```
    **************************************************
    *                                                *
    *          STAAD.Pro V8i SELECTseries6           *
    *          Version  20.07.11.33                  *
    *          Proprietary Program of                *
    *          Bentley Systems, Inc.                 *
    *          Date=    NOV 11, 2024                  *
    *          Time=     19:48: 2                     *
    *                                                *
    *      USER ID:                                  *
    **************************************************
```

```
     1. STAAD SPACE
INPUT FILE: C:\SProV8i SS6\STAAD\Plugins\G+4 building .STD
     2. START JOB INFORMATION
     3. ENGINEER DATE 11-NOV-24
     4. END JOB INFORMATION
     5. INPUT WIDTH 79
     6. UNIT METER KN
     7. JOINT COORDINATES
     8. 1 0 0 0; 2 5 0 0; 3 0 0 5; 4 5 0 5; 5 0 -3 0; 6 5 -3 0; 7 0 -3 5; 8 5 -3 5
     9. 9 10 0 0; 10 10 0 5; 11 10 -3 0; 12 10 -3 5; 13 15 0 0; 14 15 0 5; 15 15 -3 0
    10. 16 15 -3 5; 17 0 0 10; 18 5 0 10; 19 0 -3 10; 20 5 -3 10; 21 10 0 10
    11. 22 10 -3 10; 23 15 0 10; 24 15 -3 10; 25 0 0 15; 26 5 0 15; 27 0 -3 15
    12. 28 5 -3 15; 29 10 0 15; 30 10 -3 15; 31 15 0 15; 32 15 -3 15; 33 0 3 0
    13. 34 5 3 0; 35 0 3 5; 36 5 3 5; 37 10 3 0; 38 10 3 5; 39 15 3 0; 40 15 3 5
    14. 41 0 3 10; 42 5 3 10; 43 10 3 10; 44 15 3 10; 45 0 3 15; 46 5 3 15; 47 10 3 15
    15. 48 15 3 15; 49 0 6 0; 50 5 6 0; 51 0 6 5; 52 5 6 5; 53 10 6 0; 54 10 6 5
    16. 55 15 6 0; 56 15 6 5; 57 0 6 10; 58 5 6 10; 59 10 6 10; 60 15 6 10; 61 0 6 15
    17. 62 5 6 15; 63 10 6 15; 64 15 6 15; 65 0 9 0; 66 5 9 0; 67 0 9 5; 68 5 9 5
    18. 69 10 9 0; 70 10 9 5; 71 15 9 0; 72 15 9 5; 73 0 9 10; 74 5 9 10; 75 10 9 10
    19. 76 15 9 10; 77 0 9 15; 78 5 9 15; 79 10 9 15; 80 15 9 15; 81 0 12 0; 82 5 12 0
    20. 83 0 12 5; 84 5 12 5; 85 10 12 0; 86 10 12 5; 87 15 12 0; 88 15 12 5
    21. 89 0 12 10; 90 5 12 10; 91 10 12 10; 92 15 12 10; 93 0 12 15; 94 5 12 15
    22. 95 10 12 15; 96 15 12 15; 97 0 15 0; 98 5 15 0; 99 0 15 5; 100 5 15 5
    23. 101 10 15 0; 102 10 15 5; 103 15 15 0; 104 15 15 5; 105 0 15 10; 106 5 15 10
    24. 107 10 15 10; 108 15 15 10; 109 0 15 15; 110 5 15 15; 111 10 15 15
    25. 112 15 15 15
    26. MEMBER INCIDENCES
    27. 1 1 2; 2 3 4; 3 3 1; 4 4 2; 5 1 5; 6 2 6; 7 3 7; 8 4 8; 9 2 9; 10 4 10
    28. 11 10 9; 12 9 11; 13 10 12; 14 9 13; 15 10 14; 16 14 13; 17 13 15; 18 14 16
    29. 19 17 18; 20 17 3; 21 18 4; 22 17 19; 23 18 20; 24 18 21; 25 21 10; 26 21 22
    30. 27 21 23; 28 23 14; 29 23 24; 30 25 26; 31 25 17; 32 26 18; 33 25 27; 34 26 28
    31. 35 26 29; 36 29 21; 37 29 30; 38 29 31; 39 31 23; 40 31 32; 41 33 34; 42 35 36
    32. 43 35 33; 44 36 34; 45 33 1; 46 34 2; 47 35 3; 48 36 4; 49 34 37; 50 36 38
    33. 51 38 37; 52 37 9; 53 38 10; 54 37 39; 55 38 40; 56 40 39; 57 39 13; 58 40 14
    34. 59 41 42; 60 41 35; 61 42 36; 62 41 17; 63 42 18; 64 42 43; 65 43 38; 66 43 21
    35. 67 43 44; 68 44 40; 69 44 23; 70 45 46; 71 45 41; 72 46 42; 73 45 25; 74 46 26
    36. 75 46 47; 76 47 43; 77 47 29; 78 47 48; 79 48 44; 80 48 31; 81 49 50; 82 51 52
    37. 83 51 49; 84 52 50; 85 49 33; 86 50 34; 87 51 35; 88 52 36; 89 50 53; 90 52 54
    38. 91 54 53; 92 53 37; 93 54 38; 94 53 55; 95 54 56; 96 56 55; 97 55 39; 98 56 40
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39.  99 57 58; 100 57 51; 101 58 52; 102 57 41; 103 58 42; 104 58 59; 105 59 54
40.  106 59 43; 107 59 60; 108 60 56; 109 60 44; 110 61 62; 111 61 57; 112 62 58
41.  113 61 45; 114 62 46; 115 62 63; 116 63 59; 117 63 47; 118 63 64; 119 64 60
42.  120 64 48; 121 65 66; 122 67 68; 123 67 65; 124 68 66; 125 65 49; 126 66 50
43.  127 67 51; 128 68 52; 129 66 69; 130 68 70; 131 70 69; 132 69 53; 133 70 54
44.  134 69 71; 135 70 72; 136 72 71; 137 71 55; 138 72 56; 139 73 74; 140 73 67
45.  141 74 68; 142 73 57; 143 74 58; 144 74 75; 145 75 70; 146 75 59; 147 75 76
46.  148 76 72; 149 76 60; 150 77 78; 151 77 73; 152 78 74; 153 77 61; 154 78 62
47.  155 78 79; 156 79 75; 157 79 63; 158 79 80; 159 80 76; 160 80 64; 161 81 82
48.  162 83 84; 163 83 81; 164 84 82; 165 81 65; 166 82 66; 167 83 67; 168 84 68
49.  169 82 85; 170 84 86; 171 86 85; 172 85 69; 173 86 70; 174 85 87; 175 86 88
50.  176 88 87; 177 87 71; 178 88 72; 179 89 90; 180 89 83; 181 90 84; 182 89 73
51.  183 90 74; 184 90 91; 185 91 86; 186 91 75; 187 91 92; 188 92 88; 189 92 76
52.  190 93 94; 191 93 89; 192 94 90; 193 93 77; 194 94 78; 195 94 95; 196 95 91
53.  197 95 79; 198 95 96; 199 96 92; 200 96 80; 201 97 98; 202 99 100; 203 99 97
54.  204 100 98; 205 97 81; 206 98 82; 207 99 83; 208 100 84; 209 98 101
55.  210 100 102; 211 102 101; 212 101 85; 213 102 86; 214 101 103; 215 102 104
56.  216 104 103; 217 103 87; 218 104 88; 219 105 106; 220 105 99; 221 106 100
57.  222 105 89; 223 106 90; 224 106 107; 225 107 102; 226 107 91; 227 107 108
58.  228 108 104; 229 108 92; 230 109 110; 231 109 105; 232 110 106; 233 109 93
59.  234 110 94; 235 110 111; 236 111 107; 237 111 95; 238 111 112; 239 112 108
60.  240 112 96
61.  DEFINE MATERIAL START
62.  ISOTROPIC CONCRETE
63.  E 2.17185E+007
64.  POISSON 0.17
65.  DENSITY 23.5616
66.  ALPHA 1E-005
67.  DAMP 0.05
68.  TYPE CONCRETE
69.  STRENGTH FCU 27579
70.  END DEFINE MATERIAL
71.  MEMBER PROPERTY AMERICAN
72.  5 TO 8 12 13 17 18 22 23 26 29 33 34 37 40 45 TO 48 52 53 57 58 62 63 66 69 -
73.  73 74 77 80 85 TO 88 92 93 97 98 102 103 106 109 113 114 117 120 125 TO 128 -
74.  132 133 137 138 142 143 146 149 153 154 157 160 165 TO 168 172 173 177 178 -
75.  182 183 186 189 193 194 197 200 205 TO 208 212 213 217 218 222 223 226 229 -
76.  233 234 237 240 PRIS YD 0.4 ZD 0.4
77.  1 TO 4 9 TO 11 14 TO 16 19 TO 21 24 25 27 28 30 TO 32 35 36 38 39 41 TO 44 -
78.  49 TO 51 54 TO 56 59 TO 61 64 65 67 68 70 TO 72 75 76 78 79 81 TO 84 -
79.  89 TO 91 94 TO 96 99 TO 101 104 105 107 108 110 TO 112 115 116 118 119 121 -
80.  122 TO 124 129 TO 131 134 TO 136 139 TO 141 144 145 147 148 150 TO 152 155 -
81.  156 158 159 161 TO 164 169 TO 171 174 TO 176 179 TO 181 184 185 187 188 190 -
82.  191 TO 192 195 196 198 199 201 TO 204 209 TO 211 214 TO 216 219 TO 221 224 -
83.  225 227 228 230 TO 232 235 236 238 239 PRIS YD 0.45 ZD 0.3
84.  CONSTANTS
85.  MATERIAL CONCRETE ALL
86.  SUPPORTS
87.  5 TO 8 11 12 15 16 19 20 22 24 27 28 30 32 FIXED
88.  *1 TO 4 9 10 13 14 17 18 21 23 25 26 29 31 33 TO 112 PINNED
89.  ****************************************************************************
90.  DEFINE 1893 LOAD
91.  ZONE 0.24 RF 5 I 1 SS 2 ST 1
92.  ****************************************************************************
93.  JOINT WEIGHT
94.  1 WEIGHT 86.303
```

```
 95.  2 WEIGHT 117.16
 96.  3 WEIGHT 117.16
 97.  4 WEIGHT 120.041
 98.  9 WEIGHT 117.16
 99. 10 WEIGHT 120.041
100. 13 WEIGHT 86.303
101. 14 WEIGHT 117.16
102. 17 WEIGHT 117.16
103. 18 WEIGHT 120.041
104. 21 WEIGHT 120.041
105. 23 WEIGHT 117.16
106. 25 WEIGHT 86.303
107. 26 WEIGHT 117.16
108. 29 WEIGHT 117.16
109. 31 WEIGHT 86.303
110. 33 WEIGHT 118.737
111. 34 WEIGHT 184.625
112. 35 WEIGHT 184.625
113. 36 WEIGHT 262.051
114. 37 WEIGHT 184.625
115. 38 WEIGHT 262.051
116. 39 WEIGHT 118.737
117. 40 WEIGHT 184.625
118. 41 WEIGHT 184.625
119. 42 WEIGHT 262.051
120. 43 WEIGHT 262.051
121. 44 WEIGHT 184.625
122. 45 WEIGHT 118.737
123. 46 WEIGHT 184.625
124. 47 WEIGHT 184.625
125. 48 WEIGHT 118.737
126. 49 WEIGHT 119.089
127. 50 WEIGHT 184.836
128. 51 WEIGHT 184.836
129. 52 WEIGHT 261.277
130. 53 WEIGHT 184.836
131. 54 WEIGHT 261.277
132. 55 WEIGHT 119.089
133. 56 WEIGHT 184.836
134. 57 WEIGHT 184.836
135. 58 WEIGHT 261.277
136. 59 WEIGHT 261.277
137. 60 WEIGHT 184.836
138. 61 WEIGHT 119.089
139. 62 WEIGHT 184.836
140. 63 WEIGHT 184.836
141. 64 WEIGHT 119.089
142. 65 WEIGHT 118.989
143. 66 WEIGHT 184.792
144. 67 WEIGHT 184.792
145. 68 WEIGHT 261.465
146. 69 WEIGHT 184.792
147. 70 WEIGHT 261.465
148. 71 WEIGHT 118.989
149. 72 WEIGHT 184.792
150. 73 WEIGHT 184.792
```

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151.  74 WEIGHT 261.465
152.  75 WEIGHT 261.465
153.  76 WEIGHT 184.792
154.  77 WEIGHT 118.989
155.  78 WEIGHT 184.792
156.  79 WEIGHT 184.792
157.  80 WEIGHT 118.989
158.  81 WEIGHT 119.197
159.  82 WEIGHT 184.851
160.  83 WEIGHT 184.851
161.  84 WEIGHT 261.138
162.  85 WEIGHT 184.851
163.  86 WEIGHT 261.138
164.  87 WEIGHT 119.197
165.  88 WEIGHT 184.851
166.  89 WEIGHT 184.851
167.  90 WEIGHT 261.138
168.  91 WEIGHT 261.138
169.  92 WEIGHT 184.851
170.  93 WEIGHT 119.197
171.  94 WEIGHT 184.851
172.  95 WEIGHT 184.851
173.  96 WEIGHT 119.197
174.  97 WEIGHT 74.997
175.  98 WEIGHT 122.625
176.  99 WEIGHT 122.625
177.  100 WEIGHT 182.171
178.  101 WEIGHT 122.625
179.  102 WEIGHT 182.171
180.  103 WEIGHT 74.997
181.  104 WEIGHT 122.625
182.  105 WEIGHT 122.625
183.  106 WEIGHT 182.171
184.  107 WEIGHT 182.171
185.  108 WEIGHT 122.625
186.  109 WEIGHT 74.997
187.  110 WEIGHT 122.625
188.  111 WEIGHT 122.625
189.  112 WEIGHT 74.997
190. ****************************************************************************
191. ********************************************************
192. LOAD 1 LOADTYPE SEISMIC  TITLE SEISMIC 1
193. 1893 LOAD X 1
194. LOAD 2 LOADTYPE SEISMIC  TITLE SEISMIC 2
195. 1893 LOAD Z 1
196. ****************************************************************************
197. LOAD 3 LOADTYPE DEAD  TITLE DEAD LOAD
198. SELFWEIGHT Y -1
199. FLOOR LOAD
```

```
   200. YRANGE 3 15 FLOAD -5 GY
**NOTE** about Floor/OneWay Loads/Weights.
  Please note that depending on the shape of the floor you may
  have to break up the FLOOR/ONEWAY LOAD into multiple commands.
  For details please refer to Technical Reference Manual
  Section 5.32.4.2 Note d and/or "5.32.4.3 Note f.

   201. YRANGE 0 0 FLOAD 0 GY
   202. YRANGE 0 0 FLOAD 0 GY
   203. MEMBER LOAD
   204. 1 3 9 14 16 20 28 30 31 35 38 39 41 43 49 54 56 60 68 70 71 75 78 79 81 83 -
   205. 89 94 96 100 108 110 111 115 118 119 121 123 129 134 136 140 148 150 151 -
   206. 155 158 159 161 163 169 174 176 180 188 190 191 195 198 199 UNI GY -12.5
   207. 2 4 10 11 15 19 21 24 25 27 32 36 42 44 50 51 55 59 61 64 65 67 72 76 82 84 -
   208. 90 91 95 99 101 104 105 107 112 116 122 124 130 131 135 139 141 144 145 147 -
   209. 152 156 162 164 170 171 175 179 181 184 185 187 192 196 UNI GY -7.5
   210. 201 203 209 214 216 220 228 230 231 235 238 239 UNI GY -5
   211. LOAD 4 LOADTYPE LIVE REDUCIBLE TITLE LIVE LOAD
   212. FLOOR LOAD
   213. YRANGE 3 15 FLOAD -2 GY
   214. YRANGE 0 0 FLOAD 0 GY
   215. ****************************************************************************
   216. *LOAD COMB 100 DL+0.25LL
   217. *3 1.0 4 0.25
   218. *PERFORM ANALYSIS
   219. *LOAD LIST 100
   220. *FINISH
   221. *****************************************************************************
   222. *FOUNDATION DESIGN LOAD COMBINATIONS
   223. LOAD COMB 10 (DL+LL)
   224. 3 1.0 4 1.0
   225. LOAD COMB 11 (DL+LL+EQX)
   226. 3 1.0 4 1.0 1 1.0
   227. LOAD COMB 12 (DL+LL+EQZ)
   228. 3 1.0 4 1.0 2 1.0
   229. LOAD COMB 13 (DL+LL-EQX)
   230. 3 1.0 4 1.0 1 -1.0
   231. LOAD COMB 14 (DL+LL-EQZ)
   232. 3 1.0 4 1.0 2 -1.0
   233. LOAD COMB 15 (DL+EQX)
   234. 3 1.0 1 1.0
   235. LOAD COMB 16 (DL+EQZ)
   236. 3 1.0 2 1.0
   237. LOAD COMB 17 (DL-EQX)
   238. 3 1.0 1 -1.0
   239. LOAD COMB 18 (DL-EQZ)
   240. 3 1.0 2 -1.0
   241. LOAD COMB 19 (1.5 DL + 1.5 LL)
   242. 3 1.5 4 1.5
   243. LOAD COMB 20 (1.2 DL + 1.2 LL + 1.2 EQX)
```

STAAD SPACE   -- PAGE NO.   6

```
244. 3 1.2 4 1.2 1 1.2
245. LOAD COMB 21 (1.2 DL + 1.2 LL + 1.2 EQZ)
246. 3 1.2 4 1.2 2 1.2
247. LOAD COMB 22 (1.2 DL + 1.2 LL - 1.2 EQX)
248. 3 1.2 4 1.2 1 -1.2
249. LOAD COMB 23 (1.2 DL + 1.2 LL - 1.2 EQZ)
250. 3 1.2 4 1.2 2 -1.2
251. *BEAMS AND COLUMN DESIGN LOAD COMBINATIONS
252. ****************************************************************************
253. LOAD COMB 24 (1.5 DL+1.5 EQX)
254. 3 1.5 1 1.5
255. LOAD COMB 25 (1.5 DL+1.5 EQZ)
256. 3 1.5 2 1.5
257. LOAD COMB 26 (1.5 DL-1.5 EQX)
258. 3 1.5 1 -1.5
259. LOAD COMB 27 (1.5 DL-1.5 EQZ)
260. 3 1.5 2 -1.5
261. LOAD COMB 28 (0.9 DL+1.5 EQX)
262. 3 0.9 1 1.5
263. LOAD COMB 29 (0.9 DL+1.5 EQZ)
264. 3 0.9 2 1.5
265. LOAD COMB 30 (0.9 DL-1.5 EQX)
266. 3 0.9 1 -1.5
267. LOAD COMB 31 (0.9 DL-1.5 EQZ)
268. 3 0.9 2 -1.5
269. *********************************************
270. PERFORM ANALYSIS
```

P R O B L E M   S T A T I S T I C S

NUMBER OF JOINTS	112	NUMBER OF MEMBERS	240
NUMBER OF PLATES	0	NUMBER OF SOLIDS	0
NUMBER OF SURFACES	0	NUMBER OF SUPPORTS	16

SOLVER USED IS THE OUT-OF-CORE BASIC SOLVER

```
  ORIGINAL/FINAL BAND-WIDTH=    32/    16/    102 DOF
 TOTAL       PRIMARY LOAD CASES =     4, TOTAL DEGREES OF FREEDOM =      576
 TOTAL LOAD COMBINATION  CASES =    22  SO FAR.
   SIZE OF STIFFNESS MATRIX =       59 DOUBLE  KILO-WORDS
   REQRD/AVAIL. DISK SPACE  =     13.0/   9768.3 MB
```

**WARNING: IF THIS UBC/IBC ANALYSIS HAS TENSION/COMPRESSION
OR REPEAT LOAD OR RE-ANALYSIS OR SELECT OPTIMIZE, THEN EACH
UBC/IBC CASE SHOULD BE FOLLOWED BY PERFORM ANALYSIS _CHANGE.

```
***********************************************************
*                                                         *
* TIME PERIOD FOR X 1893 LOADING =     0.65541 SEC        *
* SA/G PER 1893=    2.075, LOAD FACTOR= 1.000             *
* VB PER 1893=     0.0498 X    15772.93=     785.50 KN    *
*                                                         *
***********************************************************




***********************************************************
*                                                         *
* TIME PERIOD FOR Z 1893 LOADING =     0.65541 SEC        *
* SA/G PER 1893=    2.075, LOAD FACTOR= 1.000             *
* VB PER 1893=     0.0498 X    15772.93=     785.50 KN    *
*                                                         *
***********************************************************



271. LOAD LIST 19 TO 31
272. START CONCRETE DESIGN
273. CODE INDIAN
274. CLEAR 0.025 MEMB 1 TO 4 9 TO 11 14 TO 16 19 TO 21 24 25 27 28 30 TO 32 35 -
275. 36 38 39 41 TO 44 49 TO 51 54 TO 56 59 TO 61 64 65 67 68 70 TO 72 75 76 78 -
276. 79 81 TO 84 89 TO 91 94 TO 96 99 TO 101 104 105 107 108 110 TO 112 115 116 -
277. 118 119 121 TO 124 129 TO 131 134 TO 136 139 TO 141 144 145 147 148 -
278. 150 TO 152 155 156 158 159 161 TO 164 169 TO 171 174 TO 176 179 TO 181 184 -
279. 185 187 188 190 TO 192 195 196 198 199 201 TO 204 209 TO 211 214 TO 216 219 -
280. 220 TO 221 224 225 227 228 230 TO 232 235 236 238 239
281. CLEAR 0.04 MEMB 5 TO 8 12 13 17 18 22 23 26 29 33 34 37 40 45 TO 48 52 53 -
282. 57 58 62 63 66 69 73 74 77 80 85 TO 88 92 93 97 98 102 103 106 109 113 114 -
283. 117 120 125 TO 128 132 133 137 138 142 143 146 149 153 154 157 160 -
284. 165 TO 168 172 173 177 178 182 183 186 189 193 194 197 200 205 TO 208 212 -
285. 213 217 218 222 223 226 229 233 234 237 240
286. FC 25000 ALL
287. RATIO 1.5 MEMB 1 TO 4 9 TO 11 14 TO 16 19 TO 21 24 25 27 28 30 TO 32 35 36 -
288. 38 39 41 TO 44 49 TO 51 54 TO 56 59 TO 61 64 65 67 68 70 TO 72 75 76 78 79 -
289. 81 TO 84 89 TO 91 94 TO 96 99 TO 101 104 105 107 108 110 TO 112 115 116 118 -
290. 119 121 TO 124 129 TO 131 134 TO 136 139 TO 141 144 145 147 148 150 TO 152 -
291. 155 156 158 159 161 TO 164 169 TO 171 174 TO 176 179 TO 181 184 185 187 188 -
292. 190 TO 192 195 196 198 199 201 TO 204 209 TO 211 214 TO 216 219 TO 221 224 -
293. 225 227 228 230 TO 232 235 236 238 239
294. RATIO 5 MEMB 5 TO 8 12 13 17 18 22 23 26 29 33 34 37 40 45 TO 48 52 53 57 -
295. 58 62 63 66 69 73 74 77 80 85 TO 88 92 93 97 98 102 103 106 109 113 114 117 -
296. 120 125 TO 128 132 133 137 138 142 143 146 149 153 154 157 160 165 TO 168 -
297. 172 173 177 178 182 183 186 189 193 194 197 200 205 TO 208 212 213 217 218 -
298. 222 223 226 229 233 234 237 240
299. DESIGN BEAM 1 TO 4 9 TO 11 14 TO 16 19 TO 21 24 25 27 28 30 TO 32 35 36 38 -
300. 39 41 TO 44 49 TO 51 54 TO 56 59 TO 61 64 65 67 68 70 TO 72 75 76 78 79 81 -
301. 82 TO 84 89 TO 91 94 TO 96 99 TO 101 104 105 107 108 110 TO 112 115 116 118 -
302. 119 121 TO 124 129 TO 131 134 TO 136 139 TO 141 144 145 147 148 150 TO 152 -
303. 155 156 158 159 161 TO 164 169 TO 171 174 TO 176 179 TO 181 184 185 187 188 -
304. 190 TO 192 195 196 198 199 201 TO 204 209 TO 211 214 TO 216 219 TO 221 224 -
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305. 225 227 228 230 TO 232 235 236 238 239

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STAAD SPACE                                        -- PAGE NO.    9
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=============================================================================
               B E A M   N O.     1   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

      LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm



                   SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP        1492.64        463.69          0.00        376.88       1415.19
REINF.      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM       830.80        589.60        258.07        460.18        680.90
REINF.      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------------



                   SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP        5-20í         3-20í         2-20í         3-20í         5-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     11-10í         8-10í         4-10í         6-10í         9-10í
REINF.    2 layer(s)    2 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =     94.50 MX =      0.48 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =    -96.85 MX =      0.48 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

=============================================================================


=============================================================================
               B E A M   N O.     2   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

      LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm
```

SUMMARY OF REINF. AREA (Sq.mm)

SECTION	0.0 mm	1250.0 mm	2500.0 mm	3750.0 mm	5000.0 mm
TOP REINF.	1468.04 (Sq. mm)	499.37 (Sq. mm)	0.00 (Sq. mm)	395.89 (Sq. mm)	1317.41 (Sq. mm)
BOTTOM REINF.	927.57 (Sq. mm)	557.42 (Sq. mm)	255.00 (Sq. mm)	467.60 (Sq. mm)	806.72 (Sq. mm)

SUMMARY OF PROVIDED REINF. AREA

SECTION	0.0 mm	1250.0 mm	2500.0 mm	3750.0 mm	5000.0 mm
TOP REINF.	13-12í 2 layer(s)	5-12í 1 layer(s)	3-12í 1 layer(s)	4-12í 1 layer(s)	12-12í 2 layer(s)
BOTTOM REINF.	3-20í 1 layer(s)	3-20í 1 layer(s)	3-20í 1 layer(s)	3-20í 1 layer(s)	3-20í 1 layer(s)
SHEAR REINF.	2 legged 8í @ 165 mm c/c	2 legged 8í @ 165 mm c/c	2 legged 8í @ 165 mm c/c	2 legged 8í @ 165 mm c/c	2 legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM START SUPPORT
  VY =   83.71 MX =   -0.05 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =   -83.75 MX =   -0.05 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

==

==
          B E A M   N O.   3   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

SECTION	0.0 mm	1250.0 mm	2500.0 mm	3750.0 mm	5000.0 mm
TOP REINF.	1415.19 (Sq. mm)	281.16 (Sq. mm)	0.00 (Sq. mm)	463.69 (Sq. mm)	1492.64 (Sq. mm)
BOTTOM REINF.	680.90 (Sq. mm)	436.32 (Sq. mm)	258.07 (Sq. mm)	589.60 (Sq. mm)	830.80 (Sq. mm)

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```
                  SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        5-20í          3-20í          2-20í          3-20í          5-20í
REINF.   1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM     9-10í          6-10í          4-10í          8-10í          11-10í
REINF.   2 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)     2 layer(s)

SHEAR   2 legged  8í   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    96.85 MX =   -0.48 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -94.50 MX =   -0.48 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


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            B E A M   N O.     4   D E S I G N   R E S U L T S

     M25                 Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                  SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1317.41        395.89         0.00         499.37        1468.04
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      806.72        467.60        255.00        575.35         927.57
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
STAAD SPACE                                    -- PAGE NO.   12
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        12-12í         4-12í         3-12í         5-12í        13-12í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM      3-20í         3-20í         3-20í         3-20í         3-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     83.75 MX =     0.05 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM END SUPPORT
  VY =    -83.71 MX =     0.05 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
           B E A M   N O.     9   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1337.35       345.53         0.00        363.21       1337.35
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      594.50        437.26        256.23        437.26        594.50
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
              SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP      12-12í        4-12í         3-12í         4-12í        12-12í
REINF.   2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)    2 layer(s)

BOTTOM     3-16í        3-16í         3-16í         3-16í         3-16í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     89.06 MX =      0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =    -89.06 MX =     -0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    10   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       1182.52       390.70         0.00        390.70       1182.52
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)

BOTTOM      719.76       439.05        258.07       439.05        719.76
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

```
STAAD SPACE                                 -- PAGE NO.   14
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       6-16í         3-16í         2-16í         3-16í         6-16í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM    10-10í         6-10í         4-10í         6-10í        10-10í
REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =    76.87 MX =    -0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -76.87 MX =     0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    11   D E S I G N   R E S U L T S

    M25                 Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1317.41        395.89         0.00        499.37       1468.04
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     806.72        467.60        255.00        575.35        927.57
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
STAAD SPACE                                       -- PAGE NO.   15


                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP      12-12í        4-12í         3-12í         5-12í        13-12í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM     3-20í         3-20í         3-20í         3-20í         3-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     83.75 MX =    -0.05 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM END SUPPORT
  VY =    -83.71 MX =    -0.05 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
             B E A M   N O.    14   D E S I G N   R E S U L T S

      M25                 Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       1415.19        281.16          0.00        463.69       1492.64
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      680.90        436.32        258.07        589.60        830.80
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

```
                  SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     9-10í         6-10í         4-10í         8-10í        11-10í
REINF.   2 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    96.85 MX =    -0.48 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -94.50 MX =    -0.48 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
            B E A M   N O.    15   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)             Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                  SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       1317.41       395.89         0.00         499.37       1468.04
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     806.72        467.60        255.00        575.35        927.57
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       12-12í        4-12í         3-12í         5-12í        13-12í
REINF.    2 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM      3-20í        3-20í         3-20í         3-20í         3-20í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

```
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     83.75 MX =     0.05 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM END SUPPORT
  VY =    -83.71 MX =     0.05 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

========================================================================


========================================================================
           B E A M   N O.    16   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)            Fe415 (Sec.)

   LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm
```

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1415.19       281.16         0.00        463.69       1492.64
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)


BOTTOM       680.90       436.32       258.07        589.60        830.80
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP        5-20í         3-20í         2-20í         3-20í         5-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     9-10í         6-10í         4-10í         8-10í         11-10í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    96.85 MX =     0.48 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -94.50 MX =     0.48 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
             B E A M   N O.    19   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       1468.04        499.37         0.00         395.89        1317.41
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     927.57        575.35        255.00        467.60         806.72
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP      13-12í         5-12í         3-12í         4-12í         12-12í
REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM    3-20í         3-20í         3-20í         3-20í         3-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM START SUPPORT
  VY =     83.71 MX =      0.05 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =    -83.75 MX =      0.05 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

=======================================================================


=======================================================================
            B E A M   N O.    20   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP      1337.35        345.53          0.00        363.21        1337.35
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     594.50        437.26        256.23        437.26        594.50
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        12-12í         4-12í          3-12í          4-12í         12-12í
REINF.    2 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM       3-16í         3-16í          3-16í          3-16í          3-16í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     89.06 MX =     0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =    -89.06 MX =    -0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
              B E A M   N O.    21   D E S I G N   R E S U L T S

        M25                  Fe415 (Main)              Fe415 (Sec.)

     LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        1182.52        390.70          0.00          390.70        1182.52
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      719.76        439.05         258.07         439.05         719.76
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
--------------------------------------------------------------------------
```

```
STAAD SPACE                                      -- PAGE NO.   21


                    SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       6-16í         3-16í         2-16í         3-16í         6-16í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM    10-10í         6-10í         4-10í         6-10í        10-10í
REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =     76.87 MX =    -0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =    -76.87 MX =     0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

============================================================================


============================================================================
            B E A M  N O.    24  D E S I G N  R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       1182.52        390.70          0.00        390.70       1182.52
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     719.76        439.05        258.07        439.05        719.76
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

STAAD SPACE   -- PAGE NO.   22

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        6-16í        3-16í         2-16í         3-16í         6-16í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     10-10í        6-10í         4-10í         6-10í        10-10í
REINF.    2 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =     76.87 MX =      0.00 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =    -76.87 MX =     -0.00 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

===============================================================================


===============================================================================
            B E A M   N O.    25   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1182.52       390.70         0.00         390.70       1182.52
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     719.76       439.05        258.07        439.05        719.76
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
--------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        6-16í          3-16í          2-16í          3-16í          6-16í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM     10-10í          6-10í          4-10í          6-10í          10-10í
REINF.    2 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
--------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =   76.87 MX =   0.00 LD=   25
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -76.87 MX =   -0.00 LD=   27
  Provide 2 Legged 8í @ 165 mm c/c

```
==========================================================================


==========================================================================
```
         B E A M   N O.   27   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)
```
--------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        1317.41        395.89          0.00         499.37        1468.04
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      806.72        467.60         255.00         575.35         927.57
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
---------------------------------------------------------------------------
SECTION      0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
---------------------------------------------------------------------------
 TOP      12-12í         4-12í          3-12í          5-12í          13-12í
REINF.    2 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)


BOTTOM    3-20í          3-20í          3-20í          3-20í          3-20í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
---------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
---------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     83.75 MX =    -0.05 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM END SUPPORT
  VY =    -83.71 MX =    -0.05 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
             B E A M   N O.     28   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
---------------------------------------------------------------------------
SECTION      0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
---------------------------------------------------------------------------
 TOP      1337.35        345.53          0.00          363.21         1337.35
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM    594.50         437.26         256.23         437.26         594.50
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
---------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP      12-12í        4-12í         3-12í         4-12í        12-12í
REINF.    2 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM     3-16í        3-16í         3-16í         3-16í         3-16í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     89.06 MX =    -0.00 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =    -89.06 MX =     0.00 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

========================================================================


========================================================================
             B E A M   N O.     30   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

     LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       1492.64       463.69          0.00        376.88       1415.19
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      830.80       589.60        258.07        460.18        680.90
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP        5-20í        3-20í          2-20í         3-20í         5-20í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM    11-10í        8-10í          4-10í         6-10í         9-10í
REINF.    2 layer(s)   2 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =     94.50 MX =    -0.48 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =    -96.85 MX =    -0.48 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

=========================================================================


=========================================================================
          B E A M   N O.    31   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP       1492.64       463.69          0.00        376.88       1415.19
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     830.80        589.60        258.07        460.18        680.90
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        5-20í          3-20í          2-20í          3-20í          5-20í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM     11-10í          8-10í          4-10í          6-10í          9-10í
REINF.    2 layer(s)     2 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    94.50 MX =     0.48 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -96.85 MX =     0.48 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
            B E A M   N O.     32   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        1468.04         499.37          0.00         395.89        1317.41
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      927.57         575.35         255.00         467.60         806.72
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       13-12í        5-12í         3-12í         4-12í        12-12í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM     3-20í         3-20í         3-20í         3-20í         3-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR     2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.    @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM START SUPPORT
  VY =   83.71 MX =   -0.05 LD=   25
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =   -83.75 MX =   -0.05 LD=   27
  Provide 2 Legged 8í @ 165 mm c/c

```
==============================================================================


==============================================================================
          B E A M   N O.     35   D E S I G N   R E S U L T S
```

     M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)
```
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        1337.35       345.53          0.00        363.21       1337.35
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)


BOTTOM      594.50        437.26        256.23        437.26        594.50
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       12-12í        4-12í         3-12í         4-12í        12-12í
REINF.    2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM     3-16í         3-16í         3-16í         3-16í         3-16í
REINF.    1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM START SUPPORT
  VY =     89.06 MX =    -0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =    -89.06 MX =     0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    36   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1468.04       499.37         0.00        395.89       1317.41
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM     927.57       575.35       255.00        467.60       806.72
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
STAAD SPACE                                      -- PAGE NO.   30
```

SUMMARY OF PROVIDED REINF. AREA

```
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP     13-12í          5-12í         3-12í         4-12í        12-12í
 REINF.  2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

 BOTTOM   3-20í          3-20í         3-20í         3-20í         3-20í
 REINF.  1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

 SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
 REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.5 mm AWAY FROM START SUPPORT
  VY =      83.71 MX =      0.05 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   607.8 mm AWAY FROM END SUPPORT
  VY =     -83.75 MX =      0.05 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
          B E A M   N O.     38   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm
```

SUMMARY OF REINF. AREA (Sq.mm)

```
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP      1415.19        281.16         0.00        463.69       1492.64
 REINF.   (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

 BOTTOM    680.90        436.32        258.07        589.60        830.80
 REINF.   (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP         5-20í        3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM       9-10í        6-10í         4-10í         8-10í        11-10í
REINF.   2 layer(s)   1 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    96.85 MX =     0.48 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -94.50 MX =     0.48 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

==============================================================================


==============================================================================
            B E A M   N O.    39   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)             Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        1492.64       463.69          0.00        376.88       1415.19
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      830.80       589.60        258.07        460.18        680.90
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP       5-20í          3-20í          2-20í          3-20í          5-20í
REINF.   1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM    11-10í          8-10í          4-10í          6-10í          9-10í
REINF.   2 layer(s)     2 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    94.50 MX =    -0.48 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -96.85 MX =    -0.48 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
            B E A M   N O.     41   D E S I G N   R E S U L T S

      M25                     Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP       1762.07        339.84          0.00         400.35        1716.66
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM     789.61        660.98         348.14         533.63         651.60
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP        9-16í         3-16í         2-16í         3-16í         9-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM      7-12í         6-12í         4-12í         5-12í         6-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   120.22 MX =   -0.31 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -124.29 MX =   -0.31 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

==

==
          B E A M   N O.   42   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       1838.23        503.43         0.00        422.17       1804.02
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)


BOTTOM     830.71        713.10        446.14        560.12        663.81
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

STAAD SPACE   -- PAGE NO.   34

```
                    SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP        6-20í          3-20í         2-20í         3-20í         6-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM    11-10í         10-10í         6-10í         8-10í         9-10í
REINF.   2 layer(s)    2 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   129.89 MX =     0.03 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -136.38 MX =     0.02 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


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            B E A M   N O.    43   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP        1716.66        400.35         0.00        481.50        1762.07
REINF.     (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      651.60        533.63        351.84        660.98        789.61
REINF.     (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION        0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
  TOP        9-16í          3-16í          2-16í          3-16í          9-16í
REINF.    2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM      6-12í          5-12í          4-12í          6-12í          7-12í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   122.88 MX =      0.31 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -121.63 MX =      0.31 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

===============================================================================


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           B E A M   N O.    44   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION        0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
  TOP        1804.02        422.17          0.00         503.43        1838.23
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      663.81         560.12         446.14         713.10         830.71
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-------------------------------------------------------------------------
 TOP         6-20í         3-20í          2-20í          3-20í          6-20í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM       9-10í         8-10í          6-10í         10-10í         11-10í
REINF.    2 layer(s)    2 layer(s)     1 layer(s)     2 layer(s)     2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   133.56 MX =   -0.02 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -132.71 MX =   -0.03 LD=   27
   Provide 2 Legged 8í @ 165 mm c/c

```
===========================================================================
```

```
===========================================================================
          B E A M   N O.    49   D E S I G N   R E S U L T S
```

```
     M25                   Fe415 (Main)              Fe415 (Sec.)
```

```
   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm
```

SUMMARY OF REINF. AREA (Sq.mm)
```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-------------------------------------------------------------------------
 TOP        1664.80        405.64          0.00          405.64        1664.80
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      589.62        407.41         312.34         509.67         589.62
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í          3-16í         2-16í         3-16í          9-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)     2 layer(s)

BOTTOM      3-16í          3-16í         3-16í         3-16í          3-16í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)     1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
```
  VY =   116.14 MX =     0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c
```

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
```
  VY =  -117.55 MX =    -0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c
```

```
===========================================================================


===========================================================================
          B E A M   N O.    50   D E S I G N   R E S U L T S
```

M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

SECTION	0.0 mm	1250.0 mm	2500.0 mm	3750.0 mm	5000.0 mm
TOP REINF.	1778.91 (Sq. mm)	401.54 (Sq. mm)	0.00 (Sq. mm)	428.21 (Sq. mm)	1778.91 (Sq. mm)
BOTTOM REINF.	598.07 (Sq. mm)	537.10 (Sq. mm)	404.60 (Sq. mm)	537.10 (Sq. mm)	598.07 (Sq. mm)

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        9-16í         3-16í          2-16í          3-16í          9-16í
REINF.    2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)


BOTTOM      3-16í         3-16í          3-16í          3-16í          3-16í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


SHEAR     2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.    @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   126.06 MX =    -0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -128.88 MX =     0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    51   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        1804.02       422.17          0.00         503.43        1838.23
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)       (Sq. mm)

BOTTOM      663.81        560.12         446.14        713.10         830.71
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)       (Sq. mm)
--------------------------------------------------------------------------
```

                     SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   6-20í   3-20í   2-20í   3-20í   6-20í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM   9-10í   8-10í   6-10í   10-10í   11-10í
REINF.   2 layer(s)   2 layer(s)   1 layer(s)   2 layer(s)   2 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   133.56 MX =   0.02 LD=   25
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -132.71 MX =   0.03 LD=   27
  Provide 2 Legged 8í @ 165 mm c/c

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           B E A M   N O.   54   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

   LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                     SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1716.66   400.35   0.00   481.50   1762.07
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   651.60   533.63   351.84   660.98   789.61
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

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```
                     SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP        9-16í         3-16í         2-16í         3-16í         9-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM      6-12í         5-12í         4-12í         6-12í         7-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   122.88 MX =     0.31 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -121.63 MX =     0.31 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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              B E A M   N O.    55   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                     SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP        1804.02        422.17         0.00         503.43       1838.23
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      663.81        560.12        446.14        713.10        830.71
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------------
```

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SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   6-20í   3-20í   2-20í   3-20í   6-20í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM   9-10í   8-10í   6-10í   10-10í   11-10í
REINF.   2 layer(s)   2 layer(s)   1 layer(s)   2 layer(s)   2 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   133.56 MX =   -0.02 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -132.71 MX =   -0.03 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

==

==
          B E A M   N O.   56   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

   LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1716.66   400.35   0.00   481.50   1762.07
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   651.60   533.63   351.84   660.98   789.61
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

STAAD SPACE   -- PAGE NO.   42

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       9-16í         3-16í          2-16í          3-16í          9-16í
REINF.   2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM     6-12í         5-12í          4-12í          6-12í          7-12í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   122.88 MX =    -0.31 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -121.63 MX =    -0.31 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.     59   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       1838.23       503.43          0.00          422.17        1804.02
REINF.    (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      830.71       713.10         446.14         560.12         663.81
REINF.    (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
----------------------------------------------------------------------
```

```
                  SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION        0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP         6-20í          3-20í          2-20í          3-20í          6-20í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM      11-10í         10-10í          6-10í          8-10í          9-10í
REINF.    2 layer(s)     2 layer(s)     1 layer(s)     2 layer(s)     2 layer(s)

SHEAR   2 legged  8í   2 legged  8í   2 legged  8í   2 legged  8í   2 legged  8í
REINF.  @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   129.89 MX =    -0.03 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -136.38 MX =    -0.02 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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===========================================================================
          B E A M   N O.      60   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                  SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION        0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP         1664.80        405.64          0.00         405.64        1664.80
REINF.      (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM       589.62        407.41         312.34         509.67         589.62
REINF.      (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

```
                     SUMMARY OF PROVIDED REINF. AREA
     ---------------------------------------------------------------------
     SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
     ---------------------------------------------------------------------
      TOP       9-16í         3-16í         2-16í         3-16í         9-16í
     REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


     BOTTOM    3-16í         3-16í         3-16í         3-16í         3-16í
     REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


     SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
     REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
     ---------------------------------------------------------------------



     SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
     ---------------------------------------------------------------------

     SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
       VY =   116.14 MX =     0.00 LD=   25
       Provide 2 Legged  8í  @ 165 mm c/c

     SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
       VY =  -117.55 MX =    -0.00 LD=   27
       Provide 2 Legged  8í  @ 165 mm c/c

     ============================================================================


     ============================================================================
               B E A M   N O.    61   D E S I G N   R E S U L T S

         M25                  Fe415 (Main)            Fe415 (Sec.)

        LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                     SUMMARY OF REINF. AREA (Sq.mm)
     ---------------------------------------------------------------------
     SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
     ---------------------------------------------------------------------
      TOP       1778.91       401.54         0.00        428.21       1778.91
     REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

     BOTTOM     598.07        537.10        404.60        537.10        598.07
     REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
     ---------------------------------------------------------------------
```

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```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP       9-16í         3-16í          2-16í          3-16í          9-16í
REINF.   2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM     3-16í         3-16í          3-16í          3-16í          3-16í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   126.06 MX =    -0.00 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -128.88 MX =     0.00 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
            B E A M   N O.    64   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP       1778.91        401.54          0.00         428.21         1778.91
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM     598.07         537.10         404.60         537.10         598.07
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
--------------------------------------------------------------------------
```

                   SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   9-16í   3-16í   2-16í   3-16í   9-16í
REINF.   2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM   3-16í   3-16í   3-16í   3-16í   3-16í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   126.06 MX =   0.00 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -128.88 MX =   -0.00 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

===

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            B E A M   N O.   65   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                   SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1778.91   401.54   0.00   428.21   1778.91
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   598.07   537.10   404.60   537.10   598.07
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

SUMMARY OF PROVIDED REINF. AREA
```
-----------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm    2500.0 mm    3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í         3-16í        2-16í        3-16í        9-16í
REINF.    2 layer(s)    1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM      3-16í         3-16í        3-16í        3-16í        3-16í
REINF.    1 layer(s)    1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-----------------------------------------------------------------------
```
SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   126.06 MX =   0.00 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -128.88 MX =   -0.00 LD=   27
   Provide 2 Legged 8í @ 165 mm c/c

```
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         B E A M   N O.    67   D E S I G N   R E S U L T S
```

     M25   Fe415 (Main)   Fe415 (Sec.)

   LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)
```
-----------------------------------------------------------------------
SECTION       0.0 mm     1250.0 mm    2500.0 mm    3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP        1804.02       422.17        0.00        503.43       1838.23
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM      663.81        560.12       446.14       713.10        830.71
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
----------------------------------------------------------------------
 TOP        6-20í         3-20í          2-20í          3-20í          6-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     9-10í         8-10í          6-10í         10-10í         11-10í
REINF.   2 layer(s)    2 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   133.56 MX =     0.02 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -132.71 MX =     0.03 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    68   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
----------------------------------------------------------------------
 TOP        1664.80       405.64          0.00          405.64        1664.80
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      589.62        407.41         270.15         509.67         589.62
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
----------------------------------------------------------------------
```

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```
              SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í         3-16í         2-16í         3-16í         9-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM      3-16í         3-16í         3-16í         3-16í         3-16í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   116.14 MX =    -0.00 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -117.55 MX =     0.00 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.      70   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


              SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1762.07       339.84         0.00        400.35        1716.66
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      789.61        660.98        315.53        533.63        651.60
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
   ----------------------------------------------------------------------
   SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP          9-16í        3-16í         2-16í         3-16í         9-16í
   REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

   BOTTOM       7-12í        6-12í         3-12í         5-12í         6-12í
   REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

   SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
   REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
   ----------------------------------------------------------------------


   SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
   ----------------------------------------------------------------------

   SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
     VY =   120.22 MX =     0.31 LD=   26
     Provide 2 Legged  8í  @ 165 mm c/c

   SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
     VY =  -124.29 MX =     0.31 LD=   24
     Provide 2 Legged  8í  @ 165 mm c/c

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   ==========================================================================
              B E A M   N O.    71   D E S I G N   R E S U L T S

        M25                  Fe415 (Main)            Fe415 (Sec.)

      LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
   ----------------------------------------------------------------------
   SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP         1762.07       339.84         0.00         400.35        1716.66
   REINF.      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

   BOTTOM       789.61       660.98        348.14        533.63         651.60
   REINF.      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
   ----------------------------------------------------------------------
```

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```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       9-16í         3-16í         2-16í         3-16í         9-16í
REINF.   2 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM     7-12í         6-12í         4-12í         5-12í         6-12í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   120.22 MX =    -0.31 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -124.29 MX =    -0.31 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M  N O.    72   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       1838.23        503.43         0.00         422.17        1804.02
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      830.71        713.10        446.14        560.12         663.81
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

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                    SUMMARY OF PROVIDED REINF. AREA

    SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
    ----
     TOP   6-20í   3-20í   2-20í   3-20í   6-20í
    REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

    BOTTOM   11-10í   10-10í   6-10í   8-10í   9-10í
    REINF.   2 layer(s)   2 layer(s)   1 layer(s)   2 layer(s)   2 layer(s)

    SHEAR 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
    REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
    ----

    SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

    SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
      VY =   129.89 MX =   0.03 LD=   25
      Provide 2 Legged 8í @ 165 mm c/c

    SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
      VY = -136.38 MX =   0.02 LD=   27
      Provide 2 Legged 8í @ 165 mm c/c

    ==

    ==
              B E A M   N O.   75   D E S I G N   R E S U L T S

        M25   Fe415 (Main)   Fe415 (Sec.)

      LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                    SUMMARY OF REINF. AREA (Sq.mm)

    SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
    ----
     TOP   1664.80   405.64   0.00   405.64   1664.80
    REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

    BOTTOM   589.62   407.41   270.15   509.67   589.62
    REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

```
STAAD SPACE                                    -- PAGE NO.   53
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```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        9-16í        3-16í         2-16í         3-16í         9-16í
REINF.    2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)


BOTTOM      3-16í        3-16í         3-16í         3-16í         3-16í
REINF.    1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   116.14 MX =    -0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -117.55 MX =     0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    76   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        1838.23       503.43         0.00        422.17       1804.02
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM      830.71       713.10        446.14       560.12        663.81
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        6-20í         3-20í         2-20í         3-20í         6-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


BOTTOM     11-10í         10-10í         6-10í         8-10í         9-10í
REINF.    2 layer(s)    2 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   129.89 MX =    -0.03 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -136.38 MX =    -0.02 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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             B E A M   N O.    78   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1716.66        400.35         0.00         481.50        1762.07
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)


BOTTOM       651.60        533.63        315.53        660.98        789.61
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------
 TOP        9-16í        3-16í         2-16í         3-16í         9-16í
REINF.   2 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM      6-12í        5-12í         3-12í         6-12í         7-12í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   122.88 MX =   -0.31 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -121.63 MX =   -0.31 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

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===
           B E A M   N O.   79   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------
 TOP       1762.07        0.00          0.00        400.35       1716.66
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     789.61       660.98        351.84        533.63        651.60
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------
```

STAAD SPACE   -- PAGE NO.   56

```
                    SUMMARY OF PROVIDED REINF. AREA
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-------------------------------------------------------------------------
 TOP        9-16í          2-16í          2-16í          3-16í          9-16í
REINF.    2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM      7-12í          6-12í          4-12í          5-12í          6-12í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c
-------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   120.22 MX =     0.31 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -124.29 MX =     0.31 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.     81   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)            Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-------------------------------------------------------------------------
 TOP       1694.85        441.60          0.00         353.60        1601.35
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM     667.25        590.81         344.57         496.88         570.78
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-------------------------------------------------------------------------
```

                     SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   9-16í   3-16í   2-16í   3-16í   8-16í
REINF.   2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM   6-12í   6-12í   4-12í   5-12í   6-12í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF.   @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   116.78 MX =   -0.17 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
  VY = -118.34 MX =   -0.18 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

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           B E A M   N O.   82   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

   LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                     SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1818.84   468.71   0.00   375.87   1728.99
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   702.34   638.72   438.83   526.37   591.28
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

```
STAAD SPACE                                    -- PAGE NO.   58
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm    1250.0 mm     2500.0 mm    3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP         6-20í        3-20í         2-20í        3-20í        6-20í
REINF.    1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM       9-10í        9-10í         6-10í        7-10í        8-10í
REINF.    2 layer(s)   2 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   127.18 MX =    -0.01 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -130.35 MX =    -0.02 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


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             B E A M   N O.    83   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm    1250.0 mm     2500.0 mm    3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP        1601.35       353.60         0.00       441.60      1694.85
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM      570.78       496.88        344.57       590.81       667.25
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
                       SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------------
 TOP       8-16í         3-16í         2-16í         3-16í         9-16í
REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM     6-12í         5-12í         4-12í         6-12í         6-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM START SUPPORT
  VY =   116.92 MX =     0.18 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -118.19 MX =     0.17 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.     84   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                       SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------------
 TOP       1728.99       375.87         0.00         468.71       1818.84
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     591.28        526.37        438.83        638.72        702.34
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------------
```

```
             SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
------------------------------------------------------------------------
 TOP         6-20í         3-20í          2-20í          3-20í          6-20í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM       8-10í         7-10í          6-10í          9-10í          9-10í
REINF.    2 layer(s)    1 layer(s)     1 layer(s)     2 layer(s)     2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   127.53 MX =     0.02 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -130.01 MX =     0.01 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    89   D E S I G N   R E S U L T S

    M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


             SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
------------------------------------------------------------------------
 TOP        1569.13        372.68          0.00          372.68        1569.13
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      516.48         380.26         313.20         473.80         516.48
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
------------------------------------------------------------------------
```

```
                     SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     7-10í         5-10í         4-10í         7-10í         7-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   112.53 MX =     0.00 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -113.94 MX =    -0.00 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.     90   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                     SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       1712.18        367.42          0.00        395.30       1712.18
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      531.64        505.04        321.53        505.04        531.64
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

STAAD SPACE   -- PAGE NO.   62

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í        3-16í         2-16í         3-16í         9-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM      7-10í        7-10í         5-10í         7-10í         7-10í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   122.77 MX =    -0.00 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -125.60 MX =     0.00 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

===============================================================================


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             B E A M   N O.    91   D E S I G N   R E S U L T S

       M25                  Fe415 (Main)              Fe415 (Sec.)

     LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1728.99       375.87         0.00        468.71       1818.84
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)

BOTTOM      591.28        526.37        438.83       638.72        702.34
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
   ----------------------------------------------------------------------
   SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP       6-20í         3-20í         2-20í         3-20í         6-20í
   REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

   BOTTOM     8-10í         7-10í         6-10í         9-10í         9-10í
   REINF.   2 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)

   SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
   REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
   ----------------------------------------------------------------------


   SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
   ----------------------------------------------------------------------

   SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
     VY =   127.53 MX =    -0.02 LD=   25
     Provide 2 Legged  8í  @ 165 mm c/c

   SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
     VY =  -130.01 MX =    -0.01 LD=   27
     Provide 2 Legged  8í  @ 165 mm c/c

   ============================================================================


   ============================================================================
              B E A M   N O.     94   D E S I G N   R E S U L T S

        M25                   Fe415 (Main)              Fe415 (Sec.)

      LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
   ----------------------------------------------------------------------
   SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP       1601.35       353.60         0.00         441.60       1694.85
   REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

   BOTTOM     570.78        496.88        344.57        590.81        667.25
   REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
   ----------------------------------------------------------------------
```

```
                   SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION        0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP         8-16í         3-16í          2-16í          3-16í          9-16í
REINF.     2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)


BOTTOM      6-12í         5-12í          4-12í          6-12í          6-12í
REINF.     1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM START SUPPORT
  VY =   116.92 MX =     0.18 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -118.19 MX =     0.17 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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             B E A M   N O.     95   D E S I G N   R E S U L T S

      M25                     Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                   SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION        0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        1728.99        338.28          0.00          468.71        1818.84
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      591.28        526.37         438.83          638.72         702.34
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP         6-20í        3-20í          2-20í          3-20í         6-20í
REINF.    1 layer(s)   1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)

BOTTOM       8-10í        7-10í          6-10í          9-10í         9-10í
REINF.    2 layer(s)   1 layer(s)     1 layer(s)     2 layer(s)    2 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   127.53 MX =     0.02 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -130.01 MX =     0.01 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


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             B E A M   N O.     96   D E S I G N   R E S U L T S

    M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1601.35       353.60          0.00         441.60       1694.85
REINF.     (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)     (Sq. mm)

BOTTOM      570.78       404.41         344.57         590.81        667.25
REINF.     (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        8-16í         3-16í          2-16í          3-16í          9-16í
REINF.   2 layer(s)   1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM      6-12í         4-12í          4-12í          6-12í          6-12í
REINF.   1 layer(s)   1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT    609.0 mm AWAY FROM START SUPPORT
  VY =   116.92 MX =    -0.18 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT    606.3 mm AWAY FROM END SUPPORT
  VY =  -118.19 MX =    -0.17 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
           B E A M   N O.      99   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP       1818.84        468.71          0.00         375.87        1728.99
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     702.34        638.72         438.83        526.37         591.28
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        6-20í         3-20í         2-20í         3-20í         6-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      9-10í         9-10í         6-10í         7-10í         8-10í
REINF.   2 layer(s)    2 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   127.18 MX =     0.01 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -130.35 MX =     0.02 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
             B E A M   N O.    100   D E S I G N   R E S U L T S

      M25                 Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1569.13        372.68          0.00        372.68       1569.13
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     516.48        380.26        313.20        473.80        516.48
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
            SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP       5-20í         3-20í          2-20í          3-20í          5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     7-10í         5-10í          4-10í          7-10í          7-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   112.53 MX =      0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -113.94 MX =     -0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
          B E A M   N O.    101   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


            SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP       1712.18       367.42          0.00         395.30        1712.18
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     531.64        505.04        321.53         505.04         531.64
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í        3-16í          2-16í          3-16í         9-16í
REINF.    2 layer(s)   1 layer(s)     1 layer(s)     1 layer(s)    2 layer(s)

BOTTOM      7-10í        7-10í          5-10í          7-10í         7-10í
REINF.    1 layer(s)   1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   122.77 MX =   -0.00 LD=   25
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -125.60 MX =   0.00 LD=   27
  Provide 2 Legged 8í @ 165 mm c/c

```
===========================================================================
```

```
===========================================================================
```
          B E A M   N O.   104   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1712.18       367.42          0.00         395.30        1712.18
REINF.    (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)

BOTTOM     531.64       505.04         321.53         505.04         531.64
REINF.    (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm    2500.0 mm     3750.0 mm    5000.0 mm
--------------------------------------------------------------------------
 TOP       9-16í         3-16í        2-16í         3-16í        9-16í
REINF.   2 layer(s)    1 layer(s)   1 layer(s)    1 layer(s)   2 layer(s)

BOTTOM     7-10í         7-10í        5-10í         7-10í        7-10í
REINF.   1 layer(s)    1 layer(s)   1 layer(s)    1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   122.77 MX =     0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -125.60 MX =    -0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
            B E A M   N O.    105   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm    2500.0 mm     3750.0 mm    5000.0 mm
--------------------------------------------------------------------------
 TOP      1712.18        367.42        0.00         395.30       1712.18
REINF.    (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     531.64        505.04       321.53        505.04        531.64
REINF.    (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
  ----------------------------------------------------------------------
  SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
  ----------------------------------------------------------------------
   TOP       9-16í         3-16í         2-16í         3-16í         9-16í
  REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

  BOTTOM     7-10í         7-10í         5-10í         7-10í         7-10í
  REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

  SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
  REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
  ----------------------------------------------------------------------


  SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
  ----------------------------------------------------------------------

  SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
    VY =   122.77 MX =     0.00 LD=   25
    Provide 2 Legged  8í  @ 165 mm c/c

  SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
    VY =  -125.60 MX =    -0.00 LD=   27
    Provide 2 Legged  8í  @ 165 mm c/c

  ==============================================================================


  ==============================================================================
            B E A M   N O.    107   D E S I G N   R E S U L T S

       M25                 Fe415 (Main)              Fe415 (Sec.)

     LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
  ----------------------------------------------------------------------
  SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
  ----------------------------------------------------------------------
   TOP      1728.99        338.28          0.00        468.71       1818.84
  REINF.   (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

  BOTTOM    591.28        526.37        438.83        638.72        702.34
  REINF.   (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
  ----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
---------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------
 TOP        6-20í        3-20í         2-20í         3-20í         6-20í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      8-10í        7-10í         6-10í         9-10í         9-10í
REINF.   2 layer(s)   1 layer(s)    1 layer(s)    2 layer(s)    2 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
---------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
---------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   127.53 MX =    -0.02 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -130.01 MX =    -0.01 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

=====================================================================


=====================================================================
          B E A M   N O.    108   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
---------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------
 TOP       1569.13       372.68          0.00        372.68       1569.13
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     516.48        380.26        313.20        473.80        516.48
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
---------------------------------------------------------------------
```

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                    SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   5-20í   3-20í   2-20í   3-20í   5-20í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM   7-10í   5-10í   4-10í   7-10í   7-10í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   112.53 MX =   -0.00 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -113.94 MX =   0.00 LD=   27
   Provide 2 Legged 8í @ 165 mm c/c

===

===
           B E A M   N O.   110   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

   LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                    SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1694.85   441.60   0.00   353.60   1601.35
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   667.25   590.81   344.57   496.88   570.78
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í          3-16í         2-16í         3-16í         8-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM      6-12í          6-12í         4-12í         5-12í         6-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   116.78 MX =     0.17 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
  VY =  -118.34 MX =     0.18 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    111   D E S I G N   R E S U L T S

      M25                 Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1694.85        441.60         0.00        353.60       1601.35
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      667.25        590.81        344.57        496.88        570.78
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                      SUMMARY OF PROVIDED REINF. AREA
  ----------------------------------------------------------------------
  SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
  ----------------------------------------------------------------------
   TOP       9-16í          3-16í          2-16í          3-16í          8-16í
  REINF.   2 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)


  BOTTOM     6-12í          6-12í          4-12í          5-12í          6-12í
  REINF.   1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


  SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
  REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
  ----------------------------------------------------------------------



  SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
  ----------------------------------------------------------------------

  SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
    VY =   116.78 MX =   -0.17 LD=   25
    Provide 2 Legged  8í  @ 165 mm c/c

  SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
    VY =  -118.34 MX =   -0.18 LD=   27
    Provide 2 Legged  8í  @ 165 mm c/c

  ==========================================================================


  ==========================================================================
            B E A M   N O.    112   D E S I G N   R E S U L T S

       M25                   Fe415 (Main)              Fe415 (Sec.)

     LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                      SUMMARY OF REINF. AREA (Sq.mm)
  ----------------------------------------------------------------------
  SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
  ----------------------------------------------------------------------
   TOP       1818.84        468.71          0.00         375.87        1728.99
  REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)


  BOTTOM     702.34        638.72         438.83         526.37         591.28
  REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
  ----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        6-20í         3-20í         2-20í         3-20í         6-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      9-10í         9-10í         6-10í         7-10í         8-10í
REINF.   2 layer(s)    2 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   127.18 MX =    -0.01 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -130.35 MX =    -0.02 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M  N O.    115   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1569.13       372.68        0.00          372.68       1569.13
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      516.48        380.26        313.20        473.80        516.48
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP        5-20í         3-20í         2-20í         3-20í        5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)   1 layer(s)

BOTTOM      7-10í         5-10í         4-10í         7-10í        7-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   112.53 MX =    -0.00 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -113.94 MX =     0.00 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


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          B E A M   N O.    116   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP        1818.84       468.71         0.00        375.87       1728.99
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)     (Sq. mm)

BOTTOM      702.34       638.72        438.83        526.37        591.28
REINF.     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

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STAAD SPACE                                      -- PAGE NO.   78


                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm    1250.0 mm     2500.0 mm     3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP        6-20í        3-20í         2-20í         3-20í        6-20í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)   1 layer(s)

BOTTOM      9-10í        9-10í         6-10í         7-10í        8-10í
REINF.    2 layer(s)   2 layer(s)    1 layer(s)    1 layer(s)   2 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   127.18 MX =     0.01 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -130.35 MX =     0.02 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
            B E A M   N O.    118   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm    1250.0 mm     2500.0 mm     3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP       1601.35       353.60         0.00        441.60      1694.85
REINF.    (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)

BOTTOM      570.78       404.41       303.83        590.81       667.25
REINF.    (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
    -----------------------------------------------------------------------
    SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
    -----------------------------------------------------------------------
     TOP        8-16í         3-16í          2-16í          3-16í          9-16í
    REINF.   2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)


    BOTTOM      6-12í         4-12í          3-12í          6-12í          6-12í
    REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


    SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
    REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
    -----------------------------------------------------------------------



    SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
    -----------------------------------------------------------------------

    SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM START SUPPORT
      VY =   116.92 MX =    -0.18 LD=   26
      Provide 2 Legged  8í  @ 165 mm c/c

    SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
      VY =  -118.19 MX =    -0.17 LD=   24
      Provide 2 Legged  8í  @ 165 mm c/c

    ===========================================================================



    ===========================================================================
             B E A M   N O.   119   D E S I G N   R E S U L T S

        M25                   Fe415 (Main)              Fe415 (Sec.)

       LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm



                    SUMMARY OF REINF. AREA (Sq.mm)
    -----------------------------------------------------------------------
    SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
    -----------------------------------------------------------------------
     TOP       1694.85        441.60          0.00         353.60        1601.35
    REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)


    BOTTOM     667.25         590.81         344.57         496.87         570.78
    REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
    -----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í        3-16í         2-16í         3-16í         8-16í
REINF.    2 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM      6-12í        6-12í         4-12í         5-12í         6-12í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   116.78 MX =   0.17 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
  VY = -118.34 MX =   0.18 LD=   27
   Provide 2 Legged 8í @ 165 mm c/c

```
===========================================================================


===========================================================================
```
         B E A M   N O.   121   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

     LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1494.27       348.06         0.00        269.31       1359.54
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)     (Sq. mm)     (Sq. mm)


BOTTOM      459.76        481.56        345.34       418.20        399.02
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)     (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

STAAD SPACE   -- PAGE NO.   81

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     6-10í         7-10í         5-10í         6-10í         6-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   107.61 MX =    -0.20 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -107.83 MX =    -0.21 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    122   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1635.82       371.75         0.00        288.00       1529.26
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM     481.60       518.45        440.84       448.40       414.44
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
STAAD SPACE                                   -- PAGE NO.   82
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        9-16í         3-16í          2-16í          3-16í          8-16í
REINF.    2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM      7-10í         7-10í          6-10í          6-10í          6-10í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR    2 legged  8í   2 legged  8í   2 legged  8í   2 legged  8í   2 legged  8í
REINF.   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   118.00 MX =     0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
  VY =  -119.70 MX =    -0.01 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
            B E A M   N O.    123   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        1359.54       269.31          0.00          348.06        1494.27
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      399.02        418.20         345.34         481.56         459.76
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

```
STAAD SPACE                                    -- PAGE NO.   83
```

```
                 SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     6-10í         6-10í         5-10í         7-10í         6-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   106.42 MX =     0.21 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -109.03 MX =     0.20 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    124   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                 SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1529.26       258.07         0.00         371.75       1635.82
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     414.44        378.04        440.84        518.45        481.60
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
----------------------------------------------------------------------------
 TOP        8-16í          3-16í          2-16í          3-16í          9-16í
REINF.    2 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)


BOTTOM      6-10í          5-10í          6-10í          7-10í          7-10í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM START SUPPORT
  VY =   116.88 MX =     0.01 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY =  -120.83 MX =    -0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    129   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
----------------------------------------------------------------------------
 TOP       1399.50         294.62           0.00         294.62        1399.50
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      363.08         398.34         272.00         398.34         363.08
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
----------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       7-16í         3-16í         2-16í         3-16í         7-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM     4-12í         4-12í         3-12í         4-12í         4-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM START SUPPORT
  VY =   104.23 MX =     0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM END SUPPORT
  VY =  -105.64 MX =    -0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    130   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1533.59        319.93          0.00        319.93       1533.59
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     375.37        398.88        322.10        427.04        375.37
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
-------------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP        5-20í        3-20í         2-20í         3-20í         5-20í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-12í        4-12í         3-12í         4-12í         4-12í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   114.42 MX =   -0.00 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -117.24 MX =   0.00 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

```
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```
        B E A M   N O.   131   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)
```
-------------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP        1529.26       258.07          0.00        371.75       1635.82
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      414.44        378.04        440.84        518.45        481.60
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

                     SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
  TOP   8-16í   3-16í   2-16í   3-16í   9-16í
 REINF.   2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM   6-10í   5-10í   6-10í   7-10í   7-10í
 REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
 REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM START SUPPORT
  VY =   116.88 MX =   -0.01 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -120.83 MX =   0.00 LD=   27
   Provide 2 Legged 8í @ 165 mm c/c

==

==
              B E A M   N O.   134   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

     LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                     SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
  TOP   1359.54   269.31   0.00   348.06   1494.27
 REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   399.02   418.20   345.34   481.56   459.76
 REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm       1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     6-10í         6-10í         5-10í         7-10í         6-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   106.42 MX =     0.21 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -109.03 MX =     0.20 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    135   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm       1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1529.26        258.07         0.00         371.76       1635.82
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     414.44        378.04        385.77        518.45        481.60
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP       8-16í         3-16í          2-16í          3-16í         9-16í
REINF.    2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)    2 layer(s)


BOTTOM     6-10í         5-10í          5-10í          7-10í         7-10í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)


SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM START SUPPORT
  VY =   116.88 MX =   0.01 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -120.83 MX =   -0.00 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

```
=========================================================================


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```

B E A M N O.   136   D E S I G N   R E S U L T S

        M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP       1359.54       269.31          0.00          348.06        1494.27
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)


BOTTOM     399.02        418.20         345.34         481.56        459.76
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      6-10í         6-10í         5-10í         7-10í         6-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   106.42 MX =   -0.21 LD=   25
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -109.03 MX =   -0.20 LD=   27
  Provide 2 Legged 8í @ 165 mm c/c

```
===============================================================================


===============================================================================
           B E A M   N O.    139   D E S I G N   R E S U L T S

       M25                    Fe415 (Main)              Fe415 (Sec.)

     LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm
```

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1635.82        371.75          0.00        288.00       1529.26
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     481.60        518.45        440.84        448.40        414.44
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP         9-16í         3-16í         2-16í         3-16í         8-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM      7-10í         7-10í         6-10í         6-10í         6-10í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   118.00 MX =    -0.00 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
  VY =  -119.70 MX =     0.01 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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===========================================================================
             B E A M   N O.    140   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP         1399.50        294.62         0.00        294.62       1399.50
REINF.      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM       363.08        398.34        272.00        398.34        363.08
REINF.      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        7-16í         3-16í         2-16í         3-16í         7-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM     4-12í         4-12í         3-12í         4-12í         4-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM START SUPPORT
  VY =   104.23 MX =     0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM END SUPPORT
  VY =  -105.64 MX =    -0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
         B E A M   N O.    141   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1533.59        319.93         0.00         319.93       1533.59
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     375.37        398.88        322.10        427.04        375.37
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
-------------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm    2500.0 mm    3750.0 mm    5000.0 mm
-------------------------------------------------------------------------
 TOP       5-20í        3-20í        2-20í        3-20í        5-20í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM     4-12í        4-12í        3-12í        4-12í        4-12í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   114.42 MX =   -0.00 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -117.24 MX =   0.00 LD=   27
   Provide 2 Legged 8í @ 165 mm c/c

```
===========================================================================


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```
         B E A M   N O.   144   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)
```
-------------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm    2500.0 mm    3750.0 mm    5000.0 mm
-------------------------------------------------------------------------
 TOP       1533.59       319.93         0.00       319.93      1533.59
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM     375.37       398.88       322.10       427.04       375.37
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
-------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
    ----------------------------------------------------------------------
    SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
    ----------------------------------------------------------------------
     TOP        5-20í        3-20í         2-20í         3-20í         5-20í
    REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

    BOTTOM     4-12í        4-12í         3-12í         4-12í         4-12í
    REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

    SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
    REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
    ----------------------------------------------------------------------


    SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
    ----------------------------------------------------------------------

    SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
      VY =   114.42 MX =      0.00 LD=   26
      Provide 2 Legged  8í  @ 165 mm c/c

    SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
      VY =  -117.24 MX =     -0.00 LD=   24
      Provide 2 Legged  8í  @ 165 mm c/c

    ==============================================================================


    ==============================================================================
              B E A M   N O.    145   D E S I G N   R E S U L T S

         M25                    Fe415 (Main)              Fe415 (Sec.)

       LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                      SUMMARY OF REINF. AREA (Sq.mm)
    ----------------------------------------------------------------------
    SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
    ----------------------------------------------------------------------
     TOP       1533.59       319.93         0.00        319.93       1533.59
    REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

    BOTTOM     375.37       398.88        322.10        427.04        375.37
    REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
    ----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-12í         4-12í         3-12í         4-12í         4-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   114.42 MX =     0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -117.24 MX =    -0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

=========================================================================


=========================================================================
          B E A M   N O.    147   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1529.26       258.07         0.00        371.76       1635.82
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     414.44        378.04        440.84        518.45        481.60
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

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                        SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   8-16í   3-16í   2-16í   3-16í   9-16í
REINF.   2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM   6-10í   5-10í   6-10í   7-10í   7-10í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í   2 legged 8í   2 legged 8í   2 legged 8í   2 legged 8í
REINF.   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM START SUPPORT
  VY =   116.88 MX =   -0.01 LD=   26
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM END SUPPORT
  VY = -120.83 MX =   0.00 LD=   24
   Provide 2 Legged 8í @ 165 mm c/c

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             B E A M   N O.   148   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                        SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1399.50   294.62   0.00   294.62   1399.50
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   363.08   321.44   314.83   398.34   363.08
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

```
                    SUMMARY OF PROVIDED REINF. AREA
     --------------------------------------------------------------------
     SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
     --------------------------------------------------------------------
      TOP       7-16í         3-16í         2-16í         3-16í         7-16í
     REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

     BOTTOM     4-12í         3-12í         3-12í         4-12í         4-12í
     REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

     SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
     REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
     --------------------------------------------------------------------


     SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
     --------------------------------------------------------------------

     SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM START SUPPORT
       VY =   104.23 MX =    -0.00 LD=   25
       Provide 2 Legged  8í  @ 165 mm c/c

     SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM END SUPPORT
       VY =  -105.64 MX =     0.00 LD=   27
       Provide 2 Legged  8í  @ 165 mm c/c

     ============================================================================


     ============================================================================
               B E A M   N O.    150   D E S I G N   R E S U L T S

          M25                   Fe415 (Main)             Fe415 (Sec.)

        LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                       SUMMARY OF REINF. AREA (Sq.mm)
     --------------------------------------------------------------------
     SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
     --------------------------------------------------------------------
      TOP       1494.27       348.06         0.00        269.31       1359.54
     REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

     BOTTOM     459.76        481.56        345.34        418.20        399.02
     REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
     --------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP       5-20í        3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     6-10í        7-10í         5-10í         6-10í         6-10í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   107.61 MX =     0.20 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -107.83 MX =     0.21 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

=============================================================================


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            B E A M   N O.    151   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP       1494.27       348.06         0.00         269.31       1359.54
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     459.76       481.56        345.34        418.20        399.02
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm    2500.0 mm    3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP      5-20í        3-20í        2-20í        3-20í        5-20í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM    6-10í        7-10í        5-10í        6-10í        6-10í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   107.61 MX =    -0.20 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -107.83 MX =    -0.21 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

=======================================================================


=======================================================================
            B E A M   N O.    152   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm    2500.0 mm    3750.0 mm    5000.0 mm
-----------------------------------------------------------------------
 TOP       1635.82       371.75        0.00       288.00      1529.26
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM     481.60       518.45       440.84       448.40       414.44
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       9-16í         3-16í          2-16í          3-16í          8-16í
REINF.   2 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     2 layer(s)

BOTTOM     7-10í         7-10í          6-10í          6-10í          6-10í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   118.00 MX =     0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
  VY =  -119.70 MX =    -0.01 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


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            B E A M   N O.    155   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)             Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       1399.50        294.62          0.00         294.62        1399.50
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)       (Sq. mm)

BOTTOM     363.08        321.44         314.83        398.34         363.08
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)       (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION        0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP          7-16í         3-16í          2-16í          3-16í          7-16í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM        4-12í         3-12í          3-12í          4-12í          4-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM START SUPPORT
  VY =   104.23 MX =    -0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   612.4 mm AWAY FROM END SUPPORT
  VY =  -105.64 MX =     0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
          B E A M   N O.    156   D E S I G N   R E S U L T S

     M25                     Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION        0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP         1635.82        371.75          0.00         288.00        1529.26
REINF.      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM       481.60        518.45        440.84         448.40         414.44
REINF.      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
---------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------------
 TOP       9-16í         3-16í          2-16í         3-16í          8-16í
REINF.   2 layer(s)    1 layer(s)     1 layer(s)    1 layer(s)     2 layer(s)

BOTTOM     7-10í         7-10í          6-10í         6-10í          6-10í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)    1 layer(s)     1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
---------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
---------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   606.3 mm AWAY FROM START SUPPORT
  VY =   118.00 MX =    -0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.0 mm AWAY FROM END SUPPORT
  VY =  -119.70 MX =     0.01 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

============================================================================


============================================================================
            B E A M   N O.    158   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
---------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------------
 TOP       1359.54        269.31          0.00        348.06        1494.27
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     399.02        418.20        345.34        481.56         459.76
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)      (Sq. mm)
---------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
--------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------
 TOP       5-20í         3-20í         2-20í         3-20í         5-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     6-10í         6-10í         5-10í         7-10í         6-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
--------------------------------------------------------------------
```
SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   106.42 MX =   -0.21 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -109.03 MX =   -0.20 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

```
================================================================================


================================================================================
         B E A M   N O.    159   D E S I G N   R E S U L T S
```
      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)
```
--------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------
 TOP      1494.27        348.06          0.00        269.31       1359.54
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     459.76        481.56        345.34        418.20        399.02
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        5-20í          3-20í          2-20í          3-20í          5-20í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM      6-10í          7-10í          5-10í          6-10í          6-10í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   107.61 MX =     0.20 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -107.83 MX =     0.21 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    161   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        1132.31         258.07          0.00         258.07        1010.12
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      258.07         260.83         316.62         299.90         258.07
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP        6-16í         3-16í         2-16í         3-16í         6-16í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í         4-10í         5-10í         4-10í         4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =    93.38 MX =    -0.17 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -92.41 MX =    -0.18 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    162   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP        1255.05       257.46         0.00         257.46       1127.42
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      257.46        348.90        437.67        323.47        257.46
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------------
```

                    SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   4-20í   3-20í   2-20í   3-20í   4-20í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM   3-12í   4-12í   4-12í   3-12í   3-12í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   103.00 MX =   -0.01 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -103.27 MX =   -0.03 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

==

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          B E A M   N O.   163   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                    SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1010.12   258.07   0.00   258.07   1132.31
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   258.07   299.90   341.63   323.04   258.07
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       6-16í         3-16í         2-16í         3-16í         6-16í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-10í         4-10í         5-10í         5-10í         4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =    91.00 MX =      0.18 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -94.79 MX =      0.17 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    164   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)             Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       1127.42       257.46          0.00        257.46       1255.05
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     257.46        257.46        437.67        348.90        257.46
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP      4-20í         3-20í         2-20í         3-20í         4-20í
REINF.  1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM    3-12í         3-12í         4-12í         4-12í         3-12í
REINF.  1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   100.45 MX =     0.03 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -105.82 MX =     0.01 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    169   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP      1100.84        258.07         0.00        258.07        1100.84
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM    257.46        286.87        317.39        286.87        257.46
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP      10-12í        3-12í         3-12í         3-12í         10-12í
REINF.   2 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM    3-12í        3-12í         3-12í         3-12í         3-12í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM START SUPPORT
  VY =     91.77 MX =    -0.00 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM END SUPPORT
  VY =    -93.18 MX =     0.00 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    170   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP      1232.80       257.46        0.00          257.46        1232.80
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM    257.46        258.97        412.17        309.52        257.46
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

```
                     SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP      11-12í         3-12í         3-12í         3-12í        11-12í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM     3-12í         3-12í         4-12í         3-12í         3-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM START SUPPORT
  VY =   101.21 MX =    -0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM END SUPPORT
  VY =  -104.03 MX =     0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    171   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                     SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP      1127.42        257.46         0.00         257.46       1255.05
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     257.46        257.46        437.67        348.90        257.46
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        4-20í         3-20í         2-20í         3-20í         4-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      3-12í         3-12í         4-12í         4-12í         3-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   100.45 MX =    -0.03 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -105.82 MX =    -0.01 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    174   D E S I G N   R E S U L T S

      M25                 Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        1010.12       258.07         0.00         258.07       1132.31
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      258.07        299.90        341.63        323.04        258.07
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        6-16í         3-16í          2-16í          3-16í          6-16í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM      4-10í         4-10í          5-10í          5-10í          4-10í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =    91.00 MX =     0.18 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -94.79 MX =     0.17 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    175   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
--------------------------------------------------------------------------
 TOP        1127.42       257.46          0.00         257.46        1255.05
REINF.     (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      257.46       257.46         349.02         348.90        257.46
REINF.     (Sq. mm)     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
--------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm    5000.0 mm
-------------------------------------------------------------------------
 TOP        4-20í         3-20í         2-20í         3-20í         4-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     3-12í         3-12í         4-12í         4-12í         3-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   100.45 MX =   0.03 LD=   26
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY = -105.82 MX =   0.01 LD=   24
   Provide 2 Legged 8í @ 165 mm c/c

```
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```
          B E A M   N O.   176   D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm    5000.0 mm
-------------------------------------------------------------------------
 TOP       1010.12        258.07         0.00         258.07       1132.31
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      258.07        260.61        341.63        323.04        258.07
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        6-16í          3-16í          2-16í          3-16í          6-16í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í          4-10í          5-10í          5-10í          4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =     91.00 MX =    -0.18 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =    -94.79 MX =    -0.17 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
             B E A M   N O.    179   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        1255.05        257.46          0.00         257.46        1127.42
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      257.46        348.90         437.67         323.47        257.46
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
---------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------
 TOP        4-20í         3-20í         2-20í         3-20í         4-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      3-12í         4-12í         4-12í         3-12í         3-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
---------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
---------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   103.00 MX =     0.01 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -103.27 MX =     0.03 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

============================================================================


============================================================================
          B E A M   N O.    180   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
---------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------
 TOP       1100.84        258.07         0.00         258.07        1100.84
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     257.46        286.87        317.39         286.87        257.46
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
---------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   10-12í   3-12í   3-12í   3-12í   10-12í
REINF.   2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM   3-12í   3-12í   3-12í   3-12í   3-12í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM START SUPPORT
  VY =   91.77 MX =   -0.00 LD=   25
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM END SUPPORT
  VY =   -93.18 MX =   0.00 LD=   27
  Provide 2 Legged 8í @ 165 mm c/c

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          B E A M   N O.   181   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1232.80   257.46   0.00   257.46   1232.80
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   257.46   258.97   412.17   309.52   257.46
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

                      SUMMARY OF PROVIDED REINF. AREA
```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       11-12í         3-12í         3-12í         3-12í        11-12í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)


BOTTOM      3-12í         3-12í         4-12í         3-12í         3-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)


SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM START SUPPORT
  VY =   101.21 MX =   -0.00 LD=   25
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM END SUPPORT
  VY = -104.03 MX =   0.00 LD=   27
  Provide 2 Legged 8í @ 165 mm c/c

```
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          B E A M   N O.    184   D E S I G N   R E S U L T S
```

     M25   Fe415 (Main)   Fe415 (Sec.)

   LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                      SUMMARY OF REINF. AREA (Sq.mm)
```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1232.80        257.46         0.00        257.46       1232.80
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     257.46        258.97        412.17        309.52        257.46
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP      11-12í        3-12í         3-12í         3-12í        11-12í
REINF.    2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM     3-12í        3-12í         4-12í         3-12í         3-12í
REINF.    1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM START SUPPORT
  VY =   101.21 MX =     0.00 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM END SUPPORT
  VY =  -104.03 MX =    -0.00 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    185   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       1232.80       257.46         0.00        257.46       1232.80
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM      257.46       258.97       412.17        309.52        257.46
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
----------------------------------------------------------------------
```

```
                  SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       11-12í         3-12í         3-12í         3-12í        11-12í
REINF.    2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM      3-12í         3-12í         4-12í         3-12í         3-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM START SUPPORT
  VY =   101.21 MX =      0.00 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   609.2 mm AWAY FROM END SUPPORT
  VY =  -104.03 MX =     -0.00 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    187   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)            Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                  SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       1127.42        257.46         0.00        257.46       1255.05
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      257.46        257.46        437.67        348.90        257.46
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

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STAAD SPACE                                    -- PAGE NO.  120
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```
                    SUMMARY OF PROVIDED REINF. AREA
-------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP      4-20í         3-20í         2-20í         3-20í         4-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM    3-12í         3-12í         4-12í         4-12í         3-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   100.45 MX =    -0.03 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -105.82 MX =    -0.01 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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             B E A M   N O.    188   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP      1100.84       258.07        0.00          258.07        1100.84
REINF.   (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM    257.46        286.87        273.84        286.87        257.46
REINF.   (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

```
                        SUMMARY OF PROVIDED REINF. AREA
---------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------------
  TOP      10-12í         3-12í         3-12í         3-12í        10-12í
 REINF.   2 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    2 layer(s)

BOTTOM      3-12í         3-12í         3-12í         3-12í         3-12í
 REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
---------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
---------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM START SUPPORT
  VY =     91.77 MX =      0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM END SUPPORT
  VY =    -93.18 MX =     -0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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             B E A M   N O.    190   D E S I G N   R E S U L T S

       M25                   Fe415 (Main)              Fe415 (Sec.)

     LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                        SUMMARY OF REINF. AREA (Sq.mm)
---------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------------
  TOP      1132.31        258.07         0.00         258.07       1010.12
 REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      258.07        258.07        341.63        299.90        258.07
 REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
---------------------------------------------------------------------------
```

STAAD SPACE   -- PAGE NO. 122


```
                    SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP        6-16í         3-16í         2-16í         3-16í         6-16í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í         4-10í         5-10í         4-10í         4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =    93.38 MX =     0.17 LD=   26
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -92.41 MX =     0.18 LD=   24
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    191   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       1132.31        258.07         0.00         258.07       1010.12
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     258.07        258.07        341.63        299.90        258.07
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA
```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP        6-16í         3-16í         2-16í         3-16í         6-16í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í         4-10í         5-10í         4-10í         4-10í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =   93.38 MX =   -0.17 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -92.41 MX =   -0.18 LD=   27
   Provide 2 Legged 8í @ 165 mm c/c

```
=========================================================================


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          B E A M   N O.    192   D E S I G N   R E S U L T S
```

        M25   Fe415 (Main)   Fe415 (Sec.)

     LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)
```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP        1255.05       257.46         0.00         257.46       1127.42
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      257.46        348.90        437.67        323.47       257.46
REINF.     (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       4-20í        3-20í         2-20í         3-20í         4-20í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     3-12í        4-12í         4-12í         3-12í         3-12í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   103.00 MX =    -0.01 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -103.27 MX =    -0.03 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    195   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       1100.84       258.07         0.00         258.07       1100.84
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     257.46        286.87        273.84        286.87        257.46
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

                    SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   10-12í   3-12í   3-12í   3-12í   10-12í
REINF.   2 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   2 layer(s)

BOTTOM   3-12í   3-12í   3-12í   3-12í   3-12í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM START SUPPORT
  VY =   91.77 MX =   0.00 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   610.9 mm AWAY FROM END SUPPORT
  VY =   -93.18 MX =   -0.00 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

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              B E A M   N O.   196   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

     LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                    SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   1255.05   257.46   0.00   257.46   1127.42
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   257.46   348.90   437.67   323.47   257.46
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

```
                     SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP       4-20í          3-20í          2-20í          3-20í          4-20í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


BOTTOM     3-12í          4-12í          4-12í          3-12í          3-12í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)


SHEAR   2 legged  8í   2 legged  8í   2 legged  8í   2 legged  8í   2 legged  8í
REINF.  @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   103.00 MX =     0.01 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =  -103.27 MX =     0.03 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    198   D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                     SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP       1010.12          0.00           0.00         258.07         1132.31
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)


BOTTOM     258.07         260.61         341.63         323.04         258.07
REINF.    (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

```
                   SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        6-16í        2-16í         2-16í         3-16í         6-16í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í        4-10í         5-10í         5-10í         4-10í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
  VY =    91.00 MX =    -0.18 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
  VY =   -94.79 MX =    -0.17 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    199   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                   SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       1132.31       258.07         0.00        258.07       1010.12
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)

BOTTOM     258.07       323.04        316.62       299.90        258.07
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                     SUMMARY OF PROVIDED REINF. AREA
   ----------------------------------------------------------------------
   SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP        6-16í        3-16í         2-16í         3-16í         6-16í
   REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

   BOTTOM     4-10í        5-10í         5-10í         4-10í         4-10í
   REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

   SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
   REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
   ----------------------------------------------------------------------


   SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
   ----------------------------------------------------------------------

   SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM START SUPPORT
     VY =     93.38 MX =     0.17 LD=   25
     Provide 2 Legged  8í  @ 165 mm c/c

   SHEAR DESIGN RESULTS AT   617.0 mm AWAY FROM END SUPPORT
     VY =    -92.41 MX =     0.18 LD=   27
     Provide 2 Legged  8í  @ 165 mm c/c

   ============================================================================


   ============================================================================
              B E A M   N O.    201   D E S I G N   R E S U L T S

       M25                    Fe415 (Main)              Fe415 (Sec.)

      LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                      SUMMARY OF REINF. AREA (Sq.mm)
   ----------------------------------------------------------------------
   SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP        525.77       258.07         0.00         258.07        514.86
   REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)

   BOTTOM     258.07       258.07        258.07        258.07          0.00
   REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)
   ----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP       7-10í         4-10í         4-10í         4-10í         7-10í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-10í         4-10í         4-10í         4-10í         4-10í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =     55.15 MX =    -0.38 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =    -56.04 MX =    -0.89 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    202   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        603.23        258.07          0.00        258.07        604.27
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      258.07        258.07        377.53        258.07          0.00
REINF.     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
---------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------------
 TOP       3-20í        3-20í         2-20í         3-20í         3-20í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-10í        4-10í         5-10í         4-10í         4-10í
REINF.   1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
---------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
---------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =     67.90 MX =    -0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =    -74.36 MX =    -0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    203   D E S I G N   R E S U L T S

     M25                 Fe415 (Main)               Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
---------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
---------------------------------------------------------------------------
 TOP       514.86       258.07         0.00         258.07        525.77
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      0.00        258.07        281.35        258.07        258.07
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
---------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       7-10í          4-10í         4-10í         4-10í         7-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-10í          4-10í         4-10í         4-10í         4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =    54.06 MX =     0.89 LD=   19
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =   -54.34 MX =     0.89 LD=   19
  Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    204   D E S I G N   R E S U L T S

     M25                 Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       604.27        257.46         0.00         257.46        603.23
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      0.00         257.46        315.13        257.46        257.46
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

```
                  SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        3-20í        3-20í         2-20í         3-20í         3-20í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM      3-12í        3-12í         3-12í         3-12í         3-12í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    70.41 MX =     0.04 LD=   19
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -71.85 MX =     0.04 LD=   19
  Provide 2 Legged  8í  @ 165 mm c/c

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            B E A M   N O.    209   D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                  SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP        557.61        258.07         0.00         258.07        557.61
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)

BOTTOM      0.00         258.07        258.07        258.07         0.00
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)     (Sq. mm)
----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        5-12í         3-12í         3-12í         3-12í         5-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í         4-10í         4-10í         4-10í         4-10í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
  VY =   56.16 MX =   -0.00 LD=   26
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
  VY =   -57.57 MX =   0.00 LD=   24
  Provide 2 Legged 8í @ 165 mm c/c

```
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```
B E A M   N O.   210   D E S I G N   R E S U L T S

        M25   Fe415 (Main)   Fe415 (Sec.)

     LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        645.28        0.00          0.00         257.46        645.28
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      0.00         257.46        325.02        257.46         0.00
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
   ----------------------------------------------------------------------
   SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP        6-12í         3-12í         3-12í         3-12í         6-12í
   REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

   BOTTOM     3-12í         3-12í         3-12í         3-12í         3-12í
   REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

   SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
   REINF.   @ 300 mm c/c  @ 300 mm c/c  @ 165 mm c/c  @ 300 mm c/c  @ 300 mm c/c
   ----------------------------------------------------------------------


   SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
   ----------------------------------------------------------------------

   SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
     VY =     69.15 MX =    -0.00 LD=   19
     Provide 2 Legged  8í  @ 300 mm c/c

   SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
     VY =    -73.11 MX =    -0.00 LD=   19
     Provide 2 Legged  8í  @ 300 mm c/c

   ==============================================================================


   ==============================================================================
              B E A M   N O.    211   D E S I G N   R E S U L T S

       M25                    Fe415 (Main)              Fe415 (Sec.)

      LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
   ----------------------------------------------------------------------
   SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
   ----------------------------------------------------------------------
    TOP        604.27        257.46          0.00        257.46        603.23
   REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

   BOTTOM       0.00        257.46        315.13        257.46        257.46
   REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
   ----------------------------------------------------------------------
```

```
                        SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------------
SECTION      0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------------
 TOP        3-20í          3-20í          2-20í          3-20í          3-20í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM      3-12í          3-12í          3-12í          3-12í          3-12í
REINF.    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =    70.41 MX =    -0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -71.85 MX =    -0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

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          B E A M   N O.    214   D E S I G N   R E S U L T S

     M25                     Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                        SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------------
SECTION      0.0 mm       1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------------
 TOP        514.86         258.07          0.00          258.07         525.77
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM       0.00         258.07         281.35          258.07         258.07
REINF.     (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
---------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm    2500.0 mm     3750.0 mm    5000.0 mm
---------------------------------------------------------------------------
 TOP       7-10í        4-10í        4-10í         4-10í        7-10í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)    1 layer(s)   1 layer(s)

BOTTOM     4-10í        4-10í        4-10í         4-10í        4-10í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)    1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
---------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
---------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =    54.06 MX =     0.89 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =   -54.34 MX =     0.89 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
             B E A M   N O.    215   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)               Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
---------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm    2500.0 mm     3750.0 mm    5000.0 mm
---------------------------------------------------------------------------
 TOP       604.27       258.07        0.00         258.07       603.23
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)

BOTTOM      0.00        258.07       377.53        258.07       258.07
REINF.    (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)     (Sq. mm)
---------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        3-20í         3-20í         2-20í         3-20í         3-20í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í         4-10í         5-10í         4-10í         4-10í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   70.41 MX =   0.04 LD=   19
  Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -71.85 MX =   0.04 LD=   19
  Provide 2 Legged 8í @ 165 mm c/c

```
===============================================================================


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            B E A M   N O.    216   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X   450.0 mm   COVER: 25.0 mm
```

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION      0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        514.86        258.07          0.00        258.07        525.77
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM        0.00        258.07        281.35        258.07        258.07
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

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```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP        7-10í        4-10í          4-10í          4-10í          7-10í
REINF.   1 layer(s)   1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)

BOTTOM      4-10í        4-10í          4-10í          4-10í          4-10í
REINF.   1 layer(s)   1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =     54.06 MX =    -0.89 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =    -54.34 MX =    -0.89 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

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           B E A M   N O.    219   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION     0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP       603.23        258.07          0.00          258.07        604.27
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)

BOTTOM     258.07        258.07         314.31         258.07          0.00
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP        3-20í         3-20í          2-20í         3-20í         3-20í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-10í         4-10í          5-10í         4-10í         4-10í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   67.90 MX =   0.04 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -74.36 MX =   0.04 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

```
=========================================================================


=========================================================================
            B E A M   N O.    220   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm
```

SUMMARY OF REINF. AREA (Sq.mm)

```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm     3750.0 mm     5000.0 mm
-------------------------------------------------------------------------
 TOP        557.61        258.07          0.00        258.07        557.61
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      0.00         258.07        258.07        258.07          0.00
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       5-12í         3-12í         3-12í         3-12í         5-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-10í         4-10í         4-10í         4-10í         4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
  VY =    56.16 MX =    -0.00 LD=   25
  Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
  VY =   -57.57 MX =     0.00 LD=   27
  Provide 2 Legged  8í  @ 165 mm c/c

========================================================================


========================================================================
            B E A M   N O.    221   D E S I G N   R E S U L T S

      M25                Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       645.28         0.00          0.00        257.46        645.28
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      0.00        257.46        325.02        257.46          0.00
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-------------------------------------------------------------------------
 TOP       6-12í          3-12í          3-12í          3-12í          6-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     3-12í          3-12í          3-12í          3-12í          3-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 300 mm c/c  @ 300 mm c/c  @ 165 mm c/c  @ 300 mm c/c  @ 300 mm c/c
-------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
  VY =    69.15 MX =     0.00 LD=   19
   Provide 2 Legged  8í  @ 300 mm c/c

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
  VY =   -73.11 MX =     0.00 LD=   19
   Provide 2 Legged  8í  @ 300 mm c/c

===========================================================================


===========================================================================
            B E A M   N O.    224   D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-------------------------------------------------------------------------
 TOP       645.28          0.00           0.00         257.46         645.28
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      0.00         257.46         325.02         257.46          0.00
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP         6-12í          3-12í         3-12í         3-12í         6-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM       3-12í          3-12í         3-12í         3-12í         3-12í
REINF.    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 300 mm c/c  @ 300 mm c/c  @ 165 mm c/c  @ 300 mm c/c  @ 300 mm c/c
-----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
  VY =     69.15 MX =    -0.00 LD=   19
  Provide 2 Legged  8í  @ 300 mm c/c

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
  VY =    -73.11 MX =    -0.00 LD=   19
  Provide 2 Legged  8í  @ 300 mm c/c

=============================================================================


=============================================================================
            B E A M   N O.    225   D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm     SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------------
SECTION       0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------------
 TOP         645.28         0.00          0.00         257.46        645.28
REINF.      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM        0.00        257.46        325.02        257.46          0.00
REINF.      (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------------
```

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```
                      SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------------
  TOP       6-12í         3-12í          3-12í          3-12í          6-12í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM     3-12í         3-12í          3-12í          3-12í          3-12í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 300 mm c/c  @ 300 mm c/c  @ 165 mm c/c  @ 300 mm c/c  @ 300 mm c/c
-----------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
  VY =    69.15 MX =    -0.00 LD=   19
   Provide 2 Legged  8í  @ 300 mm c/c

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
  VY =   -73.11 MX =    -0.00 LD=   19
   Provide 2 Legged  8í  @ 300 mm c/c

==============================================================================


==============================================================================
            B E A M   N O.    227   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                      SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-----------------------------------------------------------------------------
  TOP       604.27        258.07          0.00         258.07         603.23
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)

BOTTOM      0.00         258.07         377.53         258.07         258.07
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------------
```

```
                 SUMMARY OF PROVIDED REINF. AREA
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP        3-20í          3-20í          2-20í          3-20í         3-20í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)

BOTTOM      4-10í          4-10í          5-10í          4-10í         4-10í
REINF.    1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =     70.41 MX =    -0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =    -71.85 MX =    -0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

========================================================================


========================================================================
          B E A M   N O.    228   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                 SUMMARY OF REINF. AREA (Sq.mm)
------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP        557.61         258.07          0.00         258.07        557.61
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)

BOTTOM       0.00         258.07         258.07         258.07         0.00
REINF.    (Sq. mm)      (Sq. mm)       (Sq. mm)       (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       5-12í          3-12í          3-12í          3-12í          5-12í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM     4-10í          4-10í          4-10í          4-10í          4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
  VY =    56.16 MX =     0.00 LD=   25
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
  VY =   -57.57 MX =    -0.00 LD=   27
   Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
            B E A M   N O.    230   D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

    LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
----------------------------------------------------------------------
 TOP       525.77         258.07          0.00         258.07         514.86
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM     258.07         258.07         281.35         258.07          0.00
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
----------------------------------------------------------------------
```

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SUMMARY OF PROVIDED REINF. AREA

```
------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP      7-10í         4-10í         4-10í         4-10í         7-10í
REINF.  1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM    4-10í         4-10í         4-10í         4-10í         4-10í
REINF.  1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =   55.15 MX =   0.38 LD=   26
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =   -56.04 MX =   0.89 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

```
========================================================================


========================================================================
           B E A M   N O.    231   D E S I G N   R E S U L T S
```

       M25   Fe415 (Main)   Fe415 (Sec.)

     LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
------------------------------------------------------------------------
SECTION     0.0 mm     1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
------------------------------------------------------------------------
 TOP       525.77        258.07         0.00        258.07        514.86
REINF.    (Sq. mm)      (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)

BOTTOM     258.07        258.07       258.07        258.07         0.00
REINF.    (Sq. mm)      (Sq. mm)     (Sq. mm)     (Sq. mm)      (Sq. mm)
------------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        7-10í        4-10í         4-10í         4-10í         7-10í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í        4-10í         4-10í         4-10í         4-10í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =   55.15 MX =   -0.38 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =   -56.04 MX =   -0.89 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

```
===========================================================================


===========================================================================
          B E A M   N O.    232   D E S I G N   R E S U L T S
```

       M25   Fe415 (Main)   Fe415 (Sec.)

     LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        603.23       258.07         0.00         258.07        604.27
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      258.07       258.07        377.53        258.07         0.00
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

SUMMARY OF PROVIDED REINF. AREA

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        3-20í        3-20í         2-20í         3-20í         3-20í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í        4-10í         5-10í         4-10í         4-10í
REINF.    1 layer(s)   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR   2 legged  8í   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-----------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =   67.90 MX =   -0.04 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =   -74.36 MX =   -0.04 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

```
===========================================================================


===========================================================================
```
B E A M   N O.   235   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

```
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm     3750.0 mm     5000.0 mm
-----------------------------------------------------------------------
 TOP        557.61       258.07         0.00         258.07        557.61
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM      0.00         258.07        258.07        258.07         0.00
REINF.    (Sq. mm)     (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
-----------------------------------------------------------------------
```

```
                      SUMMARY OF PROVIDED REINF. AREA
-----------------------------------------------------------------------
SECTION      0.0 mm       1250.0 mm      2500.0 mm     3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        5-12í          3-12í          3-12í         3-12í          5-12í
REINF.   1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)     1 layer(s)

BOTTOM      4-10í          4-10í          4-10í         4-10í          4-10í
REINF.   1 layer(s)     1 layer(s)     1 layer(s)    1 layer(s)     1 layer(s)

SHEAR    2 legged  8í   2 legged  8í   2 legged  8í  2 legged  8í   2 legged  8í
REINF.   @ 165 mm c/c   @ 165 mm c/c   @ 165 mm c/c  @ 165 mm c/c   @ 165 mm c/c
-----------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
-----------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM START SUPPORT
  VY =    56.16 MX =     0.00 LD=   26
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   619.0 mm AWAY FROM END SUPPORT
  VY =   -57.57 MX =    -0.00 LD=   24
   Provide 2 Legged  8í  @ 165 mm c/c

===========================================================================


===========================================================================
          B E A M   N O.    236   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                      SUMMARY OF REINF. AREA (Sq.mm)
-----------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm     3750.0 mm      5000.0 mm
-----------------------------------------------------------------------
 TOP        603.23        258.07          0.00         258.07         604.27
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)       (Sq. mm)

BOTTOM      258.07        258.07        377.53         258.07          0.00
REINF.     (Sq. mm)      (Sq. mm)       (Sq. mm)      (Sq. mm)       (Sq. mm)
-----------------------------------------------------------------------
```

```
                    SUMMARY OF PROVIDED REINF. AREA
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm      3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP        3-20í         3-20í         2-20í          3-20í         3-20í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

BOTTOM      4-10í         4-10í         5-10í          4-10í         4-10í
REINF.   1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)    1 layer(s)

SHEAR    2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.   @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
--------------------------------------------------------------------------


SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
--------------------------------------------------------------------------

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM START SUPPORT
  VY =     67.90 MX =      0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

SHEAR DESIGN RESULTS AT   615.0 mm AWAY FROM END SUPPORT
  VY =    -74.36 MX =      0.04 LD=   19
   Provide 2 Legged  8í  @ 165 mm c/c

==========================================================================


==========================================================================
          B E A M   N O.    238   D E S I G N   R E S U L T S

     M25                  Fe415 (Main)             Fe415 (Sec.)

   LENGTH:  5000.0 mm    SIZE:   300.0 mm X  450.0 mm   COVER: 25.0 mm


                    SUMMARY OF REINF. AREA (Sq.mm)
--------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm     2500.0 mm      3750.0 mm     5000.0 mm
--------------------------------------------------------------------------
 TOP        514.86        258.07         0.00          258.07        525.77
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)

BOTTOM       0.00        258.07        281.35          258.07        258.07
REINF.    (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)      (Sq. mm)
--------------------------------------------------------------------------
```

                    SUMMARY OF PROVIDED REINF. AREA

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   7-10í   4-10í   4-10í   4-10í   7-10í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

BOTTOM   4-10í   4-10í   4-10í   4-10í   4-10í
REINF.   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)   1 layer(s)

SHEAR   2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í 2 legged 8í
REINF. @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c @ 165 mm c/c
----

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =   54.06 MX =   -0.89 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =   -54.34 MX =   -0.89 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

===

===
             B E A M   N O.   239   D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

    LENGTH: 5000.0 mm   SIZE: 300.0 mm X 450.0 mm   COVER: 25.0 mm

                    SUMMARY OF REINF. AREA (Sq.mm)

SECTION   0.0 mm   1250.0 mm   2500.0 mm   3750.0 mm   5000.0 mm
----
 TOP   525.77   258.07   0.00   258.07   514.86
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

BOTTOM   258.07   258.07   258.07   258.07   0.00
REINF.   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)   (Sq. mm)

SUMMARY OF PROVIDED REINF. AREA
```
-------------------------------------------------------------------------
SECTION      0.0 mm      1250.0 mm      2500.0 mm      3750.0 mm      5000.0 mm
-------------------------------------------------------------------------
 TOP        7-10í         4-10í          4-10í          4-10í          7-10í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

BOTTOM     4-10í         4-10í          4-10í          4-10í          4-10í
REINF.   1 layer(s)    1 layer(s)     1 layer(s)     1 layer(s)     1 layer(s)

SHEAR   2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í  2 legged  8í
REINF.  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c  @ 165 mm c/c
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT DISTANCE d (EFFECTIVE DEPTH) FROM FACE OF THE SUPPORT
```
-------------------------------------------------------------------------
```

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM START SUPPORT
  VY =   55.15 MX =   0.38 LD=   25
   Provide 2 Legged 8í @ 165 mm c/c

SHEAR DESIGN RESULTS AT   620.0 mm AWAY FROM END SUPPORT
  VY =   -56.04 MX =   0.89 LD=   19
   Provide 2 Legged 8í @ 165 mm c/c

```
=========================================================================
```

********************END OF BEAM DESIGN RESULTS********************

```
306. DESIGN COLUMN 5 TO 8 12 13 17 18 22 23 26 29 33 34 37 40 45 TO 48 52 53 57 -
307. 58 62 63 66 69 73 74 77 80 85 TO 88 92 93 97 98 102 103 106 109 113 114 117 -
308. 120 125 TO 128 132 133 137 138 142 143 146 149 153 154 157 160 165 TO 168 -
309. 172 173 177 178 182 183 186 189 193 194 197 200 205 TO 208 212 213 217 218 -
310. 222 223 226 229 233 234 237 240
```

```
================================================================================

          C O L U M N   N O.    5  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)               Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:     5  SHORT COLUMN


REQD. STEEL AREA   :    2275.96 Sq.mm.
REQD. CONCRETE AREA:  157724.05 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2482.79   Muz1 :    149.07   Muy1 :    149.07

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:   26
END JOINT:     5 Puz :   2523.82   Muz :    154.26   Muy :    154.26   IR: 0.95
================================================================================


================================================================================

          C O L U M N   N O.    6  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)               Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   27 END JOINT:     6  SHORT COLUMN
```

```
REQD. STEEL AREA    :     3381.09 Sq.mm.
REQD. CONCRETE AREA:   156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    27
END JOINT:      6 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
========================================================================



========================================================================

           C O L U M N   N O.     7  D E S I G N   R E S U L T S

       M25                      Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:     7  SHORT COLUMN


REQD. STEEL AREA    :     3381.09 Sq.mm.
REQD. CONCRETE AREA:   156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:      7 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
```

STAAD SPACE   -- PAGE NO. 155

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         C O L U M N   N O.   8 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 8 SHORT COLUMN

REQD. STEEL AREA   :   4480.00 Sq.mm.
REQD. CONCRETE AREA: 155520.00 Sq.mm.
MAIN REINFORCEMENT : Provide 24 - 16 dia. (3.02%,   4825.49 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz : 3144.00   Muz1 :   171.11   Muy1 :   171.11

INTERACTION RATIO: 0.96 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 24
END JOINT: 8 Puz :   3247.65   Muz :   183.71   Muy :   183.71   IR: 0.86
==

==

         C O L U M N   N O.   12 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 27 END JOINT: 11 SHORT COLUMN

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```
REQD. STEEL AREA    :    3381.09 Sq.mm.
REQD. CONCRETE AREA:  156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    27
END JOINT:    11 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
==========================================================================


==========================================================================
         C O L U M N   N O.    13  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    12  SHORT COLUMN


REQD. STEEL AREA    :    4480.00 Sq.mm.
REQD. CONCRETE AREA:  155520.00 Sq.mm.
MAIN REINFORCEMENT : Provide  24 - 16 dia. (3.02%,   4825.49 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   3144.00   Muz1 :    171.11   Muy1 :    171.11

INTERACTION RATIO: 0.96 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:    12 Puz :   3247.65   Muz :    183.71   Muy :    183.71   IR: 0.86
```

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STAAD SPACE                                    -- PAGE NO.   157
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```
         C O L U M N   N O.     17  D E S I G N   R E S U L T S

       M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    15  SHORT COLUMN


REQD. STEEL AREA   :    2275.96 Sq.mm.
REQD. CONCRETE AREA:  157724.05 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------
Puz :   2482.79   Muz1 :    149.07   Muy1 :    149.07

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    15 Puz :   2523.82   Muz :    154.26   Muy :    154.26   IR: 0.95
```
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```
         C O L U M N   N O.     18  D E S I G N   R E S U L T S

       M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    16  SHORT COLUMN
```

STAAD SPACE   -- PAGE NO. 158

```
REQD. STEEL AREA   :    3381.09 Sq.mm.
REQD. CONCRETE AREA:  156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    16 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
=========================================================================


=========================================================================

         C O L U M N   N O.    22  D E S I G N   R E S U L T S

     M25                  Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    19  SHORT COLUMN


REQD. STEEL AREA   :    3381.09 Sq.mm.
REQD. CONCRETE AREA:  156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    19 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
```

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STAAD SPACE                                     -- PAGE NO.  159
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         C O L U M N   N O.   23 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 20 SHORT COLUMN

REQD. STEEL AREA   :   4480.00 Sq.mm.
REQD. CONCRETE AREA: 155520.00 Sq.mm.
MAIN REINFORCEMENT : Provide 24 - 16 dia. (3.02%,   4825.49 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz : 3144.00   Muz1 :   171.11   Muy1 :   171.11

INTERACTION RATIO: 0.96 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 24
END JOINT: 20 Puz : 3247.65   Muz :   183.71   Muy :   183.71   IR: 0.86
==

==

         C O L U M N   N O.   26 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 26 END JOINT: 22 SHORT COLUMN

STAAD SPACE   -- PAGE NO. 160

```
REQD. STEEL AREA    :     4480.00 Sq.mm.
REQD. CONCRETE AREA:   155520.00 Sq.mm.
MAIN REINFORCEMENT : Provide  24 - 16 dia. (3.02%,   4825.49 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   3144.00   Muz1 :    171.11   Muy1 :    171.11

INTERACTION RATIO: 0.96 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:     22 Puz :   3247.65   Muz :    183.71   Muy :    183.71   IR: 0.86
========================================================================



========================================================================

          C O L U M N   N O.    29  D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    24  SHORT COLUMN


REQD. STEEL AREA    :     3381.09 Sq.mm.
REQD. CONCRETE AREA:   156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:     24 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
```

```
STAAD SPACE                                    -- PAGE NO.  161
```

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```
       C O L U M N   N O.    33  D E S I G N   R E S U L T S

    M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    27  SHORT COLUMN


REQD. STEEL AREA   :    2275.96 Sq.mm.
REQD. CONCRETE AREA:  157724.05 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------
Puz :   2482.79   Muz1 :    149.07   Muy1 :    149.07

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------
WORST LOAD CASE:    25
END JOINT:    27 Puz :   2523.82   Muz :    154.26   Muy :    154.26   IR: 0.95
```

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```
       C O L U M N   N O.    34  D E S I G N   R E S U L T S

    M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    28  SHORT COLUMN
```

STAAD SPACE   -- PAGE NO. 162

```
REQD. STEEL AREA    :     3381.09 Sq.mm.
REQD. CONCRETE AREA:   156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:    28 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
========================================================================


========================================================================

          C O L U M N   N O.    37  D E S I G N    R E S U L T S

       M25                  Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    30  SHORT COLUMN


REQD. STEEL AREA    :     3381.09 Sq.mm.
REQD. CONCRETE AREA:   156618.92 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2814.33   Muz1 :    152.33   Muy1 :    152.33

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:    30 Puz :   2885.73   Muz :    161.20   Muy :    161.20   IR: 0.91
```

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   STAAD SPACE                                    -- PAGE NO.  163
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```
         C O L U M N   N O.    40  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    32  SHORT COLUMN


REQD. STEEL AREA   :     2275.96 Sq.mm.
REQD. CONCRETE AREA:   157724.05 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
---------------------------------------------------------
Puz :   2482.79  Muz1 :    149.07  Muy1 :    149.07

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
---------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    32 Puz :   2523.82   Muz :    154.26   Muy :    154.26   IR: 0.95
```
==

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```
         C O L U M N   N O.    45  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    33  SHORT COLUMN
```

```
REQD. STEEL AREA   :    1097.19 Sq.mm.
REQD. CONCRETE AREA:  137148.22 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2129.16   Muz1 :    120.13   Muy1 :    120.13

INTERACTION RATIO: 0.97 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    33 Puz :   2176.99   Muz :    138.03   Muy :    138.03   IR: 0.80
==========================================================================



==========================================================================

         C O L U M N   N O.    46  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:     2  SHORT COLUMN


REQD. STEEL AREA   :    2367.74 Sq.mm.
REQD. CONCRETE AREA:  157632.27 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2510.32   Muz1 :    148.97   Muy1 :    148.97

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:     2 Puz :   2523.82   Muz :    151.09   Muy :    151.09   IR: 0.96
```

STAAD SPACE   -- PAGE NO. 165

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         C O L U M N   N O.   47 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 25 END JOINT: 3 SHORT COLUMN

REQD. STEEL AREA   :   2367.74 Sq.mm.
REQD. CONCRETE AREA: 157632.27 Sq.mm.
MAIN REINFORCEMENT : Provide 12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2510.32   Muz1 :   148.97   Muy1 :   148.97

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 25
END JOINT: 3 Puz :   2523.82   Muz :   151.09   Muy :   151.09   IR: 0.96
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         C O L U M N   N O.   48 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 4 SHORT COLUMN

```
REQD. STEEL AREA   :    3593.18 Sq.mm.
REQD. CONCRETE AREA:  156406.81 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :  2877.96   Muz1 :    156.01   Muy1 :    156.01

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:     4 Puz :   2885.73   Muz :    157.50   Muy :    157.50   IR: 0.96
==========================================================================



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          C O L U M N   N O.    52  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:     9  SHORT COLUMN


REQD. STEEL AREA   :    2367.74 Sq.mm.
REQD. CONCRETE AREA:  157632.27 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :  2510.32   Muz1 :    148.97   Muy1 :    148.97

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:     9 Puz :   2523.82   Muz :    151.09   Muy :    151.09   IR: 0.96
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   STAAD SPACE                                     -- PAGE NO.  167
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```
            C O L U M N   N O.    53  D E S I G N   R E S U L T S
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        M25                     Fe415 (Main)              Fe415 (Sec.)
```

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 25 END JOINT: 10 SHORT COLUMN

REQD. STEEL AREA   :   3593.18 Sq.mm.
REQD. CONCRETE AREA: 156406.81 Sq.mm.
MAIN REINFORCEMENT : Provide 32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz : 2877.96   Muz1 :   156.01   Muy1 :   156.01

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 25
END JOINT: 10 Puz : 2885.73   Muz :   157.50   Muy :   157.50   IR: 0.96
===

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```

```
            C O L U M N   N O.    57  D E S I G N   R E S U L T S
```

```
        M25                     Fe415 (Main)              Fe415 (Sec.)
```

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 39 SHORT COLUMN

STAAD SPACE   -- PAGE NO. 168

```
REQD. STEEL AREA    :     1097.19 Sq.mm.
REQD. CONCRETE AREA:   137148.22 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2129.16   Muz1 :    120.13   Muy1 :    120.13

INTERACTION RATIO: 0.97 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:     39 Puz :   2176.99   Muz :    138.03   Muy :    138.03   IR: 0.80
==========================================================================



==========================================================================

          C O L U M N   N O.     58  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    14  SHORT COLUMN


REQD. STEEL AREA    :     2367.74 Sq.mm.
REQD. CONCRETE AREA:   157632.27 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2510.32   Muz1 :    148.97   Muy1 :    148.97

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:     14 Puz :   2523.82   Muz :    151.09   Muy :    151.09   IR: 0.96
```

STAAD SPACE   -- PAGE NO. 169

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          C O L U M N   N O.   62 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 27 END JOINT: 17 SHORT COLUMN

REQD. STEEL AREA   :   2367.74 Sq.mm.
REQD. CONCRETE AREA: 157632.27 Sq.mm.
MAIN REINFORCEMENT : Provide 12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2510.32   Muz1 :   148.97   Muy1 :   148.97

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 27
END JOINT: 17 Puz :   2523.82   Muz :   151.09   Muy :   151.09   IR: 0.96
==

==

          C O L U M N   N O.   63 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 18 SHORT COLUMN

```
  STAAD SPACE                                      -- PAGE NO.   170
```

```
REQD. STEEL AREA    :     3593.18 Sq.mm.
REQD. CONCRETE AREA:   156406.81 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2877.96   Muz1 :    156.01   Muy1 :    156.01

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    18 Puz :   2885.73   Muz :    157.50   Muy :    157.50   IR: 0.96
========================================================================


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         C O L U M N   N O.    66  D E S I G N   R E S U L T S

     M25                     Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    21  SHORT COLUMN


REQD. STEEL AREA    :     3593.18 Sq.mm.
REQD. CONCRETE AREA:   156406.81 Sq.mm.
MAIN REINFORCEMENT : Provide  32 - 12 dia. (2.26%,   3619.11 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2877.96   Muz1 :    156.01   Muy1 :    156.01

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    21 Puz :   2885.73   Muz :    157.50   Muy :    157.50   IR: 0.96
```

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  STAAD SPACE                                    -- PAGE NO.   171
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```
          C O L U M N   N O.     69  D E S I G N   R E S U L T S

      M25                     Fe415 (Main)              Fe415 (Sec.)

  LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

  ** GUIDING LOAD CASE:   27 END JOINT:    23  SHORT COLUMN


  REQD. STEEL AREA   :    2367.74 Sq.mm.
  REQD. CONCRETE AREA:  157632.27 Sq.mm.
  MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                       (Equally distributed)
  TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

  SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
  -------------------------------------------------------
  Puz :  2510.32   Muz1 :    148.97   Muy1 :    148.97

  INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

  SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
  -------------------------------------------------------
  WORST LOAD CASE:    27
  END JOINT:    23 Puz :   2523.82   Muz :    151.09   Muy :    151.09   IR: 0.96
```

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```
          C O L U M N   N O.     73  D E S I G N   R E S U L T S

      M25                     Fe415 (Main)              Fe415 (Sec.)

  LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

  ** GUIDING LOAD CASE:   25 END JOINT:    45   SHORT COLUMN
```

```
REQD. STEEL AREA   :     1097.19 Sq.mm.
REQD. CONCRETE AREA:   137148.22 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2129.16   Muz1 :    120.13   Muy1 :    120.13

INTERACTION RATIO: 0.97 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:     45 Puz :   2176.99   Muz :    138.03   Muy :    138.03   IR: 0.80
==========================================================================



==========================================================================

          C O L U M N   N O.    74  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    26  SHORT COLUMN


REQD. STEEL AREA   :     2367.74 Sq.mm.
REQD. CONCRETE AREA:   157632.27 Sq.mm.
MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2510.32   Muz1 :    148.97   Muy1 :    148.97

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:     26 Puz :   2523.82   Muz :    151.09   Muy :    151.09   IR: 0.96
```

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  STAAD SPACE                                          -- PAGE NO.  173
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```
            C O L U M N   N O.    77  D E S I G N   R E S U L T S

        M25                    Fe415 (Main)              Fe415 (Sec.)

  LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

  ** GUIDING LOAD CASE:   26 END JOINT:    29  SHORT COLUMN


  REQD. STEEL AREA   :    2367.74 Sq.mm.
  REQD. CONCRETE AREA:  157632.27 Sq.mm.
  MAIN REINFORCEMENT : Provide  12 - 16 dia. (1.51%,   2412.74 Sq.mm.)
                       (Equally distributed)
  TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

  SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
  ----------------------------------------------------------
  Puz :   2510.32   Muz1 :    148.97   Muy1 :    148.97

  INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

  SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
  ----------------------------------------------------------
  WORST LOAD CASE:    26
  END JOINT:    29 Puz :   2523.82   Muz :    151.09   Muy :    151.09   IR: 0.96
```
==

==
```
            C O L U M N   N O.    80  D E S I G N   R E S U L T S

        M25                    Fe415 (Main)              Fe415 (Sec.)

  LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

  ** GUIDING LOAD CASE:   24 END JOINT:    48  SHORT COLUMN
```

```
REQD. STEEL AREA    :     1097.19 Sq.mm.
REQD. CONCRETE AREA:   137148.22 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2129.16   Muz1 :    120.13   Muy1 :    120.13

INTERACTION RATIO: 0.97 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    48 Puz :   2176.99   Muz :    138.03   Muy :    138.03   IR: 0.80
========================================================================



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        C O L U M N   N O.    85  D E S I G N   R E S U L T S

     M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    49  SHORT COLUMN


REQD. STEEL AREA    :     1238.90 Sq.mm.
REQD. CONCRETE AREA:   154862.89 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2171.67   Muz1 :    131.65   Muy1 :    131.65

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    49 Puz :   2176.99   Muz :    149.27   Muy :    149.27   IR: 0.85
```

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   STAAD SPACE                                      -- PAGE NO.   175
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```
        C O L U M N   N O.    86  D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    50  SHORT COLUMN


REQD. STEEL AREA   :    1937.52 Sq.mm.
REQD. CONCRETE AREA:  158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :  2381.26   Muz1 :    152.31   Muy1 :    152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    30
END JOINT:    50 Puz :  2389.05   Muz :    179.07   Muy :    179.07   IR: 0.83
```
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```
        C O L U M N   N O.    87  D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   27 END JOINT:    51  SHORT COLUMN
```

```
REQD. STEEL AREA    :     1937.52 Sq.mm.
REQD. CONCRETE AREA:   158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2381.26   Muz1 :    152.31   Muy1 :    152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    31
END JOINT:    51 Puz :   2389.05   Muz :    179.07   Muy :    179.07   IR: 0.83
========================================================================



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          C O L U M N   N O.    88  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    52  SHORT COLUMN


REQD. STEEL AREA    :     2463.03 Sq.mm.
REQD. CONCRETE AREA:   157536.97 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 20 dia. (1.57%,   2513.27 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2538.91   Muz1 :    148.73   Muy1 :    148.73

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    52 Puz :   2553.98   Muz :    152.12   Muy :    152.12   IR: 0.94
```

STAAD SPACE   -- PAGE NO. 177

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         C O L U M N   N O.   92 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 53 SHORT COLUMN

REQD. STEEL AREA   :   1937.52 Sq.mm.
REQD. CONCRETE AREA: 158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz : 2381.26   Muz1 :   152.31   Muy1 :   152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 28
END JOINT: 53 Puz : 2389.05   Muz :   179.07   Muy :   179.07   IR: 0.83
==

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         C O L U M N   N O.   93 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 54 SHORT COLUMN

```
REQD. STEEL AREA   :    2463.03 Sq.mm.
REQD. CONCRETE AREA:  157536.97 Sq.mm.
MAIN REINFORCEMENT : Provide  8 - 20 dia. (1.57%,   2513.27 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2538.91   Muz1 :    148.73   Muy1 :    148.73

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    54 Puz :   2553.98   Muz :    152.12   Muy :    152.12   IR: 0.94
========================================================================



========================================================================

         C O L U M N   N O.    97  D E S I G N   R E S U L T S

      M25                 Fe415 (Main)            Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    55  SHORT COLUMN


REQD. STEEL AREA   :    1238.90 Sq.mm.
REQD. CONCRETE AREA:  154862.95 Sq.mm.
MAIN REINFORCEMENT : Provide  4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2171.67   Muz1 :    131.65   Muy1 :    131.65

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    55 Puz :   2176.99   Muz :    149.27   Muy :    149.27   IR: 0.85
```

STAAD SPACE   -- PAGE NO. 179

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         C O L U M N   N O.   98 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 27 END JOINT: 56 SHORT COLUMN

REQD. STEEL AREA   :   1937.52 Sq.mm.
REQD. CONCRETE AREA: 158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2381.26   Muz1 :   152.31   Muy1 :   152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 31
END JOINT: 56 Puz :   2389.05   Muz :   179.07   Muy :   179.07   IR: 0.83
==

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         C O L U M N   N O.   102 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 25 END JOINT: 57 SHORT COLUMN

```
  STAAD SPACE                                    -- PAGE NO.   180
```

```
REQD. STEEL AREA    :     1937.52 Sq.mm.
REQD. CONCRETE AREA:   158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2381.26   Muz1 :    152.31   Muy1 :    152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    29
END JOINT:     57 Puz :   2389.05   Muz :    179.07   Muy :    179.07   IR: 0.83
=========================================================================



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          C O L U M N   N O.   103   D E S I G N    R E S U L T S

      M25                   Fe415 (Main)               Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    58  SHORT COLUMN


REQD. STEEL AREA    :     2463.03 Sq.mm.
REQD. CONCRETE AREA:   157536.97 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 20 dia. (1.57%,   2513.27 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2538.91   Muz1 :    148.73   Muy1 :    148.73

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:     58 Puz :   2553.98   Muz :    152.12   Muy :    152.12   IR: 0.94
```

```
  STAAD SPACE                                    -- PAGE NO.  181
```

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```
          C O L U M N   N O.   106  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

  LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

  ** GUIDING LOAD CASE:   24 END JOINT:    59  SHORT COLUMN


  REQD. STEEL AREA   :    2463.03 Sq.mm.
  REQD. CONCRETE AREA:  157536.97 Sq.mm.
  MAIN REINFORCEMENT : Provide   8 - 20 dia. (1.57%,   2513.27 Sq.mm.)
                       (Equally distributed)
  TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

  SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
  --------------------------------------------------------
  Puz :   2538.91   Muz1 :    148.73   Muy1 :    148.73

  INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

  SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
  --------------------------------------------------------
  WORST LOAD CASE:    24
  END JOINT:     59 Puz :   2553.98   Muz :    152.12   Muy :    152.12   IR: 0.94
```

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```
          C O L U M N   N O.   109  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

  LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

  ** GUIDING LOAD CASE:   25 END JOINT:    60  SHORT COLUMN
```

STAAD SPACE   -- PAGE NO.   182

```
REQD. STEEL AREA    :     1937.52 Sq.mm.
REQD. CONCRETE AREA:   158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2381.26   Muz1 :    152.31   Muy1 :    152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    29
END JOINT:    60 Puz :   2389.05   Muz :    179.07   Muy :    179.07   IR: 0.83
========================================================================



========================================================================

          C O L U M N   N O.    113  D E S I G N    R E S U L T S

      M25                      Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    61  SHORT COLUMN


REQD. STEEL AREA    :     1238.90 Sq.mm.
REQD. CONCRETE AREA:   154862.89 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2171.67   Muz1 :    131.65   Muy1 :    131.65

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:    61 Puz :   2176.99   Muz :    149.27   Muy :    149.27   IR: 0.85
```

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STAAD SPACE                                        -- PAGE NO.  183
```

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C O L U M N   N O.   114   D E S I G N   R E S U L T S

M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 26 END JOINT: 62 SHORT COLUMN

REQD. STEEL AREA   :   1937.52 Sq.mm.
REQD. CONCRETE AREA: 158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz : 2381.26   Muz1 :   152.31   Muy1 :   152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 30
END JOINT: 62 Puz :   2389.05   Muz :   179.07   Muy :   179.07   IR: 0.83

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C O L U M N   N O.   117   D E S I G N   R E S U L T S

M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 63 SHORT COLUMN

```
REQD. STEEL AREA   :    1937.52 Sq.mm.
REQD. CONCRETE AREA:  158062.48 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2381.26   Muz1 :    152.31   Muy1 :    152.31

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    28
END JOINT:    63 Puz :   2389.05   Muz :    179.07   Muy :    179.07   IR: 0.83
========================================================================



========================================================================

          C O L U M N   N O.    120  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    64  SHORT COLUMN


REQD. STEEL AREA   :    1238.90 Sq.mm.
REQD. CONCRETE AREA:  154862.95 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2171.67   Muz1 :    131.65   Muy1 :    131.65

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    64 Puz :   2176.99   Muz :    149.27   Muy :    149.27   IR: 0.85
```

STAAD SPACE   -- PAGE NO. 185

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          C O L U M N   N O.   125 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 26 END JOINT: 65 SHORT COLUMN

REQD. STEEL AREA   :   1506.20 Sq.mm.
REQD. CONCRETE AREA: 158493.80 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2251.86   Muz1 :   137.20   Muy1 :   137.20

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 27
END JOINT: 65 Puz :   2282.55   Muz :   142.97   Muy :   142.97   IR: 0.95
==

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          C O L U M N   N O.   126 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 30 END JOINT: 66 SHORT COLUMN

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   STAAD SPACE                                       -- PAGE NO.  186
```

```
REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2345.20   Muz1 :    143.11   Muy1 :    143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    30
END JOINT:    66 Puz :   2389.05   Muz :    165.99   Muy :    165.99   IR: 0.86
=========================================================================


=========================================================================

          C O L U M N   N O.    127  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)            Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   31 END JOINT:    67  SHORT COLUMN


REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2345.20   Muz1 :    143.11   Muy1 :    143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    31
END JOINT:    67 Puz :   2389.05   Muz :    165.99   Muy :    165.99   IR: 0.86
```

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STAAD SPACE                                   -- PAGE NO.  187
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```
         C O L U M N   N O.    128  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    68  SHORT COLUMN


REQD. STEEL AREA   :    1515.14 Sq.mm.
REQD. CONCRETE AREA:  158484.86 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
---------------------------------------------------------
Puz :   2254.54   Muz1 :    137.49   Muy1 :    137.49

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
---------------------------------------------------------
WORST LOAD CASE:    30
END JOINT:    68 Puz :   2282.55   Muz :    143.80   Muy :    143.80   IR: 0.94
```
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```
         C O L U M N   N O.    132  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   28 END JOINT:    69  SHORT COLUMN
```

```
REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
---------------------------------------------------------
Puz :   2345.20   Muz1 :     143.11   Muy1 :     143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
---------------------------------------------------------
WORST LOAD CASE:    28
END JOINT:     69 Puz :   2389.05   Muz :     165.99   Muy :     165.99   IR: 0.86
=========================================================================


=========================================================================

          C O L U M N   N O.   133  D E S I G N   R E S U L T S

       M25                 Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    70  SHORT COLUMN


REQD. STEEL AREA    :     1515.14 Sq.mm.
REQD. CONCRETE AREA:   158484.86 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
---------------------------------------------------------
Puz :   2254.54   Muz1 :     137.49   Muy1 :     137.49

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
---------------------------------------------------------
WORST LOAD CASE:    28
END JOINT:     70 Puz :   2282.55   Muz :     143.80   Muy :     143.80   IR: 0.94
```

```
   STAAD SPACE                                    -- PAGE NO.  189
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```
          C O L U M N   N O.   137  D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    71  SHORT COLUMN


REQD. STEEL AREA   :    1506.20 Sq.mm.
REQD. CONCRETE AREA:  158493.80 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2251.86   Muz1 :    137.20   Muy1 :    137.20

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    71 Puz :   2282.55   Muz :    142.97   Muy :    142.97   IR: 0.95
```
===

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```
          C O L U M N   N O.   138  D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   31 END JOINT:    72  SHORT COLUMN
```

```
REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2345.20   Muz1 :    143.11   Muy1 :    143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    31
END JOINT:     72 Puz :   2389.05   Muz :    165.99   Muy :    165.99   IR: 0.86
========================================================================



========================================================================

          C O L U M N   N O.    142  D E S I G N    R E S U L T S

      M25                     Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   29 END JOINT:     73  SHORT COLUMN


REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2345.20   Muz1 :    143.11   Muy1 :    143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    29
END JOINT:     73 Puz :   2389.05   Muz :    165.99   Muy :    165.99   IR: 0.86
```

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   STAAD SPACE                                    -- PAGE NO.   191
```

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```
          C O L U M N   N O.   143  D E S I G N   R E S U L T S

       M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

   ** GUIDING LOAD CASE:   25 END JOINT:    74  SHORT COLUMN


   REQD. STEEL AREA   :    1515.14 Sq.mm.
   REQD. CONCRETE AREA:  158484.86 Sq.mm.
   MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                        (Equally distributed)
   TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

   SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
   -------------------------------------------------------
   Puz :  2254.54   Muz1 :   137.49   Muy1 :   137.49

   INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

   SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
   -------------------------------------------------------
   WORST LOAD CASE:   29
   END JOINT:    74 Puz :  2282.55   Muz :   143.80   Muy :   143.80   IR: 0.94
```
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```
          C O L U M N   N O.   146  D E S I G N   R E S U L T S

       M25                    Fe415 (Main)              Fe415 (Sec.)

   LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

   ** GUIDING LOAD CASE:   24 END JOINT:    75  SHORT COLUMN
```

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STAAD SPACE                                       -- PAGE NO.  192
```

```
REQD. STEEL AREA    :     1515.14 Sq.mm.
REQD. CONCRETE AREA:   158484.86 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2254.54   Muz1 :    137.49   Muy1 :    137.49

INTERACTION RATIO: 0.98 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    28
END JOINT:    75 Puz :   2282.55   Muz :    143.80   Muy :    143.80   IR: 0.94
==========================================================================



==========================================================================

          C O L U M N   N O.   149  D E S I G N   R E S U L T S

      M25                  Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   29 END JOINT:    76  SHORT COLUMN


REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2345.20   Muz1 :    143.11   Muy1 :    143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    29
END JOINT:    76 Puz :   2389.05   Muz :    165.99   Muy :    165.99   IR: 0.86
```

STAAD SPACE   -- PAGE NO. 193

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          C O L U M N   N O.   153 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 25 END JOINT: 77 SHORT COLUMN

REQD. STEEL AREA   :   1506.20 Sq.mm.
REQD. CONCRETE AREA: 158493.80 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2251.86   Muz1 :   137.20   Muy1 :   137.20

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 26
END JOINT: 77 Puz :   2282.55   Muz :   142.97   Muy :   142.97   IR: 0.95
===

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          C O L U M N   N O.   154 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 30 END JOINT: 78 SHORT COLUMN

STAAD SPACE   -- PAGE NO. 194

```
REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2345.20   Muz1 :    143.11   Muy1 :    143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    30
END JOINT:    78 Puz :   2389.05   Muz :    165.99   Muy :    165.99   IR: 0.86
==========================================================================


==========================================================================

         C O L U M N   N O.    157  D E S I G N    R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   28 END JOINT:    79  SHORT COLUMN


REQD. STEEL AREA    :     1817.34 Sq.mm.
REQD. CONCRETE AREA:   158182.66 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2345.20   Muz1 :    143.11   Muy1 :    143.11

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    28
END JOINT:    79 Puz :   2389.05   Muz :    165.99   Muy :    165.99   IR: 0.86
```

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   STAAD SPACE                                  -- PAGE NO.  195
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```
          C O L U M N   N O.   160  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)                Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    80  SHORT COLUMN


REQD. STEEL AREA   :    1506.20 Sq.mm.
REQD. CONCRETE AREA:  158493.80 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
-------------------------------------------------------
Puz :   2251.86   Muz1 :    137.20   Muy1 :    137.20

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
-------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    80 Puz :   2282.55   Muz :    142.97   Muy :    142.97   IR: 0.95
```
===

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```
          C O L U M N   N O.   165  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)                Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    81  SHORT COLUMN
```

```
REQD. STEEL AREA    :     1679.51 Sq.mm.
REQD. CONCRETE AREA:   158320.48 Sq.mm.
MAIN REINFORCEMENT : Provide  16 - 12 dia. (1.13%,   1809.56 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2303.85   Muz1 :    130.97   Muy1 :    130.97

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    81 Puz :   2342.87   Muz :    136.97   Muy :    136.97   IR: 0.95
=========================================================================



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         C O L U M N   N O.   166  D E S I G N   R E S U L T S

     M25                   Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    82  SHORT COLUMN


REQD. STEEL AREA    :     1591.56 Sq.mm.
REQD. CONCRETE AREA:   158408.44 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2277.47   Muz1 :    134.77   Muy1 :    134.77

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    82 Puz :   2282.55   Muz :    137.55   Muy :    137.55   IR: 0.98
```

STAAD SPACE   -- PAGE NO. 197

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          C O L U M N   N O.   167 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 27 END JOINT: 83 SHORT COLUMN

REQD. STEEL AREA   :   1591.56 Sq.mm.
REQD. CONCRETE AREA: 158408.44 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz : 2277.47   Muz1 :   134.77   Muy1 :   134.77

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 27
END JOINT: 83 Puz : 2282.55   Muz :   137.55   Muy :   137.55   IR: 0.98
==

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          C O L U M N   N O.   168 D E S I G N   R E S U L T S

      M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 30 END JOINT: 84 SHORT COLUMN

```
REQD. STEEL AREA    :     1135.05 Sq.mm.
REQD. CONCRETE AREA:   141881.52 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2140.52   Muz1 :    109.76   Muy1 :    109.76

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    30
END JOINT:     84 Puz :   2176.99   Muz :    123.76   Muy :    123.76   IR: 0.88
==========================================================================



==========================================================================

          C O L U M N   N O.    172  D E S I G N   R E S U L T S

      M25                     Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:    85  SHORT COLUMN


REQD. STEEL AREA    :     1591.56 Sq.mm.
REQD. CONCRETE AREA:   158408.44 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2277.47   Muz1 :    134.77   Muy1 :    134.77

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:     85 Puz :   2282.55   Muz :    137.55   Muy :    137.55   IR: 0.98
```

STAAD SPACE   -- PAGE NO. 199

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          C O L U M N   N O.   173 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 28 END JOINT: 86 SHORT COLUMN

REQD. STEEL AREA   :   1135.05 Sq.mm.
REQD. CONCRETE AREA: 141881.52 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2140.52 Muz1 :   109.76 Muy1 :   109.76

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 28
END JOINT: 86 Puz :   2176.99 Muz :   123.76 Muy :   123.76 IR: 0.88
==

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          C O L U M N   N O.   177 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 87 SHORT COLUMN

STAAD SPACE   -- PAGE NO. 200

```
REQD. STEEL AREA   :     1679.51 Sq.mm.
REQD. CONCRETE AREA:   158320.48 Sq.mm.
MAIN REINFORCEMENT : Provide  16 - 12 dia. (1.13%,   1809.56 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2303.85   Muz1 :    130.97   Muy1 :    130.97

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:     87 Puz :   2342.87   Muz :    136.97   Muy :    136.97   IR: 0.95
==========================================================================


==========================================================================

         C O L U M N   N O.    178  D E S I G N   R E S U L T S

      M25                  Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   27 END JOINT:    88  SHORT COLUMN


REQD. STEEL AREA   :     1591.56 Sq.mm.
REQD. CONCRETE AREA:   158408.44 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2277.47   Muz1 :    134.77   Muy1 :    134.77

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    27
END JOINT:     88 Puz :   2282.55   Muz :    137.55   Muy :    137.55   IR: 0.98
```

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   STAAD SPACE                                      -- PAGE NO.  201
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```
          C O L U M N   N O.   182  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:    89  SHORT COLUMN


REQD. STEEL AREA   :    1591.56 Sq.mm.
REQD. CONCRETE AREA:  158408.44 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :  2277.47   Muz1 :    134.77   Muy1 :    134.77

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:   25
END JOINT:    89 Puz :  2282.55   Muz :    137.55   Muy :    137.55   IR: 0.98
```
==

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```
          C O L U M N   N O.   183  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   29 END JOINT:    90  SHORT COLUMN
```

```
REQD. STEEL AREA   :    1135.05 Sq.mm.
REQD. CONCRETE AREA:  141881.52 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2140.52   Muz1 :    109.76   Muy1 :    109.76

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    29
END JOINT:    90 Puz :   2176.99   Muz :    123.76   Muy :    123.76   IR: 0.88
========================================================================



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          C O L U M N   N O.    186  D E S I G N    R E S U L T S

      M25                    Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   28 END JOINT:    91  SHORT COLUMN


REQD. STEEL AREA   :    1135.05 Sq.mm.
REQD. CONCRETE AREA:  141881.52 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 20 dia. (0.79%,   1256.64 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2140.52   Muz1 :    109.76   Muy1 :    109.76

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    28
END JOINT:    91 Puz :   2176.99   Muz :    123.76   Muy :    123.76   IR: 0.88
```

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   STAAD SPACE                                    -- PAGE NO.  203
```

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```
          C O L U M N   N O.   189  D E S I G N   R E S U L T S

       M25                    Fe415 (Main)               Fe415 (Sec.)

   LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

   ** GUIDING LOAD CASE:   25 END JOINT:    92  SHORT COLUMN


   REQD. STEEL AREA   :     1591.56 Sq.mm.
   REQD. CONCRETE AREA:   158408.44 Sq.mm.
   MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                        (Equally distributed)
   TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

   SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
   -------------------------------------------------------
   Puz :   2277.47   Muz1 :    134.77   Muy1 :    134.77

   INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

   SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
   -------------------------------------------------------
   WORST LOAD CASE:    25
   END JOINT:    92 Puz :   2282.55   Muz :    137.55   Muy :    137.55   IR: 0.98
```
==

==

```
          C O L U M N   N O.   193  D E S I G N   R E S U L T S

       M25                    Fe415 (Main)               Fe415 (Sec.)

   LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

   ** GUIDING LOAD CASE:   25 END JOINT:    93  SHORT COLUMN
```

```
REQD. STEEL AREA    :     1679.51 Sq.mm.
REQD. CONCRETE AREA:   158320.48 Sq.mm.
MAIN REINFORCEMENT : Provide  16 - 12 dia. (1.13%,   1809.56 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2303.85   Muz1 :    130.97   Muy1 :    130.97

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:     93 Puz :   2342.87   Muz :    136.97   Muy :    136.97   IR: 0.95
========================================================================


========================================================================

         C O L U M N   N O.   194  D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    94  SHORT COLUMN


REQD. STEEL AREA    :     1591.56 Sq.mm.
REQD. CONCRETE AREA:   158408.44 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2277.47   Muz1 :    134.77   Muy1 :    134.77

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:     94 Puz :   2282.55   Muz :    137.55   Muy :    137.55   IR: 0.98
```

STAAD SPACE   -- PAGE NO. 205

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           C O L U M N   N O.   197   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 95 SHORT COLUMN

REQD. STEEL AREA   :   1591.56 Sq.mm.
REQD. CONCRETE AREA: 158408.44 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                      (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2277.47   Muz1 :   134.77   Muy1 :   134.77

INTERACTION RATIO: 1.00 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 24
END JOINT: 95 Puz :   2282.55   Muz :   137.55   Muy :   137.55   IR: 0.98
==

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           C O L U M N   N O.   200   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 96 SHORT COLUMN

```
REQD. STEEL AREA    :     1679.51 Sq.mm.
REQD. CONCRETE AREA:   158320.48 Sq.mm.
MAIN REINFORCEMENT : Provide  16 - 12 dia. (1.13%,   1809.56 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2303.85   Muz1 :    130.97   Muy1 :    130.97

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:    96 Puz :   2342.87   Muz :    136.97   Muy :    136.97   IR: 0.95
========================================================================



========================================================================

          C O L U M N   N O.   205 D E S I G N   R E S U L T S

      M25                  Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    97  SHORT COLUMN


REQD. STEEL AREA    :     1827.52 Sq.mm.
REQD. CONCRETE AREA:   158172.47 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2348.26   Muz1 :    118.09   Muy1 :    118.09

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:    97 Puz :   2389.05   Muz :    127.53   Muy :    127.53   IR: 0.92
```

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  STAAD SPACE                                        -- PAGE NO.  207


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          C O L U M N   N O.   206  D E S I G N   R E S U L T S

      M25                     Fe415 (Main)               Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:    98  SHORT COLUMN


REQD. STEEL AREA   :     1499.71 Sq.mm.
REQD. CONCRETE AREA:   158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
---------------------------------------------------------
Puz :  2249.91   Muz1 :   107.94   Muy1 :    107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
---------------------------------------------------------
WORST LOAD CASE:   26
END JOINT:    98 Puz :  2282.55   Muz :   116.23   Muy :    116.23   IR: 0.92
=========================================================================


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          C O L U M N   N O.   207  D E S I G N   R E S U L T S

      M25                     Fe415 (Main)               Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   27 END JOINT:    99  SHORT COLUMN
```

```
REQD. STEEL AREA   :     1499.71 Sq.mm.
REQD. CONCRETE AREA:   158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2249.91   Muz1 :    107.94   Muy1 :    107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    27
END JOINT:    99 Puz :   2282.55   Muz :    116.23   Muy :    116.23   IR: 0.92
==========================================================================



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          C O L U M N   N O.   208  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   30 END JOINT:   100  SHORT COLUMN


REQD. STEEL AREA   :      687.93 Sq.mm.
REQD. CONCRETE AREA:    85991.04 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 12 dia. (0.57%,    904.78 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2006.38   Muz1 :     64.32   Muy1 :     64.32

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    30
END JOINT:   100 Puz :   2071.43   Muz :     76.26   Muy :     76.26   IR: 0.83
```

STAAD SPACE   -- PAGE NO. 209

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         C O L U M N   N O.   212 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 24 END JOINT: 101 SHORT COLUMN

REQD. STEEL AREA   :   1499.71 Sq.mm.
REQD. CONCRETE AREA: 158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2249.91   Muz1 :   107.94   Muy1 :   107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 24
END JOINT: 101 Puz :   2282.55   Muz :   116.23   Muy :   116.23   IR: 0.92
==

==

         C O L U M N   N O.   213 D E S I G N   R E S U L T S

     M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 28 END JOINT: 102   SHORT COLUMN

```
REQD. STEEL AREA    :       687.93 Sq.mm.
REQD. CONCRETE AREA:    85991.04 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 12 dia. (0.57%,    904.78 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2006.38   Muz1 :     64.32   Muy1 :     64.32

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    28
END JOINT:   102 Puz :   2071.43   Muz :     76.26   Muy :     76.26   IR: 0.83
========================================================================



========================================================================

          C O L U M N   N O.    217  D E S I G N   R E S U L T S

      M25                     Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:   103  SHORT COLUMN


REQD. STEEL AREA    :      1827.52 Sq.mm.
REQD. CONCRETE AREA:   158172.47 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2348.26   Muz1 :    118.09   Muy1 :    118.09

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:   103 Puz :   2389.05   Muz :    127.53   Muy :    127.53   IR: 0.92
```

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STAAD SPACE                                  -- PAGE NO.  211
```

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```
         C O L U M N   N O.    218  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   27 END JOINT:   104  SHORT COLUMN


REQD. STEEL AREA   :     1499.71 Sq.mm.
REQD. CONCRETE AREA:   158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2249.91   Muz1 :    107.94   Muy1 :    107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    27
END JOINT:   104 Puz :   2282.55   Muz :    116.23   Muy :    116.23   IR: 0.92
```
==

==

```
         C O L U M N   N O.    222  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:   105  SHORT COLUMN
```

STAAD SPACE   -- PAGE NO. 212

```
REQD. STEEL AREA    :     1499.71 Sq.mm.
REQD. CONCRETE AREA:   158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2249.91   Muz1 :    107.94   Muy1 :    107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:   105 Puz :   2282.55   Muz :    116.23   Muy :    116.23   IR: 0.92
==========================================================================


==========================================================================

        C O L U M N   N O.   223  D E S I G N   R E S U L T S

     M25                    Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   29 END JOINT:   106  SHORT COLUMN


REQD. STEEL AREA    :      687.93 Sq.mm.
REQD. CONCRETE AREA:    85991.04 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 12 dia. (0.57%,    904.78 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2006.38   Muz1 :     64.32   Muy1 :     64.32

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    29
END JOINT:   106 Puz :   2071.43   Muz :     76.26   Muy :     76.26   IR: 0.83
```

STAAD SPACE   -- PAGE NO. 213

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            C O L U M N   N O.   226   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 28 END JOINT: 107 SHORT COLUMN

REQD. STEEL AREA   :   687.93 Sq.mm.
REQD. CONCRETE AREA: 85991.04 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 12 dia. (0.57%,   904.78 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT : Provide 8 mm dia. rectangular ties @ 190 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)

Puz :   2006.38   Muz1 :   64.32   Muy1 :   64.32

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)

WORST LOAD CASE: 28
END JOINT: 107 Puz :   2071.43   Muz :   76.26   Muy :   76.26   IR: 0.83
==

==

            C O L U M N   N O.   229   D E S I G N   R E S U L T S

       M25   Fe415 (Main)   Fe415 (Sec.)

LENGTH: 3000.0 mm   CROSS SECTION: 400.0 mm X 400.0 mm COVER: 40.0 mm

** GUIDING LOAD CASE: 25 END JOINT: 108 SHORT COLUMN

```
REQD. STEEL AREA   :    1499.71 Sq.mm.
REQD. CONCRETE AREA:  158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide  8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2249.91   Muz1 :    107.94   Muy1 :    107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    25
END JOINT:   108 Puz :   2282.55   Muz :    116.23   Muy :    116.23   IR: 0.92
========================================================================



========================================================================

         C O L U M N   N O.   233  D E S I G N   R E S U L T S

     M25                  Fe415 (Main)             Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   25 END JOINT:   109  SHORT COLUMN


REQD. STEEL AREA   :    1827.52 Sq.mm.
REQD. CONCRETE AREA:  158172.47 Sq.mm.
MAIN REINFORCEMENT : Provide  4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2348.26   Muz1 :    118.09   Muy1 :    118.09

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    26
END JOINT:   109 Puz :   2389.05   Muz :    127.53   Muy :    127.53   IR: 0.92
```

```
   STAAD SPACE                                -- PAGE NO.  215
```

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```
         C O L U M N   N O.   234  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)            Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   26 END JOINT:   110  SHORT COLUMN


REQD. STEEL AREA   :    1499.71 Sq.mm.
REQD. CONCRETE AREA:  158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
---------------------------------------------------------
Puz :   2249.91   Muz1 :    107.94   Muy1 :    107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
---------------------------------------------------------
WORST LOAD CASE:   26
END JOINT:   110 Puz :   2282.55   Muz :    116.23   Muy :    116.23   IR: 0.92
```
==

==

```
         C O L U M N   N O.   237  D E S I G N   R E S U L T S

      M25                    Fe415 (Main)            Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:   111  SHORT COLUMN
```

```
    STAAD SPACE                                      -- PAGE NO.  216
```

```
REQD. STEEL AREA    :     1499.71 Sq.mm.
REQD. CONCRETE AREA:   158500.30 Sq.mm.
MAIN REINFORCEMENT : Provide   8 - 16 dia. (1.01%,   1608.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 255 mm c/c


SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2249.91   Muz1 :    107.94   Muy1 :    107.94

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:   111 Puz :   2282.55   Muz :    116.23   Muy :    116.23   IR: 0.92
========================================================================



========================================================================

          C O L U M N   N O.   240  D E S I G N   R E S U L T S

      M25                   Fe415 (Main)              Fe415 (Sec.)

LENGTH:  3000.0 mm   CROSS SECTION:  400.0 mm X  400.0 mm  COVER: 40.0 mm

** GUIDING LOAD CASE:   24 END JOINT:   112  SHORT COLUMN


REQD. STEEL AREA    :     1827.52 Sq.mm.
REQD. CONCRETE AREA:   158172.47 Sq.mm.
MAIN REINFORCEMENT : Provide   4 - 25 dia. (1.23%,   1963.50 Sq.mm.)
                     (Equally distributed)
TIE REINFORCEMENT  : Provide  8 mm dia. rectangular ties @ 300 mm c/c

SECTION CAPACITY BASED ON REINFORCEMENT REQUIRED (KNS-MET)
----------------------------------------------------------
Puz :   2348.26   Muz1 :    118.09   Muy1 :    118.09

INTERACTION RATIO: 0.99 (as per Cl. 39.6, IS456:2000)

SECTION CAPACITY BASED ON REINFORCEMENT PROVIDED (KNS-MET)
----------------------------------------------------------
WORST LOAD CASE:    24
END JOINT:   112 Puz :   2389.05   Muz :    127.53   Muy :    127.53   IR: 0.92
```

===

********************END OF COLUMN DESIGN RESULTS********************

311. FYMAIN 500000 ALL
312. FYSEC 415000 ALL
313. END CONCRETE DESIGN
314. FINISH

            *********** END OF THE STAAD.Pro RUN ***********

               **** DATE= NOV 11,2024   TIME= 19:48: 3 ****

        ****
        *   For technical assistance on STAAD.Pro, please visit   *
        *   http://selectservices.bentley.com/en-US/   *
        *   *
        *   Details about additional assistance from   *
        *   Bentley and Partners can be found at program menu   *
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