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*****
*          STAAD.Pro 2024/Academic      *
*          Version 24.00.02.354        *
*          Proprietary Program of      *
*          Bentley Systems, Inc.       *
*          Date= JUN 18, 2025         *
*          Time= 19:48: 5            *
*          *                         *
*          * Licensed to:           *
*****
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1. STAAD SPACE

INPUT FILE: C:\Users\Nayan preetham\OneDrive\Documents\PROJECTS\CORE- FEA ON SLAB UNDER STATIC LOAD\Du.. .STD

2. START JOB INFORMATION

3. ENGINEER DATE 18-JUN-25

4. END JOB INFORMATION

5. INPUT WIDTH 79

6. UNIT METER KN

7. JOINT COORDINATES

8. 1 0 0 0; 2 12 0 0; 3 0 0 15; 4 12 0 15; 5 1 0 1; 6 4.00001 0 1; 7 7.00001 0 1
 9. 8 1 0 3.00001; 9 4.00001 0 3.00001; 10 7.00001 0 3.00001; 11 2.5 0 3.00001
 10. 12 2.5 0 5.00001; 13 1 0 5.00001; 14 1 0 8.00002; 15 2.5 0 8.00002
 11. 16 6.50001 0 8.00002; 17 10.5 0 8.00002; 18 7.00001 0 8.00002; 19 1 0 11
 12. 20 2.5 0 11; 21 6.50001 0 11; 22 10.5 0 11; 23 7.50002 0 11; 24 4.50001 0 11
 13. 25 4.50001 0 12.5; 26 7.50002 0 13; 27 7.50002 0 12.5; 28 10.5 0 13
 14. 29 10.5 0 12; 30 7.50002 0 12; 31 7.50002 2.75001 12; 32 10.5 5.50001 13
 15. 33 8.50002 2.75001 12; 34 7.50002 2.75001 13; 35 7.50002 2.75001 11
 16. 36 8.50002 2.75001 11; 37 8.50002 2.75001 13; 39 10 5.50001 12
 17. 40 10 5.50001 13; 41 10 5.50001 11; 42 10.5 5.50001 11; 43 0 5.50001 0
 18. 44 12 5.50001 0; 45 1 5.50001 1; 46 4.00001 5.50001 1; 47 7.00001 5.50001 1
 19. 48 1 5.50001 3.00001; 49 4.00001 5.50001 3.00001; 50 7.00001 5.50001 3.00001
 20. 51 2.5 5.50001 3.00001; 52 2.5 5.50001 5.00001; 53 1 5.50001 5.00001
 21. 54 1 5.50001 8.00002; 55 2.5 5.50001 8.00002; 56 6.50001 5.50001 8.00002
 22. 57 10.5 5.50001 8.00002; 58 7.00001 5.50001 8.00002; 59 0 5.50001 15
 23. 60 12 5.50001 15; 61 4.50001 5.50001 11; 62 4.50001 5.50001 12.5
 24. 63 1 5.50001 11; 64 2.5 5.50001 11; 65 6.50001 5.50001 11
 25. 66 7.50002 5.50001 12.5; 67 7.50002 5.50001 11; 68 7.50002 5.50001 13
 26. 69 8.50002 0 13; 70 8.50002 0 11; 71 4.00001 10.5 1; 72 4.00001 10.5 3.00001
 27. 73 1 10.5 1; 74 1 10.5 3.00001; 75 1 10.5 8.00002; 76 4.00001 5.50001 8.00002
 28. 77 4.00001 10.5 8.00002; 78 4.00001 0 8.00002; 79 1 6.50001 3.00001
 29. 80 2.5 6.50001 3.00001; 81 1 6.50001 3.75001; 82 2.5 6.50001 3.75001
 30. 83 2.50001 10.5 8.00002; 84 2.50001 10.5 3.00001; 85 2.50001 10.5 1
 31. 86 1 15.3 1; 87 1 15.3 3.00001; 88 2.50001 15.3 3.00001; 89 2.50001 15.3 1
 32. 90 2.50001 5.50001 1; 91 2.50001 0 1; 92 1 15.3 8.00002
 33. 93 2.50001 15.3 8.00002; 94 10 10.5 11; 95 10.5 10.5 11; 96 10.5 10.5 13
 34. 97 10 10.5 13; 98 7.50002 10.5 11; 99 7.50002 10.5 13; 100 6.5 5.50001 1
 35. 101 8.00001 5.50001 1
 36. MEMBER INCIDENCES
 37. 26 31 30; 30 26 34; 31 34 35; 32 23 35; 33 35 36; 34 34 37; 35 36 37; 36 22 36
 38. 37 33 39; 38 40 37; 39 32 42; 40 32 40; 41 40 41; 42 42 41; 43 29 33; 44 28 32

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39. 45 22 42; 46 1 43; 47 5 45; 48 8 48; 49 12 52; 50 14 54; 51 3 59; 52 6 46
 40. 53 16 56; 54 2 44; 55 7 47; 56 24 61; 57 43 44; 58 60 44; 59 4 60; 60 59 60
 41. 61 59 43; 62 45 100; 63 45 53; 64 52 51; 65 51 50; 66 50 47; 67 48 51
 42. 68 49 46; 69 58 50; 70 54 53; 71 52 53; 72 54 76; 73 42 57; 74 13 53; 75 11 51
 43. 76 15 55; 77 10 50; 78 9 49; 79 25 62; 80 62 61; 81 18 58; 82 19 63; 83 20 64
 44. 84 63 54; 85 64 55; 86 63 61; 87 65 56; 88 21 65; 89 61 65; 90 66 62; 91 17 57
 45. 92 27 66; 93 65 67; 94 67 42; 95 66 67; 96 35 67; 97 69 37; 98 68 66; 99 68 40
 46. 100 70 36; 101 75 73; 102 72 71; 103 73 85; 104 54 75; 105 45 73; 106 72 84
 47. 107 48 79; 108 46 71; 109 49 72; 110 76 57; 111 49 76; 112 78 76; 113 76 77
 48. 114 77 72; 115 75 83; 116 79 74; 117 51 80; 118 79 80; 119 82 80; 120 81 79
 49. 121 81 82; 122 81 75; 123 83 77; 124 82 83; 125 83 55; 126 84 74; 127 51 84
 50. 128 85 71; 129 84 85; 130 86 89; 131 88 89; 132 87 86; 133 88 87; 134 74 87
 51. 135 85 89; 136 84 88; 137 73 86; 138 90 101; 139 91 90; 140 83 93; 141 75 92
 52. 142 93 92; 143 42 95; 144 94 95; 145 41 94; 146 96 99; 147 99 98; 148 98 94
 53. 149 96 95; 150 67 98; 151 68 99; 152 32 96; 153 40 97; 154 100 90; 155 101 47
 54. 156 90 85
 55. DEFINE MATERIAL START
 56. ISOTROPIC STEEL
 57. E 1.99947E+08
 58. POISSON 0.3
 59. DENSITY 76.8191
 60. ALPHA 6.5E-06
 61. DAMP 0.03
 62. G 7.7221E+07
 63. TYPE STEEL
 64. STRENGTH RY 1.5 RT 1.2
 65. END DEFINE MATERIAL
 66. MEMBER PROPERTY 'INDIA (IS 2023).DB3'
 67. 31 33 TO 35 39 TO 42 57 58 60 TO 73 80 84 TO 87 89 90 93 TO 95 98 99 110 111 -
 68. 118 121 138 154 155 TABLE 'IS BEAM' ST 'ISMB 125'
 69. 101 TO 103 106 114 115 123 126 128 129 144 146 TO 148 -
 70. 149 TABLE 'IS BEAM' ST 'ISMB 200'
 71. 130 TO 133 142 TABLE 'IS BEAM' ST 'ISWB 350'
 72. 26 30 32 36 TO 38 43 TO 56 59 74 TO 79 81 TO 83 88 91 92 96 97 100 107 -
 73. 112 TABLE 'IS COLUMN' ST 'ISSC 200'
 74. 104 105 108 109 113 116 117 119 120 122 124 125 127 139 143 145 150 TO 153 -
 75. 156 TABLE 'IS COLUMN' ST 'ISSC 250'
 76. 134 TO 137 140 141 TABLE 'IS COLUMN' ST 'ISHB 400'
 77. CONSTANTS
 78. MATERIAL STEEL ALL
 79. SUPPORTS
 80. 1 TO 30 69 70 78 91 FIXED
 81. LOAD 1 LOADTYPE DEAD TITLE DEAD LOAD
 **WARNING- THIS STRUCTURE IS DISJOINTED. IGNORE IF
 CONTROL/DEPENDENT OR IF UNCONNECTED JOINTS.
 82. SELFWEIGHT Y -1.5 LIST ALL
 83. FLOOR LOAD
 84. YRANGE 3 6 FLOAD -3 GY

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****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.

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85. YRANGE 6 12 FLOAD -2.5 GY
86. MEMBER LOAD
87. 39 TO 42 58 60 61 64 69 TO 73 80 84 TO 87 89 90 93 TO 95 98 99 101 TO 103 -
88. 106 110 111 114 115 123 126 128 129 144 146 TO 149 UNI GY -6.2
89. PERFORM ANALYSIS

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PROBLEM STATISTICS

NUMBER OF JOINTS	100	NUMBER OF MEMBERS	128
NUMBER OF PLATES	0	NUMBER OF SOLIDS	0
NUMBER OF SURFACES	0	NUMBER OF SUPPORTS	34

Using 64-bit analysis engine.

SOLVER USED IS THE IN-CORE ADVANCED MATH SOLVER

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TOTAL PRIMARY LOAD CASES = 1, TOTAL DEGREES OF FREEDOM = 396
TOTAL LOAD COMBINATION CASES = 0 SO FAR.

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90. PERFORM ANALYSIS

****WARNING- CONSECUTIVE ANALYSIS COMMANDS. ONLY FIRST USED.**

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91. PARAMETER 1
92. CODE IS800 WSD
93. KZ 1 ALL
94. PARAMETER 2
95. CODE IS800 WSD
96. PARAMETER 3
97. CODE IS800 WSD
98. FIXED GROUP
99. PARAMETER 4
100. CODE IS800 WSD
101. SELECT OPTIMIZED
STEEL DESIGN

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STAAD SPACE

-- PAGE NO. 4

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 26
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.342 Critical Load Case: 1 Location: 0.23
Critical Condition: Slenderness (Compression)

Member Number: 30
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.342 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 31
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.738 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 32
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.342 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 33
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.166 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 34
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.166 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 35
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.332 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 36
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.423 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 37
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.390 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 38
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.390 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 39
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.428 Critical Load Case: 1 Location: 2.00
Critical Condition: Sec. 11.5.3

Member Number: 40
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.446 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.3

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 41
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.738 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 42
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.373 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 43
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.423 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 44
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 45
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 46
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: FAIL Ratio: 4.641 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 47
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 48
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 49
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 50
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 51
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: FAIL Ratio: 7.514 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 52
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 53
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 54
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: FAIL Ratio: 4.641 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 55
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 56
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

```
* Member Number: 57
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 4.430 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)
```

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 58 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

```
* Member Number: 58
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 144.371 Critical Load Case: 1 Location: 15.00
Critical Condition: Sec. 11.5.2(a)
```

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* Member Number: 59
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: FAIL Ratio: 7.514 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)
```

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 60 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

```
* Member Number: 60
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 52.878 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(a)
```

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*****WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4**

FOR MEMBER # 61 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR RESPONSE SPECTRUM LOAD CASES.

* Member Number:	61	
Member Section:	ST ISMB 125	(STANDARD SECTIONS)
Status:	PASS Ratio: 144.371	Critical Load Case: 1 Location: 15.00
Critical Condition:	Sec. 11.5.2(a)	
Member Number:	62	
Member Section:	ST ISMB 125	(STANDARD SECTIONS)
Status:	PASS Ratio: 0.914	Critical Load Case: 1 Location: 0.00
Critical Condition:	Slenderness (Tension)	
Member Number:	63	
Member Section:	ST ISMB 125	(STANDARD SECTIONS)
Status:	PASS Ratio: 0.665	Critical Load Case: 1 Location: 0.00
Critical Condition:	Slenderness (Tension)	
Member Number:	64	
Member Section:	ST ISMB 125	(STANDARD SECTIONS)
Status:	PASS Ratio: 0.738	Critical Load Case: 1 Location: 0.00
Critical Condition:	Slenderness (Compression)	

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

* Member Number: 65 Member Section: ST ISMB 125 (STANDARD SECTIONS) Status: FAIL Ratio: 1.661 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	
Member Number: 66 Member Section: ST ISMB 125 (STANDARD SECTIONS) Status: PASS Ratio: 0.738 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	
Member Number: 67 Member Section: ST ISMB 125 (STANDARD SECTIONS) Status: PASS Ratio: 0.249 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Tension)	
Member Number: 68 Member Section: ST ISMB 125 (STANDARD SECTIONS) Status: PASS Ratio: 0.332 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Tension)	

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

* Member Number: 69
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 3.067 Critical Load Case: 1 Location: 5.00
Critical Condition: Sec. 11.5.2(a)

Member Number: 70
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.936 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 71
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.554 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 72
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 1.108 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

* Member Number: 73 Member Section: ST ISMB 125 (STANDARD SECTIONS) Status: FAIL Ratio: 1.107 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	
Member Number: 74 Member Section: ST ISSC 200 (STANDARD SECTIONS) Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	
Member Number: 75 Member Section: ST ISSC 200 (STANDARD SECTIONS) Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	
Member Number: 76 Member Section: ST ISSC 200 (STANDARD SECTIONS) Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 77
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 78
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 79
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 80
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.554 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 81
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 82
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 83
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 84
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 1.107 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

```
* Member Number: 85
Member Section: ST ISMB 125          (STANDARD SECTIONS)
Status: FAIL Ratio: 1.107 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 86
Member Section: ST ISMB 125          (STANDARD SECTIONS)
Status: FAIL Ratio: 1.292 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 87
Member Section: ST ISMB 125          (STANDARD SECTIONS)
Status: FAIL Ratio: 1.107 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 88
Member Section: ST ISSC 200          (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)
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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 89
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.738 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 90
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 1.108 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 91
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.965 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 92
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 93
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.369 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 94
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.844 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 95
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.736 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 96
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.342 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 97
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.342 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 98
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 1.011 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 99
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.643 Critical Load Case: 1 Location: 2.50
Critical Condition: Sec. 11.5.3

Member Number: 100
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.342 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

* Member Number: 101
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: FAIL Ratio: 2.629 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(a)

Member Number: 102
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.527 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 103
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.214 Critical Load Case: 1 Location: 1.50
Critical Condition: Sec. 11.5.3

Member Number: 104
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 105
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 106
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.395 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 107
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.124 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 108
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 109
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 110 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

* Member Number: 110
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 6.557 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

* Member Number: 111
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 2.946 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 112
Member Section: ST ISSC 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.685 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 25

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 113
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 114
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: FAIL Ratio: 1.317 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 115
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.178 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 116
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.406 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 26

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 117
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.102 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 118
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.554 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 119
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.076 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 120
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.076 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 27

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 121
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.249 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 122
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.593 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 123
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.178 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 124
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.593 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 125
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 126
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.395 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 127
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 128
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.395 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 129
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.237 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 130
Member Section: ST ISWB 350 (STANDARD SECTIONS)
Status: PASS Ratio: 0.207 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 131
Member Section: ST ISWB 350 (STANDARD SECTIONS)
Status: PASS Ratio: 0.275 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 132
Member Section: ST ISWB 350 (STANDARD SECTIONS)
Status: PASS Ratio: 0.275 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 133
Member Section: ST ISWB 350 (STANDARD SECTIONS)
Status: PASS Ratio: 0.207 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 134
Member Section: ST ISHB 400 (STANDARD SECTIONS)
Status: PASS Ratio: 0.507 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 135
Member Section: ST ISHB 400 (STANDARD SECTIONS)
Status: PASS Ratio: 0.507 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 136
Member Section: ST ISHB 400 (STANDARD SECTIONS)
Status: PASS Ratio: 0.507 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 137
Member Section: ST ISHB 400 (STANDARD SECTIONS)
Status: PASS Ratio: 0.507 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 138
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.914 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 139
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.559 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 140
Member Section: ST ISHB 400 (STANDARD SECTIONS)
Status: PASS Ratio: 0.507 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 141
Member Section: ST ISHB 400 (STANDARD SECTIONS)
Status: PASS Ratio: 0.507 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 142
Member Section: ST ISWB 350 (STANDARD SECTIONS)
Status: PASS Ratio: 0.207 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 143
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 144
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.206 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

-- PAGE NO. 33

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 145
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 146
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.790 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 147
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.237 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 148
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.659 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 149
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.527 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 150
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 151
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 152
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 153
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 154
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: FAIL Ratio: 1.477 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 155
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.369 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 156
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.508 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STEEL DESIGN

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 26
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.23
Critical Condition: Slenderness (Compression)

Member Number: 30
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 31
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 32
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 37

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 33
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.247 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 34
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.303 Critical Load Case: 1 Location: 1.00
Critical Condition: Sec. 11.5.3

Member Number: 35
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.495 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 36
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.684 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 37
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.630 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 38
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.770 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 39
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.051 Critical Load Case: 1 Location: 2.00
Critical Condition: Sec. 11.5.3

Member Number: 40
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 1.014 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.3

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 41
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 42
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 43
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.684 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 44
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 45 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

STAAD SPACE

-- PAGE NO. 40

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 45
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 46
Member Section: ST ISHB 450* (STANDARD SECTIONS)
Status: FAIL Ratio: 2.895 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 47
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 48
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 41

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 49
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 50 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

Member Number: 50
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 1.060 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(a)

* Member Number: 51
Member Section: ST ISHB 450* (STANDARD SECTIONS)
Status: FAIL Ratio: 4.178 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 52
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 42

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 53
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 54
Member Section: ST ISHB 450* (STANDARD SECTIONS)
Status: FAIL Ratio: 2.895 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 55
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 56
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 43

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

* Member Number: 57
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.246 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 58
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.557 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 59
Member Section: ST ISHB 450* (STANDARD SECTIONS)
Status: FAIL Ratio: 4.178 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

* Member Number: 60
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.246 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

* Member Number: 61 Member Section: ST ISWB 600* (STANDARD SECTIONS) Status: FAIL Ratio: 1.557 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	
Member Number: 62 Member Section: ST ISJB 225 (STANDARD SECTIONS) Status: PASS Ratio: 0.872 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Tension)	
Member Number: 63 Member Section: ST ISJB 150 (STANDARD SECTIONS) Status: PASS Ratio: 0.990 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Tension)	
Member Number: 64 Member Section: ST ISLB 100 (STANDARD SECTIONS) Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	

STAAD SPACE

-- PAGE NO. 45

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 65
Member Section: ST ISWB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.835 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 66
Member Section: ST ISJB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.948 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 67
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.371 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 68
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.805 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

STAAD SPACE

-- PAGE NO. 46

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 69
Member Section: ST ISWB 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.684 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 70
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.987 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 71
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 72
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 73
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 74
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 75
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 76
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 48

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 77
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.932 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 78
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 79
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 80
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 49

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 81
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 1.058 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 82
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 83
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 84
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 85
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 86
Member Section: ST ISLB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.912 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 87
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 88
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 89
Member Section: ST ISJB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.948 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 90
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 91
Member Section: ST ISHB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.845 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 92
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 1.027 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(a)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 93
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.550 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 94
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.991 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 95
Member Section: ST ISJB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.953 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 96
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 53

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 97
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 98
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.670 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 99
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.732 Critical Load Case: 1 Location: 2.50
Critical Condition: Sec. 11.5.3

Member Number: 100
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 101
Member Section: ST ISWB 500 (STANDARD SECTIONS)
Status: PASS Ratio: 0.782 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 102
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.960 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 103
Member Section: ST ISLB(P) 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.157 Critical Load Case: 1 Location: 1.50
Critical Condition: Sec. 11.5.3

Member Number: 104
Member Section: ST ISSC 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.935 Critical Load Case: 1 Location: 5.00
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

-- PAGE NO. 55

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 105
Member Section: ST ISSC 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.951 Critical Load Case: 1 Location: 5.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 106
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 107
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.300 Critical Load Case: 1 Location: 1.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 108
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 109
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.943 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 110
Member Section: ST ISWB 500 (STANDARD SECTIONS)
Status: PASS Ratio: 0.726 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 111
Member Section: ST ISLB 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.711 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 112
Member Section: ST ISHB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.741 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(a)

STAAD SPACE

-- PAGE NO. 57

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 113
Member Section: ST ISSC 150* (STANDARD SECTIONS)
Status: PASS Ratio: 1.032 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 114
Member Section: ST ISWB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.862 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 115
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.896 Critical Load Case: 1 Location: 1.50
Critical Condition: Sec. 11.5.3

Member Number: 116
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.804 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 117
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.201 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 118
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 119
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.158 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 120
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.182 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 121
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.371 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 122
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 1.053 Critical Load Case: 1 Location: 5.35
Critical Condition: Sec. 11.5.2(b)

Member Number: 123
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.720 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 124
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.944 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 125
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 126
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.941 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 127
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 128
Member Section: ST ISLB(P) 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.130 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 129
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.113 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 130
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 1.096 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 131
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.144 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 132
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 133
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.008 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 134
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 135
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 136
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 137
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.845 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 138
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.872 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 139
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 140
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 141
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 142
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 143
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 144
Member Section: ST ISJB 175 (STANDARD SECTIONS)
Status: PASS Ratio: 1.162 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 145
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 146
Member Section: ST ISLB175 (STANDARD SECTIONS)
Status: PASS Ratio: 0.875 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 147
Member Section: ST ISLB(P) 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.121 Critical Load Case: 1 Location: 1.17
Critical Condition: Sec. 11.5.3

Member Number: 148
Member Section: ST ISLB175 (STANDARD SECTIONS)
Status: PASS Ratio: 0.813 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 149
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 1.089 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 150
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 151
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.818 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 152
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 153
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 154
Member Section: ST ISWB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.742 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 155
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.550 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 156
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STEEL DESIGN

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 26
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.23
Critical Condition: Slenderness (Compression)

Member Number: 30
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 31
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 32
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 33
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.247 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 34
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.550 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 35
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.495 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 36
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.308 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 37
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.630 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 38
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.630 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 39
Member Section: ST ISLB(P) 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.963 Critical Load Case: 1 Location: 2.00
Critical Condition: Sec. 11.5.3

Member Number: 40
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.833 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 41
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 42
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.691 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 43
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.684 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 44
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 45
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 46
Member Section: ST ISHB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.977 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 47
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 48
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 49
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 50 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

Member Number: 50
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 51
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.878 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 52
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 53
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 54
Member Section: ST ISHB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.977 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 55
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 56
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

* Member Number: 57
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.246 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 58
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.557 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 59
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.878 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

* Member Number: 60
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.246 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

* Member Number: 61 Member Section: ST ISWB 600* (STANDARD SECTIONS) Status: FAIL Ratio: 1.557 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	
Member Number: 62 Member Section: ST ISJB 225 (STANDARD SECTIONS) Status: PASS Ratio: 0.872 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Tension)	
Member Number: 63 Member Section: ST ISJB 150 (STANDARD SECTIONS) Status: PASS Ratio: 0.990 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Tension)	
Member Number: 64 Member Section: ST ISLB 100 (STANDARD SECTIONS) Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00 Critical Condition: Slenderness (Compression)	

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 65
Member Section: ST ISWB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.835 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 66
Member Section: ST ISJB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.929 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 67
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.371 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 68
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.908 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 69
Member Section: ST ISWB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.862 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 70
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.962 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 71
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 72
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 73
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 74
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 75
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 76
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 77
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 78
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 79
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 80
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 81
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 82
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 83
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 84
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 85
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 86
Member Section: ST ISLB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.912 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 87
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 88
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 89
Member Section: ST ISJB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.977 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(a)

Member Number: 90
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 91
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 92
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.922 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(a)

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 93
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.550 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 94
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.989 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 95
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.915 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 96
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 97
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 98
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.877 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.3

Member Number: 99
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.576 Critical Load Case: 1 Location: 2.50
Critical Condition: Sec. 11.5.3

Member Number: 100
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 86

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 101
Member Section: ST ISWB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.968 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 102
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.856 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 103
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 104
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 87

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 105
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 106
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 107
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.201 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 108
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 88

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 109
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 110
Member Section: ST ISWB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.899 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 111
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.987 Critical Load Case: 1 Location: 2.50
Critical Condition: Sec. 11.5.3

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 112 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

Member Number: 112
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.987 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(a)

STAAD SPACE

-- PAGE NO. 89

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 113
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 114
Member Section: ST ISWB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.862 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 115
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 116
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.804 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 90

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 117
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.201 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 118
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 119
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.151 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 120
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.151 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 91

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 121
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 122
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.944 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 123
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 124
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.944 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 92

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 125
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 126
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.584 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 127
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 128
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 93

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 129
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.949 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 130
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 131
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 132
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 94

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 133
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 134
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 135
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 136
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 137
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 138
Member Section: ST ISWB 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.752 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 139
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 140
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 96

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 141
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 142
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 143
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 144
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.570 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

-- PAGE NO. 97

STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 145
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 146
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 147
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 148
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.881 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 149
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 150
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 151
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 152
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO MEMBER SELECTION - IS-800-2007-WSD (V2.1)

Member Number: 153
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 154
Member Section: ST ISLB 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.953 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 155
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.247 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 156
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STEEL DESIGN

STAAD SPACE

-- PAGE NO. 100

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 26
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.23
Critical Condition: Slenderness (Compression)

Member Number: 30
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 31
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 32
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 33
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.247 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 34
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.550 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 35
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.495 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 36
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.308 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 37
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.630 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 38
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.630 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 39
Member Section: ST ISLB(P) 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.963 Critical Load Case: 1 Location: 2.00
Critical Condition: Sec. 11.5.3

Member Number: 40
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.833 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

STAAD SPACE

-- PAGE NO. 103

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 41
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 42
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.691 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 43
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.684 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 44
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 104

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 45
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 46
Member Section: ST ISHB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.977 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 47
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 48
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 105

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 49
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 50 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

Member Number: 50
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 51
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.878 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 52
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 106

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 53
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 54
Member Section: ST ISHB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.977 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

Member Number: 55
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 56
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 107

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

* Member Number: 57
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.246 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

* Member Number: 58
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.557 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 59
Member Section: ST ISSC 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.878 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(b)

* Member Number: 60
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.246 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 108

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

* Member Number: 61
Member Section: ST ISWB 600* (STANDARD SECTIONS)
Status: FAIL Ratio: 1.557 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 62
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.872 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 63
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.990 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 64
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 109

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 65
Member Section: ST ISWB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.835 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 66
Member Section: ST ISJB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.929 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 67
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.371 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 68
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.908 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

STAAD SPACE

-- PAGE NO. 110

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 69
Member Section: ST ISWB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.862 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 70
Member Section: ST ISMB 125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.962 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 71
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 72
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 111

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 73
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 74
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 75
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 76
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 77
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 78
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 79
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 80
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 113

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 81
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 82
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 83
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 84
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 114

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 85
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 86
Member Section: ST ISLB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.912 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 87
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 88
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 89
Member Section: ST ISJB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.977 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(a)

Member Number: 90
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 91
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 92
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.922 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(a)

STAAD SPACE

-- PAGE NO. 116

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 93
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.550 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 94
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.989 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 95
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.915 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 96
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 117

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 97
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 98
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.877 Critical Load Case: 1 Location: 0.50
Critical Condition: Sec. 11.5.3

Member Number: 99
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.576 Critical Load Case: 1 Location: 2.50
Critical Condition: Sec. 11.5.3

Member Number: 100
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.553 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 118

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 101
Member Section: ST ISWB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.968 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 102
Member Section: ST ISLB125 (STANDARD SECTIONS)
Status: PASS Ratio: 0.856 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

Member Number: 103
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 104
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 119

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 105
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 106
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 107
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.201 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 108
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 120

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 109
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 110
Member Section: ST ISWB 300 (STANDARD SECTIONS)
Status: PASS Ratio: 0.899 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 111
Member Section: ST ISMB 200 (STANDARD SECTIONS)
Status: PASS Ratio: 0.987 Critical Load Case: 1 Location: 2.50
Critical Condition: Sec. 11.5.3

***WARNING: THE VALUE OF MOMENT AMPLIFICATION FACTORS KY OR KZ IS GREATER THAN 1.4
FOR MEMBER # 112 FOR LOADCASE- 1. SECOND-ORDER ELASTIC ANALYSIS MUST BE PERFORMED
AS PER SECTION 4.4.2 of IS800-2007. ALSO, ENSURE THAT THE TYPE OF COMBINATION USED IS
REPEAT LOAD OR REFERENCE LOAD INSTEAD OF THE LOAD COMBINATION SYNTAX EXCEPT FOR
RESPONSE SPECTRUM LOAD CASES.

Member Number: 112
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.987 Critical Load Case: 1 Location: 5.50
Critical Condition: Sec. 11.5.2(a)

STAAD SPACE

-- PAGE NO. 121

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 113
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 114
Member Section: ST ISWB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.862 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 115
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 116
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.804 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 122

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 117
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.201 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 118
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 119
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.151 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 120
Member Section: ST ISSC 120 (STANDARD SECTIONS)
Status: PASS Ratio: 0.151 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 123

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 121
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 122
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.944 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 123
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 124
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.944 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 124

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 125
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 126
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.584 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 127
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 128
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 125

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 129
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.949 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.3

Member Number: 130
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 131
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 132
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 133
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 134
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 135
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 136
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 127

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 137
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 138
Member Section: ST ISWB 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.752 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 139
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.890 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 140
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 141
Member Section: ST ISHB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.754 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 142
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.825 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 143
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 144
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.570 Critical Load Case: 1 Location: 0.00
Critical Condition: Sec. 11.5.2(b)

STAAD SPACE

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 145
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 146
Member Section: ST ISLB150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.954 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 147
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 148
Member Section: ST ISJB 225 (STANDARD SECTIONS)
Status: PASS Ratio: 0.881 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

STAAD SPACE

-- PAGE NO. 130

STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 149
Member Section: ST ISLB 100 (STANDARD SECTIONS)
Status: PASS Ratio: 0.996 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 150
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 151
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 152
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

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STAAD.PRO CODE CHECKING - IS-800-2007-WSD (V2.1)

Member Number: 153
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 154
Member Section: ST ISLB 250 (STANDARD SECTIONS)
Status: PASS Ratio: 0.953 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

Member Number: 155
Member Section: ST ISJB 150 (STANDARD SECTIONS)
Status: PASS Ratio: 0.247 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Tension)

Member Number: 156
Member Section: ST ISHB 150* (STANDARD SECTIONS)
Status: PASS Ratio: 0.809 Critical Load Case: 1 Location: 0.00
Critical Condition: Slenderness (Compression)

102. PARAMETER 5
103. CODE IS800 WSD
104. STEEL TAKE OFF LIST ALL

STAAD SPACE

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STEEL TAKE OFF

STEEL TAKE-OFF

PROFILE	LENGTH(METE)	WEIGHT(KN)
ST ISSC 120	37.07	9.510
ST ISLB 100	14.00	1.097
ST ISJB 150	36.50	2.526
ST ISLB(P) 100	2.00	0.169
ST ISHB 150*	213.67	64.015
ST ISHB 300	11.00	6.321
ST ISSC 250	11.00	9.211
ST ISWB 600*	54.00	76.742
ST ISJB 225	10.00	1.252
ST ISWB 200	4.50	1.269
ST ISJB 200	4.00	0.387
ST ISWB 225	10.00	3.319
ST ISMB 125	3.00	0.392
ST ISLB150	21.00	2.920
ST ISLB 200	3.50	0.680
ST ISLB125	7.50	0.870
ST ISWB 300	13.50	6.357
ST ISMB 200	5.00	1.183
ST ISHB 150	28.80	7.633
ST ISWB 250	5.50	2.197
ST ISLB 250	4.00	1.091

TOTAL =		199.140

***** END OF DATA FROM INTERNAL STORAGE *****

105. FINISH

****WARNING** SOME MEMBER SIZES HAVE CHANGED SINCE LAST ANALYSIS.**
 IN THE POST PROCESSOR, MEMBER QUERIES WILL USE THE LAST
 ANALYSIS FORCES WITH THE UPDATED MEMBER SIZES.
 TO CORRECT THIS INCONSISTENCY, PLEASE DO ONE MORE ANALYSIS.
 FROM THE UPPER MENU, PRESS RESULTS, UPDATE PROPERTIES, THEN
 FILE SAVE; THEN ANALYZE AGAIN WITHOUT THE GROUP OR SELECT
 COMMANDS.

STAAD SPACE

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***** END OF THE STAAD.Pro RUN *****

**** DATE= JUN 18,2025 TIME= 19:48:34 ****

* For technical assistance on STAAD.Pro, please visit *
* http://www.bentley.com/en/support/
*
* Details about additional assistance from *
* Bentley and Partners can be found at program menu *
* Help->Technical Support *
*
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