

<b>HYPOTHESE DE L'ETUDE</b>	
<b>Taux de sol :</b>	Ø
<b>Classement au feu :</b>	1h30 sauf indication contraire suivant note d'hypothèses générales
<b>Béton fck :</b>	25 MPa sauf indication contraire sur plan
<b>Classe de béton :</b>	XC1
<b>Enrobage :</b>	3 cm sauf indication contraire
<b>Aciers HA :</b>	B500B
<b>Aciers TS :</b>	B500A - B500B (ouvrages concernés par le calcul sismique)
<b>Calcul :</b>	Eurocodes

***Poids plan: 2873 kg***

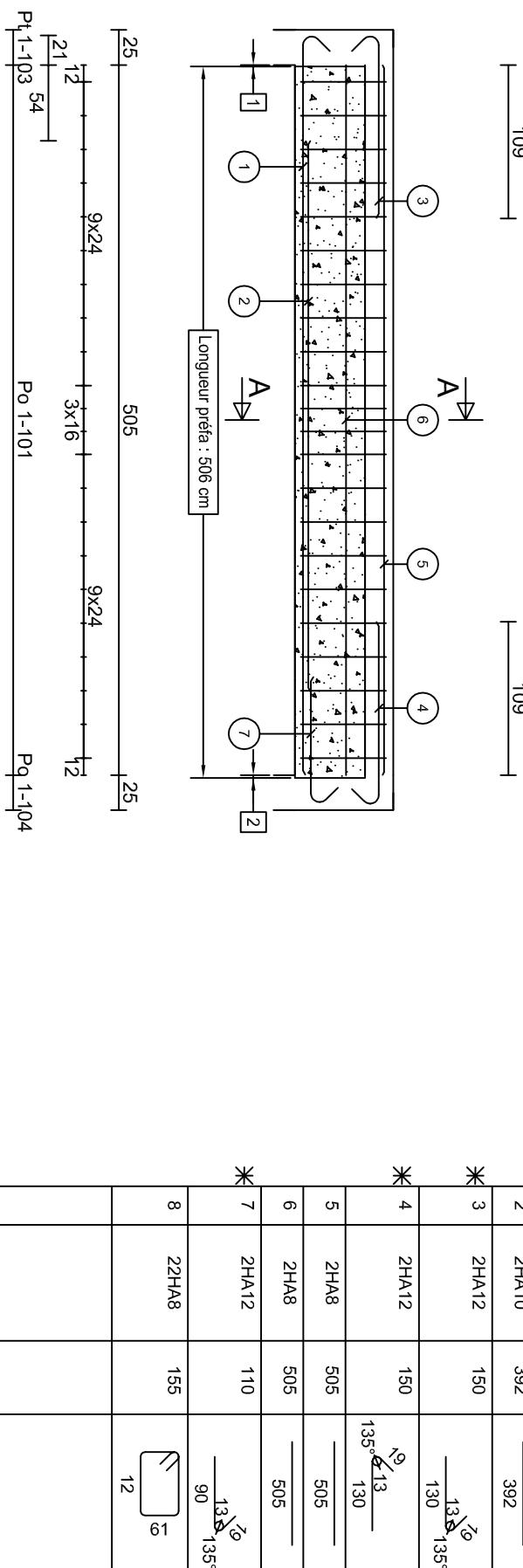
---

**LEGENDRE**

ONE 1 QUIMPER PH RDC | Po 1-101

Section : 20 x 70ht  
 $f_{ck} = 25 \text{ MPa}$   $f_{yk} = 500 \text{ MPa}$  Classe de ductilité B Coupe feu R 60 | Classe d'essai

Béton=0.78 m3	Eb=4.0 cm	1
Acier=43.2 kg d=55.6 kg/m3	Eh=5.0 cm	
Fl=9.3 mm Cof=7.1 m <sup>2</sup>	EI=4.0 cm	
n: XC1		1



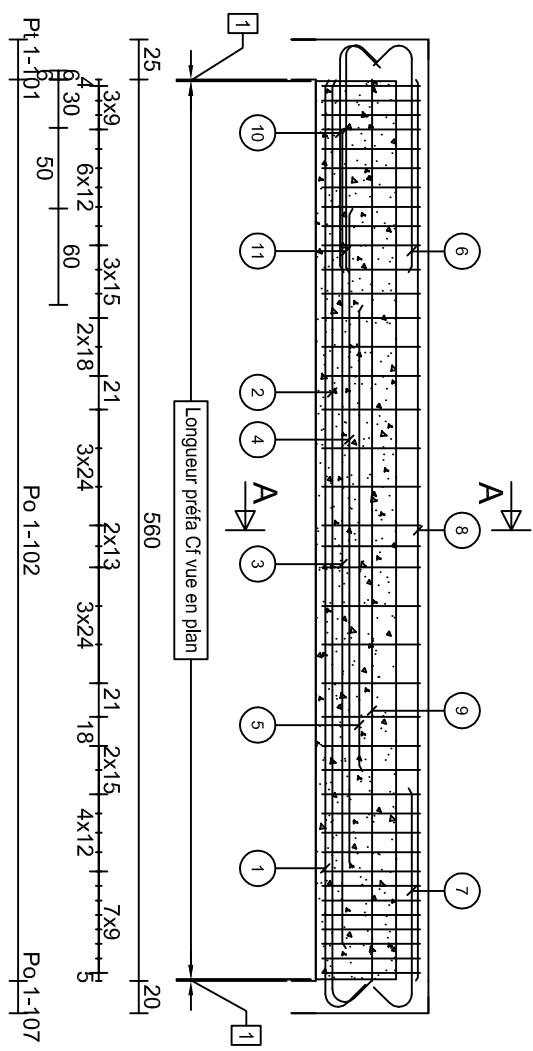
# LEGENDRE

## Poids Préfa : 1.40T

ZONE 1	QUIMPER PH RDC	PO 1-102	Béton=0.85 m3 Aacier=116.6 kg d=137.6 kg/m3 Fi=11.4 mm Cof=7.8 m <sup>2</sup>
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60   Classe d'exposition: XC1			

Section : 20 x 70ht

\*Aciers non soudés



Pt-1-101 25 560 Po 1-102

Pt-1-107 20 560 Po 1-107

10 2HA16 168

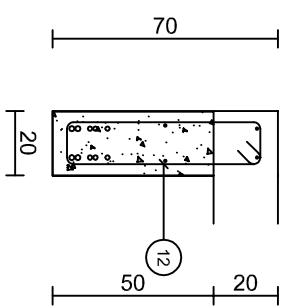
11 2HA12 162

12 39HA8 159

14

Barre	Lg/Poids
HA8	84.4/33.3
HA12	3.2/2.9
HA14	30.7/37.1
HA16	27.4/43.3

Coupe A-A  
Echelle=1/25



20

70

50

20

**LEGENDRE**

ZONE 1	QUIMPER PH RDC	PO 1-102
--------	-------------------	----------

Section : 20 x 70 ht  
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60 | Classe d'exposition: XC1

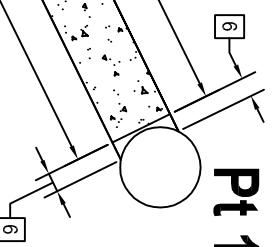
Eb=4.0 cm	2
Eh=5.0 cm	2
EI=3.0 cm	2

Poids Préfa : 1.40T

Vue en plan (dimension préfa)

Echelle=1/25

Pt 1-101

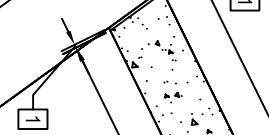


557

554

PO 1-107

PO 1-102



# LEGENDRE

## Poids Préfa : 1.19T

ZONE 1      QUIMPER      PH RDC      PO 1-103

Section : 20 x 70ht

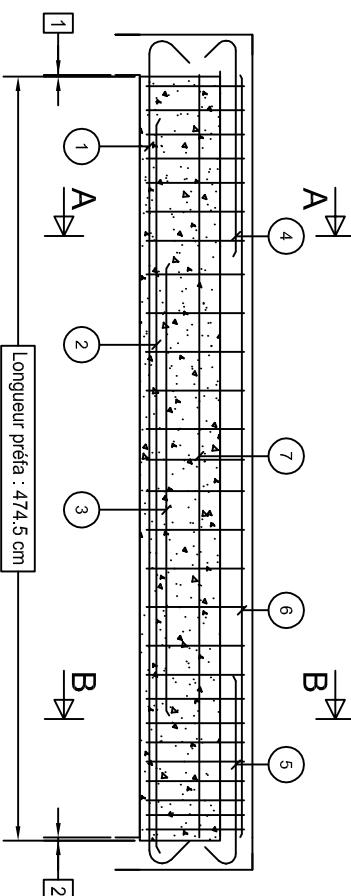
Classe de ductilité B Coupe feu R 60

\* Actifs non soudés

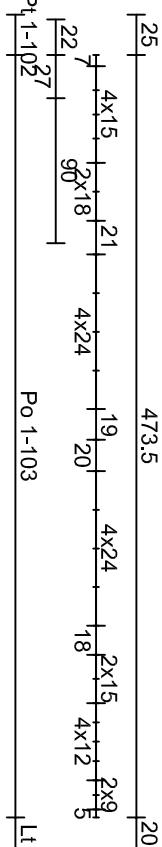
Béton=0.73 m<sup>3</sup>  
Acier=66.8 kg d=92.0 kg/m<sup>3</sup>  
Fl=10.8 mm Cof=6.6 m<sup>2</sup>

Eb=4.0 cm  
Eh=5.0 cm  
El=3.0 cm

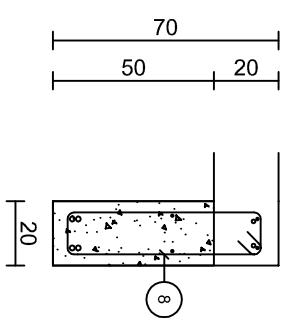
1  
1  
1



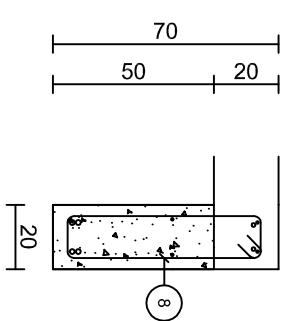
Barre	Lg	Forme
1	2HA16	564
2	2HA16	457
3	2HA12	281
4	2HA12	155
5	2HA12	137
6	2HA8	474
7	2HA8	474
8	27HA8	159



Coupe A-A  
Echelle=1/25



Coupe B-B  
Echelle=1/25



Barre	Lg/Poids
HA8	61.8/24.4
HA12	11.5/10.2
HA16	20.4/32.2

# LEGENDRE

## Poids Préfa : 0.72T

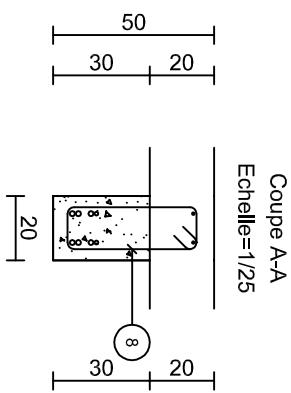
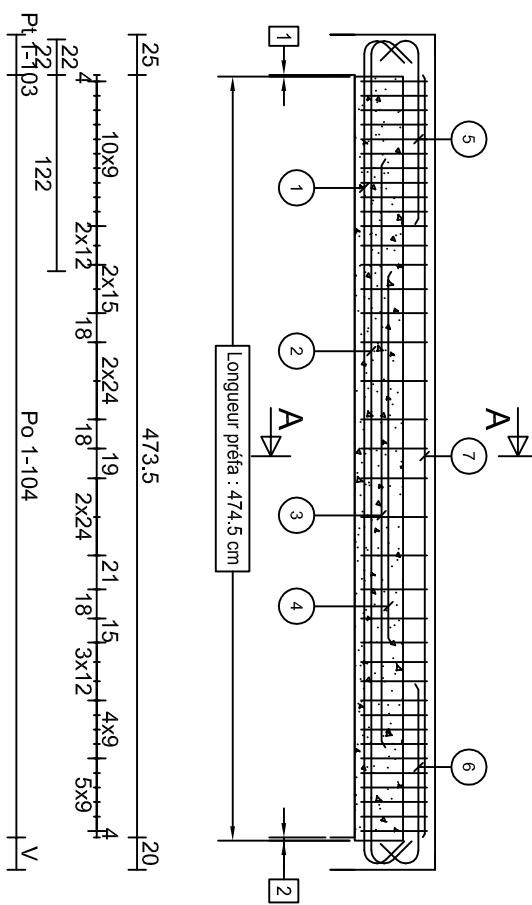
ZONE 1	QUIMPER	PH RDC	PO 1-104	Béton=0.52 m <sup>3</sup> Acier=80.6 kg d=155.5 kg/m <sup>3</sup> Ff=11.8 mm Cof=3.8 m <sup>2</sup>
Section : 20 x 50ht Classe de ductilité B Coupe feu R 60   Classe d'exposition: XC1				

fck = 25 MPa fyk = 500 MPa Classe de ductilité B Coupe feu R 60

\* Actiers non soudés

Barre	Lg	Forme
1	2HA16	564
2	2HA16	564
3	2HA16	366
4	2HA12	231
5	2HA14	139
6	2HA14	137
7	2HA8	474
8	31HA8	119
9	6HA10	119
		41

Elévation  
Echelle=1/150



Barre	Lg/Poids
HA8	46.3/18.3
HA10	7.1/4.4
HA12	4.6/4.1
HA14	5.5/6.7
HA16	29.9/47.2

# LEGENDRE

## Poids Préfa : 1.90T

ZONE 1      QUIMPER      PH RDC      Po 1-105

Béton=1.17 m3  
Acier=121.2 kg d=103.4 kg/m3  
Fi=10.3 mm Cof=9.6 m<sup>2</sup>

Section : 25 x 70ht

Classe d'exposition: XC1

Elévation  
Echelle=1/50

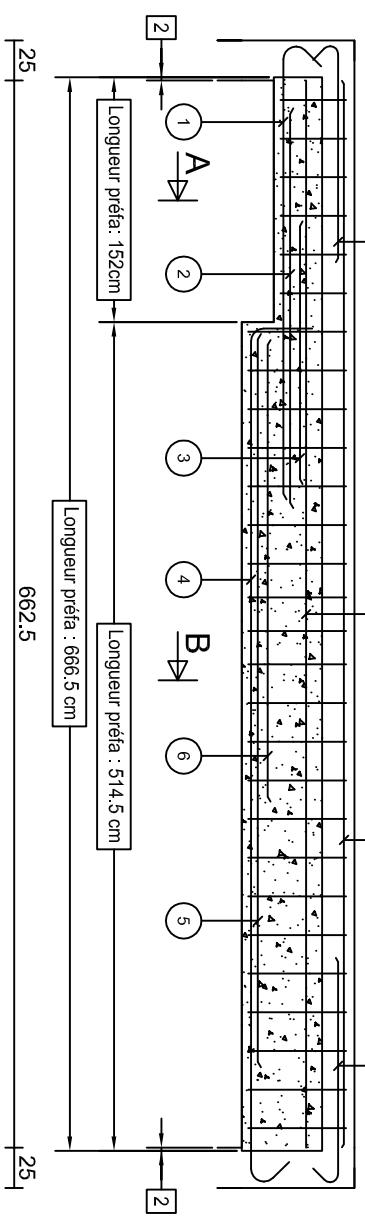
113

A →  
7

B →  
10

9

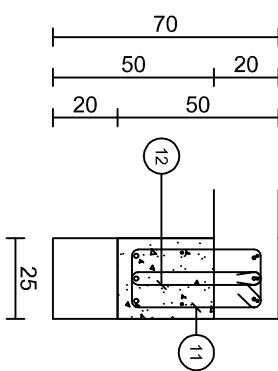
8



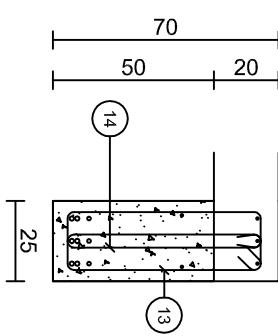
\* Actifs non soudés

	Barre	Lg	Forme
1	3HA14	306	3/3 16 282
2	3HA14	249	— 249
3	3HA12	164	— 164
4	3HA14	589	3/3 16 16 3/3 532 135°
5	3HA14	456	— 456
6	3HA12	287	— 287
7	3HA10	151	— 10 5 135°
8	3HA10	156	15 10 135°
9	3HA8	663	— 663
10	2HA8	663	— 663
11	6HA8	129	19 41
12	6HA8	101	— 41
13	22HA8	169	19 61
14	22HA8	141	— 61

Coupe A-A  
Echelle=1/25



Coupe B-B  
Echelle=1/25



Barre

Barre

Lg/Poids

HA8	115.245.5
HA10	9.25.7
HA12	13.5/12.0
HA14	48.0/58.0

# LEGENDRE

## Poids Préfa : 1.20T

ZONE 1	QUIMPER	PH RDC	PO 1-106	Béton=0.72 m <sup>3</sup>	E <sub>b</sub> =3.0 cm	$\frac{1}{2}$
fck= 25 MPa fvk= 500 MPa Classe de ductilité B Coupe feu R 60				Acier=58.0 kg d=80.1 kg/m <sup>3</sup>	E <sub>h</sub> =5.0 cm	

Section : 20 x 70ht

Classe d'exposition: XC1

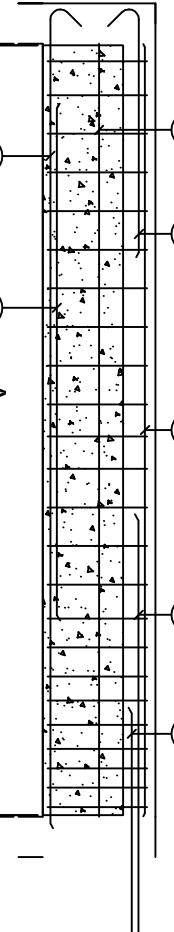
\* Aciers non soudés

Barre	Lg	Forme
1	2HA12	529
2	2HA12	321
3	2HA12	175
4	2HA16	411
5	2HA14	166
6	2HA8	480
7	2HA8	480
8	24HA8	161

14

Elévation  
Echelle=1/50

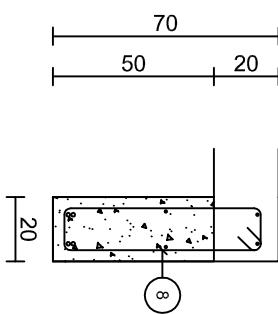
133      120      68



Longueur préfa : 478 cm

25      1      25  
21      8x24      2x20      3x24      21      2x18      3x15      3x12  
22      37      P0 1-106      Pt 1-106

Coupe A-A  
Echelle=1/25



Barre      Lg/Poids

Barre	Lg/Poids
HA8	57.8/22.8
HA12	20.5/18.2
HA14	3.3/4.0
HA16	8.2/13.0

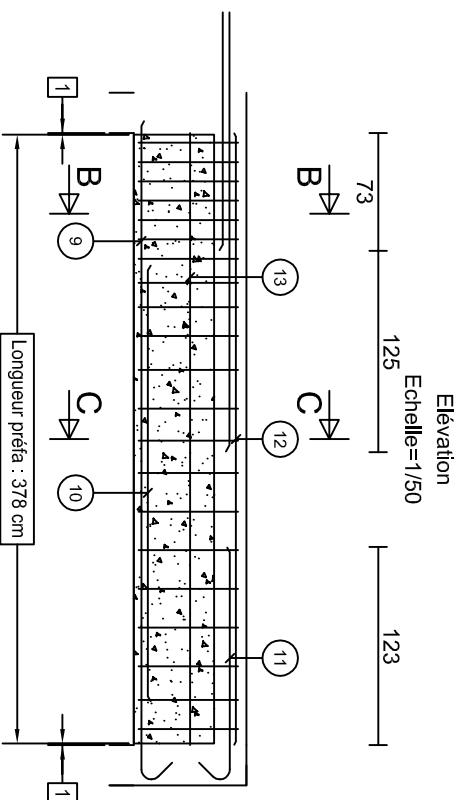
# LEGENDRE

## Poids Préfa : 0.95T

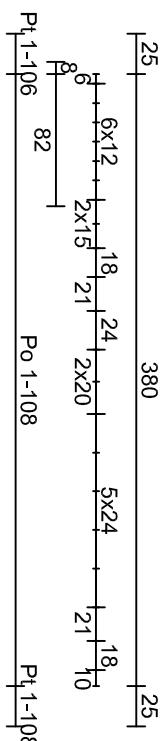
ZONE 1	QUIMPER PH RDC	PO 1-108	Béton=0.58 m <sup>3</sup> Acier=34.7 kg d=59.3 kg/m <sup>3</sup> Ft=10.4 mm Cof=4.6 m <sup>2</sup>
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60   Classe d'exposition: XC1			

Section : 20 x 70ht

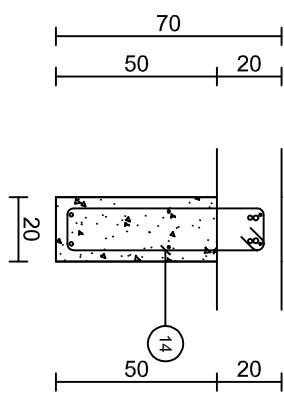
\* Actiers non soudés



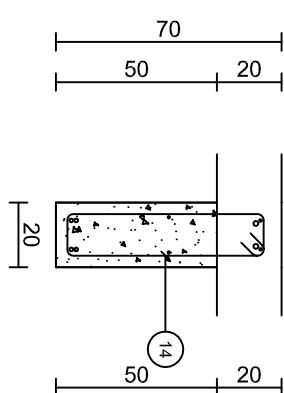
Barre	Lg	Forme
9	2HA12	429
10	2HA12	271
11	2HA12	165
12	2HA8	380
13	2HA8	380
14	21HA8	161
		14



Coupe B-B  
Echelle=1/25



Coupe C-C  
Echelle=1/25



Barre	Lg/Poids
HA8 HA12	49.0/19.3 17.3/15.4

# LEGENDRE

## Poids Préfa : 2.08T

ZONE 1      QUIMPER      PH RDC

PO 1-107

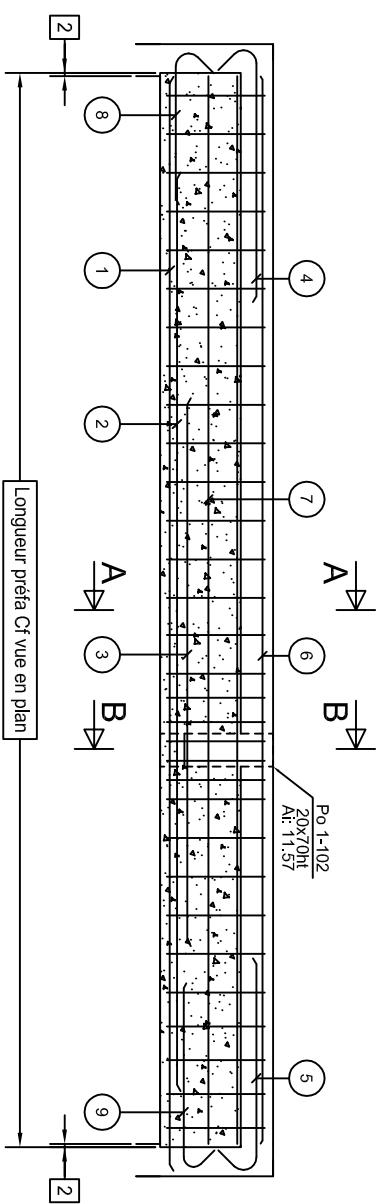
Béton=1.23 m3  
Acier=151.8 kg d=123.4 kg/m3  
Fi=10.9 mm Cof=8.3 m<sup>2</sup>

Eb=4.0 cm  
Eh=5.0 cm  
El=3.0 cm  
 $\frac{1}{2}$

Section : 25 x 70ht

Classe de ductilité B Coupe feu R 60

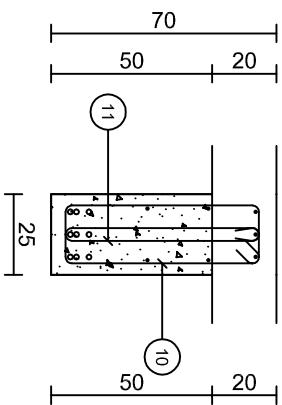
Classe d'exposition: XC1



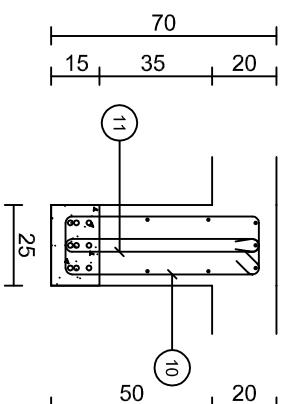
Acteurs non soudés

	Barre	Lg	Forme
1	3HA16	680	680
2	3HA16	571	571
3	3HA16	341	341
4	3HA14	182	158
5	3HA14	157	135°/16
6	3HA8	663	663
7	4HA8	663	663
8	3HA14	119	135°/16
9	3HA12	135	115
10	31HA8	169	61
11	35HA8	141	61

Coupe A-A  
Echelle=1/25



Coupe B-B  
Echelle=1/25



Barre      Lg/Poids

HA8	142.6/56.3
HA12	4.0/3.6
HA14	13.7/16.6
HA16	47.8/75.4

# LEGENDRE

Poids Préfa : 2.08T

ZONE 1      QUIMPER  
PH RDC

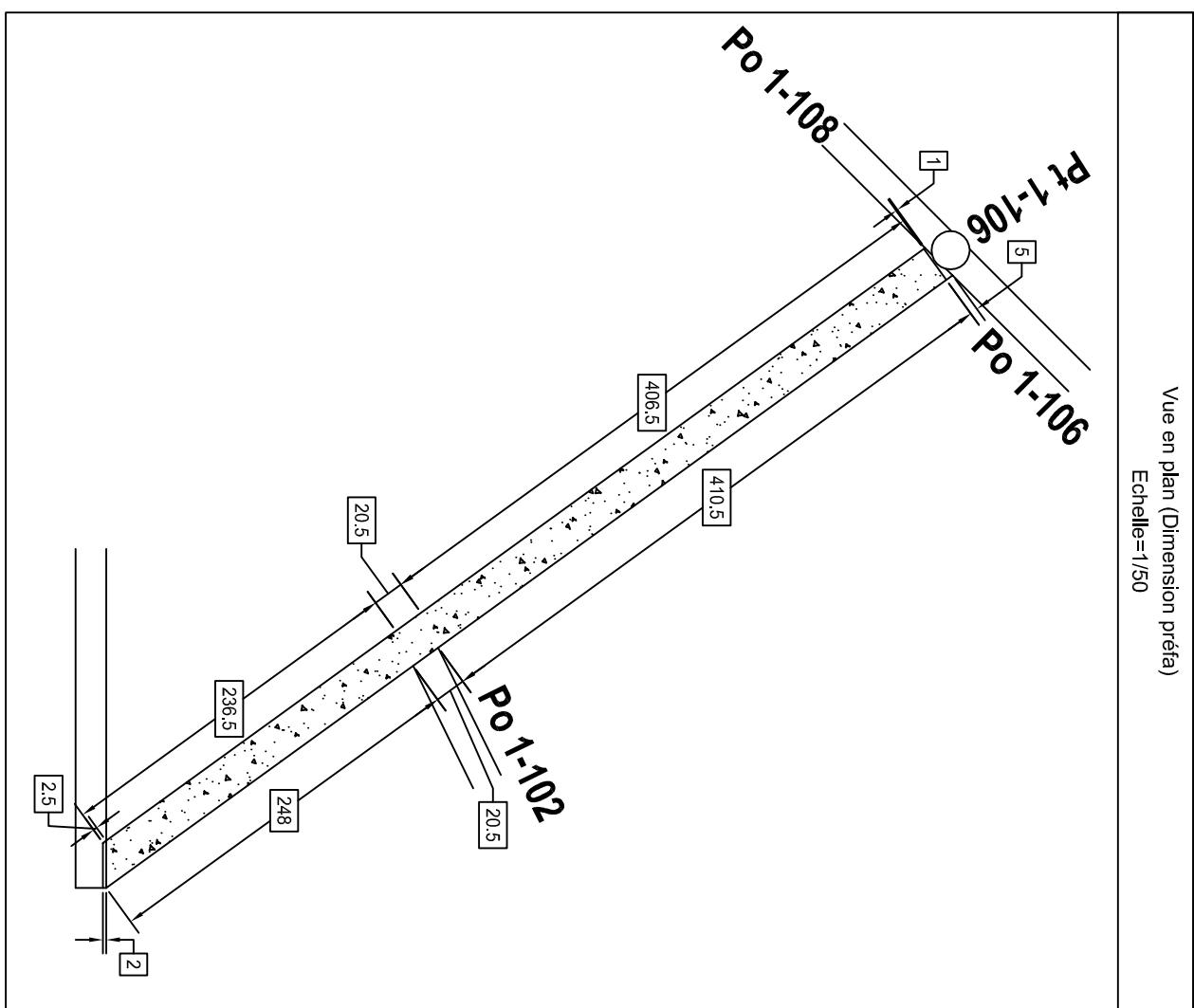
PO 1-107

E <sub>b</sub> =4.0 cm	<b>2</b>
E <sub>h</sub> =5.0 cm	
E <sub>I</sub> =3.0 cm	<b>2</b>

f<sub>c,k</sub>= 25 MPa f<sub>y,k</sub>= 500 MPa Classe de ductilité B Coupe feu R 60

Section : 25 x 70ht

Vue en plan (Dimension préfa)  
Echelle=1/50



Vue en plan (détail d'appui)  
Echelle=1/50



\* Ajout 4 étriers H48x141 (e=10) 61

# LEGENDRE

ZONE 1	QUIMPER PH RDC	PO 1-109
$f_{ck} = 25 \text{ MPa}$ $f_{vk} = 500 \text{ MPa}$ Classe de ductilité B Coupe feu R 60	Section : $30 \times 27\text{ht}$	Aacier=65.8 kg d=111.0 kg/m <sup>3</sup> $\text{Fi}=9.2 \text{ mm}$ $\text{Cof}=2.6 \text{ m}^2$

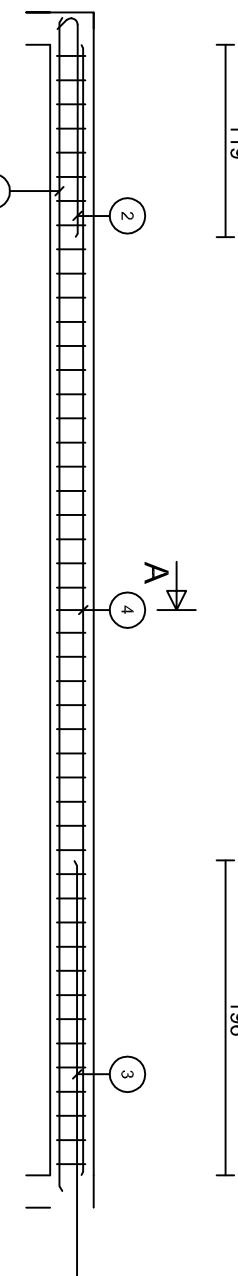
Section :  $30 \times 27\text{ht}$  Classe d'exposition: XC1

Béton=0.59 m<sup>3</sup>

Aacier=65.8 kg d=111.0 kg/m<sup>3</sup>

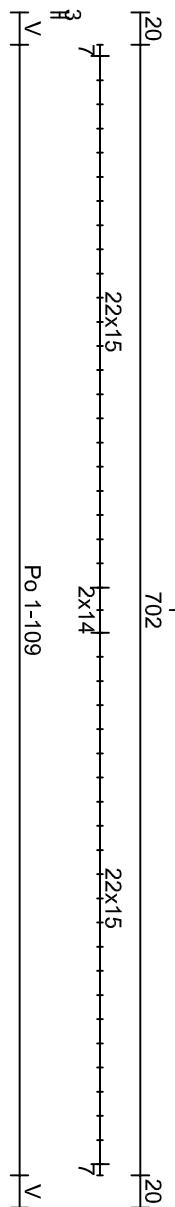
$E_b=4.0 \text{ cm}$   
 $E_h=5.0 \text{ cm}$

$E_l=3.0 \text{ cm}$   $\frac{1}{2}$



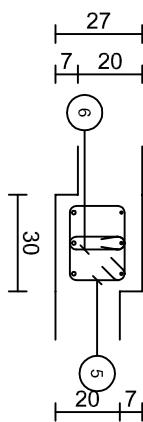
$\rightarrow A$

702



PO 1-109

Coupe A-A  
Echelle=1/25



Barre	Lg/Poids
HA8 HA12	95.3/37.6 31.8/28.2

# LEGENDRE

ZONE 1      QUIMPER      PH RDC

Po 1-110

$f_{ck} = 25 \text{ MPa}$   $f_{vk} = 500 \text{ MPa}$  Classe de ductilité B Coupe feu R 60

Section : 30 x 27ht

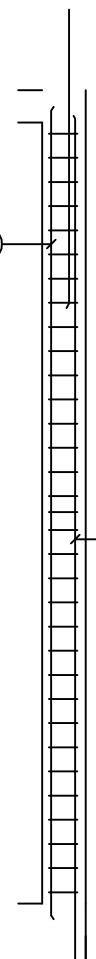
Classe d'exposition: XC1

Béton=0.43 m<sup>3</sup>  
Acier=34.9 kg d=80.5 kg/m<sup>3</sup>  
Fi=8.9 mm Cof=1.8 m<sup>2</sup>

Barre	Lg	Forme
7	3HA10	505
8	3HA8	526
9	33HA8	93
10	33HA8	55

116

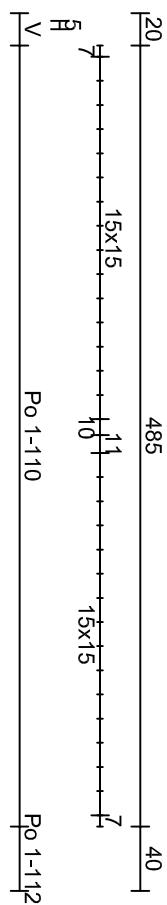
B  
B



7

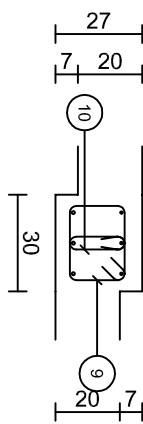
8

9



Po 1-112

Coupe B-B  
Echelle=1/25



Barre	Lg/Poids
HA8	64.7/25.5
HA10	15.2/9.3

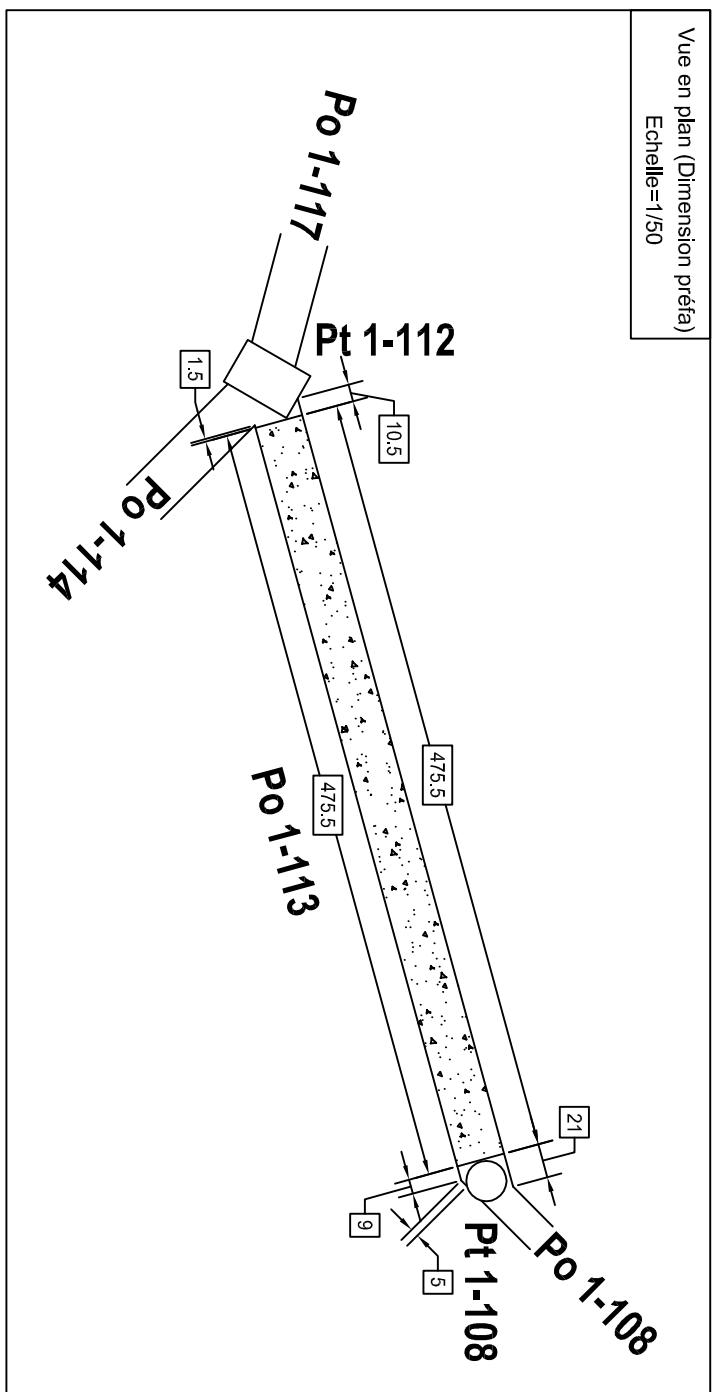


# LEGENDRE

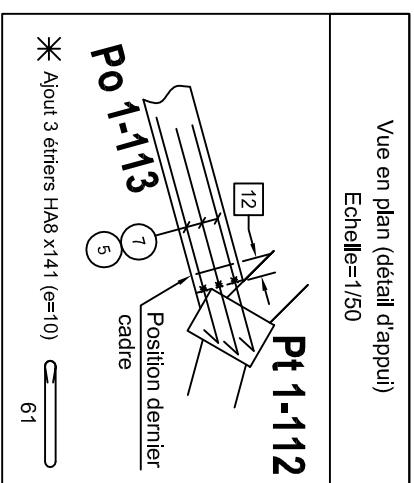
Poids Préfa : 1.79T

ZONE 1	QUIMPER PH RDC	PO 1-113	Béton=1.15 m3 Acier=150.4 kg d=130.7 kg/m3 Fi=10.2 mm Cof=6.2 m <sup>2</sup>	Eb=4.0 cm Eh=5.0 cm EI=4.0 cm	$\frac{2}{2}$
			Section : 30 x 70ht fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60	Classe d'exposition: XC1	

Vue en plan (Dimension préfa)  
Echelle=1/50



Vue en plan (détail d'appui)  
Echelle=1/50



\* Ajout 3 étiers H48x141 (e=10) 61

Eb=4.0 cm  
Eh=5.0 cm  
EI=4.0 cm



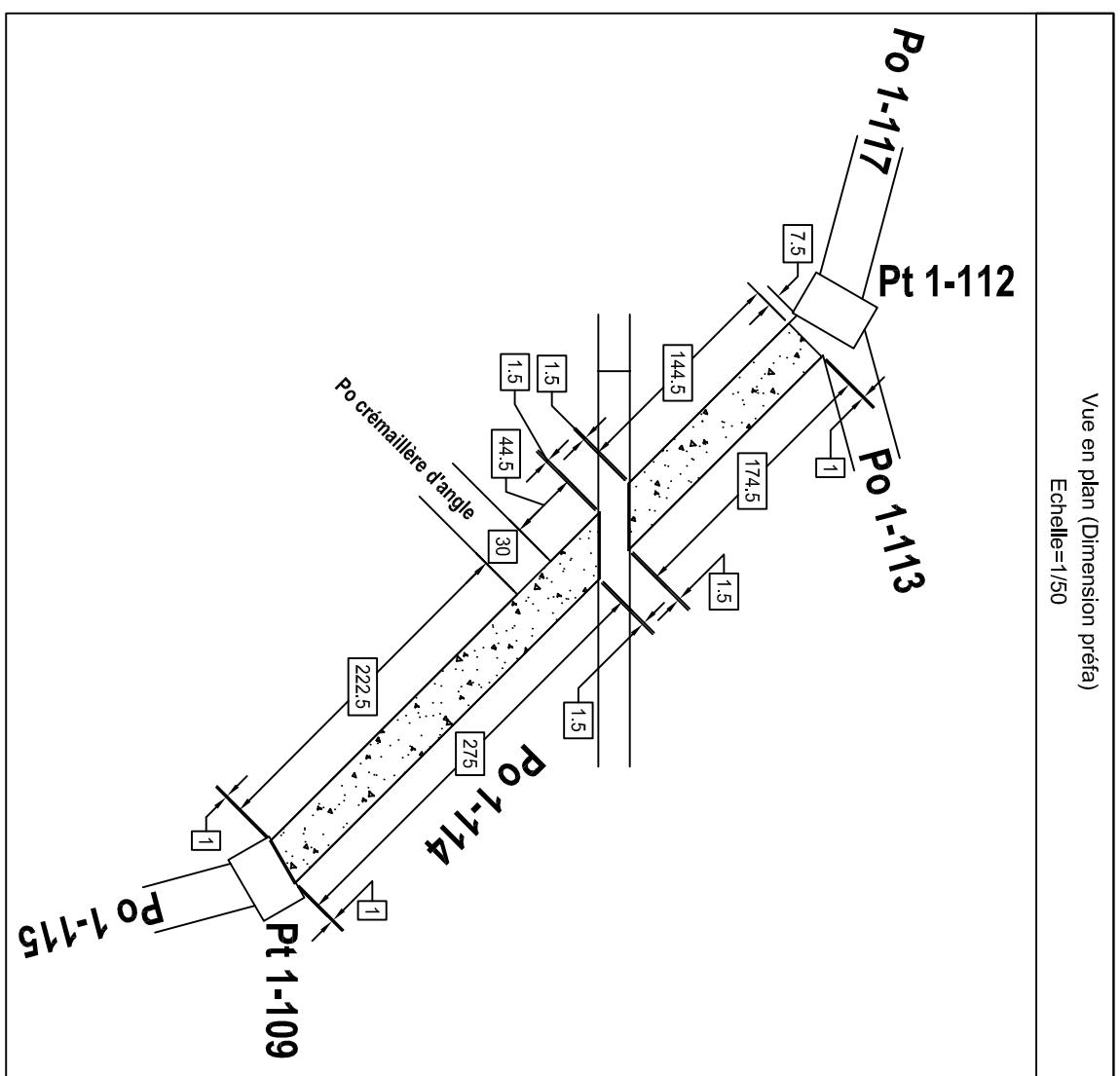
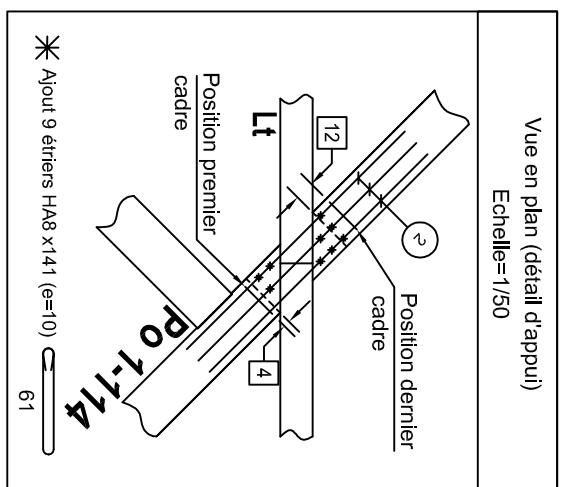
**LEGENDRE**

LEGENDRE

ZONE 1	QUIMPER PH RDC	PO 1-114 A	Eb=4.0 cm Eh=5.0 cm El=3.0 cm	<u>2</u>
				<u>2</u>

fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60 | Classe

Section : 30x70ht  
de ductilité B Coupe feu R 60 | Classe d'exposition: XC



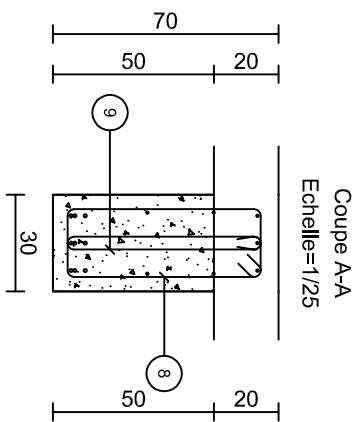
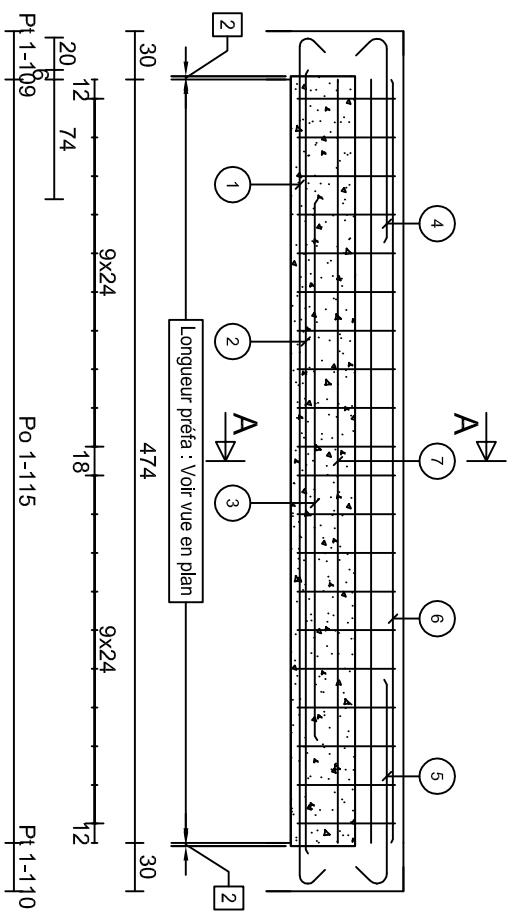
# LEGENDRE

## Poids Préfa : 1.82T

ZONE 1	QUIMPER PH RDC	PO 1-115	Béton=1.12 m <sup>3</sup> Acier=71.5 kg d=63.7 kg/m <sup>3</sup> Fi=8.9 mm Cof=6.2 m <sup>2</sup>	E <sub>b</sub> =4.0 cm E <sub>h</sub> =5.0 cm E <sub>l</sub> =4.0 cm	$\frac{1}{2}$
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60	Section : 30 x 70ht	Classe d'exposition: XC1			

Elévation  
Echelle=1/50

The elevation view shows a rectangular beam section with a height of 70mm and a width of 30mm. The top flange has a thickness of 20mm. Reinforcement bars are labeled 1 through 9. A horizontal dimension line at the bottom indicates a total length of 474mm, divided into segments of 30, 9x24, 18, 9x24, and 12. A vertical dimension line on the left indicates a total height of 109mm, divided into segments of 30, 50, 20, 50, and 20.



Barre	Lg/Poids
HA8	96.4/38.1
HA10	41.4/25.5
HA12	8.8/7.8

# LEGENDRE

ZONE 1      QUIMPER      PH RDC

PO 1-115

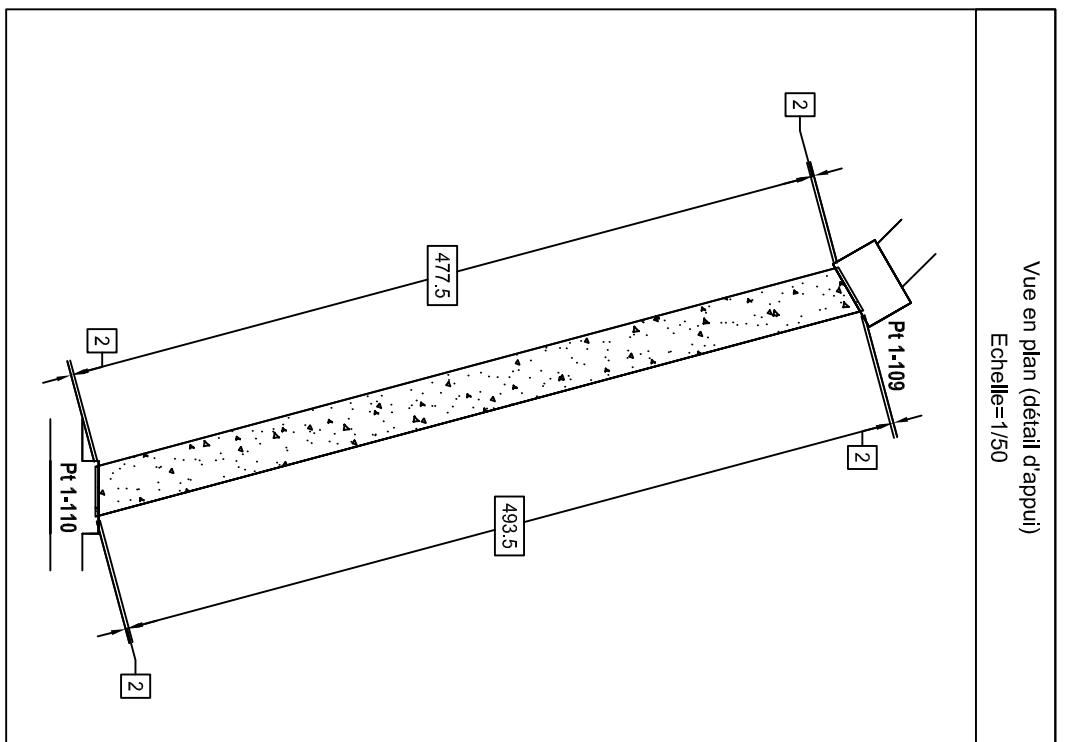
Béton=1.12 m<sup>3</sup>  
Acier=71.5 kg d=63.7 kg/m<sup>3</sup>  
Fi=8.9 mm Cof=6.2 m<sup>2</sup>

E<sub>b</sub>=4.0 cm  
E<sub>h</sub>=5.0 cm  
EI=4.0 cm

$\frac{1}{2}$

f<sub>ck</sub>= 25 MPa f<sub>yk</sub>= 500 MPa Classe de ductilité B Coupe feu R 60

Section : 30 x 70 ht | Classe d'exposition: XC1



# LEGENDRE

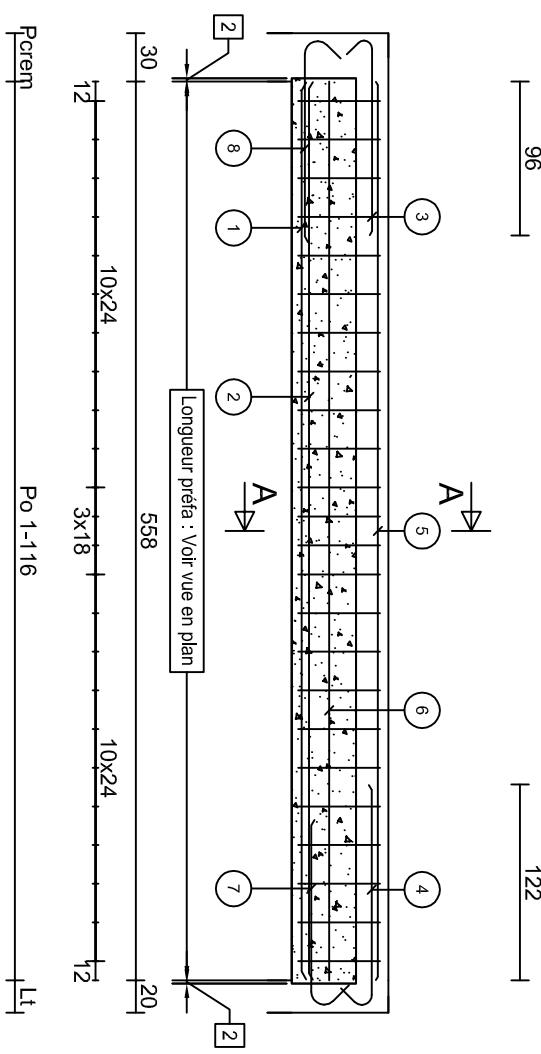
## Poids Préfa : 3.50T

ZONE 1	QUIMPER	PH RDC	PO 1-116
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60	Acier=258.1 kg d=117.9 kg/m3	Béton=2.19 m3	Eb=4.0 cm Eh=5.0 cm El=4.0 cm $\frac{1}{2}$

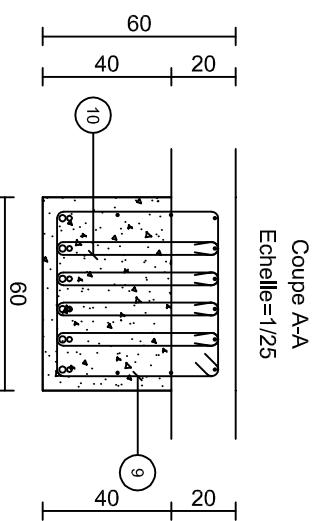
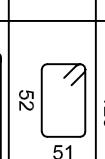
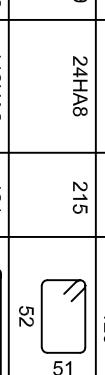
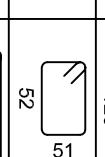
Section : 60 x 60ht

Fi=11.3 mm Cof=7.8 m<sup>2</sup>

\* Actifs non soudés



Barre	Lg	Forme
1	6HA20	558
2	6HA16	558
3	6HA10	138
*	4 6HA12	157
*	5 6HA8	558
6	4HA8	558
*	7 6HA14	140
*	8 6HA14	148
9	24HA8	215
10	119HA8	121



# LEGENDRE

Poids Préfa : 3.50T

ZONE 1      QUIMPER      PH RDC

PO 1-116

$f_{ck} = 25 \text{ MPa}$   $f_{vk} = 500 \text{ MPa}$  Classe de ductilité B Coupe feu R 60

Section : 60 x 60ht      Classe d'exposition: XC1

Béton=2.19 m<sup>3</sup>  
Acier=258.1 kg      d=117.9 kg/m<sup>3</sup>  
Fi=11.3 mm      Cof=7.8 m<sup>2</sup>

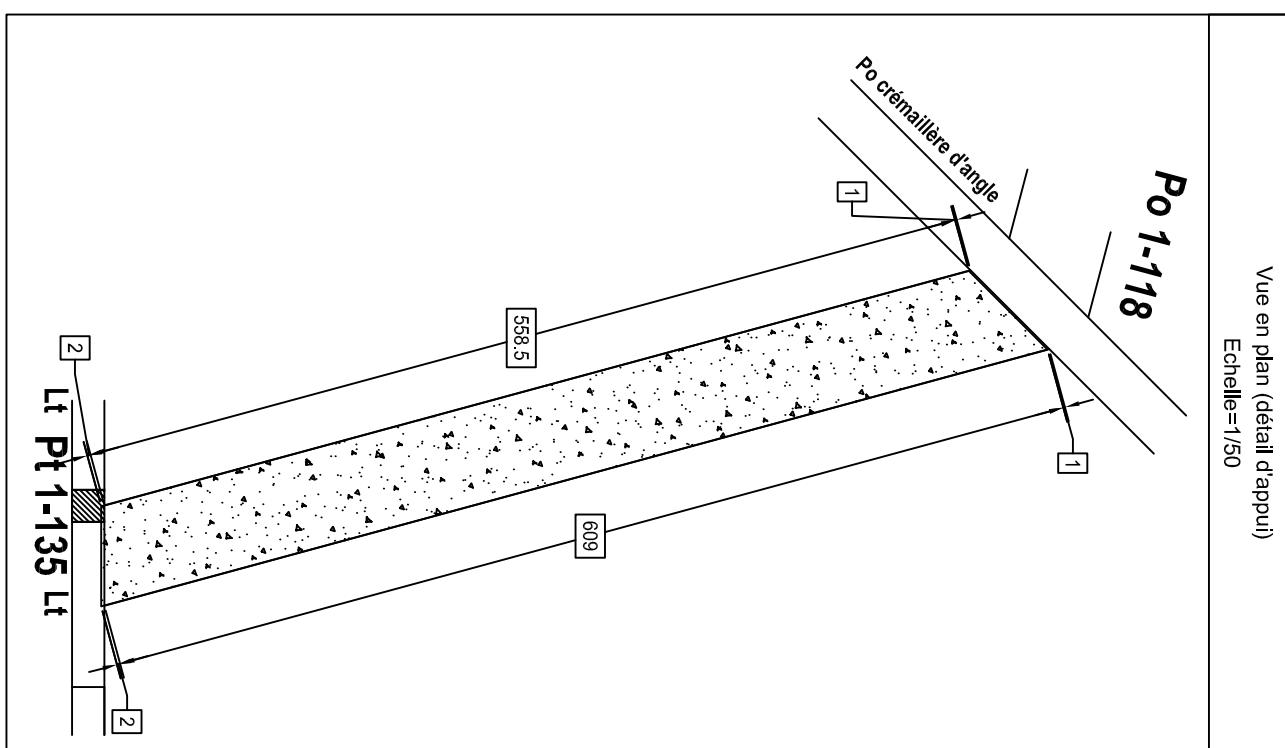
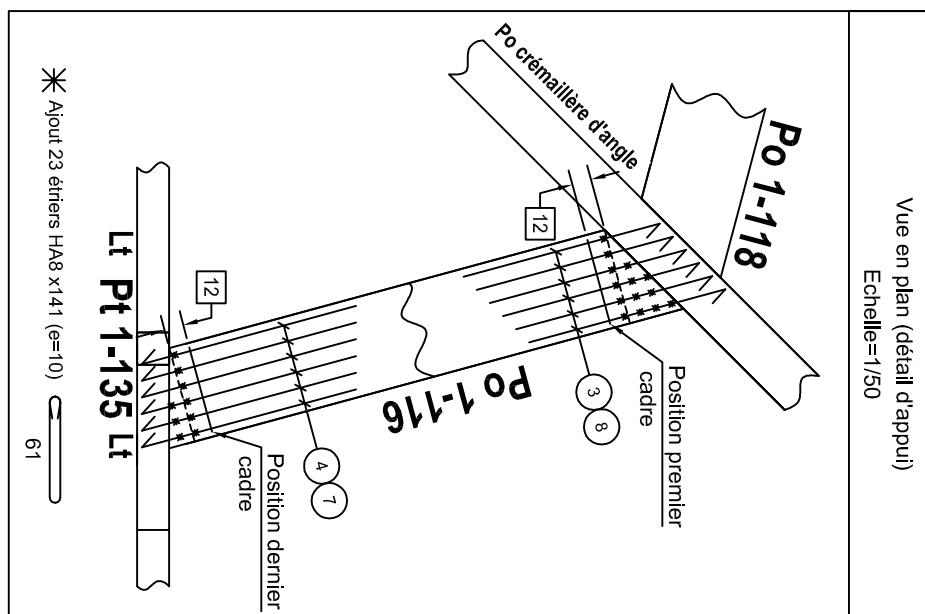
$E_b=4.0 \text{ cm}$   
 $E_h=5.0 \text{ cm}$   
 $E_l=4.0 \text{ cm}$

Vue en plan (détail d'appui)  
Echelle=1/150

PO 1-118

Vue en plan (détail d'appui)  
Echelle=1/50

PO 1-118



# LEGENDRE

## Poids Préfa : 1.82T

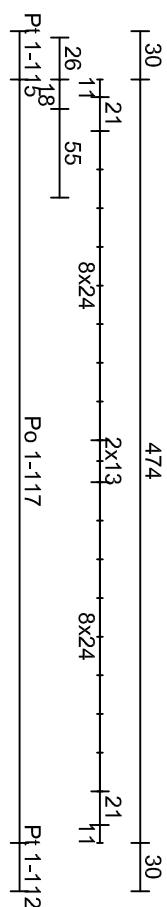
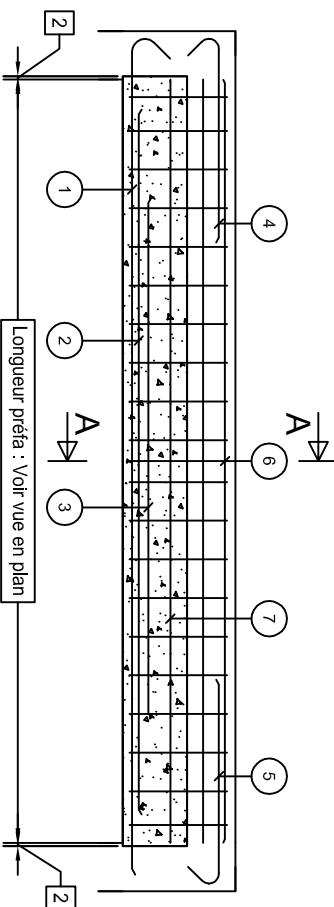
ZONE 1	QUIMPER	PH RDC	PO 1-117	Béton=1.12 m <sup>3</sup> Acier=87.2 kg d=77.7 kg/m <sup>3</sup> Fi=9.8 mm Cof=6.2 m <sup>2</sup>
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60   Classe d'exposition: XC1				

Section : 30 x 70ht

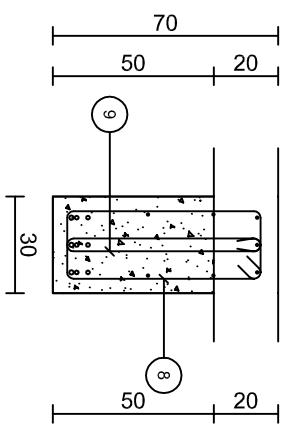
\*Actiers non soudés

Barre	Lg	Forme
1	3HA14	544 
2	3HA12	438 
3	3HA12	323 
4	3HA12	147 
5	3HA12	147 
6	3HA8	474 
7	4HA8	474 
8	21HA8	175 
9	27HA8	141 

Elévation  
Echelle=1/50



Coupe A-A  
Echelle=1/25

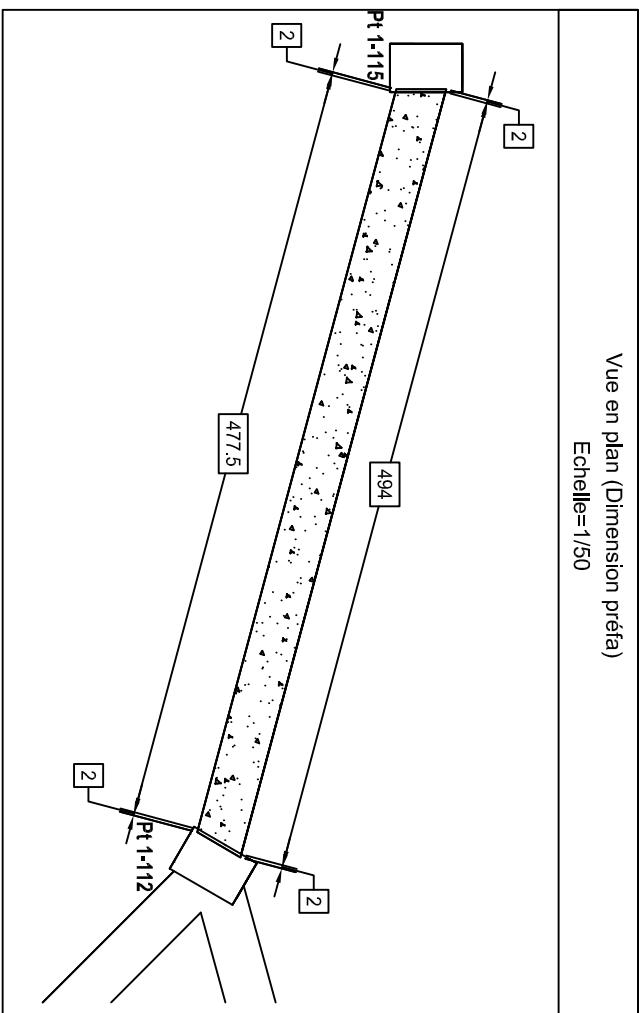
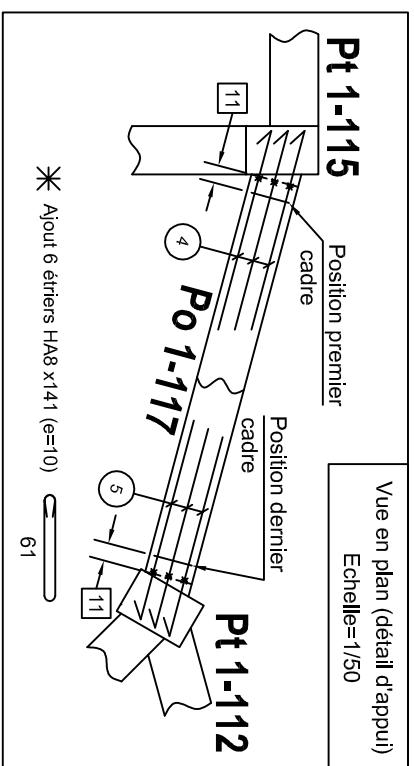


Barre	Lg/Poids
HA8	99.6/39.3
HA12	31.7/28.1
HA14	16.3/19.7

# LEGENDRE

Poids Préfa : 1.82T

ZONE 1	QUIMPER PH RDC	PO 1-117
fck= 25 MPa fyk= 500 MPa	Béton=1.12 m3 Acier=87.2 kg d=77.7 kg/m3 Fi=9.8 mm Cof=6.2 m <sup>2</sup>	Classe de ductilité B Coupe feu R 60 Classe d'exposition: XC1



# LEGENDRE

## Poids Préfa : 3.45T

ZONE 1	QUIMPER PH RDC	PO 1-118	Béton=2.19 m3 Acier=250.7 kg d=114.4 kg/m3 Fi=11.3 mm Cof=7.7 m <sup>2</sup>
--------	-------------------	----------	--

Section : 60 x 60ht

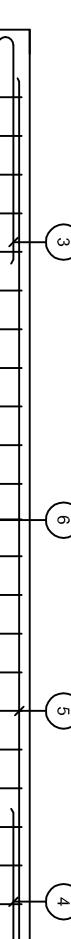
Coupe feu R 60

Classe d'exposition: XC1

Elévation  
Echelle=1/50

116  
96

A



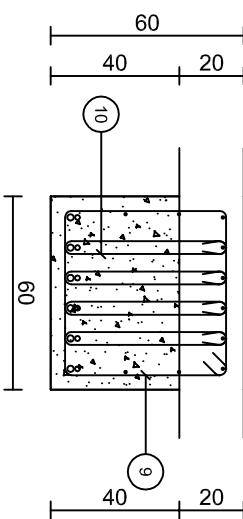
Actiers non soudés			
	Barre	Lg	Forme
1	6HA20	549	— 549
2	6HA16	549	— 549
3	6HA10	158	— 142 10° 135°
4	6HA10	138	— 122 135° 10° 10 10
5	6HA8	549	— 549
6	4HA8	549	— 549
7	6HA14	146	— 126 135° 16° 16 16
8	6HA14	148	— 126 16° 135°
9	23HA8	215	— 51
10	115HA8	121	— 52

Longueur préfâ : Voir vue en plan  
549  
30  
12  
10x24  
23  
10x24  
12  
30

P0 1-118

Barre  
Lg/Poids

Coupe A-A  
Echelle=1/25



Barre	Lg/Poids
HA8	216.1/85.3
HA10	17.7/10.9
HA14	17.6/21.3
HA16	32.9/52.0
HA20	32.9/81.2

# LEGENDRE

## Poids Préfa : 3.45T

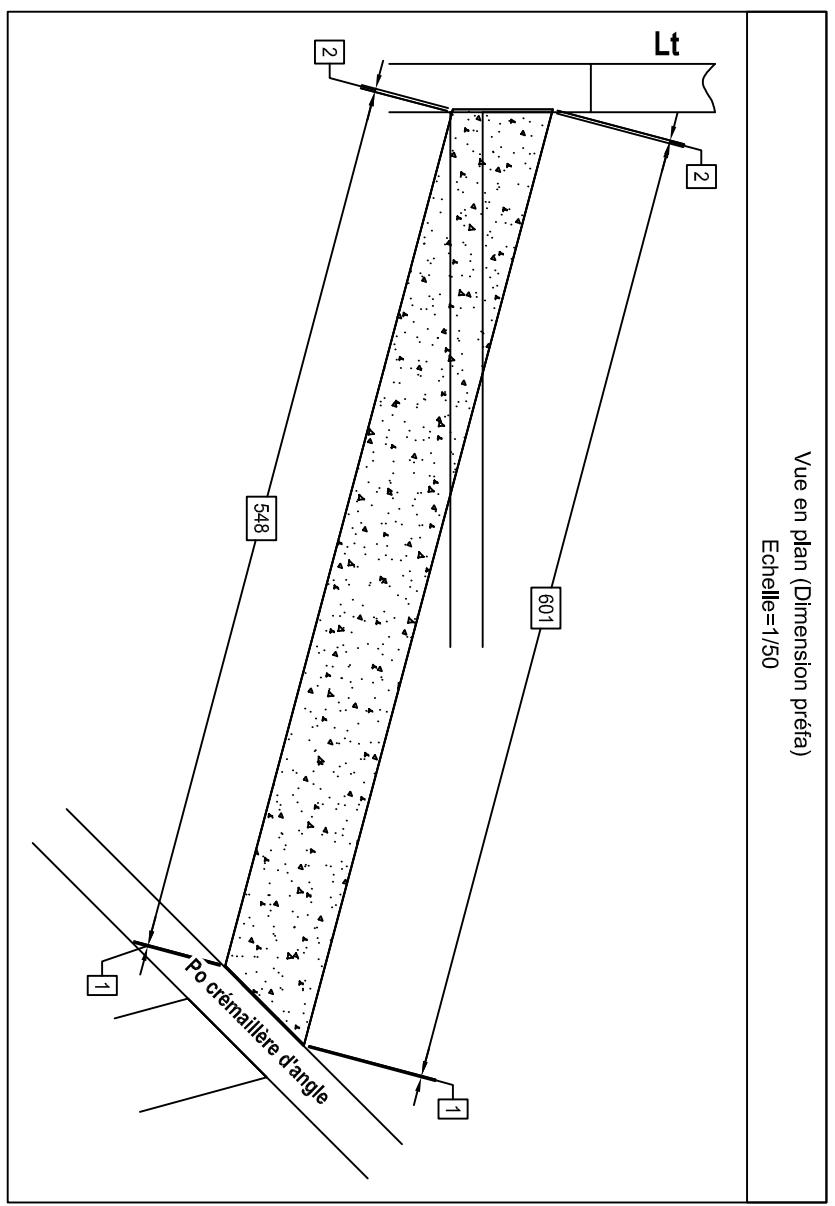
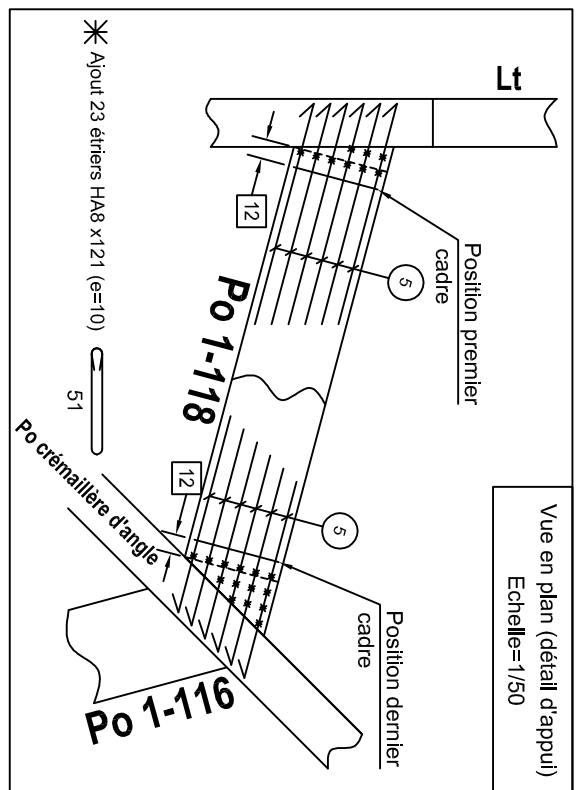
ZONE 1 QUIMPER

PO 1-118

Béton=2.19 m3  
Acier=250.7 kg d=114.4 kg/m3  
Fi=11.3 mm Cof=7.7 m<sup>2</sup>

E<sub>b</sub>=4.0 cm  
E<sub>h</sub>=5.0 cm  
E<sub>l</sub>=4.0 cm  
2  
2

f<sub>ck</sub>= 25 MPa f<sub>yk</sub>= 500 MPa Classe de ductilité B Coupe feu R 60 | Classe d'exposition: XC1



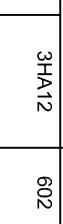
# LEGENDRE

## Poids Préfa : 2.47T

ZONE 1	QUIMPER PH RDC	PO 1-119
$f_{ck} = 25 \text{ MPa}$ $f_{vk} = 500 \text{ MPa}$ Classe de ductilité B Coupe feu R 60	Béton=1,42 m <sup>3</sup> Acier=107,8 kg d=76,1 kg/m <sup>3</sup> Fi=9,9 mm Cof=8,2 m <sup>2</sup>	

Section : 30 x 80ht

\* Actiers non soudés

	Barre	Lg	Forme
1	3HA12	602	
2	3HA10	396	
3	3HA8	269	
4	3HA12	197	
5	3HA16	511	
6	3HA14	191	
7	3HA8	545	
8	2HA8	545	
9	24HA8	199	
10	24HA8	161	

Section :

30 x 80ht

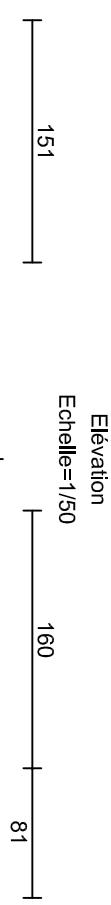
Classe d'exposition: XC1

Actiers non soudés

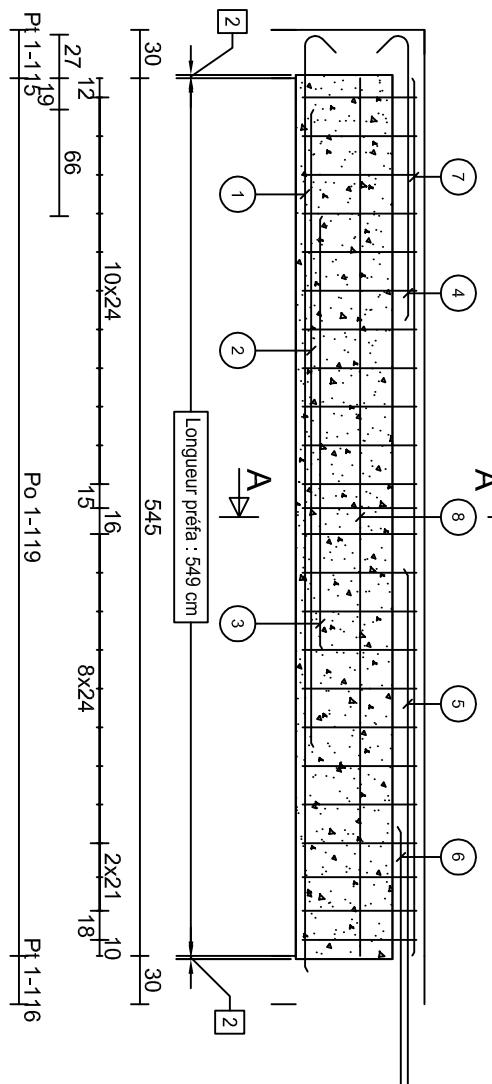
Barre

Lg

Forme



Elévation  
Echelle=1/50



A

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253</p



# LEGENDRE

## Poids Préfa : 1.45T

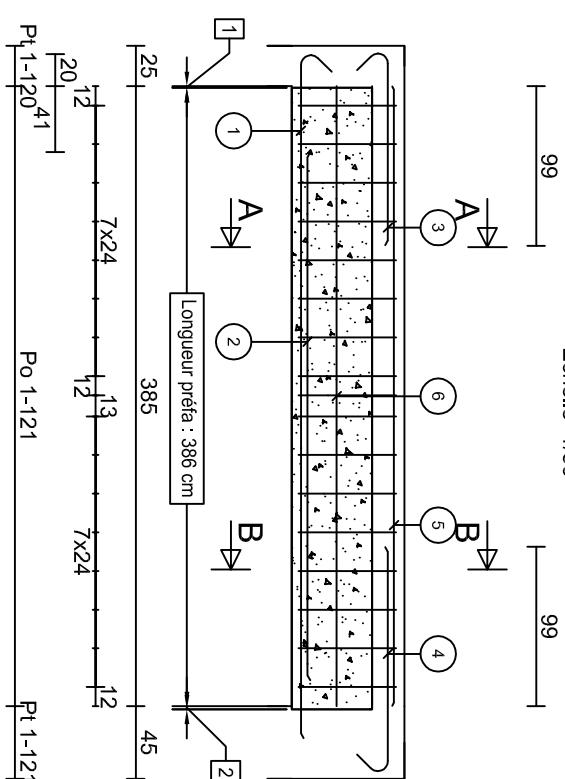
ZONE 1	QUIMPER PH RDC	PO 1-121
fck= 25 MPa fvk= 500 MPa Classe de ductilité B Coupe feu R 60	Section : 30 x 70ht	Béton=0.96 m3 Acier=60.4 kg d=63.2 kg/m3 Fi=9.3 mm Cof=5.0 m <sup>2</sup>

Classe d'exposition: XC1

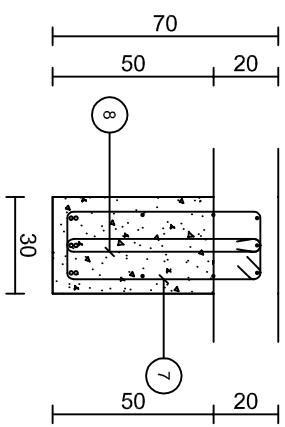
\*Actiers non soudés

Barre	Lg	Forme
1	3HA12	445
2	3HA12	328
*		
3	3HA12	140
*		
4	3HA12	160
*		
5	3HA8	385
*		
6	4HA8	385
*		
7	17HA8	175
*		
8	17HA8	141

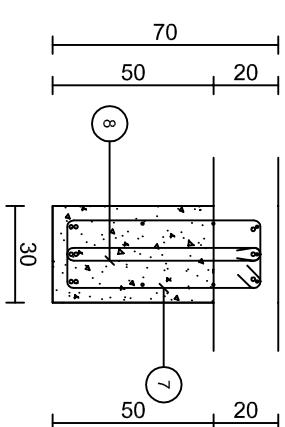
Barre	Lg/Poids
HA8 HA12	80.7/31.9 32.2/28.6



Coupe A-A  
Echelle=1/25



Coupe B-B  
Echelle=1/25

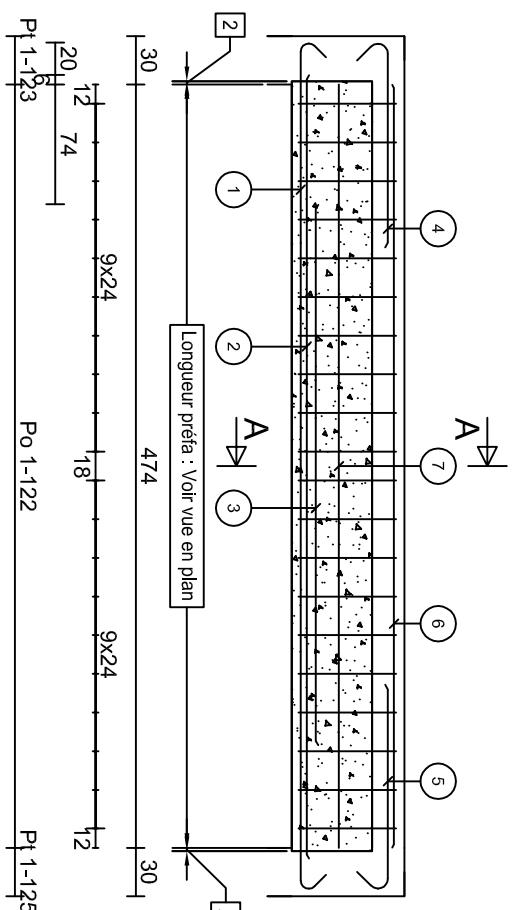


# LEGENDRE

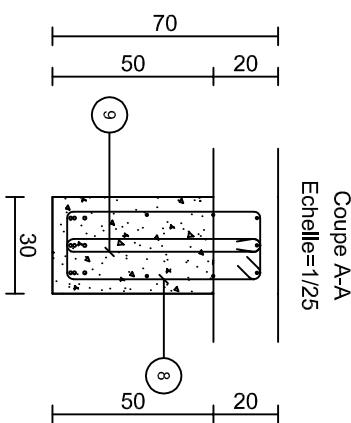
## Poids Préfa : 1.82T

ZONE 1	QUIMPER PH RDC	PO 1-122	Béton=1.12 m <sup>3</sup> Acier=71.5 kg d=63.7 kg/m <sup>3</sup> Fi=8.9 mm Cof=6.2 m <sup>2</sup>	E <sub>b</sub> =4.0 cm E <sub>h</sub> =5.0 cm E <sub>l</sub> =4.0 cm	$\frac{1}{2}$
fck= 25 MPa fvk= 500 MPa Classe de ductilité B Coupe feu R 60	Section : 30 x 70ht	Classe d'exposition: XC1			

Longueur préfa : Voir vue en plan



Barre	Actiers non soudés		
	Barre	Lg	Forme
1	3HA10	558	$\frac{10}{135^\circ} \times 10 \times 10 \times \frac{15}{526}$
2	3HA10	487	$\frac{10}{487}$
3	3HA10	336	$\frac{10}{336}$
4	3HA12	147	$\frac{13}{128} \times 135^\circ$
5	3HA12	147	$\frac{13}{128} \times 135^\circ$
6	3HA8	474	$\frac{10}{474}$
7	4HA8	474	$\frac{10}{474}$
8	20HA8	175	$\frac{10}{61} \times 22$
9	26HA8	141	$\frac{10}{61}$



Coupé A-A  
Echelle=1/25

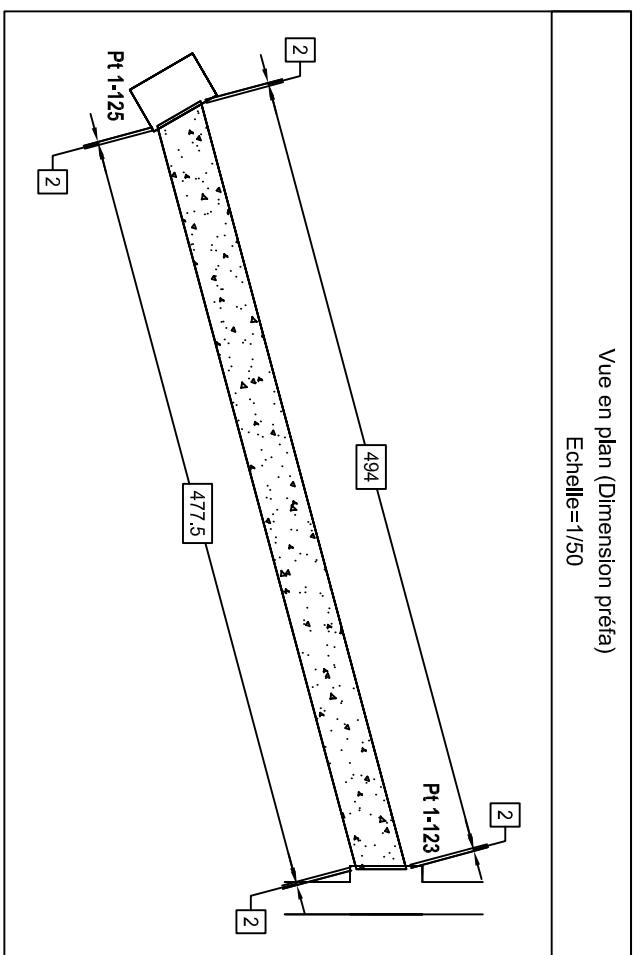
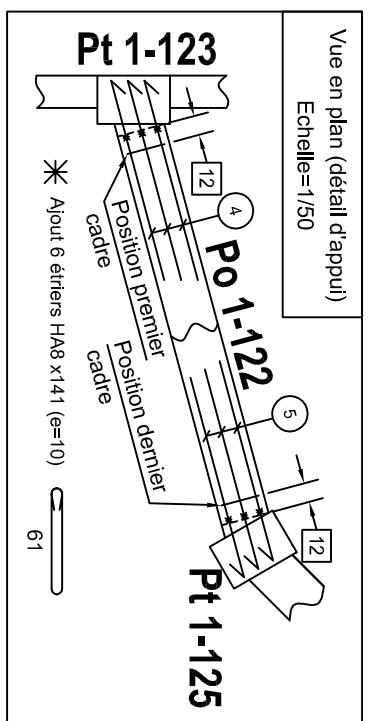
Barre	Lg/Poids
HA8	96.4/38.1
HA10	41.4/25.5
HA12	8.8/7.8

# LEGENDRE

Poids Préfa : 1.82T

ZONE 1	QUIMPER PH RDC	PO 1-122
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60	Béton=1.12 m3 Acier=71.5 kg d=63.7 kg/m3 Fi=8.9 mm Cof=6.2 m <sup>2</sup>	Eb=4.0 cm Eh=5.0 cm EI=4.0 cm

Section : 30 x 70ht  
Classe d'exposition: XC1



# LEGENDRE

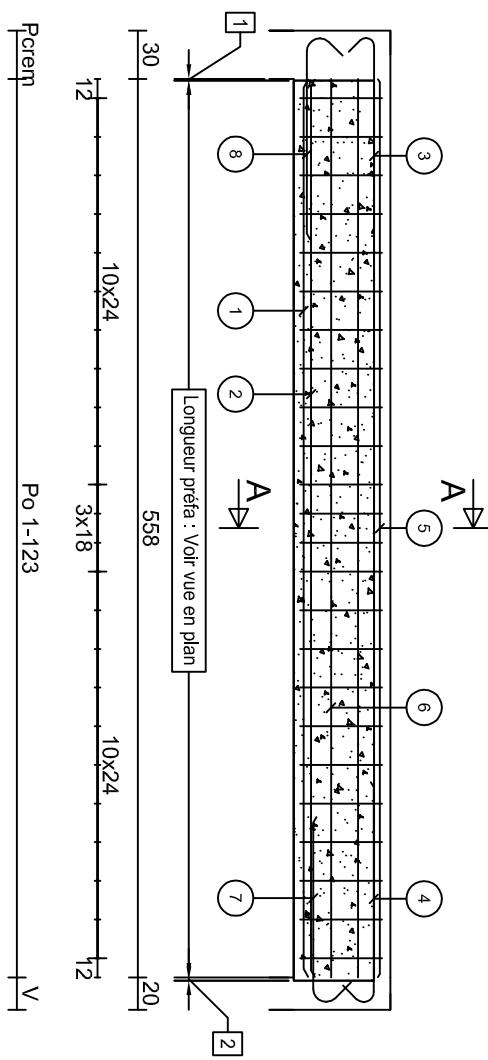
## Poids Préfa : 3.51T

ZONE 1	QUIMPER PH RDC	PO 1-123	Béton=2.19 m3 Acier=258.1 kg d=117.9 kg/m3 Fi=11.3 mm Cof=7.8 m <sup>2</sup>
Section : 60 x 60ht Classe de ductilité B Coupe feu R 60   Classe d'exposition: XC1			

Longueur préfa : Voir vue en plan  
Pcremp  
Po 1-123

96  
122  
135° 135°

Elévation  
Echelle=1/50

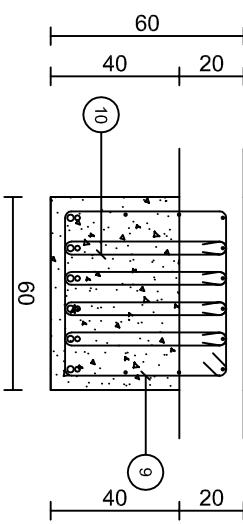


\* Actifs non soudés

Barre	Lg	Forme
1	6HA20	558
2	6HA16	558
3	6HA10	138
4	6HA12	157
5	6HA8	558
6	4HA8	558
7	6HA14	140
8	6HA14	148
9	24HA8	215
10	119HA8	121

135° 16° 126  
16° 135°  
51  
52  
51

Coupe A-A  
Echelle=1/25

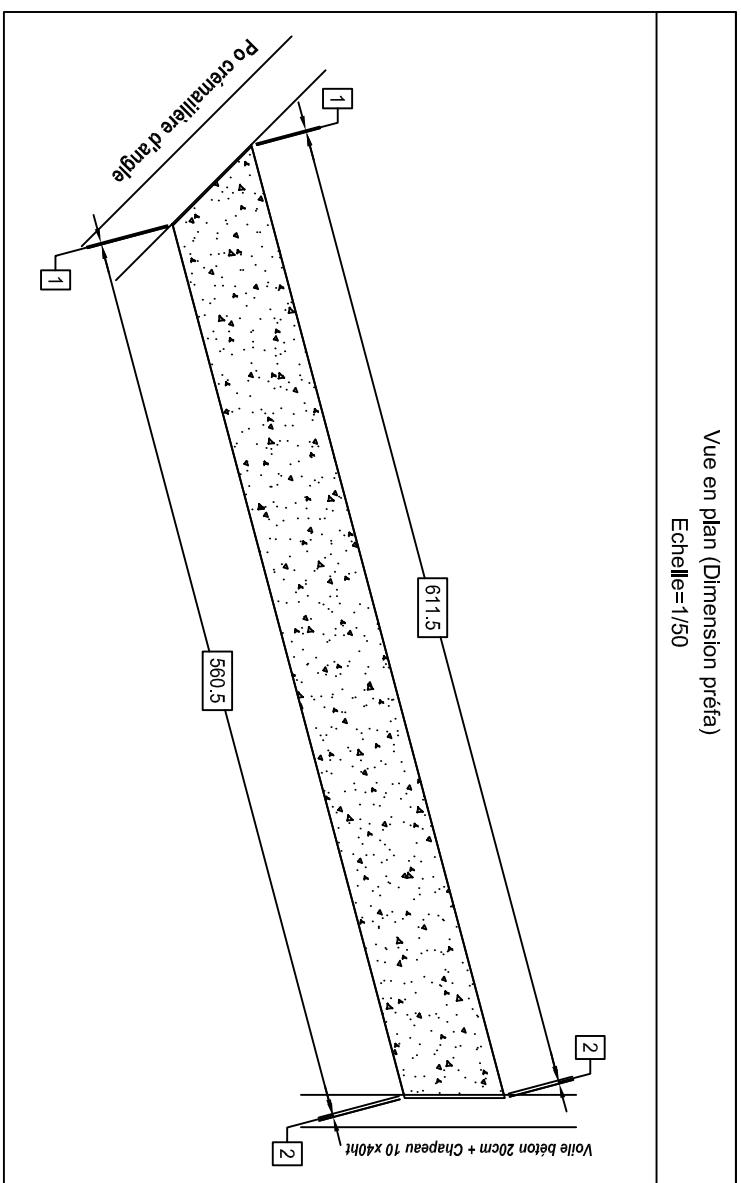
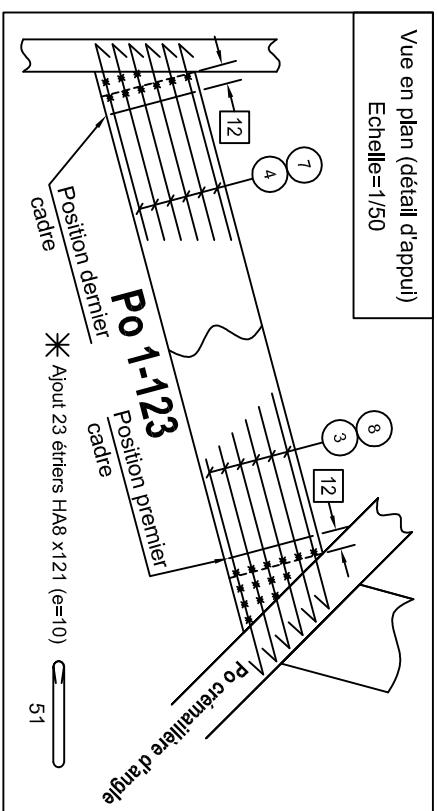


Barre	Lg/Poids
HA8	224.0/88.4
HA10	8.3/5.1
HA12	9.4/8.4
HA14	17.3/20.9
HA16	33.5/52.8
HA20	33.5/82.6

# LEGENDRE

## Poids Préfa : 3.51T

ZONE 1	QUIMPER PH RDC	PO 1-123	Béton=2.19 m3 Acier=258.1 kg d=117.9 kg/m3 Fi=11.3 mm Cof=7.8 m <sup>2</sup>	Eb=4.0 cm Eh=5.0 cm El=4.0 cm	$\frac{2}{2}$
			Section : 60 x 60 ht fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60   Classe d'exposition: XC1		



**LEGENDRE**

ONE 1 QUIMPER PH RDC Po 1-124

Béton=1.12 m <sup>3</sup>	E <sub>b</sub> =4.0 cm	$\frac{1}{2}$
Acier=238.9 kg d=213.1 kg/m <sup>3</sup>	E <sub>h</sub> =5.0 cm	
Fl=14.7 mm Cof=6.2 m <sup>2</sup>	E <sub>l</sub> =3.0 cm	

M. AUC

Elévation

— 131 —

The technical drawing illustrates a corner bracket assembly. The main structure is a rectangular frame with internal vertical and horizontal grid lines. On the left side, there are two circular holes labeled 1 and 8. On the right side, there are four circular holes labeled 4, 6, 3, and 9 from top to bottom. At the bottom center, there is a circular hole labeled 7. A circular hole labeled 5 is located at the bottom right corner. Two arrows labeled 'A' and 'B' point downwards from the left and right respectively. A bracket on the right side is labeled 'Po crémallière d'angle'. Dimension lines indicate a height of 30 mm and a width of 11.578 mm.

P	n
1-124	8
1-125	15
1-126	27
1-127	45
1-128	5x140
1-129	18
1-130	2x18
1-131	21
1-132	3x21
1-133	9
1-134	4x9
1-135	21
1-136	18
1-137	7x8
1-138	8
1-139	13

Coupe A-A  
Echelle=1/25

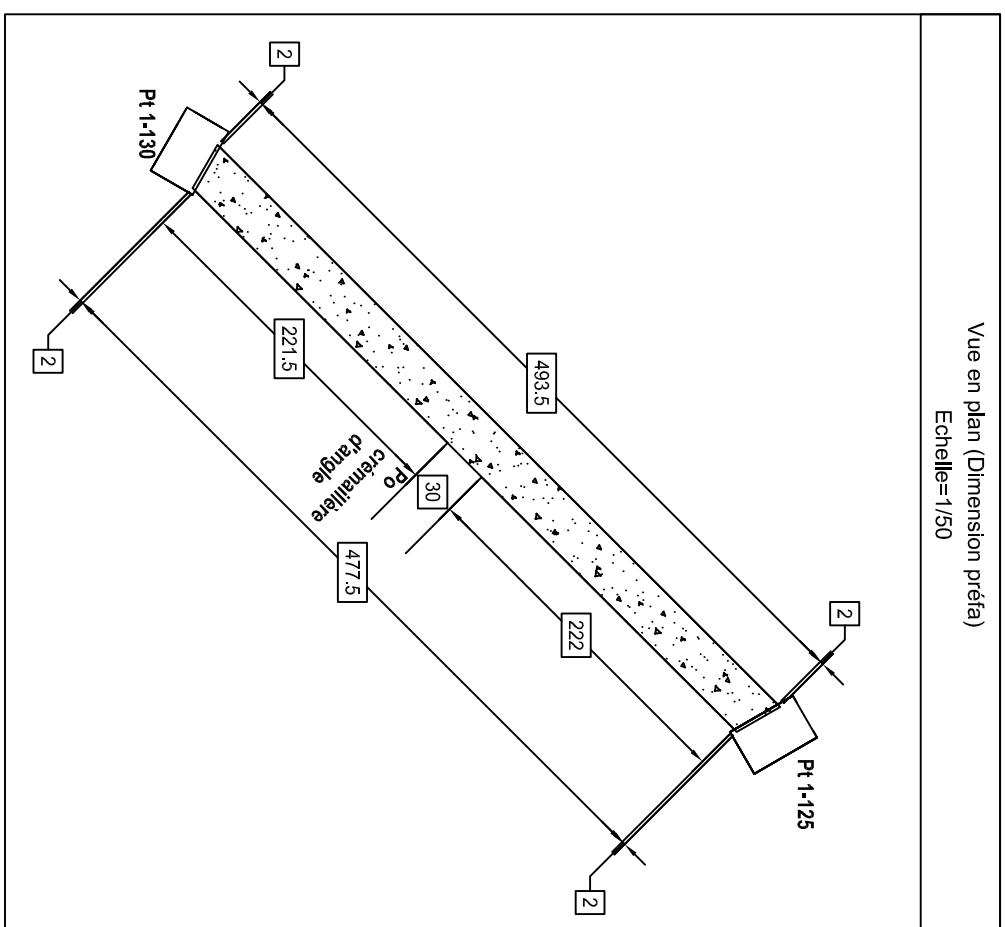
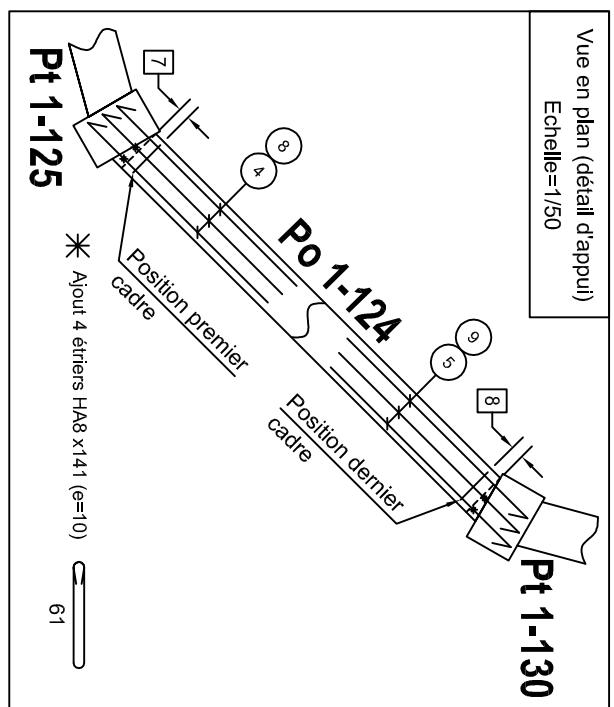
Coupe B-B  
Echelle=1/25

# LEGENDRE

Poids Préfa : 1.73T

ZONE 1	QUIMPER PH RDC	PO 1-124
$f_{ck} = 25 \text{ MPa}$ $\text{f}_{vk} = 500 \text{ MPa}$ Classe de ductilité B Coupe feu R 60	Section : 30 x 70ht	Béton=1.12 m3 Acier=238.9 kg d=213.1 kg/m3 $E_b=4.0 \text{ cm}$ $E_h=5.0 \text{ cm}$ $E_i=14.7 \text{ mm}$ $Cof=6.2 \text{ m}^2$ $E_l=3.0 \text{ cm}$

Classe d'exposition: XC1



# LEGENDRE

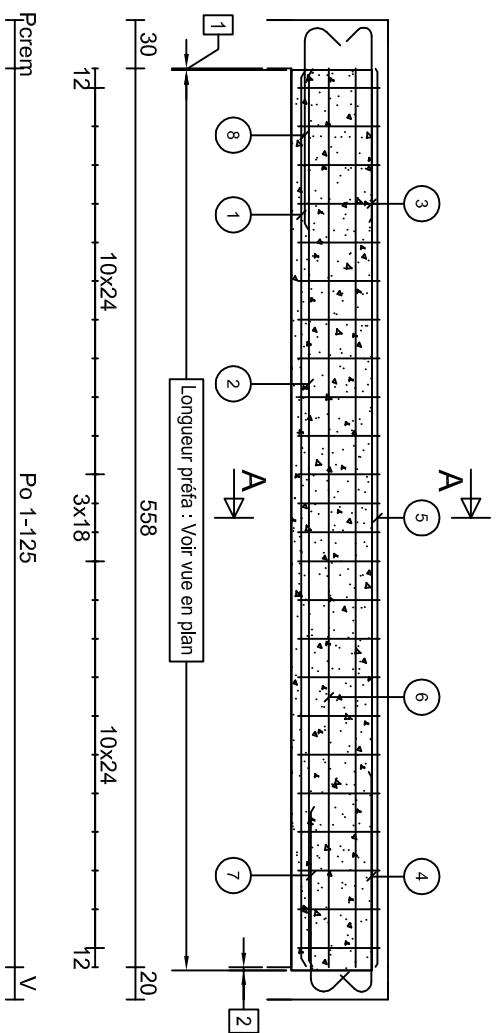
## Poids Préfa : 3.53T

ZONE 1	QUIMPER PH RDC	PO 1-125	Béton=2.19 m3 Acier=258.1 kg d=117.9 kg/m3 Fi=11.3 mm Cof=7.8 m <sup>2</sup>
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60   Classe d'exposition: XC1			

Section : 60 x 60ht

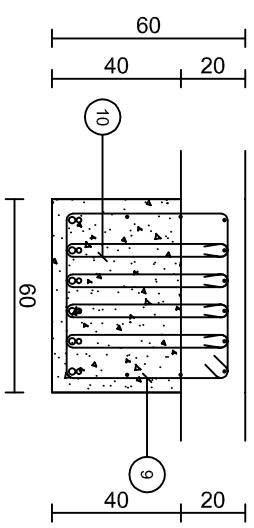
Béton=2.19 m3  
Acier=258.1 kg d=117.9 kg/m3  
Fi=11.3 mm Cof=7.8 m<sup>2</sup>

Elévation  
Echelle=1/50



Actiers non soudés			
Barre	Lg	Forme	
1	6HA20	558	— 558
2	6HA16	558	— 558
3	6HA10	138	— 122 10° 135°
4	6HA12	157	— 135° 138 13 13
5	6HA8	558	— 558
6	4HA8	558	— 558
7	6HA14	140	— 16° 135° 116 135°
8	6HA14	148	— 16° 126 135° 12
9	24HA8	215	— 52 51
10	119HA8	121	— 51

Coupe A-A  
Echelle=1/25



Barre	Lg/Poids
HA8	224.0/88.4
HA10	8.3/5.1
HA12	9.4/8.4
HA14	17.3/20.9
HA16	33.5/52.8
HA20	33.5/82.6

**LEGENDRE**

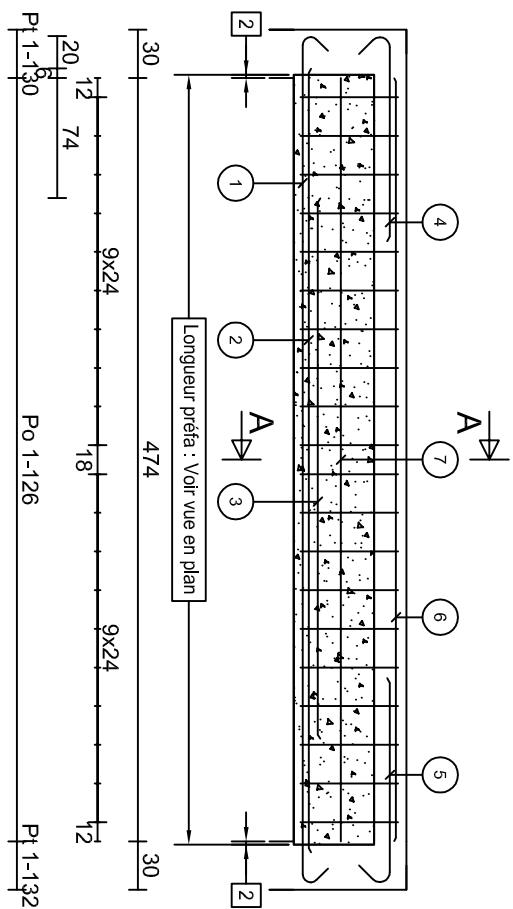
# LEGENDRE

## Poids Préfa : 1.82T

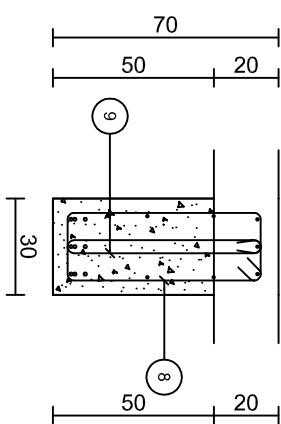
ZONE 1	QUIMPER PH RDC	PO 1-126	Béton=1.12 m <sup>3</sup> Acier=71.5 kg d=63.7 kg/m <sup>3</sup> Fi=8.9 mm Cof=6.2 m <sup>2</sup>	E <sub>b</sub> =4.0 cm E <sub>h</sub> =5.0 cm E <sub>l</sub> =4.0 cm	1 2
fck= 25 MPa fyk= 500 MPa Classe de ductilité B Coupe feu R 60	Section : 30 x 70ht	Classe d'exposition: XC1			

Longueur préfa : Voir vue en plan

Barre	Lg	
1 3HA10	558	135° ↗ 10 ↘ 15° ↗ 526 ↘ 135°
2 3HA10	487	—
3 3HA10	336	—
4 3HA12	147	— 13° ↗ 128 ↘ 135°
5 3HA12	147	135° ↗ 13 ↘ 128
6 3HA8	474	—
7 4HA8	474	— 474
8 20HA8	175	61 ↗ 22 ↘ 61
9 26HA8	141	— 61



Coupe A-A  
Echelle=1/25



Barre	Lg/Poids
HA8	96.4/38.1
HA10	41.4/25.5
HA12	8.8/7.8

# LEGENDRE

Poids Préfa : 1.82T

ZONE 1      QUIMPER      PH RDC

PO 1-126

$f_{ck} = 25 \text{ MPa}$   $f_{vk} = 500 \text{ MPa}$  Classe de ductilité B Coupe feu R 60

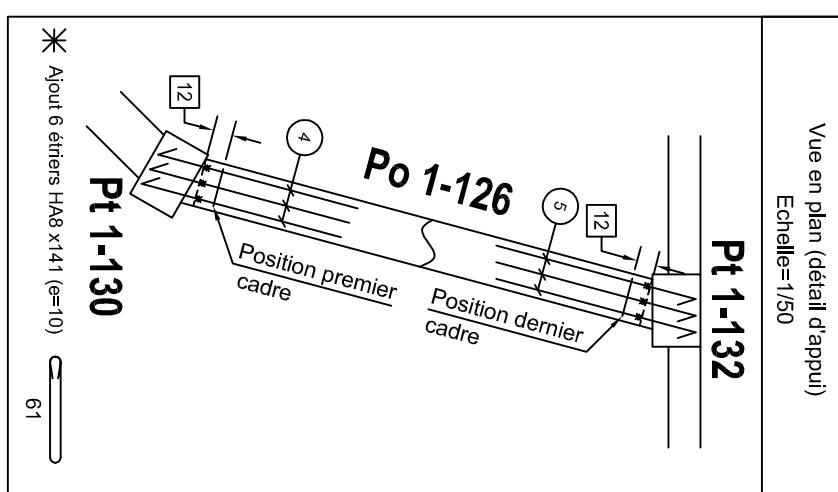
Béton=1.12 m<sup>3</sup>  
Acier=71.5 kg d=63.7 kg/m<sup>3</sup>  
 $E_b=4.0 \text{ cm}$   
 $E_h=5.0 \text{ cm}$   
 $E_l=8.9 \text{ mm}$  Cof=6.2 m<sup>2</sup>

$E_b=4.0 \text{ cm}$   
 $E_h=5.0 \text{ cm}$   
 $E_l=4.0 \text{ cm}$   
 $\frac{2}{2}$

Section : 30 x 70ht  
Classe d'exposition: XC1

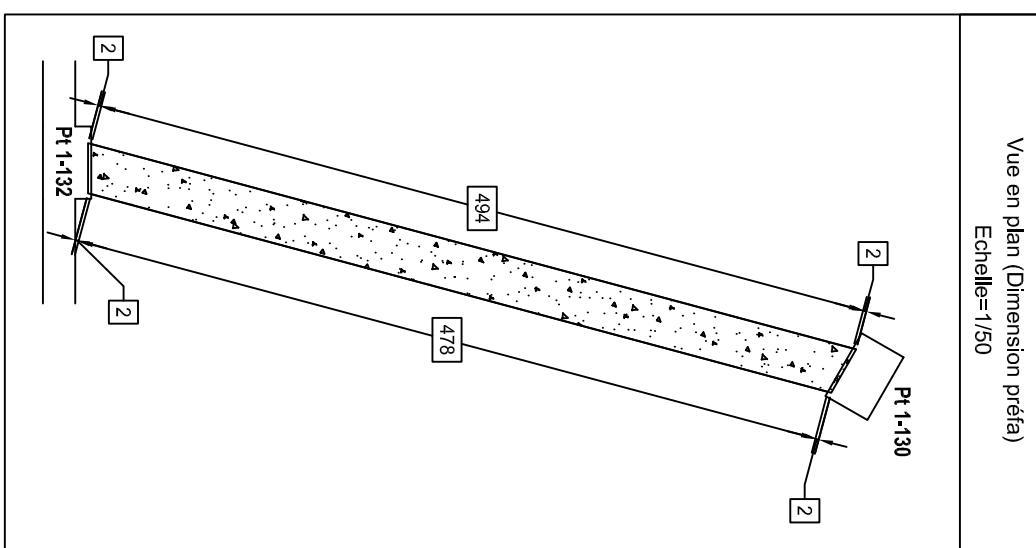
Vue en plan (détail d'appui)  
Echelle=1/50

**Pt 1-132**



Vue en plan (Dimension préfa)  
Echelle=1/50

Pt 1-130



\* Ajout 6 étriers H48 x141 ( $e=10$ )

