

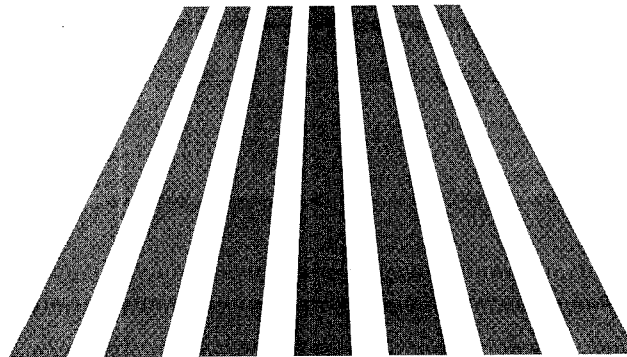


再帰反射ボルト

# JFE 防護柵

(防護柵の設置基準・同解説書準拠)

ガードレール



## ガードレール標準図集の目次

### 【路側用】

設置条件	種別	記号	頁
土中用	C	Gr-C-4EH, Gr-C-4E-SH	1
	B	Gr-B-4EH, Gr-B-4E-SH	2
	A	Gr-A-4EH, Gr-A-4E-SH	3
コンクリート用	C	Gr-C-2BH, Gr-C-2B-SH	4
		Gr-C-2B-2H, Gr-C-2B-2LH, Gr-C-2B-3H	5
		Gr-C-2B-3LH, Gr-C-2B-3SH	
		Gr-C-2B-4H, Gr-C-2B-4LH, Gr-C-2B-4SH	6
	Gr-C-2B-5H, Gr-C-2B-5LH, Gr-C-2B-5SH		
	B	Gr-B-2BH, Gr-B-2B-SH	7
		Gr-B-2B-2H, Gr-B-2B-2LH, Gr-B-2B-3H	8
		Gr-B-2B-3LH, Gr-B-2B-3SH	
		Gr-B-2B-4H, Gr-B-2B-4LH, Gr-B-2B-4SH	9
	Gr-B-2B-5H, Gr-B-2B-5LH, Gr-B-2B-5SH		
	A	Gr-A-2BH, Gr-A-2B-SH	10
		Gr-A-2B-2H, Gr-A-2B-3H	11
Gr-A-2B-4H, Gr-A-2B-5H		12	

### 【その他】

項目	頁
別図 - 1 コンクリート埋め込み支柱の定着部補強筋 (砂詰め固定)	34
別図 - 2 コンクリート埋め込み支柱の定着部補強筋 (モルタル固定)	35
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ガードレール用ボルト一覧図	37

### 【分離帯用】

設置条件	種別	記号	頁
コンクリート用	C	Gr-Cm-2BH	13
		Gr-Cm-2B-2H	14
土中用		Gr-Cm-4EH	15
コンクリート用	B	Gr-Bm-2BH	16
		Gr-Bm-2B2H	17
		Gr-Bm-2B-2H	18
		Gr-Bm-2B2-2H	19
土中用		Gr-Bm-4EH	20
		Gr-Bm-4E2H	21
コンクリート用	A	Gr-Am-2BH	22
		Gr-Am-2B2H	23
		Gr-Am-2B-2H	24
Gr-Am-2B2-2H		25	
土中用		Gr-Am-4EH	26
		Gr-Am-4E2H	27
コンクリート用	SCm	Gr-SCm-1BH	28
		Gr-SCm-1B2H	29
		Gr-SCm-1B-2H	30
		Gr-SCm-1B2-2H	31
		土中用	Gr-SCm-2EH
		Gr-SCm-2E2H	33

Gr-C-4EH  
Gr-C-4E-SH

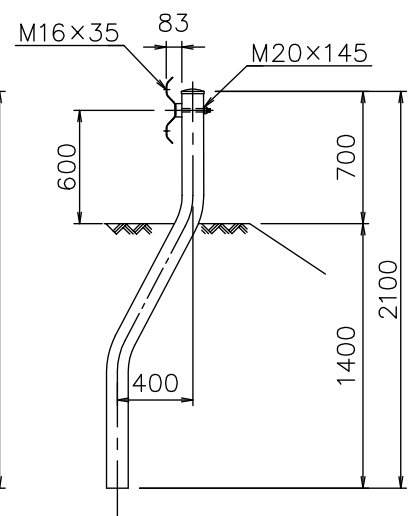
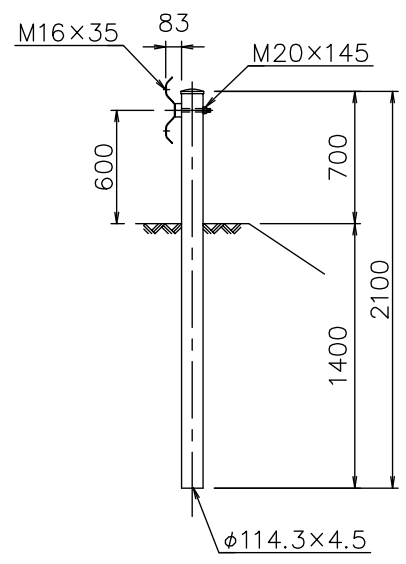
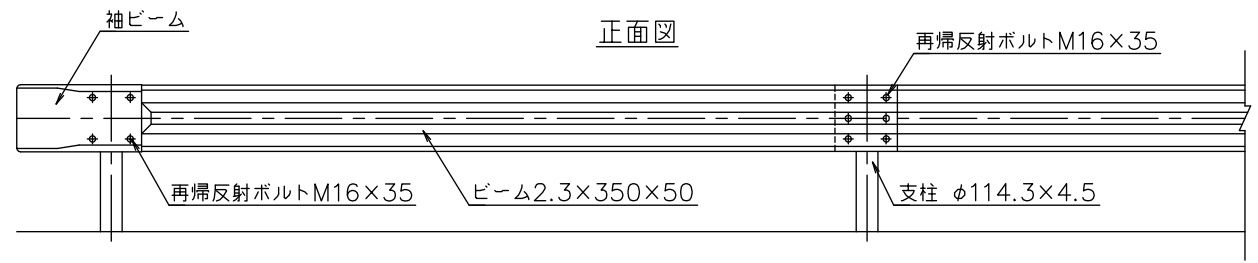
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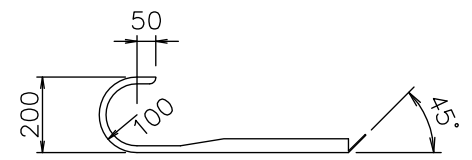
側面図

Gr-C-4EH

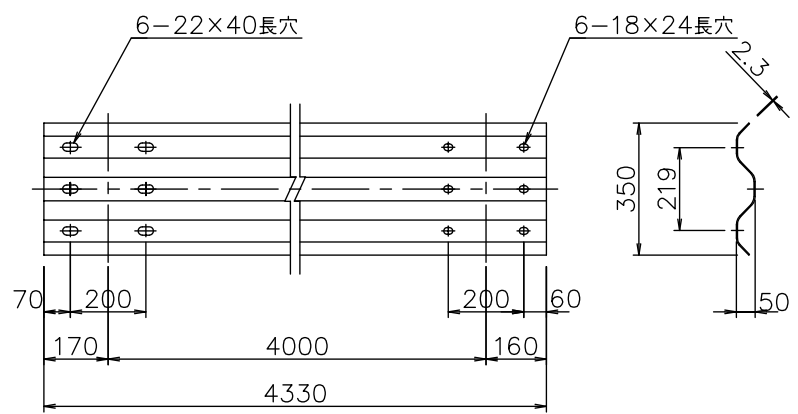
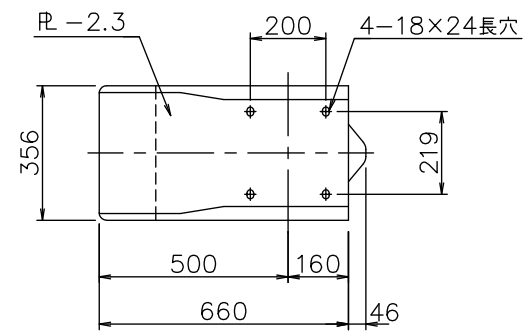
Gr-C-4E-SH



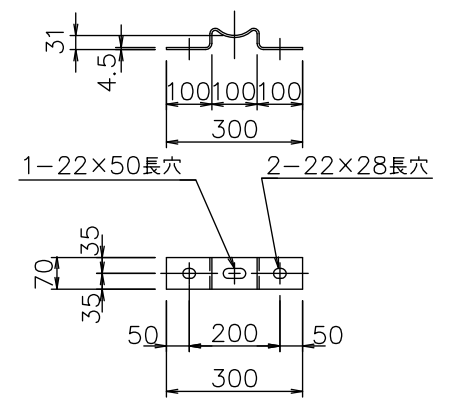
袖ビーム



ビーム



ブラケット



Gr-B-4EH  
Gr-B-4E-SH

平面図

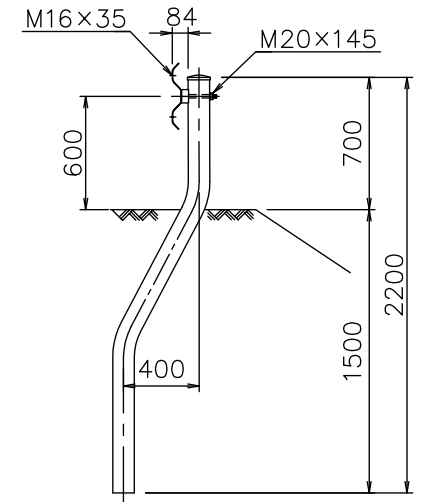
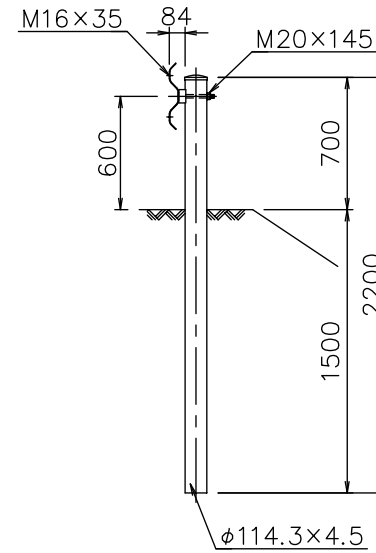
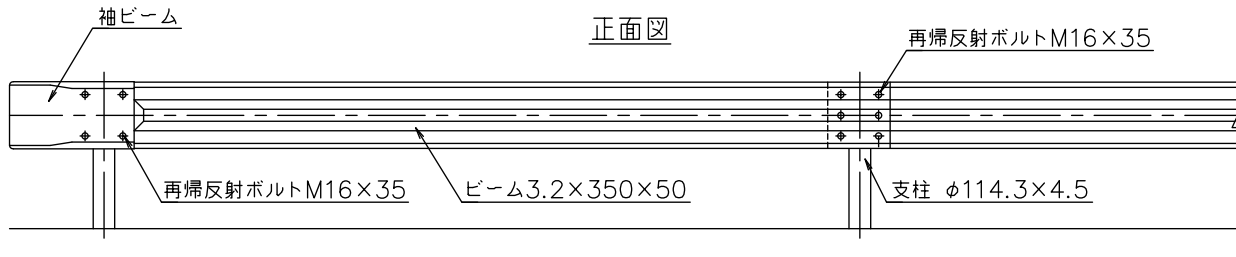


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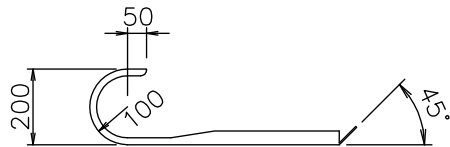
Gr-B-4EH

Gr-B-4E-SH

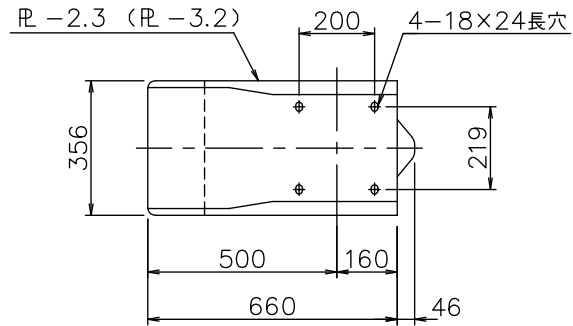
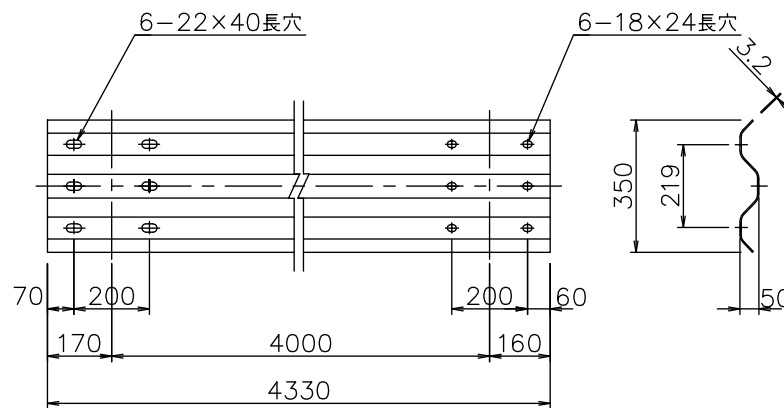
正面図



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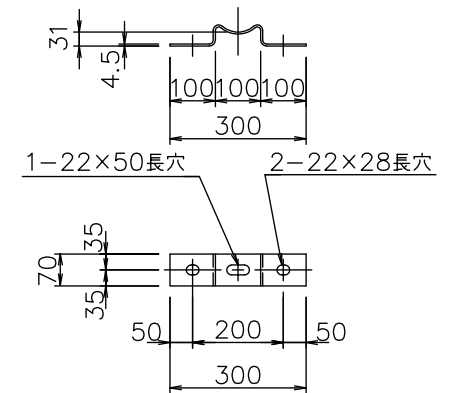


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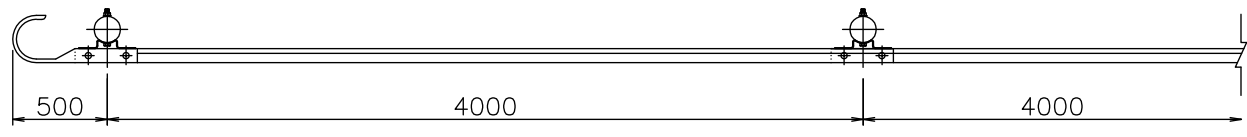
( ) 数字は溶融亜鉛めっき品の場合

ブラケット



Gr-A-4EH  
Gr-A-4E-SH

平面図

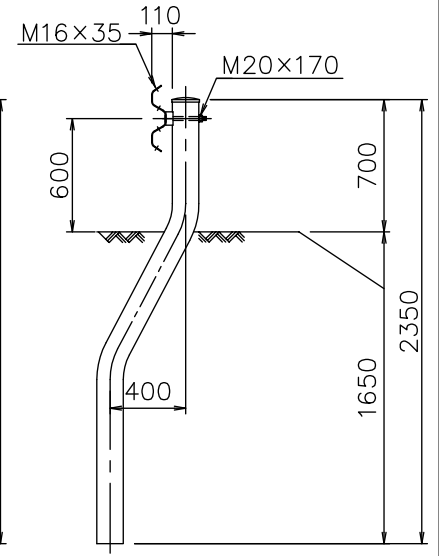
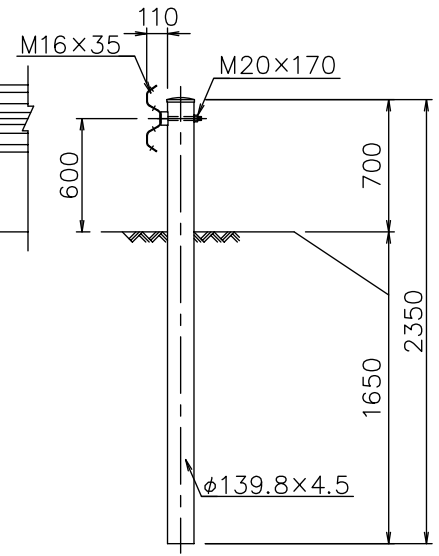
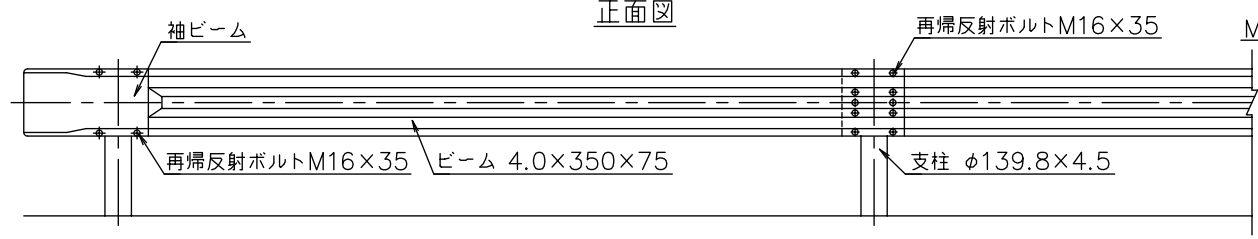


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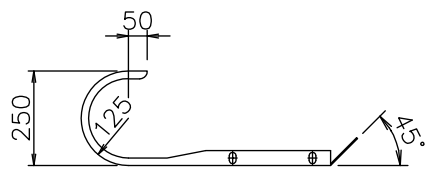
Gr-A-4EH

Gr-A-4E-SH

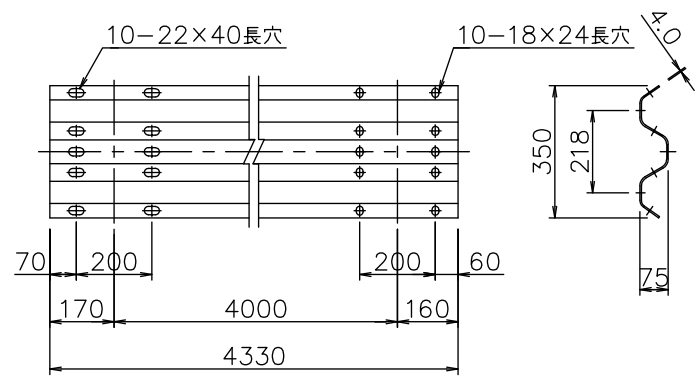
正面図



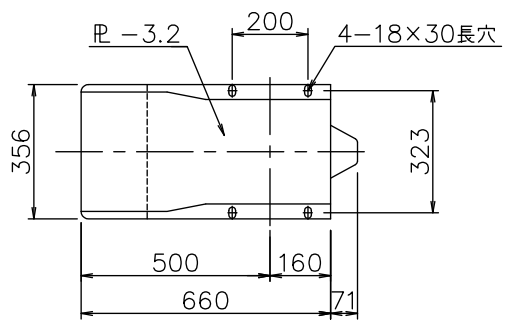
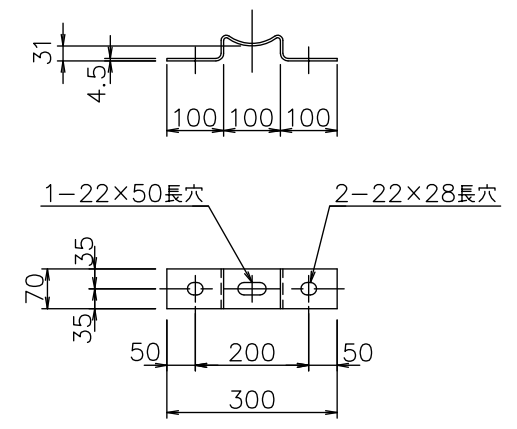
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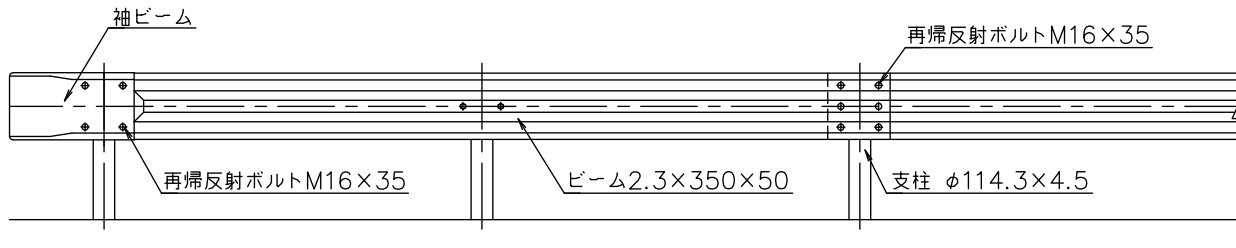


Gr-C-2BH  
Gr-C-2B-SH

平面図



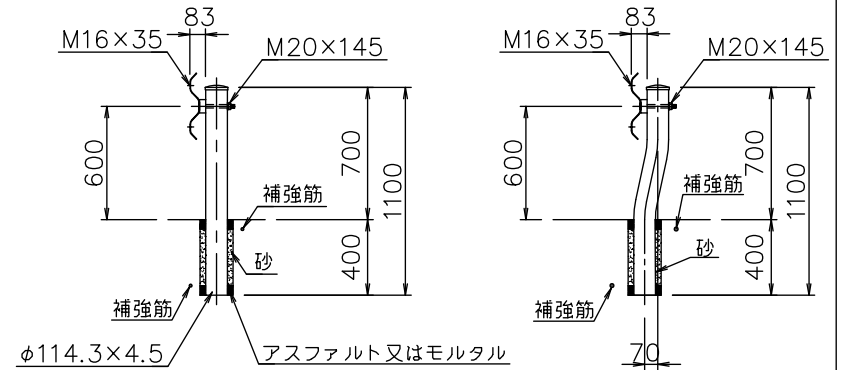
正面図



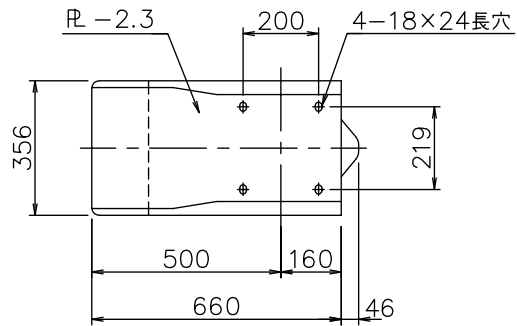
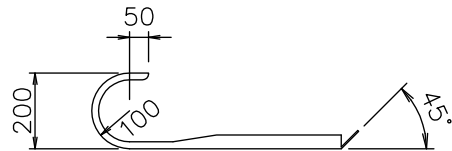
側面図

Gr-C-2BH

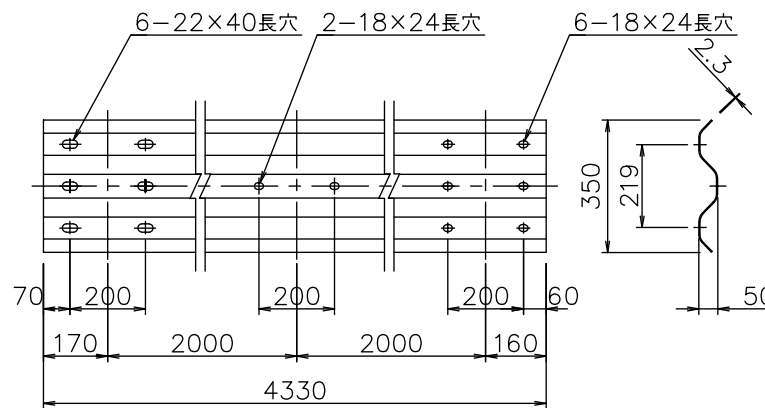
Gr-C-2B-SH



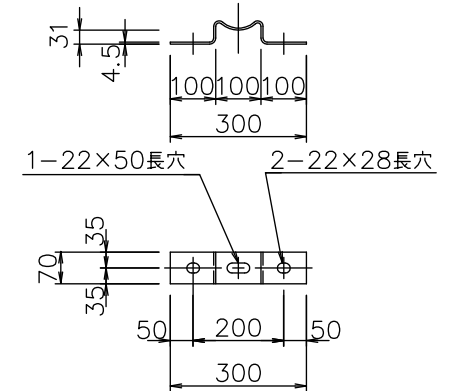
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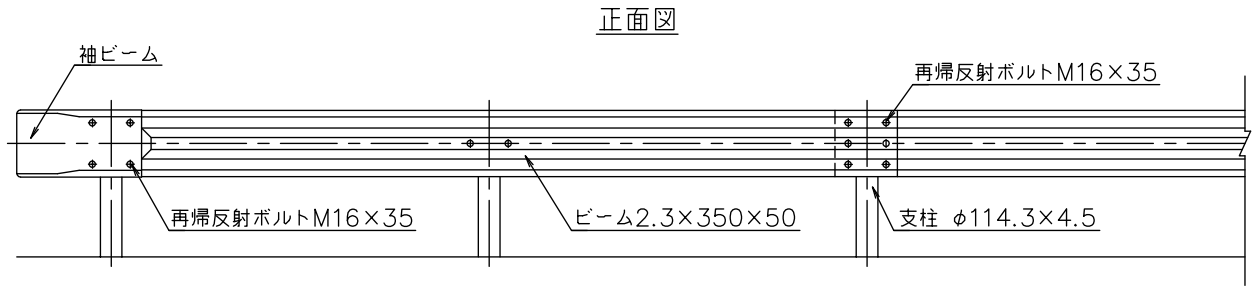


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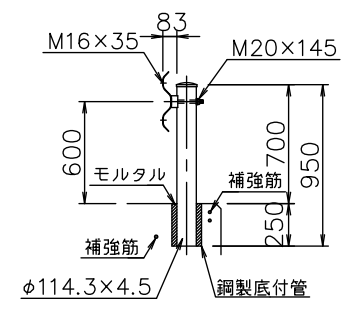
(注) 補強筋配置の詳細は別図-1に示す

Gr-C-2B-2H Gr-C-2B-3H  
 Gr-C-2B-2LH Gr-C-2B-3LH  
 Gr-C-2B-3SH

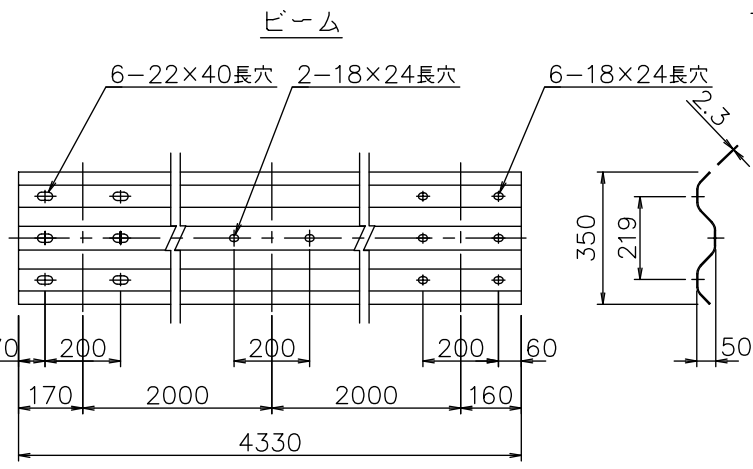
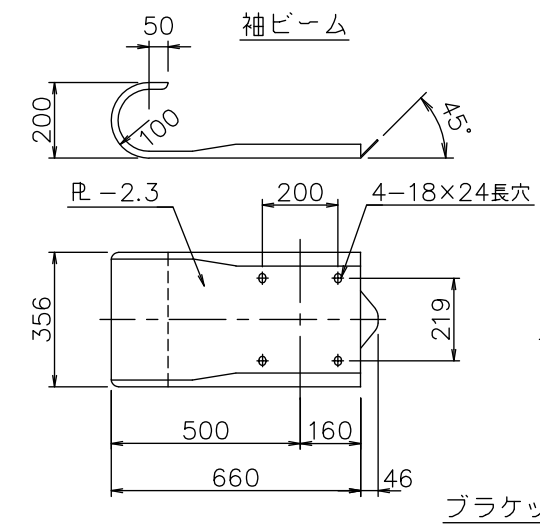
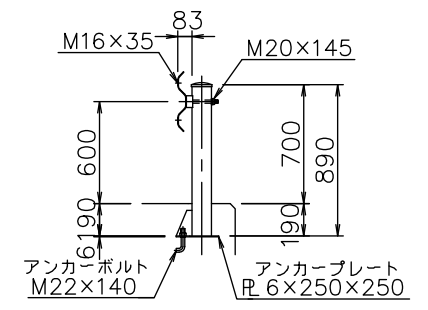


側面図

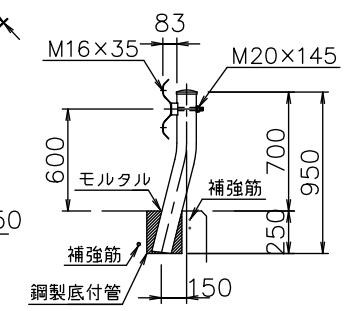
Gr-C-2B-2H



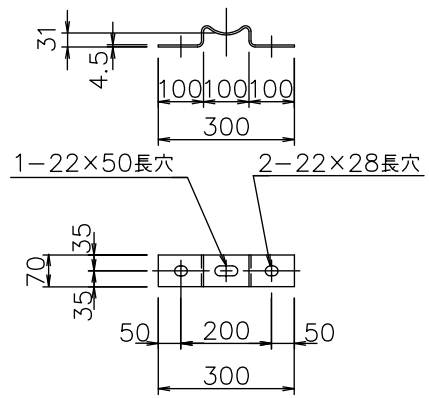
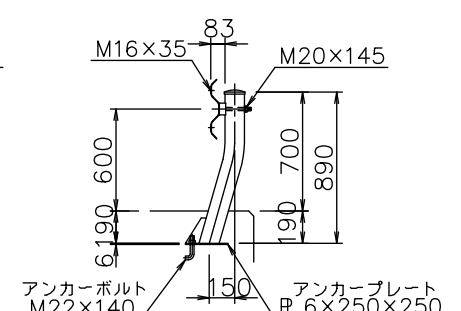
Gr-C-2B-3H



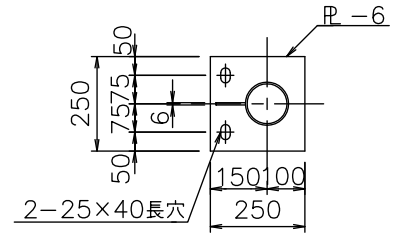
Gr-C-2B-2LH



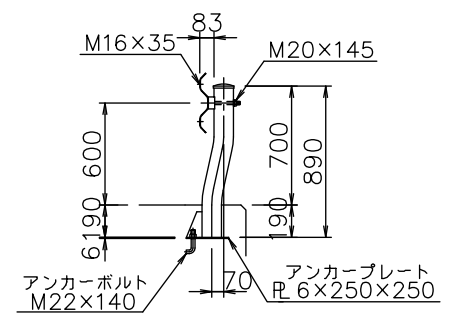
Gr-C-2B-3LH



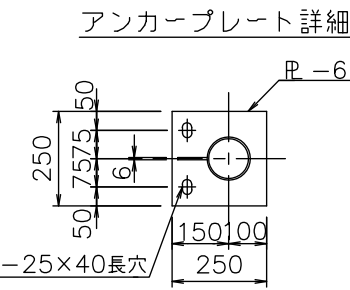
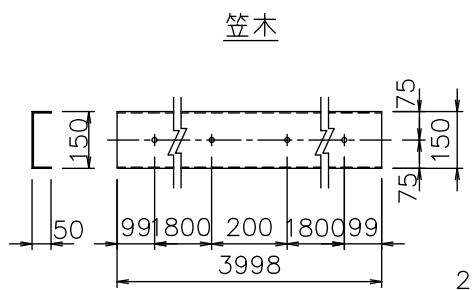
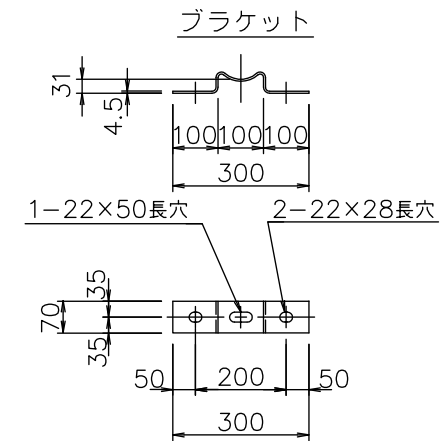
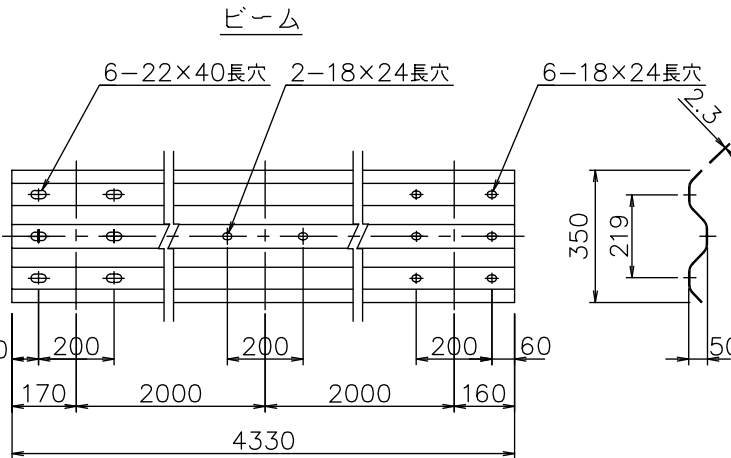
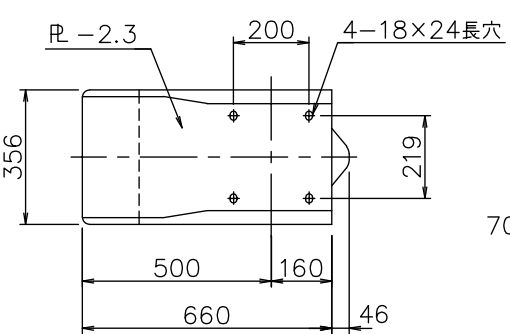
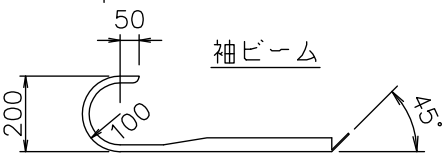
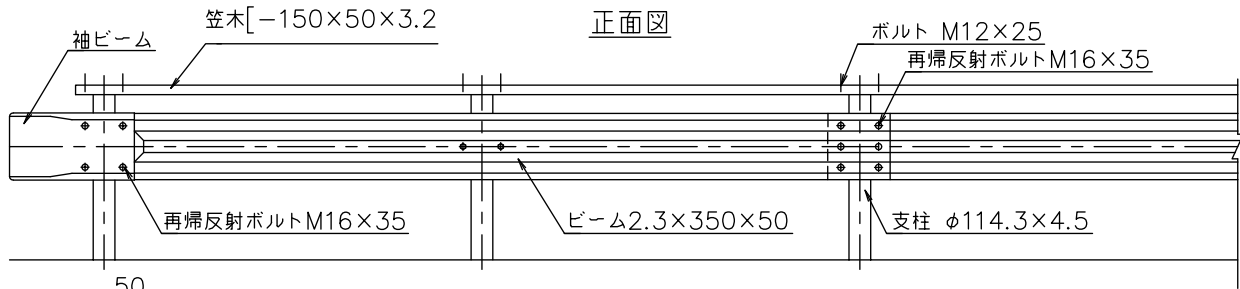
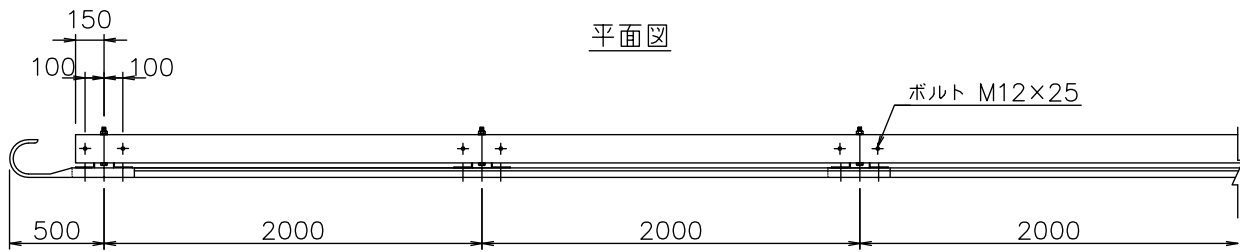
アンカープレート詳細図



Gr-C-2B-3SH



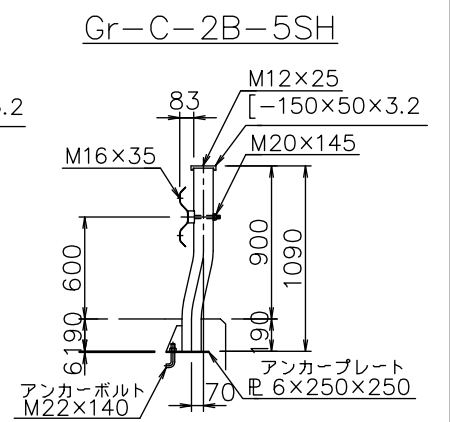
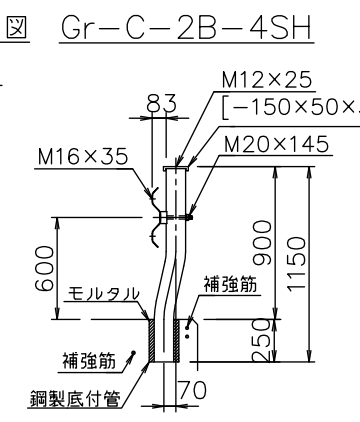
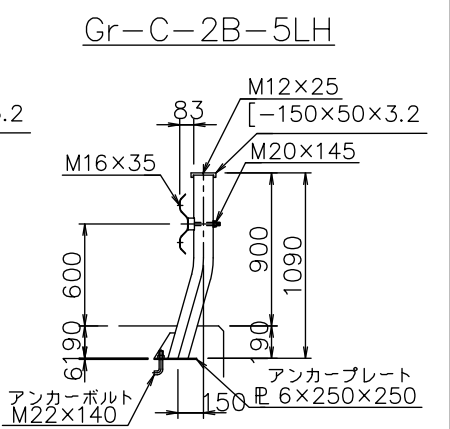
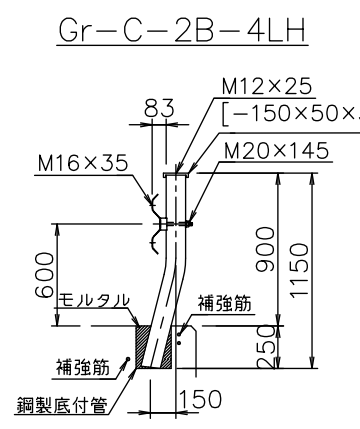
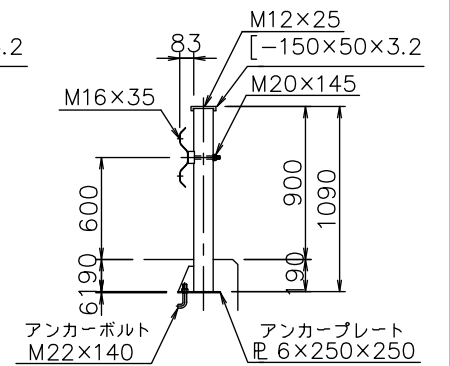
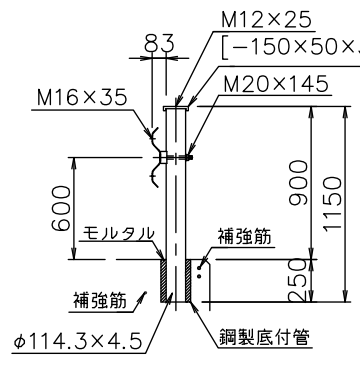
(注) 補強筋配置の詳細は別図-2に示す



(注) 補強筋配置の詳細は別図-2に示す

Gr-C-2B-4H Gr-C-2B-5H  
Gr-C-2B-4LH Gr-C-2B-5LH  
Gr-C-2B-4SH Gr-C-2B-5SH

側面図 Gr-C-2B-4H Gr-C-2B-5H



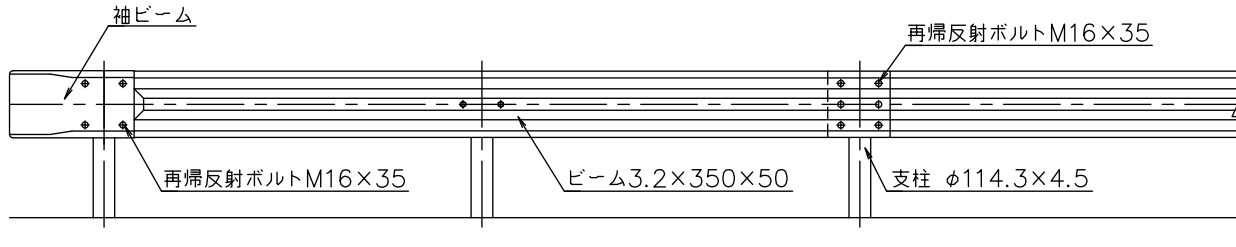


Gr-B-2BH  
Gr-B-2B-SH

平面図



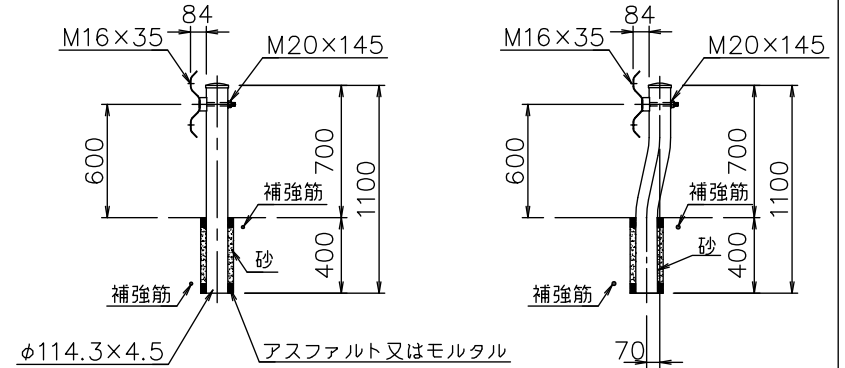
正面図



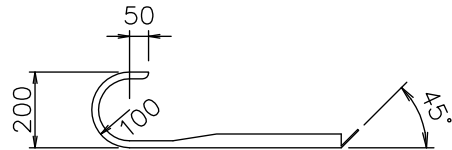
側面図

Gr-B-2BH

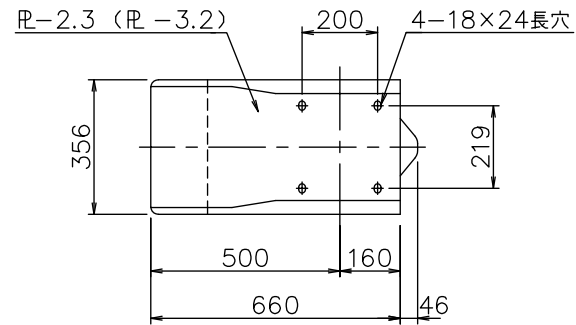
Gr-B-2B-SH



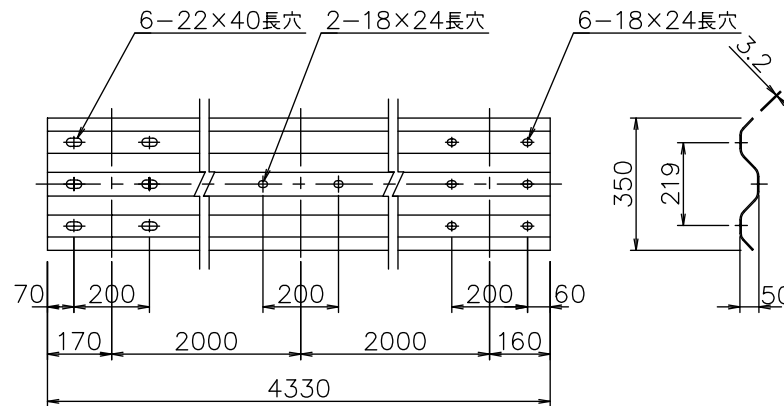
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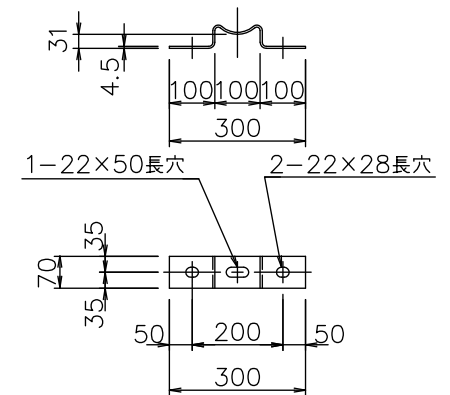
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( ) 数字は溶融亜鉛めっき品の場合

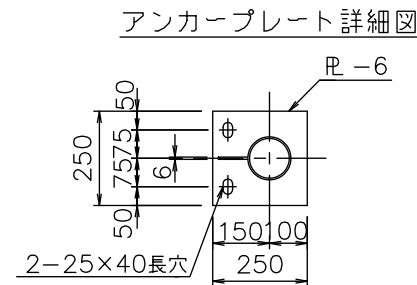
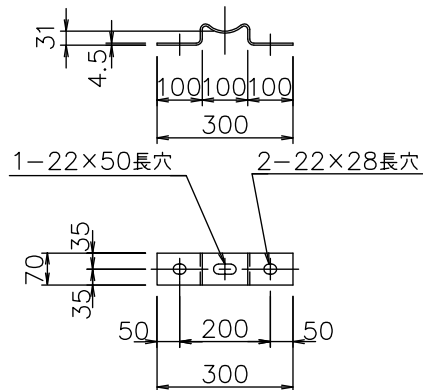
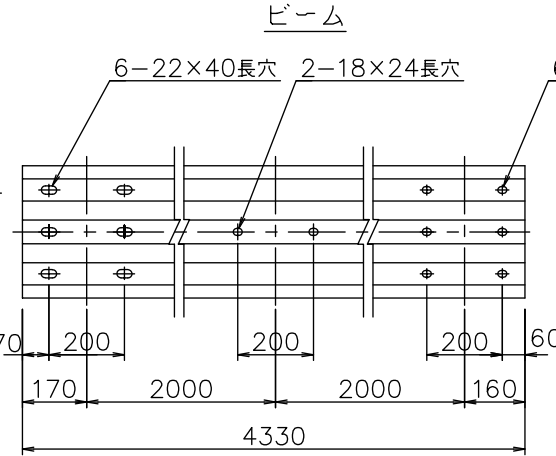
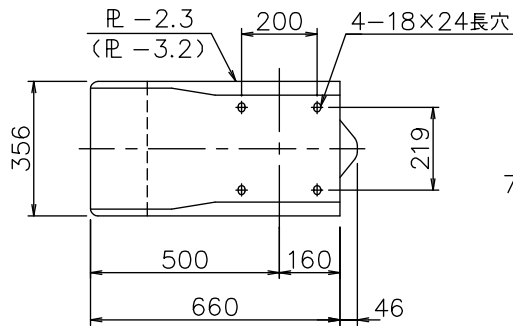
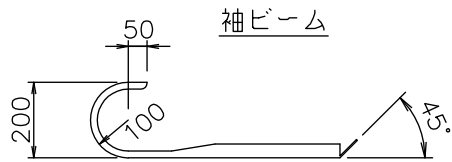
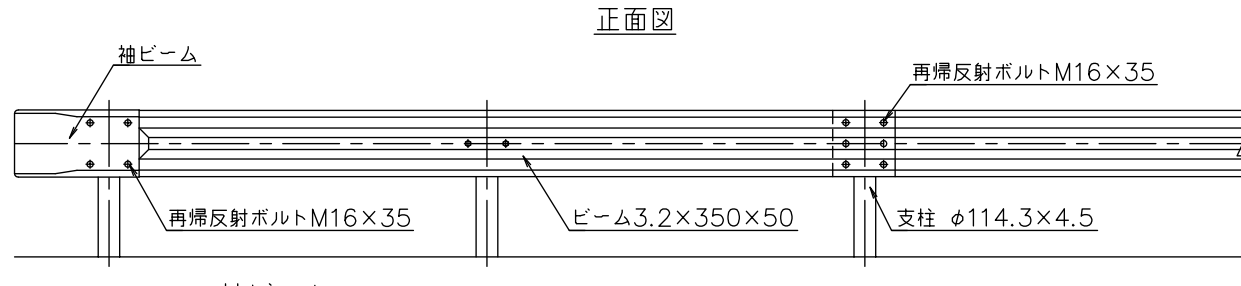


ブラケット



(注) 補強筋配置の詳細は別図-1に示す

Gr-B-2B-2H Gr-B-2B-3H  
 Gr-B-2B-2LH Gr-B-2B-3LH  
 Gr-B-2B-3SH

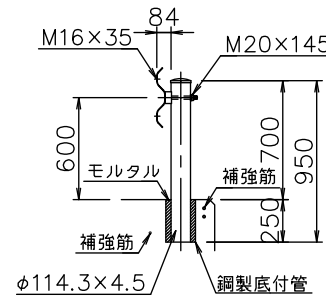


(注) 補強筋配置の詳細は別図-2に示す

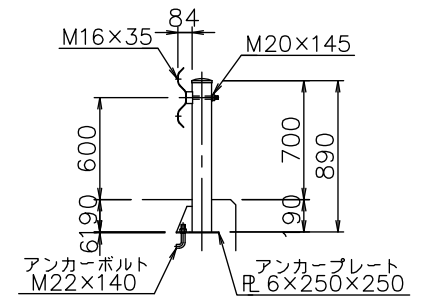
側面図

Gr-B-2B-2H

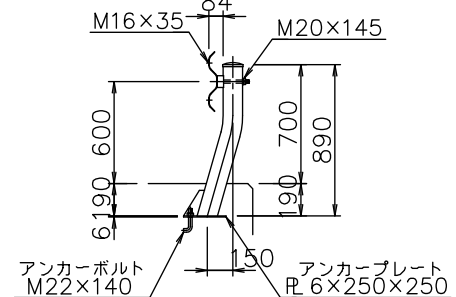
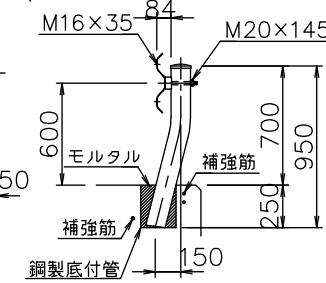
Gr-B-2B-3H



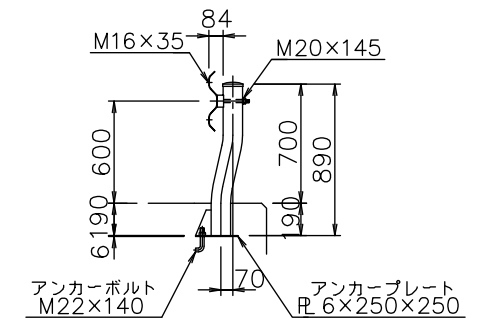
Gr-B-2B-2LH

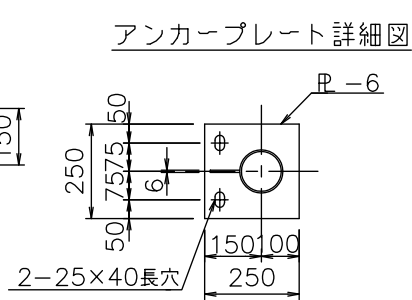
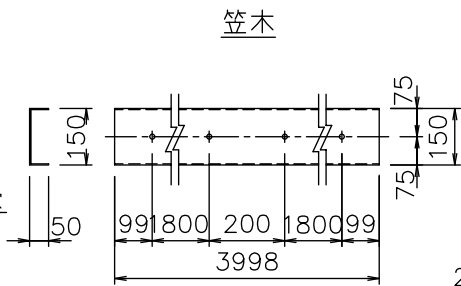
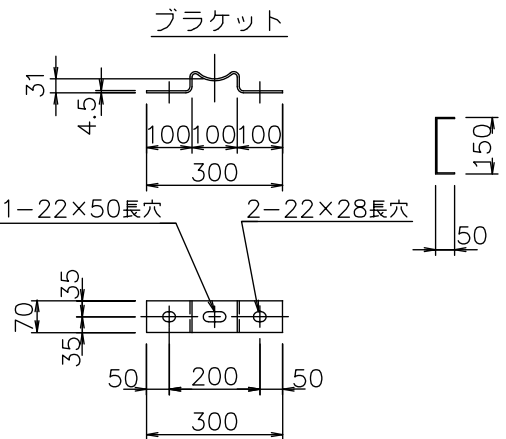
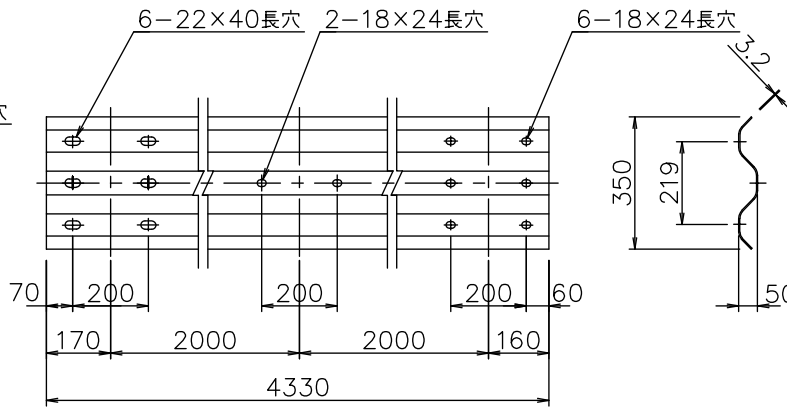
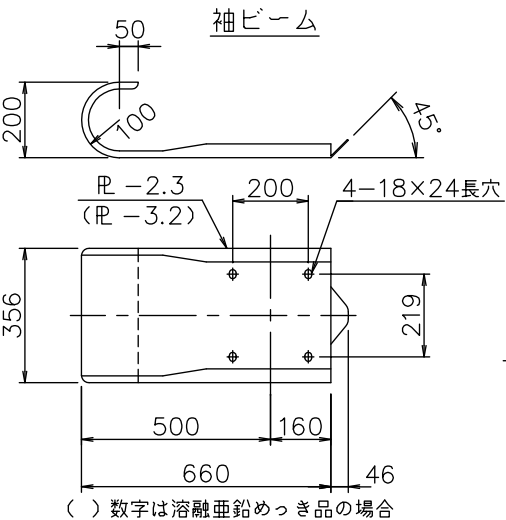
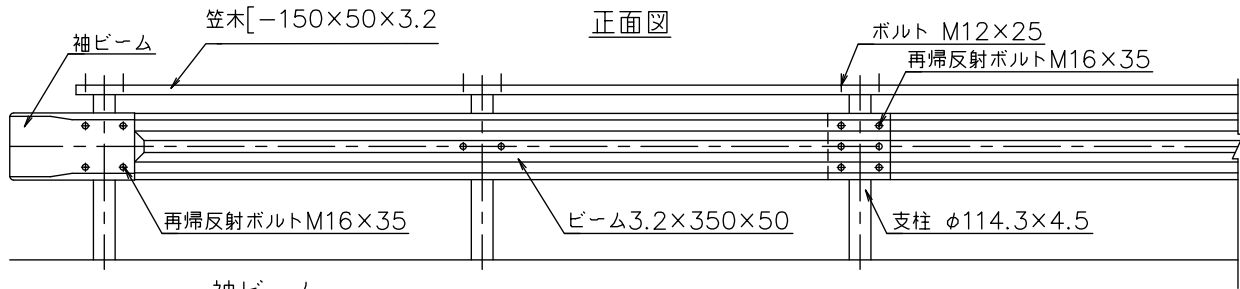
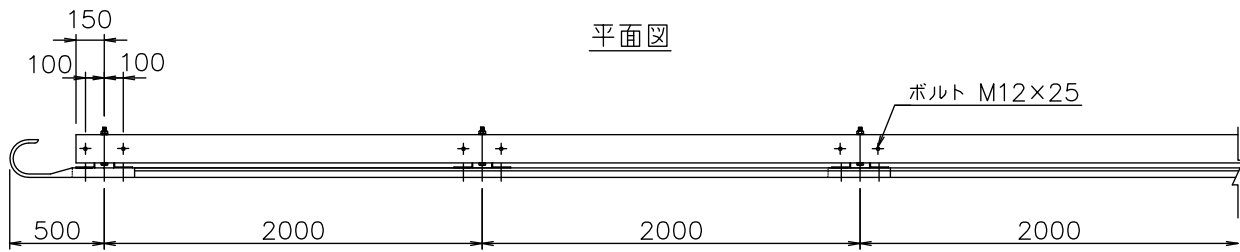


Gr-B-2B-3LH



Gr-B-2B-3SH





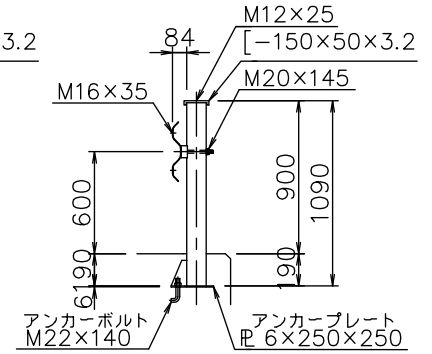
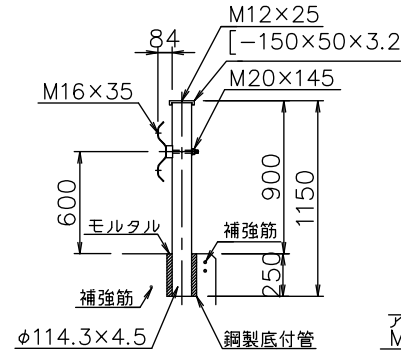
(注) 補強筋配置の詳細は別図-2に示す

Gr-B-2B-4H Gr-B-2B-5H  
Gr-B-2B-4LH Gr-B-2B-5LH  
Gr-B-2B-4SH Gr-B-2B-5SH

側面図

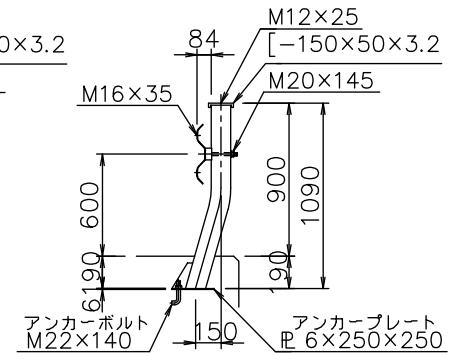
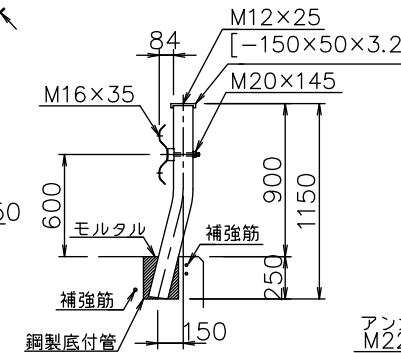
Gr-B-2B-4H

Gr-B-2B-5H



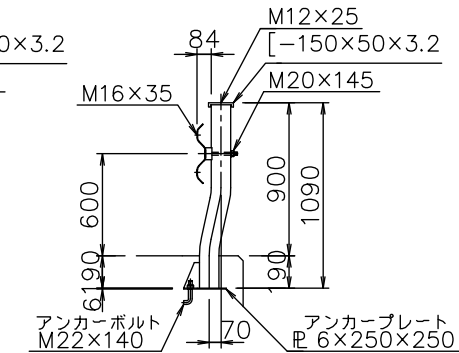
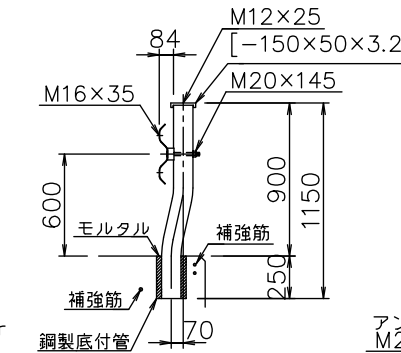
Gr-B-2B-4LH

Gr-B-2B-5LH



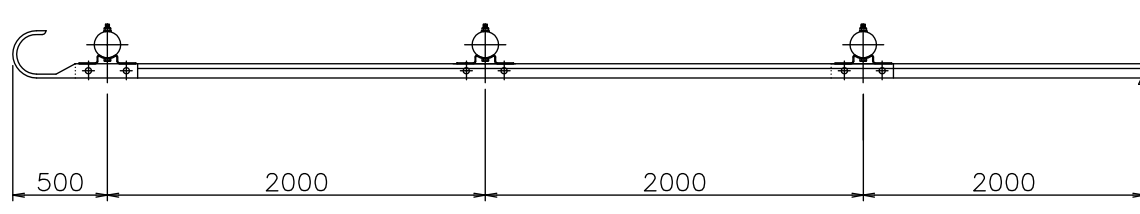
Gr-B-2B-4SH

Gr-B-2B-5SH



Gr-A-2BH  
Gr-A-2B-SH

平面図

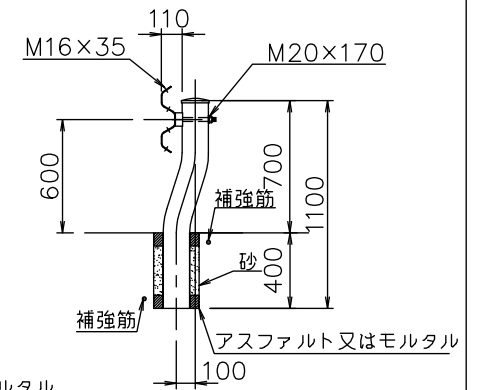
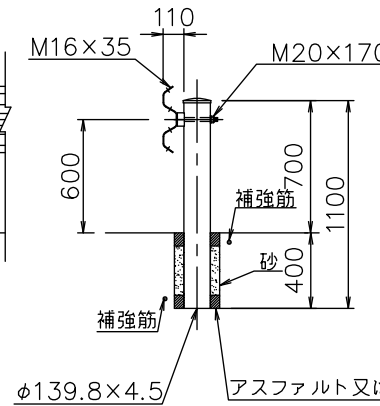
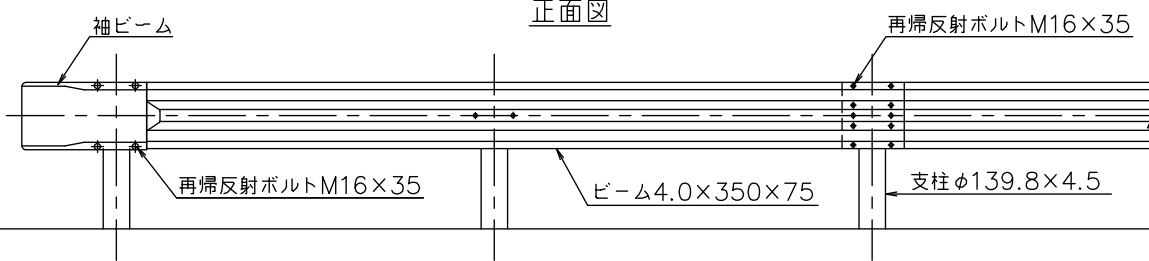


側面図

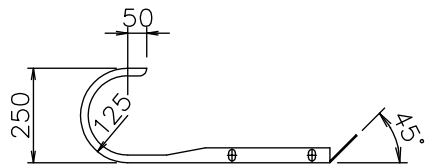
Gr-A-2BH

Gr-A-2B-SH

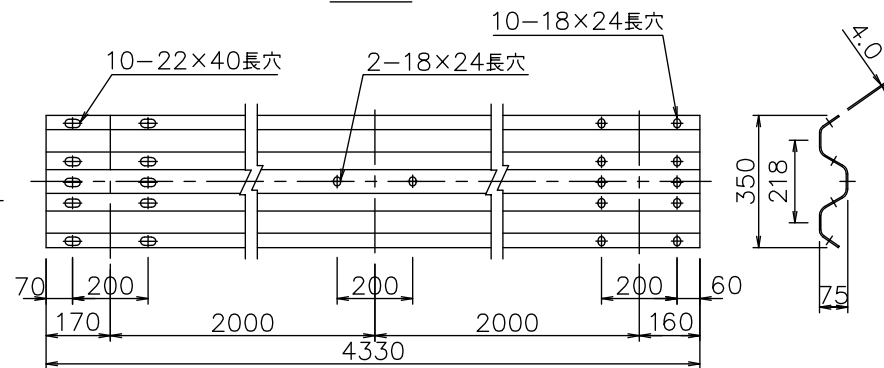
正面図



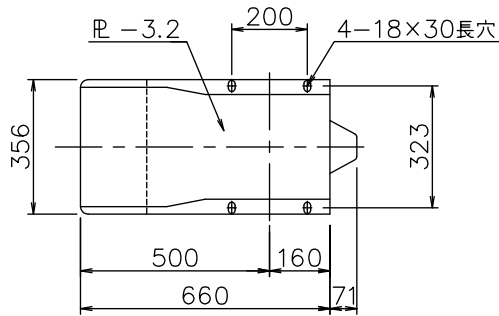
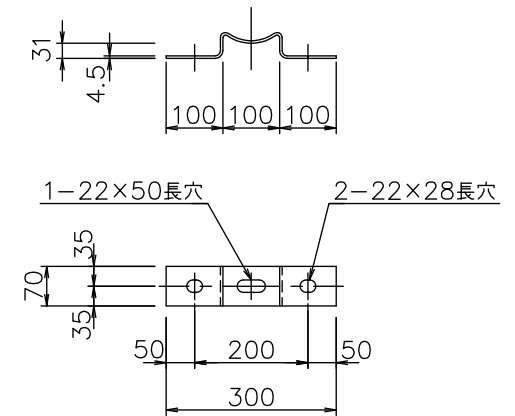
袖ビーム



ビーム



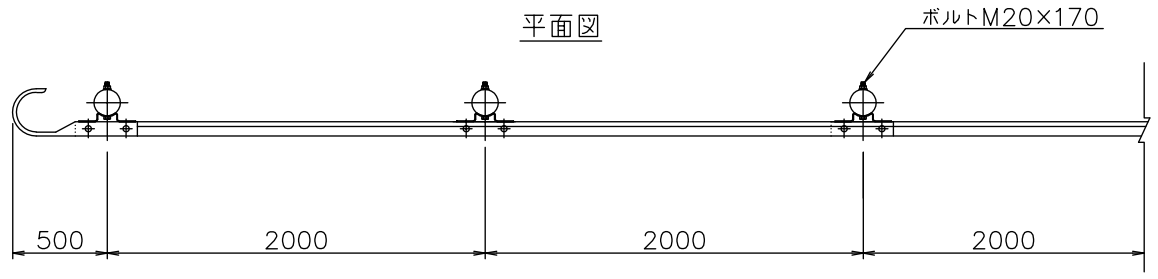
ブラケット



(注) 補強筋配置の詳細は別図-1に示す

Gr-A-2B-2H  
Gr-A-2B-3H

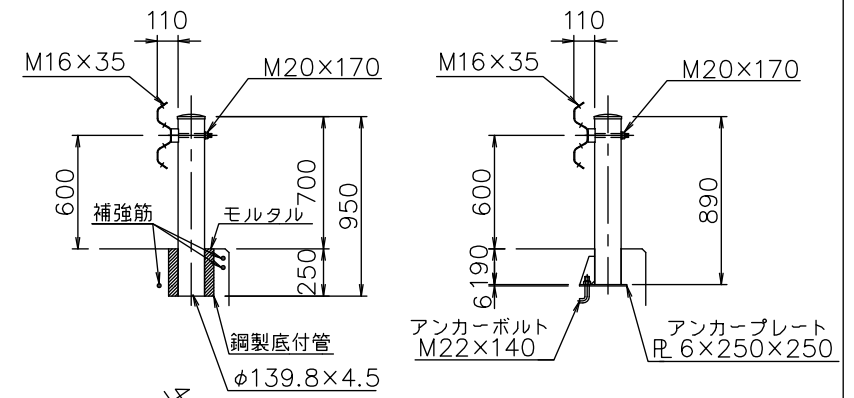
平面図



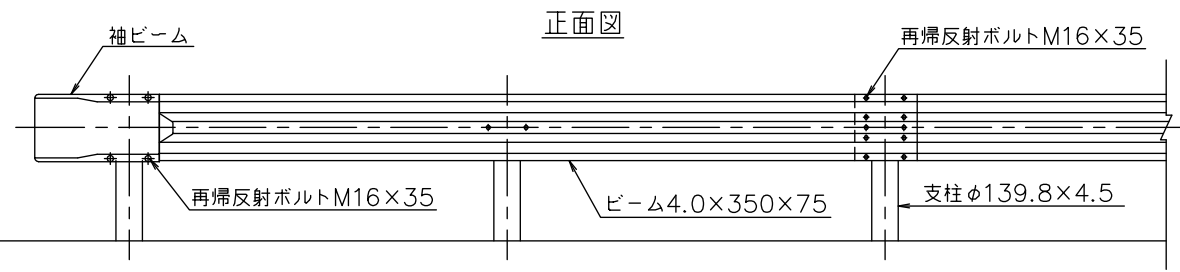
側面図

Gr-A-2B-2H

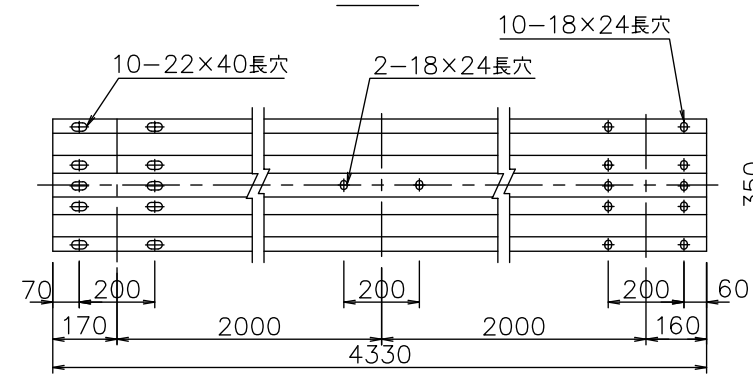
Gr-A-2B-3H



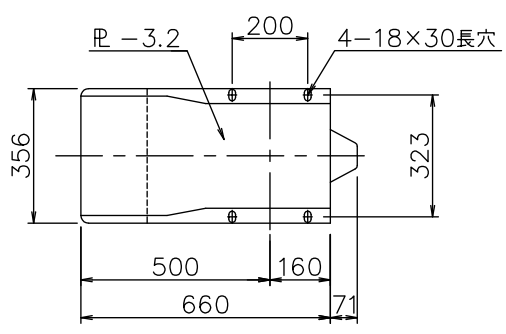
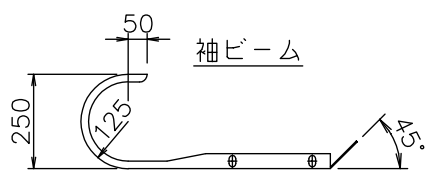
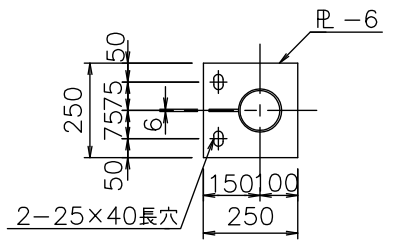
正面図



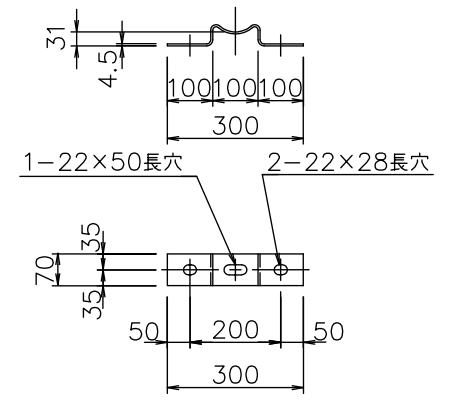
ビーム



アンカープレート詳細図



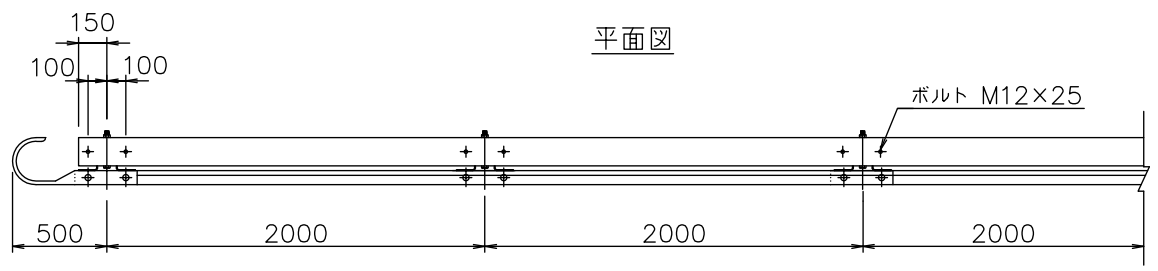
ブラケット



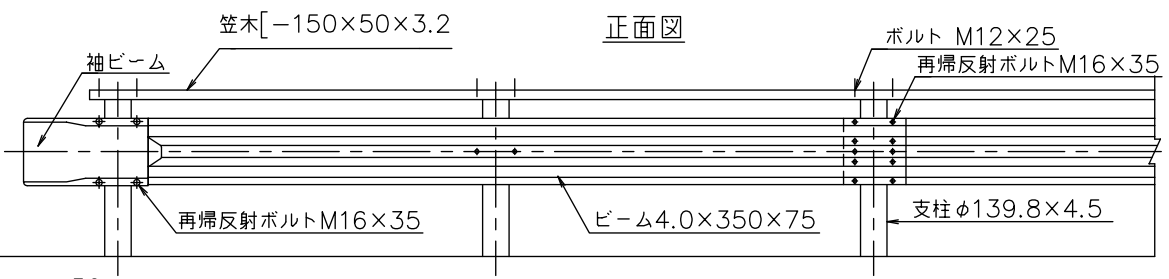
(注) 補強筋配置の詳細は別図-2に示す

Gr-A-2B-4H  
Gr-A-2B-5H

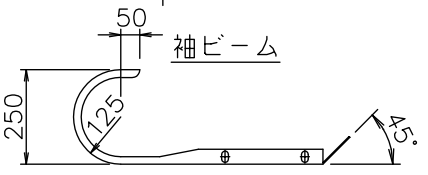
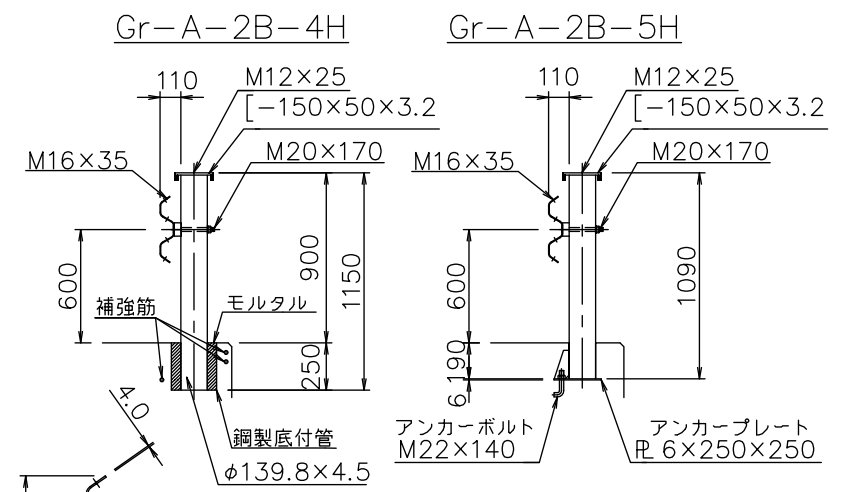
平面図



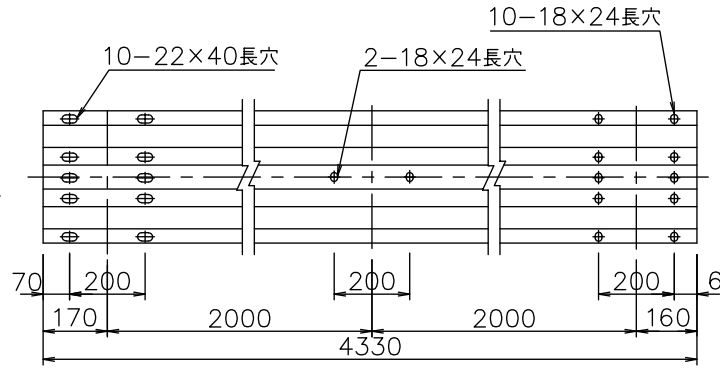
正面図



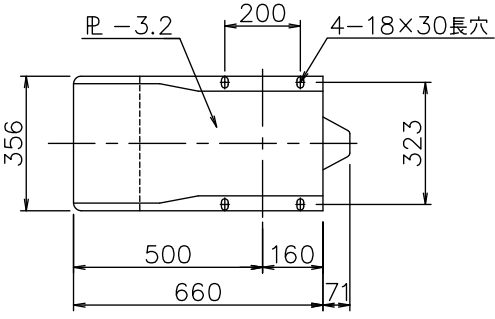
側面図



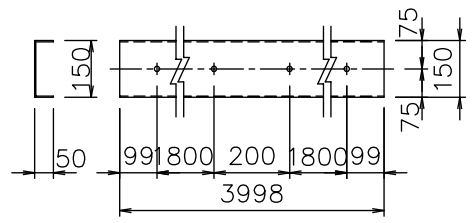
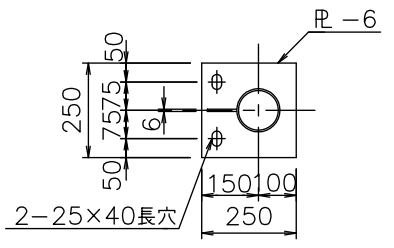
ビーム



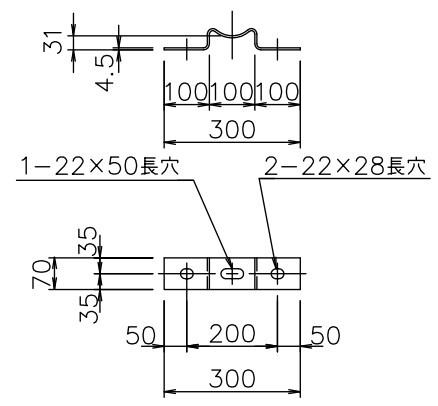
笠木



アンカープレート詳細図

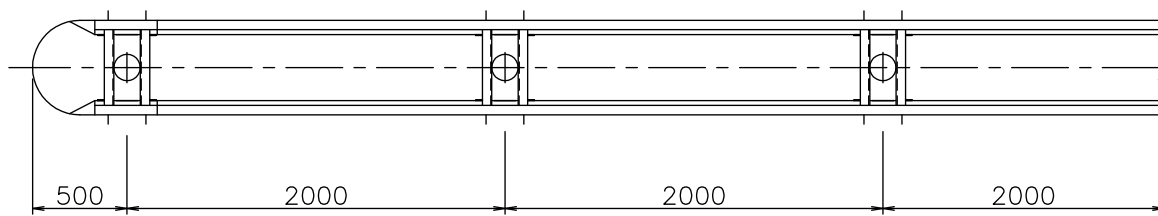


ブラケット

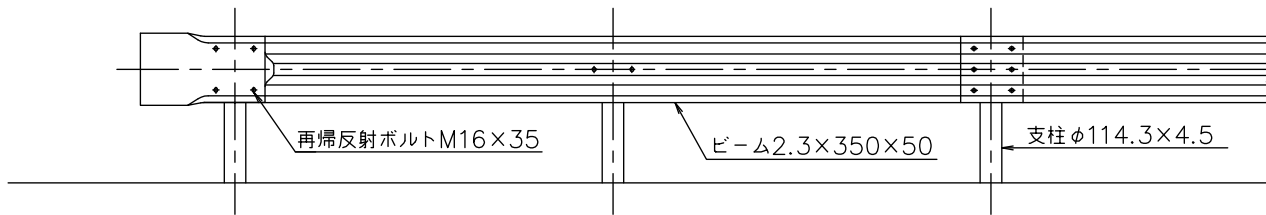


(注) 補強筋配置の詳細は別図-2に示す

平面図

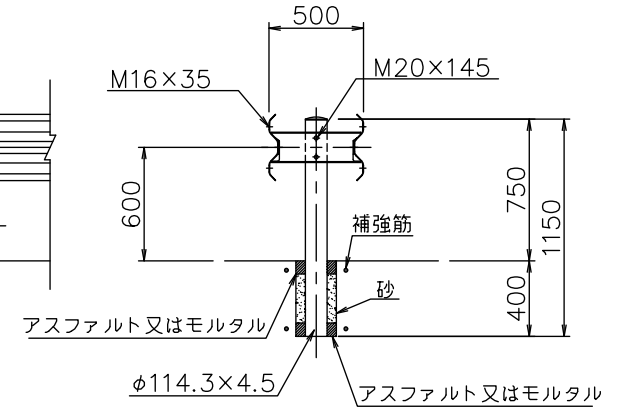


正面図

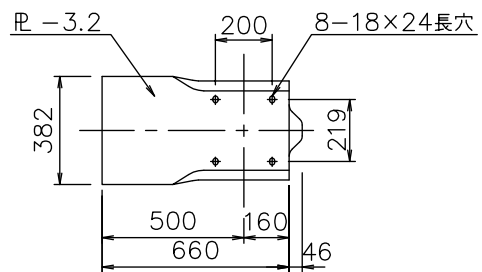
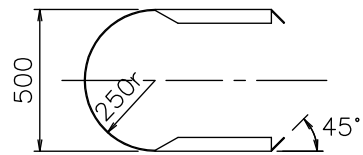


Gr-Cm-2BH

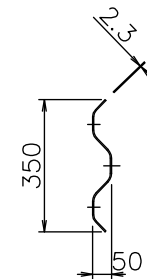
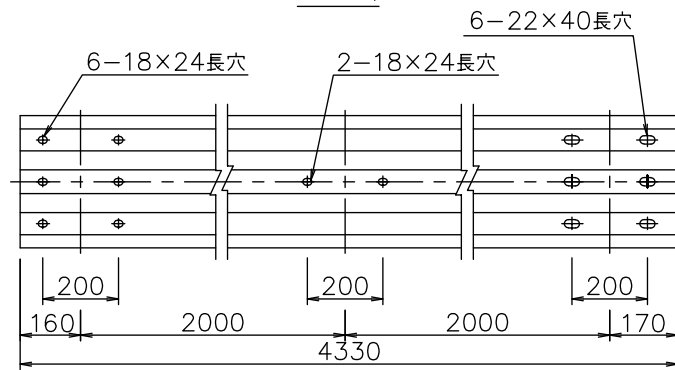
側面図



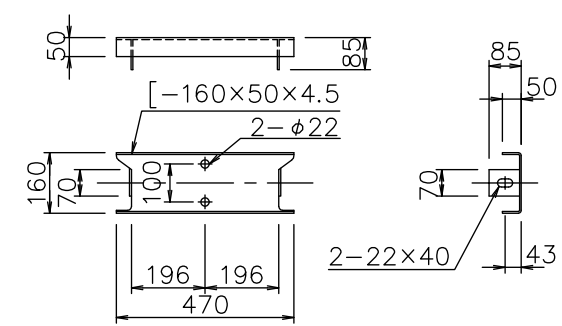
袖ビーム



ビーム

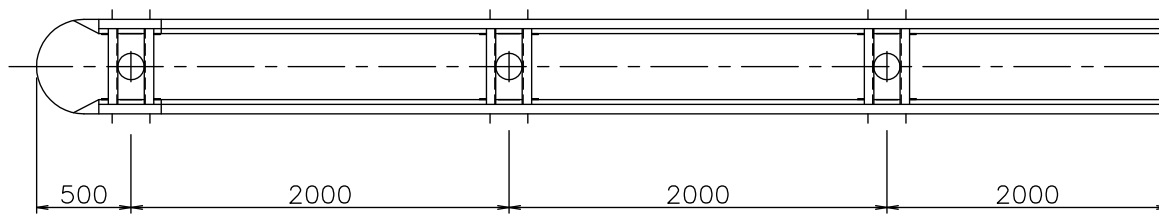


間隔材

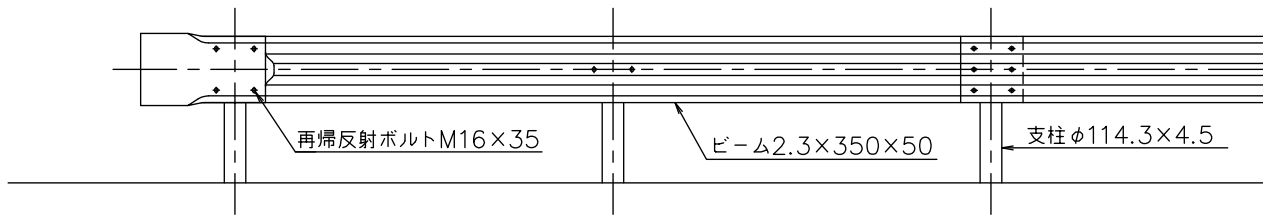


(注) 補強筋配置の詳細は別図-1に示す

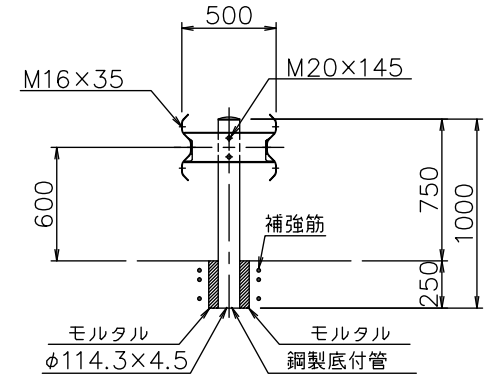
平面図



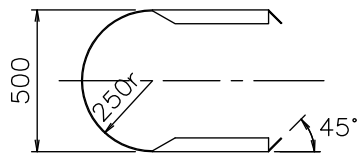
正面図



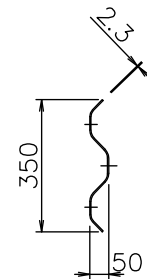
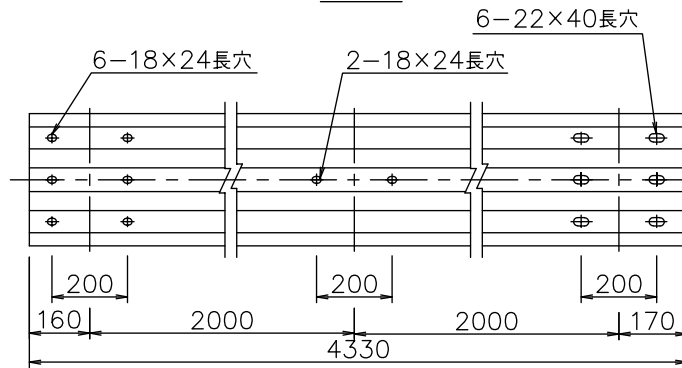
側面図



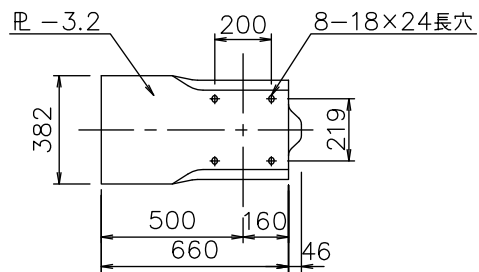
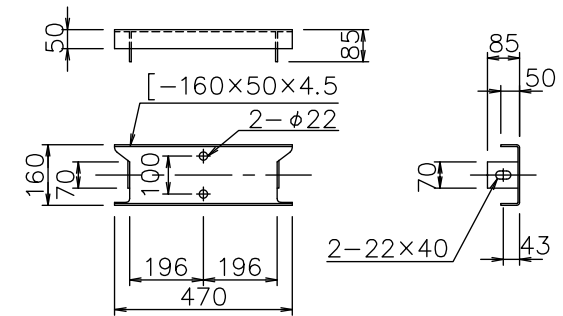
袖ビーム



ビーム



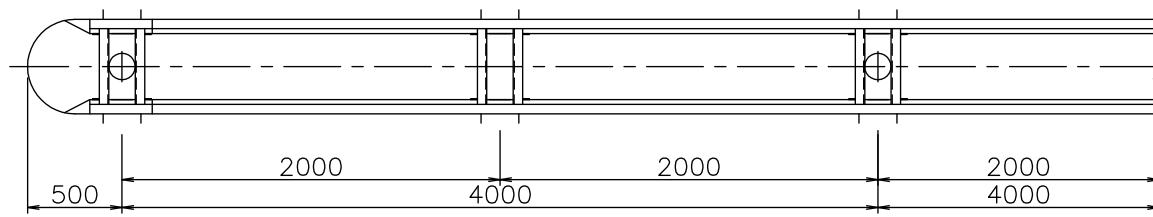
間隔材



(注) 補強筋配置の詳細は別図-2に示す

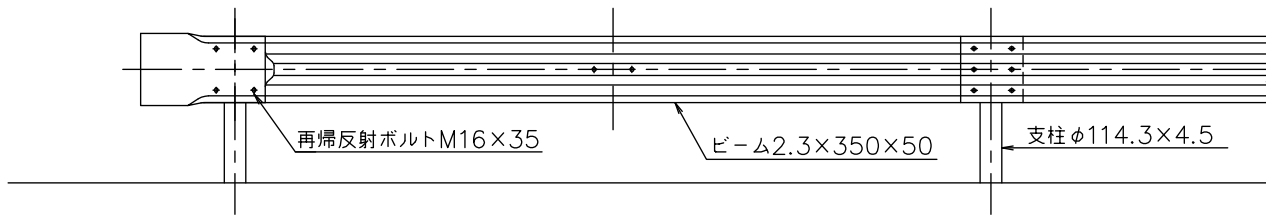


平面図

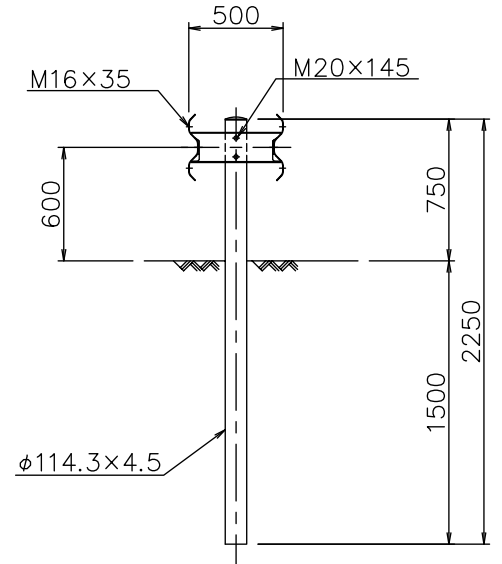


Gr-Cm-4EH

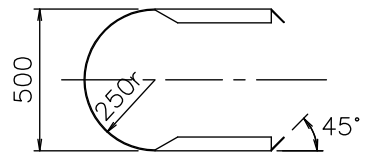
正面図



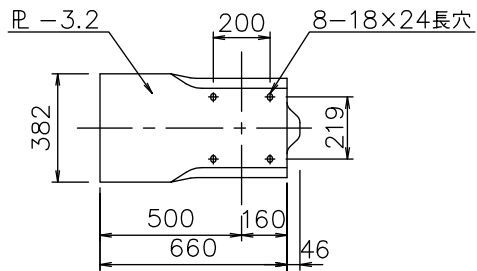
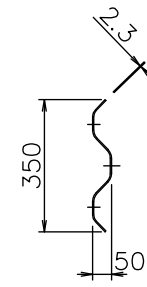
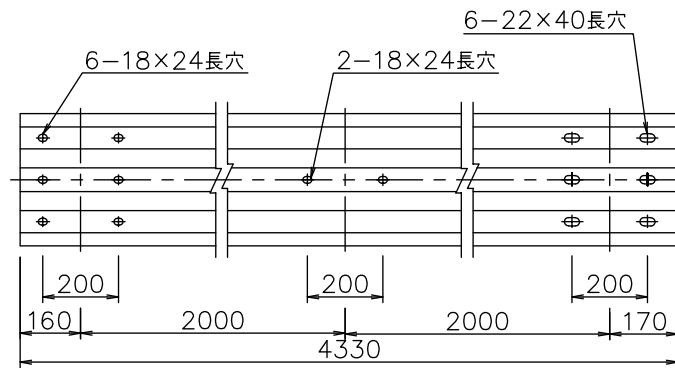
側面図



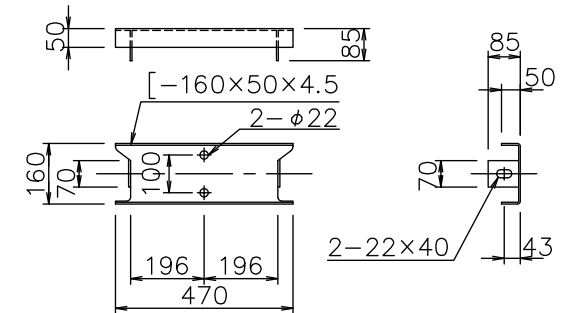
袖ビーム



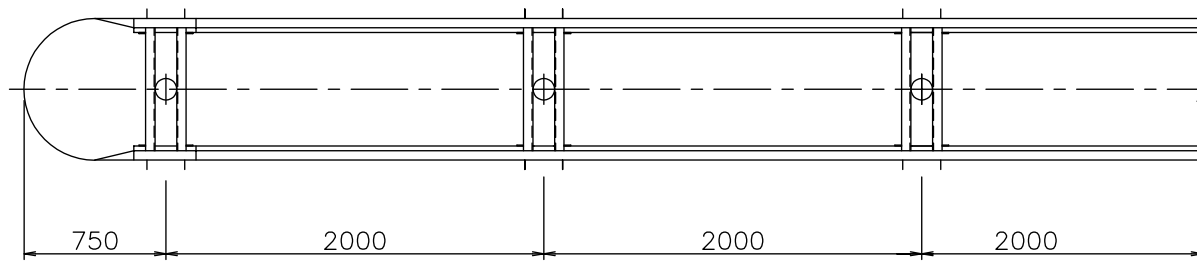
ビーム



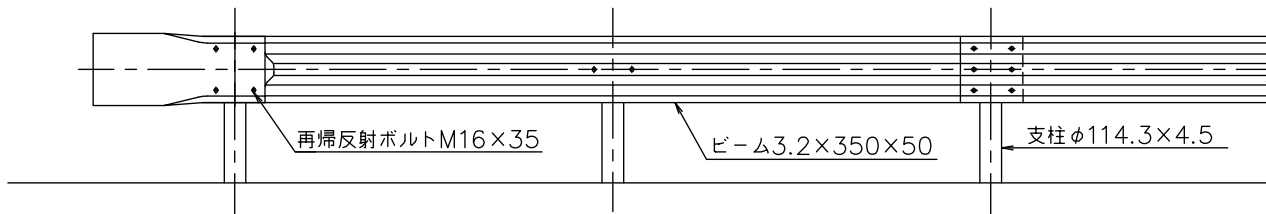
間隔材



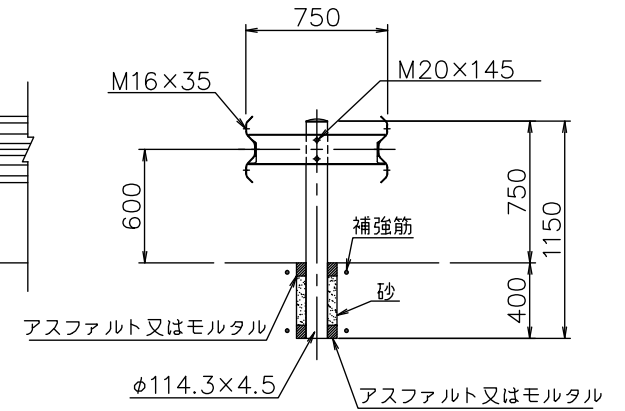
平面図



正面図

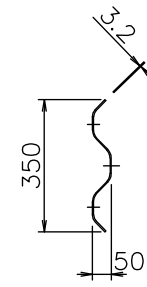
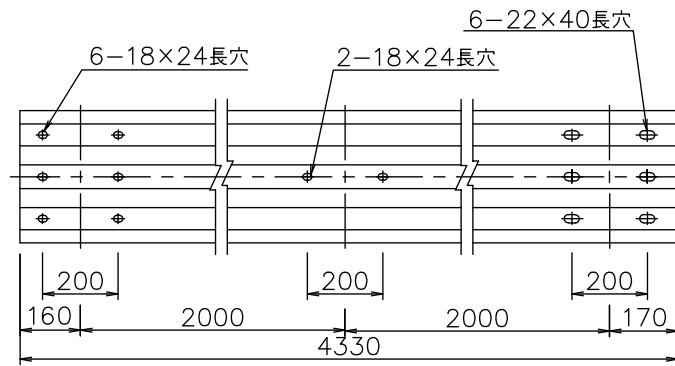
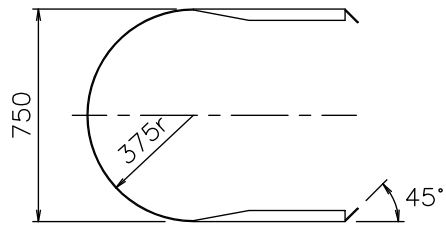


側面図

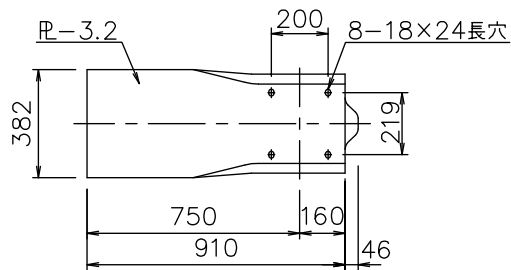
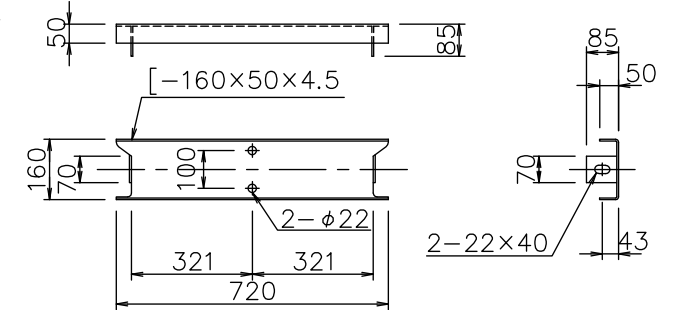


袖ビーム

ビーム

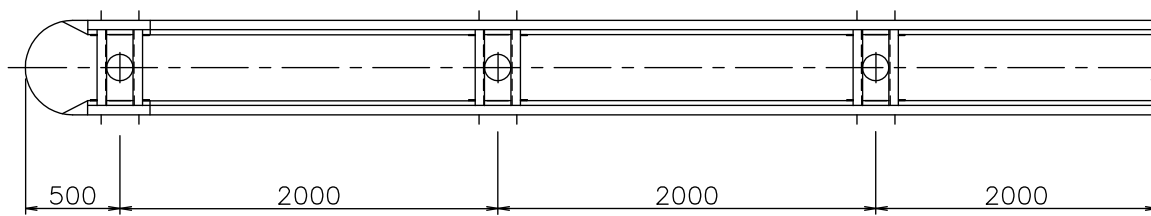


間隔材



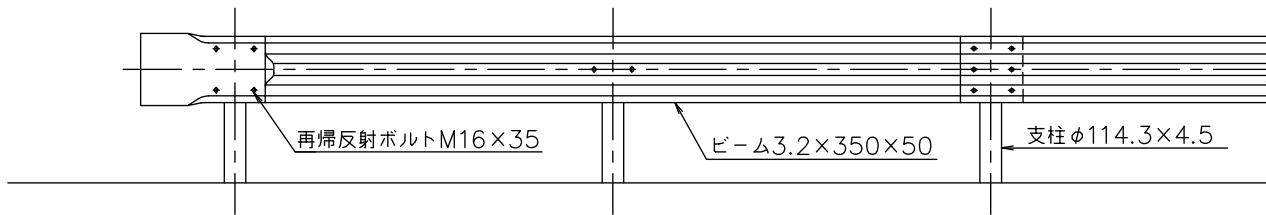
(注) 補強筋配置の詳細は別図-1に示す

平面図

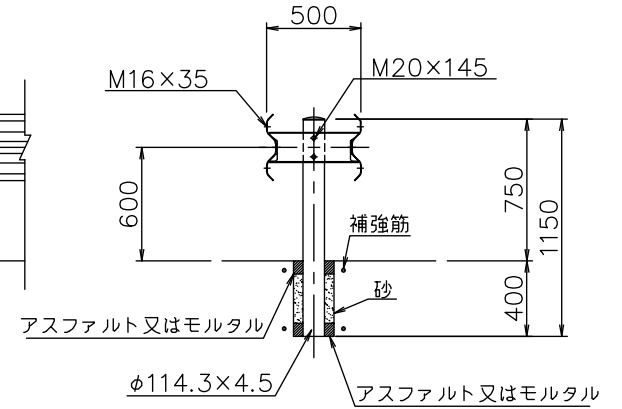


Gr-Bm-2B2H

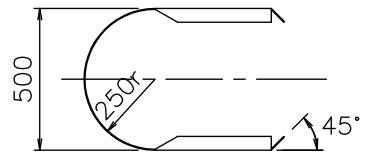
正面図



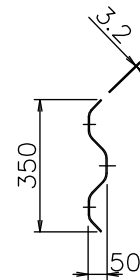
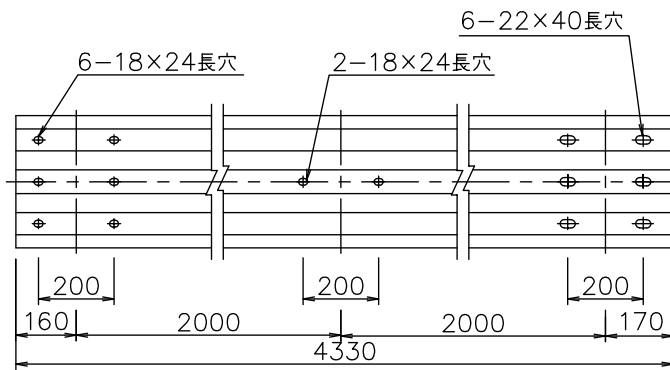
側面図



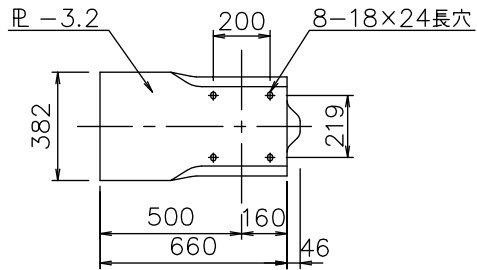
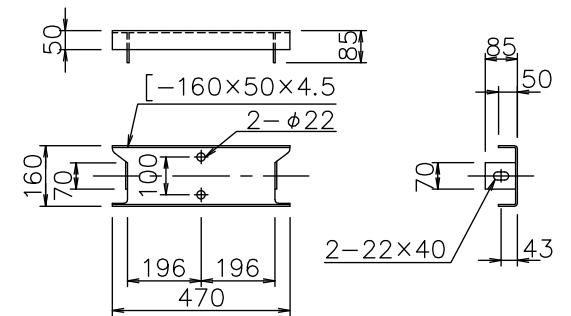
袖ビーム



ビーム

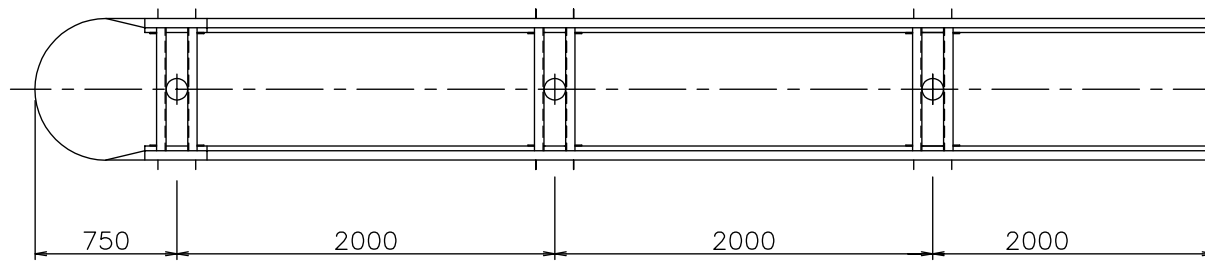


間隔材

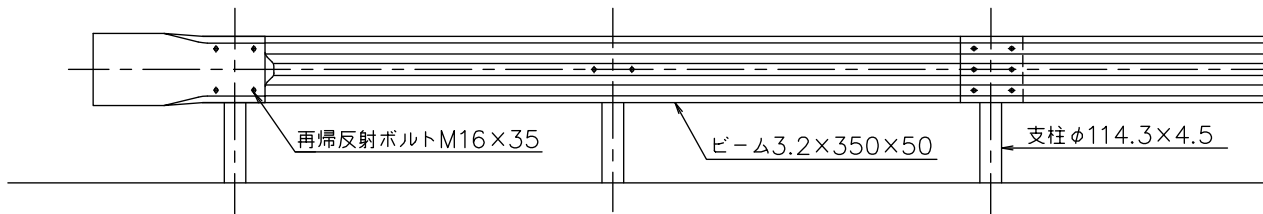


(注) 補強筋配置の詳細は別図-1に示す

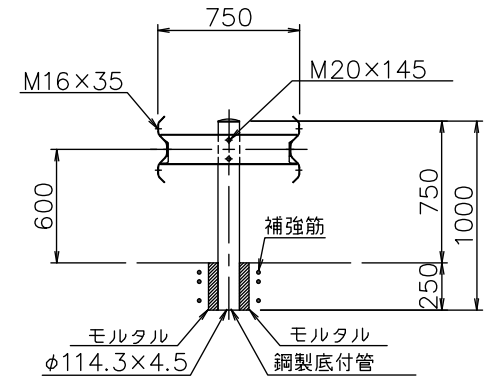
平面図



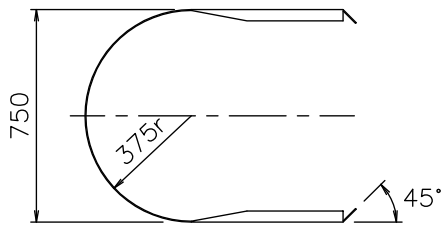
正面図



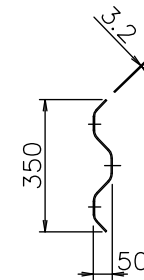
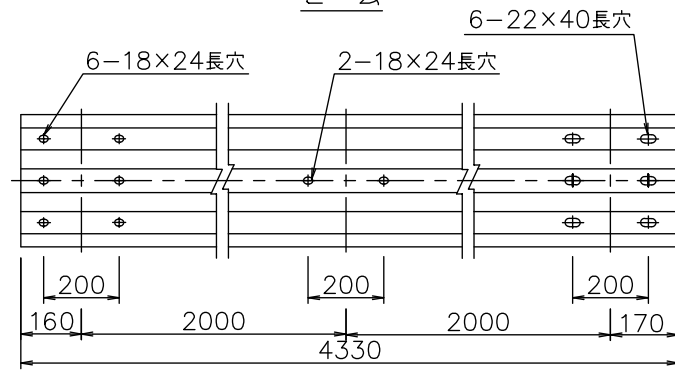
側面図



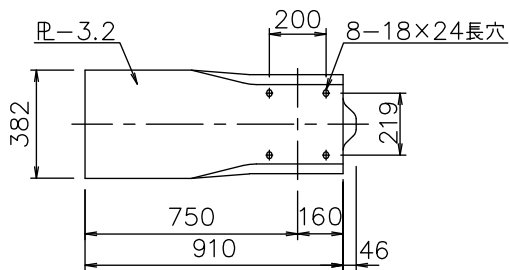
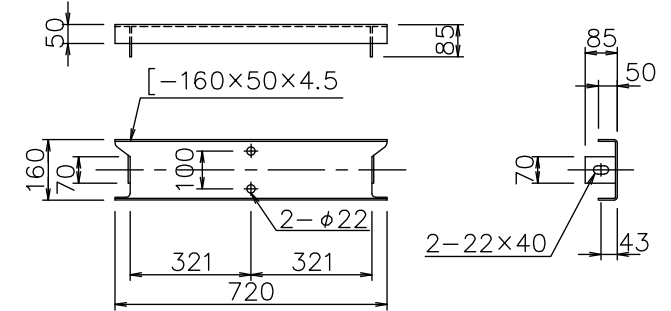
袖ビーム



ビーム

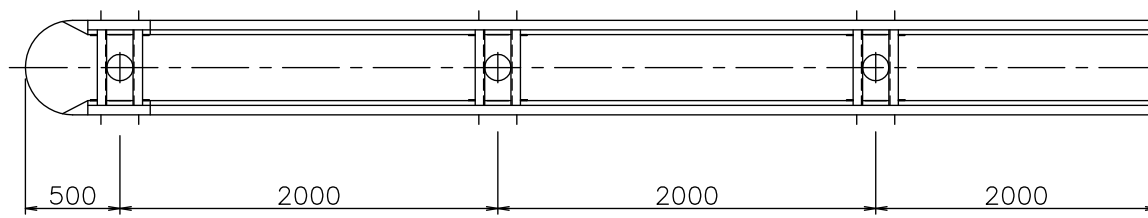


間隔材

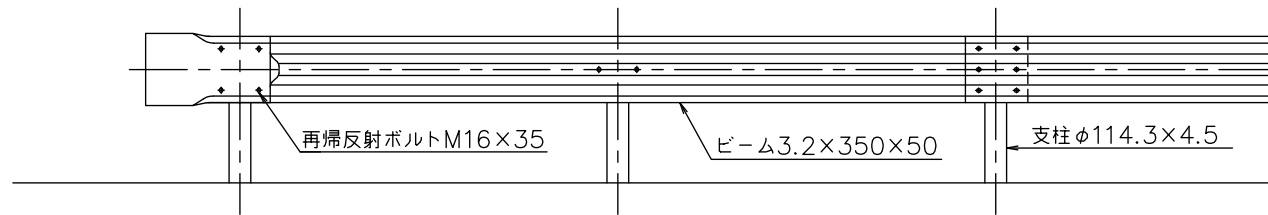


(注) 補強筋配置の詳細は別図-2に示す

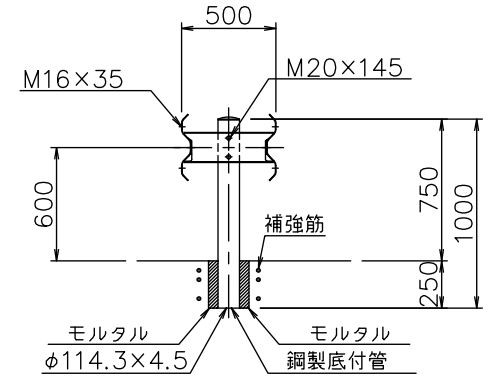
平面図



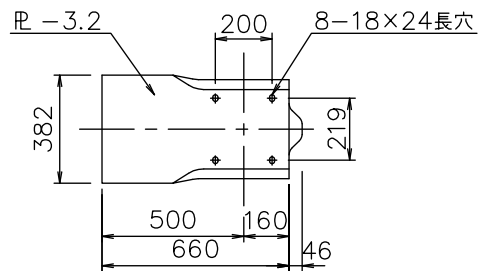
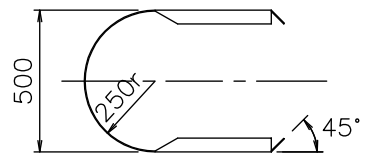
正面図



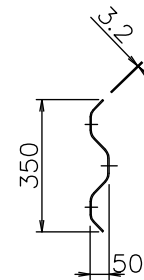
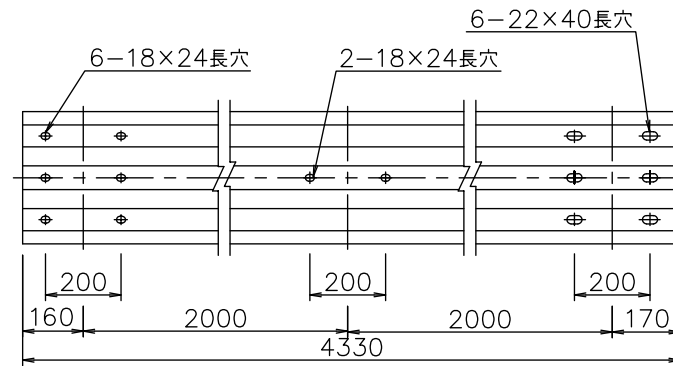
側面図



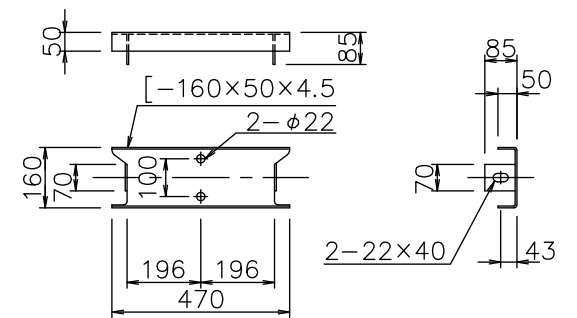
袖ビーム



ビーム

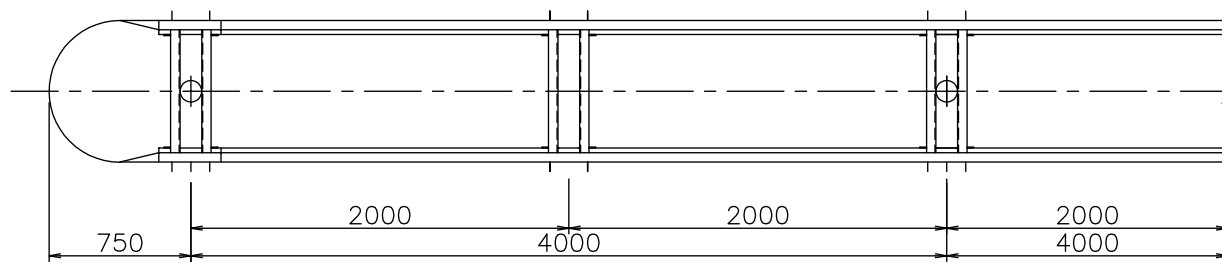


間隔材

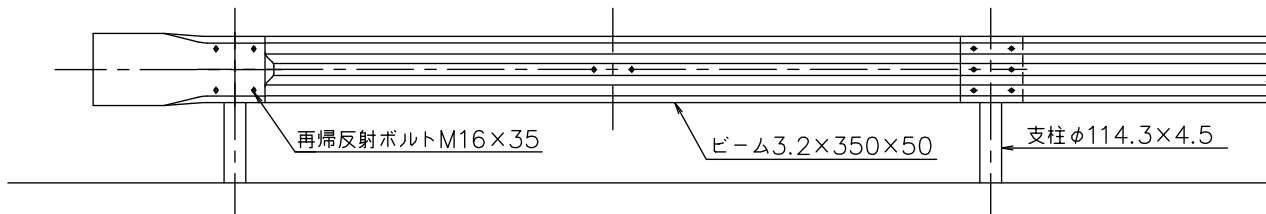


(注) 補強筋配置の詳細は別図-2に示す

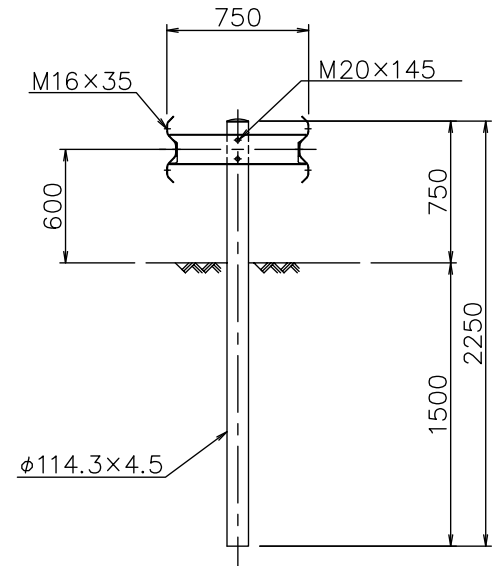
平面図



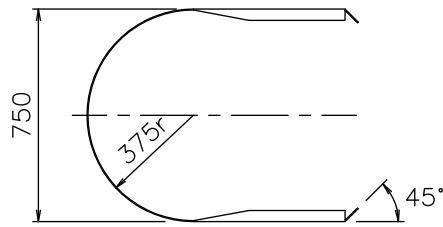
正面図



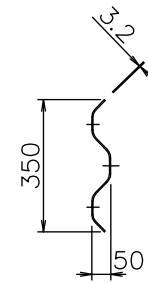
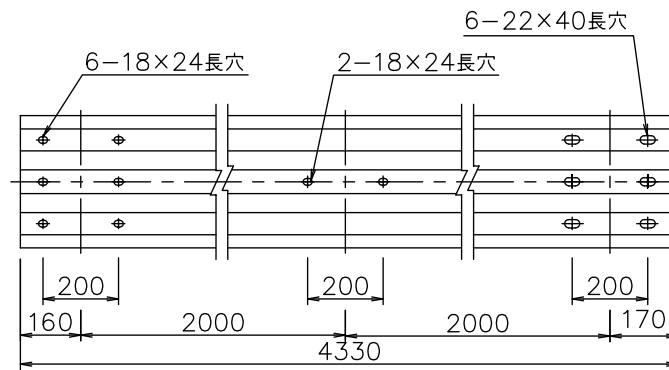
側面図



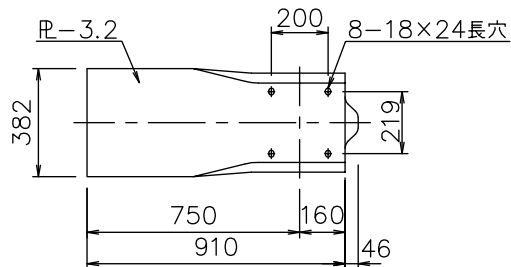
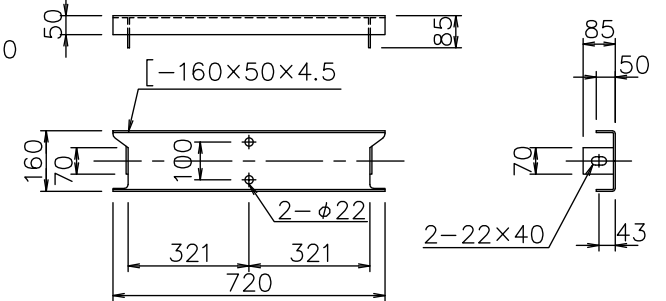
袖ビーム



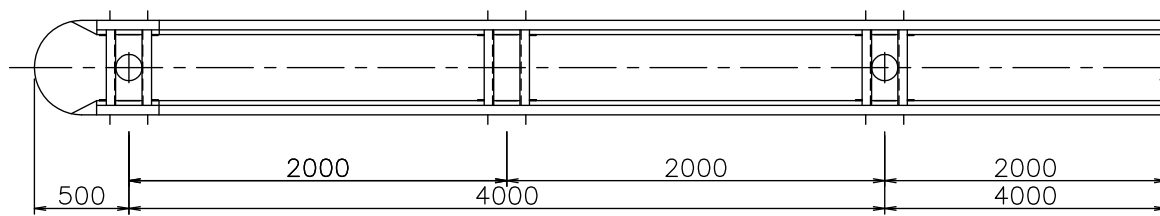
ビーム



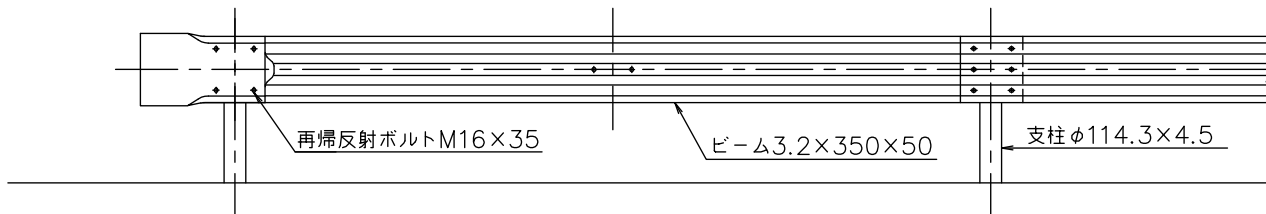
間隔材



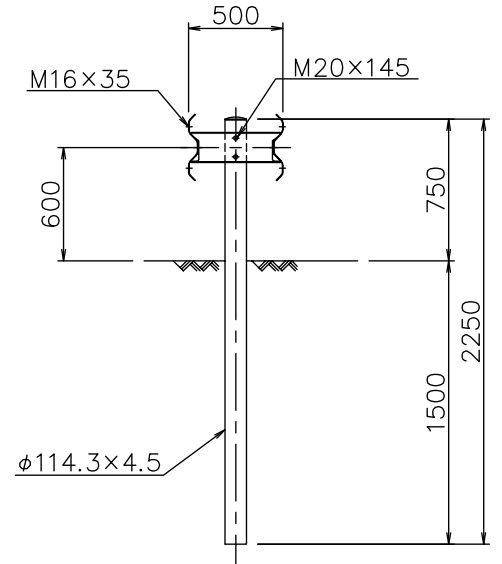
平面図



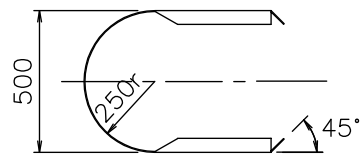
正面図



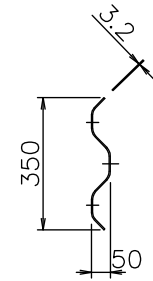
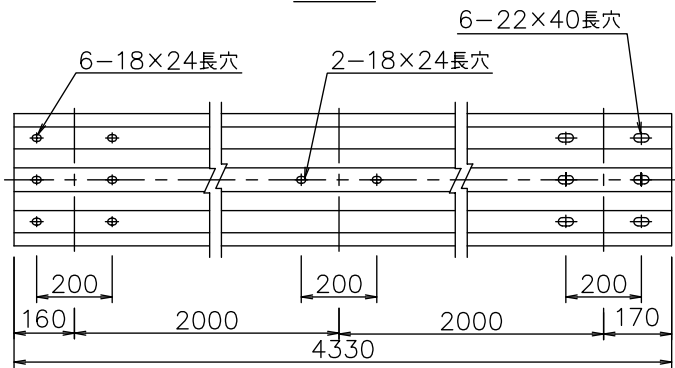
側面図



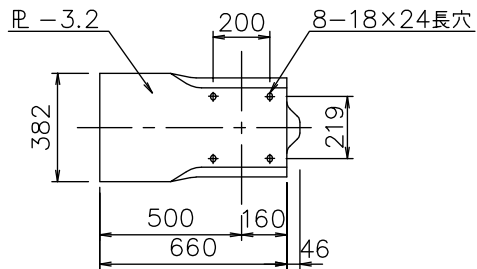
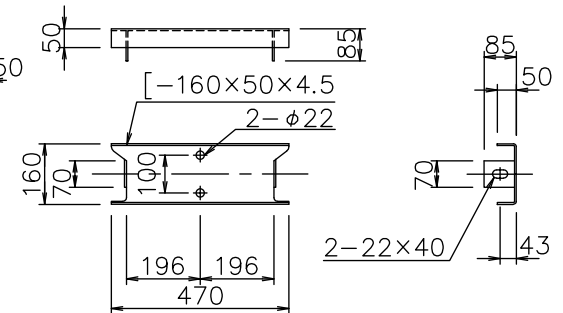
袖ビーム



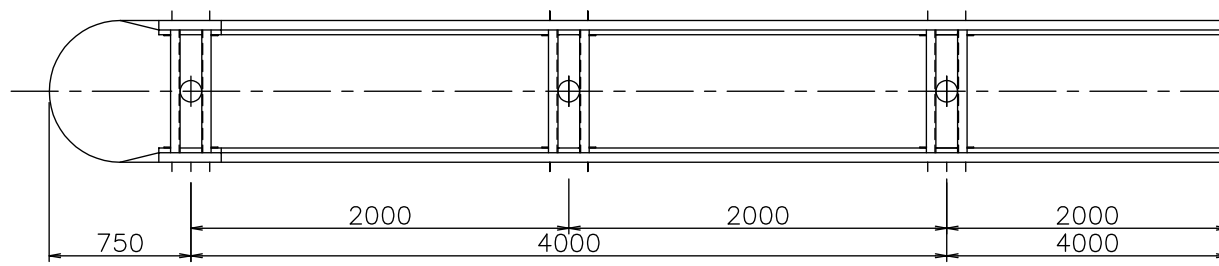
ビーム



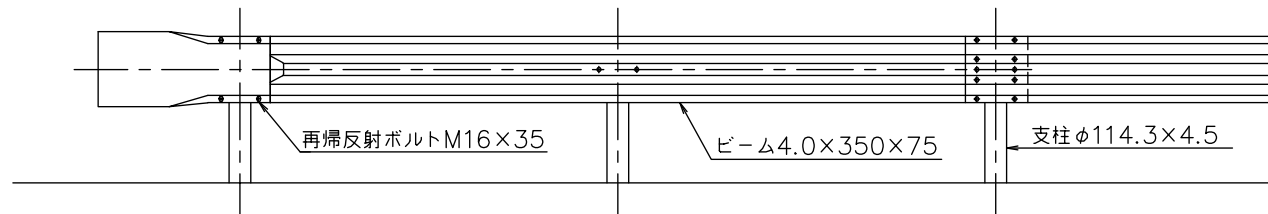
間隔材



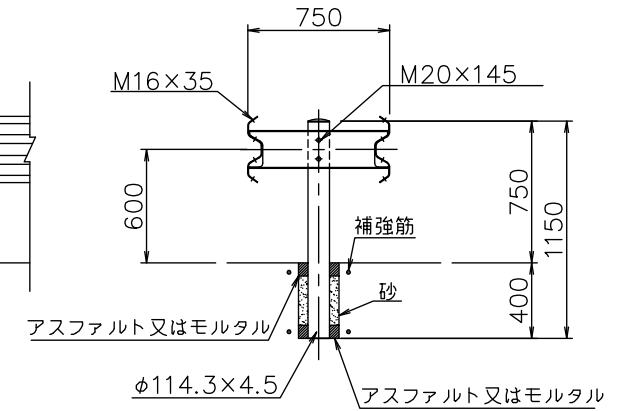
平面図



正面図

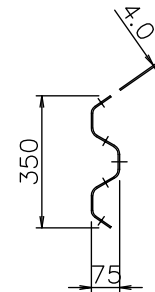
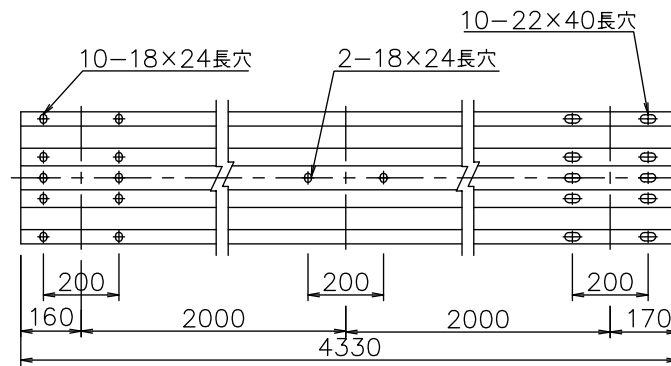
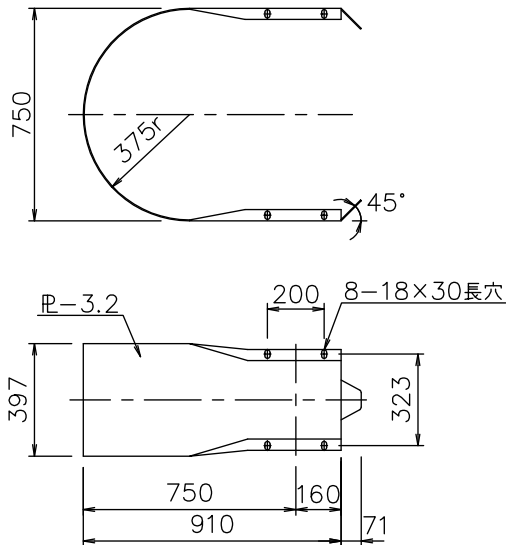


側面図

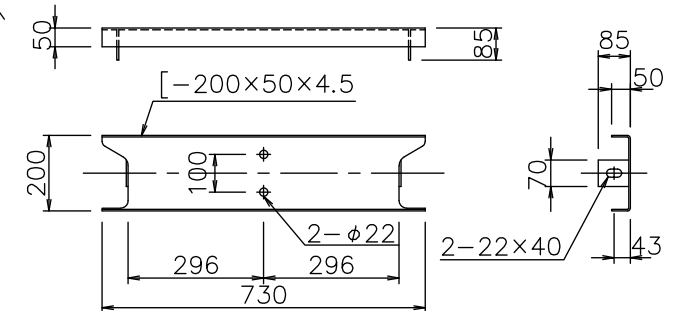


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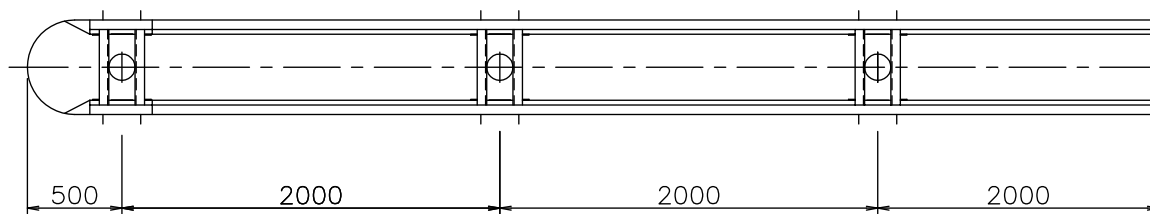
間隔材



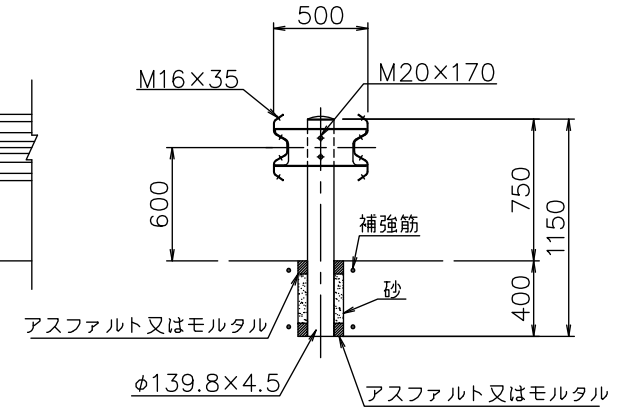
(注) 補強筋配置の詳細は別図-1に示す



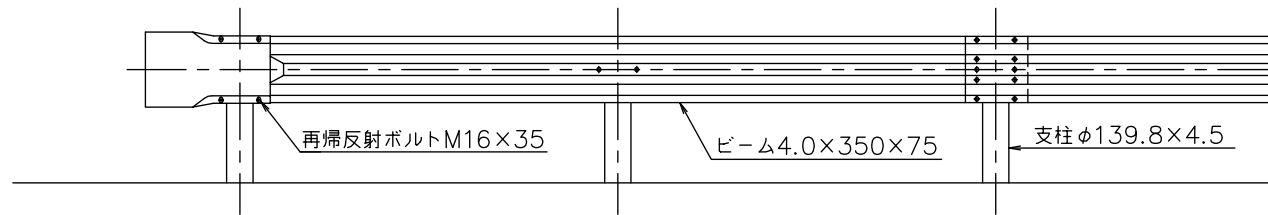
平面図



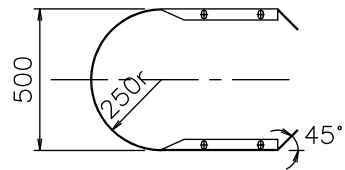
側面図



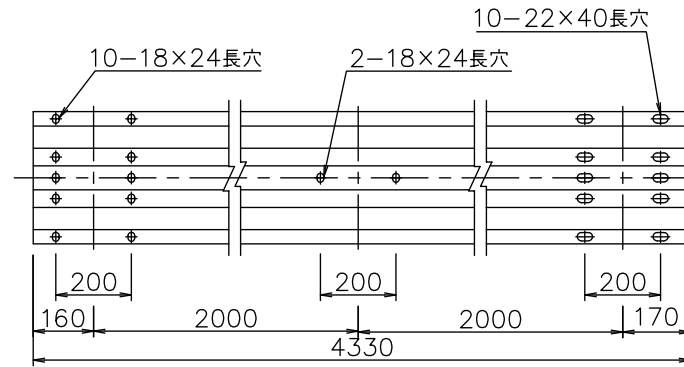
正面図



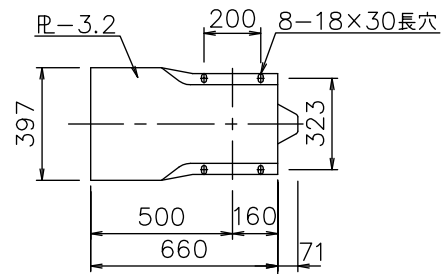
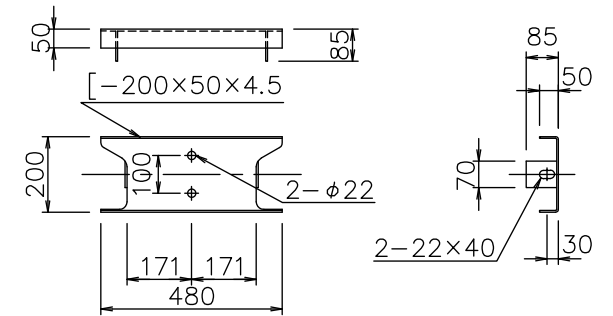
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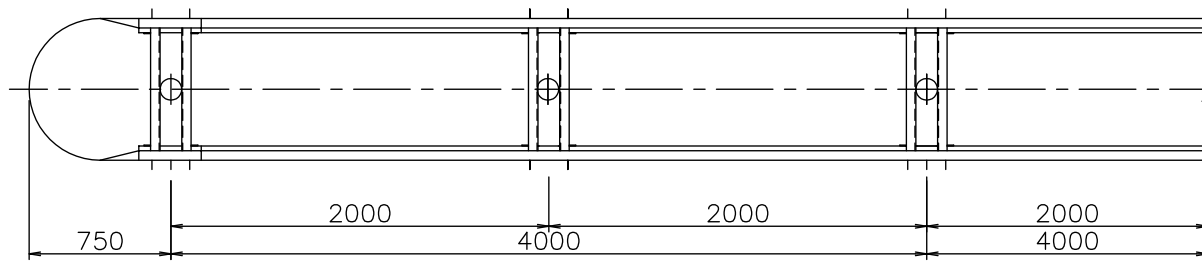


間隔材

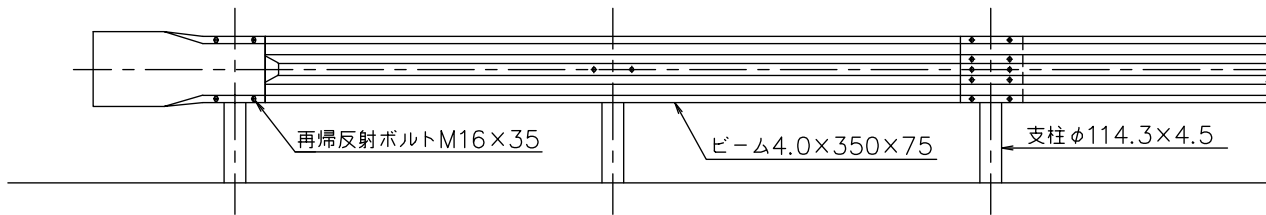


(注) 補強筋配置の詳細は別図-1に示す

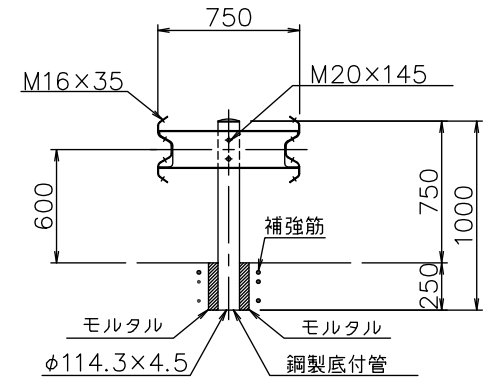
平面図



正面図

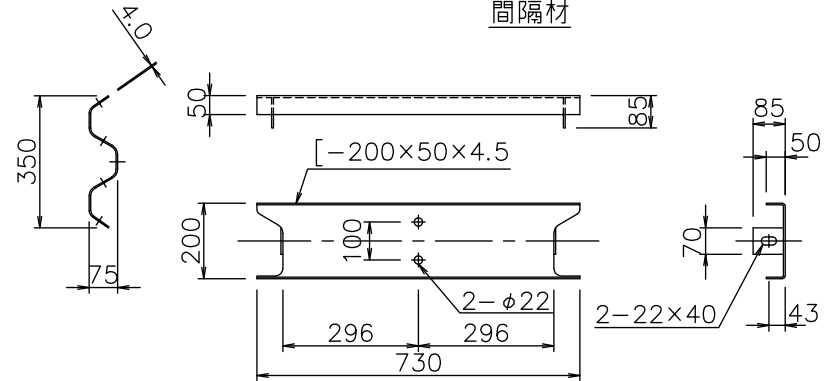
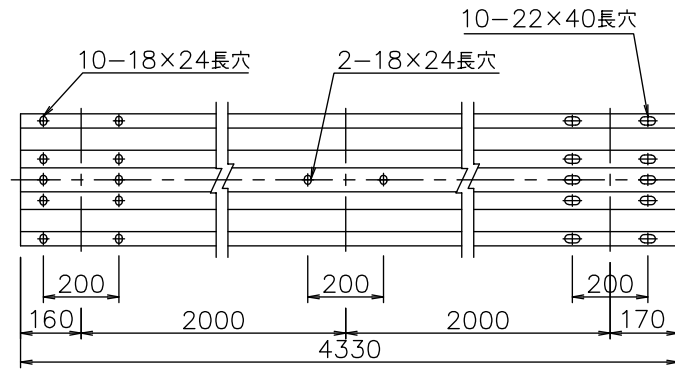
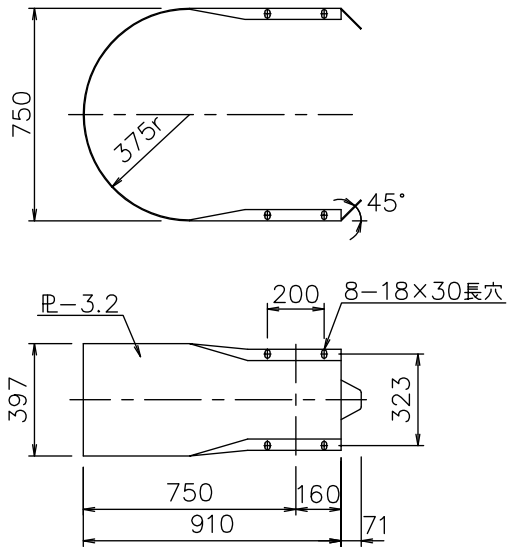


側面図



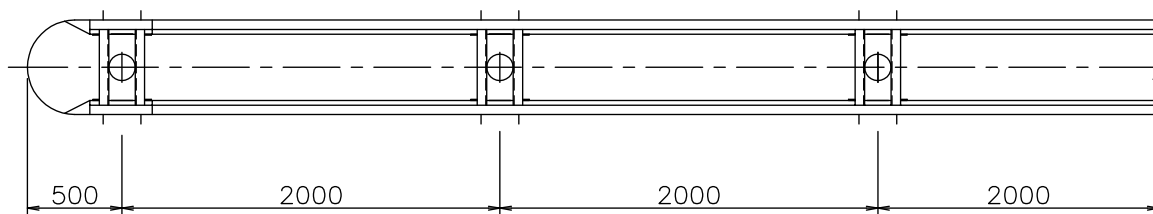
袖ビーム

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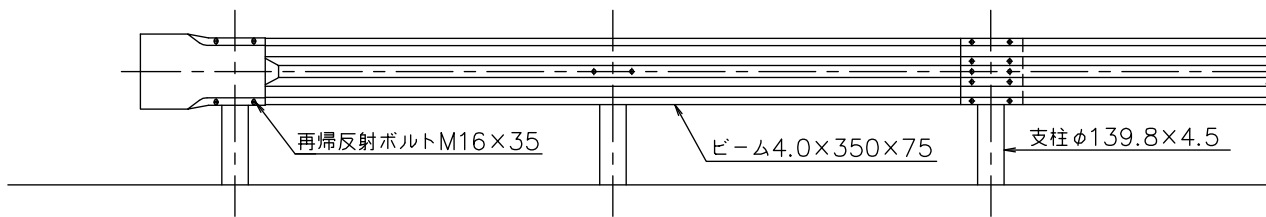


(注) 補強筋配置の詳細は別図-2に示す

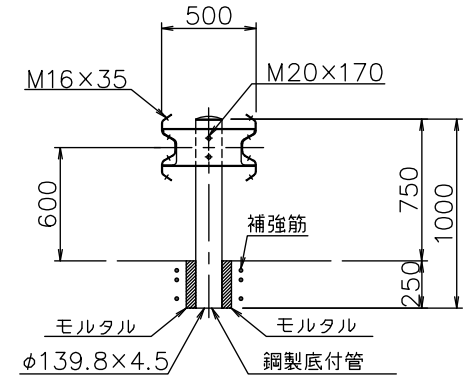
平面図



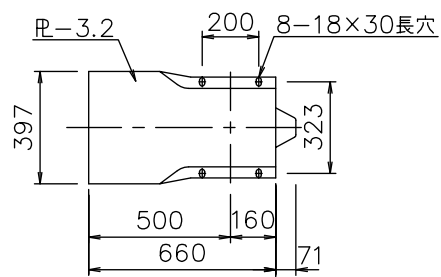
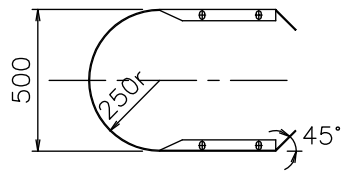
正面図



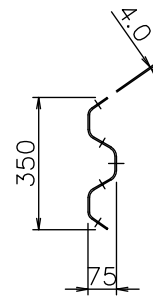
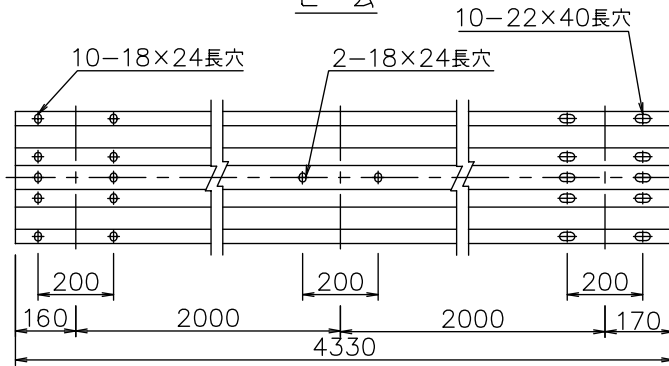
側面図



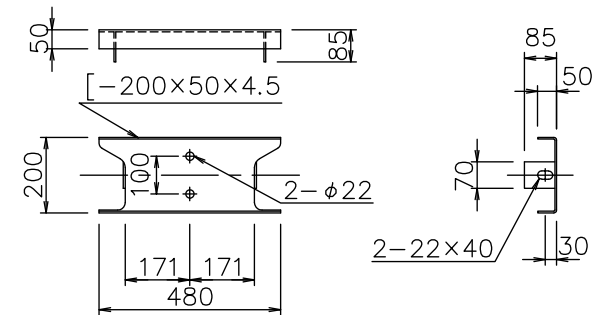
袖ビーム



ビーム

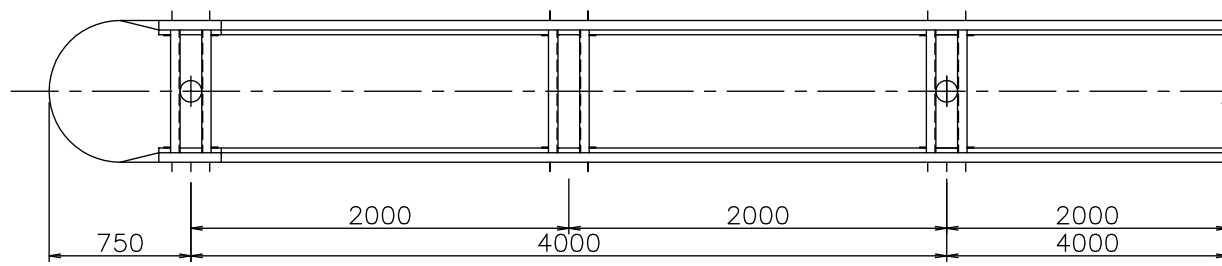


間隔材

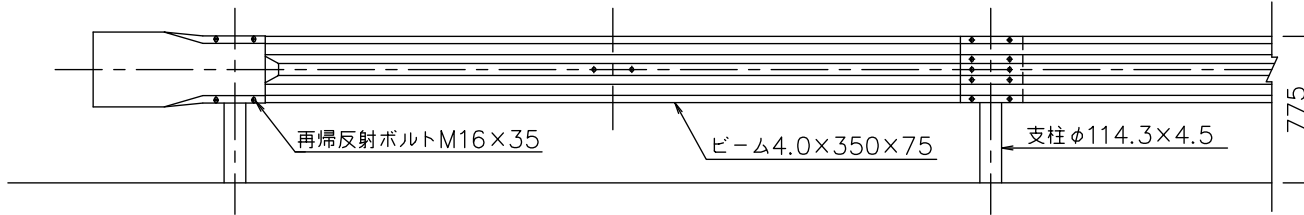


(注) 補強筋配置の詳細は別図-2に示す

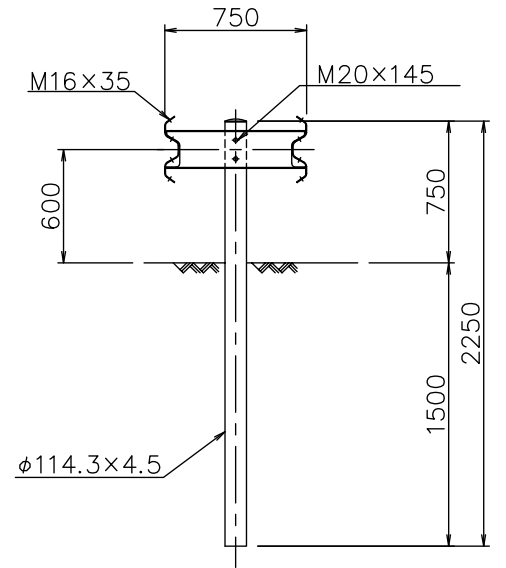
平面図



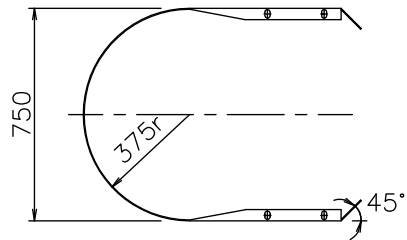
正面図



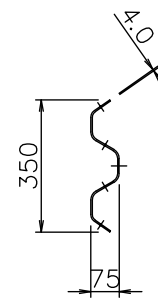
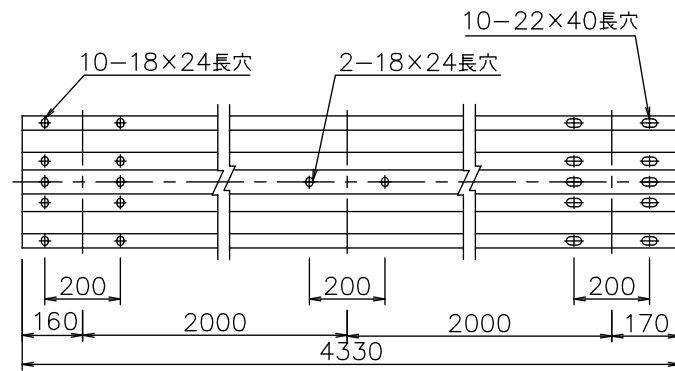
側面図



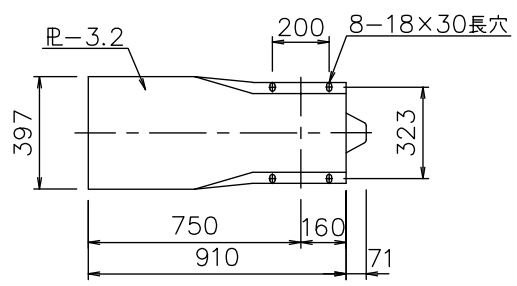
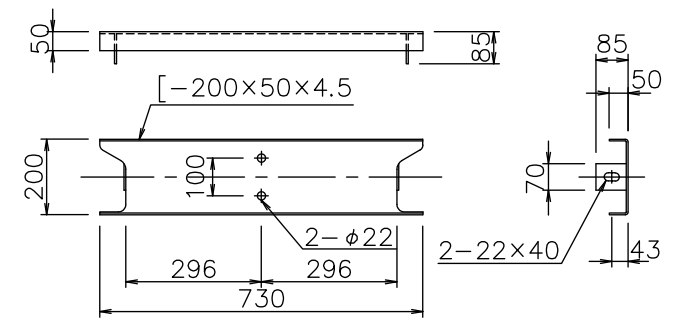
袖ビーム



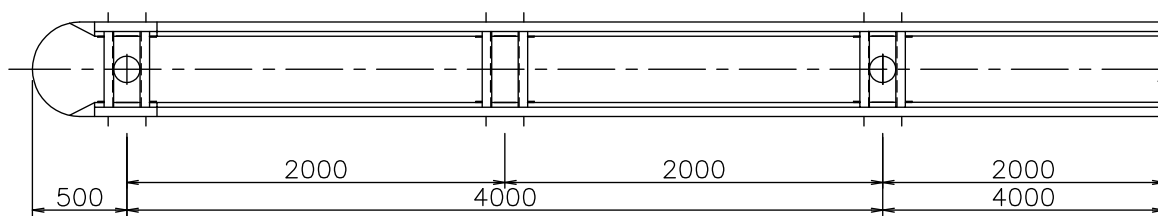
ビーム



間隔材

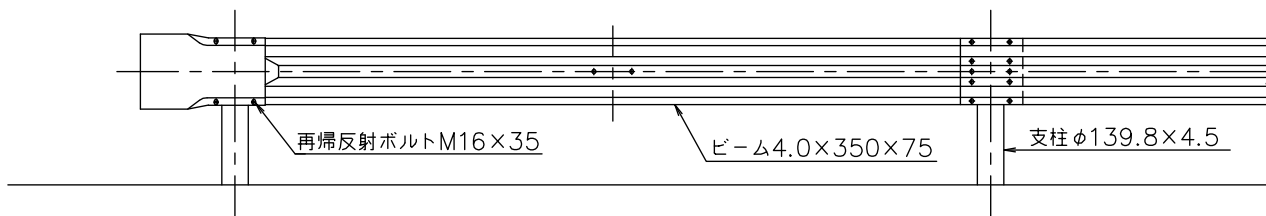


平面図

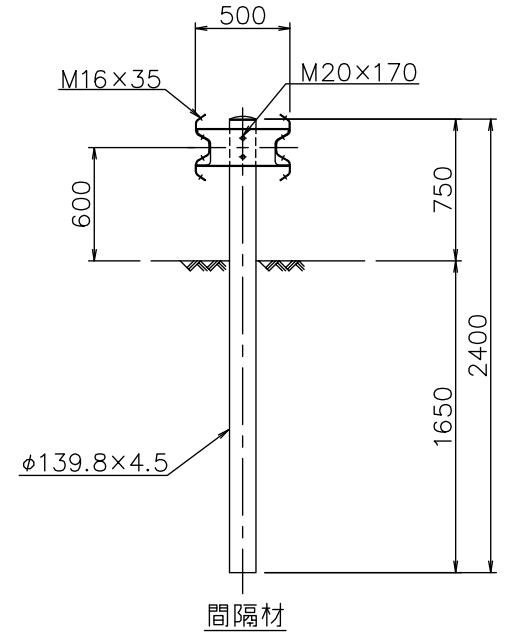


Gr-Am-4E2H

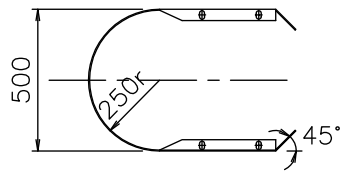
正面図



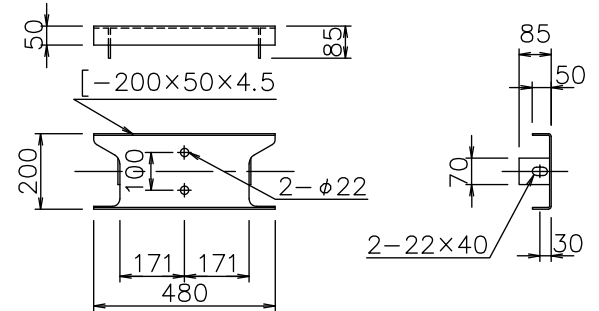
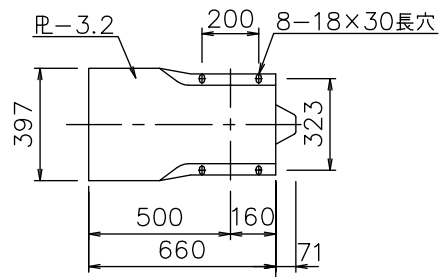
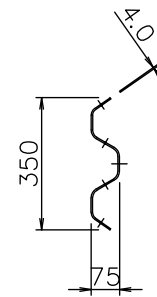
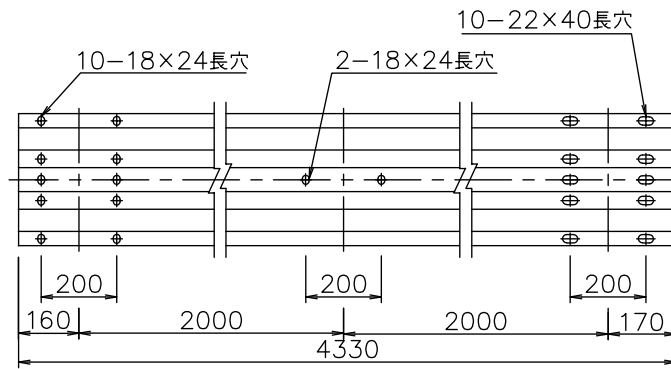
側面図



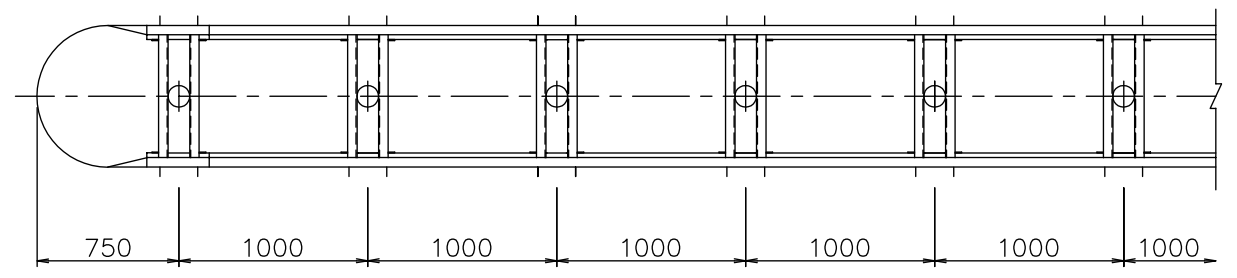
袖ビーム



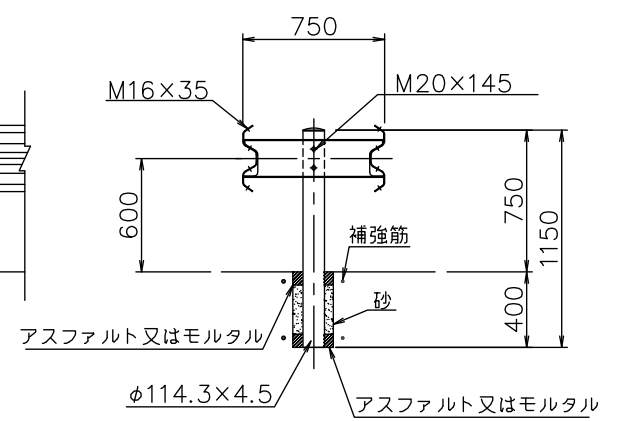
ビーム



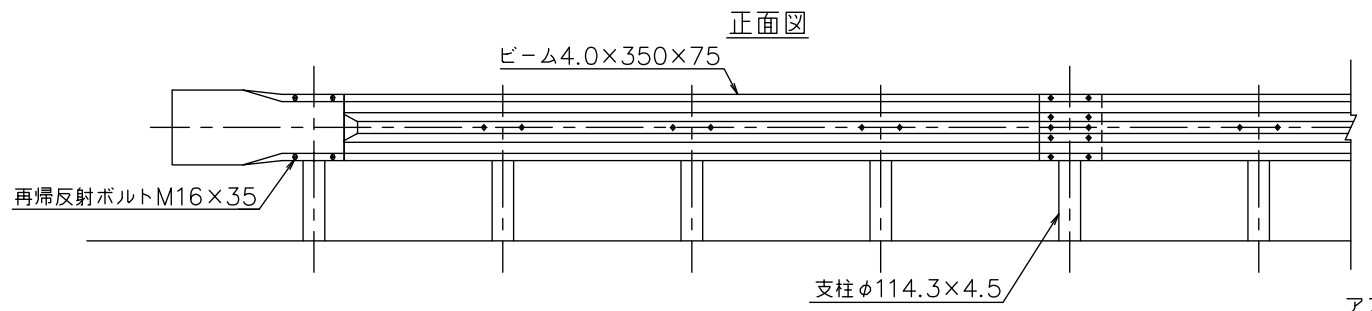
平面図



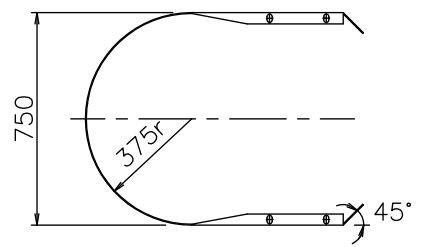
側面図



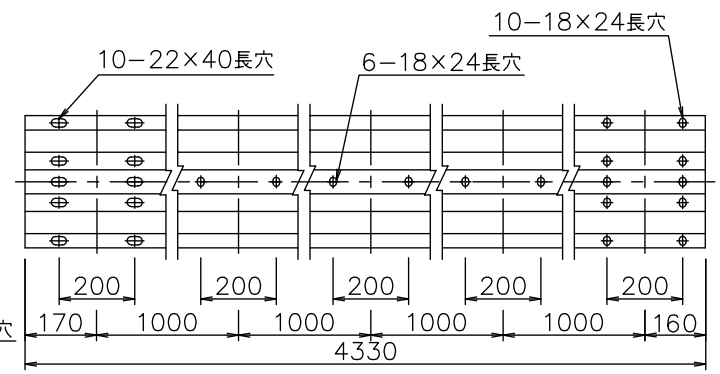
正面図



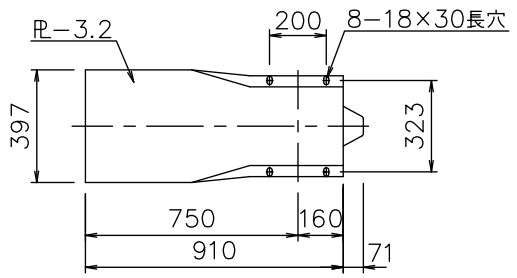
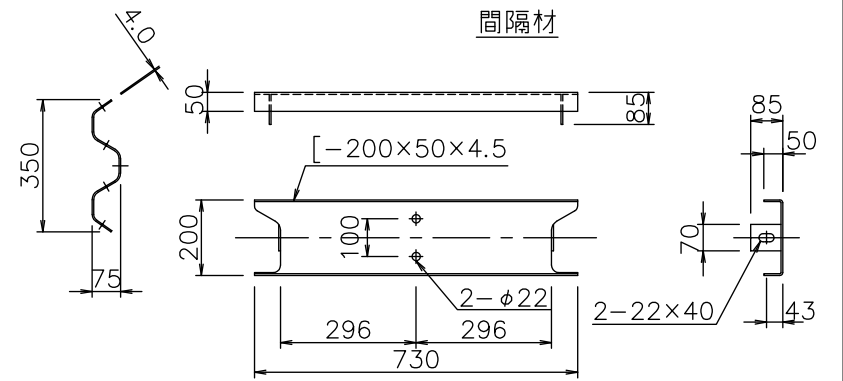
袖ビーム



ビーム

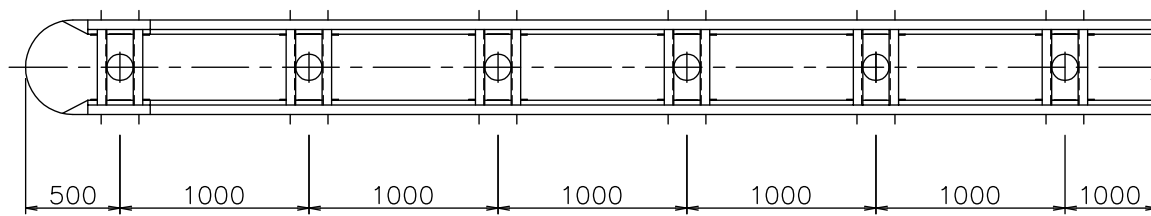


間隔材

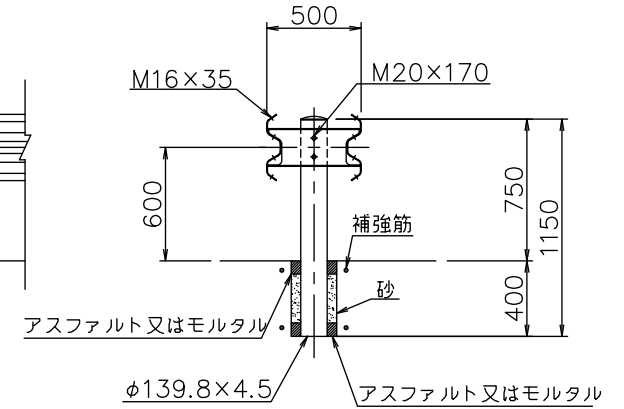


(注) 補強筋配置の詳細は別図-1に示す

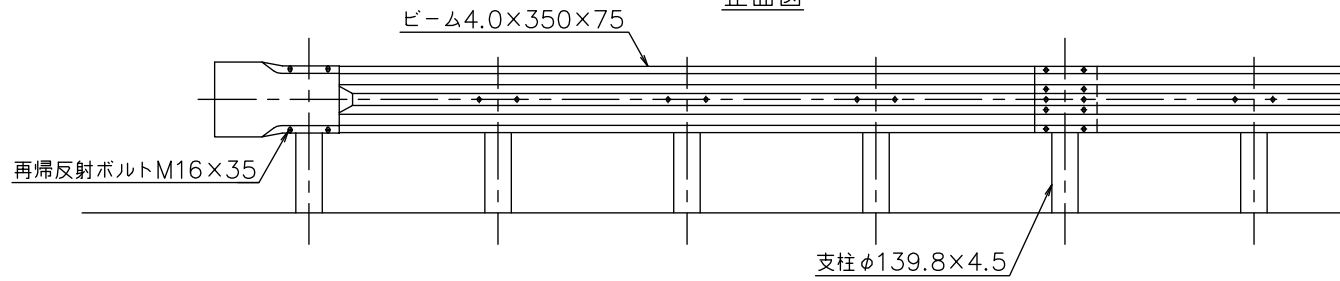
平面図



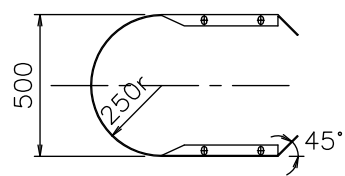
側面図



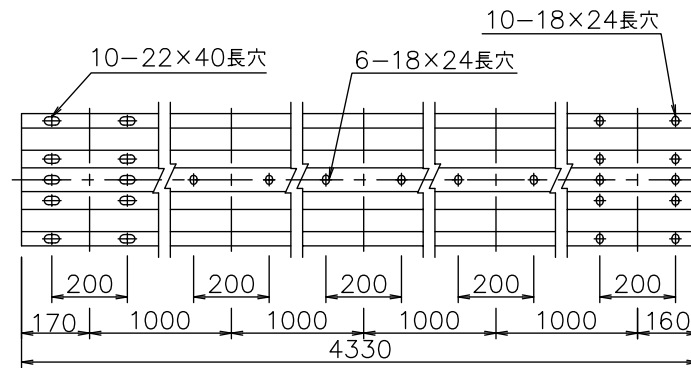
正面図



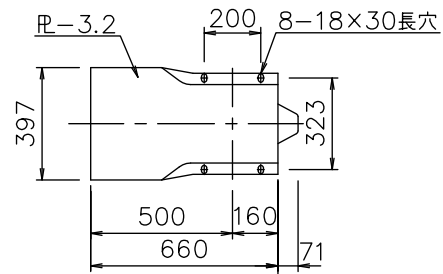
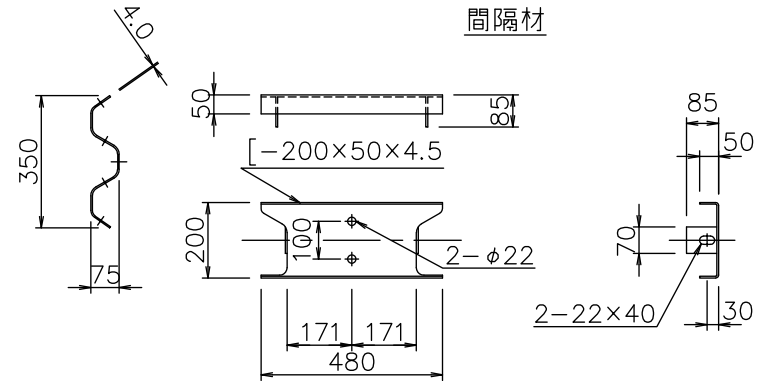
袖ビーム



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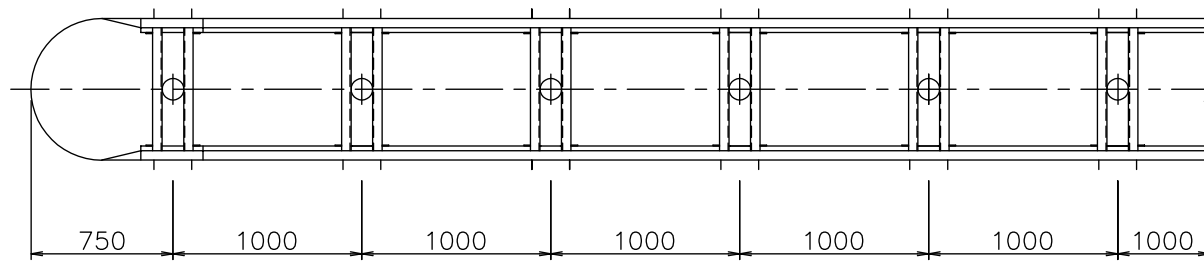


間隔材

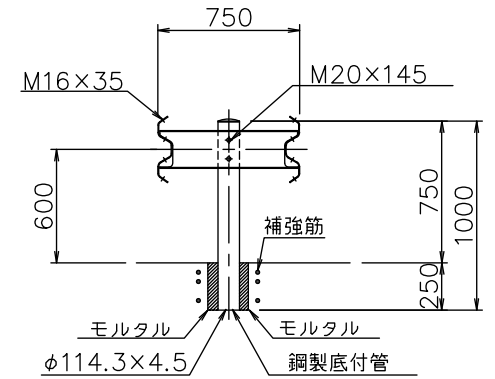


(注) 補強筋配置の詳細は別図-1に示す

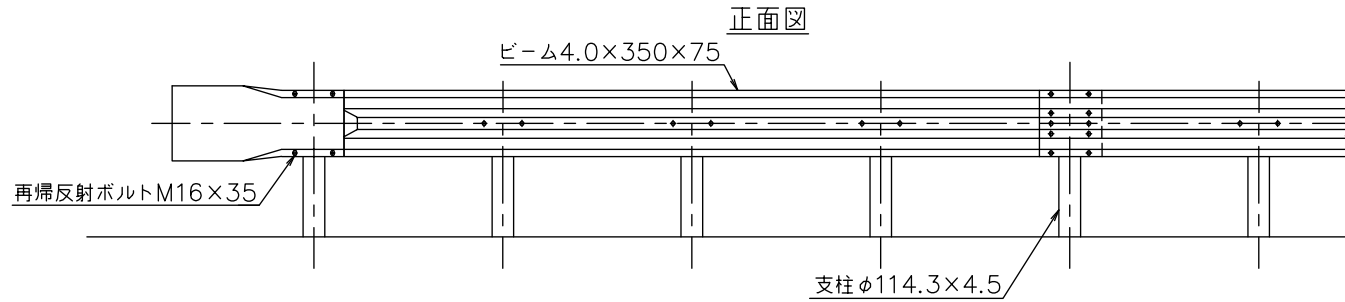
平面図



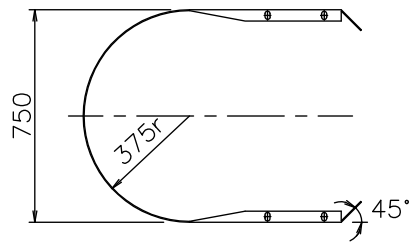
側面図



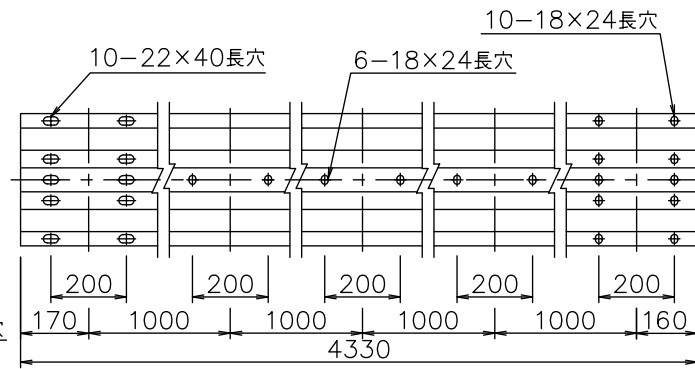
正面図



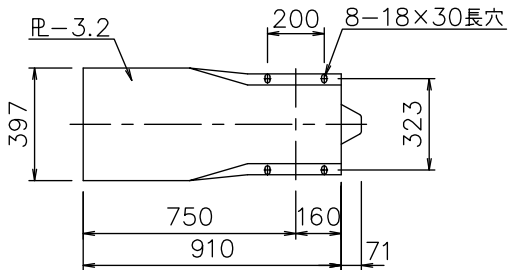
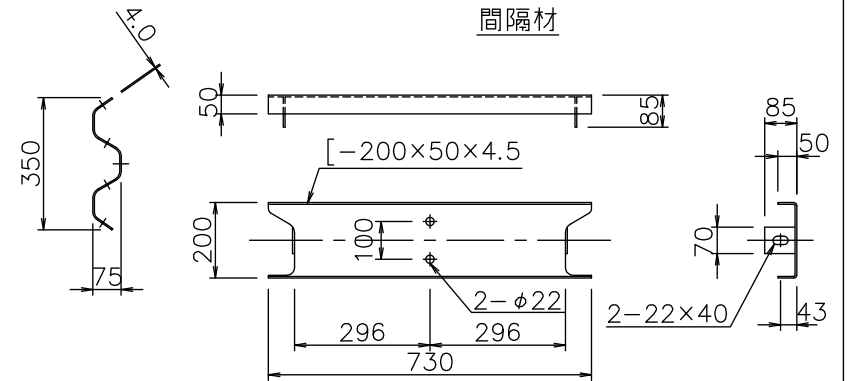
袖ビーム



ビーム



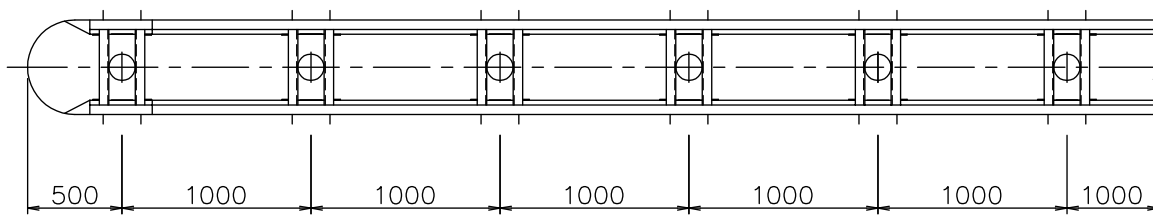
間隔材



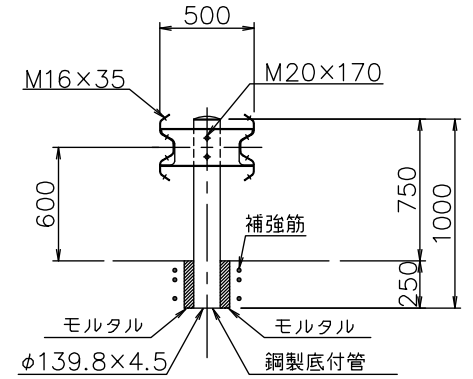
(注) 補強筋配置の詳細は別図-2に示す



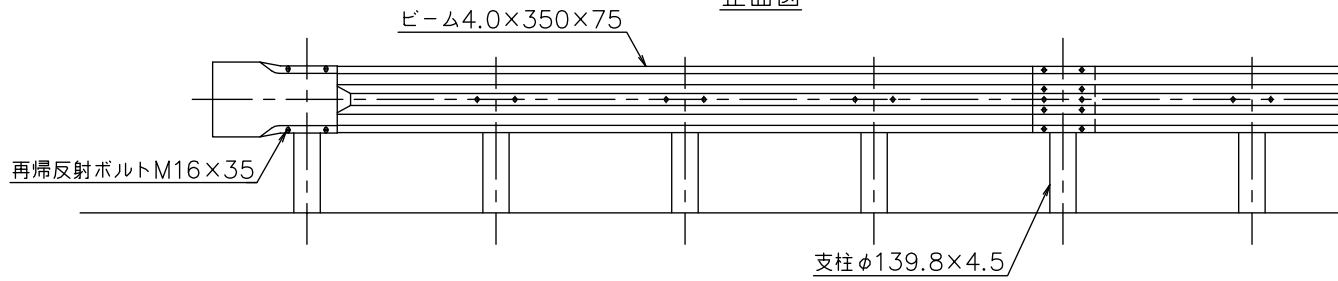
平面図



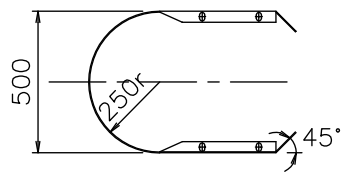
側面図



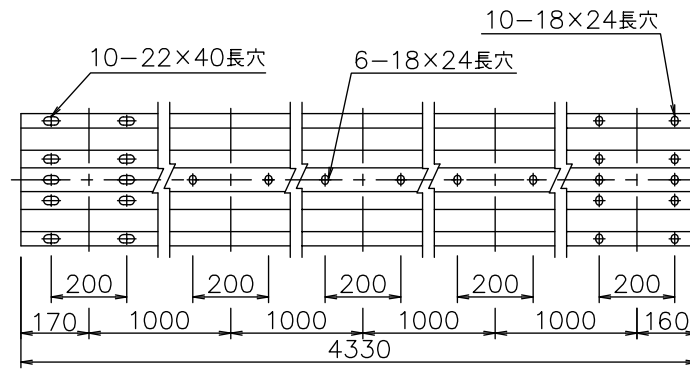
正面図



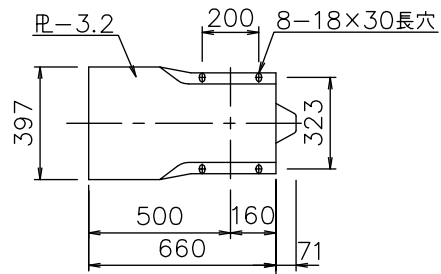
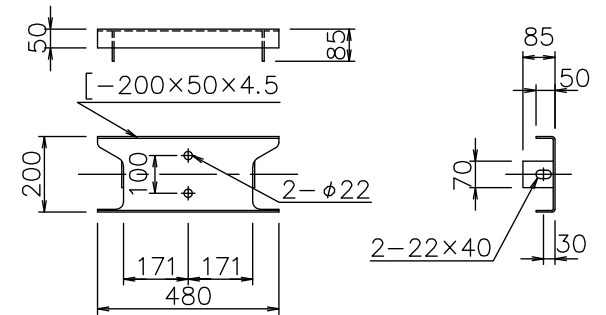
袖ビーム



ビーム

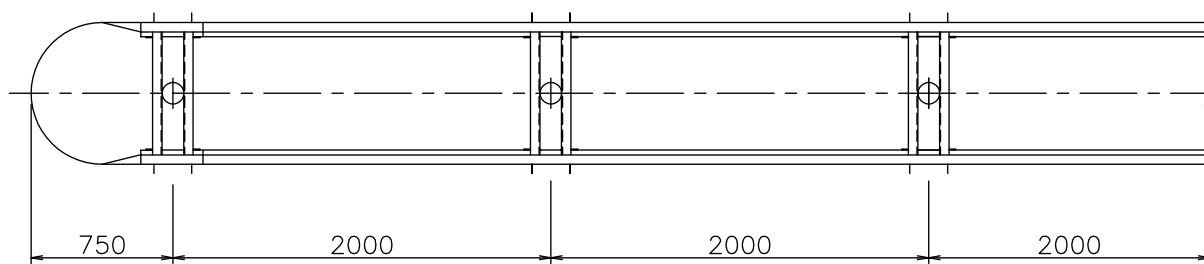


間隔材

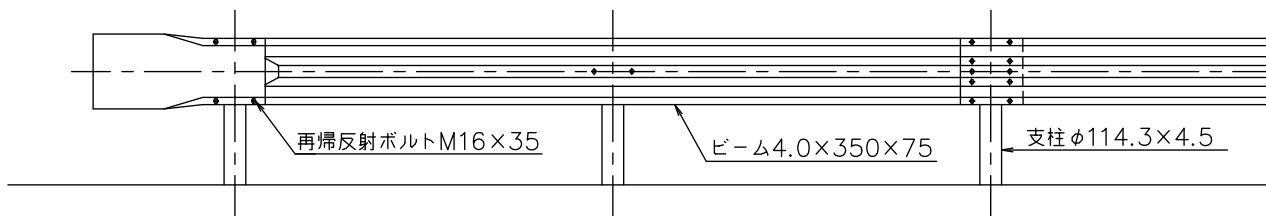


(注) 補強筋配置の詳細は別図-2に示す

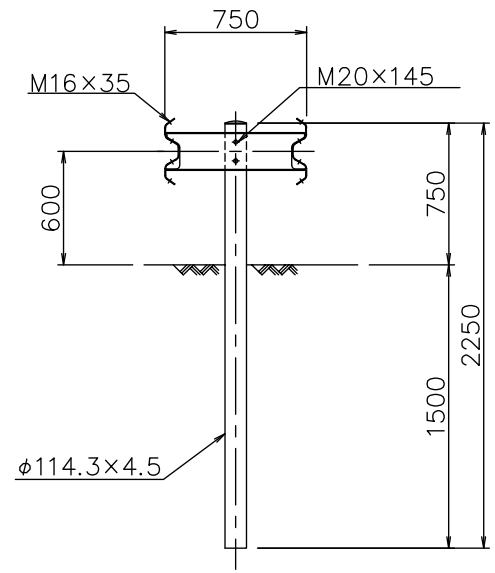
平面図



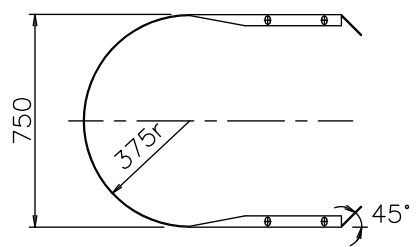
正面図



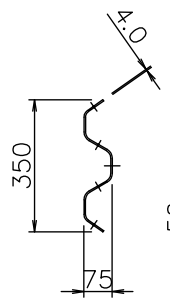
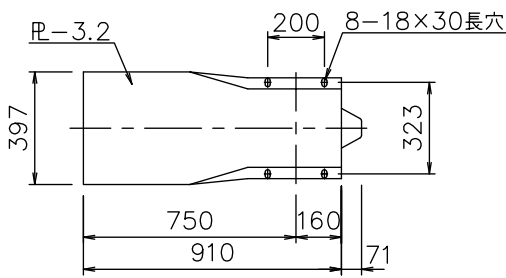
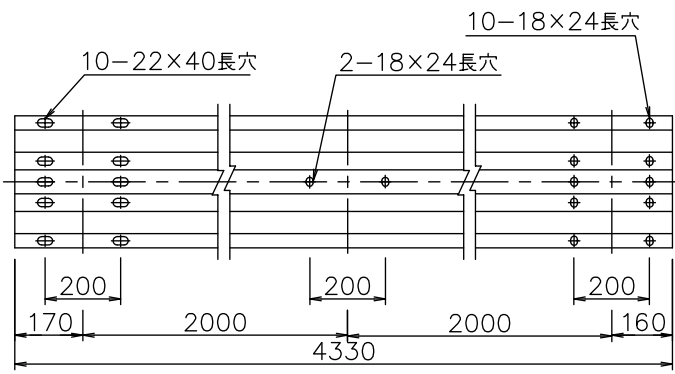
側面図



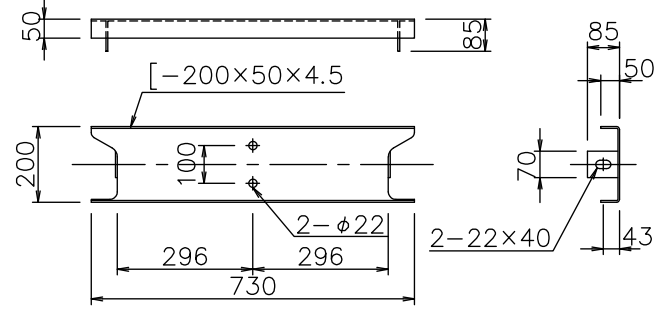
袖ビーム



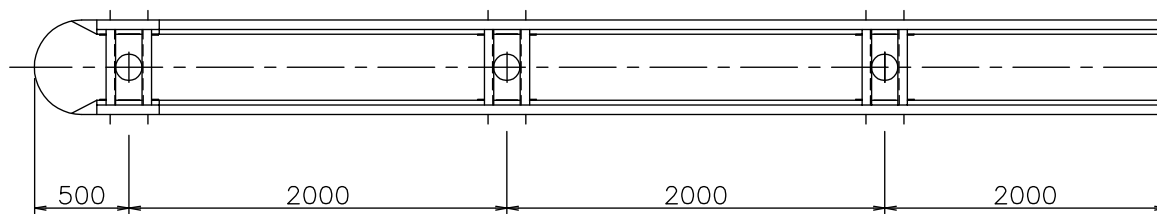
ビーム



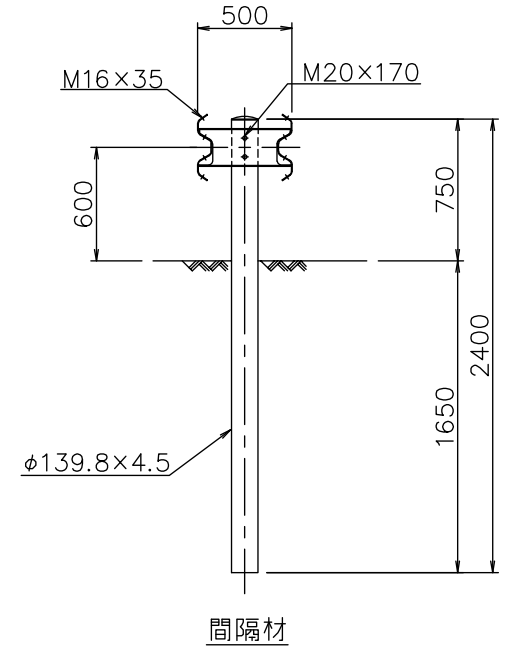
間隔材



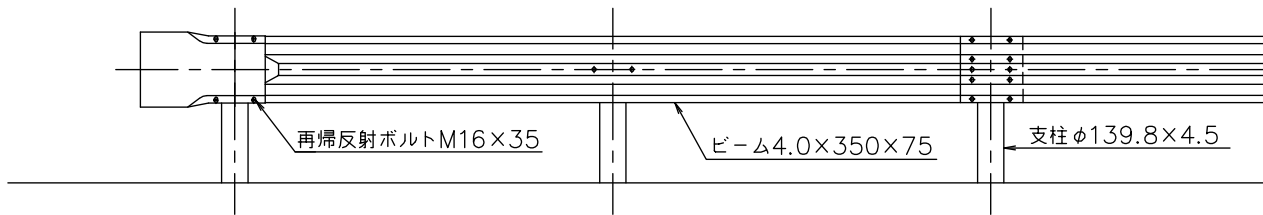
平面図



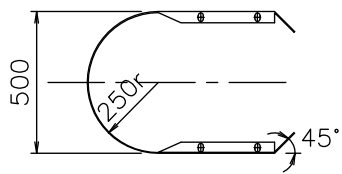
側面図



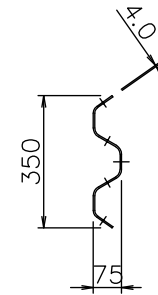
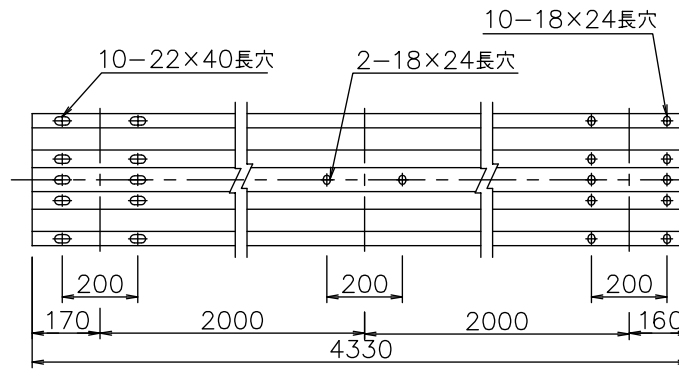
正面図



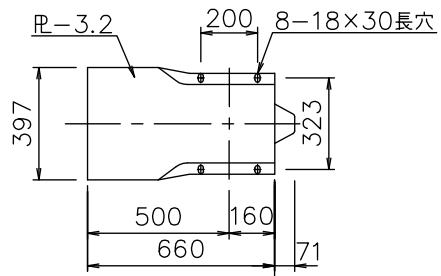
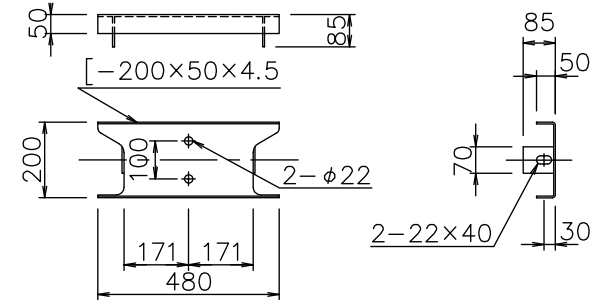
袖ビーム



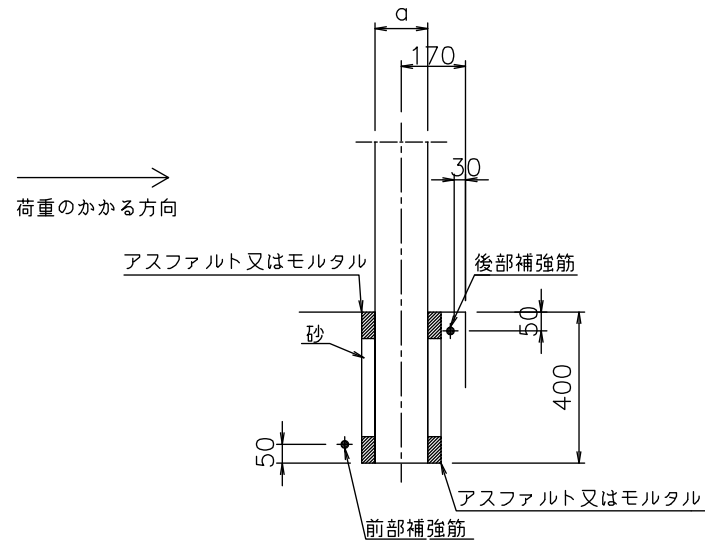
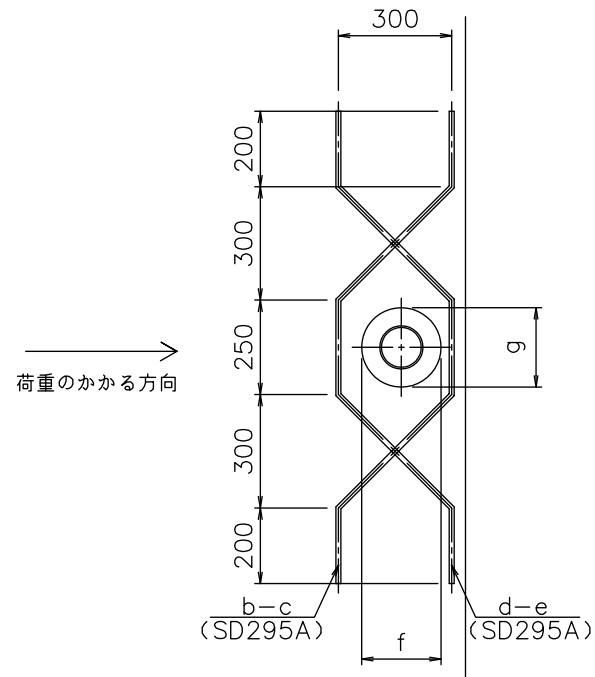
ビーム



間隔材



別図-1 コンクリート埋め込み支柱の定着部補強筋  
 (埋め込み深さ400mm(砂詰め固定)の場合)



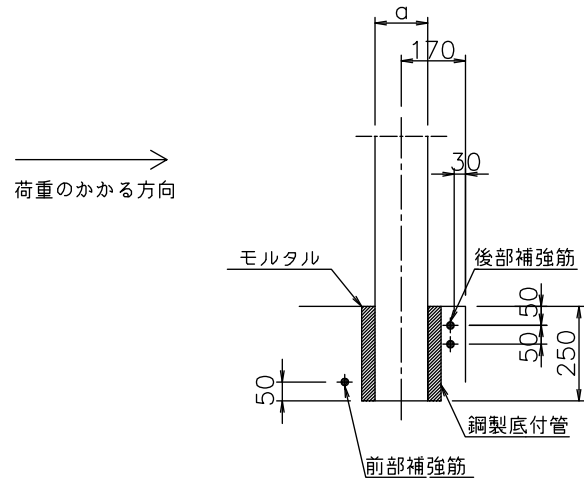
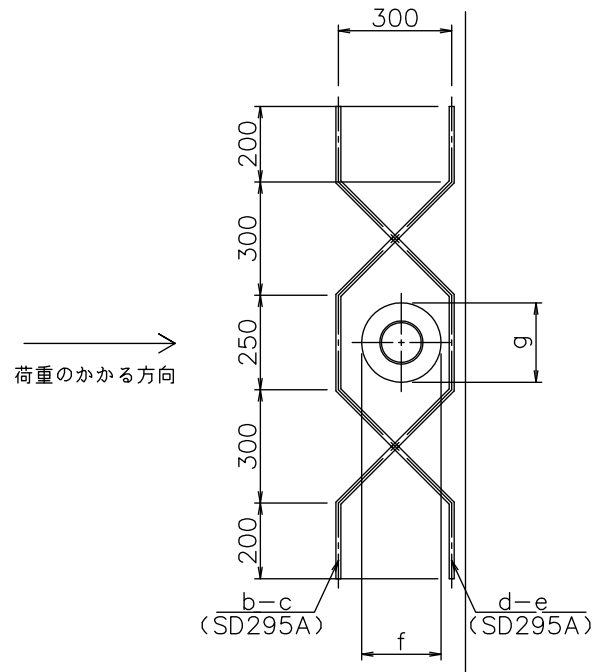
※コンクリート強度  $\sigma_{ck} = 21 \text{ N/mm}^2$

仕様記号	Gr-B	Gr-SC	Gr-SS
	Gr-C	Gr-A	Gr-SA
	Gr-SAm	Gr-SCm (※)	Gr-SB
	Gr-SBm	Gr-Am (※)	Gr-SSm
	Gr-SCm		
	Gr-Am		
	Gr-Bm		
	Gr-Cm		
	a	$\phi 114.3 \times 4.5$	$\phi -139.8 \times 4.5$
b	1	1	1
c	D13	D13	D22
d	1	1	1
e	D13	D13	D13
f	$\phi 180$	$\phi 200$	$\phi 200$
g			

(注) 分離帯の場合は左右対称に配筋する

(注) 分離帯狭幅員用を示す

別図-2 コンクリート埋め込み支柱の定着部補強筋  
(埋め込み深さ250mm(モルタル固定)の場合)



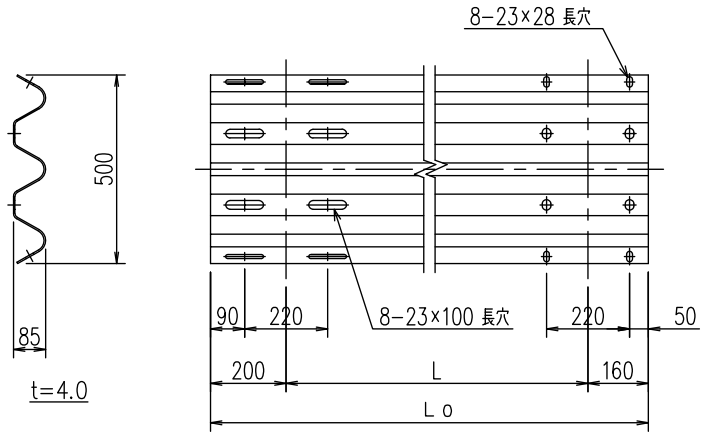
※コンクリート強度  $\sigma_{ck} = 21\text{N/mm}^2$

仕様記号	Gr-B	Gr-SC	Gr-SS	
	Gr-C	Gr-A	Gr-SA	
	Gr-SAm	Gr-SCm(※)	Gr-SB	
	Gr-SBm	Gr-Am(※)	Gr-SSm	
	Gr-SCm			
	Gr-Am			
	Gr-Bm			
	Gr-Cm			
	a	$\phi 114.3 \times 4.5$	$\phi -139.8 \times 4.5$	$\square 125 \times 125 \times 6$
	b	2	2	2
c	D16	D22	D25	
d	1	1	1	
e	D16	D22	D25	
f	$\phi 220$	$\phi 220$	$\phi 220$	
g				

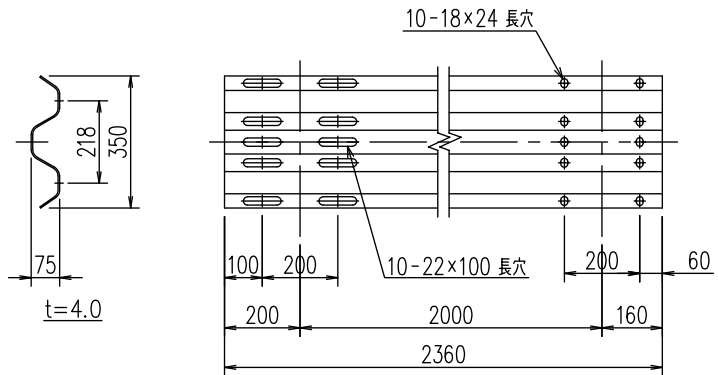
(注) 分離帯の場合は左右対称に配筋する

(注) 分離帯狭幅員用を示す

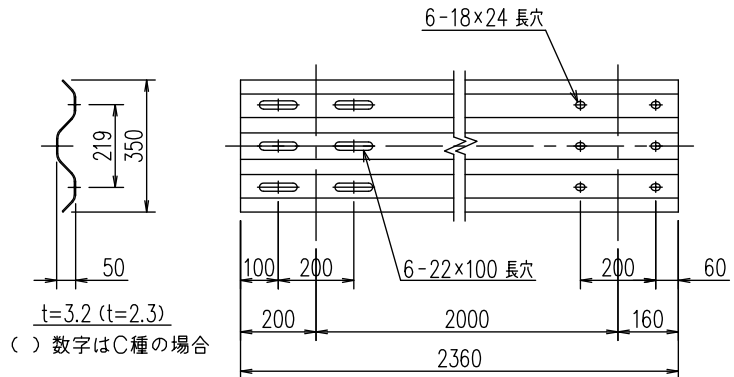
SC,SB,SA,SS 種 エキスパンション用ビーム



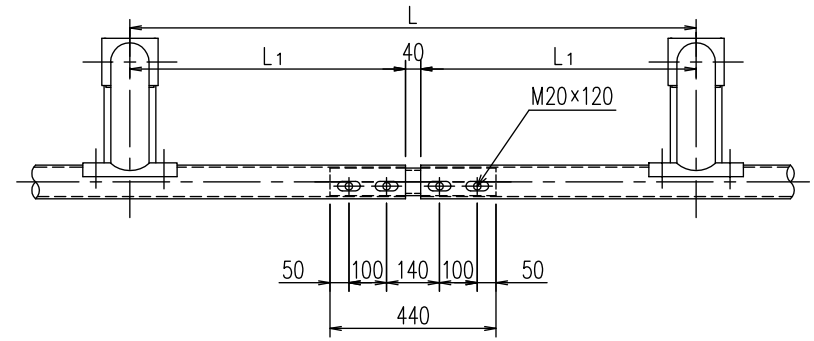
A 種 エキスパンション用ビーム



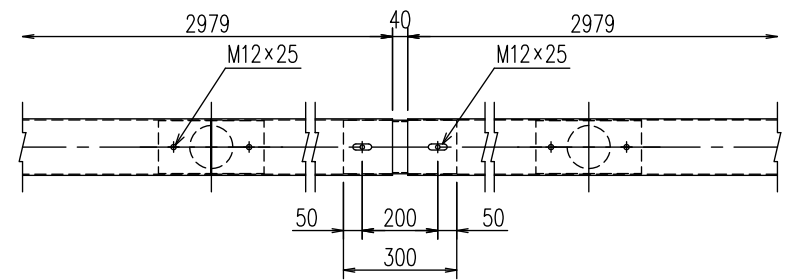
C,B 種 エキスパンション用ビーム



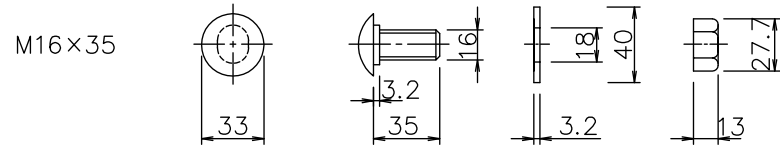
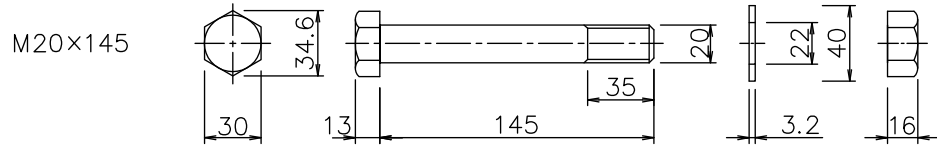
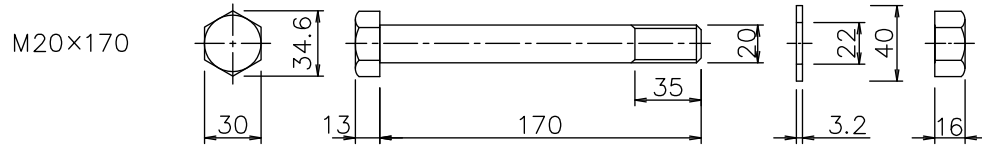
上段ビーム伸縮継手部



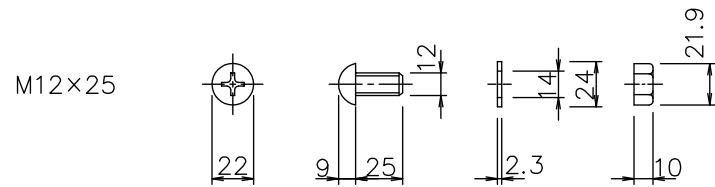
笠木伸縮継手部



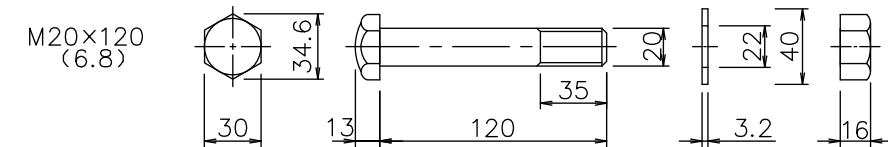
ボルト・ナット（一般用）



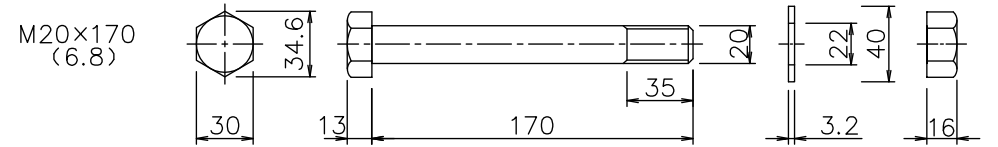
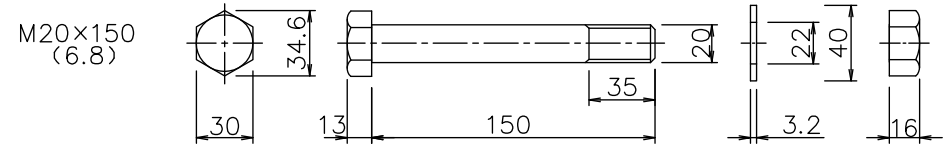
ボルト・ナット（笠木取付用）



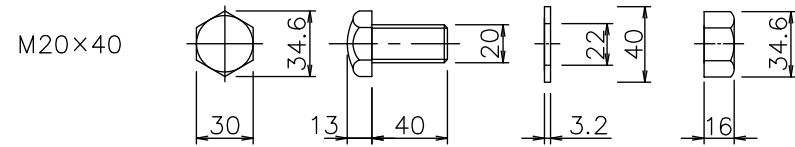
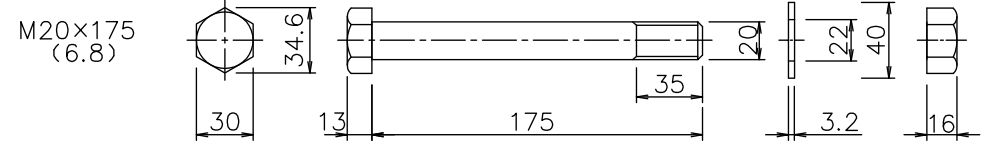
ボルト・ナット  
（Gr-SS,Gr-SAの上段ビーム用）



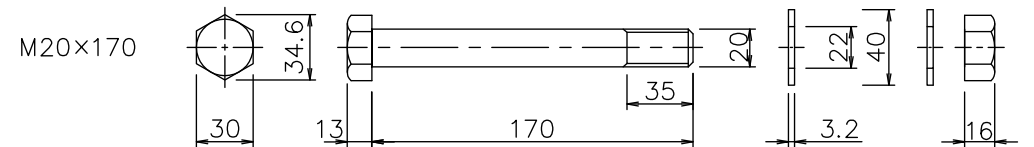
ボルト・ナット（高強度型用）



注) Gr-SSm用は2ワッシャーとする



ボルト・ナット  
（Gr-SS,Gr-SA,Gr-SB用）



ボルト・ナット  
（Gr-SC用）

