

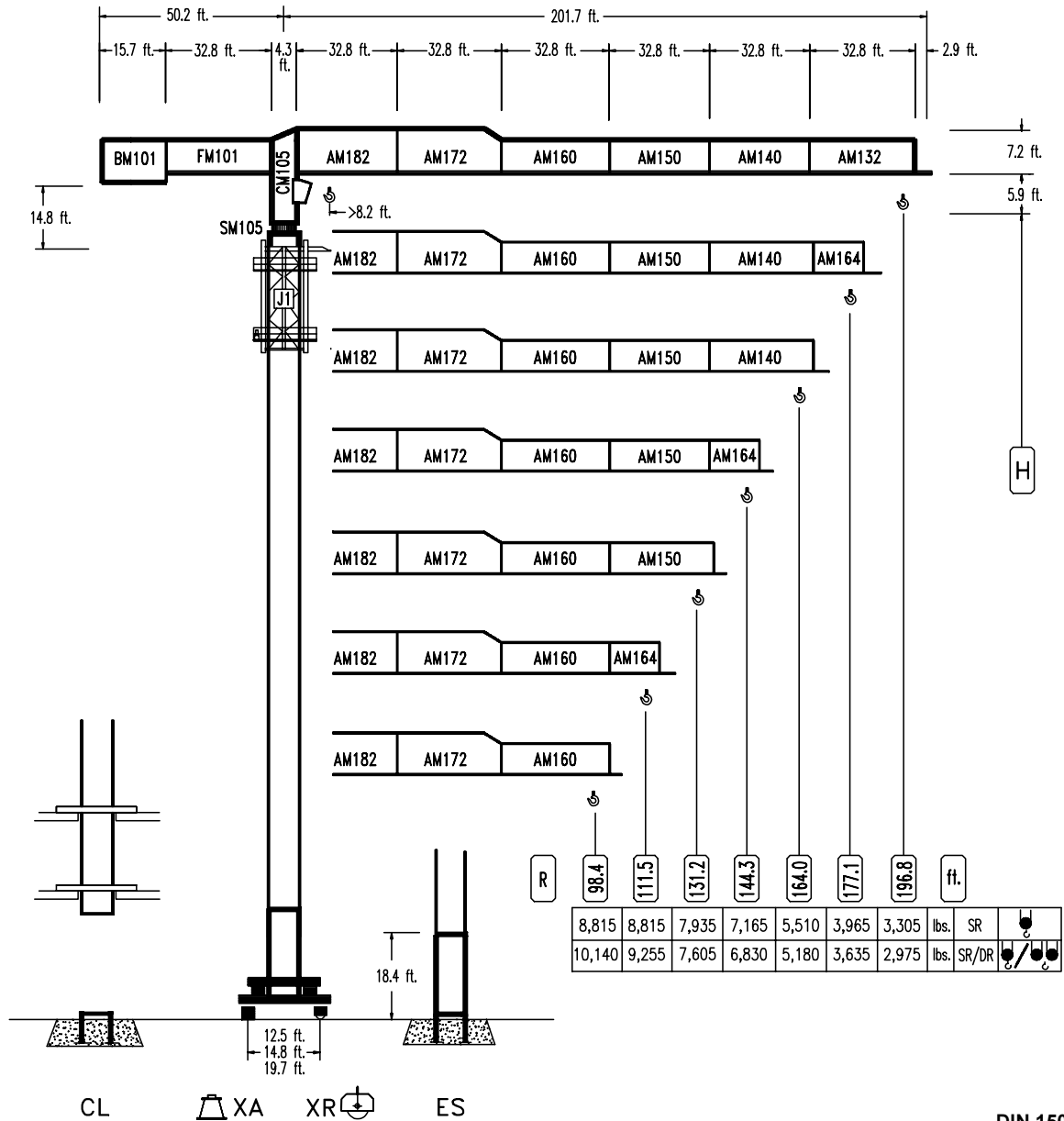


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LINDEN 1000

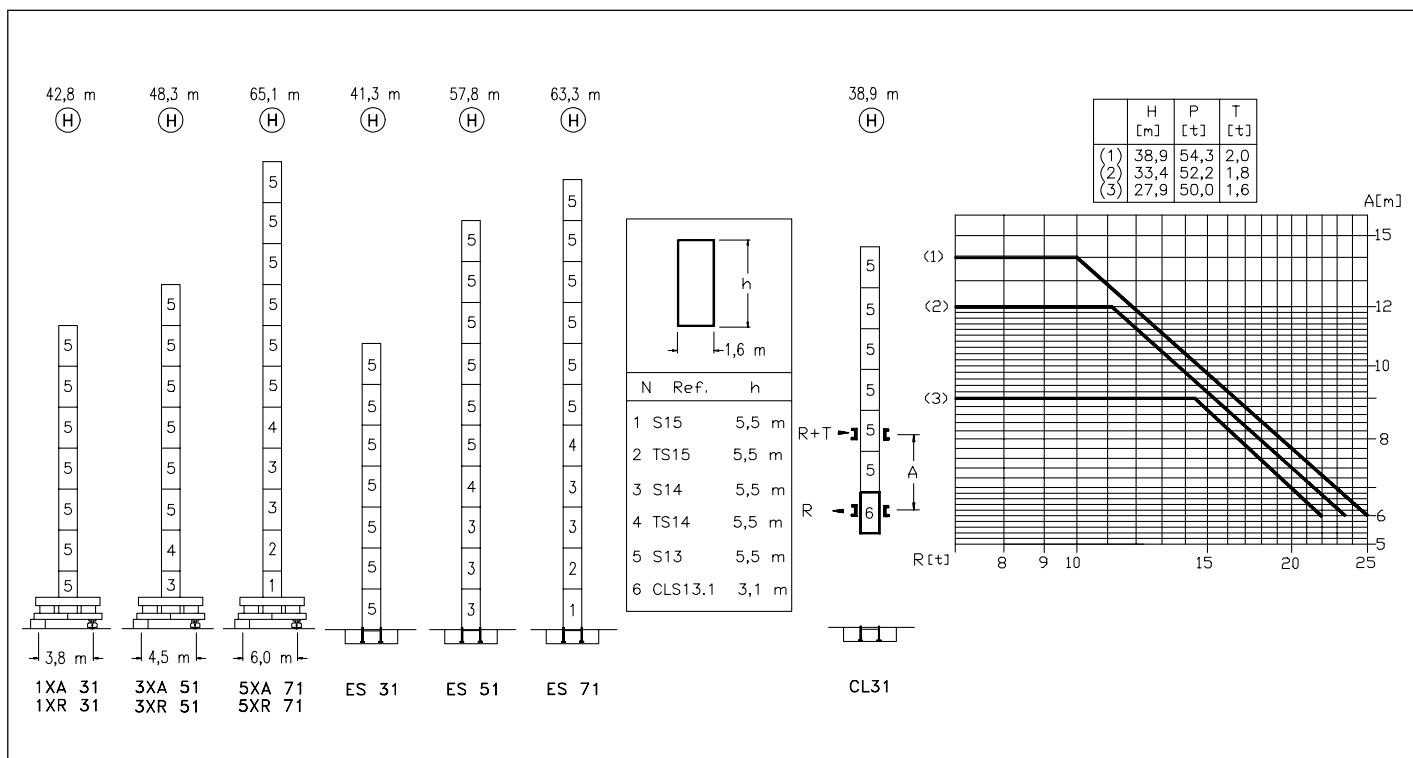
LC-1060

ft./lbs.



CE
DIN 15018 H1 B3

R	R(Cmax)	Cmax	82.0	98.4	111.5	131.2	144.3	164.0	177.1	196.8	ft.
196.8	SR	86.6 ft.	8,815	7,625	6,610	5,455	4,870	4,165	3,780	3,305	
	SR/DR	46.3 ft.	9,135	7,360	6,315	5,155	4,560	3,845	3,460	2,975	
177.1	SR	90.2 ft.	8,815	7,965	6,900	5,710	5,090	4,365	3,965		
	SR/DR	47.9 ft.	9,530	7,680	6,600	5,400	4,785	4,035	3,635		
164.0	SR	109.2 ft.	8,815	8,815	8,595	7,140	6,405	5,510			
	SR/DR	57.8 ft.	17,630	11,845	9,600	8,300	6,085	5,180			
144.3	SR	117.1 ft.	8,815	8,815	8,815	7,750	6,945				
	SR/DR	61.7 ft.	17,630	12,795	10,390	8,995	7,415	6,610			
131.2	SR	118.1 ft.	8,815	8,815	8,815	7,825					
	SR/DR	62.0 ft.	17,630	12,915	10,490	9,080	7,495				
111.5	SR	111.5 ft.	8,815	8,815	8,815						
	SR/DR	63.3 ft.	17,630	13,160	10,690	9,255					
98.4	SR	98.4 ft.	8,815	8,815							
	SR/DR	63.0 ft.	17,630	13,160	10,690						



CS3-3.7
3,7 kW

10 m/min
33 m/min
66 m/min

GR-7.5
2 x 75 Nm

0 $\varnothing$ 0,7 rpm

TS2-5.5 **TRA-7.5**
2 x 55 Nm 2 x 75 Nm

0 $\varnothing$ 20 m/min

1XR31 3XR51 5XR 71

TS2-5.5VC **TRA-7.5VC**
2 x 55 Nm 2 x 75 Nm

0 $\varnothing$ 20 m/min

1XR31 3XR51 5XR 71

ES3-25-20
25 kW

		I	II	III
SR	m/min	7	28	56
	t	4	4	2
DR	m/min	3,5	14	28
	t	8	8	4

CFU-4.0
4 kW

0 $\varnothing$ 66 m/min

EFU2-24-20
24 kW

		I	II	III
SR	m/min	9	36	72
	t	4	4	2
DR	m/min	4,5	18	36
	t	8	8	4

ES3-33-20
33 kW

		I	II	III
SR	m/min	9	36	72
	t	4	4	2
DR	m/min	4,5	18	36
	t	8	8	4

Tensión de alimentación Operating voltage Tension de service Betriebsspannung	400 V 3 ph 50 Hz
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Opcional Optional En option Kaufoption	*
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R. máx.	En servicio In operation En service In Betrieb	1XR31 72,7 t 3XR51 66,8 t 5XR71 80,2 t
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R. máx.	Fuera de servicio Out of service Hors service Ausser Betrieb	1XR31 87,1 t 3XR51 93,4 t 5XR71 125,8 t
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Construcciones Metálicas COMANSA S. A.
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Texas LoneStar Division
281. 772-9308
www.heedesoutheast.com

TECHNICAL SPECIFICATIONS

REACTIONS ON FIXING ANGLES

IESTAE1252

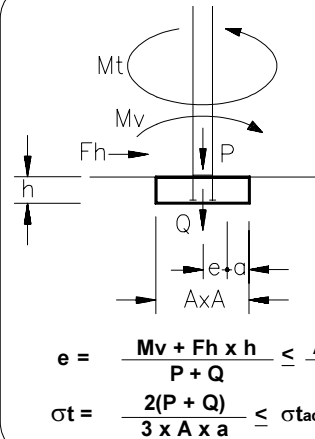
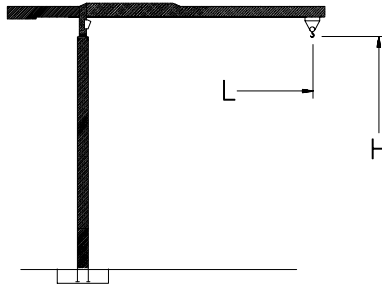
LC-1060



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ES51

SR/DR 17,640 lbs.



- Mt** -Torsional moment. (x1000) ft.lbs.
- Mv** -Overturning moment. (x1000) ft.lbs.
- P** -Weight of crane (x1000) lbs.
- Fh** -Horizontal reaction (x1000) lbs.
- Q** -Mass of foundation concrete (x1000) lbs.
- e** -Excentricity
- σt** -Pressure on ground
- σt_{adm}** -Permissible ground pressure
- L** -Max. hook radius ft.
- H** -Hook height ft.
- n** -Number of sections
- A** -Foundation dimensions ft.

H (ft.)	n		IN SERVICE								OUT OF SERVICE							
			L (ft.)								L (ft.)							
			196.8	177.1	164.0	144.3	131.2	111.5	98.4		196.8	177.1	164.0	144.3	131.2	111.5	98.4	
189.6	10	Mv	1,751	1,648	1,785	1,793	1,760	1,725	1,698		3,279	3,092	2,975	2,824	2,776	2,713	2,721	
		Fh	7	7	7	7	7	7	7		27	26	26	26	26	26	26	
		P	134	134	133	131	130	124	121		117	116	116	114	112	106	104	
171.6	9	Mv	1,583	1,482	1,618	1,628	1,595	1,562	1,537		2,657	2,478	2,367	2,222	2,177	2,120	2,131	
		Fh	6	6	6	6	6	6	6		24	24	24	24	24	23	23	
		P	129	128	128	126	124	118	116		111	111	110	108	107	101	98	
153.5	8	Mv	1,432	1,335	1,469	1,479	1,448	1,416	1,392		2,103	1,932	1,826	1,687	1,646	1,594	1,607	
		Fh	6	6	6	6	6	6	6		22	22	21	21	21	21	21	
		P	123	123	122	120	119	113	110		106	105	105	103	101	95	93	
135.5	7	Mv	1,298	1,203	1,336	1,348	1,317	1,287	1,263		1,613	1,450	1,347	1,215	1,176	1,129	1,145	
		Fh	5	5	5	5	5	5	5		19	19	19	19	19	19	18	
		P	118	117	117	115	113	107	105		100	100	99	97	96	90	87	
117.5	6	Mv	1,179	1,087	1,219	1,231	1,202	1,173	1,150		1,183	1,026	928	800	766	723	743	
		Fh	5	5	5	5	5	5	5		17	17	17	16	16	16	16	
		P	112	112	111	109	108	102	99		95	94	94	91	90	84	82	
99.4	5	Mv	1,081	991	1,122	1,135	1,107	1,079	1,057		833	683	589	582	596	609	570	
		Fh	4	4	4	4	4	4	4		15	15	14	14	14	14	14	
		P	108	107	107	104	103	97	95		90	89	89	87	85	80	77	
81.4	4	Mv	996	907	1,038	1,051	1,024	998	976		531	411	486	582	596	609	570	
		Fh	4	4	4	4	4	4	4		13	12	12	12	12	11	11	
		P	103	102	102	100	98	92	90		85	85	84	82	81	75	72	
		Mv																
		Fh																
		P																
Mt			123	123	123	123	123	123	123		0	0	0	0	0	0	0	

TECHNICAL SPECIFICATIONS

REACTIONS ON FIXING ANGLES / PRESSURE UNDER FOUNDATION

IESTAE1255

LC1060

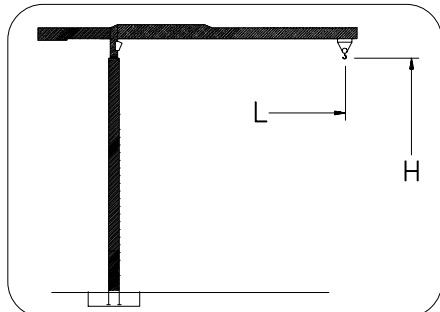
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COMANSA

ES51

CONCERNING THE FIXING ANGLES FOUNDATION SEE DOCUMENT:
IIMJAC1033 (EPS41)



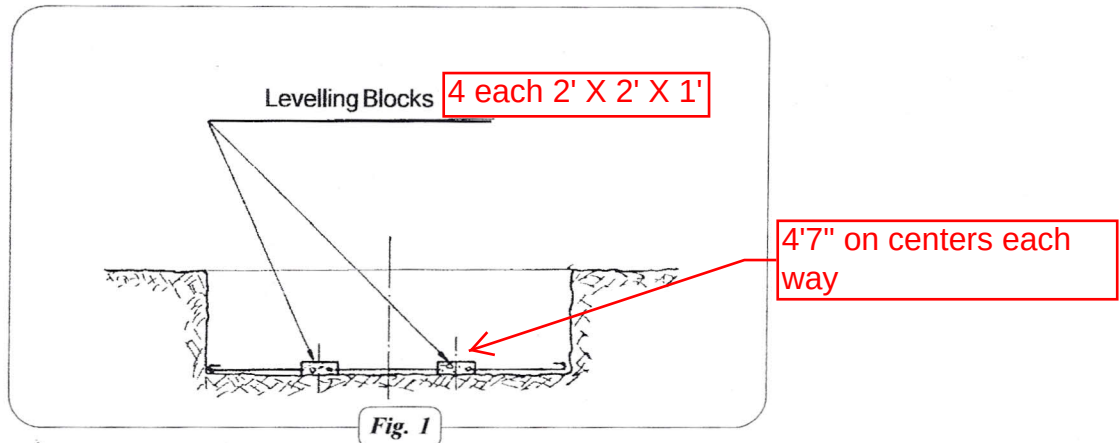
	A x A x h (ft.)
D1	13.1 x 13.1 x 6.56
D2	14.8 x 14.8 x 6.56
D3	16.4 x 16.4 x 6.56
D4	18.0 x 18.0 x 6.56
D5	19.7 x 19.7 x 6.56
D6	21.3 x 21.3 x 6.56

A x A x h -Foundation dimensions
H -Hook height
SR -Single reenving
DR -Double reeving

PRESSURE UNDER FOUNDATION
IN psi.

	H	D 1	D 2	D 3	D 4	D 5	D 6		
S R	189.6	-	-	-	-	-	27.1		
	171.6	-	-	-	-	28.0	31.6		
	153.5	-	-	-	29.5	21.9	18.2		
	135.5	-	-	30.0	22.2	18.1	15.9		
	117.5	-	27.7	21.1	17.6	15.4	14.2		
	99.4	40.5	25.6	20.0	16.9	14.9	14.2		
	81.4	35.9	23.9	19.0	16.3	14.5	14.2		
D R	189.6	-	-	-	-	-	27.1		
	171.6	-	-	-	-	28.0	21.6		
	153.5	-	-	-	29.5	21.9	18.2		
	135.5	-	-	30.0	22.2	18.1	15.9		
	117.5	-	29.0	21.9	18.2	15.9	14.4		
	99.4	42.0	26.5	20.6	17.4	15.3	14.2		
	81.4	37.4	24.8	19.6	16.8	14.9	14.2		

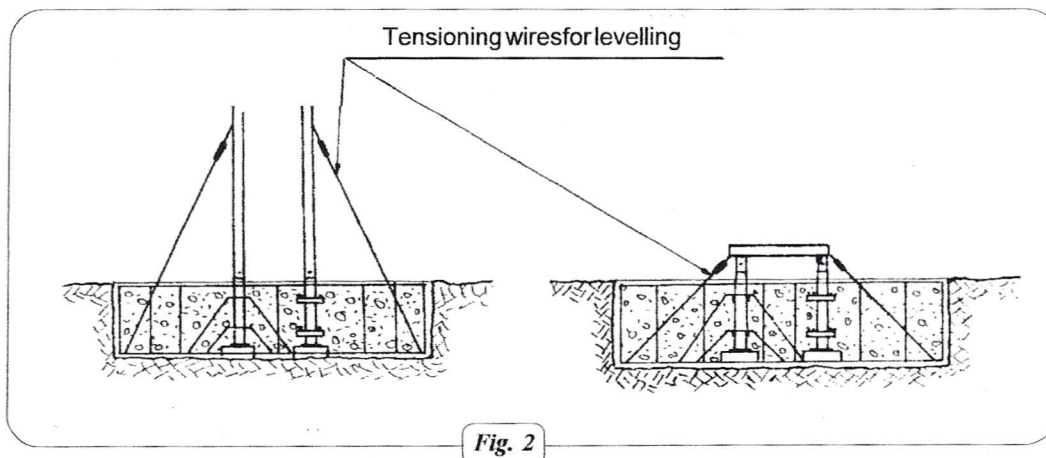
- 1 Excavate.
Prepare 4 levelling blocks for the fixing angles. (Fig. 1)



- 2 Place fixing angles and locate re-bars.
Level.

Levelling can be either done using a template or a mast section (Fig. 2)

- 3 Pour concrete, vibrate to eliminate air-pockets and settle correctly.
- 4 Before erecting crane, ensure that concrete is duly cured to prevent possibility of movement.
- 5 Connect to ground the anchor base. See instructions in chapter "ELECTRICAL INSTALLATION"



INSTALLATION AND ERECTION

FIXING ANGLE FOUNDATIONS

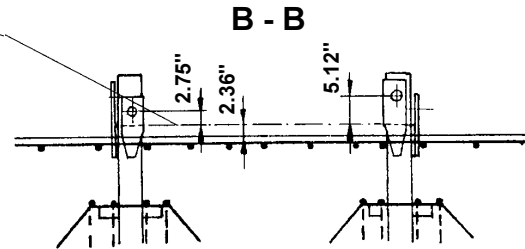
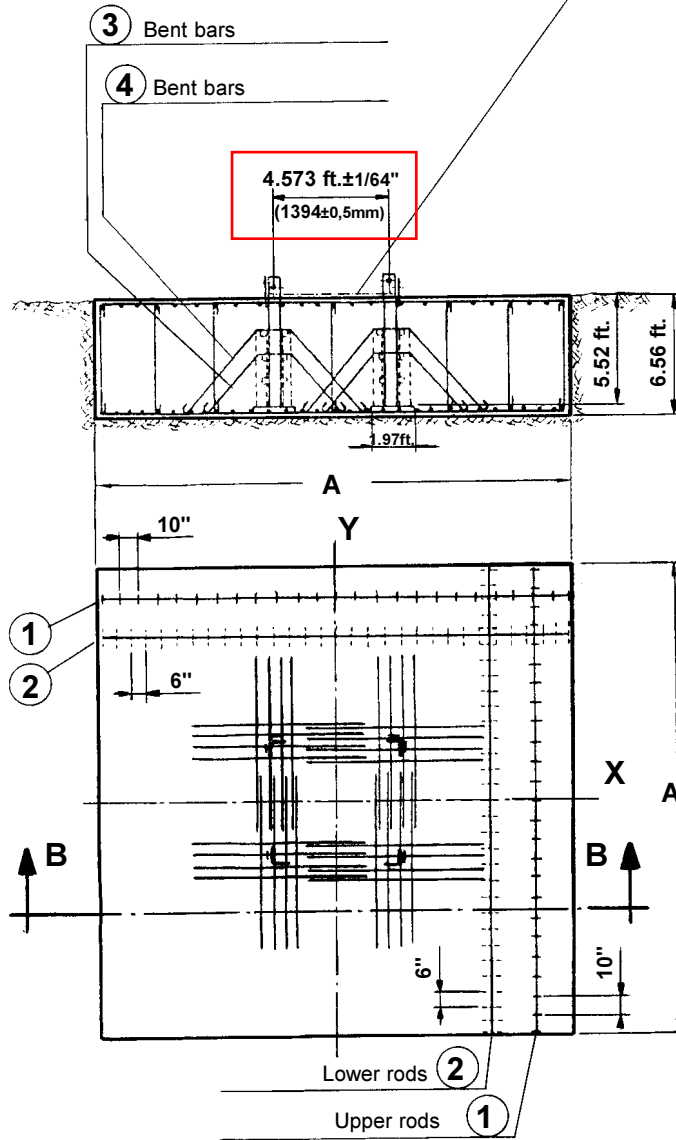
IIMJAC1033

EPS41



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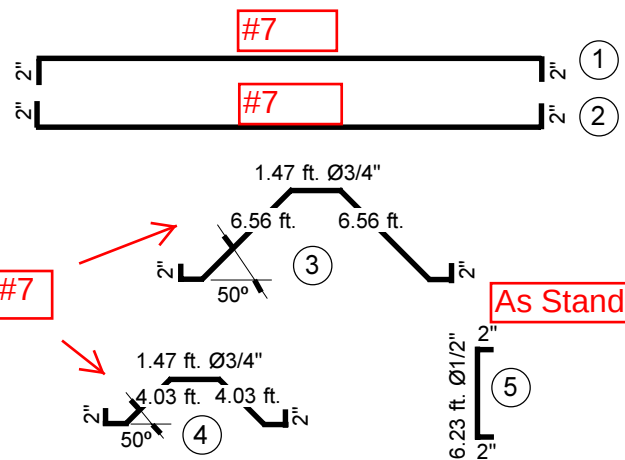
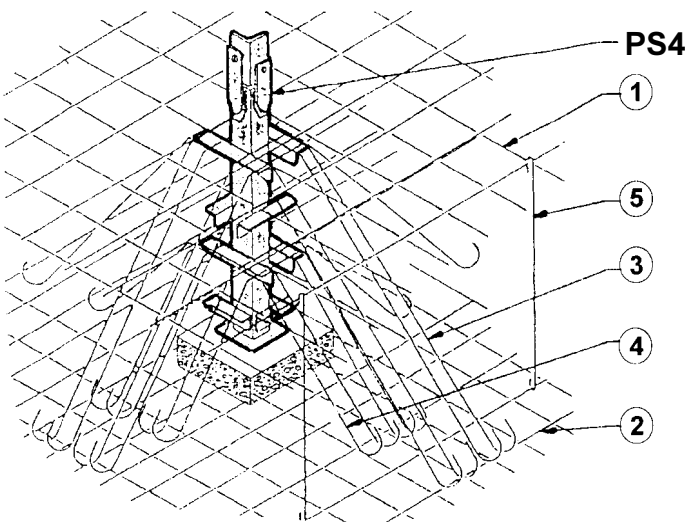
Max. permitted height tolerance between feet in any axis: $\pm 1/32"$



ATTENTION: Check the anchoring feet position in relation to the X and Y axes.

A x A	L	1	2	3	4	Q
(ft.)	(ft.)					(lbs) (x1000)
13.1x13.1	12.8	MESH 10 x 10	MESH 6 x 6	16	16	169.8
14.8x14.8	14.4			16	16	213.8
16.4x16.4	16.1			16	16	264.6
18.0x18.0	17.7			16	16	319.7
19.7x19.7	19.4			16	16	381.4
21.3x21.3	21.0			16	16	454.1

ALWAYS use either a mast section or COMANSA - built template to locate the fixing angles.



CONCRETE RESISTANCE 5,000 psi.
MIN. CONCRETE DENSITY 150 lbs.cu.ft.
WEIGHT OF FOUNDATIONS Q