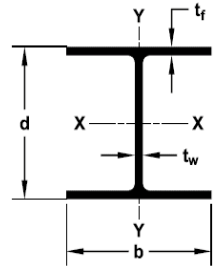




# H-PILES



# H-PILE SERIES



SECTION HP	Weight (m) lb/ft (kg/m)	Area (A) in <sup>2</sup> (cm <sup>2</sup> )	Depth (d) in (mm)	Flange Width (b) in (mm)	Thickness		Coating Area ft <sup>2</sup> /ft (m <sup>2</sup> /m)	ELASTIC PROPERTIES							
					Flange (t <sub>f</sub> ) in (mm)	Web (t <sub>w</sub> ) in (mm)		AXIS X-X				AXIS Y-Y			
								I in <sup>4</sup> (cm <sup>4</sup> )	S in <sup>3</sup> (cm <sup>3</sup> )	Z in <sup>3</sup> (cm <sup>3</sup> )	r in (cm)	I in <sup>4</sup> (cm <sup>4</sup> )	S in <sup>3</sup> (cm <sup>3</sup> )	Z in <sup>3</sup> (cm <sup>3</sup> )	r in (cm)
8X8 HP 200	36	10.6	8.02	8.16	0.445	0.445	3.92	119	29.8	33.6	3.36	40.3	9.88	15.2	1.95
	54	68.4	204	207	11.3	11.3	1.19	4953	488	550.6	8.53	1677	162	249.1	4.95
10X10 HP 250	42	12.4	9.70	10.10	0.420	0.415	4.83	210	43.4	48.3	4.13	71.7	14.2	21.8	2.41
	63	80.0	246	257	10.7	10.5	1.47	8741	711	791.5	10.5	2984	233	357.2	6.12
	57	16.7	9.99	10.20	0.565	0.565	4.91	294	58.8	66.5	4.18	101	19.7	30.3	2.45
	85	108	254	259	14.4	14.4	1.50	12237	964	1089.7	10.6	4204	323	496.5	6.22
12X12 HP 310	53	15.5	11.80	12.00	0.435	0.435	5.82	393	66.7	74.0	5.03	127	21.1	32.2	2.86
	79	100	300	305	11.0	11.0	1.77	16358	1093	1212.6	12.8	5286	346	527.7	7.26
	63	18.4	11.90	12.10	0.515	0.515	5.86	472	79.1	88.3	5.06	153	25.3	38.7	2.88
	94	119	302	307	13.1	13.1	1.79	19646	1296	1447.0	12.9	6368	415	634.2	7.32
	74	21.8	12.10	12.20	0.610	0.605	5.91	569	93.8	105	5.11	186	30.4	46.6	2.92
	110	141	307	310	15.5	15.4	1.80	23683	1537	1720.6	13.0	7742	498	763.6	7.42
	84	24.6	12.30	12.30	0.685	0.685	5.97	650	106	120	5.14	213	34.6	53.2	2.94
	125	159	312	312	17.4	17.4	1.82	27055	1737	1966.4	13.1	8866	567	871.8	7.47
	89	25.9	12.36	12.32	0.720	0.720	6.04	689	111.6	126.3	5.16	225	36.5	56.2	2.94
	132	167	314	313	18.3	18.3	1.84	28700	1830	2070	13.1	9370	599	922	7.48
14X14 HP 360	102	29.9	12.56	12.64	0.819	0.819	6.17	811	129.3	147.6	5.20	276	43.7	67.1	3.04
	152	193	319	321	20.8	20.8	1.88	33800	2120	2420	13.2	11500	716	1100	7.71
	117	34.4	12.76	12.87	0.929	0.929	6.26	946	148.2	170.8	5.24	331	51.4	79.3	3.11
	174	222	324	327	23.6	23.6	1.91	39400	2430	2800	13.3	13800	843	1300	7.89
	73	21.4	13.60	14.60	0.505	0.505	6.96	729	107	118	5.84	261	35.8	54.6	3.49
	109	138	345	371	12.8	12.8	2.12	30343	1753	1933.7	14.8	10864	587	894.7	8.86
16X16 HP 410	88	25.8	15.30	15.70	0.540	0.540	7.52	1110	145	161	6.56	349	44.5	68.2	3.68
	131	167	389	399	13.7	13.7	2.29	46201	2376	2638.3	16.7	14526	729	1117.6	9.35
	101	29.9	15.50	15.80	0.625	0.625	7.56	1300	168	187	6.59	412	52.2	80.1	3.71
	150	193	394	401	15.9	15.9	2.30	54110	2753	3064.4	16.7	17149	855	1312.6	9.42
	121	35.8	15.80	15.90	0.750	0.750	7.62	1590	201	226	6.66	504	63.4	97.6	3.75
16X16 HP 410	180	231	401	404	19.1	19.1	2.32	66180	3294	3703.5	16.9	20978	1039	1599.4	9.53
	141	41.7	16.00	16.00	0.875	0.875	7.69	1870	234	264	6.70	599	74.9	116	3.79
	210	269	406	406	22.2	22.2	2.34	77835	3835	4326.2	17.0	24932	1227	1900.9	9.63

Please contact a JD Fields representative for available material grades and delivery conditions.



## SPECIFICATIONS

### STEEL GRADES FOR HP PROFILES

AVAILABLE STEEL GRADES								
AMERICAN			CANADIAN			EUROPEAN**		
ASTM	YIELD STRENGTH			YIELD STRENGTH		EN 10034	YIELD STRENGTH	
	(ksi)	(MPa)		(ksi)	(MPa)		(ksi)	(MPa)
<b>A 36</b>	36	250		44	300	<b>HISTAR 355</b>	51	355
<b>A 572 Grade 50*</b>	50	345		50	350	<b>HISTAR 420</b>	61	420
<b>A 572 Grade 60</b>	60	415				<b>HISTAR 460</b>	67	460
<b>A 588</b>	50	345						
<b>A 690</b>	50	345						

### DELIVERY CONDITIONS & TOLERANCES

#### ASTM A 6

Mass	± 2.5%	
Length <sup>§</sup>		
30 Feet and Under	± 0.375 inches	
Over 30 Feet	+ (0.375 inches + (length - 30)/80)	- 0.375 inches
Depth	± 0.125 inches	- 0.1875 inches
Flange Width	+ 0.25 inches	
Flanges out of Square		
HP 8 x 42 - HP 12 x 84	≤ 0.25 inches	
HP 14 x 73 - HP 14 x 117	≤ 0.3125 inches	
Web off Center	≤ 0.1875 inches Greatest Depth over Theoretical	≤ 0.25 inches Camber and Sweep***
45 Feet and Under	(0.125") (Length in feet/10) but not over 0.375"	
Over 45 Feet	(0.375") + (0.125" Length in feet - 45/10)	

For HP ordered as bearing piles, length tolerances are +5 in. and -0 in.

\*\*\*For the HP 10 x 42, 12 x 53, 12 x 63, 14 x 73, and 14 x 89 ordered as columns, tolerances are subject to negotiation with manufacturer.

#### MAXIMUM ROLLED LENGTHS<sup>†</sup>

HPs	130'	39.6 m
-----	------	--------

†Longer lengths may be possible upon request.

# H-PILE ACCESSORIES

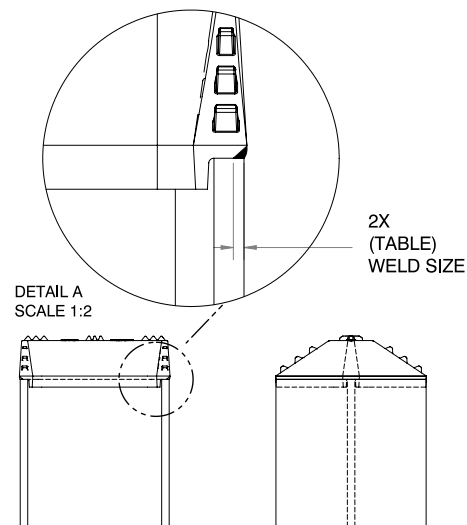
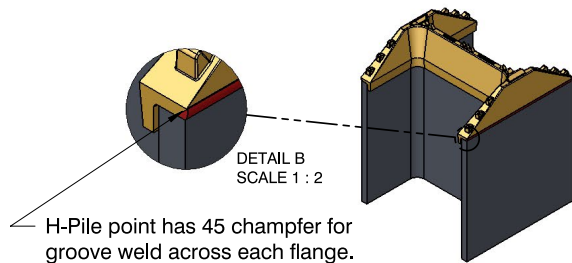
## H-PILE POINTS

H-Pile points are made of high strength, low alloy cast steel. Cast steel is a superior material choice because it's isotropic – its properties are uniform in all directions. Cast steel points absorb impact and transfer it uniformly to the end of the pile.

Tips are pre-beveled, eliminating pile end preparation. The weld prep is already built into the point; our castings have a 45 degree weld chamfer so there is no need to chamfer piles.

### WELD PROCEDURE

1. To ensure proper seating of the tip, remove all flash from end of pile and insert tip.
2. Using a 70xx series rod, make a single pass weld across each flange on the outside only.
3. Do not weld web or inside of flanges.
4. For heavier sections, you may want to use multiple welding passes.

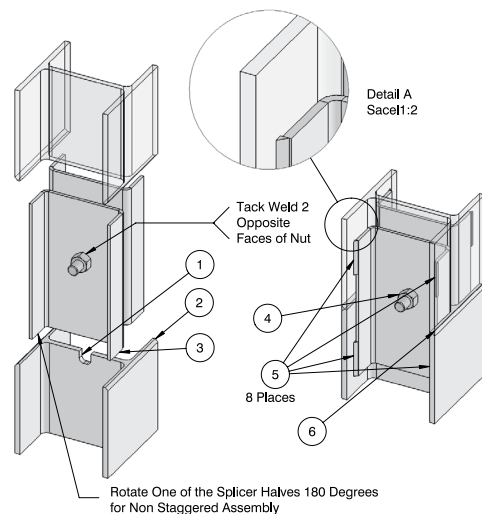


## H-PILE SPLICER

H-Pile splicers save time during driving of long piles by eliminating the need for a full penetration weld. Made in ASTM A572 GR.50 or higher strength if requested.

### WELD PROCEDURE

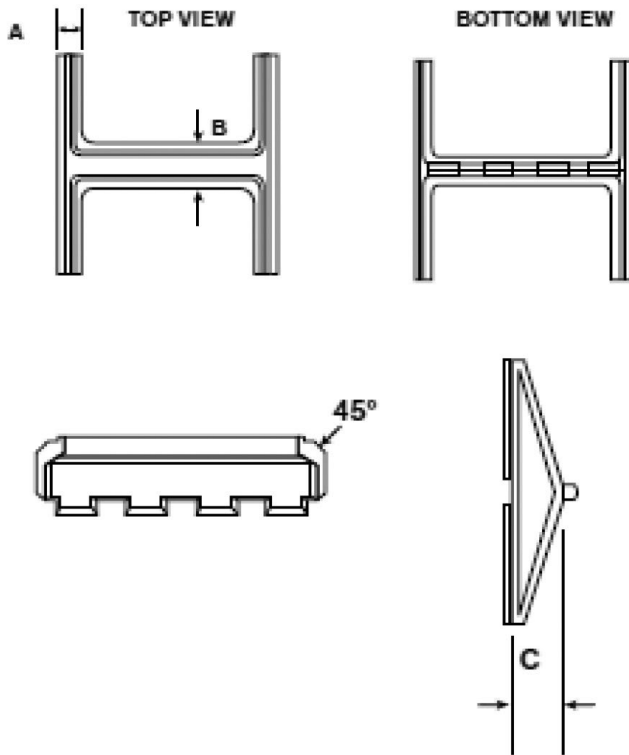
1. Cut 1.0" wide x 1.0" long notch in center of web of one pile.
2. Chamfer outside edges of flanges on ends of one or both piles to be spliced. Make chamfer to about 1/2 material thickness.
3. Insert splicer on first pile making sure bolt is completely inside notch.
4. Install the next section of pile and tighten bolt.
5. Using a 70xx series rod, weld the flanges of splicer to the flanges of the pile with (TABLE)" by 3" vertical fillets.
6. Weld the outside flanges of the piles to complete.



# H-PILE ACCESSORIES

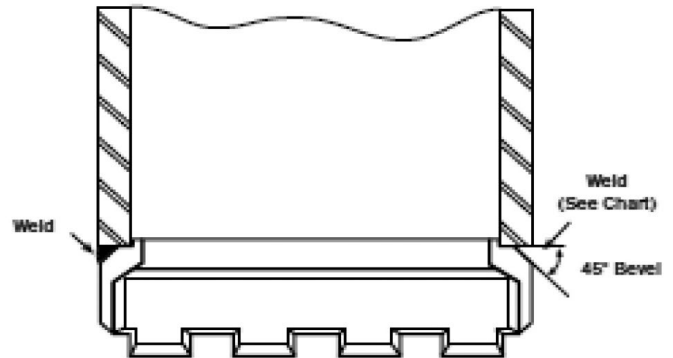
## H-PILE POINT

### DIMENSIONS



### INSTALLATION INSTRUCTIONS

1. Fit point onto the end of the square cut pile end.
2. Weld point to the pile in either flat or vertical position using E70XX electrodes or equivalent filler material.
3. Weld across full width of flange following chart below for minimum size weld.



ASTM A148 90/60 - Heat Treated			
	10"	12"	14"
<b>A</b>	1"	1-1/4"	1-1/4"
<b>B</b>	1-1/4"	1-7/16"	1-3/4"
<b>C</b>	2-9/16"	2-5/8"	2-15/16"
<b>WT</b>	14	23	30

Normal Foundry Tolerances Apply

Pile Size	Flange Thickness	Minimum Size Groove Weld
HP 14 x 117	.805	7/16
HP 14 x 102	.705	3/8
HP 14 x 89	.615	3/8
HP 14 x 73	.505	5/16
HP 12 x 84	.685	3/8
HP 12 x 74	.610	3/8
HP 12 x 63	.515	5/16
HP 12 x 53	.435	5/16
HP 10 x 57	.565	5/16
HP 10 x 42	.420	5/16