

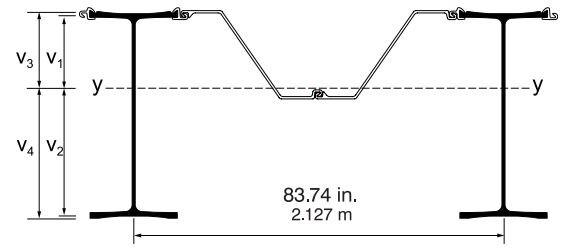


HZ[®]-M STEEL WALL SYSTEMS



HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-12 / AZ 18-800

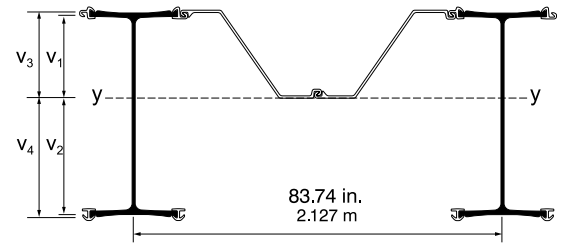


JD FIELDS & COMPANY, INC. A FIELDS COMPANY SECTION	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 18-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
HZ 630M	12.55 265.7	1,112.0 151,850	83.0 4,465	93.0 5,000	35.13 172	38.93 190	42.72 209	8.73 2.660	15.11 4.605
HZ 880M A	11.97 253.4	1,641.1 224,100	93.2 5,010	106.7 5,740	33.28 162	37.01 181	40.74 199	8.85 2.699	16.72 5.095
HZ 880M B	12.68 268.3	1,763.9 240,880	100.7 5,415	113.5 6,100	35.69 174	39.42 192	43.14 211	8.86 2.702	16.72 5.097
HZ 880M C	13.00 275.1	1,847.3 252,260	105.4 5,665	118.4 6,365	36.78 180	40.51 198	44.23 216	8.86 2.702	16.72 5.097
HZ 1080M A	13.69 289.8	2,964.2 404,780	131.7 7,080	147.7 7,940	39.12 191	42.86 209	46.59 227	8.84 2.695	18.15 5.533
HZ 1080M B	14.20 300.6	3,188.2 435,370	141.6 7,615	157.9 8,490	40.86 200	44.60 218	48.33 236	8.84 2.696	18.15 5.533
HZ 1080M C	15.12 320.1	3,458.0 472,210	153.9 8,270	169.9 9,135	44.00 215	47.73 233	51.47 251	8.85 2.697	18.16 5.535
HZ 1080M D	15.87 335.9	3,721.3 508,160	165.2 8,880	181.9 9,780	46.55 227	50.28 245	54.01 264	8.85 2.698	18.16 5.535
HZ 1180M A	16.47 348.6	3,919.2 535,180	173.4 9,320	190.9 10,260	48.58 237	52.31 255	56.04 274	8.85 2.699	18.16 5.536
HZ 1180M B	16.85 356.6	4,092.7 558,890	181.1 9,735	198.5 10,675	49.88 244	53.61 262	57.34 280	8.86 2.700	18.18 5.540
HZ 1180M C	17.59 372.3	4,347.6 593,690	191.0 10,270	210.5 11,315	52.26 255	56.06 274	59.85 292	8.90 2.713	18.20 5.549
HZ 1180M D	18.17 384.7	4,548.1 621,070	200.5 10,780	218.6 11,750	54.26 265	58.05 283	61.85 302	8.92 2.719	18.22 5.554

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-14 / AZ 18-800

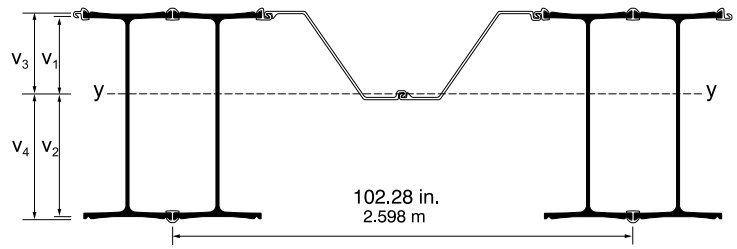


JD FIELDS & COMPANY, INC. A FIELDS COMPANY	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 18-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
HZ 630M	13.39 283.3	1,243.7 169,840	102.5 5,510	93.9 5,045	36.72 179	41.14 201	45.55 222	8.73 2.660	16.03 4.886
HZ 880M A	12.79 270.8	1,872.7 255,730	118.2 6,355	108.9 5,855	34.87 170	39.20 191	43.54 213	8.85 2.699	17.49 5.331
HZ 880M B	13.49 285.6	1,991.2 271,910	125.1 6,725	115.8 6,225	37.25 182	41.58 203	45.92 224	8.86 2.702	17.50 5.334
HZ 880M C	13.81 292.4	2,073.7 283,180	129.6 6,970	120.6 6,485	38.34 187	42.68 208	47.01 230	8.86 2.702	17.50 5.334
HZ 1080M A	14.52 307.3	3,350.9 457,580	162.3 8,725	152.3 8,185	40.71 199	45.06 220	49.40 241	8.84 2.695	18.92 5.768
HZ 1080M B	15.02 317.9	3,569.0 487,370	171.9 9,240	162.2 8,720	42.43 207	46.77 228	51.12 250	8.84 2.696	18.93 5.769
HZ 1080M C	15.94 337.4	3,835.7 523,790	183.7 9,875	174.3 9,375	45.56 222	49.91 244	54.25 265	8.85 2.697	18.93 5.771
HZ 1080M D	16.69 353.2	4,097.0 559,460	194.7 10,470	186.2 10,015	48.11 235	52.45 256	56.79 277	8.85 2.698	18.94 5.771
HZ 1180M A	17.28 365.8	4,293.0 586,240	202.6 10,890	195.4 10,505	50.14 245	54.48 266	58.82 287	8.85 2.699	18.94 5.772
HZ 1180M B	17.64 373.4	4,452.9 608,070	209.3 11,255	202.4 10,885	51.35 251	55.69 272	60.03 293	8.86 2.700	18.94 5.774
HZ 1180M C	18.60 393.8	4,806.3 656,330	223.6 12,020	216.0 11,610	54.20 265	58.76 287	63.31 309	8.90 2.713	19.05 5.808
HZ 1180M D	19.14 405.1	4,978.1 679,780	230.8 12,410	223.8 12,030	56.02 273	60.57 296	65.13 318	8.92 2.719	19.07 5.814

* Referring outside of HZ®-M-flange (highest value of v₁; v₂), ** Referring outside of connector (highest value of v₃; v₄), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-24 / AZ 18-800

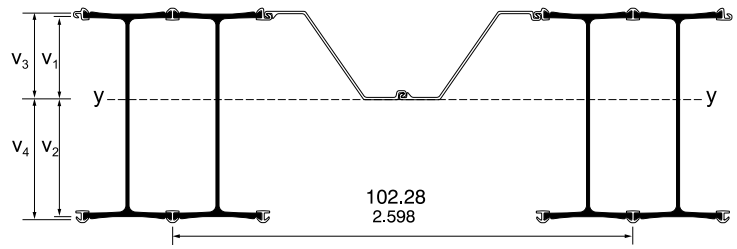


JD FIELDS & COMPANY, INC. FIELD'S COMPANY	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 18-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	16.79 355.5	1,644.7 224,600	128.2 6,895	118.0 6,345	50.87 248	54.01 264	57.15 279	10.32 3.145	16.76 5.109
HZ 880M A	15.73 332.9	2,495.8 340,810	148.6 7,985	137.5 7,390	47.42 232	50.47 246	53.52 261	10.57 3.222	18.49 5.637
HZ 880M B	16.87 357.0	2,689.6 367,290	160.2 8,610	148.9 8,005	51.30 250	54.35 265	57.40 280	10.59 3.229	18.51 5.643
HZ 880M C	17.39 368.1	2,825.1 385,790	167.8 9,020	156.7 8,420	53.09 259	56.14 274	59.18 289	10.59 3.228	18.51 5.643
HZ 1080M A	18.56 392.8	4,656.0 635,800	215.0 11,555	202.3 10,875	57.04 278	60.10 293	63.16 308	10.54 3.214	19.92 6.070
HZ 1080M B	19.39 410.3	5,014.3 684,730	230.8 12,410	218.4 11,740	59.85 292	62.91 307	65.97 322	10.55 3.216	19.92 6.073
HZ 1080M C	20.88 442.1	5,450.3 744,280	250.5 13,470	238.3 12,810	64.96 317	68.02 332	71.07 347	10.56 3.219	19.93 6.076
HZ 1080M D	22.11 467.9	5,877.7 802,640	269.0 14,460	257.7 13,855	69.12 337	72.17 352	75.23 367	10.57 3.220	19.94 6.077
HZ 1180M A	23.08 488.4	6,198.0 846,370	282.2 15,170	272.2 14,635	72.43 354	75.48 369	78.53 383	10.57 3.222	19.94 6.079
HZ 1180M B	23.66 500.8	6,460.1 882,170	293.4 15,770	284.0 15,270	74.41 363	77.46 378	80.51 393	10.58 3.225	19.97 6.088
HZ 1180M C	24.95 528.0	6,919.2 944,860	312.7 16,810	302.3 16,255	78.69 384	81.79 399	84.90 415	10.64 3.242	20.02 6.101
HZ 1180M D	25.81 546.4	7,198.9 983,050	324.6 17,455	315.0 16,935	81.64 399	84.74 414	87.84 429	10.68 3.254	20.05 6.110

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-26 / AZ 18-800

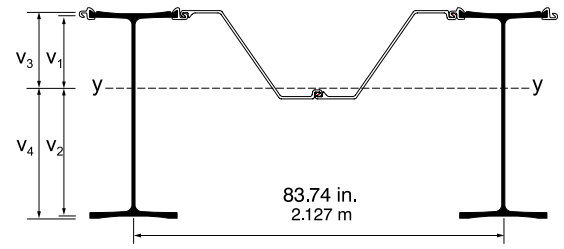


JD FIELDS & COMPANY, INC. FIELD'S COMPANY	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 18-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	17.55 371.4	1,759.4 240,250	145.1 7,800	132.8 7,140	52.40 256	56.06 274	59.72 292	10.32 3.145	17.62 5.371
HZ 880M A	16.46 348.4	2,692.6 367,690	170.1 9,145	156.7 8,425	48.91 239	52.46 256	56.01 273	10.57 3.222	19.21 5.854
HZ 880M B	17.60 372.4	2,885.1 393,980	181.4 9,750	167.9 9,025	52.79 258	56.34 275	59.88 292	10.59 3.229	19.23 5.860
HZ 880M C	18.12 383.6	3,020.2 412,430	188.9 10,160	175.8 9,450	54.58 266	58.12 284	61.67 301	10.59 3.228	19.23 5.860
HZ 1080M A	19.29 408.4	4,986.8 680,970	241.7 12,995	226.8 12,190	58.53 286	62.10 303	65.66 321	10.54 3.214	20.63 6.288
HZ 1080M B	20.12 425.9	5,344.2 729,790	257.5 13,845	243.0 13,065	61.35 300	64.91 317	68.47 334	10.55 3.216	20.64 6.290
HZ 1080M C	21.62 457.6	5,778.4 789,080	276.9 14,885	262.8 14,130	66.46 324	70.01 342	73.57 359	10.56 3.219	20.65 6.293
HZ 1080M D	22.84 483.4	6,204.6 847,280	295.1 15,865	282.2 15,170	70.61 345	74.17 362	77.72 379	10.57 3.220	20.65 6.294
HZ 1180M A	23.81 503.9	6,523.9 890,880	308.0 16,560	296.7 15,955	73.92 361	77.47 378	81.02 396	10.57 3.222	20.65 6.296
HZ 1180M B	24.39 516.2	6,785.7 926,630	319.2 17,160	308.6 16,595	75.90 371	79.45 388	83.00 405	10.58 3.225	20.67 6.299
HZ 1180M C	25.86 547.4	7,323.8 1,000,110	342.0 18,390	330.3 17,760	80.56 393	84.29 412	88.01 430	10.64 3.242	20.79 6.337
HZ 1180M D	26.73 565.7	7,602.6 1,038,190	353.8 19,020	342.9 18,435	83.51 408	87.23 426	90.96 444	10.68 3.254	20.83 6.349

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-12 / AZ 23-800

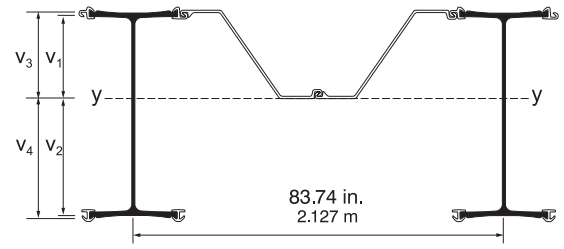


JD FIELDS & COMPANY, INC. FIELD'S CONNECTION	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 23-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	13.35 282.6	1,190.2 162,520	88.9 4,780	99.5 5,350	36.76 179	41.10 201	45.44 222	8.84 2.694	15.22 4.639
HZ 880M A	12.75 270.0	1,717.8 234,580	97.6 5,245	111.7 6,005	34.88 170	39.14 191	43.41 212	8.97 2.733	16.83 5.130
HZ 880M B	13.46 284.9	1,840.6 251,350	105.1 5,650	118.4 6,365	37.29 182	41.55 203	45.81 224	8.98 2.736	16.84 5.131
HZ 880M C	13.78 291.7	1,924.0 262,730	109.7 5,900	123.3 6,625	38.38 187	42.64 208	46.90 229	8.98 2.736	16.83 5.131
HZ 1080M A	14.48 306.4	3,041.1 415,280	135.1 7,260	151.5 8,145	40.72 199	44.99 220	49.26 241	8.95 2.729	18.27 5.567
HZ 1080M B	14.99 317.2	3,265.1 445,870	145.0 7,795	161.7 8,695	42.46 207	46.74 228	51.01 249	8.96 2.730	18.26 5.567
HZ 1080M C	15.91 336.7	3,534.8 482,700	157.3 8,455	173.7 9,340	45.60 223	49.87 243	54.14 264	8.96 2.731	18.27 5.569
HZ 1080M D	16.66 352.5	3,798.1 518,650	168.6 9,065	185.7 9,980	48.15 235	52.42 256	56.68 277	8.96 2.732	18.27 5.569
HZ 1180M A	17.25 365.2	3,995.9 545,660	176.8 9,505	194.6 10,465	50.18 245	54.45 266	58.71 287	8.97 2.733	18.27 5.570
HZ 1180M B	17.63 373.2	4,169.5 569,370	184.5 9,920	202.3 10,875	51.48 251	55.74 272	60.01 293	8.97 2.734	18.29 5.574
HZ 1180M C	18.37 388.8	4,424.3 604,160	194.4 10,450	214.2 11,515	53.86 263	58.19 284	62.52 305	9.01 2.747	18.32 5.583
HZ 1180M D	18.96 401.3	4,624.8 631,540	203.9 10,960	222.3 11,950	55.86 273	60.19 294	64.51 315	9.03 2.753	18.33 5.588

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HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-14 / AZ 23-800

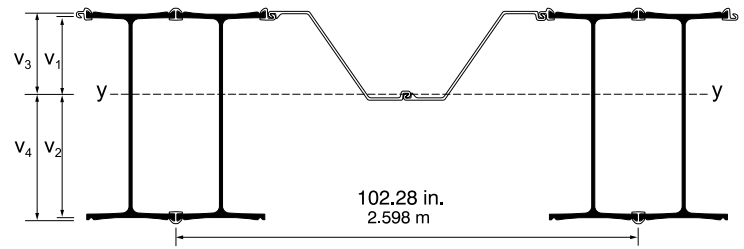


JD FIELDS & COMPANY, INC. FIELD'S CONNECTION	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 23-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	14.18 300.2	1,321.9 180,510	108.9 5,855	99.7 5,365	38.35 187	43.31 211	48.27 236	8.84 2.694	16.14 4.920
HZ 880M A	13.58 287.4	1,949.5 266,210	123.1 6,615	113.4 6,095	36.47 178	41.34 202	46.21 226	8.97 2.733	17.60 5.365
HZ 880M B	14.28 302.2	2,067.8 282,380	129.9 6,985	120.3 6,465	38.85 190	43.72 213	48.58 237	8.98 2.736	17.61 5.368
HZ 880M C	14.60 309.0	2,150.4 293,650	134.4 7,230	125.1 6,725	39.94 195	44.81 219	49.68 243	8.98 2.736	17.61 5.368
HZ 1080M A	15.30 323.9	3,427.8 468,080	166.0 8,925	155.8 8,375	42.31 207	47.19 230	52.08 254	8.95 2.729	19.04 5.802
HZ 1080M B	15.81 334.6	3,645.9 497,860	175.6 9,440	165.7 8,910	44.03 215	48.91 239	53.79 263	8.96 2.730	19.04 5.803
HZ 1080M C	16.72 354.0	3,912.6 534,280	187.4 10,075	177.8 9,560	47.17 230	52.04 254	56.92 278	8.96 2.731	19.05 5.805
HZ 1080M D	17.47 369.8	4,173.7 569,950	198.4 10,665	189.7 10,200	49.71 243	54.59 267	59.46 290	8.96 2.732	19.05 5.806
HZ 1180M A	18.07 382.4	4,369.8 596,720	206.2 11,085	198.9 10,690	51.74 253	56.62 276	61.49 300	8.97 2.733	19.05 5.806
HZ 1180M B	18.42 390.0	4,529.7 618,550	212.9 11,450	205.9 11,070	52.95 259	57.82 282	62.70 306	8.97 2.734	19.05 5.808
HZ 1180M C	19.39 410.4	4,883.0 666,800	227.2 12,215	219.4 11,795	55.80 272	60.89 297	65.98 322	9.01 2.747	19.17 5.842
HZ 1180M D	19.92 421.6	5,054.7 690,250	234.4 12,600	227.2 12,215	57.61 281	62.70 306	67.79 331	9.03 2.753	19.19 5.848

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HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-24 / AZ 23-800

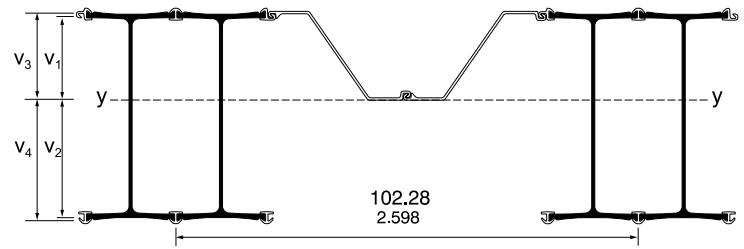


JD FIELDS & COMPANY, INC. FIELD'S CONNECTION	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 23-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
HZ 630M	17.46 369.5	1,709.4 233,430	133.3 7,165	122.6 6,590	52.22 255	55.81 272	59.40 290	10.43 3.179	16.87 5.143
HZ 880M A	16.37 346.5	2,558.6 349,390	152.3 8,190	140.9 7,575	48.73 238	52.22 255	55.71 272	10.68 3.256	18.61 5.671
HZ 880M B	17.51 370.5	2,752.4 375,850	163.9 8,815	152.3 8,190	52.61 257	56.09 274	59.58 291	10.70 3.263	18.63 5.677
HZ 880M C	18.03 381.7	2,887.8 394,350	171.5 9,220	160.1 8,610	54.40 266	57.88 283	61.36 300	10.70 3.262	18.62 5.677
HZ 1080M A	19.20 406.5	4,719.0 644,410	217.9 11,715	205.0 11,025	58.35 285	61.85 302	65.35 319	10.66 3.248	20.03 6.105
HZ 1080M B	20.03 423.9	5,077.3 693,340	233.7 12,565	221.1 11,890	61.16 299	64.66 316	68.16 333	10.66 3.250	20.04 6.107
HZ 1080M C	21.53 455.7	5,513.2 752,870	253.4 13,625	241.0 12,960	66.27 324	69.77 341	73.26 358	10.67 3.253	20.05 6.110
HZ 1080M D	22.75 481.5	5,940.6 811,230	271.9 14,615	260.4 14,000	70.43 344	73.92 361	77.41 378	10.68 3.255	20.05 6.111
HZ 1180M A	23.72 502.0	6,260.8 854,950	285.0 15,325	275.0 14,785	73.74 360	77.23 377	80.71 394	10.68 3.256	20.05 6.113
HZ 1180M B	24.30 514.3	6,522.9 890,740	296.2 15,925	286.8 15,420	75.72 370	79.21 387	82.69 404	10.69 3.259	20.08 6.122
HZ 1180M C	25.59 541.6	6,981.9 953,420	315.5 16,965	305.0 16,400	80.00 391	83.54 408	87.08 425	10.75 3.276	20.13 6.135
HZ 1180M D	26.45 559.9	7,261.6 991,610	327.5 17,605	317.7 17,080	82.95 405	86.49 422	90.02 440	10.79 3.289	20.16 6.144

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-26 / AZ 23-800

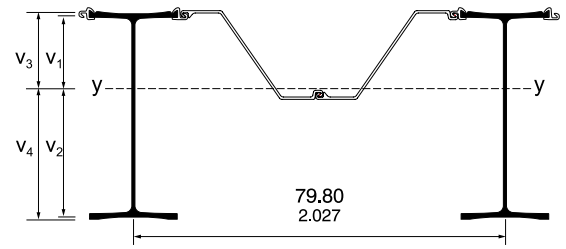


JD FIELDS & COMPANY, INC. FIELD'S CONNECTION SECTION	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 23-800			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
HZ 630M	18.21 385.4	1,824.1 249,090	150.4 8,085	137.7 7,405	53.75 262	57.86 283	61.97 303	10.43 3.179	17.73 5.405
HZ 880M A	17.10 362.0	2,755.4 376,270	174.1 9,360	160.3 8,620	50.22 245	54.21 265	58.19 284	10.68 3.256	19.32 5.888
HZ 880M B	18.24 386.0	2,947.9 402,550	185.3 9,965	171.5 9,225	54.10 264	58.08 284	62.06 303	10.70 3.263	19.34 5.894
HZ 880M C	18.76 397.1	3,082.9 420,990	192.9 10,370	179.4 9,645	55.89 273	59.87 292	63.85 312	10.70 3.262	19.34 5.894
HZ 1080M A	19.94 422.0	5,049.8 689,580	244.7 13,155	229.6 12,345	59.85 292	63.85 312	67.85 331	10.66 3.248	20.74 6.322
HZ 1080M B	20.76 439.5	5,407.2 738,390	260.6 14,010	245.9 13,220	62.66 306	66.66 325	70.66 345	10.66 3.250	20.75 6.324
HZ 1080M C	22.26 471.2	5,841.3 797,670	279.9 15,050	265.7 14,285	67.77 331	71.76 350	75.75 370	10.67 3.253	20.76 6.327
HZ 1080M D	23.48 497.0	6,267.5 855,860	298.1 16,025	285.1 15,325	71.92 351	75.91 371	79.90 390	10.68 3.255	20.76 6.328
HZ 1180M A	24.45 517.5	6,586.7 899,460	311.0 16,720	299.6 16,105	75.23 367	79.22 387	83.20 406	10.68 3.256	20.77 6.330
HZ 1180M B	25.03 529.8	6,848.5 935,210	322.1 17,320	311.5 16,745	77.21 377	81.20 396	85.18 416	10.69 3.259	20.78 6.333
HZ 1180M C	26.50 561.0	7,386.5 1,008,670	344.9 18,545	333.1 17,910	81.87 400	86.03 420	90.19 440	10.75 3.276	20.90 6.371
HZ 1180M D	27.37 579.3	7,665.3 1,046,740	356.7 19,180	345.8 18,590	84.82 414	88.98 434	93.14 455	10.79 3.289	20.94 6.383

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-12 / AZ 28-750

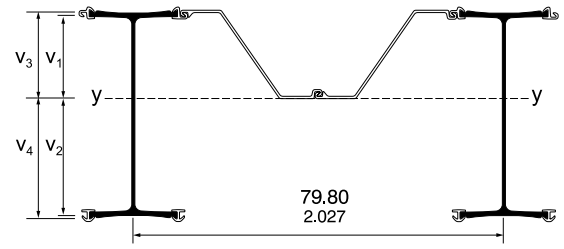


JD FIELDS & COMPANY, INC. FIELD'S COMPANY	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 28-750			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	14.40 304.8	1,319.5 180,190	98.5 5,295	110.3 5,930	39.37 192	44.19 216	49.00 239	8.84 2.693	15.22 4.638
HZ 880M A	13.75 291.1	1,870.8 255,460	106.2 5,710	121.7 6,540	37.35 182	42.08 205	46.80 229	8.96 2.732	16.83 5.128
HZ 880M B	14.49 306.7	1,999.5 273,040	114.2 6,135	128.6 6,915	39.88 195	44.60 218	49.31 241	8.97 2.735	16.83 5.130
HZ 880M C	14.83 313.8	2,086.9 284,980	119.0 6,400	133.7 7,190	41.02 200	45.74 223	50.46 246	8.97 2.735	16.83 5.130
HZ 1080M A	15.56 329.4	3,259.8 445,140	144.8 7,785	162.4 8,730	43.49 212	48.22 235	52.95 259	8.95 2.728	18.26 5.566
HZ 1080M B	16.10 340.7	3,494.8 477,230	155.2 8,345	173.1 9,305	45.32 221	50.05 244	54.78 267	8.95 2.729	18.26 5.566
HZ 1080M C	17.06 361.1	3,777.6 515,860	168.1 9,035	185.7 9,980	48.61 237	53.33 260	58.06 283	8.96 2.730	18.27 5.567
HZ 1080M D	17.85 377.7	4,053.7 553,560	180.0 9,675	198.2 10,655	51.28 250	56.00 273	60.73 297	8.96 2.731	18.27 5.568
HZ 1180M A	18.47 390.9	4,261.2 581,890	188.5 10,135	207.5 11,155	53.41 261	58.13 284	62.86 307	8.96 2.732	18.27 5.569
HZ 1180M B	18.87 399.4	4,443.3 606,760	196.6 10,570	215.5 11,590	54.77 267	59.49 290	64.22 314	8.97 2.733	18.28 5.573
HZ 1180M C	19.64 415.8	4,710.6 643,260	207.0 11,130	228.0 12,260	57.27 280	62.06 303	66.85 326	9.01 2.746	18.31 5.582
HZ 1180M D	20.26 428.8	4,920.8 671,960	216.9 11,665	236.5 12,715	59.36 290	64.15 313	68.94 337	9.03 2.752	18.33 5.587

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-14 / AZ 28-750

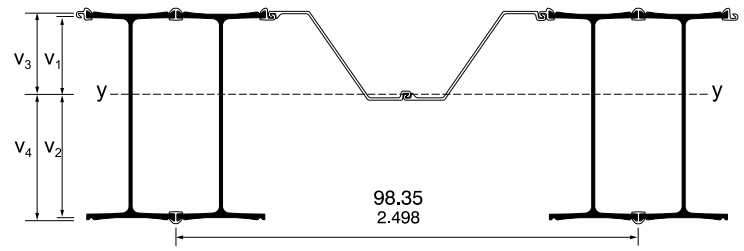


JD FIELDS & COMPANY, INC. FIELD'S COMPANY	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 28-750			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	15.27 323.2	1,457.8 199,080	120.1 6,460	110.0 5,915	41.04 200	46.51 227	51.97 254	8.84 2.693	16.14 4.919
HZ 880M A	14.62 309.4	2,113.8 288,660	133.4 7,175	122.9 6,610	39.02 190	44.38 217	49.74 243	8.96 2.732	17.60 5.364
HZ 880M B	15.35 324.8	2,237.9 305,600	140.6 7,560	130.1 6,995	41.51 203	46.87 229	52.23 255	8.97 2.735	17.61 5.367
HZ 880M C	15.68 332.0	2,324.5 317,430	145.3 7,815	135.2 7,270	42.66 208	48.02 234	53.37 261	8.97 2.735	17.61 5.367
HZ 1080M A	16.43 347.7	3,665.5 500,550	177.5 9,545	166.6 8,955	45.16 220	50.53 247	55.90 273	8.95 2.728	19.03 5.801
HZ 1080M B	16.96 358.9	3,894.4 531,800	187.5 10,085	177.0 9,515	46.96 229	52.33 256	57.70 282	8.95 2.729	19.04 5.802
HZ 1080M C	17.92 379.3	4,174.0 569,980	199.9 10,745	189.7 10,200	50.25 245	55.61 272	60.98 298	8.96 2.730	19.04 5.804
HZ 1080M D	18.70 395.9	4,447.9 607,390	211.4 11,365	202.2 10,870	52.92 258	58.28 285	63.65 311	8.96 2.731	19.04 5.804
HZ 1180M A	19.33 409.1	4,653.5 635,460	219.6 11,805	211.8 11,385	55.05 269	60.41 295	65.77 321	8.96 2.732	19.05 5.805
HZ 1180M B	19.70 417.0	4,821.3 658,370	226.7 12,185	219.2 11,785	56.32 275	61.68 301	67.04 327	8.97 2.733	19.05 5.807
HZ 1180M C	20.71 438.4	5,191.9 708,980	241.6 12,985	233.3 12,545	59.30 290	64.89 317	70.48 344	9.01 2.746	19.16 5.841
HZ 1180M D	21.27 450.2	5,371.9 733,570	249.1 13,390	241.5 12,980	61.20 299	66.79 326	72.38 353	9.03 2.752	19.18 5.847

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-24 / AZ 28-750

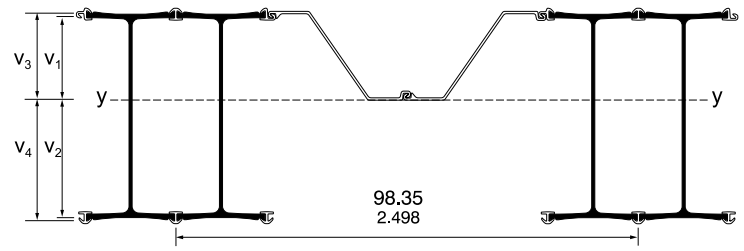


JD FIELDS & COMPANY, INC. FIELD'S COMPANY	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 28-750			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	18.48 391.2	1,837.0 250,860	143.2 7,700	131.8 7,085	55.00 269	58.95 288	62.90 307	10.43 3.178	16.87 5.142
HZ 880M A	17.32 366.6	2,716.3 370,930	161.7 8,695	149.6 8,045	51.29 250	55.12 269	58.95 288	10.68 3.255	18.60 5.670
HZ 880M B	18.50 391.7	2,917.5 398,410	173.8 9,340	161.5 8,680	55.32 270	59.14 289	62.97 307	10.70 3.262	18.62 5.676
HZ 880M C	19.05 403.2	3,058.4 417,650	181.7 9,765	169.6 9,120	57.18 279	61.00 298	64.83 317	10.70 3.261	18.62 5.676
HZ 1080M A	20.27 429.1	4,963.9 677,850	229.2 12,320	215.7 11,595	61.30 299	65.15 318	68.99 337	10.65 3.247	20.02 6.103
HZ 1080M B	21.13 447.3	5,336.6 728,740	245.7 13,205	232.4 12,495	64.23 314	68.07 332	71.92 351	10.66 3.249	20.03 6.106
HZ 1080M C	22.69 480.2	5,789.6 790,600	266.1 14,310	253.1 13,610	69.54 340	73.38 358	77.21 377	10.67 3.252	20.04 6.109
HZ 1080M D	23.96 507.1	6,233.8 851,270	285.3 15,340	273.3 14,690	73.86 361	77.69 379	81.53 398	10.67 3.253	20.05 6.110
HZ 1180M A	24.96 528.4	6,566.6 896,710	298.9 16,075	288.4 15,505	77.30 377	81.13 396	84.96 415	10.68 3.255	20.05 6.112
HZ 1180M B	25.57 541.2	6,839.2 933,930	310.6 16,700	300.7 16,165	79.35 387	83.19 406	87.02 425	10.69 3.258	20.08 6.121
HZ 1180M C	26.91 569.5	7,316.0 999,040	330.6 17,775	319.6 17,185	83.80 409	87.68 428	91.57 447	10.75 3.275	20.12 6.134
HZ 1180M D	27.81 588.6	7,606.6 1,038,720	343.0 18,440	332.8 17,895	86.87 424	90.75 443	94.63 462	10.79 3.287	20.15 6.143

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ®-M STEEL WALL SYSTEMS

Combination HZ...M-26 / AZ 28-750

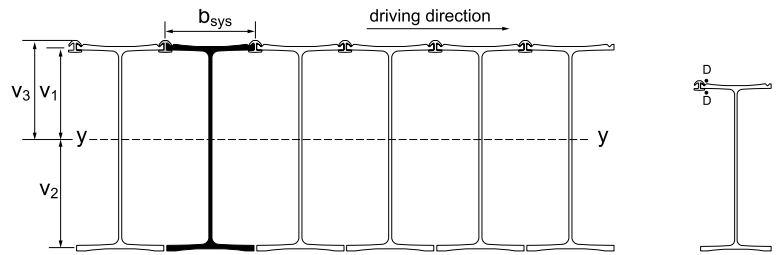


JD FIELDS & COMPANY, INC. • FIELDS COMPANY	PROPERTIES PER FOOT OF WALL				MASS OF COMBINATION WITH INTERMEDIARY SECTION				
	Sectional Area in ² /ft cm ² /m	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	*** AZ 28-750			COATING AREA	
					£AZ = 60% £HZ lb/ft ² kg/m ²	£AZ = 80% £HZ lb/ft ² kg/m ²	£AZ = £HZ lb/ft ² kg/m ²	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION									
HZ 630M	19.27 407.8	1,956.4 267,160	161.3 8,670	147.7 7,940	56.60 276	61.09 298	65.57 320	10.43 3.178	17.73 5.404
HZ 880M A	18.08 382.7	2,921.0 398,880	184.5 9,920	170.0 9,140	52.84 258	57.19 279	61.54 300	10.68 3.255	19.31 5.887
HZ 880M B	19.26 407.7	3,120.9 426,170	196.2 10,550	181.6 9,765	56.87 278	61.21 299	65.55 320	10.70 3.262	19.34 5.893
HZ 880M C	19.81 419.3	3,261.3 445,360	204.0 10,970	189.8 10,205	58.73 287	63.07 308	67.41 329	10.70 3.261	19.33 5.893
HZ 1080M A	21.04 445.3	5,308.0 724,830	257.2 13,830	241.4 12,980	62.86 307	67.22 328	71.59 350	10.65 3.247	20.74 6.321
HZ 1080M B	21.90 463.5	5,679.7 775,600	273.7 14,715	258.3 13,885	65.79 321	70.15 343	74.51 364	10.66 3.249	20.74 6.323
HZ 1080M C	23.45 496.4	6,130.8 837,200	293.8 15,795	278.8 14,990	71.09 347	75.45 368	79.81 390	10.67 3.252	20.75 6.326
HZ 1080M D	24.72 523.2	6,573.8 897,690	312.7 16,810	299.0 16,075	75.41 368	79.77 389	84.12 411	10.67 3.253	20.76 6.327
HZ 1180M A	25.73 544.5	6,905.6 943,000	326.0 17,530	314.1 16,885	78.85 385	83.20 406	87.55 427	10.68 3.255	20.76 6.329
HZ 1180M B	26.33 557.3	7,177.8 980,180	337.6 18,150	326.5 17,555	80.91 395	85.26 416	89.61 438	10.69 3.258	20.77 6.332
HZ 1180M C	27.86 589.7	7,736.8 1,056,500	361.3 19,425	348.9 18,760	85.75 419	90.28 441	94.81 463	10.75 3.275	20.90 6.370
HZ 1180M D	28.76 608.7	8,026.4 1,096,060	373.5 20,080	362.0 19,465	88.81 434	93.34 456	97.87 478	10.79 3.287	20.94 6.382

* Referring outside of HZ®-M-flange (v₂), ** Referring outside of connector (v₃), *** Length of connectors = Length of AZ.

HZ[®]-M STEEL WALL SYSTEMS

Combination C 1



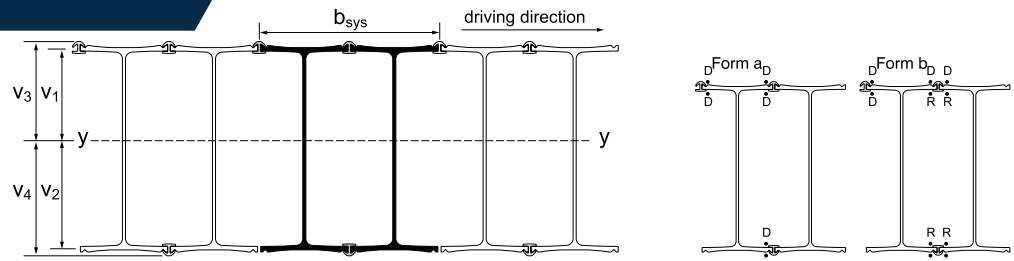
D = discontinuous weld, a = 0.236" (6 mm), 10% of length (3.94" per 3.28', 100 mm/m) over the whole pile length + 19.68" (500 mm) continuous weld at top and toe

JD FIELDS & COMPANY, INC. SECTION	DIMENSIONS					PROPERTIES PER FOOT OF WALL					COATING AREA	
	b _{sys} in mm	v ₁ in mm	v ₂ in mm	v ₃ in mm	v ₄ in mm	Sectional Area in ² /ft cm ² /m	Mass lb/ft ² kg/m ²	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
HZ 630M	17.09 0.434	11.52 292.6	12.72 323.2	12.63 320.9	-	35.78 757.3	121.77 594.5	3971.6 542,340	312.1 16780	314.3 16900	1.68 0.513	8.20 2.500
HZ 880M A	18.70 0.475	14.96 379.9	16.67 423.5	16.31 414.3	-	31.28 662.1	106.46 519.8	5939.0 811,010	356.2 19150	364.1 19575	1.81 0.551	9.85 3.001
HZ 880M B	18.70 0.475	15.13 384.3	16.66 423.1	16.41 416.7	-	34.37 727.6	116.98 571.1	6464.9 882,820	388.1 20865	394.0 21185	1.82 0.554	9.85 3.003
HZ 880M C	18.70 0.475	15.24 387.1	16.71 424.3	16.44 417.5	-	35.81 758.1	121.88 595.1	6836.8 933,600	409.2 22000	415.9 22360	1.82 0.554	9.85 3.002
HZ 1080M A	18.50 0.470	19.72 500.8	21.52 546.6	21.07 535.2	-	39.25 830.8	133.58 652.2	11646.2 1,590,360	541.2 29095	552.7 29715	1.79 0.547	11.28 3.439
HZ 1080M B	18.50 0.470	19.90 505.5	21.57 547.9	21.14 536.9	-	41.58 880.0	141.49 690.8	12654.9 1,728,110	586.6 31540	598.6 32185	1.80 0.548	11.28 3.438
HZ 1080M C	18.50 0.470	20.10 510.5	21.61 548.9	21.22 538.9	-	45.62 965.7	155.26 758.0	13825.6 1,887,970	639.7 34395	651.7 35035	1.80 0.549	11.29 3.440
HZ 1080M D	18.50 0.470	20.31 515.8	21.72 551.6	21.27 540.2	-	48.93 1035.8	166.53 813.1	14985.9 2,046,410	690.1 37100	704.6 37880	1.80 0.550	11.29 3.440
HZ 1180M A	18.70 0.475	20.50 520.8	21.84 554.6	21.31 541.2	-	51.55 1091.2	175.45 856.6	15849.3 2,164,320	725.9 39025	743.8 39990	1.81 0.551	11.29 3.441
HZ 1180M B	18.70 0.475	20.65 524.5	21.85 554.9	21.37 542.9	-	53.27 1127.6	181.29 885.2	16625.5 2,270,310	760.9 40910	777.9 41820	1.82 0.553	11.31 3.447
HZ 1180M C	18.70 0.475	20.58 522.7	22.07 560.7	21.34 542.0	-	56.34 1192.6	191.75 936.2	17709.1 2,418,290	802.2 43130	829.8 44615	1.83 0.558	11.37 3.465
HZ 1180M D	18.70 0.475	20.78 527.8	22.03 559.6	21.46 545.1	-	58.89 1246.5	200.40 978.5	18567.9 2,535,560	842.8 45310	865.2 46515	1.85 0.564	11.39 3.472

* Referring outside of HZ[®]-M-flange (v₂). ** Referring outside of connector (v₃).

HZ[®]-M STEEL WALL SYSTEMS

Combination C 23



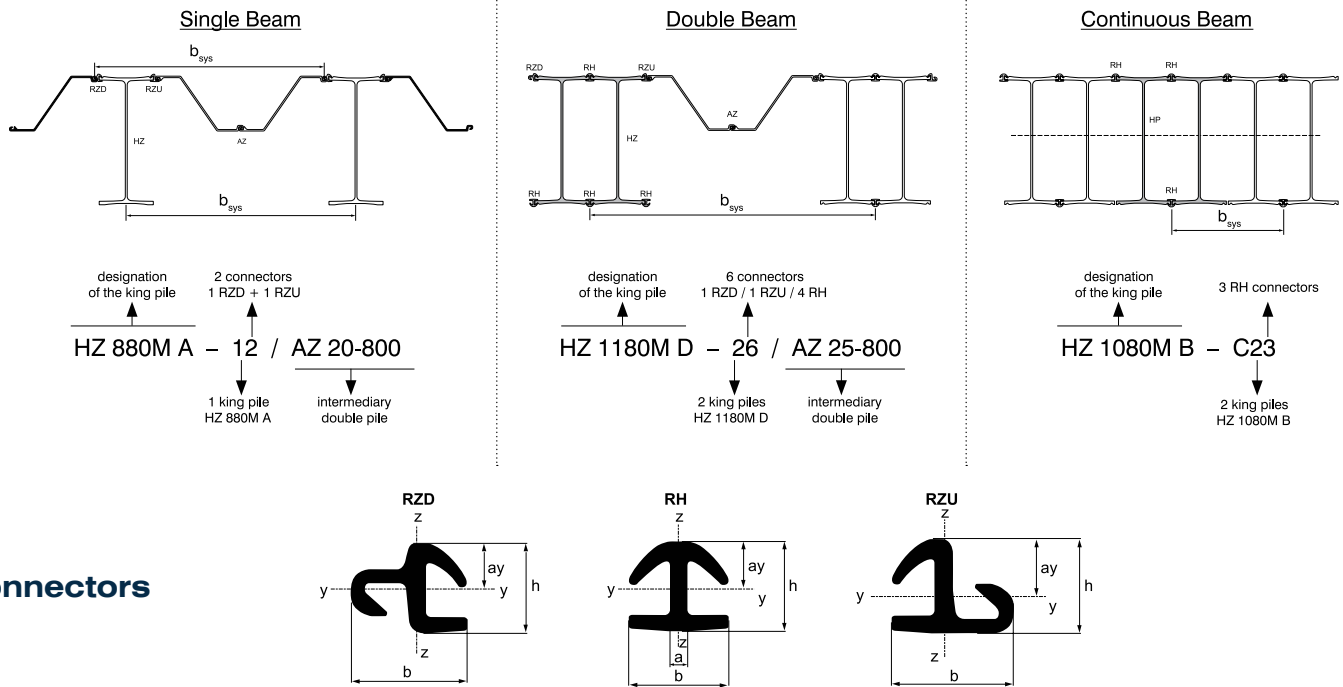
D = discontinuous weld, a = 0.236" (6 mm), 10% of length (3.94" per 3.28', 100 mm/m) over the whole pile length + 19.68" (500 mm) continuous weld at top and toe
R = continuous weld, a = 0.236" (6 mm), length 19.68" (500 mm) at top and toe only

SECTION	DIMENSIONS					PROPERTIES PER FOOT OF WALL					COATING AREA	
	b _{sys} in mm	v ₁ in mm	v ₂ in mm	v ₃ in mm	v ₄ in mm	Sectional Area in ² /ft cm ² /m	Mass lb/ft ² kg/m ²	Moment of Inertia in ⁴ /ft cm ⁴ /m	*Elastic Section Modulus in ³ /ft cm ³ /m	**Elastic Section Modulus in ³ /ft cm ³ /m	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
HZ 630M	34.17 0.868	11.76 298.7	12.48 317.0	12.88 327.1	13.59 345.3	36.50 772.5	124.21 606.4	4080.4 557,210	327 .0 17580	300.1 16135	3.27 0.998	9.82 2.992
HZ 880M A	37.40 0.950	15.31 389.0	16.32 414.4	16.67 423.4	17.67 448.9	31.97 676.7	108.81 531.2	6126.0 836,540	375 .4 20185	346.6 18635	3.53 1.074	11.62 3.542
HZ 880M B	37.40 0.950	15.44 392.1	16.35 415.3	16.72 424.6	17.63 447.7	35.03 741.5	119.21 582.0	6641.1 906,880	406 .2 21840	376.7 20255	3.55 1.081	11.64 3.549
HZ 880M C	37.40 0.950	15.54 394.6	16.41 416.8	16.73 425.1	17.61 447.3	36.47 772.0	124.12 606.0	7012.4 957,590	427 .3 22975	398.2 21410	3.54 1.080	11.64 3.548
HZ 1080M A	37.01 0.940	20.09 510.3	21.14 537.1	21.45 544.8	22.50 571.5	39.95 845.7	135.97 663.8	11964.3 1,633,800	565 .8 30420	531.8 28590	3.50 1.066	13.04 3.976
HZ 1080M B	37.01 0.940	20.24 514.1	21.23 539.3	21.48 545.5	22.47 570.8	42.24 894.1	143.75 701.9	12954.8 1,769,060	610 .1 32800	576.5 30995	3.51 1.068	13.05 3.978
HZ 1080M C	37.01 0.940	20.40 518.2	21.31 541.2	21.52 546.6	22.43 569.6	46.28 979.7	157.51 769.1	14122.5 1,928,510	662 .8 35635	629.7 33855	3.52 1.072	13.06 3.981
HZ 1080M D	37.01 0.940	20.59 523.0	21.43 544.4	21.55 547.4	22.39 568.8	49.60 1049.8	168.79 824.1	15280.9 2,086,700	712 .9 38330	682.3 36685	3.52 1.073	13.07 3.982
HZ 1180M A	37.40 0.950	20.77 527.6	21.57 547.8	21.57 548.0	22.37 568.3	52.21 1105.1	177.69 867.5	16141.6 2,204,240	748 .4 40235	721.5 38790	3.52 1.074	13.07 3.984
HZ 1180M B	37.40 0.950	20.86 529.9	21.64 549.5	21.59 548.3	22.36 568.0	53.81 1139.1	183.14 894.2	16862.8 2,302,720	779 .4 41905	754.1 40545	3.54 1.078	13.11 3.995
HZ 1180M C	37.40 0.950	20.87 530.2	21.78 553.2	21.63 549.5	22.54 572.5	57.14 1209.4	194.45 949.4	18058.9 2,466,050	829 .1 44575	801.2 43075	3.57 1.087	13.18 4.017
HZ 1180M D	37.40 0.950	20.97 532.7	21.84 554.8	21.65 549.9	22.52 572.0	59.44 1258.2	202.29 987.7	18800.1 2,567,270	860 .8 46280	834.8 44880	3.61 1.099	13.21 4.025

* Referring outside of HZ[®]-M-flange (v₂). ** Referring outside of connector (v₃).

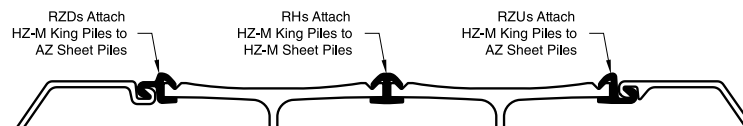
HZ®-M STEEL WALL SYSTEMS

Definition of the HZ®-M Steel Wall System



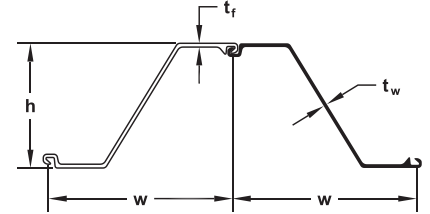
SECTION	DIMENSIONS				Suitable King Pile	Sectional Area in ² cm ²	Mass lb/ft kg/m	MOMENT OF INERTIA		ELASTIC SECTION MODULUS		COATED AREA	
	h in mm	b in mm	a in mm	ay in mm				y-y in ⁴ cm ⁴	z-z in ⁴ cm ⁴	y-y in ³ cm ³	z-z in ³ cm ³	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
RZD 16	2.43 61.8	3.19 80.5	-	1.24 31.5	HZ 880M / 1080M / 1180M A-B	3.21 20.7	10.89 16.2	1.4 57	2.3 94	1.1 18	1.3 22	0.39 0.12	0.20 0.06
RZU 16	2.43 61.8	3.19 80.5	-	1.51 38.3	HZ 880M / 1080M / 1180M A-B	3.16 20.4	10.82 16.0	1.6 68	2.3 94	1.1 18	1.3 22	0.26 0.08	0.33 0.10
RH 16	2.43 61.8	2.69 68.2	0.48 12.2	1.28 32.5	HZ 880M / 1080M / 1180M A-B	3.12 20.1	10.75 15.8	2.0 83	1.3 54	1.5 25	1.0 16	0.33 0.10	0.30 0.09
RZD 18	2.65 67.3	3.35 85.0	-	1.41 35.9	HZ 1180M C-D	3.57 23.0	12.16 18.0	1.9 78	2.6 110	1.3 22	1.5 25	0.39 0.12	0.23 0.07
RZU 18	2.65 67.3	3.35 85.0	-	1.66 42.1	HZ 1180M C-D	3.50 22.6	12.03 17.8	2.2 92	2.6 110	1.3 22	1.5 25	0.30 0.09	0.33 0.10
RH 20	2.65 67.3	3.12 79.2	0.56 14.2	1.44 36.5	HZ 1180M C-D	3.91 25.2	13.44 19.8	2.9 122	2.1 88	2.0 33	1.3 22	0.36 0.11	0.33 0.10

Without other specifications, all the connectors are offered in Grade S 430 GP.



HZ[®]-M STEEL WALL SYSTEMS

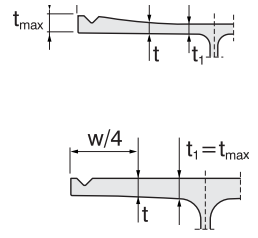
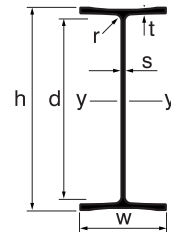
AZ - Intermediary Piles



SECTION	Width (w) in mm	Height (h) in mm	THICKNESS		Cross Sectional Area in ² /ft cm ² /m	WEIGHT		SECTION MODULUS		Moment of Inertia in ⁴ /ft cm ⁴ /m	COATING AREA	
			Flange (t _f) in mm	Web (t _w) in mm		Single Pile lb/ft kg/m	Wall Area lb/ft ² kg/m ²	Elastic in ³ /ft cm ³ /m	Plastic in ³ /ft cm ³ /m		Both Sides ft ² /ft m ² /m	Wall Surface ft ² /ft m ² /m
AZ 12-770	30.31 770	13.52 344	0.335 8.5	0.335 8.5	5.67 120.1	48.78 72.6	19.31 94.3	23.2 1245	27.5 1480	156.9 21430	6.07 1.85	1.20 1.20
AZ 13-770	30.31 770	13.54 344	0.354 9.0	0.354 9.0	5.94 125.8	51.14 76.1	20.24 98.8	24.2 1300	28.8 1546	163.7 22360	6.07 1.85	1.20 1.20
AZ 14-770	30.31 770	13.56 345	0.375 9.5	0.375 9.5	6.21 131.5	53.42 79.5	21.14 103.2	25.2 1355	30.0 1611	170.6 23300	6.07 1.85	1.20 1.20
AZ 17-700	27.56 700	16.52 420	0.335 8.5	0.335 8.5	6.28 133.0	49.12 73.1	21.38 104.4	32.2 1730	37.7 2027	265.3 36230	6.10 1.86	1.33 1.33
AZ 18-700	27.56 700	16.54 420	0.354 9.0	0.354 9.0	6.58 139.2	51.41 76.5	22.39 109.3	33.5 1800	39.4 2116	276.8 37800	6.10 1.86	1.33 1.33
AZ 19-700	27.56 700	16.56 421	0.375 9.5	0.375 9.5	6.88 145.6	53.76 80.0	23.35 114.3	34.8 1870	41.0 2206	288.4 39380	6.10 1.86	1.33 1.33
AZ 20-700	27.56 700	16.57 421	0.394 10.0	0.394 10.0	7.18 152.0	56.11 83.5	24.43 119.3	36.2 1945	42.7 2296	300.0 40960	6.10 1.86	1.33 1.33
AZ 18-800	31.5 800	17.68 449	0.335 8.5	0.335 8.5	6.07 128.6	54.26 80.7	20.67 100.9	34.2 1840	39.7 2135	302.6 41320	6.82 2.08	1.30 1.30
AZ 20-800	31.5 800	17.72 450	0.375 9.5	0.375 9.5	6.66 141.0	59.50 88.6	22.67 110.7	37.2 2000	43.3 2330	329.9 45050	6.82 2.08	1.30 1.30
AZ 22-800	31.5 800	17.76 451	0.413 10.5	0.413 10.5	7.25 153.5	64.77 96.4	24.68 120.5	40.3 2165	47.0 2525	357.3 48790	6.82 2.08	1.30 1.30
AZ 23-800	31.50 800	18.66 474	0.453 11.5	0.354 9.0	7.12 150.6	63.56 94.6	24.22 118.2	43.3 2330	49.9 2680	404.6 55260	6.94 2.11	1.32 1.32
AZ 25-800	31.50 800	18.70 475	0.492 12.5	0.394 10.0	7.71 163.3	68.91 102.6	26.26 128.2	46.5 2500	53.8 2890	435.1 59410	6.94 2.11	1.32 1.32
AZ 27-800	31.50 800	18.74 476	0.531 13.5	0.433 11.0	8.31 176.0	74.26 110.5	28.29 138.1	49.7 2670	57.6 3100	465.5 63570	6.94 2.11	1.32 1.32
AZ 24-700	27.56 700	18.07 459	0.441 11.2	0.441 11.2	8.23 174.1	64.30 95.7	28.00 136.7	45.2 2430	53.5 2867	408.8 55820	6.33 1.93	1.38 1.38
AZ 26-700	27.56 700	18.11 460	0.480 12.2	0.480 12.2	8.84 187.2	69.12 102.9	30.10 146.9	48.4 2600	57.1 3070	437.3 59720	6.33 1.93	1.38 1.38
AZ 28-700	27.56 700	18.15 461	0.520 13.2	0.520 13.2	9.46 200.2	73.93 110.0	32.19 157.2	51.3 2760	60.9 3273	465.9 63620	6.33 1.93	1.38 1.38
AZ 28-750	29.53 750.0	20.04 509.0	0.472 12.00	0.394 10.00	8.09 171.2	67.73 100.80	27.53 134.40	52.3 2810	60.3 3245	523.9 71540	6.93 2.11	1.41 1.41
AZ 30-750	29.53 750.0	20.08 510.0	0.512 13.00	0.433 11.00	8.73 184.7	73.08 108.80	29.70 145.00	55.9 3005	64.8 3485	561.5 76670	6.93 2.11	1.41 1.41
AZ 32-750	29.53 750.0	20.12 511.0	0.551 14.00	0.472 12.00	9.37 198.3	78.44 116.70	31.88 155.60	59.5 3200	69.2 3720	599.0 81800	6.93 2.11	1.41 1.41
AZ 36-700N	27.56 700	19.65 499	0.591 15.0	0.441 11.2	10.20 215.9	79.72 118.6	34.71 169.5	66.8 3590	76.4 4110	656.2 89610	6.73 2.05	1.47 1.47
AZ 38-700N	27.56 700	19.69 500	0.630 16.0	0.480 12.2	10.87 230.0	84.94 126.4	36.98 180.6	70.6 3795	81.1 4360	694.5 94840	6.73 2.05	1.47 1.47
AZ 40-700N	27.56 700	19.72 501	0.669 17.0	0.520 13.2	11.54 244.2	90.16 134.2	39.26 191.7	74.3 3995	85.7 4605	732.9 100080	6.73 2.05	1.47 1.47
AZ 42-700N	27.56 700	19.65 499	0.709 18.0	0.551 14.0	12.22 258.7	95.51 142.1	41.59 203.1	78.2 4205	90.3 4855	768.4 104930	6.75 2.06	1.47 1.47
AZ 44-700N	27.56 700	19.69 500	0.748 19.0	0.591 15.0	12.89 272.8	100.74 149.9	43.87 214.2	81.9 4405	95.0 5105	806.6 110150	6.75 2.06	1.47 1.47
AZ 46-700N	27.56 700	19.72 501	0.787 20.0	0.630 16.0	13.56 287.0	105.97 157.7	46.14 225.3	85.7 4605	99.5 5350	844.9 115370	6.75 2.06	1.47 1.47
AZ 48-700	27.56 700.0	19.80 503.0	0.866 22.00	0.591 15.00	13.63 288.4	106.49 158.50	46.37 226.40	88.4 4755	102.1 5490	876.2 119650	6.70 2.04	1.46 1.46
AZ 50-700	27.56 700.0	19.84 504.0	0.906 23.00	0.630 16.00	14.30 302.6	111.73 166.30	48.65 237.50	92.2 4955	106.7 5735	914.6 124890	6.70 2.04	1.46 1.46
AZ 52-700	27.56 700.0	19.88 505.0	0.945 24.00	0.669 17.00	14.97 317.0	116.97 174.10	50.93 248.70	95.9 5155	111.3 5985	953.0 130140	6.70 2.04	1.46 1.46

HZ®-M STEEL WALL SYSTEMS

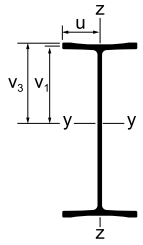
HZ®-M - King Pile



JD FIELDS & COMPANY, INC.	DIMENSIONS										Suitable Connector	
	h	h ₁	d	w	t ₁	t _{max}	t	s	r			
SECTION	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm			
HZ 630M	24.86 631.4	24.24 615.7	20.08 510.1	16.54 420.0	0.89 22.7	1.14 29.0	0.67 16.9	0.63 16.0	1.18 30.0		RZD/RZU 16	RH 16
HZ 880M A	32.73 831.3	31.63 803.4	28.72 729.4	18.03 458.0	0.67 17.0	1.14 29.0	0.74 18.9	0.51 13.0	0.79 20.0		RZD/RZU 16	RH 16
HZ 880M B	32.73 831.3	31.79 807.4	28.72 729.4	18.11 460.0	0.75 19.0	1.14 29.0	0.82 20.9	0.59 15.0	0.79 20.0		RZD/RZU 16	RH 16
HZ 880M C	32.73 831.3	31.94 811.4	28.72 729.4	18.11 460.0	0.83 21.0	1.14 29.0	0.90 22.9	0.59 15.0	0.79 20.0		RZD/RZU 16	RH 16
HZ 1080M A	42.33 1075.3	41.24 1047.4	37.23 945.6	17.87 454.0	0.81 20.7	1.14 29.0	0.77 19.6	0.63 16.0	1.18 30.0		RZD/RZU 16	RH 16
HZ 1080M B	42.33 1075.3	41.47 1053.4	37.23 945.6	17.87 454.0	0.93 23.7	1.14 29.0	0.89 22.6	0.63 16.0	1.18 30.0		RZD/RZU 16	RH 16
HZ 1080M C	42.33 1075.3	41.71 1059.4	37.23 945.6	17.95 456.0	1.05 26.7	1.14 29.0	1.01 25.7	0.71 18.0	1.18 30.0		RZD/RZU 16	RH 16
HZ 1080M D	42.33 1075.3	42.02 1067.4	37.23 945.6	17.99 457.0	1.21 30.7	1.21 30.7	1.17 29.7	0.75 19.0	1.18 30.0		RZD/RZU 16	RH 16
HZ 1180M A	42.34 1075.4	-	37.23 945.6	18.03 458.0	1.37 34.7	1.36 34.7	1.22 31.0	0.79 20.0	1.18 30.0		RZD/RZU 16	RH 16
HZ 1180M B	42.50 1079.4	-	37.23 945.6	18.03 458.0	1.44 36.7	1.44 36.7	1.30 33.0	0.79 20.0	1.18 30.0		RZD/RZU 16	RH 16
HZ 1180M C	42.65 1083.4	-	37.23 945.6	18.07 459.0	1.52 38.7	1.52 38.7	1.38 35.0	0.83 21.0	1.18 30.0		RZD/RZU 18	RH 20
HZ 1180M D	42.81 1087.4	-	37.23 945.6	18.11 460.0	1.60 40.7	1.60 40.7	1.46 37.0	0.87 22.0	1.18 30.0		RZD/RZU 18	RH 20

HZ[®]-M STEEL WALL SYSTEMS

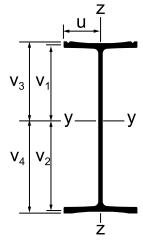
Solution 100



JD FIELDS & COMPANY, INC. A FIELDS COMPANY	PROPERTIES PER SOLUTION												Coating Area	
	Dimensions					Sectional Area in² cm²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus				
	v ₁ in mm	v ₂ in mm	v ₃ in mm	v ₄ in mm	u in mm			y-y in⁴ cm⁴	z-z in⁴ cm⁴	y-y* in³ cm³	y-y** in³ cm³	z-z in³ cm³	Waterside ft²/ft m²/m	Landside ft²/ft m²/m
SECTION	12.12 307.9	-	12.43 315.7	-	8.27 210.0	48.37 312.0	164.59 244.9	5306.2 220,860	822.2 34,220	437.7 7,175	-	99.4 1,630	1.38 0.421	7.97 2.430
HZ 880M A	15.82 401.7	-	16.36 415.7	-	9.02 229.0	45.82 295.6	155.92 232.0	8571.4 356,770	960.8 39,990	542.0 8,880	-	106.6 1,745	1.51 0.459	9.73 2.966
HZ 880M B	15.89 403.7	-	16.36 415.7	-	9.06 230.0	50.87 328.2	173.13 257.6	9435.7 392,750	1027.5 42,770	593.7 9,730	-	113.5 1,860	1.51 0.461	9.74 2.967
HZ 880M C	15.97 405.7	-	16.36 415.7	-	9.06 230.0	53.11 342.7	180.76 269.0	10012.7 416,760	1065.5 44,350	626.9 10,275	-	117.7 1,930	1.51 0.461	9.73 2.967
HZ 1080M A	20.62 523.7	-	21.17 537.7	-	8.94 227.0	57.63 371.8	196.13 291.9	16805.3 699,490	944.7 39,320	815.1 13,355	-	105.7 1,730	1.49 0.455	11.17 3.403
HZ 1080M B	20.74 526.7	-	21.17 537.7	-	8.94 227.0	61.26 395.2	208.46 310.2	18373.8 764,780	1016.2 42,300	886.1 14,520	-	113.7 1,865	1.49 0.455	11.17 3.403
HZ 1080M C	20.85 529.7	-	21.17 537.7	-	8.98 228.0	67.77 437.2	230.62 343.2	20257.8 843,200	1079.8 44,950	971.4 15,920	-	120.3 1,970	1.50 0.457	11.17 3.405
HZ 1080M D	21.01 533.7	-	21.17 537.7	-	9.00 228.5	73.04 471.2	248.56 369.9	22093.2 919,590	1127.5 46,930	1051.5 17,230	-	125.3 2,055	1.50 0.457	11.17 3.405
HZ 1180M A	21.17 537.7	-	21.17 537.7	-	9.02 229.0	77.26 498.4	262.92 391.3	23479.2 977,280	1151.8 47,940	1109.1 18,175	-	127.8 2,095	1.50 0.458	11.18 3.406
HZ 1180M B	21.25 539.7	-	21.25 539.7	-	9.02 229.0	80.09 516.7	272.57 405.6	24755.0 1,030,390	1228.6 51,140	1165.1 19,090	-	136.3 2,235	1.50 0.458	11.20 3.414
HZ 1180M C	21.33 541.7	-	21.33 541.7	-	9.04 229.5	84.61 545.9	287.95 428.5	26296.4 1,094,540	1314.5 54,720	1233.0 20,205	-	145.5 2,385	1.51 0.459	11.23 3.423
HZ 1180M D	21.41 543.7	-	21.41 543.7	-	9.06 230.0	89.14 575.1	303.37 451.5	27852.9 1,159,330	1401.5 58,340	1301.2 21,325	-	154.8 2,535	1.53 0.466	11.24 3.426

* Referring outside of HZ[®]-M-flange. ** Referring outside of connector.

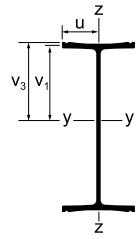
Solution 102



JD FIELDS & COMPANY, INC. A FIELDS COMPANY	PROPERTIES PER SOLUTION												Coating Area	
	Dimensions					Sectional Area in ² cm ²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus				
	V ₁ in mm	V ₂ in mm	V ₃ in mm	V ₄ in mm	u in mm			y-y in ⁴ cm ⁴	z-z in ⁴ cm ⁴	y-y* in ³ cm ³	y-y** in ³ cm ³	z-z in ³ cm ³	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION														
HZ 630M	12.26 311.4	11.98 304.4	12.57 319.2	12.29 312.2	8.27 210.0	47.83 308.6	162.77 242.2	5224.5 217,460	793.1 33010	426.2 6,985	-	95.9 1,570	1.44 0.440	7.97 2.430
HZ 880M A	15.99 406.2	15.64 397.2	16.54 420.1	16.19 411.2	9.02 229.0	45.32 292.4	154.24 229.5	8441.1 351,350	928.4 38640	527.9 8,650	-	103.0 1,685	1.57 0.478	9.73 2.966
HZ 880M B	16.07 408.1	15.72 399.3	16.54 420.0	16.19 411.3	9.06 230.0	50.33 324.7	171.30 254.9	9293.2 386,810	991.9 41280	578.4 9,480	-	109.5 1,795	1.58 0.481	9.74 2.967
HZ 880M C	16.14 409.9	15.81 401.5	16.53 419.9	16.20 411.4	9.06 230.0	52.58 339.2	178.93 266.3	9870.3 410,830	1029.8 42870	611.6 10,025	-	113.7 1,865	1.58 0.480	9.73 2.967
HZ 1080M A	20.80 528.2	20.44 519.2	21.34 542.2	20.99 533.1	8.94 227.0	57.15 368.7	194.49 289.4	16590.8 690,560	913.4 38020	797.8 13,075	-	102.2 1,675	1.55 0.473	11.17 3.403
HZ 1080M B	20.92 531.4	20.55 522.0	21.35 542.4	20.98 532.9	8.94 227.0	60.72 391.7	206.63 307.5	18134.7 754,830	981.6 40860	866.8 14,205	-	109.8 1,800	1.56 0.475	11.17 3.403
HZ 1080M C	21.02 534.0	20.69 525.4	21.34 541.9	21.00 533.4	8.98 228.0	67.23 433.7	228.79 340.5	20018.9 833,250	1044.9 43490	952.3 15,605	-	116.4 1,910	1.56 0.476	11.17 3.405
HZ 1080M D	21.17 537.7	20.86 529.7	21.32 541.6	21.01 533.7	9.00 228.5	72.50 467.7	246.73 367.2	21854.4 909,650	1092.3 45470	1032.5 16,920	-	121.4 1,990	1.56 0.477	11.17 3.405
HZ 1180M A	21.32 541.5	21.02 533.9	21.32 541.5	21.02 533.9	9.02 229.0	76.72 494.9	261.08 388.5	23238.6 967,270	1116.2 46460	1090.1 17,865	-	123.8 2,030	1.57 0.477	11.18 3.406
HZ 1180M B	21.44 544.5	21.06 534.9	21.44 544.5	21.06 534.9	9.02 229.0	79.37 512.1	270.13 402.0	24433.5 1,017,000	1181.4 49170	1139.7 18,675	-	131.0 2,145	1.58 0.481	11.20 3.414
HZ 1180M C	21.51 546.3	21.15 537.1	21.51 546.3	21.15 537.1	9.04 229.5	83.89 541.2	285.51 424.9	25972.6 1,081,070	1267.1 52740	1207.6 19,790	-	140.2 2,300	1.58 0.482	11.23 3.423
HZ 1180M D	21.67 550.4	21.14 537.0	21.67 550.4	21.14 537.0	9.06 230.0	88.05 568.1	299.66 445.9	27355.6 1,138,630	1329.5 55340	1262.5 20,690	-	146.8 2,405	1.60 0.487	11.24 3.426

* Referring outside of HZ®-M-flange. ** Referring outside of connector.

Solution 104

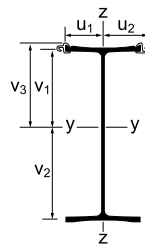


JD FIELDS & COMPANY, INC. A FIELDS COMPANY	PROPERTIES PER SOLUTION												Coating Area	
	Dimensions					Sectional Area in ² cm ²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus				
	v ₁ in mm	v ₂ in mm	v ₃ in mm	v ₄ in mm	u in mm			y-y in ⁴ cm ⁴	z-z in ⁴ cm ⁴	y-y* in ³ cm ³	y-y** in ³ cm ³	z-z in ³ cm ³	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION	12.12 307.9	12.12 307.9	12.43 315.7	12.43 315.7	8.27 210.0	47.29 305.1	160.94 239.5	5144.6 214,130	764.0 31800	424.4 6,955	-	92.4 1,515	1.44 0.440	8.04 2.449
HZ 630M	15.82 401.7	15.82 401.7	16.36 415.7	16.36 415.7	9.02 229.0	44.83 289.2	152.57 227.0	8313.6 346,040	895.9 37290	525.7 8,615	-	99.4 1,630	1.57 0.478	9.79 2.984
HZ 880M A	15.89 403.7	15.89 403.7	16.36 415.7	16.36 415.7	9.06 230.0	49.80 321.3	169.47 252.2	9153.7 381,010	956.2 39800	575.9 9,440	-	105.6 1,730	1.58 0.481	9.80 2.987
HZ 880M B	15.97 405.7	15.97 405.7	16.36 415.7	16.36 415.7	9.06 230.0	52.04 335.7	177.10 263.6	9730.7 405,030	994.2 41380	609.2 9,985	-	109.8 1,800	1.58 0.480	9.80 2.987
HZ 880M C	20.62 523.7	20.62 523.7	21.17 537.7	21.17 537.7	8.94 227.0	56.67 365.6	192.84 287.0	16379.9 681,790	882.1 36720	794.4 13,020	-	98.7 1,620	1.55 0.473	11.23 3.421
HZ 1080M A	20.74 526.7	20.74 526.7	21.17 537.7	21.17 537.7	8.94 227.0	60.18 388.3	204.80 304.8	17899.8 745,050	947.0 39420	863.2 14,145	-	106.0 1,735	1.56 0.475	11.23 3.423
HZ 1080M B	20.85 529.7	20.85 529.7	21.17 537.7	21.17 537.7	8.98 228.0	66.69 430.3	226.96 337.8	19783.7 823,460	1009.9 42040	948.7 15,545	-	112.5 1,845	1.56 0.476	11.23 3.424
HZ 1080M C	21.01 533.7	21.01 533.7	21.17 537.7	21.17 537.7	9.00 228.5	71.96 464.3	244.90 364.4	21619.1 899,860	1057.2 44000	1028.9 16,860	-	117.5 1,925	1.56 0.477	11.24 3.425
HZ 1080M D	21.17 537.7	21.17 537.7	21.17 537.7	21.17 537.7	9.02 229.0	76.17 491.4	259.23 385.8	23001.4 957,390	1080.6 44980	1086.6 17,805	-	119.9 1,965	1.57 0.477	11.24 3.426
HZ 1180M A	21.25 539.7	21.25 539.7	21.25 539.7	21.25 539.7	9.02 229.0	78.66 507.5	267.68 398.4	24117.8 1,003,860	1134.2 47210	1135.1 18,600	-	125.8 2,060	1.58 0.481	11.28 3.437
HZ 1180M B	21.33 541.7	21.33 541.7	21.33 541.7	21.33 541.7	9.04 229.5	83.17 536.6	283.06 421.2	25654.4 1,067,820	1219.6 50760	1202.9 19,710	-	135.0 2,210	1.58 0.482	11.31 3.446
HZ 1180M C	21.41 543.7	21.41 543.7	21.41 543.7	21.41 543.7	9.06 230.0	86.96 561.0	295.94 440.4	26870.5 1,118,440	1257.5 52340	1255.3 20,570	-	138.9 2,275	1.60 0.487	11.31 3.447
HZ 1180M D														

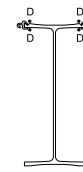
* Referring outside of HZ[®]-M-flange. ** Referring outside of connector.

HZ®-M STEEL WALL SYSTEMS

Solution 12



Delivery Form



D = discontinuous weld, a = 0.236" (6 mm), 10% of length (3.94" per 3.28', 100 mm/m) over the whole pile length + 19.68" (500 mm) continuous weld at top and toe

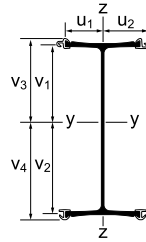
R = continuous weld, a = 0.236" (6 mm), length 19.68" (500 mm) at top and toe only

JD FIELDS & COMPANY, INC. A JACOBS COMPANY	PROPERTIES PER SOLUTION													Coating Area	
	Dimensions					Sectional Area in ² cm ²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus					
	V ₁	V ₂	V ₃	V ₄	U ₁			U ₂	y-y	z-z	y-y*	y-y**	z-z		
	in mm	in mm	in mm	in mm	in mm			in mm	in ⁴ cm ⁴	in ⁴ cm ⁴	in ³ cm ³	in ³ cm ³	in ³ cm ³	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION															
HZ 630M	10.85 275.5	13.39 340.2	11.96 303.8	-	8.26 209.9	10.39 263.9	54.20 349.7	184.45 274.5	6036.6 251,260	1282.9 53400	450.7 7,385	504.8 8270	123.5 2,025	1.91 0.582	8.29 2.527
HZ 880M A	14.02 356.2	17.61 447.2	15.37 390.5	-	9.01 228.9	11.14 282.9	51.70 333.5	175.93 261.8	9868.8 410,770	1504.9 62640	560.5 9,185	641.9 10520	135.1 2,215	2.04 0.621	9.90 3.017
HZ 880M B	14.27 362.5	17.51 444.9	15.55 394.9	-	9.05 229.9	11.18 283.9	56.71 365.8	192.98 287.2	10738.1 446,960	1573.2 65480	613.1 10,045	690.8 11320	140.8 2,305	2.05 0.624	9.91 3.019
HZ 880M C	14.41 366.1	17.53 445.3	15.61 396.4	-	9.05 229.9	11.18 283.9	58.95 380.3	200.61 298.5	11320.8 471,210	1611.2 67060	645.7 10,580	725.3 11885	144.2 2,360	2.05 0.624	9.90 3.019
HZ 1080M A	18.72 475.6	22.51 571.8	20.07 509.9	-	8.93 226.9	11.06 280.9	63.52 409.8	216.17 321.7	19067.5 793,650	1480.5 61620	846.9 13,880	949.9 15565	133.9 2,195	2.02 0.617	11.34 3.455
HZ 1080M B	18.96 481.5	22.51 571.9	20.19 512.9	-	8.93 226.9	11.06 280.9	67.09 432.8	228.32 339.8	20628.1 858,610	1548.7 64460	916.2 15,015	1021.7 16740	140.1 2,295	2.03 0.618	11.33 3.455
HZ 1080M C	19.23 488.5	22.48 570.9	20.35 516.8	-	8.97 227.9	11.10 281.9	73.60 474.8	250.48 372.8	22531.1 937,820	1616.7 67290	1002.5 16,430	1107.3 18145	145.7 2,385	2.03 0.619	11.34 3.456
HZ 1080M D	19.50 495.3	22.53 572.1	20.46 519.6	-	8.99 228.4	11.12 282.4	78.87 508.8	268.41 399.4	24379.5 1,014,760	1666.5 69370	1082.3 17,735	1191.9 19530	149.9 2,455	2.03 0.620	11.34 3.457
HZ 1180M A	19.73 501.2	22.61 574.2	20.53 521.5	-	9.01 228.9	11.14 282.9	83.09 536.0	282.76 420.8	25773.1 1,072,760	1692.8 70460	1140.1 18,685	1255.2 20570	152.0 2,490	2.04 0.621	11.34 3.458
HZ 1180M B	19.89 505.3	22.60 574.1	20.61 523.6	-	9.01 228.9	11.14 282.9	85.75 553.2	291.81 434.3	26985.0 1,123,200	1758.2 73180	1193.9 19,565	1309.0 21450	157.9 2,585	2.04 0.622	11.36 3.462
HZ 1180M C	19.90 505.4	22.76 578.0	20.66 524.7	-	9.03 229.4	11.16 283.4	90.96 586.8	309.55 460.7	28778.5 1,197,860	1897.2 78970	1264.6 20,725	1393.2 22830	170.1 2,785	2.08 0.635	11.39 3.471
HZ 1180M D	20.13 511.2	22.68 576.2	20.81 528.5	-	9.05 229.9	11.18 283.9	95.12 613.7	323.70 481.7	30194.1 1,256,780	1962.2 81670	1331.1 21,815	1451.1 23780	175.6 2,875	2.10 0.641	11.40 3.476

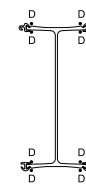
* Referring outside of HZ®-M-flange. ** Referring outside of connector.

HZ®-M STEEL WALL SYSTEMS

Solution 14



Delivery Form



D = discontinuous weld, a = 0.236" (6 mm), 10% of length (3.94" per 3.28', 100 mm/m) over the whole pile length + 19.68" (500 mm) continuous weld at top and toe

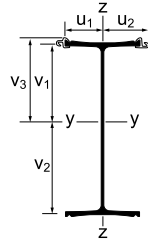
R = continuous weld, a = 0.236" (6 mm), length 19.68" (500 mm) at top and toe only

JD FIELDS & COMPANY, INC. A FUESS COMPANY	PROPERTIES PER SOLUTION													Coating Area	
	Dimensions					Sectional Area in ² cm ²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus					
	V ₁	V ₂	V ₃	V ₄	U ₁			U ₂	Y-Y	Z-Z	Y-Y*	Y-Y**	Z-Z		
	in mm	in mm	in mm	in mm	in mm			in mm	in ⁴ cm ⁴	in ⁴ cm ⁴	in ³ cm ³	in ³ cm ³	in ³ cm ³	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION															
HZ 630M	12.10 307.5	12.14 308.3	13.22 335.7	13.25 336.6	8.26 209.9	10.39 263.9	59.90 386.5	203.85 303.4	6939.7 288,850	1711.8 71250	571.8 9,370	523.7 8580	164.8 2,700	1.91 0.582	9.21 2.808
HZ 880M A	15.79 401.1	15.84 402.4	17.14 435.4	17.20 436.8	9.01 228.9	11.14 282.9	57.44 370.6	195.49 290.9	11486.0 478,080	2013.6 83810	725.1 11,880	667.9 10945	180.8 2,965	2.04 0.621	10.67 3.253
HZ 880M B	15.87 403.1	15.92 404.3	17.14 435.4	17.19 436.8	9.05 229.9	11.18 283.9	62.41 402.6	212.38 316.1	12326.1 513,050	2083.3 86710	774.4 12,690	716.9 11745	186.4 3,055	2.05 0.624	10.68 3.256
HZ 880M C	15.95 405.1	16.00 406.3	17.14 435.5	17.19 436.7	9.05 229.9	11.18 283.9	64.65 417.1	220.02 327.4	12903.1 537,070	2121.3 88290	806.7 13,220	750.4 12300	189.8 3,110	2.05 0.624	10.68 3.255
HZ 1080M A	20.59 522.9	20.65 524.5	21.94 557.2	22.00 558.9	8.93 226.9	11.06 280.9	69.28 446.9	235.76 350.9	21761.8 905,800	1981.3 82470	1053.9 17,270	989.0 16205	179.2 2,935	2.02 0.617	12.11 3.690
HZ 1080M B	20.71 526.0	20.77 527.4	21.94 557.3	22.00 558.9	8.93 226.9	11.06 280.9	72.79 469.6	247.72 368.6	23281.5 969,050	2046.2 85170	1121.2 18,375	1058.2 17340	185.0 3,030	2.03 0.618	12.11 3.691
HZ 1080M C	20.83 529.0	20.88 530.4	21.94 557.3	22.00 558.8	8.97 227.9	11.10 281.9	79.30 511.6	269.88 401.6	25165.6 1,047,480	2118.4 88170	1205.2 19,750	1143.9 18745	190.9 3,130	2.03 0.619	12.12 3.693
HZ 1080M D	20.99 533.1	21.04 534.3	21.94 557.4	22.00 558.8	8.99 228.4	11.12 282.4	84.57 545.6	287.81 428.3	27001.0 1,123,870	2170.3 90340	1283.5 21,035	1227.4 20115	195.2 3,200	2.03 0.620	12.12 3.693
HZ 1180M A	21.15 537.1	21.19 538.3	21.94 557.4	21.97 558.1	9.01 228.9	11.14 282.9	88.78 572.8	302.15 449.6	28383.2 1,181,400	2198.4 91500	1339.3 21,945	1291.7 21170	197.4 3,235	2.04 0.621	12.12 3.694
HZ 1180M B	21.22 539.1	21.27 540.3	21.95 557.4	22.00 558.7	9.01 228.9	11.14 282.8	91.27 588.8	310.60 462.2	29499.6 1,227,870	2251.9 93730	1386.8 22,725	1341.1 21975	202.2 3,315	2.04 0.622	12.13 3.696
HZ 1180M C	21.49 545.9	21.16 537.5	22.25 565.2	21.92 556.8	9.03 229.4	11.16 283.4	98.07 632.7	333.73 496.7	31982.3 1,331,210	2538.0 105640	1488.0 24,385	1437.2 23550	227.5 3,730	2.08 0.635	12.24 3.730
HZ 1180M D	21.57 547.8	21.25 539.6	22.25 565.1	21.93 556.9	9.05 229.9	11.18 283.9	101.85 657.1	346.61 515.8	33198.4 1,381,830	2581.4 107440	1539.4 25,225	1492.3 24455	231.0 3,785	2.10 0.641	12.26 3.736

* Referring outside of HZ'-M-flange. ** Referring outside of connector.

HZ®-M STEEL WALL SYSTEMS

Solution 124



Delivery Form



D = discontinuous weld, a = 0.236" (6 mm), 10% of length (3.94" per 3.28', 100 mm/m) over the whole pile length + 19.68" (500 mm) continuous weld at top and toe

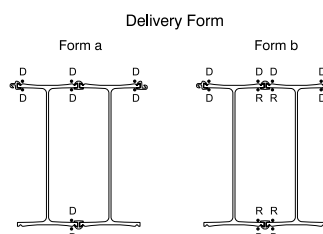
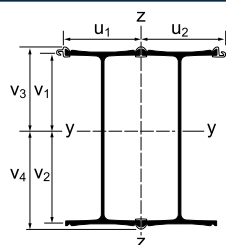
R = continuous weld, a = 0.236" (6 mm), length 19.68" (500 mm) at top and toe only

J.D. FIELDS & COMPANY, INC. A JACOBI COMPANY	PROPERTIES PER SOLUTION													Coating Area	
	Dimensions					Sectional Area in ² cm ²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus					
	v ₁	v ₂	v ₃	v ₄	u ₁			u ₂	y-y	z-z	y-y*	y-y**	z-z		
	in mm	in mm	in mm	in mm	in mm			in mm	in ⁴ cm ⁴	in ⁴ cm ⁴	in ³ cm ³	in ³ cm ³	in ³ cm ³	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
SECTION															
HZ 630M	10.71 272.1	13.53 343.6	11.82 300.3	-	8.26 209.9	10.39 263.9	53.66 346.2	182.65 271.8	5931.1 247,130	1252.6 52190	438.6 7,190	502.0 8230	120.8 1,980	1.91 0.582	8.35 2.546
HZ 880M A	13.85 351.8	17.78 451.6	15.20 386.1	-	9.01 228.8	11.14 282.9	51.20 330.3	174.25 259.3	9698.2 404,090	1471.0 61290	546.0 8,950	638.4 10465	132.1 2,165	2.04 0.621	9.90 3.019
HZ 880M B	14.10 358.2	17.69 449.2	15.37 390.5	-	9.05 229.9	11.18 283.9	56.17 362.4	191.18 284.5	10554.7 439,780	1536.0 64000	597.2 9,790	686.9 11260	137.6 2,255	2.05 0.624	9.91 3.022
HZ 880M C	14.25 361.9	17.70 449.5	15.44 392.3	-	9.05 229.9	11.18 283.9	58.40 376.8	198.78 295.8	11138.2 464,090	1573.9 65580	629.8 10,325	721.6 11830	140.9 2,310	2.05 0.624	9.91 3.021
HZ 1080M A	18.54 470.8	22.70 576.6	19.89 505.1	-	8.93 226.9	11.06 280.9	63.04 406.7	214.57 319.3	18793.0 783,040	1447.7 60320	828.4 13,580	945.5 15500	131.2 2,150	2.02 0.617	11.39 3.473
HZ 1080M B	18.76 476.6	22.71 576.8	20.00 507.9	-	8.93 226.9	11.06 280.9	66.56 429.4	226.46 337.0	20325.6 846,900	1512.5 63020	895.8 14,685	1017.2 16675	136.9 2,245	2.03 0.618	11.40 3.474
HZ 1080M C	19.06 484.1	22.65 575.3	20.17 512.4	-	8.97 227.9	11.10 281.9	73.07 471.4	248.64 370.0	22230.7 926,280	1580.2 65840	982.1 16,100	1102.9 18080	142.4 2,335	2.03 0.619	11.40 3.476
HZ 1080M D	19.34 491.2	22.69 576.3	20.30 515.5	-	8.99 228.4	11.12 282.4	78.34 505.4	266.58 396.7	24079.9 1,003,330	1629.6 67900	1062.0 17,410	1187.4 19465	146.7 2,405	2.03 0.620	11.41 3.476
HZ 1180M A	19.58 497.3	22.76 578.1	20.38 517.6	-	9.01 228.9	11.14 282.9	82.55 532.6	280.96 418.1	25471.9 1,061,330	1655.5 68980	1120.0 18,360	1250.8 20505	148.8 2,440	2.04 0.621	11.41 3.477
HZ 1180M B	19.70 500.5	22.79 578.9	20.43 518.8	-	9.01 228.9	11.14 282.9	85.03 548.6	289.36 430.6	26593.2 1,108,050	1709.0 71210	1167.5 19,140	1303.0 21360	153.4 2,515	2.04 0.622	11.43 3.484
HZ 1180M C	19.72 500.8	22.94 582.6	20.48 520.1	-	9.03 229.4	11.16 283.4	90.24 582.2	307.10 457.0	28380.2 1,182,510	1847.8 76990	1238.3 20,300	1386.8 22735	165.6 2,715	2.08 0.635	11.46 3.493
HZ 1180M D	19.86 504.5	22.95 582.9	20.54 521.8	-	9.05 229.9	11.18 283.9	94.02 606.6	320.01 476.2	29604.2 1,233,510	1888.3 78680	1290.8 21,160	1442.0 23640	169.0 2,770	2.10 0.641	11.47 3.497

* Referring outside of HZ®-M-flange. ** Referring outside of connector.

HZ[®]-M STEEL WALL SYSTEMS

Solution 24



D = discontinuous weld, a = 0.236" (6 mm), 10% of length (3.94" per 3.28'; 100 mm/m) over the whole pile length + 19.68" (500 mm) continuous weld at top and toe

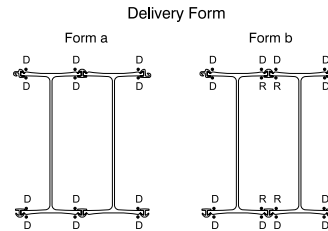
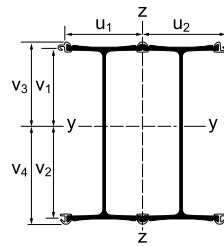
R = continuous weld, a = 0.236" (6 mm), length 19.68" (500 mm) at top and toe only

JD FIELDS & COMPANY, INC. ESTABLISHED 1978	PROPERTIES PER SOLUTION													Coating Area	
	Dimensions						Sectional Area in ² cm ²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus				
	v ₁	v ₂	v ₃	v ₄	u ₁	u ₂			y-y	z-z	y-y*	y-y**	z-z	Waterside	Landside
	in mm	in mm	in mm	in mm	in mm	in mm			in ⁴ cm ⁴	in ⁴ cm ⁴	in ³ cm ³	in ³ cm ³	in ³ cm ³	ft ² /ft m ² /m	ft ² /ft m ² /m
SECTION															
HZ 630M	11.42 290.0	12.83 325.8	12.53 318.3	13.94 354.1	16.81 426.9	18.93 480.9	107.19 691.5	364.79 542.9	12031.0 500,770	10338.8 430330	938.1 15,370	863.0 14140	546.1 8,950	3.50 1.067	9.94 3.031
HZ 880M A	14.83 376.7	16.80 426.7	16.19 411.2	18.16 461.2	18.30 464.8	20.43 518.9	102.27 659.8	348.05 518.0	19700.6 820,000	11783.3 490460	1172.7 19,220	1217.0 19945	576.8 9,450	3.75 1.144	11.68 3.559
HZ 880M B	15.00 380.9	16.79 426.5	16.27 413.4	18.07 458.9	18.38 466.9	20.51 520.9	112.20 723.9	381.85 568.3	21389.6 890,310	12853.1 534990	1273.9 20,875	1314.3 21540	626.7 10,270	3.77 1.150	11.70 3.565
HZ 880M C	15.11 383.8	16.83 427.6	16.31 414.3	18.03 458.1	18.38 466.9	20.51 520.9	116.69 752.8	397.12 591.0	22547.1 938,480	13319.6 554410	1339.3 21,950	1382.5 22655	649.5 10,645	3.77 1.150	11.69 3.565
HZ 1080M A	19.58 497.2	21.66 550.2	20.93 531.7	23.02 584.6	18.14 460.9	20.27 514.9	125.94 812.5	428.61 637.8	38005.0 1,581,890	13596.5 565930	1754.6 28,755	1815.7 29755	670.7 10,990	3.73 1.136	13.10 3.992
HZ 1080M B	19.75 501.6	21.72 551.8	20.99 533.1	22.96 583.2	18.14 460.9	20.27 514.9	132.97 857.9	452.52 673.4	41051.9 1,708,720	14322.7 596160	1889.8 30,970	1956.2 32055	706.6 11,580	3.73 1.138	13.11 3.995
HZ 1080M C	19.96 506.9	21.75 552.5	21.07 535.3	22.87 581.0	18.22 462.9	20.35 516.9	145.99 941.9	496.84 739.4	44831.4 1,866,030	15669.5 652220	2060.9 33,770	2127.3 34860	770.1 12,620	3.74 1.141	13.12 3.998
HZ 1080M D	20.17 512.4	21.85 555.0	21.14 536.8	22.81 579.4	18.26 463.9	20.39 517.9	156.53 1009.9	532.71 792.8	48510.1 2,019,150	16728.2 696280	2220.2 36,380	2295.3 37615	820.5 13,445	3.75 1.142	13.12 3.999
HZ 1180M A	20.37 517.5	21.97 557.9	21.18 537.9	22.77 578.3	18.30 464.9	20.43 518.9	164.96 1064.2	561.38 835.4	51280.2 2,134,450	17564.3 731080	2334.7 38,260	2421.5 39680	859.9 14,090	3.75 1.144	13.13 4.001
HZ 1180M B	20.48 520.1	22.02 559.3	21.20 538.5	22.75 577.7	18.30 464.9	20.43 518.9	169.92 1096.3	578.28 860.6	53516.1 2,227,520	18099.9 753380	2430.4 39,825	2524.3 41365	886.1 14,520	3.76 1.147	13.15 4.009
HZ 1180M C	20.53 521.3	22.13 562.1	21.29 540.6	22.89 581.4	18.38 466.9	20.51 520.9	181.24 1169.3	616.79 917.9	57523.0 2,394,300	19477.8 810730	2599.6 42,600	2702.5 44285	949.8 15,565	3.82 1.164	13.20 4.022
HZ 1180M D	20.64 524.2	22.17 563.2	21.32 541.5	22.86 580.5	18.42 467.9	20.55 521.9	188.81 1218.1	642.55 956.2	59959.8 2,495,730	20289.8 844530	2704.0 44,310	2812.7 46095	987.5 16,180	3.86 1.176	13.23 4.032

* Referring outside of HZ[®]-M-flange. ** Referring outside of connector.

HZ®-M STEEL WALL SYSTEMS

Solution 26



D = discontinuous weld, a = 0.236" (6 mm), 10% of length (3.94" per 3.28', 100 mm/m) over the whole pile length + 19.68" (500 mm) continuous weld at top and toe

R = continuous weld, a = 0.236" (6 mm), length 19.68" (500 mm) at top and toe only

JD FIELDS & COMPANY, INC. © 2023 COMPANY	PROPERTIES PER SOLUTION													Coating Area	
	Dimensions					Sectional Area in ² cm ²	Mass lb/ft kg/m	Moment of Inertia		Elastic Section Modulus					
	V ₁	V ₂	V ₃	V ₄	u ₁			u ₂	y-y	z-z	y-y*	y-y**	z-z	Waterside ft ² /ft m ² /m	Landside ft ² /ft m ² /m
	in mm	in mm	in mm	in mm	in mm	in mm	in ⁴ cm ⁴	in ⁴ cm ⁴	in ³ cm ³	in ³ cm ³	in ³ cm ³				
SECTION															
HZ 630M	12.11 307.6	12.13 308.1	13.23 336.0	13.24 336.4	16.81 426.9	18.93 480.9	113.43 731.8	386.02 574.5	12980.3 540,280	12162.8 506260	1070.2 17,535	980.1 16060	642.4 10,530	3.50 1.067	10.80 3.292
HZ 880M A	15.80 401.4	15.83 402.0	17.16 435.8	17.19 436.5	18.31 464.9	20.43 518.8	108.51 700.1	369.28 549.6	21379.6 889,890	13940.2 580240	1350.7 22,135	1246.1 20420	682.5 11,185	3.75 1.144	12.39 3.776
HZ 880M B	15.88 403.4	15.91 404.0	17.16 435.8	17.18 436.5	18.38 467.0	20.50 520.8	118.44 764.1	403.08 599.9	23059.8 959,830	15028.4 625530	1449.8 23,755	1343.9 22020	733.0 12,010	3.77 1.150	12.41 3.782
HZ 880M C	15.96 405.4	15.98 406.0	17.16 435.9	17.18 436.5	18.38 467.0	20.50 520.8	122.93 793.1	418.35 622.6	24213.8 1,007,860	15494.9 644950	1514.9 24,825	1411.1 23125	755.7 12,385	3.77 1.150	12.41 3.782
HZ 1080M A	20.60 523.3	20.63 524.1	21.96 557.7	21.99 558.5	18.14 460.9	20.27 514.9	132.18 852.8	449.84 669.4	40817.8 1,698,970	15717.1 654200	1978.2 32,415	1859.0 30465	775.4 12,705	3.73 1.136	13.81 4.209
HZ 1080M B	20.72 526.3	20.75 527.1	21.96 557.7	21.99 558.5	18.14 460.9	20.27 514.9	139.21 898.1	473.75 705.0	43857.5 1,825,490	16443.3 684420	2113.5 34,635	1997.4 32730	811.2 13,295	3.73 1.138	13.82 4.212
HZ 1080M C	20.84 529.4	20.87 530.1	21.96 557.8	21.99 558.5	18.22 462.9	20.35 516.9	152.23 982.1	518.07 771.0	47625.5 1,982,330	17808.3 741240	2282.2 37,400	2168.8 35540	875.2 14,340	3.74 1.141	13.83 4.215
HZ 1080M D	21.00 533.4	21.02 534.0	21.96 557.8	21.99 558.5	18.26 463.9	20.39 517.9	162.77 1050.1	553.94 824.4	51296.2 2,135,120	18876.0 785680	2439.8 39,980	2335.9 38280	925.9 15,170	3.75 1.142	13.83 4.216
HZ 1180M A	21.16 537.4	21.18 538.0	21.96 557.8	21.99 558.4	18.30 464.9	20.43 518.9	171.20 1104.5	582.61 867.0	54060.7 2,250,190	19721.2 820860	2552.3 41,825	2461.7 40340	965.4 15,820	3.75 1.144	13.84 4.217
HZ 1180M B	21.24 539.4	21.26 540.0	21.96 557.8	21.99 558.4	18.30 464.9	20.43 518.8	176.16 1136.5	599.51 892.2	56293.6 2,343,130	20256.9 843160	2647.9 43,390	2563.3 42005	991.7 16,250	3.76 1.147	13.85 4.221
HZ 1180M C	21.41 543.9	21.24 539.5	22.17 563.2	22.00 558.8	18.38 466.9	20.51 520.9	189.07 1219.8	643.42 957.5	60979.6 2,538,170	22216.2 924710	2847.8 46,665	2750.2 45070	1083.4 17,755	3.82 1.164	13.97 4.259
HZ 1180M D	21.49 545.8	21.32 541.6	22.17 563.1	22.00 558.9	18.42 467.9	20.55 521.9	196.63 1268.6	669.18 995.9	63411.7 2,639,410	23041.8 959080	2951.0 48,360	2860.4 46875	1121.5 18,380	3.86 1.176	14.01 4.271

* Referring outside of HZ®-M-flange. ** Referring outside of connector.

Available Steel Grades

AMERICAN			CANADIAN			EUROPEAN		
ASTM	Yield Strength		Grade	Yield Strength		Grade	Yield Strength	
	ksi	MPa		ksi	MPa		ksi	MPa
A328	39	270	Grade 260 W	38	260	S240 GP	35	240
A572 Grade 42	42	290	Grade 300 W	43	297	S270 GP	39	270
A572 Grade 50	50	345	Grade 355 W	51	355	S320 GP	46	315
A572 Grade 55	55	380	Grade 400 W	58	400	S355 GP	51	355
A572 Grade 60	60	415				S390 GP	57	390
A572 Grade 65	65	450				S430 GP	62	430
A690	50	345				S460 GP	67	460
A690	57*	390				S500 GP*	72	500
A690	60*	415						

* On request

Delivery Conditions & Tolerances

HZ®-M & AZ PILES	ASTM A6	EN 10248
Mass	± 2.5%	± 5%
Length	+ 5 in. - 0 in.	± 200 mm
Height		± 5 mm
Width		± 2%
Width Interlocked		± 3%
Straightness		0.2% of the length
Ends out of Square		20 mm
AZ Pile		
Thickness		≤ 8.5 mm - 0.5 mm > 8.5 mm - 6%
HZ®-M Pile		
Thickness		≤ 12.5 mm + 2.0, -1.0 mm > 12.5 + 2.5, -1.5 mm

Maximum Rolled Lengths†

HZ®-M	108.3 ft.	33.0 m	
AZ	101.7 ft.	31.0 m	
RZD/RZU	78.7 ft.	24.0 m	(Length does not restrict wall height)
RH	78.7 ft.	24.0 m	(Length does not restrict wall height)

† Longer lengths may be possible upon request.