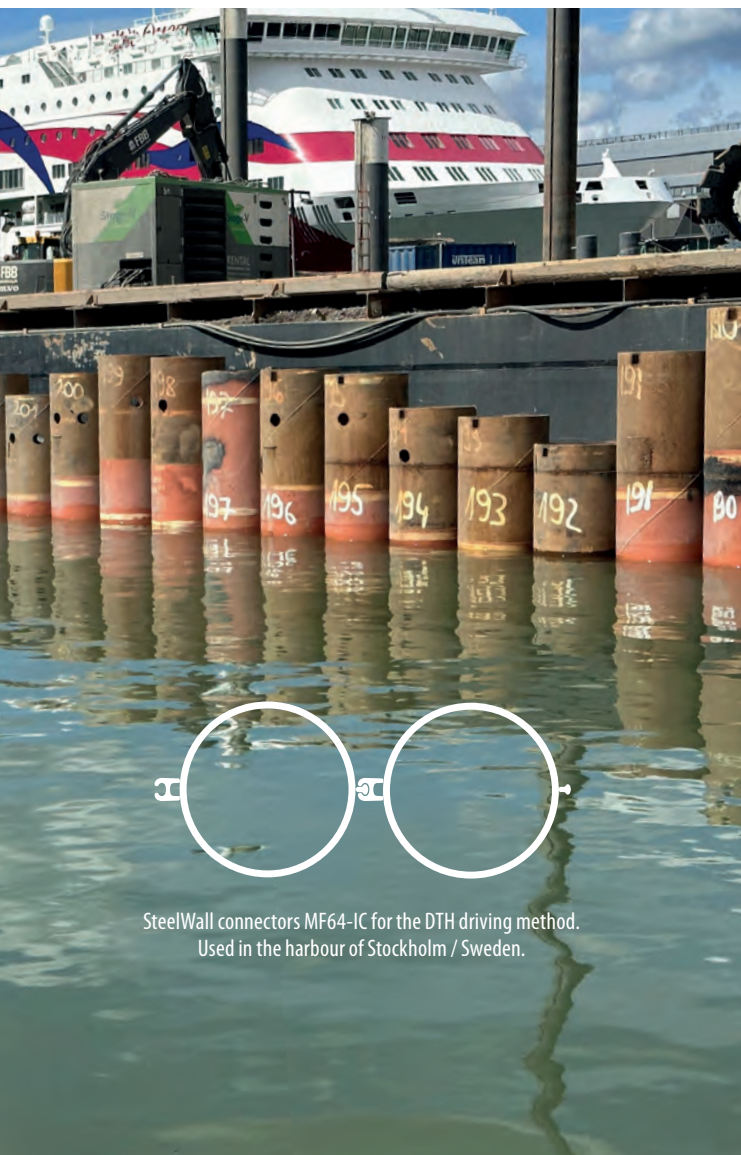


SteelWall®

Connectors for steel sheet pile walls

2024



SteelWall connectors MF64-IC for the DTH driving method.
Used in the harbour of Stockholm / Sweden.

SteelWall
Connectors





Larssen

Corner connectors	4
Omega corner connector	6
T connectors	7
Cross connector	8
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Ball & Socket

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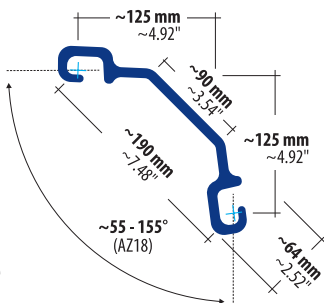
Larssen

Corner connectors

ULTRA-S

For Larssen sheet piles

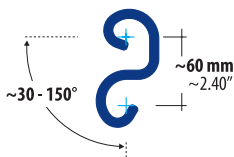
Steel grade: S355J2
Steel thickness: 0.35" (9 mm)
Standard length: 38.7 ft +0/-3.94"
(11.8 m +0/-100 mm)
Weight: 17 lbs/ft (25.3 kg/m)
ULTRA-S corner section can be driven individually up to a length of 38.7 ft (11.8 meters), provided that there are no weld joints.



LV20n

For Larssen sheet piles

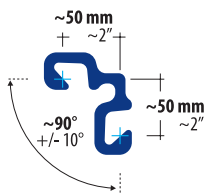
Steel grade: S355J2
Steel thickness: 0.32" (8 mm)
Standard lengths:
38.7 ft (11.8 m)
45.9 ft (14 m)
59 ft (18 m)
Weight: 9.45 lbs/ft (14.07 kg/m)



LLS90

For Larssen sheet piles

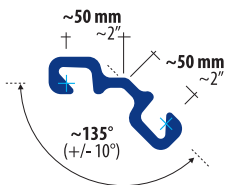
Steel grade: S355J2
Steel thickness: 0.35" (9 mm)
Standard lengths:
26.25 ft (8 m)
38.7 ft (11.8 m)
Weight: 11.87 lbs/ft (17.66 kg/m)

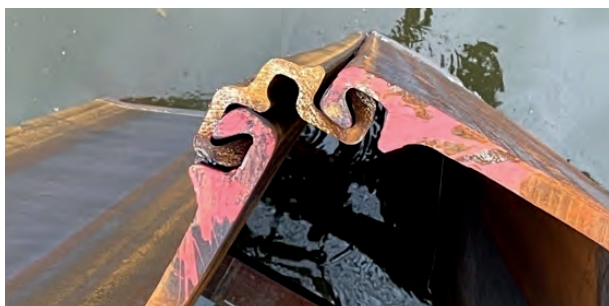


LLS135

For Larssen sheet piles

Steel grade: S355J2
Steel thickness: 0.35" (9 mm)
Standard lengths:
26.25 ft (8 m)
38.7 ft (11.8 m)
Weight: 11.87 lbs/ft (17.66 kg/m)





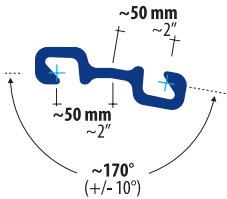
Larssen Corner connectors

Larssen Omega corner connector

LLS170

For Larssen sheet piles

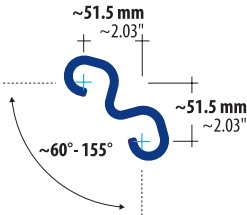
Steel grade: S355J2
Steel thickness: 0.35" (9 mm)
Standard lengths:
26.25 ft (8 m)
38.7 ft (11.8 m)
Weight: 11.85 lbs/ft (17.63 kg/m)



LVOn

For Larssen sheet piles

Steel grade: S355J2
Steel thickness: 0.32" (8 mm)
Standard lengths:
38.7 ft (11.8 m), 44 ft (13.40 m)
Weight: 9.347 lbs/ft (13.91 kg/m)



Larssen T connectors

LTn

For Larssen sheet piles

Steel grades: S355J2, S355GP

Steel thickness: 0.32" (8 mm)

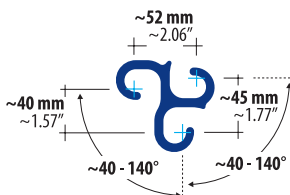
Standard length S355J2:

38.7 ft (11.8 m)

Standard length S355GP:

45.2 ft (13.8 m)

Weight: 10.42 lbs/ft (15.5 kg/m)



LOTn

For Larssen sheet piles

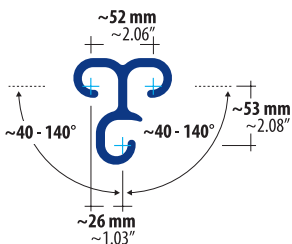
Steel grades: S355J2, S355GP

Steel thickness: 0.32" (8 mm)

Standard length S355J2: 38.7 ft (11.8 m)

Standard length S355GP: 45.2 ft (13.8 m)

Weight: 11.56 lbs/ft (17.2 kg/m)



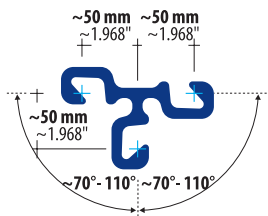
Larssen T connectors

Larssen Cross connector

LLTS

For Larssen sheet piles

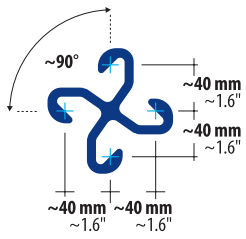
Steel grade: S355J2
Steel thickness: 0.35" (9 mm)
Standard length: 35.4 ft (10.8 m)
Weight: 17.605 lbs/ft (26.2 kg/m)



L4S

For Larssen sheet piles

Steel grade: S355J2
Steel thickness: 0.32" (8 mm)
Standard length: 38.7 ft (11.8 m)
Weight: 15.6 lbs/ft (23.2 kg/m)



Larssen Weld-on connectors

LV22

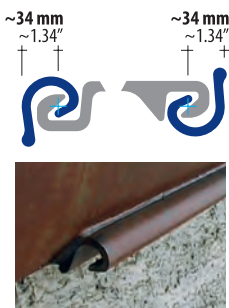
For Larssen sheet piles

Steel grade: S355J2

Steel thickness: 0.32" (8 mm)

Standard length: 38.7 ft (11.8 m)

Weight: 5.39 lbs/ft (8.02 kg/m)



L8

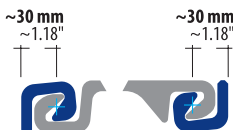
For Larssen sheet piles

Steel grade: S355J2

Steel thickness: 0.375" (9.5 mm)

Standard length: 38.7 ft (11.8 m)

Weight: 5.69 lbs/ft (8.47 kg/m)



LPB100-9A

For Larssen sheet piles

Steel grade: S355J2

Steel thickness: 0.35" (9 mm)

Standard lengths:

26.25 ft (8 m), 38.7 ft (11.8 m)

Weight: 6.08 lbs/ft (9.05 kg/m)



LPB

Connectors for pipe pile, H-pile and combined steel walls

LPB100-10

For Larssen sheet piles

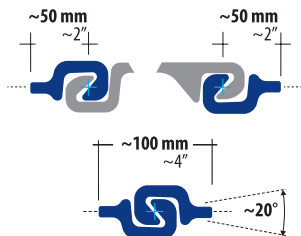
Steel grade: S355J2

Steel thickness: 0.39" (10 mm)

Standard lengths:

26.25 ft (8 m), 38.7 ft (11.8 m)

Weight: 6.652 lbs/ft (9.9 kg/m)



LPB180-10

For Larssen sheet piles

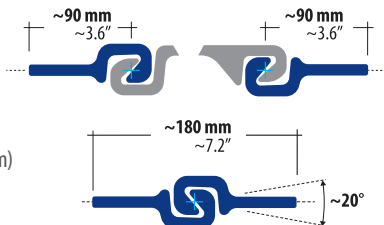
Steel grades: S355J2, S430GP

Steel thickness: 0.39" (10 mm)

Standard lengths:

26.25 ft (8 m), 38.7 ft (11.8 m)

Weight: 8.628 lbs/ft (12.84 kg/m)



LPB180-12

Not suitable for Larssen sheet piles

Steel grade: S355J2

Steel thickness: 0.47" (12 mm)

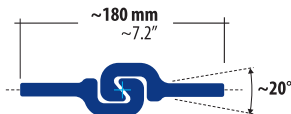
Standard lengths:

26.25 ft (8 m), 38.7 ft (11.8 m)

Weight: 9.74 lbs/ft (14.5 kg/m)

Max. tensile strength:

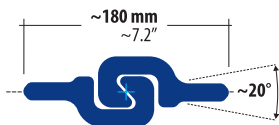
8.58 kips/in (1,502 kN/m)



LPB180-16

Not suitable for Larssen sheet piles

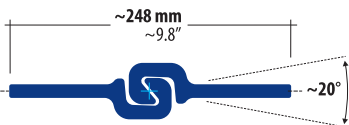
Steel grade: S355J2
Steel thickness: 0.63" (16 mm)
Standard lengths:
26.25 ft (8 m), 38.7 ft (11.8 m)
Weight: 15.05 lbs/ft (22.4 kg/m)
Max. tensile strength:
please see LPB300-16



LPB248-12

Not suitable for Larssen sheet piles

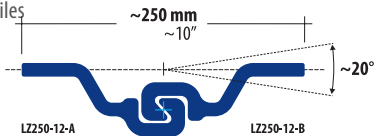
Steel grade: S355J2
Steel thickness: 0.47" (12 mm)
Standard lengths:
26.25 ft (8 m), 38.7 ft (11.8 m)
Weight: 12.27 lbs/ft (18.26 kg/m)
Max. tensile strength: 8.57 kips/in (~1,500 kN/m)
Connector is only manufactured to order.



LZ250-12A, LZ250-12B

Not suitable for Larssen sheet piles

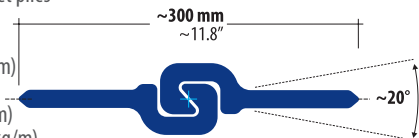
Steel grade: S355J2
Steel thickness: 0.47" (12 mm)
Standard lengths:
26.25 ft (8 m), 38.7 ft (11.8 m)
Weight, each: 13.1 lbs/ft (19.48 kg/m)
Max. tensile strength: 6.85 kips/in (1,200 kN/m)
Connectors are only manufactured to order.



LPB300-16

Not suitable for Larssen sheet piles

Steel grade: S355J2
Steel thickness: 0.63" (16 mm)
Standard lengths:
26.25 ft (8 m), 38.7 ft (11.8 m)
Weight: 19.92 lbs/ft (29.65 kg/m)
Max. tensile strength: 10.43 kips/in (1,828 kN/m)

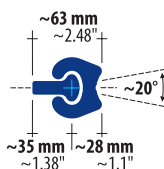


MF

High tensile connectors for pipe pile, H-pile and combined steel walls (Ball + Socket)

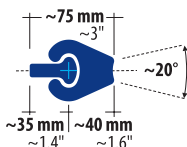
MF63

Steel grade: S355J2
Steel thickness: 0.47" (12 mm)
Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)
Weight M35: 3.2 lbs/ft (4.76 kg/m)
Weight F28: 7.19 lbs/ft (10.7 kg/m)
Max. tensile strength:
14.57 kips/in (2,552 kN/m), (FEM)



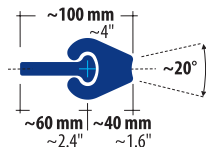
MF75

Steel grade: S355J2
Steel thickness: 0.47" (12 mm)
Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)
Weight M35: 3.2 lbs/ft (4.76 kg/m)
Weight F40: 9.6 lbs/ft (14.28 kg/m)
Max. tensile strength:
19.52 kips/in (3,419 kN/m)



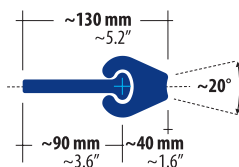
MF100

Steel grade: S355J2
Steel thickness: 0.47" (12 mm)
Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)
Weight M60: 4.64 lbs/ft (6.9 kg/m)
Weight F40: 9.6 lbs/ft (14.28 kg/m)
Max. tensile strength:
19.52 kips/in (3,419 kN/m)



MF130

Steel grade: S355J2
Steel thickness: 0.47" (12 mm)
Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)
Weight M90: 6.56 lbs/ft (9.76 kg/m)
Weight F40: 9.6 lbs/ft (14.28 kg/m)
Max. tensile strength:
19.52 kips/in (3,419 kN/m)



MF180a

Steel grade: S355J2

Steel thickness: 0.47" (12 mm)

Standard lengths:

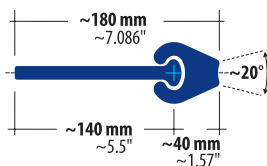
26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M140: 9.92 lbs/ft (14.77 kg/m)

Weight F40: 9.6 lbs/ft (14.28 kg/m)

Max. tensile strength:

19.52 kips/in (3,419 kN/m)



MF180b

Steel grade: S355J2

Steel thickness: 0.47" (12 mm)

Standard lengths:

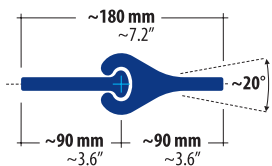
26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M90: 6.56 lbs/ft (9.76 kg/m)

Weight F90: 12.377 lbs/ft (18.42 kg/m)

Max. tensile strength:

12.15 kips/in (2,128 kN/m)



MF230

Steel grade: S355J2

Steel thickness: 0.47" (12 mm)

Standard lengths:

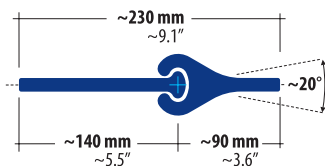
26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M140: 9.92 lbs/ft (14.77 kg/m)

Weight F90: 12.377 lbs/ft (18.42 kg/m)

Max. tensile strength:

12.15 kips/in (2,128 kN/m)



MF

High tensile connectors for DTH driving method

MF64

Exclusively for DTH driving method

Steel grade: S355J2

Steel thickness: 0.47" (12 mm)

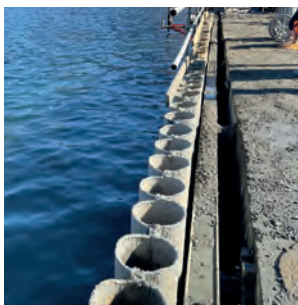
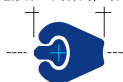
Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M22: 2.3 lbs/ft (3.42 kg/m)

Weight F40: 9.6 lbs/ft (14.28 kg/m)

Max. tensile strength: 19.52 kips/in (3,419 kN/m)

~64 mm +2/-4 mm
~2.519" +0.078/-0.157"



MF64-IC

Exclusively for DTH driving method

Steel grade: S355J2

Steel thickness: 0.39 - 0.47" (10 - 12 mm)

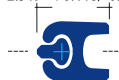
Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M22: 2.3 lbs/ft (3.42 kg/m)

Weight F40-IC: 9.1 lbs/ft (13.55 kg/m)

Max. tensile strength: 18.07 kips/in (3,164 kN/m)

~64 mm +3/-2 mm
~2.519" +0.118/-0.078"

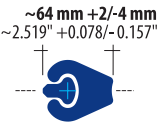


MF64

High tensile connectors

Comparative tensile test with WOM-S/WOF-S

MF64

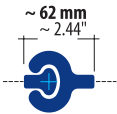


Test setup



After testing, failure through deformation

WOM-S / WOF-S



Sample no.	Maximum force F_m		Length of the clutch bar		Length-related maximum resilience		
	[kN]	[lb]	[mm]	[in]	[kN/m]	[lbf/in]	[kip/in]
P1Z1 (WOM-S/WOF-S)	111,97	25.171,83	50,5	1,99	2.217,23	226,09	12,66
P2Z1 (MF64, S355)	168,92	37.974,69	49,4	1,94	3.419,43	348,69	19,53

Conclusion

It is proven that the MF64 connectors can take more than 50% more tensile force than the WOM-S/WOF-S connectors.

This is very important information for pipe pile steel wall applications in the DTH driving method.

Please see/download the complete test report from our website: steelwallus.com

MDF

High tensile connectors for pipe pile and H-pile steel walls

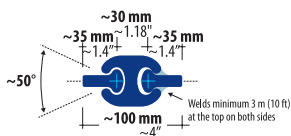
MDF100

Steel grades: S355J2 (M35), S430GP (DF), Steel thickness: 0.47" (12 mm)

Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M35: 3.2 lbs/ft (4.76 kg/m), Weight DF: 9.82 lbs/ft (14.62 kg/m)

Max. tensile strength: 18.3 kips/in (3,271 kN/m), (FEM)



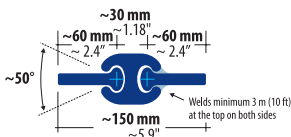
MDF150

Steel grades: S355J2 (M60), S430GP (DF), Steel thickness: 0.47" (12 mm)

Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M60: 4.64 lbs/ft (6.9 kg/m), Weight DF: 9.82 lbs/ft (14.62 kg/m)

Max. tensile strength: 18.3 kips/in (3,271 kN/m), (FEM)



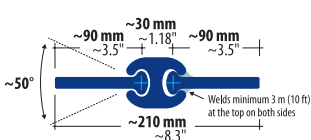
MDF210

Steel grades: S355J2 (M90), S430GP (DF), Steel thickness: 0.47" (12 mm)

Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M90: 6.56 lbs/ft (9.76 kg/m), Weight DF: 9.82 lbs/ft (14.62 kg/m)

Max. tensile strength: 18.3 kips/in (3,271 kN/m), (FEM)



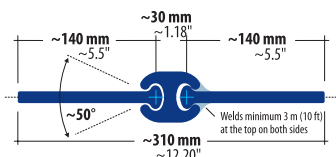
MDF310

Steel grades: S355J2 (M140), S430GP (DF), Steel thickness: 0.47" (12 mm)

Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)

Weight M140: 9.92 lbs/ft (14.77 kg/m), Weight DF: 9.82 lbs/ft (14.62 kg/m)

Max. tensile strength: 18.3 kips/in (3,271 kN/m), (FEM)



Plan your projects directly with the most cost-effective configurations for pipe sheet piling with our

MF-Pipe Selection Lists

Sorted by increasing moment of resistance and increasing weight.



Code					System		max. M_{res} of R_{pl} or $R_{pl,2}$ and $R_{pl,3}$			
connector	$W_{y, system}$ cm ³ /m	G_{grn} kg/m ³	OD mm	t mm	b_{system} m	$I_{y, system}$ cm ⁴ /m	S355J2 kNm/m	S460MH kNm/m	X60 kNm/m	X65 kNm/m
180	22182	434	1700,0	19	1,880	1885447	7875	10204	9205	9980
130	22788	443	1700,0	19	1,830	1936962	8090	10482	9457	1025
230	24247	448	1800,0	20	2,030	2182271	8608	11154	10063	1091
180	24860	457	1800,0	20	1,980	2237379	8825	11435	10317	1118
130	25504	467	1800,0	20	1,930	2295342	9054	11732	10584	1147
230	27040	472	1900,0	21	2,130	2568823	9599	12439	11222	1216
180	27690	481	1900,0	21	2,080	2630573	9830	12738	11491	1246
130	28372	491	1900,0	21	2,030	2695366	10072	13051	11774	1276
230	29985	496	2000,0	22	2,230	2998543	10645	13793	12444	1349
180	30673	505	2000,0	22	2,180	3067317	10889	14110	12729	1380
130	31393	515	2000,0	22	2,130	3139320	11145	14441	13028	1412
230	33083	519	2100,0	23	2,330	3473718	11744	15218	13729	1488
180	33809	529	2100,0	23	2,280	3549896	12002	15552	14031	1521
130	34567	539	2100,0	23	2,230	3629490	12271	15901	14345	1555
230	36333	543	2200,0	24	2,430	3996634	12898	16713	15078	1635
180	37096	553	2200,0	24	2,380	4080597	13160	17064	15305	1669
130	37892	563	2200,0	24	2,330	4168163	13452	17431	15725	1705
230	39735	567	2300,0	25	2,530	4569577	14106	18278	16490	1788
180	41678	569	2400,0	25	2,630	5001302	14796	19172	17296	1875
130	43621	571	2500,0	25	2,730	5452644	15486	20066	18103	1963
230	44435	580	2500,0	25	2,680	5554373	15774	20440	18441	1999
180	45280	589	2500,0	25	2,630	5699969	16074	20829	18791	2037
130	46157	602	2500,0	26	2,680	5769597	16386	21232	19155	2077
230	47034	612	2500,0	26	2,630	5879285	16697	21636	19519	2116

Please find more information as well as the MF-Pipe Selection Lists (PDF/download) on our website:

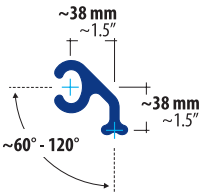
MF-Pipe.com

Ball + Socket Corner connectors

US-90

Steel grades: S355, 572 Grade 50
Steel thickness: 0.32" (8 mm)
Standard lengths on request,
variable from
25 to 35 ft (7.6 m - 10.6 m)
Weight: 6.85 lbs/ft (10.1 kg/m)

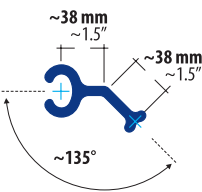
Corner connector



US-135

Steel grades: S355, 572 Grade 50
Steel thickness: 0.32" (8 mm)
Standard lengths on request,
variable from
25 to 35 ft (7.6 m - 10.6 m)
Weight: 6.92 lbs/ft (10.3 kg/m)

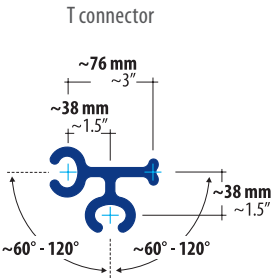
Corner connector



Ball + Socket T connectors

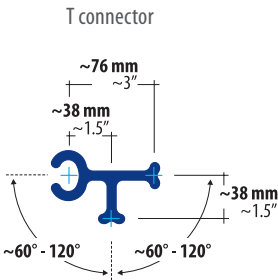
US-TS

Steel grades: S355, 572 Grade 50
Steel thickness: 0.32" (8 mm)
Standard lengths on request,
variable from
25 to 35 ft (7.6 m - 10.6 m)
Weight: 11.1 lbs/ft (16.5 kg/m)



US-T

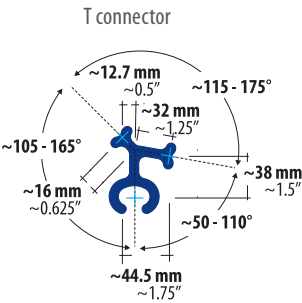
Steel grades: S355, 572 Grade 50
Steel thickness: 0.32" (8 mm)
Standard lengths on request,
variable from
25 to 35 ft (7.6 m - 10.6 m)
Weight: 9 lbs/ft (13.4 kg/m)



Ball + Socket T connectors

US-Universal

Steel grades: S355, 572 Grade 50
Steel thickness: 0.32" (8 mm)
Standard lengths on request,
variable from
25 to 35 ft (7.6 m - 10.6 m)
Weight: 8.33 lbs/ft (12.4 kg/m)



Ball + Socket Cross connectors

US-Cross I

Steel grades: S355, 572 Grade 50

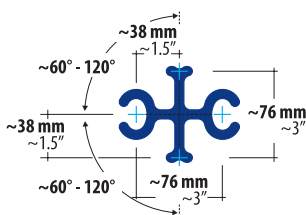
Steel thickness: 0.32" (8 mm)

Standard lengths on request,
variable from

25 to 35 ft (7.6 m - 10.6 m)

Weight: 13.4 lbs/ft (20 kg/m)

Cross connector



US-Cross II

Steel grades: S355, 572 Grade 50

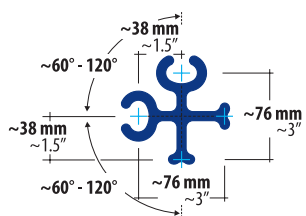
Steel thickness: 0.32" (8 mm)

Standard lengths on request,
variable from

25 to 35 ft (7.6 m - 10.6 m)

Weight: 13.4 lbs/ft (20 kg/m)

Cross connector



Flat sheet pile connectors

For PS and YSP straight web piles only

FSC60 Center, FSC Leg

Steel grade: S355J2

Steel thickness FSC60 Center: 0.63" (16 mm)

Steel thickness FSC Leg: 0.5" (12.7 mm)

Length FSC60 Center: 31.2 ft (9.5 m)

Length FSC Leg: up to 59 ft (18 m)

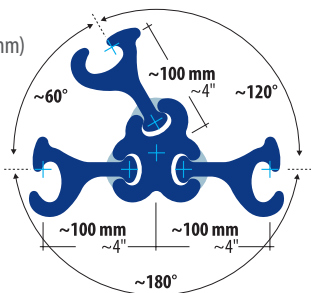
Weight FSC60 Center:

20.5 lbs/ft (30.5 kg/m)

Weight FSC Leg: 13.1 lbs/ft (19.5 kg/m)

Max. tensile strength FSC60 Center:

32 kips/in (5,604 kN/m), (FEM)



FSC90 Center, FSC Leg

Steel grade: S355J2

Steel thickness FSC90 Center: 0.63" (16 mm)

Steel thickness FSC Leg: 0.5" (12.7 mm)

Length FSC90 Center: 32.8 ft (10 m)

Length FSC Leg: up to 59 ft (18 m)

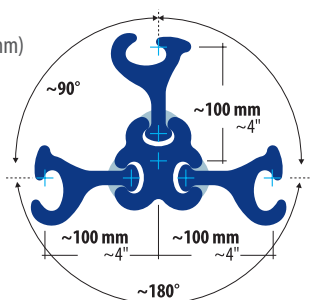
Weight FSC90 Center:

19.62 lbs/ft (29.2 kg/m)

Weight FSC Leg: 13.1 lbs/ft (19.5 kg/m)

Max. tensile strength FSC90 Center:

35 kips/in (6,129 kN/m), (FEM)



FSC120 Center, FSC Leg

Steel grade: S355J2

Steel thickness FSC120 Center: 0.63" (16 mm)

Steel thickness FSC Leg: 0.5" (12.7 mm)

Length FSC120 Center: 36.8 ft (11.2 m)

Length FSC Leg: up to 59 ft (18 m)

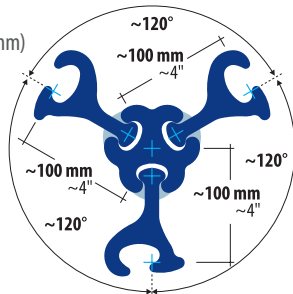
Weight FSC120 Center:

17.67 lbs/ft (26.3 kg/m)

Weight FSC Leg: 13.1 lbs/ft (19.5 kg/m)

Max. tensile strength FSC120 Center:

36 kips/in (6,129 kN/m), (FEM)



Cold formed sheet pile connectors

CF90

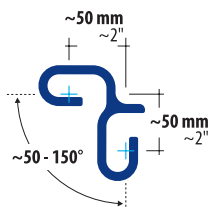
Corner connector for midsize cold-formed sheet piles

Steel grade: S355J2

Steel thickness: 0.32" (8 mm)

Standard length: 44.1 ft (13.45 m)

Weight: 11.76 lbs/ft (17.5 kg/m)



CF-Junction

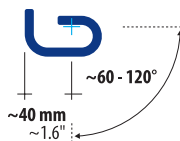
Weld-on connector for midsize cold-formed sheet piles

Steel grade: S355J2

Steel thickness: 0.32" (8 mm)

Standard length: 38.7 ft (11.8 m)

Weight: 6 lbs/ft (8.87 kg/m)



SteelWall®

Connectors for steel sheet pile walls



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E-Mail: chang@steelwallus.com

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