

PILE CONNECTORS

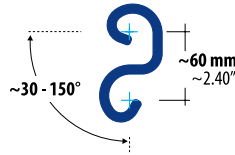
LARSENEN

CORNER CONNECTORS

LV20n

For Larssen sheet piles

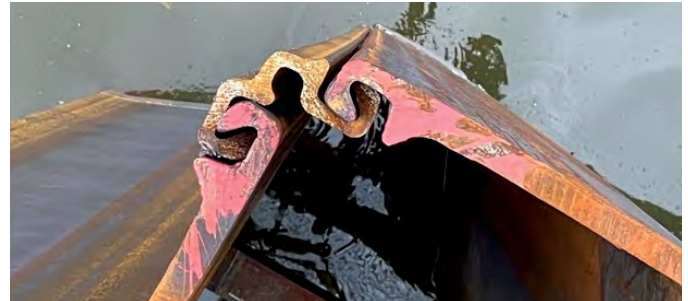
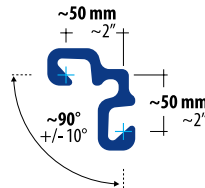
Steel grade: S355J2
Steel thickness: 0.32" (8 mm)
Standard lengths:
38.7 ft (11.8 m)
45.9 ft (14 m)
59 ft (18 m)
Weight: 9.45 lbs/ft (14.07 kg/m)



LLS90

For Larssen sheet piles

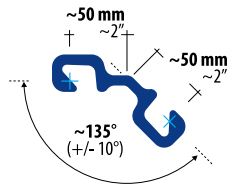
Steel grade: S355J2
Steel thickness: 0.35" (9 mm)
Standard lengths:
26.25 ft (8 m)
38.7 ft (11.8 m)
Weight: 11.87 lbs/ft (17.66 kg/m)



LLS135

For Larssen sheet piles

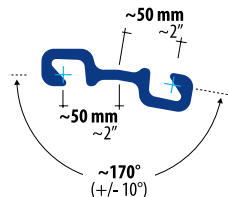
Steel grade: S355J2
Steel thickness: 0.35" (9 mm)
Standard lengths:
26.25 ft (8 m)
38.7 ft (11.8 m)
59 ft (18 m)
Weight: 11.87 lbs/ft (17.66 kg/m)



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)
59 ft (18 m)
Weight: 11.85 lbs/ft (17.63 kg/m)



PILE CONNECTORS

LARSEN

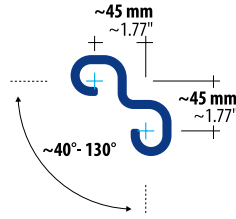
OMEGA CORNER CONNECTORS

LVO

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: 9.3 lbs/ft (13.85 kg/m)

This connector will be modified in 2023 and thereafter enable angular positions of approx. 55°-145° (VL603/AZ18). The modified profile will be called LVO_n.



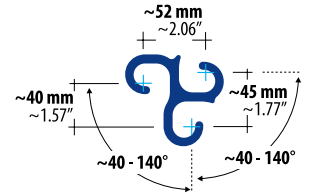
LARSEN

T CONNECTORS

LTn

For Larssen sheet piles

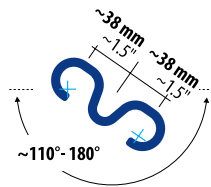
Steel grades: S355J2, S355GP
 Steel thickness: 0.32" (8 mm)
 Standard length S355J2: 38.7 ft (11.8 m)
 Standard length S355GP: 45.2 ft (13.8 m)
 Weight: 10.42 lbs/ft (15.5 kg/m)



LV-Omega

For Larssen sheet piles

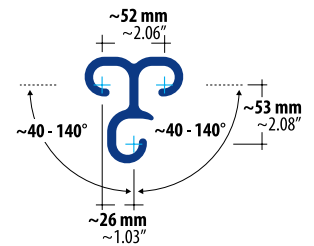
Steel grade: S355J2
 Steel thickness: 0.32" (8 mm)
 Standard lengths: 38.7 ft (11.8 m),
 45.9 ft (14 m), 59 ft (18 m)
 Weight: 9.43 lbs/ft (14.04 kg/m)



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)



PILE CONNECTORS

LARSEN

CROSS CONNECTOR

L4S

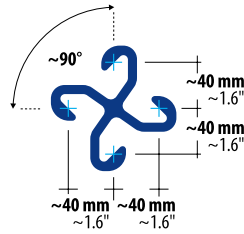
For Larssen sheet piles

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)



LARSEN

COMBINED WALL CONNECTORS

LV22

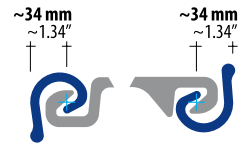
Weld-on connector for Larssen sheet piles

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

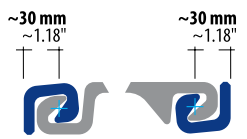
Weld-on connector for Larssen sheet piles

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

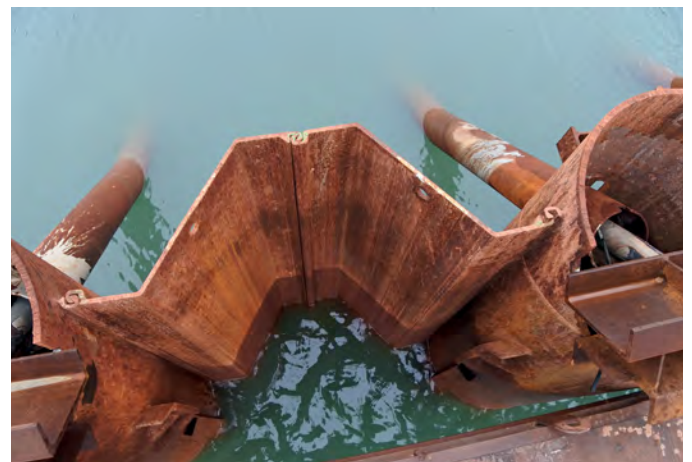
Weld-on connector for Larssen sheet piles

Steel grade: S355J2

Steel thickness: 9 mm

Standard lengths: 8 m, 11.8 m

Weight: 9.05 kg/m



PILE CONNECTORS

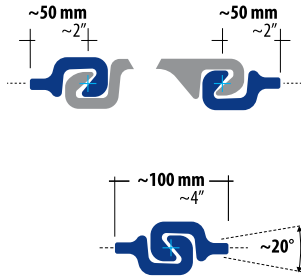
LARSENEN

PIPE PILE, H-PILE AND COMBINED WALL CONNECTORS

LPB100-10

For Larssen sheet piles

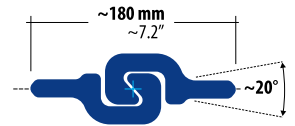
Steel grade: S355J2
 Steel thickness: 0.39" (10 mm)
 Standard lengths:
 26.25 ft (8 m), 38.7 ft (11.8 m)
 Weight: 6.63 lbs/ft (9.86 kg/m)
 Max. tensile strength:
 5.6 kips/in (980 kN/m)



LPB180-16

Not suitable for Larssen sheet piles

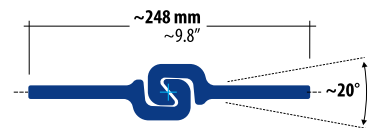
Steel grade: S355J2
 Steel thickness: 0.63" (16 mm)
 Standard lengths:
 26.25 ft (8 m), 38.7 ft (11.8 m)
 Weight: 15.05 lbs/ft (22.4 kg/m)
 Max. tensile strength: please see LPB300-16



LPB248-12

Not suitable for Larssen sheet piles

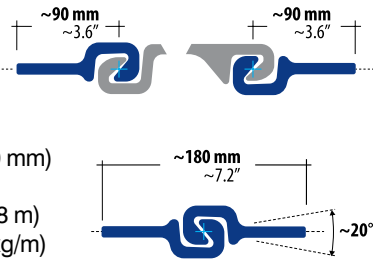
Steel grade: S355J2
 Steel thickness: 0.47" (12 mm)
 Standard lengths:
 26.25 ft (8 m), 38.7 ft (11.8 m)
 Weight: 12.27 lbs/ft (18.26 kg/m)
 Max. tensile strength:
 8.57 kips/in (~1,500 kN/m)



LPB180-10

For Larssen sheet piles

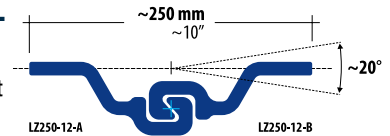
Steel grades: S355J2,
 S430GP
 Steel thickness: 0.39" (10 mm)
 Standard lengths:
 26.25 ft (8 m), 38.7 ft (11.8 m)
 Weight: 8.7 lbs/ft (12.94 kg/m)
 Max. tensile strength:
 5.86 kips/in (1,026 kN/m)



LZ250-12A, LZ250-12B

Not suitable for Larssen sheet piles

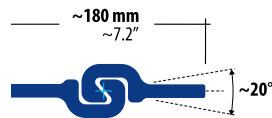
Steel grade: S355J2
 Steel thickness: 0.47" (12 mm)
 Standard lengths:
 26.25 ft (8 m), 38.7 ft (11.8 m)
 Weight, each:
 13.1 lbs/ft (19.48 kg/m)
 Max. tensile strength:
 6.85 kips/in (1,200 kN/m)



LPB180-12

Not suitable for Larssen sheet piles

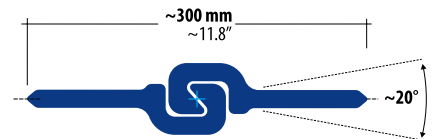
Steel grade: S355J2
 Steel thickness: 0.47" (12 mm)
 Standard lengths:
 26.25 ft (8 m), 38.7 ft (11.8 m)
 Weight: 9.74 lbs/ft (14.5 kg/m)
 Max. tensile strength:
 8.58 kips/in (1,502 kN/m)



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)



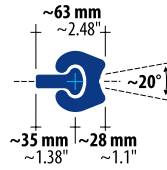
PILE CONNECTORS

MF HIGH TENSILE CONNECTORS

PIPE PILE AND H-PILE WALLS, COMBINED WALLS (BALL+SOCKET)

MF63

Steel grade M35: S355J2, F28: S355J2/-GP
 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)

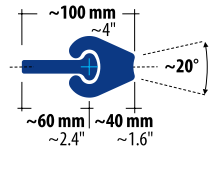


OOO OVO III IVI



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)

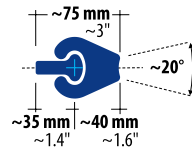


OOO OVO III IVI

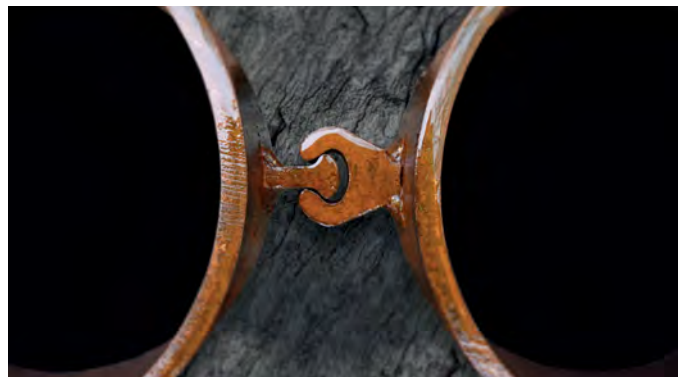


MF75

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)

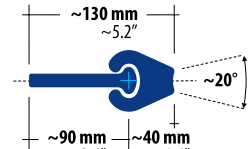


OOO OVO III IVI



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)



OOO OVO III IVI



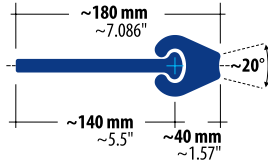
PILE CONNECTORS

MF HIGH TENSILE CONNECTORS

PIPE PILE AND H-PILE WALLS, COMBINED WALLS (BALL+SOCKET)

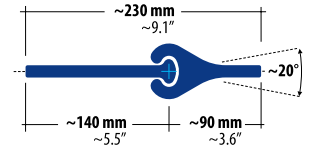
MF180a

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)



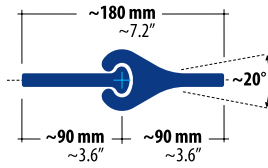
MF230

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)



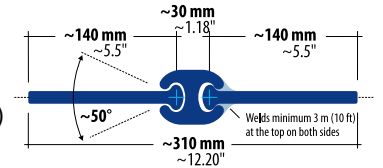
MF180b

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)



MDF310

Steel grade M140: S355J2
 Steel grade DF: S430GP
 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 (3,204 kN/m), (FEM)

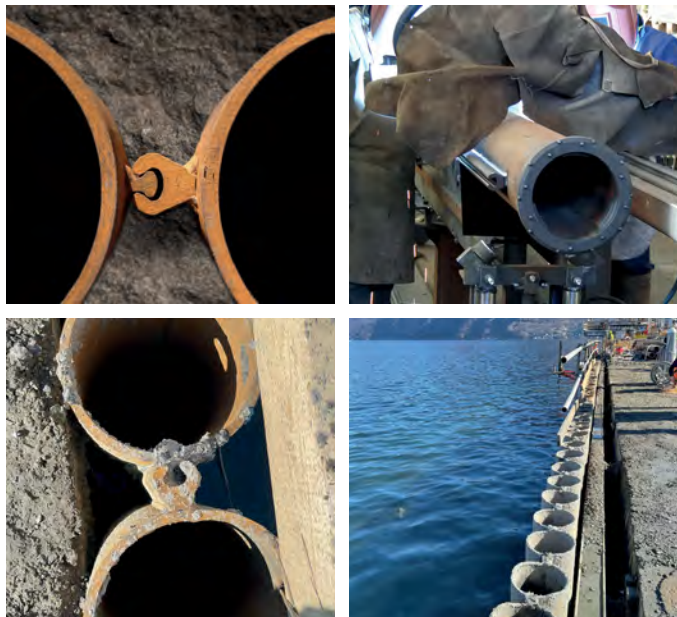
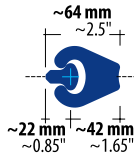


PILE CONNECTORS

MF HIGH TENSILE CONNECTORS FOR DTH DRIVING METHOD

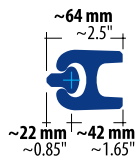
MF64

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)
 Exclusively for DTH driving method



MF64-IC

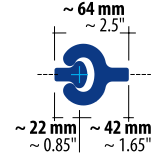
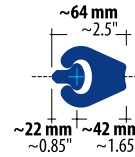
Steel grade: S355J2
 Steel thickness: 0.39 - 0.47" (10 - 12 mm)
 Standard lengths: 26.25 ft (8 m), 38.7 ft (11.8 m)
 Weight M22: 2.3 lbs/ft (3.42 kg/m)
 Weight F40-IC: 9.1 lbs/ft (13.55 kg/m)
 Max. tensile strength:
 18.08 kips/in (3,167 kN/m)
 Exclusively for DTH driving method



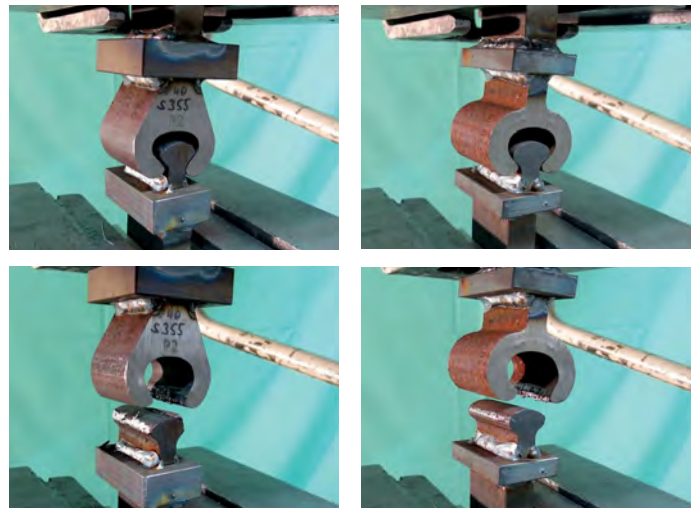
MF64 HIGH TENSILE CONNECTORS COMPARATIVE TENSILE TEST WITH WOM-S/WOF-S

MF64

WOM-S / WOF-S



Test setup



After testing, failure through deformation

Sample no.	Maximum force F_m		Length of the clutch bar		Length-related maximum resilience		
	[kN]	[lb]	[mm]	[in]	[kN/m]	[t/m]	[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

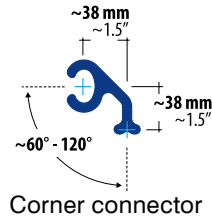
It is proven that the MF64 connectors can take more than 50% more tensile force than the WOM-S/WOF-S connectors. This is very important information for pipe pile steel wall applications in the DTH driving method.

PILE CONNECTORS

BALL & SOCKET CORNER CONNECTORS

US-90

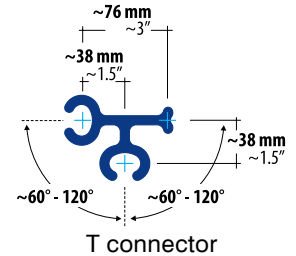
Steel grades: S355, 572 Grade 50
Steel thickness: 0.32" (8 mm)
Standard lengths on request,
variable from
25 to 35 ft (7.6 m - 10.6 m)
Weight: 6.85 lbs/ft (10.1 kg/m)



BALL & SOCKET T CONNECTORS

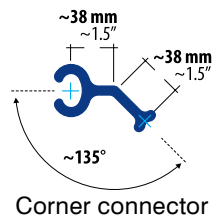
US-TS

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)



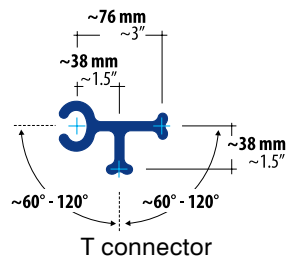
US-135

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)



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)



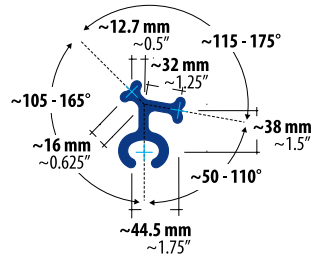
PILE CONNECTORS

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)



T connector

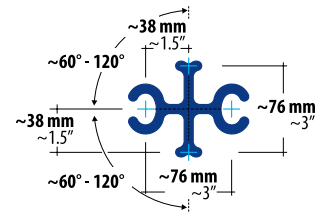


BALL & SOCKET

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)

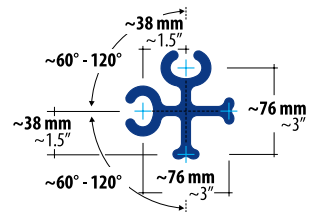


Cross connector



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



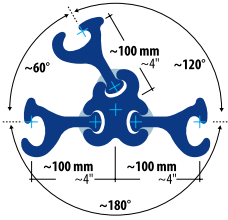
PILE CONNECTORS

FLAT SHEET PILE CONNECTORS

For PS and YSP straight web piles only

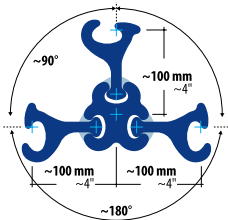
FSC60 Center, FSC Leg

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)



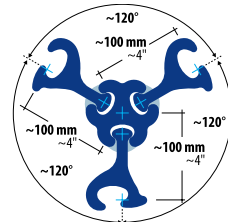
FSC90 Center, FSC Leg

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)

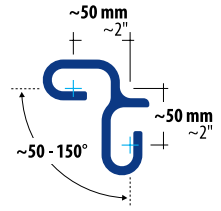


COLD FORMED SHEET PILE CONNECTORS

CF90

Corner connector for midsize cold-formed sheet piles

Steel grade: S355GP
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)

