

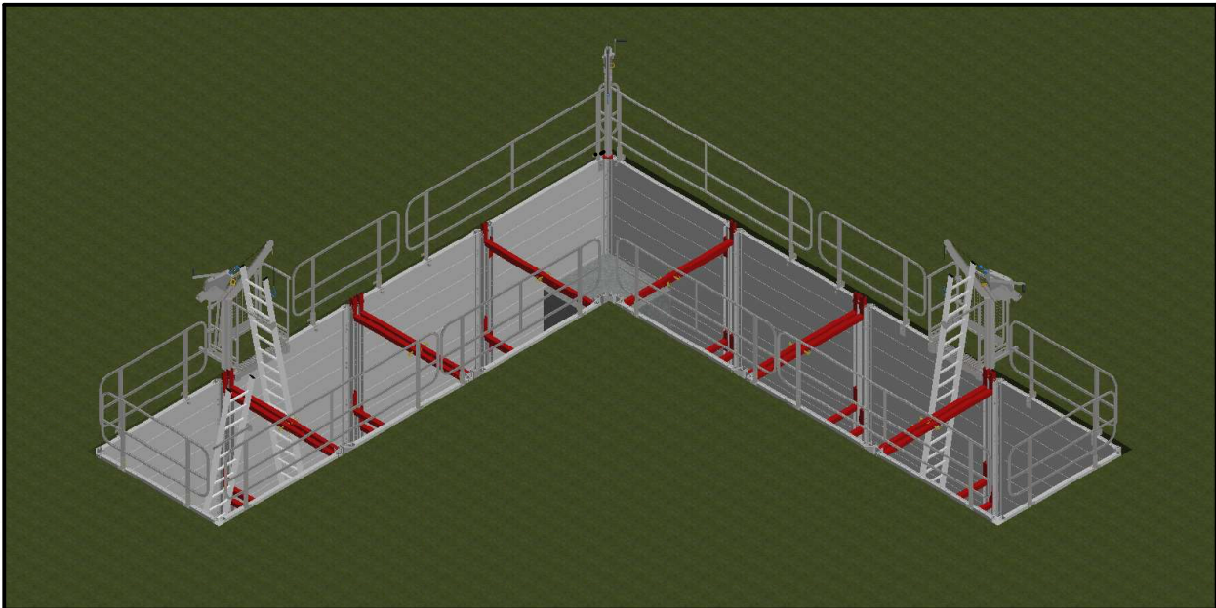
TECHNICAL DATA

DESCRIPTION

Modular Aluminium Panel Shields (MAPS) are engineered for high strength, ultra light weight and ease of handling. The system is ideal for utility maintenance and repairs to cable splits, gas sewer, water, and other light utility installations. Small MAPS panels, end posts and adjustable struts are light enough for transportation by a utility vehicle, and can be quickly configured for 2, 3, or 4-sided applications.

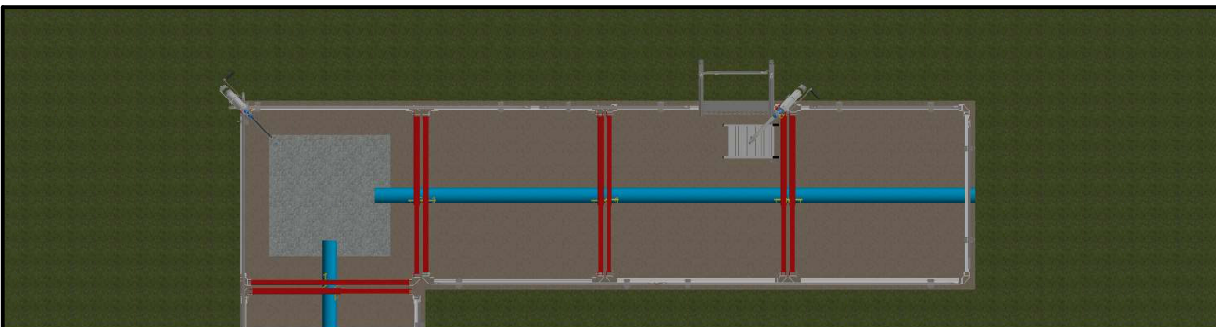
The foam filled double wall aluminum panels are available in a full range of standard sizes. Extruded end members are available in various lengths, which allows easy pin and keeper connection of panels and struts in various sizes, forming the exact configuration required at work site.

Various width options are available with the adjustable struts.



MAPS CONFIGURATION EXAMPLE - ISOMETRIC VIEW

SCALE 1:100



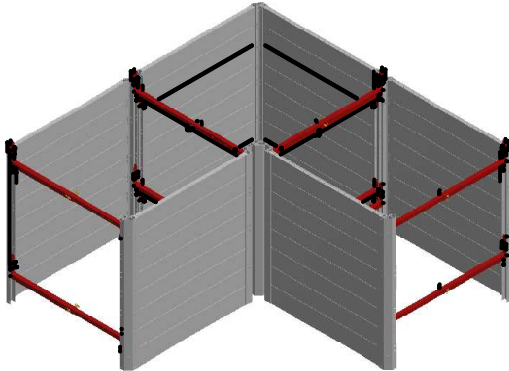
MAPS CONFIGURATION EXAMPLE - TOP VIEW

SCALE 1:100

TECHNICAL DATA

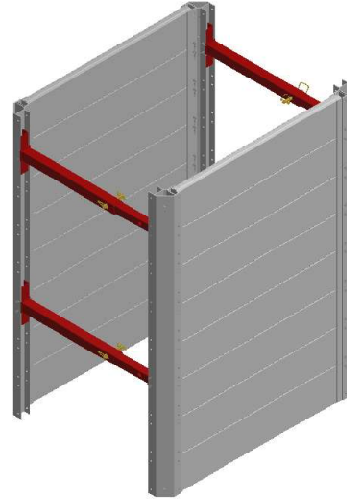
EXCAVATION CONFIGURATION:

STRUTS ONLY



ISO. VIEW - L SHAPE

SCALE 1:100

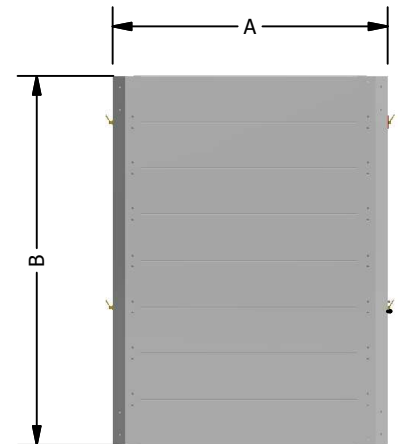
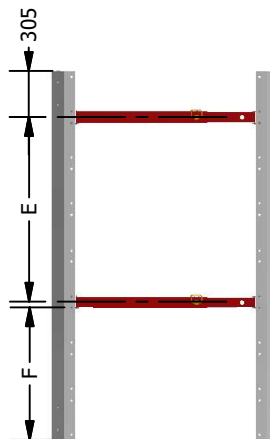


ISO. VIEW - 2 SIDED TRENCH

SCALE 1:50

EXCAVATION LENGTH:

PANEL SIZE	PANEL LENGHT (mm)	LENGHT (A) (mm)
Map Panels 900	735	1000
Map Panels 1200	1040	1305
Map Panels 1800	1610	1875
Map Panels 2400	2220	2485
Map Panels 3000	2820	3085



EXCAVATION DEPTH:

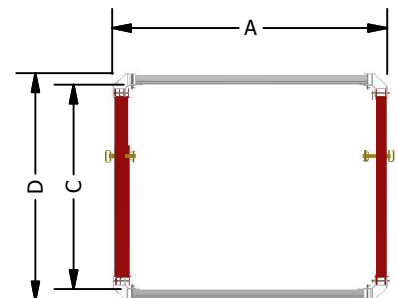
END POST SIZE	HEIGHT (B) (mm)	*DIM (E) (mm)	MIN. STRUT	*CLEARANCE (F) (mm)
End Post E02	610	N/A	1	305
End Post E04	1220	305	2	570
End Post E06	1830	915 - 305	2	570 - 1180
End Post E08	2440	1525 - 915	2	570 - 1180
End Post E10	3000	1525 - 915	2	570 - 1180

SIDE VIEWS

SCALE 1:50

EXCAVATION WIDTH:

STRUT SIZE	INTERNAL WIDTH (C) CLOSED - OPENED (mm)	EXTERNAL WIDTH (D) CLOSED - OPENED (mm)	*CLEARANCE (F) (mm)
Strut 0	390 - 500	540 - 650	305
Strut 1	600 - 850	750 - 1000	570
Strut 2	750 - 1160	900 - 1310	570 - 1180
Strut 3	1060 - 1680	1210 - 1830	570 - 1180
Strut 4	1360 - 2290	1510 - 2440	570 - 1180



TOP VIEW

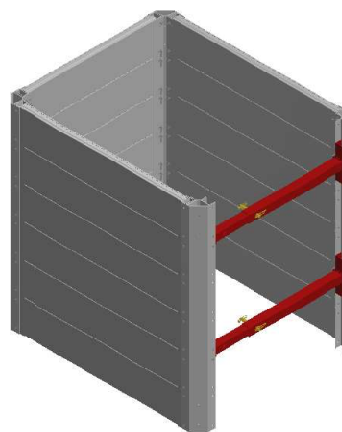
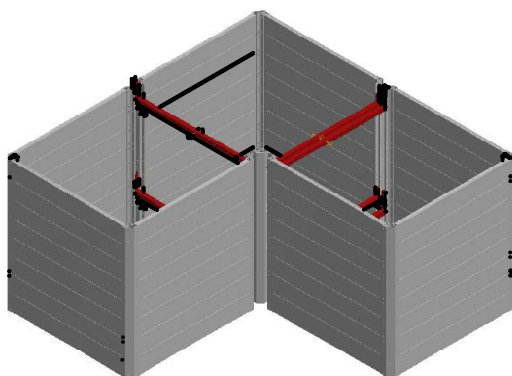
SCALE 1:50

*Recommended value range consult with Shore Hire Team for alternative values.

TECHNICAL DATA

ASSEMBLY CONFIGURATION

3 & 4 - SIDED PANEL SYSTEMS



ISO. VIEW - L SHAPE

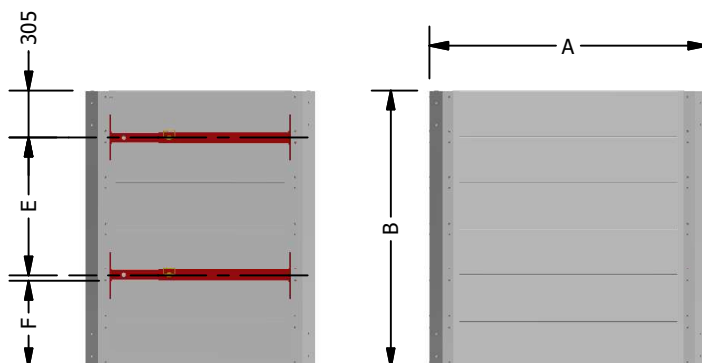
SCALE 1:100

ISO. VIEW - 3 - SIDED TRENCH

SCALE 1:50

EXCAVATION LENGTH:

PANEL SIZE	PANEL LENGTH (mm)	LENGTH (A) (mm)
Map Panels 900	735	1000
Map Panels 1200	1040	1305
Map Panels 1800	1610	1875
Map Panels 2400	2220	2485
Map Panels 3000	2820	3085



EXCAVATION DEPTH:

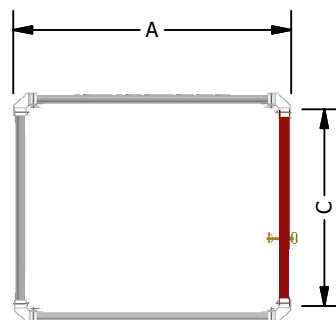
END POST SIZE	HEIGHT (B) (mm)	*DIM (E) (mm)	MIN. STRUT	*CLEARANCE (F) (mm)
End Post E02	610	N/A	1	305
End Post E04	1220	305	2	570
End Post E06	1830	915 - 305	2	570 - 1180
End Post E08	2440	1525 - 915	2	570 - 1180
End Post E10	3000	1525 - 915	2	570 - 1180

EXCAVATION WIDTH:

STRUT SIZE	PANEL SIZE ON OPPOSITE SIDE	STRUT LENGTH (C) (mm)	*CLEARANCE (F) (mm)
Strut 0	N/A	326 - 437	305
Strut 1	MAPS PANEL 900	536 - 791	570
Strut 2	MAPS PANEL 1200	691 - 1101	570 - 1180
Strut 3	MAPS PANEL 1800	997 - 1615	570 - 1180
Strut 4	MAPS PANEL 2400	1294 - 2223	570 - 1180

SIDE VIEWS

SCALE 1:50



TOP VIEW

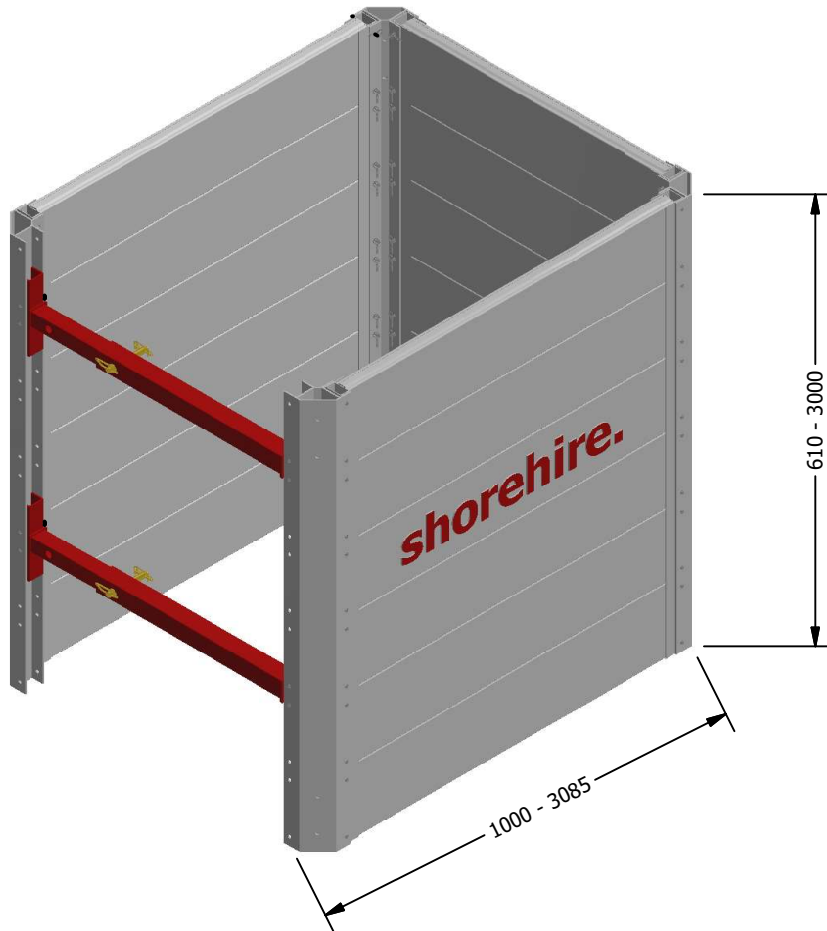
SCALE 1:50

*Recommended value range consult with Shore Hire Team for alternative values.

TECHNICAL DATA

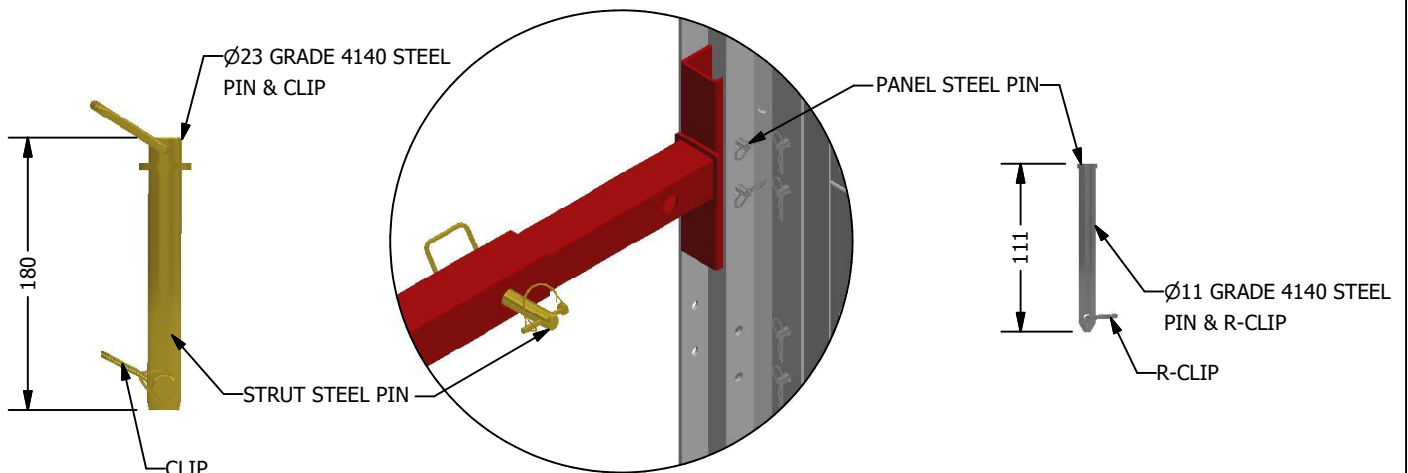
ASSEMBLY CONFIGURATION

SINGLE MAPS BOX



NOTES

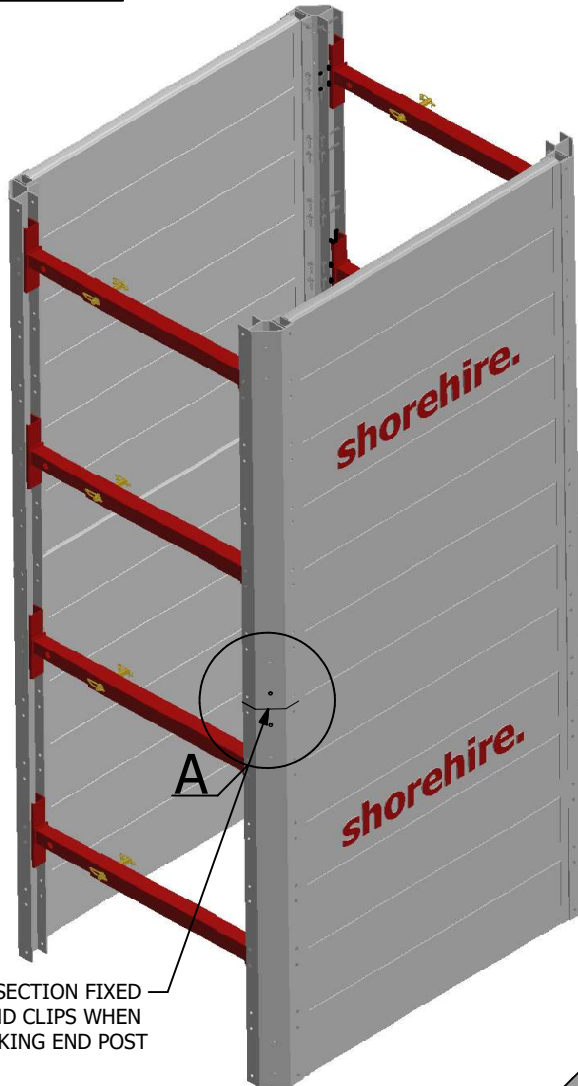
1. ALL DIMENSIONS IN mm. U.N.O.
2. ALUMINIUM MATERIAL IS TO BE GRADE 6061-T6 IN ACCORDANCE WITH AUSTRALIAN STANDARD AS 1664.1 - 1997.
3. ALUMINIUM WELDING TO BE MIG WIRE TYPE WELDING ES356 TO AS 2712.2.
4. AS 4100 STEEL STRUCTURES.
5. AS 1664 ALUMINIUM STRUCTURES.
6. AS 4744.1 STEEL SHORING AND TRENCH LINING EQUIPMENT.



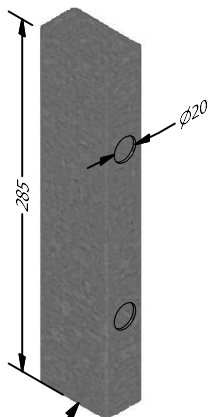
TECHNICAL DATA

ASSEMBLY CONFIGURATION

MAPS BOX STACKED



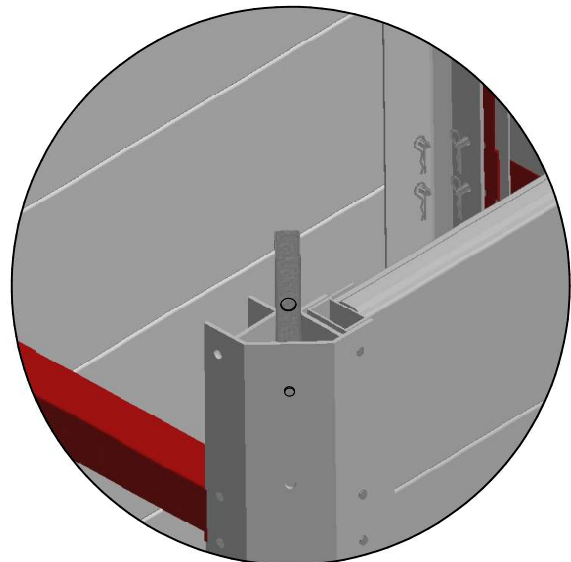
CONNECTOR SECTION FIXED
WITH 2 X PINS AND CLIPS WHEN
ALWAYS STACKING END POST



CONNECTOR SECTION
STEEL GRADE C350L0

NOTES

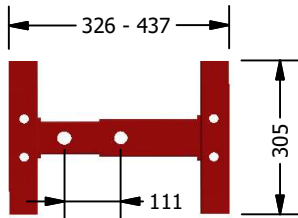
1. ALL DIMENSIONS IN mm.
U.N.O.
2. ALUMINIUM MATERIAL IS TO
BE GRADE 6061-T6 IN
ACCORDANCE WITH
AUSTRALIAN STANDARD AS
1664.1 - 1997.
3. ALUMINIUM WELDING TO BE
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5. AS 1664 ALUMINIUM
STRUCTURES.
6. AS 4744.1 STEEL SHORING
AND TRENCH LINING
EQUIPMENT.



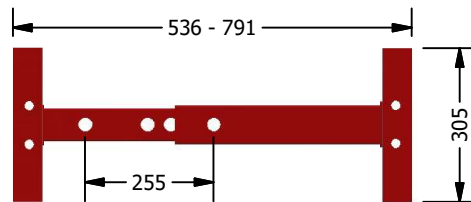
DETAIL A - CONNECTOR SECTION

TECHNICAL DATA

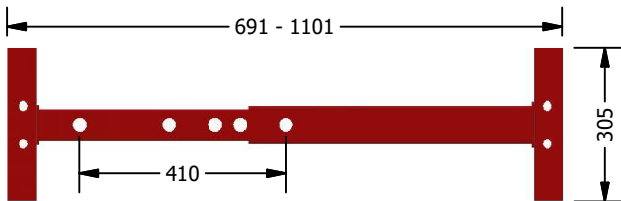
STRUT CONFIGURATION



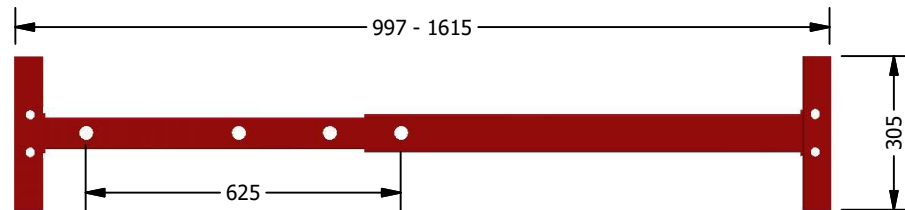
STRUT 0



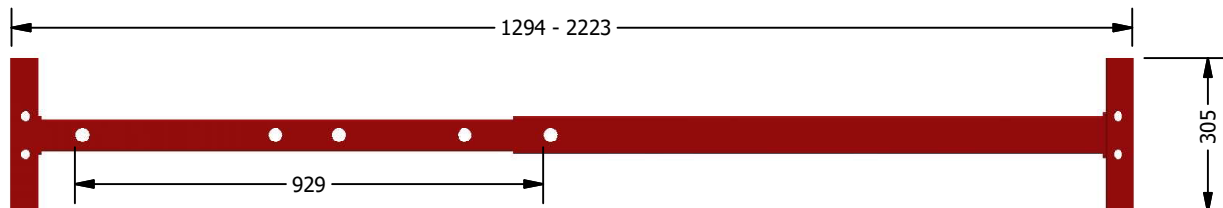
STRUT 1



STRUT 2

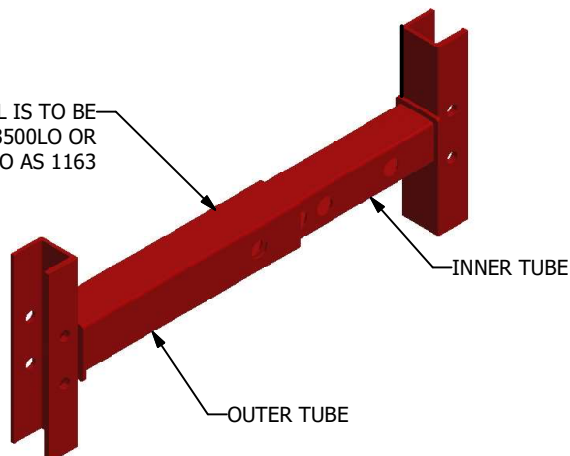


STRUT 3



STRUT 4

ALL STEEL MATERIAL IS TO BE
MIN. GRADE C3500LO OR
EQUIVALENT TO AS 1163



TECHNICAL DATA

STRUCTURAL SPECIFICATIONS

A MAPS SYSTEM CAPACITY MUST BE DEFINED BY A PRACTISING QUALIFIED STRUCTURAL ENGINEER AS PER THE GUIDELINES OF AS4744.1 STEEL SHORING AND TRENCH LINING EQUIPMENT., USING THE FOLLOWING MAP PANEL, STRUT AND END MEMBER INFORMATION.

MAPS PANEL CAPACITY

PANEL NO.	WLL (kPa)
900	469.2 kPa
1200	235.5 kPa
1800	90 kPa
2400	47.3 kPa
3000	29.3 kPa

MAPS STRUT CAPACITY

STRUT NO.	WLL (kN) AT MIN & MAX LENGTH
No. 0 (390 – 500 mm)	78.2 – 69.0 kN
No. 1 (600 – 850 mm)	69.1 – 55.1 kN
No. 2 (750 – 1160 mm)	63.9 – 46.2 kN
No. 3 (1060 – 1680 mm)	54.8 – 35.2 kN
No. 4 (1750 – 2300 mm)	41.4 – 25.6 kN

MAPS END POST PROPERTIES

END MEMBER SECTION PROPERTIES
$I = 6.6 \times 10^6 \text{ mm}^4$
$z = 77.5 \times 10^3 \text{ mm}^3$
$J = 3.13 \times 10^6 \text{ mm}^4$
$I_w = 1.96 \times 10^9 \text{ mm}^6$
$r = 44.9 \text{ mm}$

SHORE HIRE'S TEAM OF QUALIFIED PRACTISING ENGINEERS CAN CUSTOM SIZE AND SPECIFY YOUR MAPS CONFIGURATION BASED ON THE SITE CONDITIONS, CONSTRAINTS, EXCAVATION GEOMETRY AND GEOTECHNICAL INFORMATION PROVIDED. SHORE HIRE CAN PROVIDE SITE INSPECTIONS AND COMPLIANCE CERTIFICATION TO MEET RELEVANT AUSTRALIAN STANDARDS.