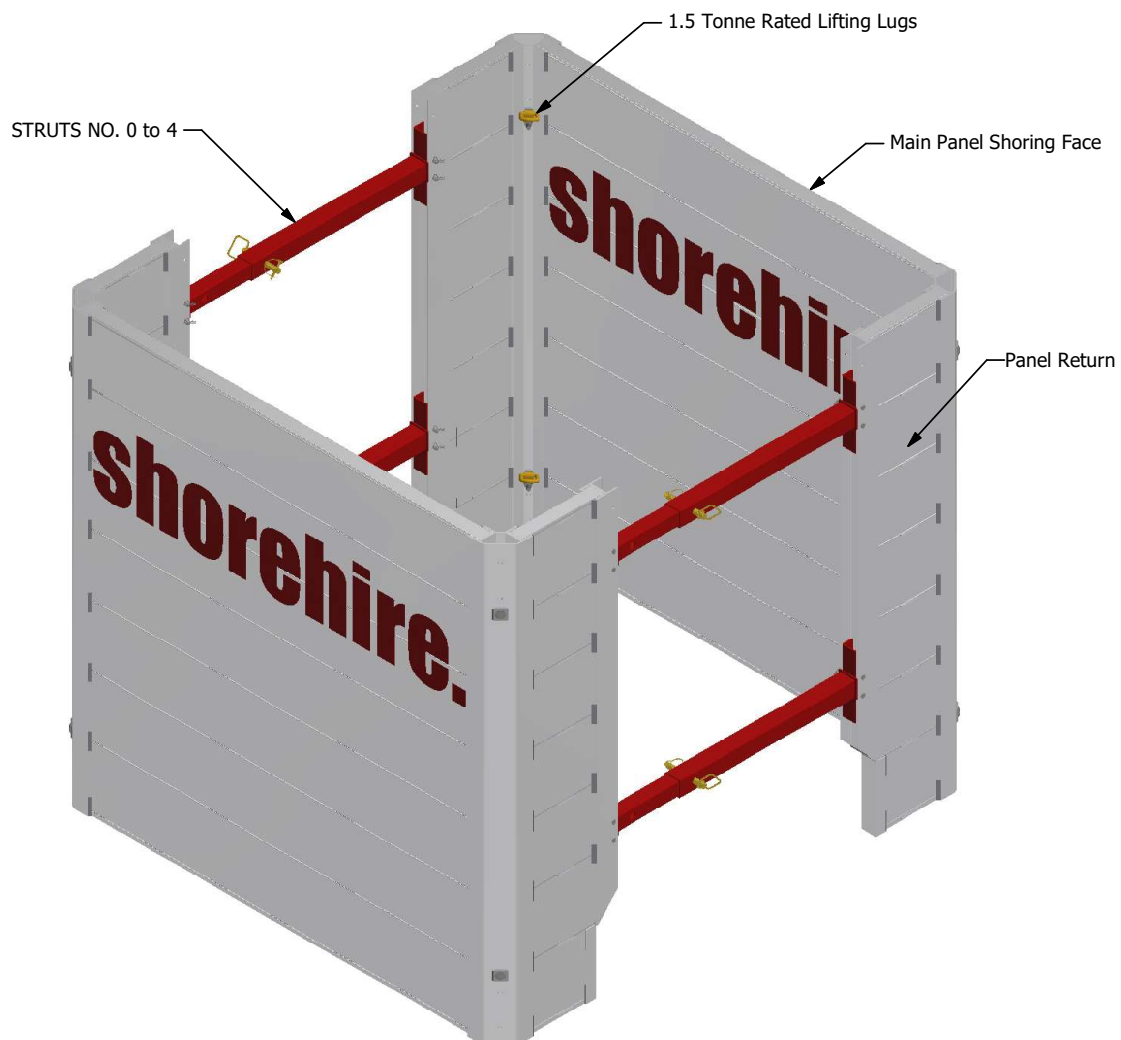


TECHNICAL DATA

DESCRIPTION

The Shore 2.2m Manhole Boxes incorporate the key qualities of our trench box range and have additional features to accommodate adjoining service trenches for typical manholes and other uniform four-sided excavations. These 2.2m Manhole Boxes are also designed with durability and convenience in mind. They are made with lightweight yet robust aluminium, which makes them easy to handle and transport while still providing reliable protection for workers.

They can be installed in pre-dug trenches in stable ground or by using the progressive Dig & Push method in non-cohesive soils. The Shore 2.2m Manhole Box is engineered to support the working load limit of 20 KPa in accordance with AS4744.1 - the Australian Standard for shoring.



TECHNICAL DATA

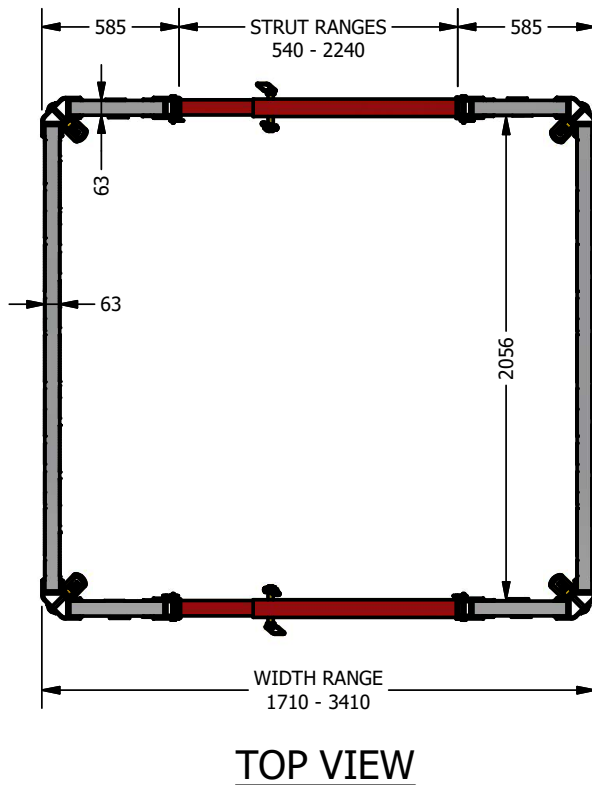
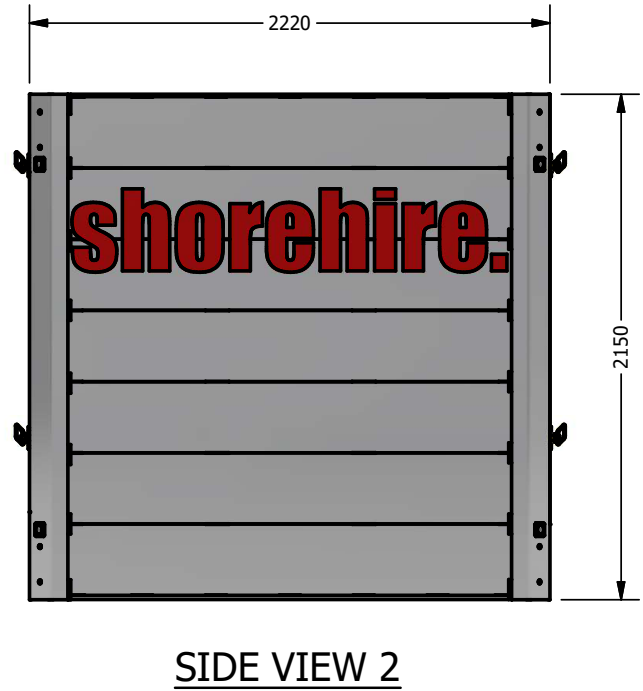
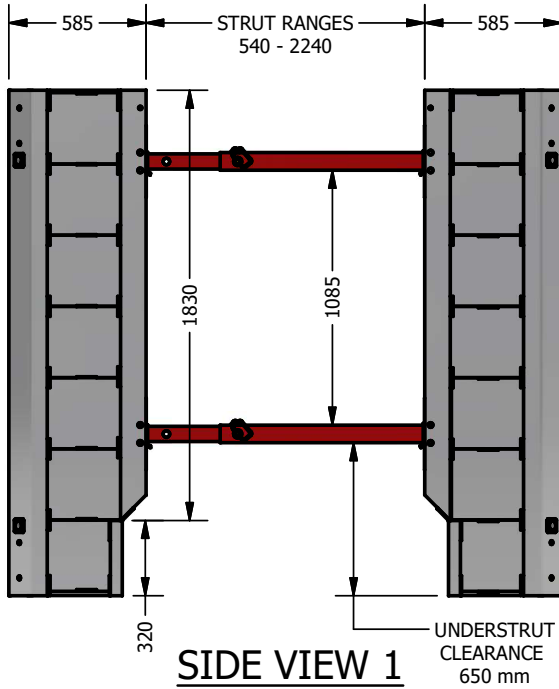
Manhole Box Guidelines

1. Manhole boxes should only be used in the configurations shown by competent persons following Shore Hire's installation guidelines.
2. Manhole boxes are not normally suitable for usage where ground movement is an issue and therefore situations where live carriageways or adjacent existing buildings/structures are a factor. Advice from a qualified civil engineer or similar is recommended.
3. Similarly, manhole boxes used in very weak ground (especially very soft clays, loose sand/fill and peats) where significant ground water is present, should be assessed by a suitable qualified person prior to installation.
4. Flying or elevating of the box above the base of the excavation is not recommended.
5. Manhole boxes should not be left in-situ for extended periods within cohesive or very weak soils as earth pressures/adhesion on the panel surfaces may increase significantly with time requiring additional extraction forces to release the panels.
6. Always use Shore Hire specified extraction chains to release an in-situ manhole box from the ground prior to any attempt to lift the manhole box out of the trench. Always use Shore Hire specified lifting chains when lifting and handling the boxes or components.
7. Prior to every lifting operation, all lifting points must be carefully inspected by a competent person for evidence of damage.
8. Always enter the box with appropriate approved ladder systems within the box and never from an unsupported edge.
9. During lift or extracting operations, ensure personnel are well clear of the equipment.
10. At the end of the manhole box, the ground should always be battered back to a safe angle or end shoring must be used. End shoring recommendations can be advised by the Shore Hire Engineering Team or competent representative.

SHORE 2.2 MANHOLE BOX FEATURES

- Lightweight
- Installed by small excavators and backhoes
- Adjustable steel speed struts
- Shoring panels, steel plates or trench sheets can be used to close off ends
- Enables rapid construction of manholes, chambers and interceptors
- Foam filled, high yield, aluminium panels for strength
- Certified to Australian Standard AS 4744.1
- Compatible with Edge Safe Protection

TECHNICAL DATA

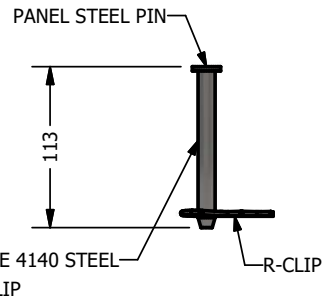
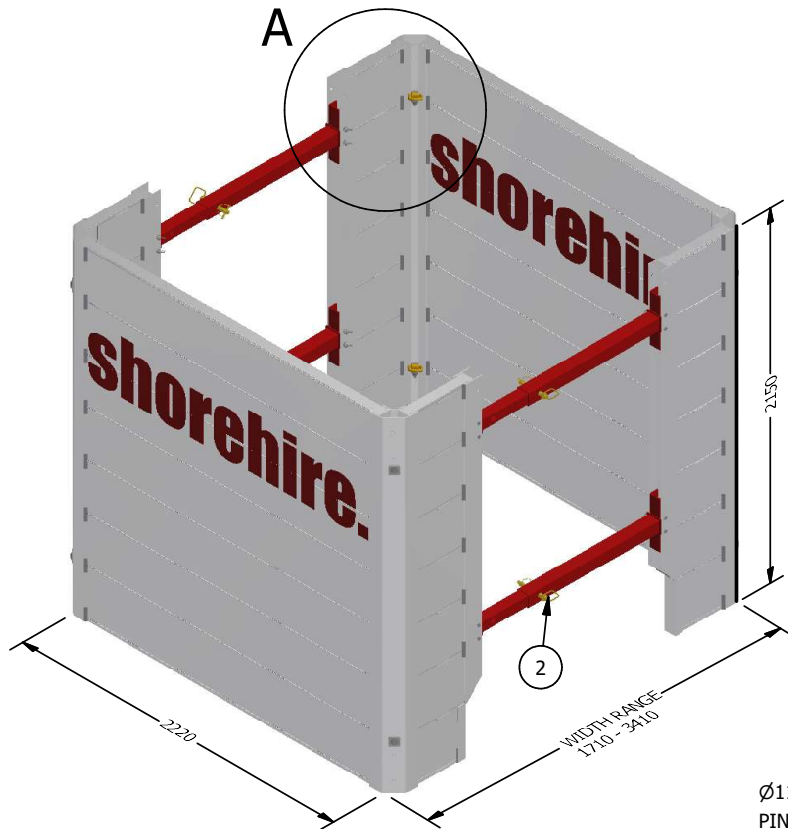


2.2M ALU MANHOLE BOX SPECIFICATIONS	
Specification	Base
Length	2220 mm
Height	2150 mm
Minimum Width Internal	1710 mm
Maximum Width Internal	3410 mm
Clearance Between Struts	1085 mm
Clearance Beneath Bottom Strut	650 mm
Panel Thickness	65 mm
Working Load Limit	20 kPa

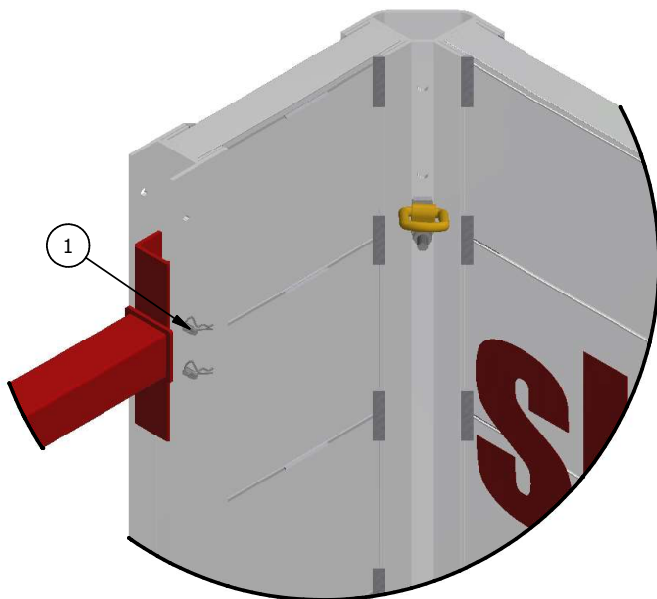
TECHNICAL DATA

ASSEMBLY CONFIGURATION

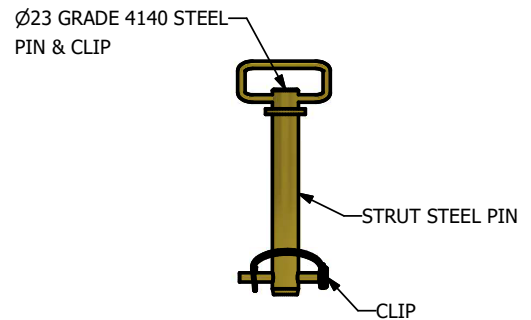
2.2M MANHOLE BOX



DETAIL 1



VIEW A



DETAIL 2

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.

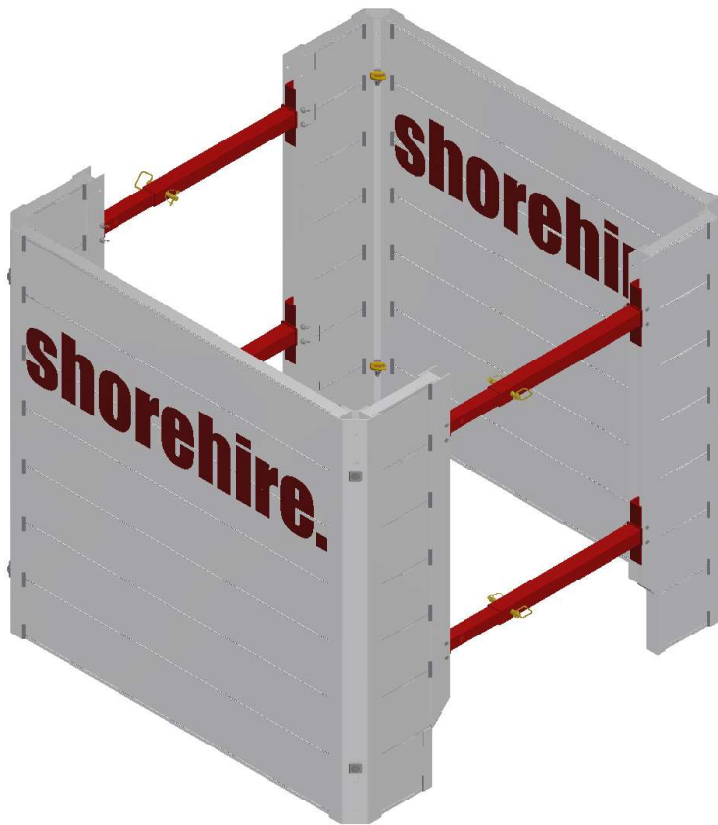
TECHNICAL DATA

ASSEMBLY DETAILS

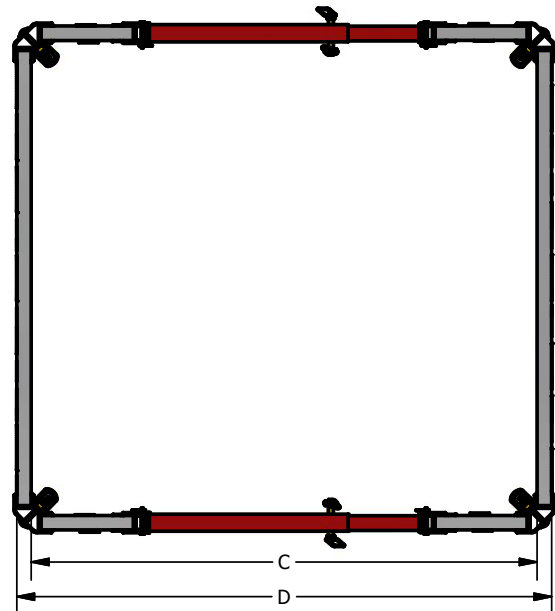
EXCAVATION WIDTH:

STRUT SIZE	INTERNAL WIDTH (C) CLOSED - OPENED (mm)	EXTERNAL WIDTH (D) CLOSED - OPENED (mm)	WEIGHT (kg)	WLL
Strut 0	1255 - 1370	1380 - 1490	638	20 kPa
Strut 1	1465 - 1720	1590 - 1850	658	20 kPa
Strut 2	1620 - 2030	1750 - 2160	670	20 kPa
Strut 3	1930 - 2540	2050 - 2670	702	20 kPa
Strut 4	2220 - 3150	2350 - 3280	734	20 kPa

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



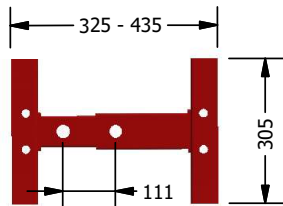
ISOMETRIC VIEW



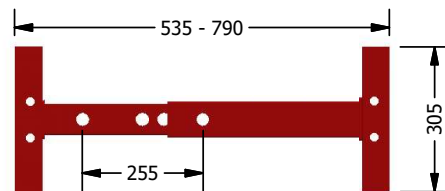
PLAN VIEW

TECHNICAL DATA

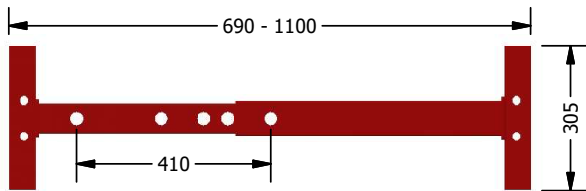
STRUT CONFIGURATION



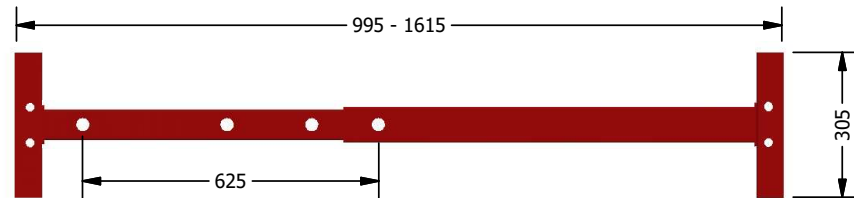
STRUT 0 (18 kg)



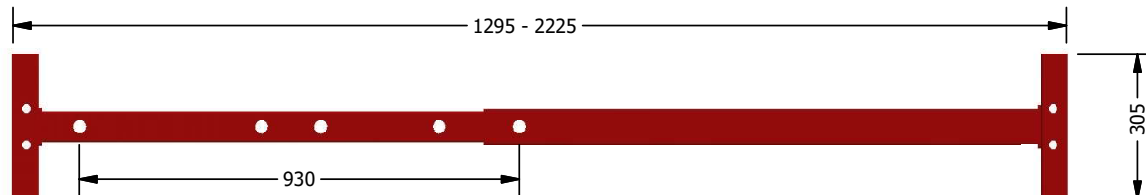
STRUT 1 (23 kg)



STRUT 2 (26 kg)

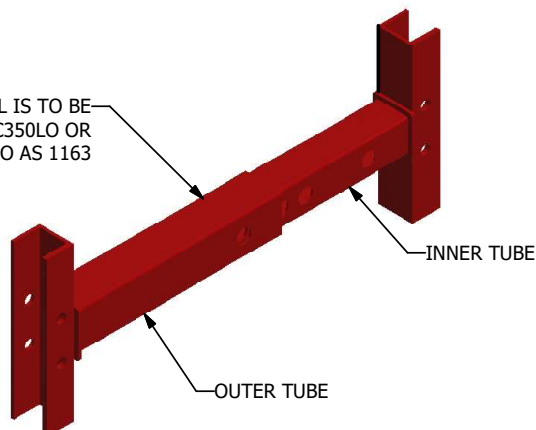


STRUT 3 (34 kg)



STRUT 4 (42 kg)

ALL STEEL MATERIAL IS TO BE
MIN. GRADE C350LO OR
EQUIVALENT TO AS 1163



TECH DATA REF: SHORING

PRODUCT: 2.2M ALUMINIUM
MANHOLE BOX

REFERENCE: TDS18 - PAGE 7

shorehire.

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TECHNICAL DATA

EDGE PROTECTION DETAILS

Shore Hire can provide a compatible range of edge protection and access retrieval winch accessories to attach to the aluminum manhole box. Upon request, Shore Hire can also provide technical advice on the various applications and uses of all accessories.

