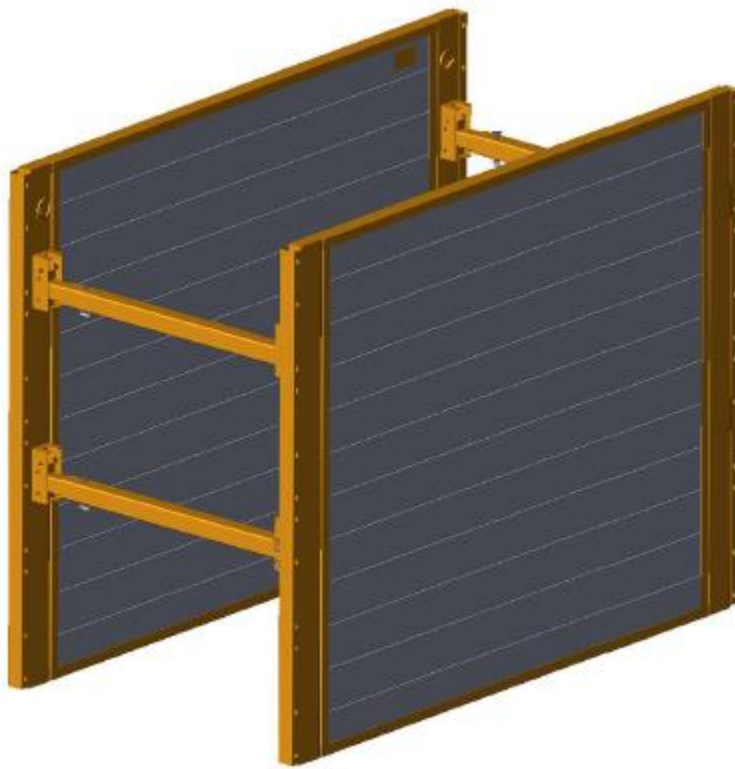


XTERRA TRENCH SHIELDS

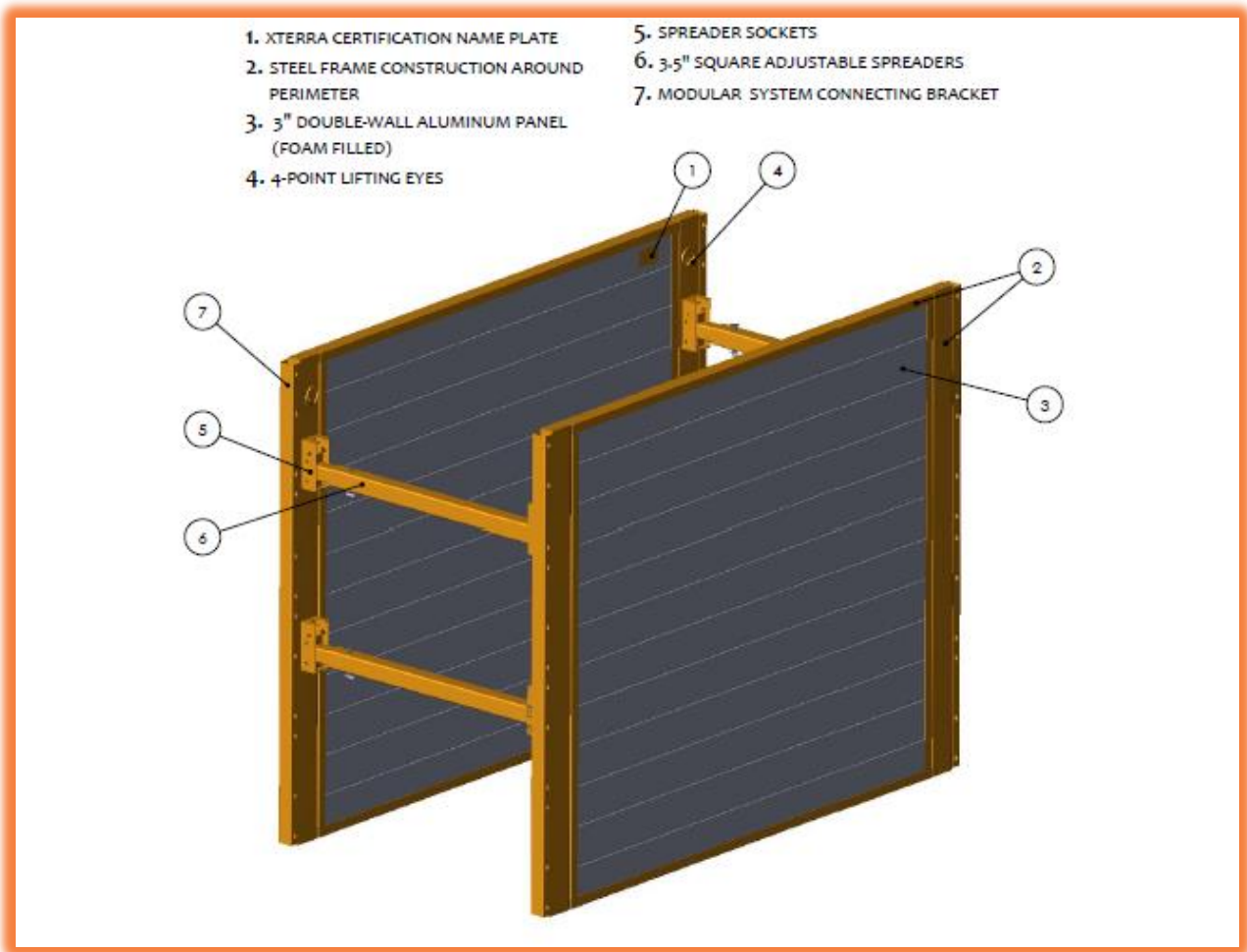
TABULATED DATA



STEEL FRAME ALUMINUM MODULAR SHIELD

STEEL FRAME ALUMINUM MODULAR SHIELD

Xterra Trench Shields Aluminum Modular Shields are certified by a Registered Professional Engineer and are designed to meet OSHA safety requirements. Standard shields are available in 3" thick walls and have a full range of heights and lengths.





1.0 GENERAL INFORMATION:

- 1.1** Xterra Trench Shields' Steel Frame Aluminum Shield tabulated data complies with Federal OSHA standards, 29CFR, Part 1926, Subpart P- Excavations, Section 1926.652 (c)(2).
- 1.2** Only a "Competent Person" shall use this tabulated data to select maximum allowable trench depth. The "Competent Person" must be experienced in the safety procedures and use of trenching and excavation applications.
- 1.3** Before the use of this tabulated data, the "competent person" must first classify the soil type, in accordance with OSHA Appendix A, Soil Classification. Refer to the following section "Soil Classification," for guidance.
- 1.4** Table "XAMS-17", in the "Tabulated Data" section, is applicable only to products exclusively manufactured by Xterra Trench Shields, and may only be used with Xterra Trench Shields manufactured products.
- 1.5** Any soil conditions outside of what is noted in table "XAMS-17," or any variance from tabulated data shall require site specific engineered designs.
- 1.6** Any modifications or alterations of Xterra Trench Shield products, without authorization from Xterra Trench Shields, shall void this tabulated data.
- 1.7** All aluminum shields must be assembled and dis-assembled outside of the trench.
- 1.8** Aluminum Shields shall be inspected by a "Competent Person" prior to assembly.

2.0 SOIL CLASSIFICATION:

- 2.1** The tabulated data presented in table XAMS-17, can only be used after a "Competent Person" has determined the soil classification in accordance with OSHA Appendix A.
- 2.2** Soil that is classified as "C-60" does not qualify as OSHA type "A" or "B" soil. Xterra Trench Shield's Steel Frame Aluminum Shields can be used in OSHA type "C-60" soil. Reference table XAMS-17 to determine maximum allowable depth in C-60 soil.
- 2.3** The Competent Person must closely monitor the excavation site for any deterioration or change of soil type, that can be caused by but not limited to, seeping water, flowing soil entering the excavation, soil movements or cracks.

3.0 TABULATED DATA:

- 3.1** Xterra Trench Shields’ tabulated data is a general set of guidelines. The Competent Person has sole responsibility for job site safety, and proper installation and removal of equipment.
- 3.2** The Competent Person must inspect the shield for deficiencies, each time before use, and whenever there is a change of job site conditions.

TABULATED DATA TABLE:

MODEL	CAPACITY (PSF)	MAXIMUM DEPTH RATING (FT)				VERTICAL PIPE CLEARANCE (IN)	EST. WEIGHT (LBS)
		A-25	B-45	C-60	C-80		
XAMS-606	1645	30	25	25	23	25	892
XAMS-608	1215	30	25	20	15	25	1070
XAMS-610	957	25	20	15	11	25	1143
XAMS-612	642	25	15	13	9	25	1407
XAMS-808	1212	30	25	20	15	36	1245
XAMS-810	929	25	20	15	12	36	1530
XAMS-812	649	25	14	13	9	36	1775
XAMS-1010	875	25	19	14	10	40	2250
XAMS- 1012	590	20	13	11	7	40	2550

Table XAMS-17

4.0 Assembly

- 4.1 Begin by laying one aluminum panel on the ground with the spreader sockets facing up.
- 4.2 Next, place the spreaders inside of the spreader sockets and insert pins and keepers (FIG. 2). Do this with all four spreaders before moving to the next step.
- 4.3 After that, lower the second panel onto the spreaders already pinned into the panel laying on the ground (FIG. 1). Insert pins and keepers where needed.
- 4.4 Next, attach a 4-point sling to the D-rings that are welded onto the sides of each panel and lift the aluminum shield into an upright and standing position.
- 4.5 Finally, attach any necessary tag lines and install the shield into a trench.

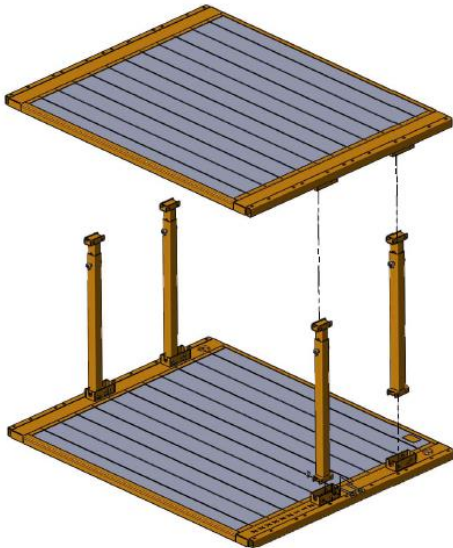


FIGURE 1

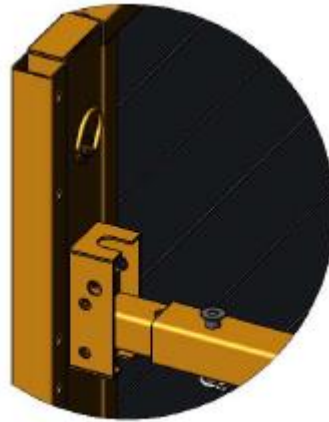


FIGURE 2

5.0 ASSEMBLY NOTES:

- 5.1 Any damaged or missing components shall be evaluated and repaired using a registered Professional Engineer, before use.
- 5.2 Shields should be assembled and properly rigged before setting inside an excavation.
- 5.3 Xterra Steel Frame Aluminum Shields may be stacked vertically, if they are pinned together properly, using the stacking brackets welded on the end of each shield.
- 5.4 Two spreaders are required at the end of each shield, and shall be pinned in place.