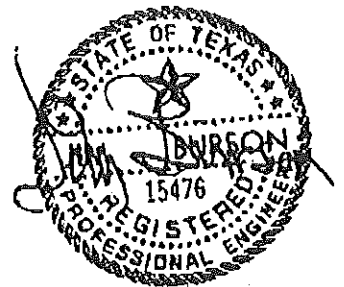
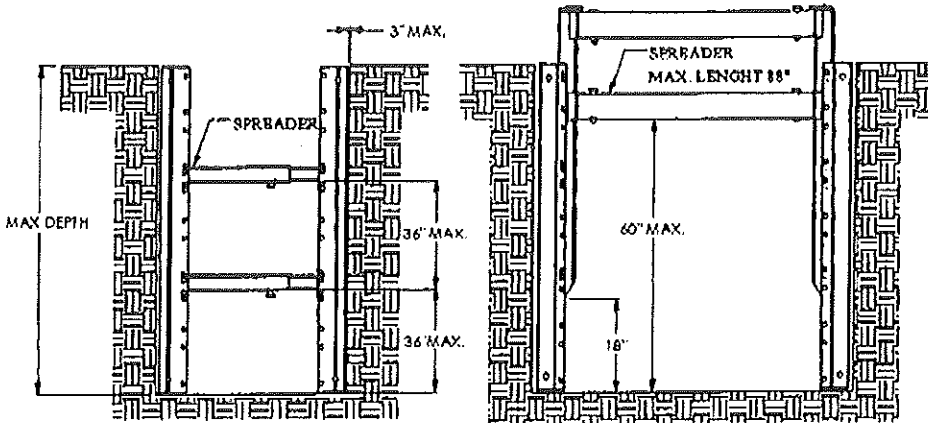


CERDA

INDUSTRIES

BUILD-A-SHIELD PANELS TABULATED DATA

MAXIMUM ALLOW DEPTH (FT.)								
SOIL TYPE	PANEL LENGTH (FT.)							
	3	4	5	6	7	8	10	12
A25	30	30	30	30	30	30	30	24
B45	30	30	30	30	26	24	20	14
C60	30	30	28	24	20	18	14	10
C80	30	24	22	18	16	14	12	8
CAPACITY (PSF)	2586	1940	1552	1296	1108	970	776	598



**BUILD-A-SHIELD
TRENCH CROSS SECTIONS**

Build-A-Shield Panels Tabulated Data

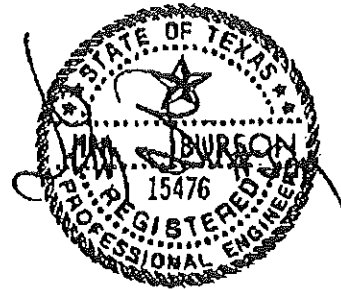
CONDITIONS FOR USE OF TAB DATA

1. This Tabulated Data has been prepared by a registered professional engineer as required to comply with the OSHA standard 29 CFR Part 1926, Subpart P.
2. The Soil Types A - 25, B - 45, and C - 80 are as defined in the OSHA Standard. Soil Type C - 60 is a moist, cohesive soil or a moist dense granular soil, which is not flowing or submerged and has an Equivalent Fluid Pressure (EFP) of 60 PSF per foot of depth. The competent person must monitor the excavation for signs of deterioration that may alter soil pressures and produce the Soil Type C - 80 conditions. Such signs are indicated by, but not limited to, freely seeping water or flowing soil entering the excavation around or below the Panels.
3. Cerda Industries Build-A-Shield Panels shall be used in accordance with the depth chart. The maximum depth is the distance from the surface of the excavation to the bottom of the trench. Depth ratings shown are based upon examples of homogeneous soil conditions. Soil pressures may vary due to non-homogeneous soils, surcharged loads, and slope or embankment (layback). Actual soil pressures should be verified to be sure that the shield capacity is not exceeded.
4. Surcharged loads are not included in the maximum depth table. Surcharged loads are possible due to heavy equipment, vibrations, or soil piles adjacent to the trench. (Adjacent is defined as within a distance equal to the depth of the trench.)
5. Build-A-Shield Panels are not intended to provide stability to adjacent buildings or other structures.
6. The use of Build-A-Shield Panels shall be in accordance with all federal, provincial, state and local laws and regulations. All personnel involved in the assembly, installation and removal of Build-A-Shield Panels shall be trained in the proper use of the equipment and shall be knowledgeable of all applicable safety requirements and procedures.
7. The Build-A-Shield Panels shall be installed in a manner to prevent lateral movements. There shall not be more than 3 inches between the face of the Panel and the face of the excavation. Back filling may be required to prevent lateral movement.
8. The spreaders shall not be used to support side loading on the struts and the Build-A-Shield Panels shall not be lifted, pulled or moved by the spreaders. Lift the Build-A-Shield Panels from the lifting eyes furnished with the Panels.
9. When the Build-A-Shield Panels are used in a four sided assembly a bottom panel may be left out on one side or two opposite sides.
10. Build-A-Shield Panels must be placed no more than 24" off the bottom of the excavation except for C-80 soil conditions or flowing soil conditions. These flowing soil types of soils require that bottom of the Panels meet the bottom of the excavation at all times.
11. Excavation walls should be near vertical to insure proper installation of the Panels.
12. When using the Panels in a vertical excavation, the top of the Panels must be equal to or slightly higher than the excavation.

13. When using the Panels in a combination sloped and vertical cut excavation, the top of the Panels must be at least 12' above the vertical cut part of the excavation.

GENERAL NOTES FOR BUILD-A-SHIELD PANEL USE:

1. The Build-A-Shield Panels shall not be modified unless approved in writing by Cerda Industries, Inc.
2. Maximum depths are based on Panels being in structurally sound condition. Panels should be inspected prior to each use for damage or deterioration. If a Build-A-Shield Panel has sustained major structural damage or permanent deformation of a structural member, the Tabulated Data is void until repairs are made as specified by a registered professional engineer.
3. The use of Cerda Industries, Inc. Build-A-Shield Panels shall be in accordance with this tabulated data and all requirements of the OSHA standard. Panel usage other than specified may create unsafe conditions that could cause a cave-in, structural failure, or collapse resulting in a disabling injury or even death. Cerda Industries, Inc. shall not be liable for shield usage other than specified.



Cerda Industries, Inc.
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WARNING!
Use of this equipment not in
accordance with Manufacturers
Tabulated Data may lead to
injury or death