ARCOSA

SHORING PRODUCTS

# Tabulated Data

## G3 Sheeting Guide Frame System

August 2024

Arcosa Shoring Products. (ASP)

Cerda Industries

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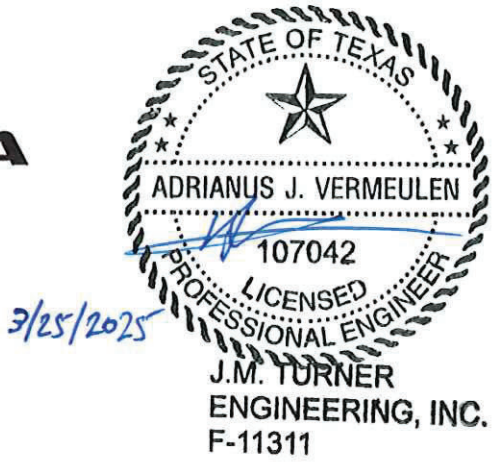
CERDA INDUSTRIES



# SHEETING GUIDE
## MANUFACTURER'S TABULATED DATA

**Warning- Improper use of this product could result in cave-in, collapse, or structural failure and could result in injury or death.**

1. Unless otherwise specified herein, **OSHA CFR 29 Part 1926, Subpart P – Excavations applies.**

2. Use of this tabulated data is dependent on first **classifying the soil** in accordance OSHA Appendix A. Classification shall be made using freshly dug, representative soil.

3. Soil types A and B are defined in the OSHA standard identified in para 1. Soil type C60 is a soil that 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 soil can be cut vertically and will stand long enough to safely install the protective system.

4. The **competent person** shall monitor the excavation for signs of **water seeping or accumulation** and shall promptly remove water when worker exposure is anticipated.

5. **A competent person** who has been trained in the proper use of the sheeting guide, safe excavation practices, and soil classification methods must direct and control the installation and use of the system. The competent person must be knowledgeable and capable of complying with all federal, state, and local laws and ordinances. **And have STOP WORK authority.**

6. **Excavations and protective systems shall be inspected** at the beginning of the shift and as necessary when there is a change in the soil or site conditions.

7. **All lifting and pulling equipment shall be inspected** for damage, defects, capacity, and suitability prior to use.

8. **Installation requirements** and front (interior) panel properties are shown in figures 1 and 2.

9. The sheeting guide may be used in a **4-sided pit (see figure 3)** or **trench (see figure 4)** application. **Three sided systems (see figure 5)** may be used in a 4-sided pit if the two open sides are butted against each other, and the open sides are equipped with spreaders that meet the specifications in paragraph 15.

10. Installation:
    (a) Excavate 4 feet to 6 feet max deep and install the sheeting system or excavate a perimeter trench 4 feet to 6 feet deep x 16-inches wide and insert the sheeting guide to a maximum depth of 6 feet;
    (b) **Soil should be firmly placed** against the outside of the panels and corners. Voids should be eliminated.
    (c) insert the sheeting and drive to depth achieving the specified toe; then
    (d) complete the excavation.

11. After assembly and installation of the sheeting guide there should be **no gap** between the excavation wall and the sheeting guide panels.

12. When sheeting is placed **directly over a crossing utility,** the sheeting must be secured over the crossing utility.

13. The sheeting guide is **not intended to provide stability** for adjacent buildings or other structures.

14. Modifications of any kind to the sheeting guide or any deviation from this tabulated data not approved in writing by ARCOSA/Cerda Industries' voids this tabulated data.

15. When the sheeting guide is used **in a trench, four spreaders** shall be installed. The spreaders shall be 8" schedule 80 pipe, 20 feet max long secured with spreader pins placed in all collar pin holes. The pins shall be 2-inches diameter manufactured from 75 ksi min yield steel. Pins manufactured from steel using less than 75 ksi material voids this tabulated data.

16. **Arch spreader, model SG3-ARCH** may be used in place of the pipe spreaders. The maximum excavation depth when using this spreader with panel model no. SG3-0624 is 19 feet.

17. **Lateral loads** shall not be applied to the spreaders.

18. This tabulated data does not include any allowance **for surcharge loads**. Surcharge loads may be introduced by spoil piles, heavy equipment, structures or vibration placed adjacent to the excavation. Adjacent is defined as a distance equal to or less than the depth of the excavation.

19. The **maximum depths** specified herein are based upon the sheeting guide being in a structurally sound condition. The **competent person must inspect** the Sheeting guide prior to each use for damage or deterioration. If a sheeting guide has sustained major structural damage or permanent deformation of a structural member or connection, this tabulated data is void until repairs are made as specified by a licensed professional engineer. The use of the Cerda Industries' sheeting guide shall be in accordance with this tabulated data and all requirements of the OSHA standard. **Sheeting guide usage other than a specified or required herein may create unsafe conditions that could cause a cave-in, structural failure,**

**or collapse resulting in disabling injury or even death.** Cerda Industries will not be liable for the Sheeting Guide being used in ways other than as specified herein. Use of this sheeting guide not in accordance with this tabulated data could cause injury or death.

20. Installation and removal of the sheeting guide components shall be **from above ground only**.

21. The competent person shall assure that the soil has sufficient strength and stability to provide adequate support at the bottom of the excavation.

INSTALLATION REQUIREMENTS TABLE

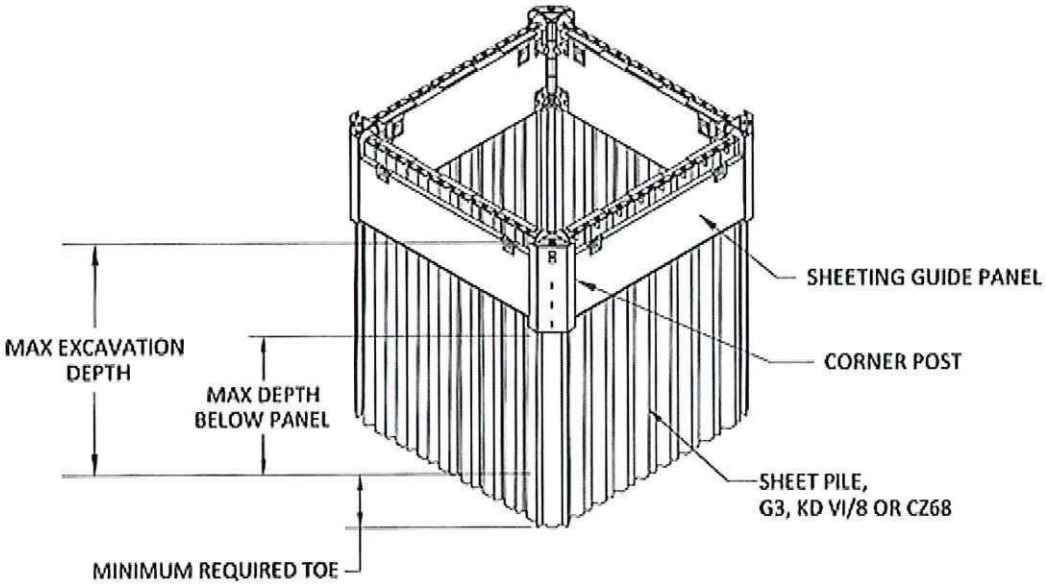
| SOIL TYPE | MIN TOE (ft) | MAX DEPTH (ft) | MAX DEPTH BELOW PANEL (ft) |
|---|---|---|---|
| | | SG3-SHEETING | SG3-SHEETING |
| A | 2 | 20 | 14 |
| B | 3 | | |
| C60 | 3 | | |
| SEE PARA 21 | | SEE PARA 16 | |

Figure 1

PANEL PROPERTIES TABLE

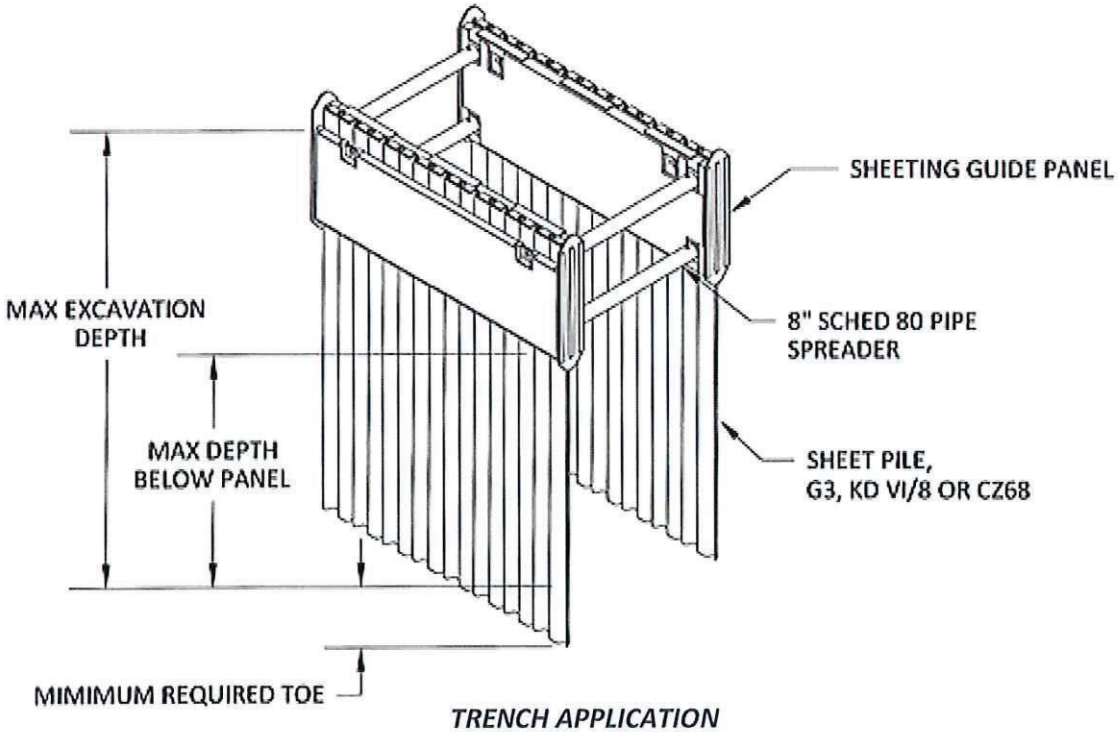
| MODEL | CAPACITY (psf) | WEIGHT (lbs) | MOMENT OF INERTIA (in^4) | SECTION MODULUS (in^3) |
|---|---|---|---|---|
| SG3-0612 | 7739 | 7,910 | 555.5 | 151.8 |
| SG3-0616 | 4008 | 9,784 | | |
| SG3-0620 | 2445 | 11,386 | | |
| SG3-0624 | 1646 | 13,276 | | |

Figure 2



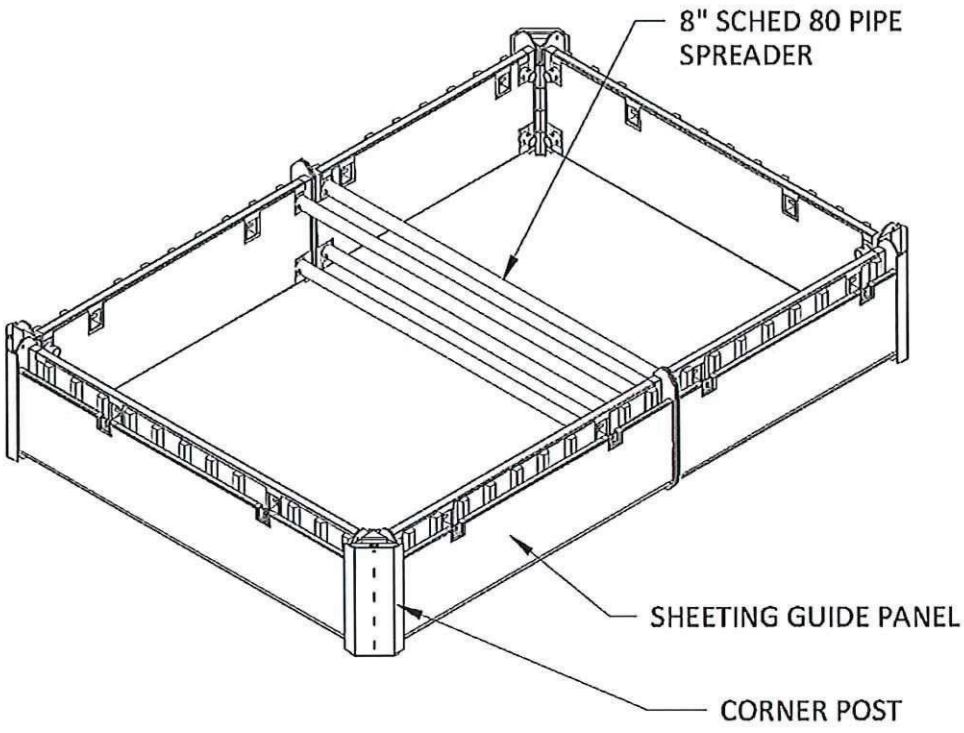

*4-SIDED PIT APPLICATION*

Figure 3




*TRENCH APPLICATION*

Figure 4




***4-SIDED PIT (2 SYSTEMS, 3-SIDED)***

Figure 5

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