



A Division of Sunstate Equipment Co.

# TRENCH SAFETY

## TRENCH SHIELD MANUFACTURER'S TABULATED DATA

SS4M412NKE-SE

MODEL NO.

45974

SERIAL NO.

05/2025

DATE SHIPPED

### MAXIMUM DEPTH TABLE

| SOIL TYPE | EFP | MAXIMUM DEPTH (FT) |
|-----------|-----|--------------------|
| A         | 25  | 99'                |
| B         | 45  | 66'                |
| C         | 60  | 50'                |
| C         | 80  | 38'                |

\*Shield Capacity based on C60  
soil at bottom of the excavation.

3,000 PSF

SHIELD CAPACITY\*

20 FT

MAX SPREADER  
LENGTH

8 IN SCH 80

SPREADER SIZE

#### CONDITIONS FOR USE OF TABULATED 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 condition. Such signs are indicated by, but not limited to, freely seeping water or flowing soil entering the excavation around or below the shield.
3. Trench Shields 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, surcharge loads, and slope of embankment (layback). Actual soil pressures should be verified to be sure that the shield capacity is not exceeded.
4. Surcharge loads are not included in the maximum depth table. Surcharge 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. Trench Shields are not intended to provide stability to adjacent buildings or other structures.
6. 2 inch diameter pins furnished by Arcosa Shoring Products shall be placed in all spreader to collar connections.

#### GENERAL NOTES FOR TRENCH SHIELD USE:

1. Any modifications to shields using parts not manufactured by Arcosa Shoring Products will void Tabulated Data unless otherwise specified or allowed in writing by Arcosa Shoring Products.
2. Arcosa Shoring Products Trench Shields may be stacked provided that appropriate connections are made between stacked shields as specified by Arcosa Shoring Products. Each stacked shield shall have a depth rating equal to or greater than the actual depth at which it is used.
3. Maximum depths are based on shields being in structurally sound condition. Trench Shields should be inspected prior to each use for any damage or deterioration. If a shield has sustained major structural damage or permanent deformation of a structural member or connection, the Tabulated Data is void until repairs are made as specified by a registered professional engineer.
4. The use of Arcosa Shoring Products Trench Shields shall be in accordance with this tabulated data and all requirements of the OSHA standard. Trench Shield usage other than specified or required may create unsafe conditions that could cause a cave-in, structural failure, or collapse resulting in a disabling injury or even death. Arcosa Shoring Products shall not be liable for shield usage other than specified.



# TRENCH SHIELD ASSEMBLY & DISASSEMBLY



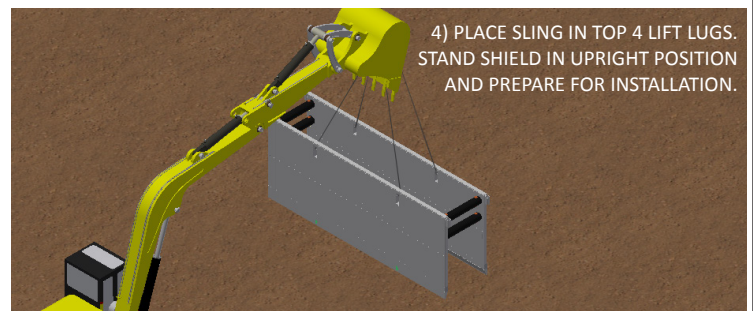
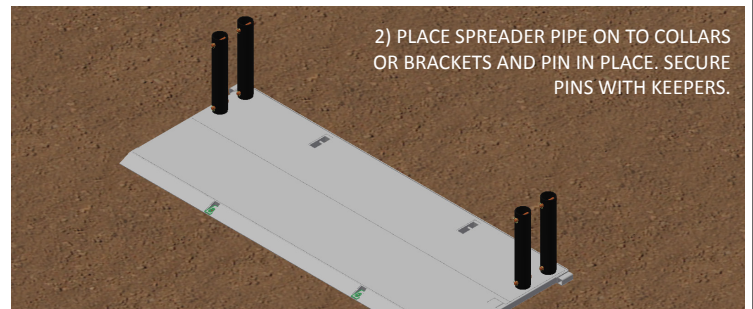
Visit [www.naxsa.org/trenchsafetyvideos](http://www.naxsa.org/trenchsafetyvideos) for trench shield assembly & disassembly video

Rev 0, NAXSA 2019

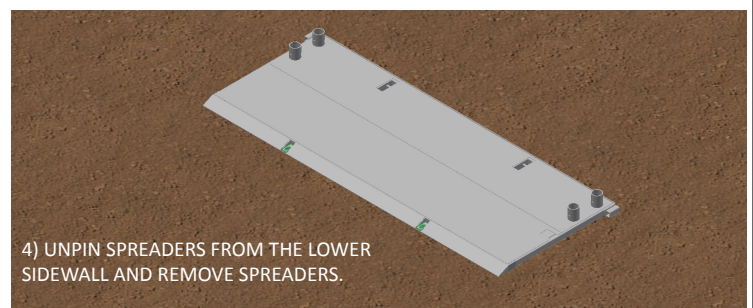
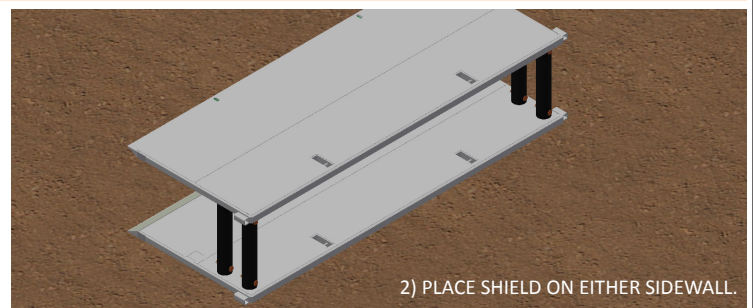
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1. ANY USE OF A TRENCH SHIELD WITHOUT MANUFACTURER'S SPREADERS AND PINS OR EQUAL WILL VOID THE TABULATED DATA AND WARRANTY.
2. TRENCH SHIELDS ARE DESIGNED TO BE USED WITHOUT PLATES EXTENDING BELOW, ABOVE, OR NEXT TO IT. ANY USE OF SUCH PLATES OR PANELS MAY VOID THE TABULATED DATA AND MAY REQUIRE SITE SPECIFIC ENGINEERING.
3. TRENCH SHIELDS ARE DESIGNED TO BE PUSHED TO GRADE IF NECESSARY. AS NOTED BELOW, ANY UNNECESSARY ABUSE BY THE EXCAVATOR AND OR OPERATOR (SUCH AS POUNDING WITH THE BUCKET) WILL VOID THE TABULATED DATA AS WELL AS THE WARRANTY.
4. CONDITION OF SHIELD, SPREADER PIPES, AND SPREADER PINS MUST BE CHECKED/ INSPECTED FOR SERVICEABILITY BY THE COMPETENT PERSON PRIOR TO EACH USE. PSF RATING IS NOT VALID IF THERE IS ANY VISIBLE DAMAGE TO, OR REPAIRS MADE TO THE SHIELD THAT HAS NOT BEEN DOCUMENTED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.
5. A MINIMUM OF 4 SPREADERS OR A MANUFACTURER-APPROVED ALTERNATIVE, MUST BE INSTALLED ON THE TRENCH SHIELD PRIOR TO USE.
6. WARNING: LIFTING EYES ARE DESIGNED AND INTENDED FOR ASSEMBLY/DISASSEMBLY AND LIFTING ONLY. DO NOT PULL OR LIFT BY EYES WHEN SHIELD IS STUCK OR HAS PRESSURE AGAINST IT. LOOSEN SHIELD BY PULLING ON PULLING EYES OR DIGGING ALONG SIDES.

## ASSEMBLY



## DISASSEMBLY



**WARNING: ANY USE OF THIS PRODUCT NOT SPECIFICALLY DESCRIBED ON THIS CERTIFICATE COULD CAUSE CAVE-IN, COLLAPSE, OR STRUCTURAL FAILURE, AND MAY RESULT IN INJURY, OR DEATH**