



TRENCH SHIELD TABULATED DATA

A COPY OF THIS SHEET MUST ACCOMPANY EACH
CORRESPONDING TRENCH SHIELD AT EVERY JOB SITE

MODEL NUMBER: PAL4-420DNKE

SERIAL NUMBER: 37310

SOIL	MAX DEPTH	*PSF
TYPE A	25 - FT	660
TYPE B	15 - FT	
TYPE C60	11 - FT	
TYPE C80	9 - FT	

DATE MANUFACTURED: 05/2020

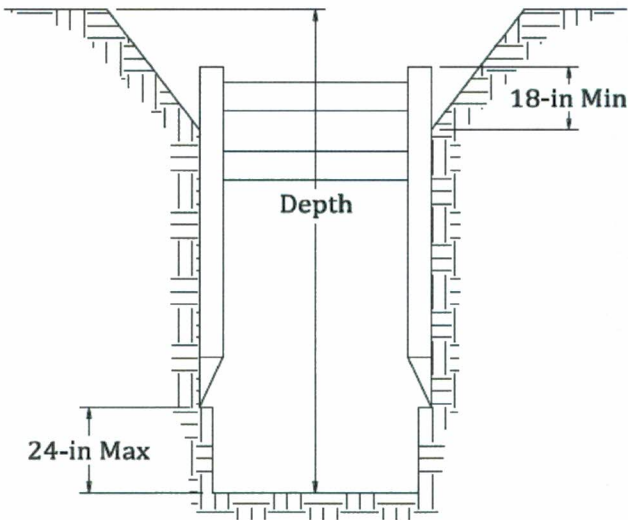
SHIELD SIZE: 4 - FT X 20 - FT

SPREADER SIZE: 5 IN SCH 80

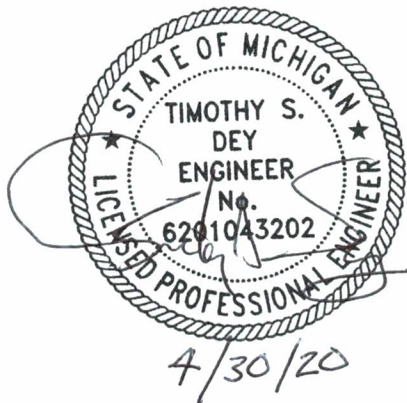
MAX SPREADER LENGTH: 15 - FT

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

LIMITATIONS:



1. Soil above shield must be sloped according to OSHA Subpart P. Slope must begin no less than 18" below the top of shield.
2. Shield may be suspended no more than 2 feet above bottom of the trench and only if there is no possible loss of soil from behind or below bottom of shield.
3. A minimum of 2 spreader pipes are required on each end with manufacturer approved **1-in diameter pins** and keepers.
4. Repairs and modifications shall be approved in writing by the manufacturer and a registered professional engineer.
5. Shields may be stacked as long as each is rated to the depth it is used and manufacturer approved stack connections are utilized.
6. Surcharge loads have not been included in the above depth ratings. The allowable working depth of the shield must be reduced to account for all surcharge loading which occurs adjacent to the trench. (Adjacent is defined as within a distance equal to the depth of the trench.)
7. The Soil Types A, B, 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.
8. PRO-TEC trench shields have been designed by a registered professional engineer as required to comply with Occupational Safety and Health Administration (OSHA) standard 29 CFR Part 1926, Subpart P.
9. 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.



49145 - 4/30/2020

Usage of trench shields other than specified could cause failure or cave-ins resulting in serious injury or death.

ARCOSA
SHORING PRODUCTS

Phone (517) 541-0303 • 1-800-292-1225 • Fax (517) 541-0329

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TRENCH SHIELD ASSEMBLY & DISASSEMBLY



Visit 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