

TRENCH SHIELD TABULATED DATA

3810 Magnolia Pkwy
Pearland TX 77584

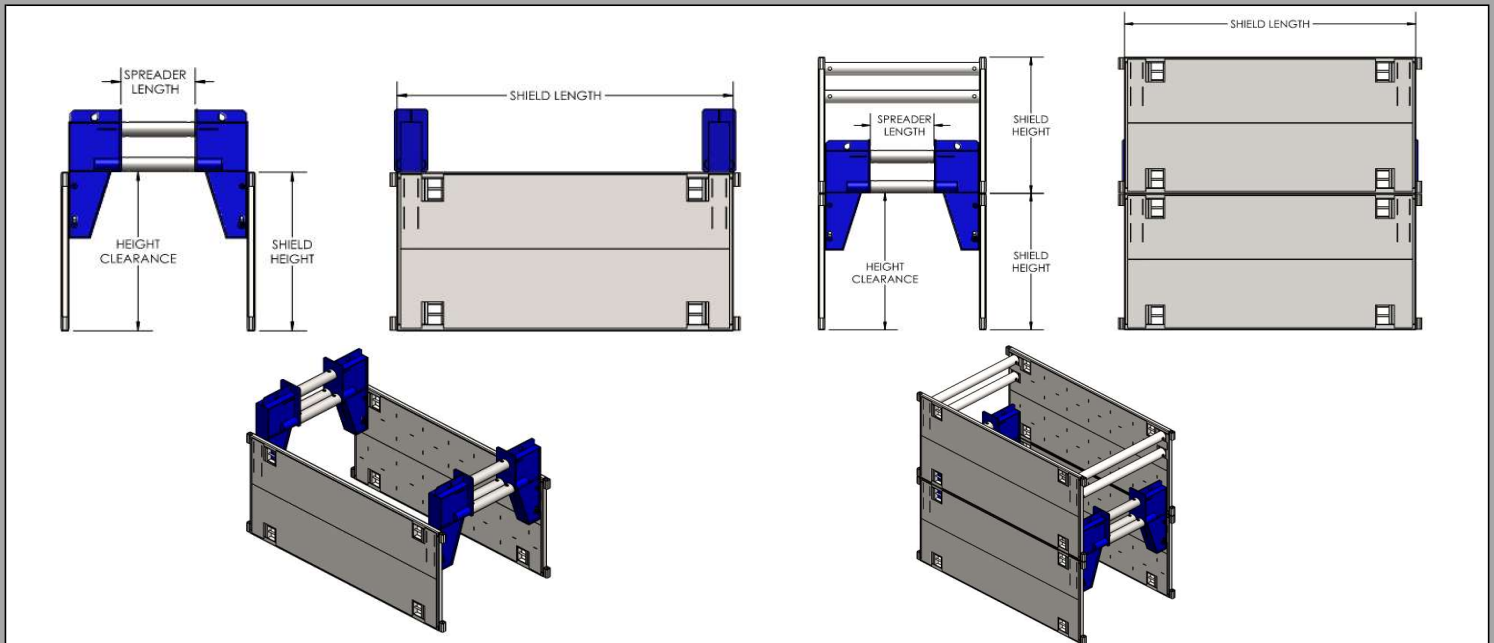
Model Number: 11-ACC-ARCH-STACK-120-144-7-STS

Serial Number	PS26661	Max Clearance Height	144 IN	Spreader Pin Size	2 IN
Maximum Shield Height	10 FT	Spreader Size	8" SCH 80 Pipe	Pin Yield Strength	90 KSI
Maximum Shield Length	24 FT	Spreader Yield Strength	65 KSI*	Weight	3708 LBS
Min Clearance Height	120 IN	Max Spreader Length	15 FT	Surcharge	72 PSF

UPPER SHIELD HEIGHT (FT)	LOWER SHIELD HEIGHT (FT)	SHIELD LENGTH (FT)	PSF**	A-25	B-45	C-60	C-80
8	8	16	2300	40	40	37	28
10	10	16	1840	40	39	29	22
8	8	20	1840	40	39	29	22
10	10	20	1472	40	31	23	17
8	8	24	1533	40	32	24	18
10	10	24	1227	40	26	19	14
UPPER SHIELD HEIGHT (FT)	LOWER SHIELD HEIGHT (FT)	SHIELD LENGTH (FT)	PSF**	A-25	B-45	C-60	C-80
NO SHIELD	8	16	2335	40	40	38	28
NO SHIELD	10	16	1663	40	35	27	20
NO SHIELD	8	20	1868	40	40	30	22
NO SHIELD	10	20	1331	40	28	21	16
NO SHIELD	8	24	1557	40	33	25	19
NO SHIELD	10	24	1109	40	23	17	13



03/25/2026



NOTES & LIMITATIONS:

- This document has been prepared and sealed by a Licensed Professional Engineer (P.E.), in accordance with OSHA 29 CFR Part 1926, Subpart P.
- Where soils are sloped, the slope shall extend to not less than 18 in. below the top of the trench shield. The trench shield is not required to extend above the soil surface where soils are flat and level with the top of the shield. See shield tabulated data tables for allowable sloping requirements.
- Arch spreaders shall be used under the supervision and direction of a Competent Person as defined by CRF, Part 1926, Subpart P. Among other qualifications, the Competent Person shall be trained in the use of high arch spreaders and have practical field experience with the use of shields, soil classification, and recognizing hazardous conditions.
- High arch spreaders are not intended to provide support or stability to adjacent buildings, structures, utilities, or foundations.
- High arch spreaders shall be used in strict compliance with all applicable OSHA requirements and the limitations outlined in this document.
- High arch spreaders shall be inspected by the Competent Person prior to each use to verify they are in serviceable condition and free from damage, deformation, or defects.
- Surcharge loads are included in the maximum depth table. Surcharge loads are possible due to heavy equipment, vibrations, or stock piles adjacent to the trench. Adjacent is defined as within a horizontal distance equal to the depth of the excavation.
- Competent person must ensure surcharge limits and equipment setbacks are maintained at all times, unless approved in writing by a P.E.
- All spreaders shall be secured to sockets using pins or other mechanical connections approved by the manufacturer prior to use. Side loading or vertical loading of high arch spreaders—including leaning plates or sheeting against spreaders—is prohibited unless approved in writing by the Manufacturer or a P.E.
- Repairs, alterations, or modifications to high arch spreaders—including changes to geometry, length, or capacity—are strictly prohibited unless approved in writing by a P.E.
- Refer to the applicable trench shield tabulated data sheets for spreader pipe requirements (larger diameter, sched, and ksi control), allowable depths, and configuration limitations. The maximum allowable depth ratings and PSF ratings are the lower of those tabulated on the shield and the high arch spreader.

*To achieve tabulated depth ratings, the Owner shall use 8 in. NPS Schedule 80 pipe spreaders with minimum specified yield strength $F_y \geq 65$ ksi (API 5L X65 or approved equal) and provide certified MTRs, calculations, and/or load testing if requested for P.E. approval.

**PSF rating controlled by spreader compression and/or bearing capacity.

WARNING: USE OF SHIELDING OTHER THAN OUTLINED IN THIS DOCUMENT CAN CAUSE FAILURE, COLLAPSE, OR CAVE-INS, AND MAY RESULT IN SERIOUS INJURY OR DEATH.