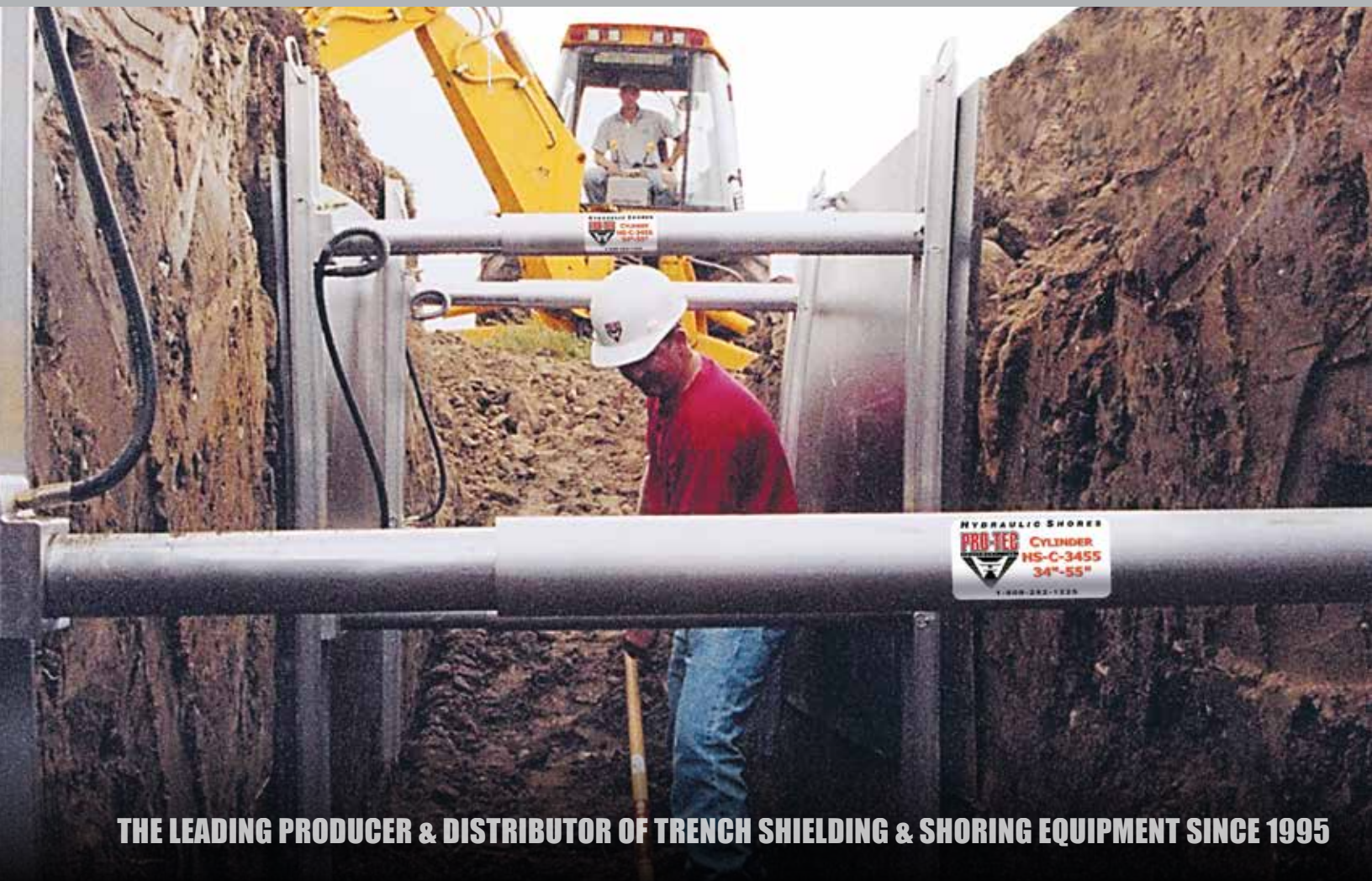




HYDRAULIC SHORING



THE LEADING PRODUCER & DISTRIBUTOR OF TRENCH SHIELDING & SHORING EQUIPMENT SINCE 1995

VERTICAL SHORES

Light in weight yet extra strong for long lasting durability

Exceptionally strong, durable, portable, versatile

- **High yield aluminum alloy construction** makes Pro-Tec Equipment shores light in weight yet extra strong for long lasting durability.
- **Cylinder pads** mount flush, providing even load distribution on side rails.
- **One-piece cylinder extensions** can be installed easily at the job site to accommodate a variety of trench widths.
- **Cylinder oversleeves are standard**, provide extra strength, protect cylinders.
- **Bleed-off ports eliminate over-extension** of cylinders to increase the safety factor.
- **Hinged design** allows for fast knock-down and transport.



One-Person installation & removal from above ground

Quick, easy, simple way to shore a trench

Installation is fast, easy, safe



Position shore at edge of trench. Connect hydraulic hose line to fitting.



Drop shore into trench at desired height.



Pump to minimum pressure of 750 psi. Disconnect hose from fitting using release tool.

Removal is quick and simple



Release hydraulic shoring fluid at fitting using release tool.



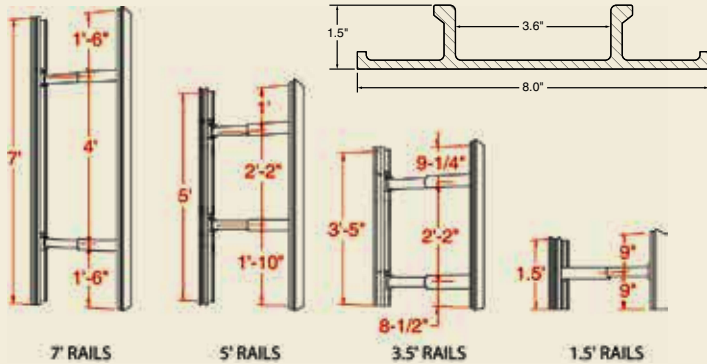
Pull shore assembly from trench using both release and removal hook.



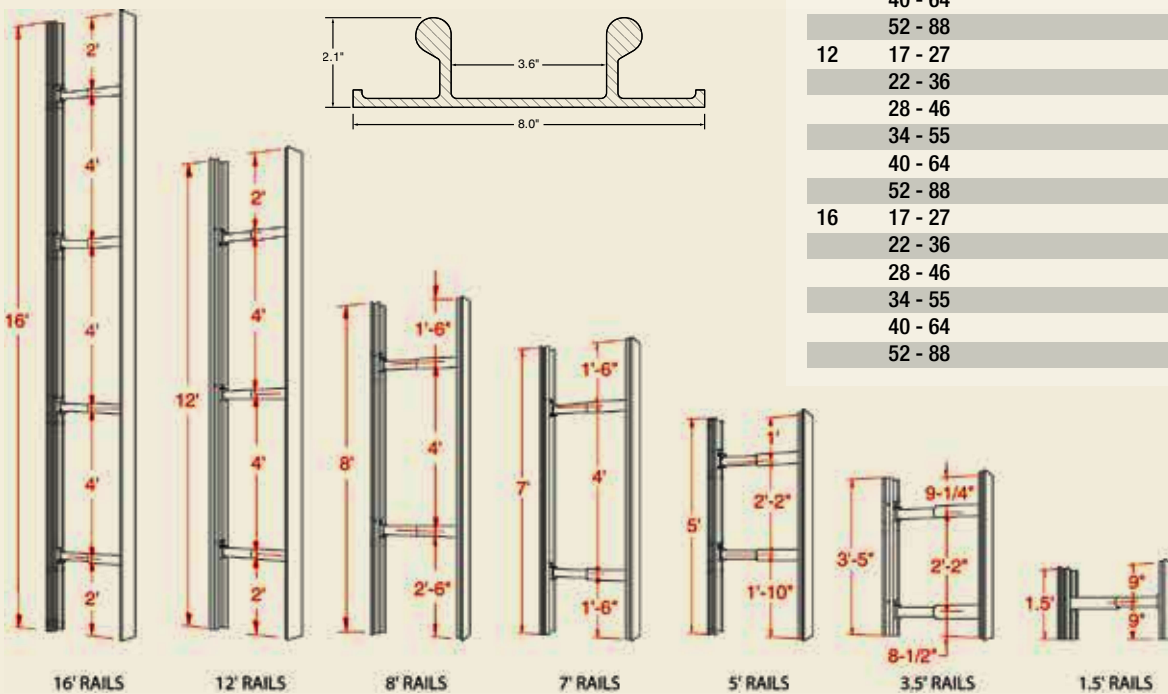
Complete shore assembly folds flat for portability to next location.

Wide selection of cylinders and rails available to meet your needs

4 Sizes of Standard Duty Rails



7 Sizes of Heavy Duty Rails



VERTICAL HYDRAULIC SHORING SYSTEM

Rail Length (ft.)	Cylinder Width (in.)	Standard Duty Model	Weight (lb.)	Heavy Duty Model	Weight (lb.)
1.5	17 - 27	PVS-1.5-27	20	PVH-1.5-27	28
	22 - 36	PVS-1.5-36	24	PVH-1.5-36	30
	28 - 46	PVS-1.5-46	26	PVH-1.5-46	32
	34 - 55	PVS-1.5-55	28	PVH-1.5-55	34
	40 - 64	PVS-1.5-64	30	PVH-1.5-64	40
	52 - 88	PVS-1.5-88	36	PVH-1.5-88	44
3.5	17 - 27	PVS-3.5-27	44	PVH-3.5-27	50
	22 - 36	PVS-3.5-36	50	PVH-3.5-36	54
	28 - 46	PVS-3.5-46	56	PVH-3.5-46	62
	34 - 55	PVS-3.5-55	60	PVH-3.5-55	66
	40 - 64	PVS-3.5-64	68	PVH-3.5-64	74
	52 - 88	PVS-3.5-88	76	PVH-3.5-88	82
5	17 - 27	PVS-5-27	54	PVH-5-27	62
	22 - 36	PVS-5-36	60	PVH-5-36	66
	28 - 46	PVS-5-46	64	PVH-5-46	72
	34 - 55	PVS-5-55	70	PVH-5-55	78
	40 - 64	PVS-5-64	76	PVH-5-64	85
	52 - 88	PVS-5-88	86	PVH-5-88	92
7	17 - 27	PVS-7-27	64	PVH-7-27	78
	22 - 36	PVS-7-36	70	PVH-7-36	82
	28 - 46	PVS-7-46	74	PVH-7-46	90
	34 - 55	PVS-7-55	80	PVH-7-55	100
	40 - 64	PVS-7-64	88	PVH-7-64	106
	52 - 88	PVS-7-88	98	PVH-7-88	110
8	17 - 27			PVH-8-27	90
	22 - 36			PVH-8-36	94
	28 - 46			PVH-8-46	98
	34 - 55			PVH-8-55	100
	40 - 64			PVH-8-64	110
	52 - 88			PVH-8-88	118
12	17 - 27			PVH-12-27	132
	22 - 36			PVH-12-36	138
	28 - 46			PVH-12-46	146
	34 - 55			PVH-12-55	152
	40 - 64			PVH-12-64	162
	52 - 88			PVH-12-88	176
16	17 - 27			PVH-16-27	174
	22 - 36			PVH-16-36	184
	28 - 46			PVH-16-46	196
	34 - 55			PVH-16-55	202
	40 - 64			PVH-16-64	216
	52 - 88			PVH-16-88	234

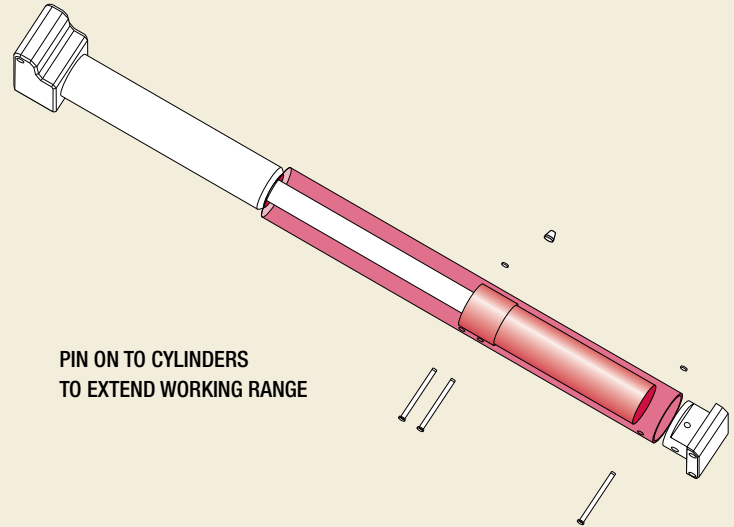
Professional Engineer certified for use in A, B, and C-60 soil. Meets or exceeds OSHA requirements.

CYLINDER EXTENSION SYSTEM

BROADENS YOUR WORK RANGE

Cylinder Extension System

Normal Cylinder Range in Inches	Range in Inches (with Extension)	Description	Model Number
17 - 27	28 - 38	11" EXTENSION	PEX 27-11
17 - 27	39 - 49	22" EXTENSION	PEX 27-22
17 - 27	50 - 60	33" EXTENSION	PEX 27-33
22 - 36	33 - 47	11" EXTENSION	PEX 36-11
22 - 36	44 - 58	22" EXTENSION	PEX 36-22
22 - 36	55 - 69	33" EXTENSION	PEX 36-33
28 - 46	43 - 61	15" EXTENSION	PEX 46-15
28 - 46	58 - 76	30" EXTENSION	PEX 46-30
28 - 46	73 - 91	45" EXTENSION	PEX 46-45
34 - 55	52 - 73	18" EXTENSION	PEX 55-18
34 - 55	70 - 91	36" EXTENSION	PEX 55-36
34 - 55	88 - 109	54" EXTENSION	PEX 55-54
40 - 64	61 - 85	21" EXTENSION	PEX 64-21
40 - 64	82 - 106	42" EXTENSION	PEX 64-42
40 - 64	96 - 120	56" EXTENSION	PEX 64-56
52 - 88	76 - 112	24" EXTENSION	*PEX 88-24
52 - 88	94 - 132	42" EXTENSION	*PEX 88-42
52 - 88	108 - 144	56" EXTENSION	*PEX 88-56



*REQUIRES STEEL OVERSLEEVES

CYLINDER UNIVERSAL EXTENSION

Similar to the Pin-on Cylinder Extensions, the Universal Extension is the new standard that enable the hydraulic cylinders to reach lengths up to 12', where they differ is the Universal Extension is not dedicated to one cylinder size. So an 18" Universal Extension is able to be used on any of the six different hydraulic cylinder ranges!

Universal Cylinder Extension

Model	Description	Length (in.)	Weight (lbs)
HS-UNIVEX-6	6" Extension	6	5
HS-UNIVEX-12	12" Extension	12	6
HS-UNIVEX-18	18" Extension	18	7
HS-UNIVEX-24	24" Extension	24	8
HS-UNIVEX-30	30" Extension	30	9
HS-UNIVEX-36	36" Extension	36	11
HS-UNIVEX-42	42" Extension	42	12
HS-UNIVEX-48	48" Extension	48	13
HS-UNIVEX-56	56" Extension	56	14



END SHORES



Hydraulic Aluminum End Shores are perfect for enclosing an end of a hydraulic shoring trench run. Available in 6' and 8' foot heights they are also available to cover inside widths from 26" to up to 92". Their weight varies from a low of 355 lbs to a maximum of 751 lbs.

End Shores Specifications:

- Heavy-duty steel struts.
- Twin 8' horizontal walers allow maximum depth.
- Reinforced top and bottom caps for added durability.
- Multi-valved manifold for quick and accurate pressurization.

Hydraulic Aluminum End Shores - 6' Tall

6' Tall Aluminum Overlap Sheet Pile, Manifolds & Struts

Model	Inside Width Range	Weight (lb.)
ES-6 2640	26" to 40"	365
ES-6 3250	32" to 50"	425
ES-6 3859	38" to 59"	495
ES-6 4468	44" to 68"	562
ES-6 5692	56" to 92"	661

Hydraulic Aluminum End Shores - 8' Tall

8' Tall Aluminum Overlap Sheet Pile, Manifolds & Struts

Model	Inside Width Range	Weight (lb.)
ES-8 2640	26" to 40"	425
ES-8 3250	32" to 50"	491
ES-8 3859	38" to 59"	567
ES-8 4468	44" to 68"	640
ES-8 5692	56" to 92"	751



Job site photos are strictly intended for general product information only and may not comply with all applicable safety standards. Always refer to manufacturers' serialized specific tabulated data, O.S.H.A. 29 CFR 1926 Subpart P for excavations and all applicable safety standards prior to each use

HYDRAULIC WALER SYSTEM

The Pro-Tec Equipment Waler Systems are designed to allow for maximum protection along with the versatility and flexibility needed to work around existing utility lines. Designed with two styles: Hydraulic Strut and Hydraulic Cylinders. The Hydraulic Struts are designed for use as a three- or four-sided system for pipe repair and maintenance projects. While the Hydraulic Cylinders are designed for use in a two-sided application, for production work.

Standard features:

- Easy & safe to install from above excavation
- Interchangeable components
- Permits skip sheeting around crossing utilities
- 2-, 3- or 4-sided configurations
- Professional Engineer Certified to meet or exceed O.S.H.A. requirements



Walers with Struts

Model	Description	Strut Range	Weight (lbs)
PWH-6-40	6' Walers W\2 Struts	26" - 40"	270
PWH-6-50	6' Walers W\2 Struts	32" - 50"	300
PWH-6-59	6' Walers W\2 Struts	38" - 59"	334
PWH-6-68	6' Walers W\2 Struts	44" - 69"	376
PWH-6-92	6' Walers W\2 Struts	56" - 92"	420
PWH-8-40	8' Walers W\2 Struts	26" - 40"	316
PWH-8-50	8' Walers W\2 Struts	32" - 50"	345
PWH-8-59	8' Walers W\2 Struts	38" - 59"	383
PWH-8-68	8' Walers W\2 Struts	44" - 69"	424
PWH-8-92	8' Walers W\2 Struts	56" - 92"	467
PWH-12-40	12' Walers W\2 Struts	26" - 40"	408
PWH-12-50	12' Walers W\2 Struts	32" - 50"	437
PWH-12-59	12' Walers W\2 Struts	38" - 59"	475
PWH-12-68	12' Walers W\2 Struts	44" - 69"	516
PWH-12-92	12' Walers W\2 Struts	56" - 92"	560
PWH-16-40	16' Walers W\3 Struts	26" - 40"	566
PWH-16-50	16' Walers W\3 Struts	32" - 50"	608
PWH-16-59	16' Walers W\3 Struts	38" - 59"	665
PWH-16-68	16' Walers W\3 Struts	44" - 69"	724
PWH-16-92	16' Walers W\3 Struts	56" - 92"	790

Walers with Cylinders

Model	Description	Cylinder Range	Weight (lbs)
PWH-6-27	6' Walers W\2 Cyl.	17" - 27"	156
PWH-6-36	6' Walers W\2 Cyl.	22" - 36"	160
PWH-6-46	6' Walers W\2 Cyl.	28" - 46"	168
PWH-6-55	6' Walers W\2 Cyl.	34" - 55"	172
PWH-6-64	6' Walers W\2 Cyl.	40" - 64"	178
PWH-6-88	6' Walers W\2 Cyl.	52" - 92"	188
PWH-8-27	6' Walers W\2 Cyl.	17" - 27"	206
PWH-8-36	6' Walers W\2 Cyl.	22" - 36"	212
PWH-8-46	6' Walers W\2 Cyl.	28" - 46"	218
PWH-8-55	6' Walers W\2 Cyl.	34" - 55"	222
PWH-8-64	6' Walers W\2 Cyl.	40" - 64"	228
PWH-8-88	6' Walers W\2 Cyl.	52" - 92"	238
PWH-12-27	12' Walers W\2 Cyl.	17" - 27"	296
PWH-12-36	12' Walers W\2 Cyl.	22" - 36"	302
PWH-12-46	12' Walers W\2 Cyl.	28" - 46"	311
PWH-12-55	12' Walers W\2 Cyl.	34" - 55"	317
PWH-12-64	12' Walers W\2 Cyl.	40" - 64"	322
PWH-12-88	12' Walers W\2 Cyl.	52" - 92"	330
PWH-16-27	16' Walers W\2 Cyl.	17" - 27"	400
PWH-16-36	16' Walers W\2 Cyl.	22" - 36"	408
PWH-16-46	16' Walers W\2 Cyl.	28" - 46"	420
PWH-16-55	16' Walers W\2 Cyl.	34" - 55"	426
PWH-16-64	16' Walers W\2 Cyl.	40" - 64"	432
PWH-16-88	16' Walers W\2 Cyl.	52" - 92"	448

Extension systems available for all cylinder models



HATS SERIES HYDRAULIC ALUMINUM TRENCH SHIELD

Pro-Tec Equipment's HATS Series allows users to combine the security and added safety of a solid wall trench shield with the benefits of hydraulic shoring. Constructed of high strength aluminum foam filled panels, it is ideal for light-duty applications, easily installed with a rubber-tired backhoe.

Specifications:

- Spreaders adjust hydraulically to accommodate varying trench widths.
- Multi-valve manifold permits individual spreader control
- Manifold, hoses, and hydraulic spreaders are removable so it can be converted to a static shield using ATS spreaders.
- Double-wall aluminum construction provides ideal strength-to-weight ratio.
- Foam-filled panels prevent excess weight build-up from dirt and moisture.
- Vertical walers allow for maximum inside horizontal clearance.
- Professional Engineer certified to meet OSHA requirements.
- Four-point lifting system provides easier, safer handling.
- Pin type stack pockets available to accommodate deeper cuts. HATS shields can be stacked with ATS shields.
- Knife edge bottom panels for easier penetration.



Hydraulic Spreader Sizes



Hydraulic Spreader cut-away to show internal assembly

Model (set of 4)	Stroke Range (inches)	Weight (lb.)
PSH4-2640	26" - 40"	248
PSH4-3250	32" - 50"	304
PSH4-3859	38" - 59"	380
PSH4-4468	44" - 68"	460
PSH4-5692	56" - 92"	548

Hydraulic Aluminum Trench Shield Options

Height x Lgth (ft.)	Model	Weight (lb.)	Clearance (in)	PSF Rating (PSF)*	Depth of Cut (ft.)		
					B	C-60	C-80
4 x 6	HATS 4 x 6	525	**	1960	78	44	21
4 x 8	HATS 4 x 8	615	**	1770	59	33	16
4 x 10	HATS 4 x 10	705	**	1130	45	25	13
4 x 12	HATS 4 x 12	805	**	764	31	17	11
4 x 16	HATS 4 x 16	990	**	421	17	10	7
6 x 6	HATS 6 x 6	750	22	1264	51	28	21
6 x 8	HATS 6 x 8	860	22	960	38	21	16
6 x 10	HATS 6 x 10	1020	22	777	31	17	13
6 x 12	HATS 6 x 12	1160	22	655	26	15	11
6 x 16	HATS 6 x 16	1430	22	427	17	10	7
8 x 6	HATS 8 x 6	980	22	1254	51	28	21
8 x 8	HATS 8 x 8	1160	22	960	38	21	16
8 x 10	HATS 8 x 10	1340	22	777	31	17	13
8 x 12	HATS 8 x 12	1520	22	655	26	15	11
8 x 16	HATS 8 x 16	1900	22	427	17	10	7

** Vertical Pipe Clearance is negligible on 4' high shields



PRO-TEC EQUIPMENT

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