

EFFICIENCY PRODUCTION

 AMERICA'S TRENCH BOX BUILDER™

Aluminum Trench Shield Product Application Guide

BUILD-A-BOX ■ XLAP™ ALUMINUM SHIELD ■ CORR-U-LITE™ ■ ALUM-A-SHIELD™

PIPE CLEARANCE



DEPTH OF CUT

SHIELD CAPACITY

EFFICIENCY PRODUCTION
Aluminum Trench Shield Product Guide


America's Trench Box Builder™
800-552-8800

www.encyproduction.com



Build-A-Box

Modular Aluminum Trench Shielding System

Purpose:

The Build-A-Box Modular Aluminum Trench Shielding System can be assembled in minutes to a wide variety of configurations. The modular system enables work crews to make on-the-spot design changes to meet job requirements in conditions ranging from light to extreme. Build-A-Box is compatible and stackable with Efficiency's XLAP Aluminum Trench Shields.

Common Applications:

- Sewer & Water Valves
- Hydrants & Taps
- Spot Repairs
- Gas and Electric Utility

Features:

- Compatible with XLAP
- Pick-up truck transportable
- Can be hand-assembled in minutes
- Narrow, smooth aluminum sidewalls reduce dirt build-up
- Tongue and groove design
- Foam-filled
- Pulling and lifting lugs
- Professional Engineer design and depth certification

Options:

- T-connection cut-outs
- Telescoping spreader sets
- Sectional or Full Length corner posts
- 3 or 4-way corner posts
- Octagon-configuration corner posts

Spreader Options:

- XL adjustable spreaders
- Spreader arches



2-Sided Build-A-Box



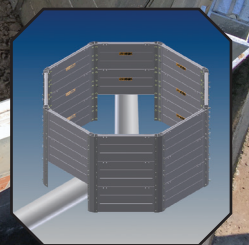
3-Sided Build-A-Box



4-Sided Build-A-Box



Build-A-Box Octagon Box



Build-A-Box

Modular Aluminum Trench Shielding System

Build-A-Box Modular Trench Shield - Two-Sided w/ Full Length or Sectional Corner Posts

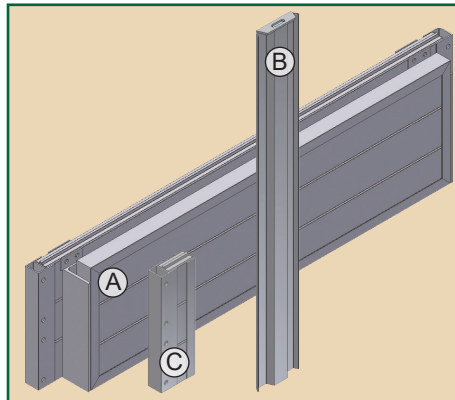
Panel Selection Chart		Ht. x Lg.	Weight	Shield Cap.	Depth of Cut (m) Soil Type		
Part No. (Ft.)	Item	(mm)	(kg)	(kPa)	B	C-60	C-80
BAB-2X2	7529	610 x 610	15	120	16	12	9
BAB-2X3	7530	610 x 915	21	120	16	12	9
BAB-2X4	7531	610 x 1,220	27	120	16	12	9
BAB-2X5	7532	610 x 1,525	32	120	16	12	9
BAB-2X6	7533	610 x 1,830	38	120	16	12	9
BAB-2X7	7534	610 x 2,135	44.5	87	12	9	6.5
BAB-2X8	7535	610 x 2,440	49.5	72	9.5	7	5.5
BAB-2X10	7536	610 x 3,050	62	48	6	5	3.5
BAB-2X12	7537	610 x 3,660	74	39	5	4	3
BAB-2X14	7538	610 x 4,270	85.5	30	4	3	2.5
BAB-2X16	7539	610 x 4,880	94.5	24	3	2.5	2

^ABAB Sheeting Guide Frames

Model	Length	Weight
Length (Ft.)	(mm)	(kg)
BBAC-GF-4	1,220	53
BBAC-GF-6	1,830	75
BBAC-GF-8	2,440	97
BBAC-GF-10	3,050	135
BBAC-GF-12	3,660	173

^BAluminum Sheets (with push caps)

BBAC-GF-SHEET-6	1,830	13.5
BBAC-GF-SHEET-8	2,440	16
^C FILLER PANEL	200	16



Corner End Posts

Model	Length	Weight
Length (In.)	(mm)	(Lbs.)
BAB-C2-2	610	11
BAB-C2-4	1,220	22
BAB-C2-6	1,830	32
BAB-C2-8	2,440	43
BAB-C2-10	3,050	54
BAB-C2-12	3,660	65

T-Corner End Posts

Model	Length	Weight
Length (In.)	(mm)	(kg)
BAB-C3-2	610	13
BAB-C3-4	1,220	25
BAB-C3-6	1,830	37
BAB-C3-8	2,440	50
BAB-C3-10	3,050	63

4-Way Connection Posts

Model	Length	Weight
Length (In.)	(mm)	(kg)
BBC4-24	610	16
BBC4-48	1,220	32
BBC4-72	1,830	47
BBC4-96	2,440	63
BBC4-120	3,050	78
BBC4-144	3,660	94

Arch Spreaders and Extensions

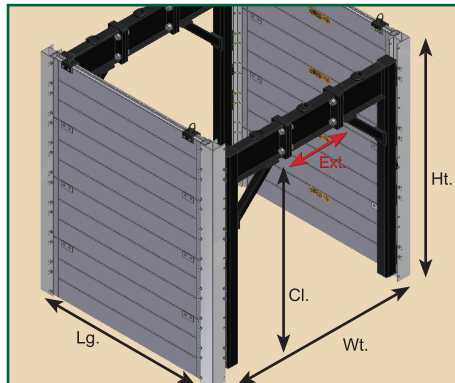
Model	Length	Description	Weight	Depth of Cut (m)
Length (In.)	(mm)		(kg)	C-60 - Soil Type
BBAC-ARCH 64	1,830	1,830 mm (high) x 1,220 mm	252	2.5
BBAC-EXT24	610	610 mm Horiz. Extensions	53	2.5
BBAC-EXT36	915	915 mm Horiz. Extensions	63	2.5
BBAC-EXT48	1,220	1,220 mm Horiz. Extensions	72	2.5
BBAC-EXT60	1,525	1,525 mm Horiz. Extensions	82	2.5
BBAC-EXT72	1,830	1,830 mm Horiz. Extensions	92	2.5
BBAC-EXT84	2,135	2,135 mm Horiz. Extensions	102	2.5

Spreaders Single Adj. Square Tube

Model		Length	Weight
Length (In.)	Item	(mm)	(kg)
XL-2436-1	7514	610 - 914	12
XL-3660-1	7515	914 - 1,524	16
XL-4872-1	7516	1,219 - 1,829	21
XL-6096-1	7570	2,134 - 3,048	28
XL-72120-1	7518	1,829 - 3048	50
XL-84144-1	7519	2,136 - 3,658	60



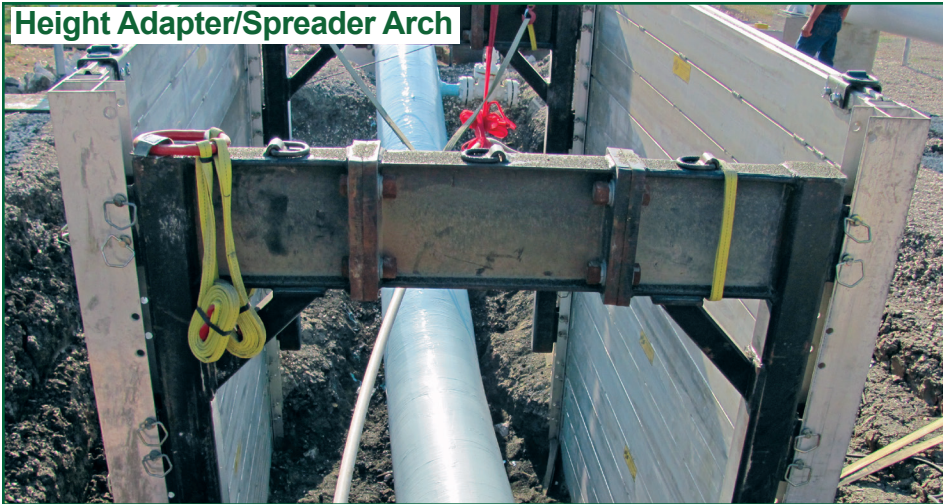
Build-A-Box with Spreader Arch



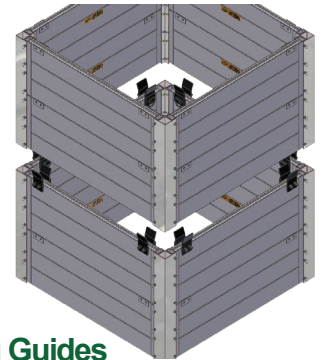
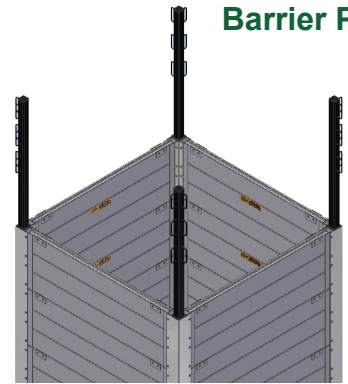
Accessories

Innovative Accessories for Build-A-Box Modular Shielding System

Height Adapter/Spreader Arch



Barrier Posts



Stacking Guides

Aluminum Sheets

Sheets 6 and 8 ft. lengths



Sheeting Guide Frame

Wheel Kit



Guard Rail

4,6,10 ft. lengths

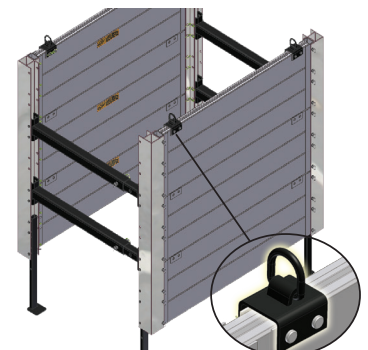


Guard Rail Adpt

Ladder Bracket

Adjustable Legs

Lifting Lug



“Xtra Light” 75 mm Aluminum Panel Trench Shields

Purpose:

Efficiency's XLAP series aluminum panel trench shields are designed specifically for municipalities, utilities, and contractors who use rubber-tired backhoe/loaders and small excavators for trenching. XLAP is compatible and stackable with Build-A-Box.

Common Applications:

- Sewer & Water Valves
- Hydrants & Taps
- Spot Repairs
- Gas and Electric Utility

Features:

- Compatible with Build-A-Box
- Narrow, smooth aluminum sidewalls reduce dirt build-up
- Foam-filled
- Pulling and Lifting Lugs
- Professional Engineer design and depth certification

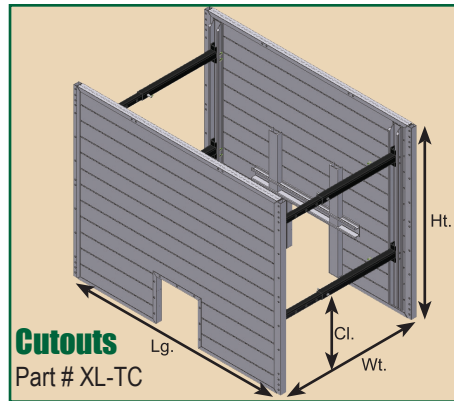
Options & Accessories:

- T-connection cut-outs
- End panel connector bracket
- Stacking pockets
- knife edge
- Adjustable legs
- Wheel kit

Spreader Options:

- XL adjustable spreaders
- Spreader Arches

Spreaders Single Adj. Square Tube			
Model Length (In.)	Item	Length (mm)	Weight (kg)
XL-2436-1	7514	610 - 914	12
XL-3660-1	7515	914 - 1,524	16
XL-4872-1	7516	1,219 - 1,829	21
XL-6096-1	7570	2,134 - 3,048	28
XL-72120-1	7518	1,829 - 3048	50
XL-84144-1	7519	2,136 - 3,658	60



XLAP 75 mm Aluminum double Sidewall Trench Shield								
Model (Ft.) XLAP-Ht.Lg.	Ht. x Lg. (mm)	Weight (kg)	Pipe Cl. (mm)	Shield Cap (kPa)	Depth of Cut (m)			Soil Type
					B	C-60	C-80	
XLAP-46	1,200 x 1,830	470	255	120	16	12	9	
XLAP-48	1,200 x 2,440	590	255	87	12	9	6	
XLAP-410	1,200 x 3,050	700	255	57	7.5	6	4	
XLAP-412	1,200 x 3,660	820	255	42	5.5	4	3	
XLAP-414	1,200 x 4,270	940	255	30	4	3	2	
XLAP-416	1,220 x 4,880	1,050	255	24	3	2.5	2	
XLAP-66	1,830 x 1,830	690	760	78	10.5	8	5.5	
XLAP-68	1,830 x 2,440	850	760	60	8	6	4.5	
XLAP-610	1,830 x 3,050	1,020	760	48	6	5	3.5	
XLAP-612	1,830 x 3,660	1,190	760	36	5	3.5	2.5	
XLAP-614	1,830 x 4,270	1,360	760	27	3.5	2.5	2	
XLAP 616	1,830 x 4,880	1,520	760	24	3	2	2	
XLAP-86	1,830 x 1,830	900	760	78	10.5	8	5.5	
XLAP-88	1,830 x 2,440	1,120	760	60	8	6	4.5	
XLAP-810	1,830 x 3,050	1,340	760	48	6	5	3.5	
XLAP-812	1,830 x 3,660	1,560	760	39	5	4	2.5	
XLAP-814	1,830 x 4,270	1,770	760	30	4	3	2	
XLAP-816	1,830 x 4,880	1,990	760	24	3	2.5	2	
XLAP-108	3,050 x 2,440	1,380	610	54	7	5.5	4	
XLAP-1010	3,050 x 3,050	1,650	610	45	6	4.5	3.5	
XLAP-1012	3,050 x 3,660	1,920	610	42	5.5	4	3	
XLAP-1014	3,050 x 4,270	2,190	610	33	4.5	3	2.5	

XLAP & Build-A-Box

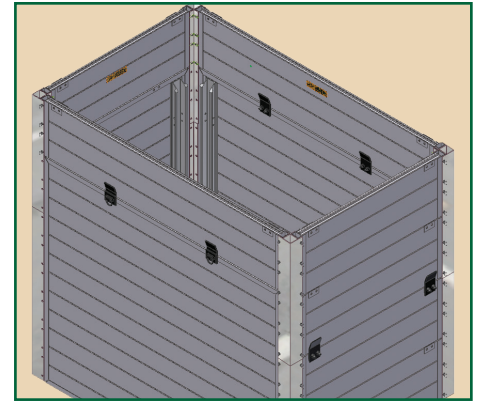
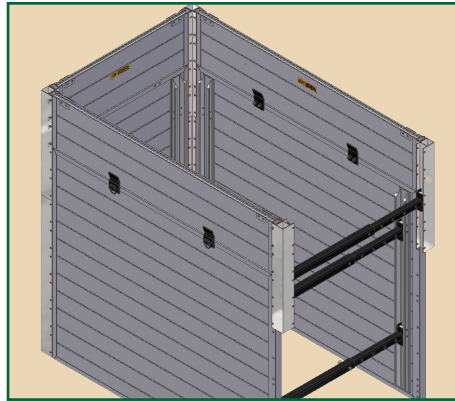
Compatibility & Flexibility with XLAP/Build-A-Box Combo

Purpose:

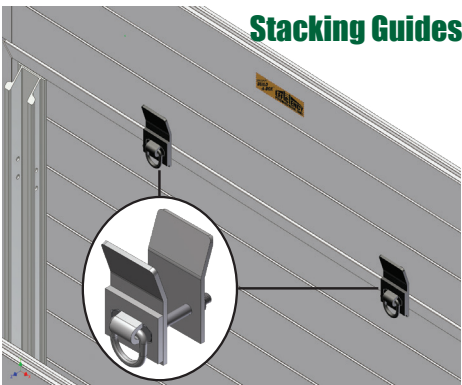
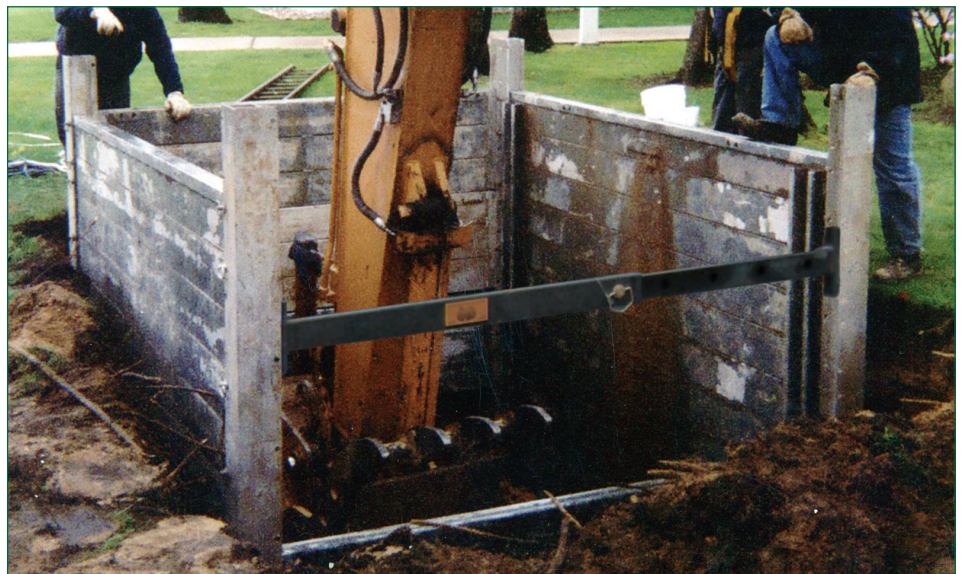
XLAP is **compatible** and **stackable** with Efficiency's Build-A-Box modular aluminum trench shielding system which allows contractors and municipalities to make **on-the-spot** modifications to the shield.

Common Applications:

- Sewer & Water Valves
- Hydrants & Taps
- Spot Repairs
- Gas and Electric Utility



Build-A-Box Stacked on XLAP



Stacking Guides

XLAP-SF

“Xtra Light” 75 mm Aluminum Panel Trench Shields with Steel Frame

Purpose:

Efficiency's XLAP-SF series aluminum panel trench shields with steel tube frames offer greater rigidity to the box that is ideal for utility work or other spot repair, but are still light enough to be handled by rubber-tire backhoes or small excavators.

Common Applications:

- Sewer & Water Valves
- Hydrants & Taps
- Spot Repairs
- Gas and Electric Utility

Features:

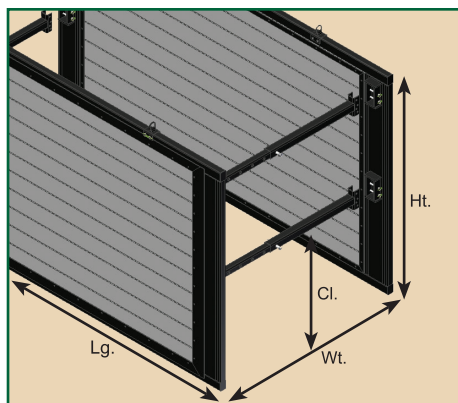
- Narrow, smooth aluminum sidewalls reduce dirt build-up
- Foam-filled
- Wrapped steel frame sidewalls
- Professional Engineer design and depth certification

Options:

- Stacking pockets
- knife edge

Spreader Options:

- XL adjustable spreaders
- 127 mm collar pipe for 6" schedule 80 spreaders
- 180 mm collar pipe for 8" schedule 80 spreaders



XLAP-SF 75 mm Aluminum steel frame double Sidewall Trench Shield

Model (Ft.) XLAP-SF-Ht.Lg.	Ht. x Lg. (mm)	Weight (kg)	Pipe Cl. (mm)	Shield Cap (kPa)	Depth of Cut (m) Soil Type		
					B	C-60	C-80
XLAP-SF-46	1,200 x 1,830	400	255	120	16	12	9
XLAP-SF-48	1,200 x 2,440	490	255	87	12	9	6
XLAP-SF-410	1,200 x 3,050	580	255	57	7.5	6	4
XLAP-SF-412	1,200 x 3,660	670	255	42	5.5	4	3
XLAP-SF-414	1,200 x 4,270	760	255	30	4	3	2
XLAP-SF-416	1,220 x 4,880	860	255	24	3	2.5	2
XLAP-SF-66	1,830 x 1,830	540	760	78	10.5	8	6
XLAP-SF-68	1,830 x 2,440	650	760	60	8	6	4.5
XLAP-SF-610	1,830 x 3,050	760	760	48	6	5	3.5
XLAP-SF-612	1,830 x 3,660	875	760	36	5	3.5	3
XLAP-SF-614	1,830 x 4,270	990	760	27	3.5	2.5	2
XLAP-SF-616	1,830 x 4,880	1,100	760	24	3	2	2
XLAP-SF-86	2,440 x 1,830	670	760	78	10.5	8	6
XLAP-SF-88	2,440 x 2,440	805	760	60	8	6	4.5
XLAP-SF-810	2,440 x 3,050	945	760	48	6	5	3.5
XLAP-SF-812	2,440 x 3,660	1,080	760	39	5	4	3
XLAP-SF-814	2,440 x 4,270	1,210	760	30	4	3	2
XLAP-SF-816	2,440 x 4,880	1,350	760	24	3	2.5	2
XLAP-SF-108	3,050 x 2,440	960	610	54	7	5.5	4
XLAP-SF-1010	3,050 x 3,050	1,120	610	45	6	4.5	3
XLAP-SF-1012	3,050 x 3,660	1,280	610	42	5.5	4	3
XLAP-SF-1014	3,050 x 4,270	1,440	610	33	4.5	3	2.5

Alum-A-Shield™

Corrugated Aluminum Shield w/ Hydraulic or Static Spreaders

Purpose:

Alum-A-Shield is a single wall corrugated shield that is designed to be light and strong. Available with static or hydraulic spreader sets, Alum-A-Shield is designed specifically for municipalities, utilities, and contractors who use rubber-tired backhoe/loaders and small excavators for trenching.

Common Applications:

- Sewer & Water Valves
- Hydrants & Taps
- Spot Repairs
- Plumbing

Features:

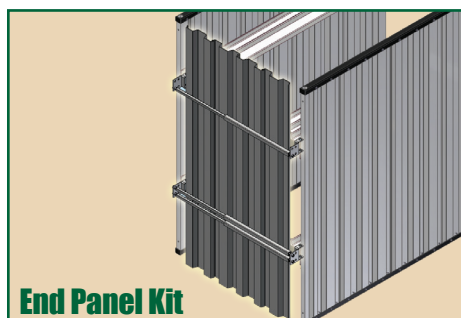
- Full length horizontal waler for greater depth rating
- Molded tubular end members with recessed stacking or leg sockets
- Top and bottom steel caps
- Professional Engineer design and depth certification

Options:

- End panel kit
- Leg kit
- Stacking pins

Spreader Options:

- Hydraulic Telescoping Quickbrace*
- Static Telescoping Quickbrace
- 3.5 in. Square Spreaders



Alum-A-Shield Corrugated Aluminum Trench Shield (with static spreaders)								
Model (Ft.)	Ht. x Lg.	Weight	Pipe Cl.	Shield Cap	Depth of Cut (m)			Soil Type
AS-Ht.Lg.	(mm)	(kPa)	(mm)	(kPa)	B	C-60	C-80	
AS-46	1,220 x 1,830	263	610	60	8	6	4.5	
AS-48	1,220 x 2,440	347	610	60	8	6	4.5	
AS-410	1,220 x 3,050	434	610	50	6.5	5	4	
AS-412	1,220 x 3,660	522	610	30	4	3	2.5	
AS-66	1,830 x 1,830	311	610	60	8	6	4.5	
AS-68	1,830 x 2,440	410	610	60	8	6	4.5	
AS-610	1,830 x 3,050	509	610	50	6.5	5	4	
AS-612	1,830 x 3,660	608	610	30	4	3	2.5	
AS-86	1,830 x 1,830	356	610	60	8	6	4.5	
AS-88	1,830 x 2,440	468	610	60	8	6	4.5	
AS-810	1,830 x 3,050	583	610	50	6.5	5	4	
AS-812	1,830 x 3,660	720	610	30	4	3	2.5	
AS-106	3,050 x 1,830	466	610	60	8	6	4.5	
AS-108	3,050 x 2,440	527	610	60	8	6	4.5	
AS-1010	3,050 x 3,050	657	610	50	6.5	5	4	
AS-1012	3,050 x 4,270	783	610	30	4	3	2.5	

*Hydraulic Shoring Product Guide available online at: www.efficiencyproduction.com

Corru-Lite™

Lightweight Corrugated Aluminum Trench Shield

Purpose:

The Corru-Lite Shield is made of lightweight corrugated aluminum and is primarily used for light utility work or plumbing. Corru-Lite can be easily transported in the back of a pick-up truck.

Common Applications:

- Sewer & Water Valves
- Hydrants & Taps
- Spot Repairs
- Plumbing

Features:

- Pick-up truck transportable
- Can be hand-assembled in minutes
- Molded tubular end members with recessed stacking or leg sockets
- Top and bottom steel caps
- Professional Engineer design and depth certification

Options:

- End kit for three and four-sided protection
- Leg kit for up to 610 mm additional pipe clearance
- Stacking Pins

Spreader Options:

- Static Aluminum
- Adjustable Aluminum
- Adjustable Steel



Corru-Lite Corrugated Aluminum Trench Shield							
Model (Ft.) CL-Ht.Lg.	Ht. x Lg. (mm)	Weight (kg)	Pipe Cl. (mm)	Shield Cap (kPa)	Depth of Cut (m) Soil Type		
					B	C-60	C-80
CL-24	610 x 1,220	48	305	33	4.5	3	2.5
CL-26	610 x 1,830	62	305	27	3.5	3	2
CL-27	610 x 2,135	10	305	24	3	2.5	2
CL-28	610 x 2,440	80	305	24	3	2.5	2
CL-210	610 x 3,050	97	305	21	3	2	1.5
CL-212	610 x 3,660	118	305	18	2.5	2	1
CL-44	1,220 x 1,200	70	305	33	4.5	3	2.5
CL-45	1,220 x 1,525	82	305	33	4.5	3	2.5
CL-46	1,220 x 1,830	95	305	27	3.5	3	2
CL-48	1,220 x 2,440	117	305	24	3	2.5	2
CL-410	1,220 x 3,050	155	305	21	2.5	2	1.5
CL-412	1,220 x 3,660	170	305	18	2.5	2	1
CL-56	1,525 x 1,830	124	200	27	3.5	3	2
CL-66	1,830 x 1,830	160	460	27	3.5	3	2
CL-68	1,830 x 2,440	207	560	21	3	2	1.5

Adjustable Spreaders - Aluminum		
Model Ht. x Lg. (Ft.)	Length (mm)	Weight (kg)
CLSA-1727	432 - 686	27
CLSA-2236	559 - 914	30
CLSA-2846	711 - 1,168	33
CLSA-3455	864 - 1,397	37
CLSA-4269	1,067 - 1,753	41
CLSA-5288	1,321 - 2,235	48

Adjustable Spreaders - Steel		
Model Ht. x Lg. (Ft.)	Length (mm)	Weight (kg.)
CLSP-1727	432 - 686	32
CLSP-2236	559 - 914	41
CLSP-2846	711 - 1,168	50
CLSP-3455	864 - 1,397	59
CLSP-4269	1,067 - 1,753	77
CLSP-5288	1,321 - 2,235	90

Shoring Trailer

FullStock Aluminum Shoring Trailer (FAST)

Efficiency's **FullStock Aluminum Shoring Trailer (FAST)** is equipped with a variety of custom-built options for stocking shoring equipment for fast, resourceful use in the field.

Shoring trailers are ideal for Public Works crews encountering a variety of trench projects each day, since all of the necessary tools are available... no return trips to the yard for missing equipment.

The FullStock trailer can also save storage space in the equipment garage since all of the pieces can remain loaded and locked on the trailer.

All racks and other options can be re-sized, repositioned, and re-configured to fit your specific needs.

Features:

- High strength steel construction
- Dual axle

Aluminum Shield Series:

- Aluminum shield racks that fit a XLAP, Alum-A-Shield or Corru-Lite
- Modular Build-A-Box panel and corner post racks
- Spreader racks
- Workbench and toolbox for Build-A-Box pins and keepers, slings, or other tools

Vertical Shores Series:

- Hydraulic shores rack
- Shoring board rack
- Tool box for shoring accessories, parts, and tools
- Toolbox with cylinder repair kit and workbench
- Hydraulic cylinder test stand



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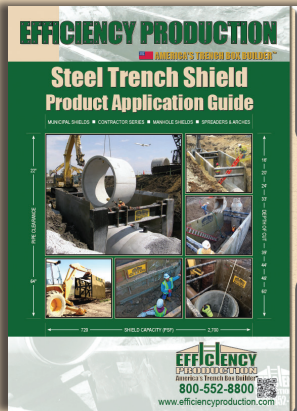


AMERICA'S TRENCH BOX BUILDER™

Catalogs & Brochures for Efficiency Production Products

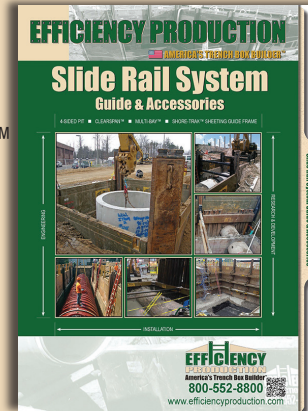
Steel Trench Shield Product Application Guide

- Municipal Shields
- Contractor Series Trench Shields
- Heavy-Duty Shields
- Manhole Shields
- Inner Shield Liner
- Arch Spreaders



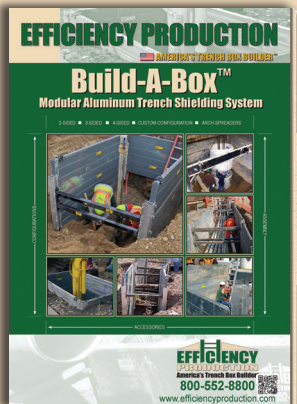
Slide Rail System Guide & Accessories

- 4-Sided
- ClearSpan™
- 4-Sided Multi-Bay™
- Linear Multi-Bay™
- Shore-Trak™
- Innovative Accessories



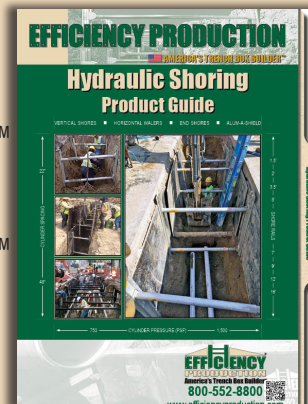
Build-A-Box™ Modular Aluminum Trench wShielding

- 2-Sided
- 3-Sided
- 4-Sided
- Sheeting Guide Frame
- Spreader Arches
- Innovative Accessories



Hydraulic Shoring Product Guide

- 4-Sided
- ClearSpan™
- 4-Sided Multi-Bay™
- Linear Multi-Bay™
- 4-Sided Multi-Bay™ with Waler
- Innovative Accessories



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