

# LIGHTWEIGHT SHORING & SHIELDING CATALOG





## THE EVOLUTION OF ALUMINUM TRENCH SHORING

GME lightweight shoring has traditionally been used by contractors for utility repair.

This is because the major advantage of aluminum shoring has always been its weight-to-strength ratio. It is easily transportable to the jobsite; it is designed to be used with rubber-tired backhoes or smaller excavators; and some systems may be installed by hand.

While in the past aluminum shoring users have primarily been utility repair contractors and municipalities, the performance parameters of today's systems have improved to the point where aluminum shoring now has applications in certain conventional underground contracting projects.

When selecting shoring for your projects, please be sure to consider the superior quality of GME's aluminum shoring.



All GME® Shoring products are certified by a professional engineer to meet OSHA standards. To assist in OSHA compliance, tabulated data is provided with every GME product.

## TYPICAL USERS OF GME® ALUMINUM TRENCH SHORING

Plumbers

Water & Sewer Contractors

Telephone Service Contractors

Electrical Contractors

Mechanical Contractors

Road Contractors

Environmental Control Contractors

Cable Contractors

Municipalities

Water Authorities

Cemeteries

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# GME® QUALITY



*Incoming materials are routinely checked for hardness and acceptable surface finish.*



*Incoming machined parts are also thoroughly inspected to ensure that they meet our precise tolerances and tooling standards.*

GME® has long been a leader in quality manufacturing of trench protection products. We have carried that quality through to our full line of aluminum products. We conduct continuous quality control inspections from the time raw materials arrive at our plant, throughout the various stages of manufacturing. The final quality challenge is a 100% pressure testing of all out-going hydraulic shoring units, just before they are shipped. This ensures that the aluminum products you receive from GME® have been built and inspected to perform safely and productively in the trenches. It's what you've come to expect from "The Trench Protection Specialists".

*One of our on-staff, registered, professional engineers conducts a pressure test on a vertical shore prior to shipment.*



*The molded plastic pump bucket used with all GME hydraulic products is lightweight, stable and durable.*

*A ready-to-ship order of vertical shores.*



# GME® VERTICAL SHORES



## GME® VERTICAL SHORES

are designed to prevent cave-ins in all but the most unstable soil conditions, by supporting the side walls of the trench through the use of hydraulic pressure.

Some of the major benefits of vertical shores are that they are quick, safe and simple to use. They are also designed to be installed and removed from the top of the trench 100% of the time.

They can be used as spot bracing for repair situations, or can be used for production trenching. GME vertical shores come in standard sizes that range from 18" to 16' long. Standard sizes of hydraulic cylinders range from 17" to 88" wide. Extensions are available up to 15' wide.

## FEATURES

- Lightweight aluminum alloy construction for both exceptional durability, and easy portability
- Easy to set up
- Can be used with, or without sheeting, according to soil conditions
- Interchangeable components
- Stores compactly
- Cylinders feature oversleeve protection and safety bleed-off port
- Molded plastic pump bucket delivers 50% more volume per stroke than a comparable steel pump bucket
- All vertical shores are certified by a registered professional engineer to meet OSHA standards
- Complete manufacturer's tabulated data, and installation/removal procedures are provided

Vertical Shores may be used with or without Finform as determined by soil type.



## INSTALLATION/REMOVAL

Special tools (above) enable you to quickly and easily install or remove the vertical shores.



# GME® VERTICAL SHORES

## HYDRAULIC VERTICAL SHORES

MODEL NUMBER	RAIL LENGTH	OPERATING RANGE (MIN-MAX)	NUMBER OF CYLINDERS	WEIGHT (LBS.)
HVS-1.5-1727	1.5'	17-27"	1	20
HVS-1.5-2236	1.5'	22-36"	1	22
HVS-1.5-2846	1.5'	28-46"	1	24
HVS-1.5-3455	1.5'	34-55"	1	27
HVS-1.5-4064	1.5'	40-64"	1	29
HVS-1.5-5288	1.5'	52-88"	1	35
HVS-3.5-1727	3.5'	17-27"	2	43
HVS-3.5-2236	3.5'	22-36"	2	49
HVS-3.5-2846	3.5'	28-46"	2	54
HVS-3.5-3455	3.5'	34-55"	2	59
HVS-3.5-4064	3.5'	40-64"	2	67
HVS-3.5-5288	3.5'	52-88"	2	76
HVS-5-1727	5'	17-27"	2	54
HVS-5-2236	5'	22-36"	2	59
HVS-5-2846	5'	28-46"	2	64
HVS-5-3455	5'	34-55"	2	69
HVS-5-4064	5'	40-64"	2	76
HVS-5-5288	5'	52-88"	2	86
HVS-7-1727	7'	17-27"	2	64
HVS-7-2236	7'	22-36"	2	69
HVS-7-2846	7'	28-46"	2	74
HVS-7-3455	7'	34-55"	2	79
HVS-7-4064	7'	40-64"	2	88
HVS-7-5288	7'	52-88"	2	96

## QUALITY COMPONENTS AND DESIGN

- Our standard duty rail is rated to be as strong or stronger, than any other on the market.
- Improved seal design – large 5/8" size, provides more seal area for increased performance and safety.
- Rails and hydraulic cross braces are constructed of lightweight, high-strength aluminum alloy, to deliver both ease in handling and durability.
- An oversleeve protects the cylinder assembly.
- A security bleed-off port prevents cylinder over-extension.
- Optional one-piece slip-on cylinder extensions are available for all ranges.
- Three extension ranges per cylinder range add more versatility in the field.

## LOCKING SHORES



For areas that require mechanical locking devices, GME also offers a patented mechanical lock.



GME® Vertical Shoring is safe, easy and quick to set up. All necessary accessories, including pump bucket, shoring fluid, and installation and removal tools are available.



Vertical end shores are available in a wide range of sizes, ideal for shoring the end of your trench.



# GME® HYDRAULIC SHIELDS



## GME® HYDRAULIC SHIELDS

consist of lightweight, aluminum sidewalls, coupled with heavy-duty hydraulic struts. The strut contains a hydraulic cylinder and return spring, and is protected by steel box tubing.

A uniquely designed manifold allows the user to precisely control the flow of fluid to each cylinder, while safely outside the trench. This makes hydraulic shields ideal for irregular size excavations.

The shields may be used in a hydraulic mode, providing full pressure on the sides of the trench, or in a static mode – much like a standard trench shield.

Because of their light weight and easy assembly, these shields can be handled easily by rubber-tired backhoes. They are ideal for municipal maintenance or repair projects, utility or cable work, and light- to moderate-duty general underground contracting.



*Cut-away view of hydraulic strut.*

## FEATURES

- Lightweight aluminum sheeting sidewalls with sturdy lifting eyes
- Heavy-duty skid plates and sheeting caps reinforce top and bottom of sheeting sidewalls
- Heavy-duty steel box tubing protects cylinder, and features end-loading capability for 3- or 4-sided use
- Multiple pinning locations in strut permit a wide range of settings when the shield is used in a static mode
- Fold-down steel manifold cover protects manifold when shield is in use, yet permits quick access to hydraulic hook-ups
- Certified by a registered professional engineer to meet OSHA standards

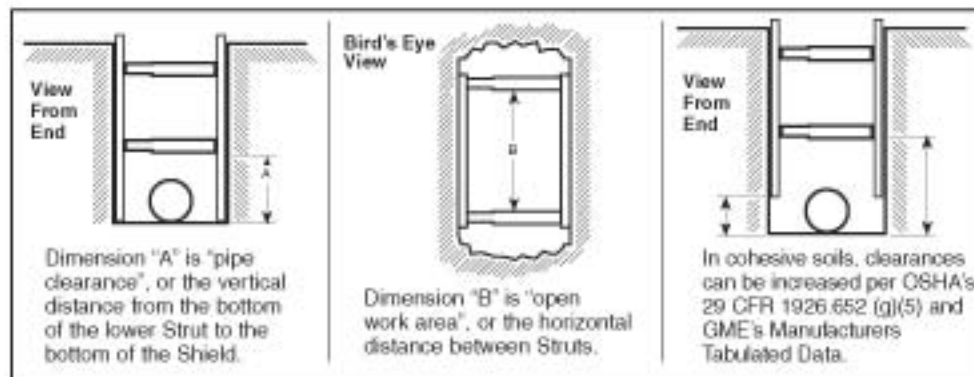




# GME® HYDRAULIC SHIELDS

HYDRAULIC SHIELDS														
MODEL NUMBER	SIZE (FEET)		WT. (LBS.)	OPERATING RANGE (MIN-MAX)	CLEARANCE (INCHES)		MAXIMUM DEPTH PER SOIL TYPE (FT.)*							
	H	L			A	B	A		B		C (60)		C (80)	
							HYD	STAT	HYD	STAT	HYD	STAT	HYD	STAT
HS-5x5-2640	5	5	720	29-43"	22	45	25	25	25	25	25	21	16	16
HS-5x5-3250	5	5	777	35-53"	22	45	25	25	25	25	25	21	16	16
HS-5x5-3859	5	5	848	41-62"	22	45	25	25	25	25	25	21	16	16
HS-5x5-4468	5	5	932	47-71"	22	45	25	25	25	25	25	21	16	16
HS-5x5-5692	5	5	1020	59-95"	22	45	25	25	25	25	25	21	16	16
HS-6x6-2640	6	6	850	29-43"	22	57	25	25	25	25	25	21	16	16
HS-6x6-3250	6	6	905	35-53"	22	57	25	25	25	25	25	21	16	16
HS-6x6-3859	6	6	976	41-62"	22	57	25	25	25	25	25	21	16	16
HS-6x6-4468	6	6	1050	47-71"	22	57	25	25	25	25	25	21	16	16
HS-6x6-5692	6	6	1167	59-95"	22	57	25	25	25	25	25	21	16	16
HS-6x8-2640	6	8	1053	29-43"	22	81	25	25	25	25	25	21	16	16
HS-6x8-3250	6	8	1101	35-53"	22	81	25	25	25	25	25	21	16	16
HS-6x8-3859	6	8	1164	41-62"	22	81	25	25	25	25	25	21	16	16
HS-6x8-4468	6	8	1253	47-71"	22	81	25	25	25	25	25	21	16	16
HS-6x8-5692	6	8	1341	59-95"	22	81	25	25	25	25	25	21	16	16
HS-6x10-2640	6	10	1216	29-43"	22	105	25	25	25	25	25	21	16	16
HS-6x10-3250	6	10	1272	35-53"	22	105	25	25	25	25	25	21	16	16
HS-6x10-3859	6	10	1348	41-62"	22	105	25	25	25	25	25	21	16	16
HS-6x10-4468	6	10	1428	47-71"	22	105	25	25	25	25	25	21	16	16
HS-6x10-5692	6	10	1525	59-95"	22	105	25	25	25	25	25	21	16	16
HS-6x12-2640	6	12	1392	29-43"	22	129	25	25	25	21	21	16	12	12
HS-6x12-3250	6	12	1448	35-53"	22	129	25	25	25	21	21	16	12	12
HS-6x12-3859	6	12	1524	41-62"	22	129	25	25	25	21	21	16	12	12
HS-6x12-4468	6	12	1604	47-71"	22	129	25	25	25	21	21	16	12	12
HS-6x12-5692	6	12	1692	59-95"	22	129	25	25	25	21	21	16	12	12
HS-8x8-2640	8	8	1162	29-43"	22	81	25	25	25	25	25	21	16	16
HS-8x8-3250	8	8	1221	35-53"	22	81	25	25	25	25	25	21	16	16
HS-8x8-3859	8	8	1275	41-62"	22	81	25	25	25	25	25	21	16	16
HS-8x8-4468	8	8	1388	47-71"	22	81	25	25	25	25	25	21	16	16
HS-8x8-5692	8	8	1457	59-95"	22	81	25	25	25	25	25	21	16	16
HS-8x10-2640	8	10	1364	29-43"	22	105	25	25	25	25	21	19	15	15
HS-8x10-3250	8	10	1418	35-53"	22	105	25	25	25	25	21	19	15	15
HS-8x10-3859	8	10	1489	41-62"	22	105	25	25	25	25	21	19	15	15
HS-8x10-4468	8	10	1573	47-71"	22	105	25	25	25	25	21	19	15	15
HS-8x10-5692	8	10	1660	59-95"	22	105	25	25	25	25	21	19	15	15
HS-8x12-2640	8	12	1578	29-43"	22	129	25	25	23	16	17	12	9	9
HS-8x12-3250	8	12	1658	35-53"	22	129	25	25	23	16	17	12	9	9
HS-8x12-3859	8	12	1714	41-62"	22	129	25	25	23	16	17	12	9	9
HS-8x12-4468	8	12	1810	47-71"	22	129	25	25	23	16	17	12	9	9
HS-8x12-5692	8	12	1903	59-95"	22	129	25	25	23	16	17	12	9	9

HYD = Hydraulic Application STAT = Static Application  
 Depths are based on A, B, C soil types as described in OSHA's 29 CFR Part 1926 Subpart P, October 31, 1999 with Type A not exceeding 25 PSF per foot at depth, Type B not exceeding 45 PSF per foot of depth and Type C not exceeding 60 PSF per foot of depth. Determine actual soil pressures and consult Manufacturer's Tabulated Data prior to each use.



## OPTIONS



### CUT-OUTS

These are replaceable or non-replaceable cut-outs. Cut-outs make it easier to work around crossing utility lines, and simplify lateral connections. Standard cut-outs are 20" x 24", and are positioned in the center at the bottom of the sidewall. Custom cut-outs are available on request.



### END PANELS

These end panels are pre-engineered and attach quickly for 3- or 4-sided applications. End panel sizes match strut sizes, and are completely adjustable throughout the range of the strut.

### WHEEL KITS

Optional wheel kit helps make the static mode hydraulic shield easier to move, and can increase pipe clearance.

### LEG KITS

For use with static shields to increase pipe clearance.

# GME® WALER SYSTEMS

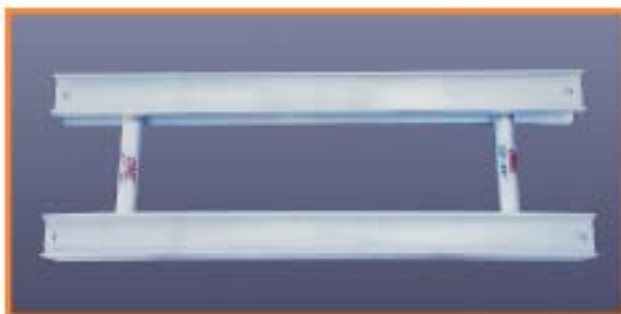


## GME® WALER SYSTEMS

are designed to allow protection coupled with the versatility and flexibility needed to work around crossing utility lines. Two styles of walers are available. The waler with hydraulic struts allows end-loading in a 3-sided or 4-sided application, for pipe repair or valve maintenance. The waler with hydraulic cylinders is designed to be used in a 2-sided application for production work. Waler systems, used in conjunction with proper sheeting materials, can prove to be a versatile and effective style of shoring.

## FEATURES

- Lightweight aluminum alloy construction for both exceptional durability, and easy portability
- Easy and safe to install from outside the trench
- Versatile
- Stores compactly
- Is capable of delivering 4-wall protection
- Components are interchangeable with other GME® Hydraulic Shoring products
- Permits skip sheeting around crossing utilities
- Certified by a registered professional engineer to meet OSHA standards



▲ Waler with hydraulic cylinders is designed for production work.



▶ Waler with hydraulic struts is designed to allow 3- or 4-sided protection.



# GME® WALER SYSTEMS

WALERS with HYDRAULIC STRUTS			
MODEL NUMBER	DESCRIPTION	WEIGHT (LBS.)	RANGE (O.D.) (MIN-MAX)
WMD-6-2640-HS	6' Rails/2 Hydraulic Struts	270	26-40"
WMD-6-3250-HS	6' Rails/2 Hydraulic Struts	300	32-50"
WMD-6-3859-HS	6' Rails/2 Hydraulic Struts	334	38-59"
WMD-6-4468-HS	6' Rails/2 Hydraulic Struts	376	44-68"
WMD-6-5692-HS	6' Rails/2 Hydraulic Struts	420	56-92"
WMD-8-2640-HS	8' Rails/2 Hydraulic Struts	316	26-40"
WMD-8-3250-HS	8' Rails/2 Hydraulic Struts	345	32-50"
WMD-8-3859-HS	8' Rails/2 Hydraulic Struts	383	38-59"
WMD-8-4468-HS	8' Rails/2 Hydraulic Struts	424	44-68"
WMD-8-5692-HS	8' Rails/2 Hydraulic Struts	467	56-92"
WHD-12-2640-HS	12' Rails/2 Hydraulic Struts	408	26-40"
WHD-12-3250-HS	12' Rails/2 Hydraulic Struts	437	32-50"
WHD-12-3859-HS	12' Rails/2 Hydraulic Struts	475	38-59"
WHD-12-4468-HS	12' Rails/2 Hydraulic Struts	516	44-68"
WHD-12-5692-HS	12' Rails/2 Hydraulic Struts	560	56-92"
WHD-16-2640-HS	16' Rails/3 Hydraulic Struts	566	26-40"
WHD-16-3250-HS	16' Rails/3 Hydraulic Struts	608	32-50"
WHD-16-3859-HS	16' Rails/3 Hydraulic Struts	665	38-59"
WHD-16-4468-HS	16' Rails/3 Hydraulic Struts	724	44-68"
WHD-16-5692-HS	16' Rails/3 Hydraulic Struts	790	56-92"

WALERS with CYLINDERS			
MODEL NUMBER	DESCRIPTION	WEIGHT (LBS.)	RANGE (O.D.) (MIN-MAX)
WMD-6-1727	6' Rails/2 Cylinders	104	17-27"
WMD-6-2236	6' Rails/2 Cylinders	106	22-36"
WMD-6-2846	6' Rails/2 Cylinders	109	28-46"
WMD-6-3455	6' Rails/2 Cylinders	111	34-55"
WMD-6-4064	6' Rails/2 Cylinders	114	40-64"
WMD-6-5288	6' Rails/2 Cylinders	119	52-88"
WMD-8-1727	8' Rails/2 Cylinders	205	17-27"
WMD-8-2236	8' Rails/2 Cylinders	212	22-36"
WMD-8-2846	8' Rails/2 Cylinders	219	28-46"
WMD-8-3455	8' Rails/2 Cylinders	225	34-55"
WMD-8-4064	8' Rails/2 Cylinders	230	40-64"
WMD-8-5288	8' Rails/2 Cylinders	237	52-88"
WHD-12-1727	12' Rails/2 Cylinders	296	17-27"
WHD-12-2236	12' Rails/2 Cylinders	302	22-36"
WHD-12-2846	12' Rails/2 Cylinders	311	28-46"
WHD-12-3455	12' Rails/2 Cylinders	317	34-55"
WHD-12-4064	12' Rails/2 Cylinders	322	40-64"
WHD-12-5288	12' Rails/2 Cylinders	330	52-88"
WHD-16-1727	16' Rails/3 Cylinders	398	17-27"
WHD-16-2236	16' Rails/3 Cylinders	410	22-36"
WHD-16-2846	16' Rails/3 Cylinders	419	28-46"
WHD-16-3455	16' Rails/3 Cylinders	424	34-55"
WHD-16-4064	16' Rails/3 Cylinders	432	40-64"
WHD-16-5288	16' Rails/3 Cylinders	448	52-88"

**NOTE:**  
Extension Systems available for all cylinder models.

# GME® MANHOLE SHORES



## GME® MANHOLE SHORES

are designed to shore square or rectangular excavations. They provide 4-way hydraulic support against the trench walls to create an obstruction-free pit which permits adequate working room for the installation of manholes or vaults, or the operation of boring equipment.

They can be used with several different types of sheeting, as described in the manufacturer's tabulated data. Each of the four sides of the manhole shores can be independently pressurized, and also can pivot laterally, to provide proper shoring to the excavation, even if it is somewhat irregular in shape.

GME Manhole Shores are easily transported as four individual cylinder and tube sections, and quickly assemble at the jobsite.

## FEATURES

- Rugged steel box outer tube protects heavy-duty cylinder inside each shore
- The 4-way hose bridle is designed to allow individual or simultaneous pressurization
- Can be pressurized to fit square or rectangular pits
- Lifting eyes on all four corners allow for easy installation and removal
- Certified by a registered professional engineer to meet OSHA standards
- Complete manufacturer's tabulated data, and installation/removal procedures are provided



## POWER PUMP

GME's Power Pump is available in both gas and electric. Can be used to deliver a large volume of fluid for continuous shoring operation.



# GME® MANHOLE SHORES

MANHOLE SHORE DEPTH TABLE								
MODEL	SPAN (FT.)		MAXIMUM TRENCH DEPTH (FT.)					
	MIN.	MAX.	4 FT. O.C. VERTICAL SPACING			3 FT. O.C. VERTICAL SPACING		
			A & B	C-60	C-80	A & B	C-60	C-80
2 MHS 4-5	5	8	25	20	10	25	25	12
2 MHS 4-6	6	9	25	20	10	25	25	12
2 MHS 4-7	7	10	25	20	10	25	25	12
3 MHS 6-6	6	9	25	25	12	25	25	16
3 MHS 6-7	7	10	25	25	12	25	25	16
3 MHS 6-8	8	11	25	25	12	25	25	16
3 MHS 6-9	9	12	19	14	7	25	20	9
3 MHS 6-10	10	13	17	13	6	23	18	8
3 MHS 6-11	11	14	15	11	5	21	16	7
3 MHS 6-12	12	15	14	10	–	19	14	6
3 MHS 6-13	13	16	13	9	–	17	13	5
3 MHS 6-14	14	17	11	8	–	15	11	–
3 MHS 6-15	15	18	9	7	–	13	10	–
3 MHS 6-16	16	19	8	6	–	12	9	–
3 MHS 6-17	17	20	7	5	–	10	8	–
3 MHS 8-8	8	11	25	25	18	25	25	20
3 MHS 8-9	9	12	25	25	16	25	25	20
3 MHS 8-10	10	13	25	25	14	25	25	19
3 MHS 8-11	11	14	25	25	12	25	25	16
3 MHS 8-12	12	15	25	23	10	25	25	14
3 MHS 8-13	13	16	25	20	9	25	25	12
3 MHS 8-14	14	17	23	17	8	25	23	11
3 MHS 8-15	15	18	20	15	7	25	20	10
3 MHS 8-16	16	19	18	13	6	24	18	8
3 MHS 8-17	17	20	16	12	5	21	16	7
3 MHS 8-18	18	21	14	10	–	19	14	–
3 MHS 8-19	19	22	12	9	–	16	12	–
3 MHS 8-20	20	23	11	8	–	15	11	–
3 MHS 8-21	21	24	10	7	–	14	10	–

**NOTE:**

1. For unequal leg lengths in rectangular shaped excavations, find the maximum depth of the longest leg.
2. The first digit of the model number denotes the diameter, in inches, of the hydraulic cylinder required.  
The fifth digit of the model number indicates the size in inches, of the steel box tubing used as the outer sleeve.

# GME® 2AEX SHIELD



## GME® 2AEX SHIELDS

The GME® 2AEX Shield is an aluminum extruded shield with a slim, 2" wall that comes standard with a tough, T-6 knife edge and rugged top cap. Massive, extruded end members ensure strength. Available in lengths to 12-feet, it is sized for rubber-tired backhoes, and priced competitively.

## OPTIONS

- Standard square-box tubing struts
- End loading struts
- 5" Schedule 80 pipe
- Screw-jack type struts
- Lifting eyes and bridle
- Pullbar
- No-knife edge
- Certified by a registered professional engineer to meet OSHA standards



**Standard Features Include  
Knife Edge and Top Cap!**



# GME® 2AEX SHIELD

2AEX – 2" ALUMINUM EXTRUDED WALL								
MODEL	SIZE			WEIGHT (LBS)	MAXIMUM DEPTH PER SOIL TYPE (FT.)			
	H	L	W		A	B	C-60	C-80
2AEX-66	6'	6'	2"	724	67	38	29	21
2AEX-68	6'	8'	2"	906	37	21	17	12
2AEX-610	6'	10'	2"	1088	23	14	11	8
2AEX-612	6'	12'	2"	1270	15	9	8	5
2AEX-86	8'	6'	2"	943	45	26	20	14
2AEX-88	8'	8'	2"	1177	34	20	15	11
2AEX-810	8'	10'	2"	1412	23	14	11	8
2AEX-812	8'	12'	2"	1647	15	9	8	5

NOTE: 2AEX Boxes come standard with knife edge and protective top cap. Optional "no knife edge" panels are available.

**GME's 2AEX gives you the choice of several spreader options. This allows you to pick the one that best suits your needs.**

## STANDARD SPREADERS

(For use when working 2 sided)

SPREADER SETS		
MODEL	RANGE	WT. (LBS.)
2AEX-AB	Adapt. Brckts (8/set)	64
2AEX-2640	26-40*	28
2AEX-3250	32-50*	34
2AEX-3859	38-59*	41
2AEX-4468	44-68*	47
2AEX-5692	56-92*	62

Pinned in place adjustable, box steel tube, 3.5" x 3.5"

## END LOADABLE STRUTS

(Allows you to work 2, 3, or 4 sided by end loading your box for repair work)

END LOADABLE STRUTS		
MODEL	RANGE	WT. (LBS.)
2AEX-SS-AB	Adapt. Brckts (8/set)	80
2AEX-SS-2640	26-40*	54
2AEX-SS-3250	32-50*	66
2AEX-SS-3859	38-59*	78
2AEX-SS-4468	44-68*	92
2AEX-SS-5692	56-92*	114

3.5" x 7.5" steel tube

## LITE-SHIELD™ STRUTS

(Screw jack type spreaders)

LITE-SHIELD STRUTS		
MODEL	RANGE	WT. (LBS.)
LSS-AB	Adapter Brackets (8/set)	64
24LSS-1	24-32*	12
24LSS-2	32-48*	16
24LSS-2.5	40-64*	21
24LSS-3	51-86*	25

\*We also offer the option of standard steel spreaders – 5" Schedule 80 Pipe

## OPTIONAL ACCESSORIES

2AEX PULLBARS		
MODEL	RANGE	WEIGHT (LBS.)
2AEX-PB-40	26"-40"	26
2AEX-PB-50	32"-50"	32
2AEX-PB-59	38"-59"	41
2AEX-PB-68	44"-68"	54
2AEX-PB-92	56"-92"	62

NOTE: Pullbars come with built-in Lift Eyes(2). Extra 1/2 set Lift Eyes are required with Pull Bar.

2AEX LIFT & STACK ACCESSORIES	
MODEL	WEIGHT (LBS.)
2AEX2 Lift Eye pair (2)	12
2AEX-LE Lift Eye set (4)	24
Nylon sling – 6-ft.	7
Nylon sling – 8-ft.	9
2AEX Stacking pins w/Bolts (4)	8

# GME® 4AEX SHIELD



## GME® 4AEX SHIELDS

The new GME® Aluminum Extruded Trench Shield is a rugged, 4" wall shield that comes standard with a tough, T-6 knife edge and rugged top cap. Massive, extruded end members insure strength. Because it's aluminum, 4AEX can be handled by today's lighter excavators, allowing you to match your equipment to the proper machine.

## FEATURES

- Rugged collar adapters for 5" pipe spreaders
- Lifting eyes
- Optional "no-knife edge" with heavy-duty skid plate
- Standard lengths to 16 feet
- Custom lengths on request
- Certified by a registered professional engineer to meet OSHA standards



**Standard Features Include  
Knife Edge and Top Cap!**



# GME® 4AEX SHIELD

4AEX – 4" ALUMINUM EXTRUDED WALL									
MODEL	SIZE			WEIGHT (LBS)	PIPE CLEARANCE	MAXIMUM DEPTH PER SOIL TYPE (FT.)			
	H	L	W			A	B	C-60	C-80
4AEX-68	6'	8'	4"	1438	36"	117	66	50	37
4AEX-610	6'	10'	4"	1708	36"	72	41	31	23
4AEX-612	6'	12'	4"	2050	36"	49	28	21	16
4AEX-614	6'	14'	4"	2301	36"	35	20	16	10
4AEX-616	6'	14'	4"	2539	36"	26	15	12	9
4AEX-88	8'	8'	4"	1736	48"	69	39	30	23
4AEX-810	8'	10'	4"	2195	48"	55	31	24	18
4AEX-812	8'	12'	4"	2631	48"	45	26	20	15
4AEX-814	8'	14'	4"	2937	48"	35	20	16	10
4AEX-816	8'	16'	4"	3197	48"	26	15	12	9

NOTE: 4AEX shields come standard with knife edge & protective top cap.

## ACCESSORIES

5DS Spreader Sets: Loose 5" Schedule 60 Pipe														
Model	5DS24	5DS30	5DS36	5DS42	5DS48	5DS54	5DS60	5DS72	5DS84	5DS96	5DS108	5DS120	5DS132	5DS144
Inside Width	24"	30"	36"	42"	48"	54"	60"	72"	84"	96"	108"	120"	132"	144"
Wt. (lbs)	198	257	300	343	386	430	473	559	646	732	819	905	991	1078

NOTE: Four spreaders required per shield.

## HEAVY-DUTY ADJUSTABLE SPREADERS AVAILABLE ON REQUEST.

4AEX LIFT & STACK ACCESSORIES	
MODEL	WT. (LBS.)
Nylon Sling – 6-ft.	7
Nylon Sling – 8-ft.	9
4AEX-SP Stacking pins (4)24" (incl. bolts)	20

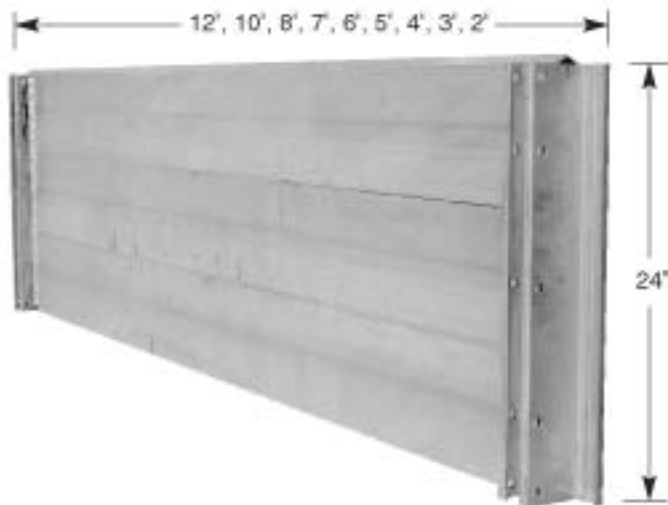
# GME® LITE-SHIELD™ 24

## GME LITE-SHIELD™ 24

The Lite-Shield™ 24 Series offers you a wide choice of panel lengths, from 2 to 12 feet. The lightweight 24-inch panels can be transported easily, even in a pick-up. The system assembles in just minutes at the jobsite. Tongue-in-groove panels are easily aligned, and mechanical screw-jack struts provide fast, variable adjustment. For maximum versatility, the system can be used as a 2, 3, or 4 sided configuration.

### FEATURES

- Strong yet lightweight 6061-T6 aluminum construction
- 2-inch wall thickness
- Foam filling available as an option
- Certified by a professional engineer to meet OSHA standards
- Made in U.S.A.



### LITE-SHIELD™ 24 PANELS

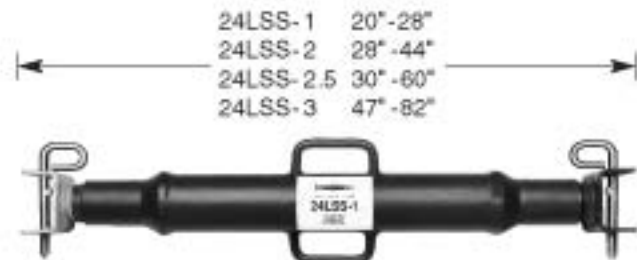
Lite-Shield 24" Panels	Dimensions (L x H x W)	Weight
24LSP-12	144" x 24" x 2"	155 lb.
24LSP-10	120" x 24" x 2"	140 lb.
24LSP-8	96" x 24" x 2"	114 lb.
24LSP-7	84" x 24" x 2"	96 lb.
24LSP-6	72" x 24" x 2"	86 lb.
24LSP-5	60" x 24" x 2"	75 lb.
24LSP-4	48" x 24" x 2"	63 lb.
24LSP-3	36" x 24" x 2"	45 lb.
24LSP-2	24" x 24" x 2"	31 lb.

### Shielding System Capacity Depth Chart

Soil Type	Equivalent Fluid Pressure (PSF)	MAXIMUM ALLOWABLE DEPTH (FT.)			
		12 Ft. Panel	10 Ft. Panel	7 & 8 Ft. Panels	2-6 Ft. Panels
A	25	16	24	24*	24*
B	45	9	14	23	24*
C	60	7	10	17	22
C	80	5	8	13	16

### ADVANTAGES FOR BETTER PERFORMANCE IN THE FIELD:

- Unique keyed locking pin requires no keepers – so it's faster and easier to use, with fewer parts to lose.
- The screw jack strut features a shallow square thread design and is coated with a special rust inhibitor which wipes clean with a rag, for smoother performance. Most competitive screw jack struts have deep V-grooves that are difficult to clean.



Strut is shown with keyed locking pin, which is for use with 24" system.

### LITE-SHIELD™ 24 STRUTS

Adjustment Range (Inside Panel Dimension)			
Part No.	Weight	With Connector	W/O Connector
24LSS-1	12 lbs.	24 - 32 inches	20 - 28 inches
24LSS-2	16 lbs.	32 - 48 inches	28 - 44 inches
24LSS-2.5	21 lbs.	40 - 64 inches	30 - 60 inches
24LSS-3	25 lbs.	51 - 86 inches	47 - 82 inches



# LITE-SHIELD™ OPTIONS

## PULLBAR



The Pullbar option is intended to aid the backhoe operator in the positioning of the Lite-Shield™ modular aluminum trench shields. The struts on modular type shoring systems were not designed to be pulled on with a backhoe bucket. Damage is likely, if the operator uses them to pull the shield. The Pullbar will allow the bucket to pull the shield system ahead, without damage to the struts. Bent struts are a safety hazard.



### **Why take a chance?**

The Pullbar conforms to your strut width, without interference with their adjustment range. The lift eyes are built in. It can be ordered in several different sizes, to match the working range of the struts. Consult your distributor or the factory for full specifications.

#### LITE-SHIELD PULLBARS

PB-1	24-32"
PB-2	32-48"
PB-2.5	40-64"
PB-3	51-86"

## KNIFE EDGE



Add some "bite" to your Lite-Shield™ Trench System. Tough, extruded T-6 knife edges are now available as an option. Knife edges make the Lite-Shield™ much more effective when digging in soft, wet, silty or sandy material. Available on 6', 8', 10' & 12' panels.

## TOP CAP



Keep your top panels safe from wear and tear from the backhoe bucket. The extruded T-6 "Top Cap" option provides a massive protective wear bar for the top panel in your system. Available on 6', 8', 10', and 12' panels.

# GME® LITE-SHIELD™ 20

## The Original LITE-SHIELD™ 20

These 20-inch high panels are lighter in weight and easy to handle. They feature tongue-in-groove design for easy set-up. Struts are mechanical screw-jack type for fast fitting.



### FEATURES

- Strong, lightweight 6061-T6 aluminum construction
- 2-inch wall thickness
- Certified by professional engineer to meet OSHA standards
- Proven in the trenches nationwide... thousands of panels in use today across the U.S.A.

### Shielding System Capacity/Depth Chart

Soil Type	Equivalent Fluid Pressure (PSF)	MAXIMUM ALLOWABLE DEPTH (FT.)			
		12 Ft. Panel	10 Ft. Panel	7 & 8 Ft. Panels	2 - 6 Ft. Panels
A	25	16	24	24*	24*
B	45	9	14	23	24*
C	60	7	10	17	22
C	80	5	8	13	16



LITE-SHIELD™ PANELS

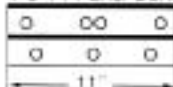
Lite-Shield® Panels	Dimensions (L x H x W)	Weight
LSP-10	118" x 20" x 2"	100 lb.
LSP-8	96" x 20" x 2"	80 lb.
LSP-7	78" x 20" x 2"	68 lb.
LSP-5	60" x 20" x 2"	55 lb.
LSP-3	36" x 20" x 2"	35 lb.

## LITE-SHIELD™ 20 COMPONENTS

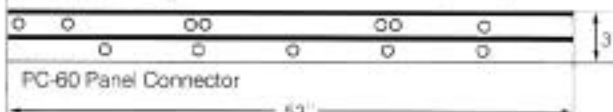
### PANEL CONNECTORS



PC-11 Panel Connector



Panel Connector with pins included.  
PC-11: 11", connects 2 panels; wt. 4 lbs.  
PC-60: 53", connects up to 3 panels; wt. 15 lbs.



PC-60 Panel Connector

### ALUMINUM MANHOLE CONNECTOR



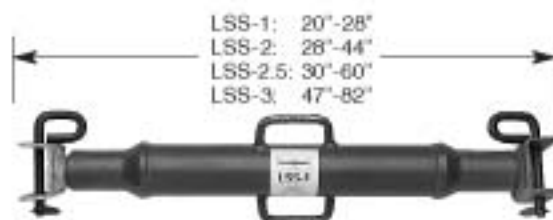
59" - wt. 28 lbs. each  
40" - wt. 21 lbs. each  
20" - wt. 10 lbs. each

### STEEL MANHOLE CONNECTOR



Wt. 76 lbs. (set of 4)

### LIFTING EYE



LITE-SHIELD™ STRUTS Strut is shown with gravity clip pin, which is necessary for use with 20" system.

Adjustment Range (Inside Panel Dimension)			
Part No.	Weight	With Connector	w/o Connector
LSS-1	16 lbs.	24 - 32 inches	20 - 28 inches
LSS-2	20 lbs.	32 - 48 inches	28 - 44 inches
LSS-2.5	23 lbs.	40 - 64 inches	30 - 60 inches
LSS-3	26 lbs.	51 - 85 inches	47 - 82 inches



# LITE-SHIELD™ ASSEMBLY

Choose a relatively flat, level space, close to the back hoe and excavation.

Start construction of the shield assembly with 2 panels, 2 panel connectors, (PC2-PC3 or PC4) and an adjustable strut.

Stand the two panels up, parallel with each other with the "V" groove side down, and spaced apart the length of the strut.

Use the keyway pins to attach the panel connectors to the panels. Install pin handles facing the inside of the shield. After installing the pins, be sure to rotate the handle downward in the locked position. Check if pin is secured by pulling on the handle. A PC2 connector should extend above the panel, one half of its length.

The PC2 connector has four holes along one edge, and a single hole in the center of the other edge. Use two of the holes to pin the next panel in place. The single remaining hole is for the strut end.

Pin the strut in place on the PC2's between the two panels.

**NOTE: All holes in the PC2 must have a pin installed.**



This sub-assembly will now stand up unaided, while you complete the shield. Continue construction by adding two more panel connectors to the opposite end of the shield and add a strut to that end also.



Add two more panels. It is easier to place the bottom edge of the next panel along the top edge of the previously constructed panel, with the top of the "loose" panel tilted outward 30% or so. When it is lined up, just "tilt" the panel up and into the panel connectors, and pin in place. Avoid "sliding" panels down into the connectors so as to avoid a pinch point.



Add two more PC2 connectors to each end of the newly added panels (4) and add a strut between these connectors at each end.

**NOTE: Struts must be no further apart vertically than 4 feet, and must be within 2 feet of the top and bottom of the shield assembly. Consult tabulated data.**

You may continue adding panels and struts in this manner. It is only practical to build the shield assembly to 8 feet high, in this fashion. Add the lift eyes to the four corners, and connect a four leg lift bridle. You are now ready to lift the Lite-Shield into the trench.

If more depth is required, simply add panels, connectors, and struts from the top of the trench, and then place the assembly in the deeper excavation.



PC3 and PC4 connectors allow for easier construction of a "base" unit, either 6 feet or 8 feet high.

Note that these long connectors do not start at the bottom edge of the first panel, but rather halfway up, in the fashion of the PC2s.



Corner (manhole) connectors are used in the same way as the panel connectors, except that they accept a panel instead of a strut. They are used instead of the PC's to construct a 3- or 4-sided closed end box. (Manhole, inlet, repair pit, etc.)

# GME®

1-800-248-2054

**Contact GME® or your dealer for information on steel trench shields, aluminum Lite-Shield™ systems, manhole shields and bedding boxes.**



Steel Shields



Manhole Shields



Round Manhole Shields



TZ Drop Boxes



Bedding Boxes



Slide Rail Systems



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