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 to15' 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.

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.

LOCKING SHORES

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

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 hydrualic hook-ups
- Certified by a registered professional engineer to meet OSHA standards

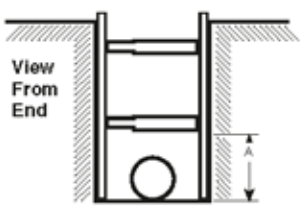
GME® HYDRAULIC SHIELDS

HYDRAULIC SHIELDS

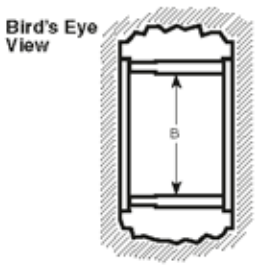
MODEL NUMBER	SIZE (FEET)		WT. (LBS.)	OPERATING RANGE (MIN-MAX)	CLEARANCE (INCHES)		MAXIMUM DEPTH PER SOIL TYPE (FT.)*							
							A		B		C (60)		C (80)	
	H	L			A	B	HYD	STAT	HYD	STAT	HYD	STAT	HYD	STAT
HS-5x5-2640	5	5	720	29-43"	22	45	25	25	25	25	25	21	16	16
HS-5x5-3250	5	5	777	35-53"	22	45	25	25	25	25	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	1060	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

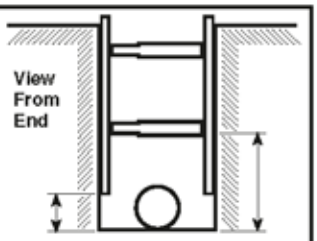
Depths are based on A, B, C soil types as described in OSHA's 29 CFR Part 1926 Subpart P, October 31, 1989 with Type A not exceeding 25 PSF per foot at depth. Type B not exceeding 45 PSF per foot of depth and Type C not exceeding 60 PSF per foot of depth. Determine actual soil pressures and consult Manufacturer's Tabulated Data prior to each use.



Dimension "A" is "pipe clearance", or the vertical distance from the bottom of the lower Strut to the bottom of the Shield.



Dimension "B" is "open work area", or the horizontal distance between Struts.



In cohesive soils, clearances can be increased per OSHA's 29 CFR 1926.652 (g)(5) and GME's Manufacturers Tabulated Data.

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.

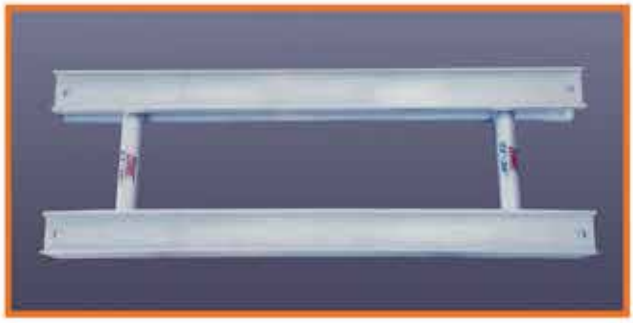
GME® WALER SYSTEMS

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.