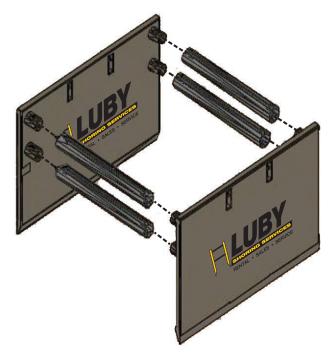


TRENCH SPAN



MODEL	LENGTH	WEIGHT (LBS.)
SP-24-4	24"	415
SP-30-4	30"	500
SP-36-4	36"	585
SP-42-4	42"	675
SP-48-4	48"	760
SP-54-4	54"	850
SP-60-4	60″	935
SP-66-4	66"	1020
SP-72-4	72"	1105
SP-78-4	78″	1195
SP-84-4	84"	1280
SP-90-4	90″	1370



MODEL	LENGTH	WEIGHT (LBS.)
SP-96-4	96″	1455
SP-102-4	102″	1540
SP-108-4	108″	1630
SP-120-4	120″	1800
SP-132-4	132"	1975
SP-144-4	144"	2150
SP-156-4	156"	2320
SP-168-4	168″	2495
SP-180-4	180″	2670
SP-192-4	192″	2850
SP-204-4	204"	3015
SP-216-4	216"	3535
SP-228-4	228"	3185
SP-240-4	240"	3365

В

Spreader Sets / 8" Sch. 80 / 4-Pipe "I"

# Rigging

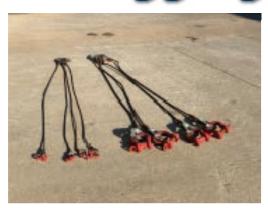
3/8" X 6' Wire Rope Sling with (4) - 2 Ton Crosby Shack	les
---	-----

3/8" X 8' Wire Rope Sling with (4) - 2 Ton Crosby Shackles

5/8" X 8' Wire Rope Sling with (4) - 13.5 Ton Crosby Shackles

5/8" X 10' Wire Rope Sling with (4) - 13.5 Ton Crosby Shackles

5/8" X 15' Wire Rope Sling with (4) - 13.5 Ton Crosby Shackles



\*\*\* All rigging is certified and tagged with size, length, max load, serial number, and date of load test \*\*\*

# Size A Trench Shield

Soil, Classification, Calculating Depth Ratings, and Sizing a Shield



#### **Determine Depth of Cut**

 Slope must start 18 in. or 1-1/2 ft. below the top of the Shield

#### **Determine Soil Conditions**

• (See Depth Rating Chart)

Type A (25#)

Type B (45#)

Type C-60 (60#)

Type C-80 (80#)

Hvdrostatic

#### **Determine Width of Trench Shield**

- Shield width determined by Outside Diameter (OD) of the pipe or the OD of the excavator bucket.
- Allow 6 in. of clearance on each side of pipe bell.
- Shield should be a minimum of 12 in. wider than the excavator bucket OD.

#### **Determine Length of Trench Shield**

- Inside length clearance of pipe is approximately 2 ft. less than the overall length of the shield.
- Shield must be 2 to 4 ft. longer than the pipe.

#### **Determine Machine Lift Capacity**

 Lift capacity is 1.5 times the shield weight at 20 ft. radius at grade.

#### **Determine Bucket Width**

Inside shield: 12 in. less than shield

#### **CALCULATING DEPT RATINGS:**

PSF ratings and depths are based on temporary loading.

Lateral Pressure Per Foot of Depth:
• Type "A" Soil = 25 lbs.
• Type "B" Soil = 45 lbs.
• Type "C-60" Soil = 60 lbs.
• Type "C-80" Soil – 80 lbs

Depth Rating Using Shield Capacity (e.g. 1200 lbs.):				
• 1200 / 25 = 48 ft.				
• 1200 / 45 = 27 ft.				
• 1200 / 60 = 20 ft.				
• 1200 / 80 = 15 ft.				

# **Soil types**

#### Type "A" (No Soil Is Type "A" If):

- It is fissured
- It is subject to vibration
- It has been previously disturbed
- It is part of a sloped, layered system, which dips into the excavation on a slope of four horizontal to one vertical [4H:1V] or greater
- It is subject to other factors requiring Classification as less stable

#### Type "B" Soil:

- Cohesive soil with unconfined compressive strength greater than 0.5 tons per square foot (tsf.), but less than 1.5 tsf.
- Granular cohesion-less soils, e.g., gravel, silt, silt loam, sandy loam
- Type "A" fissured or subject to vibration
- Unstable dry rock
- It is part of a sloped, layered system, which dips in into the excavation on a slope less steep than 4H:1V, but only if the material would otherwise be classifed as Type "B"

#### Type "C" Soil:

- Cohesive/non-cohesive soils with unconfined compressive strength of 0.5 tsf or less
- Granular soils including gravel, sand, and loamy sand
- Submerged soil or soil from which water Is freely seeping
- Submerged rock that is not stable
- Sloped, layered system which slopes Into an excavation at an angle 4H:1V, or steeper



# XLD

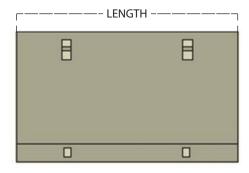
# 4" Thick Steel Double Wall Trench Shields

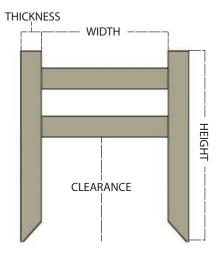
Used with medium crawler excavators in trenches where weight and space are crucial.



B

,	MODEL	WEIGHT (LBS.)	PIPE CLEARANCE	SOIL TYPE (C-60)	SHIELD CAP (PSF)
ř.	48 XLD	2,520	22″	46′	2,760
1	410 XLD	2,850	22"	46′	2,760
TR	412 XLD	3,380	22″	46′	2,760
10	414 XLD	3740	22"	34′	2,040
U	416 XLD	4130	22″	25′	1,500
M	420 XLD	4970	22″	20′	1,200
	88 XLD	4,380	64"	46′	2,760
	810 XLD	5,090	64"	44′	2,640
	812 XLD	5,800	64"	34′	2,040
	814 XLD	6,580	64"	29′	1,740
	816 XLD	7,270	64"	26′	1,560
	820 XLD	8,920	64"	22′	1,320
76	1012 XLD	7,000	84″	33′	1,980
0	1014 XLD	8,025	84"	22′	1,320





# **Features**

- **♦** Reinforced top rails
- ◆ Adjustable & stackable
- ◆ Thru-wall lifting lugs
- ◆ Four-point lifting system
- ◆ Thru-wall collars
- ◆ Triple vertical tube collar post design
- ◆ Pinned spreader connections
- ◆ Strongest knife edge in industry
- ◆ Professional Engineer design & depth certification
- ◆ Plug welding on double wall sheilds
- ♦ High strength mill certified steel

# **Options**

- ◆ Pulling lugs
- **♦** Foam filled
- ◆ Pulling blocks
- ◆ Mud plate
- ◆ Corner brackets

- ◆ Custom spreader location
- ◆ Custom paint
- **◆** Stacking pockets
- **♦** T-connection cut-outs

# **Spreader options**

- ◆ 4-Pipe Independent Set
- ◆ 5-Pipe Independent Set
- ♦ 6" Schedule 80
- ♦ 8" Schedule 80 (Standard)

W

# 6" Thick Steel Double Wall Trench Shields





6	MODEL (HT. x LENGTH)	WEIGHT (LBS.)	PIPE CLEARANCE	SOIL TYPE (C-60)	SHIELD CAP (PSF)
1	4'X20' HT6	6,370	22″	24′	1,440
TB	4′X24′ HT6	7,510	22″	19′	1,140
Ť.					
	8'X20' HT6	10,410	64"	26′	1,560
A B	8'X24' HT6	12,290	64"	19′	1,140
6					
U	10'X16' HT6	10,380	84"	28′	1,680
	10'X20' HT6	12,900	84"	24′	1,440
	10′X24′HT6	15,890	84"	20′	1,200

# 8" Thick Steel Double Wall Trench Shields Designed for deeper, more demanding work, while minimizing sidewall deflection and providing extensive shield durability.

è	MODEL (HT. x LENGTH)	WEIGHT (LBS.)	PIPE CLEARANCE	SOIL TYPE (C-60)	SHIELD CAP (PSF)	
	8'X20' HT8	10,960	64"	35′	2,100	
	8'X22' HT8	12,320	64"	26′	1,560	
23	8'X24' HT8	13,420	64"	25′	1,500	
	8'X30' HTHD8	22,400	64"	25′	1,500	
0						
0	10'X20' HT8	14,740	84"	32′	1,920	
	10'X24' HT8	16,270	84"	28′	1,680	
1/2	10'X30' HT8	23,400	84"	20′	1,200	

# **MHXLDW MANHOLE SHIELDS**

Designed to be used in two, three, or four-sided configurations, with an independent spreader system. Can also be used with the 6" schedule 80 spreader.

# **Features**

- ◆ Reinforced top rails
- **♦** Stackable
- ◆ Thru-wall lifting lugs
- ◆ Pinned spreader connections
- ◆ Strongest knife edge in the industry
- ◆ Plug welding on double wall shields
- ♦ High strength mill-certified steel

MODEL (Height x Length)	WEIGHT (LBS.)	PIPE CLEARANCE	SOIL TYPE (C-60)	SHIELD CAPACITY
8'x 8' MHXLDW	5,170	52"	22′	1,320
8'x 10' MHXLDW	5,840	52"	22′	1,320
8'x 12' MHXLDW	6,860	52"	22′	1,320
8'x 14' MHXLDW	7,570	52"	22′	1,320





Luby Shoring Services has several options available for fast and reliable delivery of your trenching and shoring rental equipment including our own boom trucks.



## 4 in. Steel Double Wall Trench Shield

#### **Uses**:

The XLD 4 in. double wall steel shield is the most popular shield in the Efficiency line. They are designed for use with medium crawler excavators in trenches where weight and space are critical.

#### **Features:**

- Reinforced top rails.
- Adjustable and stackable.
- Thru-wall lifting lugs.
- Four-point lifting system.
- Thru-wall collars.
- Triple vertical tube collar post design.
- Pinned spreader connections.
- Strongest knife edge in the industry.
- Plug welding on double wall shields.
- High strength mill certified steel.
- Professional Engineer design and depth certification.

### **Options:**

- Pushing blocks.
- Pulling lugs.
- Foam filler.
- Mud plate.
- Corner brackets.
- Custom spreader location.
- Custom paint.
- Stacking Pockets.
- T-connection cut-outs.

- 8" schedule 80 (standard).
- 6" schedule 80.
- 4-pipe independent set.
- 5-pipe independent set.
- Custom collar sizes available.





XID Side	ewalls 4 in	n Steel Double	Wall Trench Sh	nield		
Model	Weight	Pipe Clearance			f Cut (Ft.) S	Soil Type
(Ht. x Lg.)	(Lbs.)	"C" (In.)	(PSF)	В	C-60	C-80
48 XLD	2,520	22	2,760	61	46	34
410 XLD	2,850	22	2,760	61	46	34
412 XLD	3,380	22	2,760	61	46	34
414 XLD	3,740	22	2,040	45	34	25
416 XLD	4,130	22	1,500	33	25	19
420 XLD	4,970	22	1,200	27	20	15
424 XLD	6,130	22	840	19	14	10
	-,					
68 XLD	3,430	41	2,760	61	46	34
610 XLD	4,120	41	2,760	61	46	34
612 XLD	4,790	41	2,460	55	41	31
614 XLD	5,380	41	1,920	43	32	24
616 XLD	5,970	41	1,440	32	24	18
618 XLD	6,690	41	1,260	28	21	16
620 XLD	7,220	41	1,380	31	23	17
622 XLD	8,100	41	1,024	23	17	13
624 XLD	8,680	41	900	20	15	11
88 XLD	4,380	60	2,760	61	46	34
810 XLD	5,090	60	2,640	59	44	33
812 XLD	5,800	60	2,040	45	34	25
814 XLD	6,580	60	1,740	39	29	22
816 XLD	7,270	60	1,560	35	26	20
818 XLD	8,250	60	1,380	31	23	17
820 XLD	8,920	60	1,320	29	22	16
822 XLD	9,830	60	900	20	15	11
824 XLD	11,420	60	840	19	14	10
108 XLD	5,220	69	2,760	61	46	34
1010 XLD	6,020	69	2,640	59	44	33
1012 XLD	7,000	69	1,980	44	33	25
1014 XLD	7,940	69	1,320	29	22	16
1016 XLD	9,040	69	1,320	29	22	16
1020 XLD	10,890	69	960	21	16	12
1024 XLD	12,910	69	900	20	15	11

# HT6

### 6 In. Hi-Tensile Steel Double Wall Trench Shield

#### **Uses:**

The HT6 is the most versatile steel shield available. It combines depth capability with lightweight narrow sidewalls. Designed for medium range excavators.

#### **Features:**

- Reinforced top rails.
- Double tube top rails.
- Adjustable and stackable.
- Thru-wall lifting lugs.
- Four-point lifting system.
- Thru-wall collars.
- Triple vertical tube collar post design.
- Pinned spreader connections.
- Strongest knife edge in the industry.
- Plug welding on double wall shields.
- High strength mill certified steel.
- Professional Engineer design and depth certification.

## **Options:**

- Pushing blocks.
- Pulling lugs.
- Foam filler.
- Mud plate.
- Corner brackets.
- Custom spreader location.
- Custom paint.
- Stacking Pockets.
- T-connection cut-outs.

- 8" schedule 80 (standard).
- 3-pipe and mud plate set.
- 4-pipe independent set.
- 4-pipe connected set.
- 5-pipe independent set.
- 5-pipe connected set.





HT6 Sid	ewalls 6 in	. Steel Double	Wall Trench Sl	nield		
Model	Weight	Pipe Clearance	Shield Capacity	Depth o	f Cut (Ft.) S	Soil Type
(Ht. x Lg.)	(Lbs.)	"C" (In.)	(PSF)	B	C-60	C-80
412 HT6	4,090	22	2,100	47	35	26
416 HT6	5,310	22	1,860	41	31	23
418 HT6	5,890	22	1,680	37	28	21
420 HT6	6,370	22	1,440	32	24	18
424 HT6	7,510	22	1,140	25	19	14
427 HT6	8,350	22	780	17	13	10
616 HT6	7,000	41	2,340	52	39	30
618 HT6	7,680	41	1,680	37	28	21
620 HT6	8,330	41	1,440	32	24	18
622 HT6	9,130	41	1,200	27	20	15
624 HT6	10,210	41	1,140	25	19	14
626 HT6	10,890	41	900	20	15	11
627 HT6	11,140	41	900	20	15	11
88 HT6	4,860	64	2,880	64	48	36
812 HT6	6,800	64	2,280	50	38	28
814 HT6	7,580	64	2,100	47	35	26
816 HT6	8,440	64	1,980	44	33	25
818 HT6	9,350	64	1,860	41	31	23
820 HT6	10,410	64	1,560	34	26	19
822 HT6	11,230	64	1,200	27	20	15
824 HT6	12,290	64	1,140	25	19	14
826 HT6	13,110	64	960	21	16	12
827 HT6	13,240	64	780	17	13	10
1012 HT6	8,460	85	2,400	53	40	30
1016 HT6	10,380	85	1,680	37	28	21
1018 HT6	11,560	85	1,560	34	26	19
1020 HT6	12,900	85	1,440	32	24	18
1022 HT6	14,220	85	1,200	27	20	15
1024 HT6	15,890	85	1,200	27	20	15
1027 HT6	17,630	85	960	21	16	12

## 8 In. Hi-Tensile Steel Double Wall Trench Shield

#### **Uses**:

The HT8 is an excellent choice for deeper, more demanding work. The 8 in. double wall construction minimizes sidewall deflection and provides extended shield durability.

#### **Features:**

- Reinforced top rails.
- Double tube top rails.
- Adjustable and stackable.
- Thru-wall lifting lugs.
- Four-point lifting system.
- Thru-wall collars.
- Triple vertical tube collar post design.
- Pinned spreader connections.
- Strongest knife edge in the industry.
- Plug welding on double wall shields.
- High strength mill certified steel.
- Professional Engineer design and depth certification.

### **Options:**

- Pushing blocks.
- Pulling lugs.
- Foam filler.
- Mud plate.
- Corner brackets.
- Custom spreader location.
- Custom paint.
- Stacking Pockets.
- T-connection cut-outs.

- 8" schedule 80 (standard).
- 3-pipe and mud plate set.
- 4-pipe independent set.
- 4-pipe connected set.
- 5-pipe independent set.
- 5-pipe connected set.







HT8 Side	ewalls 8 ir	. Steel Double	Wall Trench Sh	nield		
Model	Weight	Pipe Clearance	Shield Capacity	Depth o	f Cut (Ft.) S	oil Type
(Ht. x Lg.)	(Lbs.)	"C" (In.)	(PSF)	В	C-60	C-80
416 HT8	6,150	22	2,580	57	43	32
420 HT8	7,120	22	1,800	40	30	22
424 HT8	8,360	22	1,260	28	21	16
427 HT8	9,280	22	1,020	23	17	13
430 HT8	10,080	22	840	10	14	10
616 HT8	7,930	41	2,640	59	44	33
620 HT8	9,210	41	1,800	40	30	22
624 HT8	11,080	41	1,260	28	21	16
627 HT8	12,330	41	1,020	23	17	13
630 HT8	13,560	41	1,020	23	17	13
814 HT8	8,570	64	2,520	56	42	31
816 HT8	9,150	64	2,580	57	43	32
820 HT8	10,960	64	2,100	46	35	26
822 HT8	12,320	64	1,560	19	26	19
824 HT8	13,420	64	1,500	33	25	19
827 HT8	14,570	64	1,140	25	19	14
830 HT8	15,930	64	840	19	14	10
1016 HT8	12,480	85	2,220	49	37	28
1020 HT8	14,740	85	1,920	42	32	24
1024 HT8	16,270	85	1,680	37	28	21
1027 HT8	18,780	85	1,200	27	20	15
1030 HT8	20,570	85	1,020	23	17	13

# HDHT8

# 8 In. Heavy Duty Hi-Tensile Steel Double Wall Shield

#### **Uses**:

This 8 in. double wall trench shield is available with panels up to 12 ft. high and 36 ft. long. The HDHT8 offers maximum depth ratings to handle the most demanding jobs with larger excavators.

#### **Features:**

- Reinforced top rails.
- Double tube top rails.
- Adjustable and stackable.
- Thru-wall lifting lugs.
- Four-point lifting system.
- Thru-wall collars.
- Triple vertical tube collar post design.
- Pinned spreader connections.
- Strongest knife edge in the industry.
- Plug welding on double wall shields.
- High strength mill certified steel.
- Professional Engineer design and depth certification.

### **Options:**

- Pushing blocks.
- Pulling lugs.
- Foam filler.
- Mud plate.
- Corner brackets.
- Custom spreader location.
- Custom paint.
- Stacking Pockets.
- T-connection cut-outs.

- 8" schedule 80 (standard).
- 10" schedule 120.
- 3-pipe and mud plate set.
- 4-pipe independent set.
- 4-pipe connected set.
- 5-pipe independent set.
- 5-pipe connected set.







HDHT8 Si	dewalls	8 in. Heavy D	uty Steel Doubl	e Wall T	rench Shi	eld
Model	Weight	Pipe Clearance	Shield Capacity	Depth o	f Cut (Ft.) S	Soil Type
(Ht. x Lg.)	(Lbs.)	"C" (In.)	(PSF)	В	C-60	C-80
616 HDHT8-58	7,500	41	3,480	77	58	43
620 HDHT8-40	9,700	41	2,400	53	40	30
624 HDHT8-30	12,340	41	1,800	40	30	22
626 HDHT8-27	14,300	41	1,620	36	27	20
627 HDHT8-25	14,870	41	1,500	33	25	19
628 HDHT8-24	14,975	41	1,440	32	24	18
630 HDHT8-20	16,460	41	1,200	27	20	15
816 HDHT8-58	9,770	64	3,480	77	58	43
820 HDHT8-40	12,300	64	2,400	53	40	30
824 HDHT8-30	14,500	64	1,800	40	30	22
826 HDHT8-30	20,100	64	1,800	40	30	22
827 HDHT8-27	18,215	64	1,620	36	27	20
828 HDHT8-24	21,300	64	1,440	32	24	18
830 HDHT8-20	19,995	64	1,200	27	20	15
1016HDHT8-60	13,790	85	3,600	80	60	45
1020HDHT8-41	16,920	85	2,460	55	41	31
1024HDHT8-31	17,490	85	1,860	41	31	23
1026HDHT8-28	19,560	85	1,620	36	27	20
1027HDHT8-25	20,110	85	1,500	33	25	19
1028HDHT8-24	22,310	85	1,440	32	24	18
1030HDHT8-20	23,400	85	1,200	27	20	15

# Manhole Shields

# 4 in. Single and Double Wall Manhole Shields

Manhole Sh Shield	nield w	o Corner Er	nd Plates 4 ir	ı. Single	and Doub	ole Wall		
Model	Weight	Pipe Clearance	Shield Capacity	Depth of Cut (Ft.) Soil Type				
(Ht. x Lg.)	(Lbs.)	"C" (In.)	(PSF)	В	C-60	C-80		
4 In. Single Wall								
88 MHXLS	2,500	52	840	19	14	10		
810 MHXLS	2,950	52	660	15	11	8		
812 MHXLS	3,580	52	600	13	10	7		
814 MHXLS	4,090	52	540	12	9	7		
816 MHXLS	4,520	52	480	11	8	6		
4 in. Double Wall								
88 MHXLD	3,970	52	2,220	45	37	28		
810 MHXLD	4,640	52	1,980	41	33	25		
812 MHXLD	5,660	52	1,680	35	28	21		



Manhole Shield w/ Corner End Plates							
Model	Weight	Pipe Clearance	Shield Capacity	Depth of Cut (Ft.) Soil Type			
(Ht. x Lg.)	(Lbs.)	"C" (In.)	(PSF)	В	C-60	C-80	
4 in. Single Wall							
88 MHXLS-CEP	3,600	52	840	19	14	10	
810 MHXLS-CEP	4,050	52	660	15	11	8	
812 MHXLS-CEP	4,680	52	600	13	10	7	
814 MHXLS-CEP	5,190	52	540	12	9	7	
816 MHXLS-CEP	5,620	52	480	11	8	6	
4 in. Double Wall							
88 MHXLD-CEP	5,070	52	2,220	45	37	28	
810 MHXLD-CEP	5,740	52	1,980	41	33	25	
812 MHXLD-CEP	6,760	52	1,680	35	28	21	
814 MHXLD-CEP	7,470	52	1,440	29	24	18	
816 MHXLD-CEP	8,150	52	1,320	27	22	16	



Manhole Shield w/ Wrap Around Corner End Plates							
Model	Weight	Pipe Clearance	Shield Capacity	Depth of Cut (Ft.) Soil Type			
(Ht. x Lg.)	(Lbs.)	"C" (In.)	(PSF)	В	C-60	C-80	
4 In. Single Wall							
88 MHXLSW	4,900	52	840	19	14	10	
810 MHXLSW	5,370	52	660	15	11	8	
812 MHXLSW	5,940	52	600	13	10	7	
814 MHXLSW	6,410	52	540	12	9	7	
816 MHXLSW	6,980	52	480	11	8	6	
4 in. Double Wal	l						
88 MHXLDW	5,130	52	1,320	29	22	16	
810 MHXLDW	5,840	52	1,320	29	22	16	
812 MHXLDW	6,430	52	1,320	29	22	16	
814 MHXLDW	7,300	52	1,320	29	22	16	
816 MHXLDW	7,990	52	1,320	29	22	16	

