

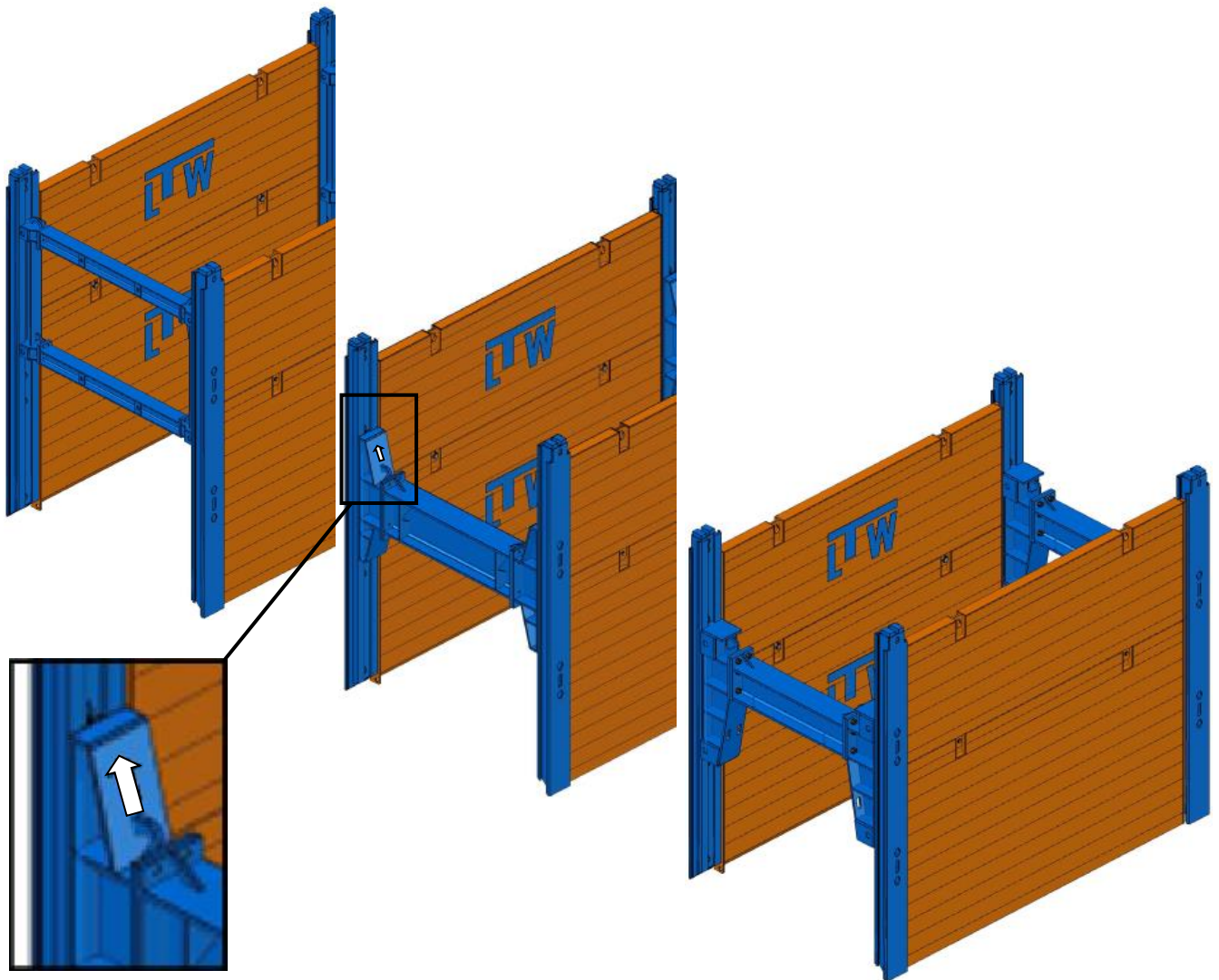
# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV



### SYSTEM VIEW

Single Slide Rail System - Type EG PV



When assembling the H-Frame make sure that **the arrow is** in an upward position, in order to ensure the A-position.

**Standard Shoring Frame**

brace extension HEB 160

**H-Shoring Frame**

brace extension HEA 500

**U-Shoring Frame**

brace extension HEB 360

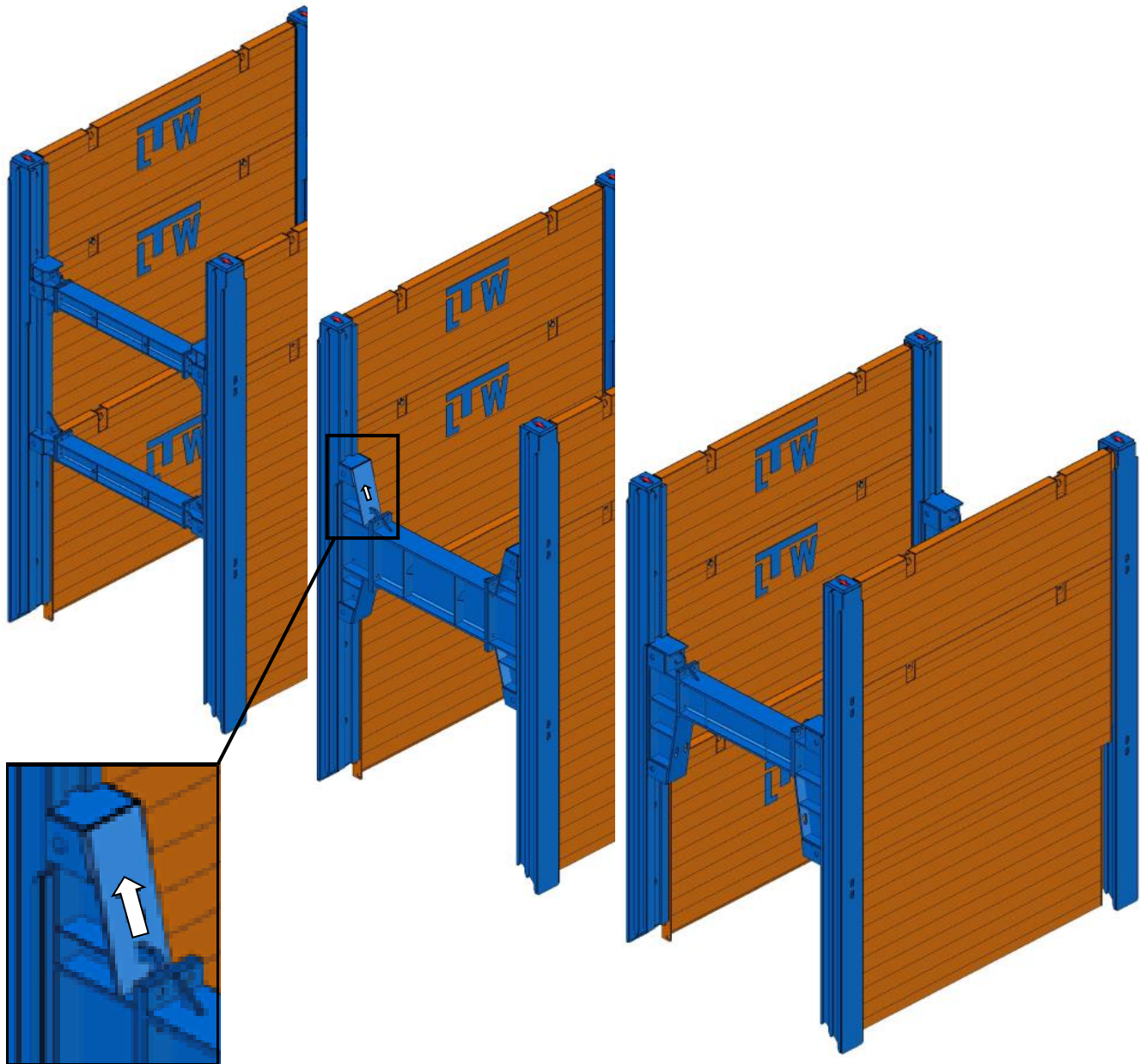
# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV



### SYSTEM VIEW

Double Slide Rail System - Type DG PV



When assembling the H-Frame make sure that **the arrow is** in an upward position, in order to ensure the A-position.

**Standard Shoring Frame**  
brace extension HEB 240

**H-Shoring Frame**  
brace extension HEA 700

**U-Shoring Frame**  
brace extension HEB 450

# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV

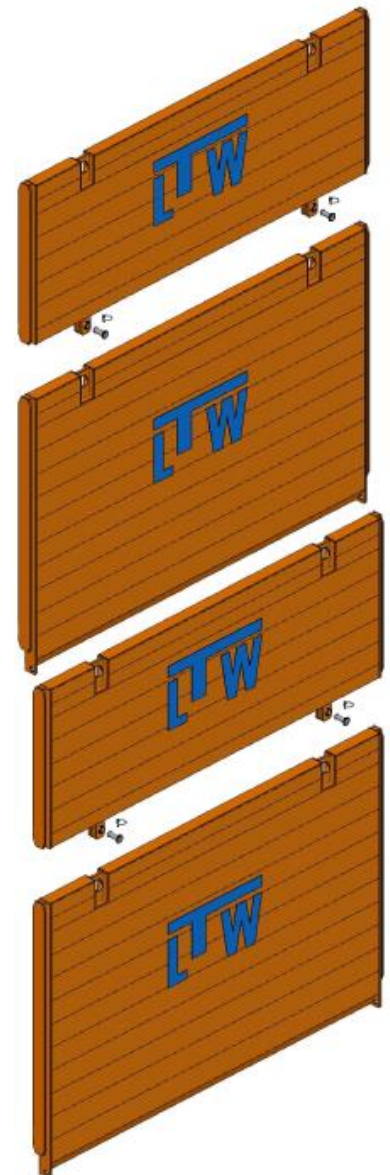


### SLIDE RAIL SHORING PLATES

Off-the-shelf, the Slide Rail Plates are designed - **VSI** -; i.g. Rails and Plates are **flush inside** (for use with in-situ ducts). On demand the plates can also be supplied - **VSA** -; i.g. Rails and plates are **flush outside** (for inner city shoring, allowing a straight blacktop cut).

#### Plates VS 100

Plate length <b>L</b> [ m ]	Plate height <b>H</b> [ m ]	Plate thickness <b>t<sub>PI</sub></b> [ mm ]	Pipe culvert length <b>L<sub>C</sub></b> [ m ]	Limit state design load <b>e<sub>d</sub></b> [ kN / m <sup>2</sup> ]	Plate weight <b>G<sub>PL</sub></b> [ kg ]
2,00	2,40	100	~2,00	171,6	510
	1,40				335
	1,60				370
2,50	2,40	100	~2,50	110,4	605
	1,40				400
	1,60				440
3,00	2,40	100	~3,00	81,1	690
	1,40				450
	1,60				500
3,50	2,40	100	~3,50	56,6	805
	1,40				525
	1,60				580



#### Plates VS 120

Plate length <b>L</b> [ m ]	Plate height <b>H</b> [ m ]	Plate thickness <b>t<sub>PI</sub></b> [ mm ]	Pipe culvert length <b>L<sub>C</sub></b> [ m ]	Limit state design load <b>e<sub>d</sub></b> [ kN / m <sup>2</sup> ]	Plate weight <b>G<sub>PL</sub></b> [ kg ]
4,00	2,40	120	~4,00	71,0	1170
	1,40				745
	1,60				835
4,50	2,40	120	~4,50	56,2	1305
	1,40				830
	1,60				930
5,00	2,40	120	~5,00	72,1	1635
	1,40				1020
	1,60				1150

# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV



### SLIDE RAILS

#### Single Slide Rail - Type EG PV

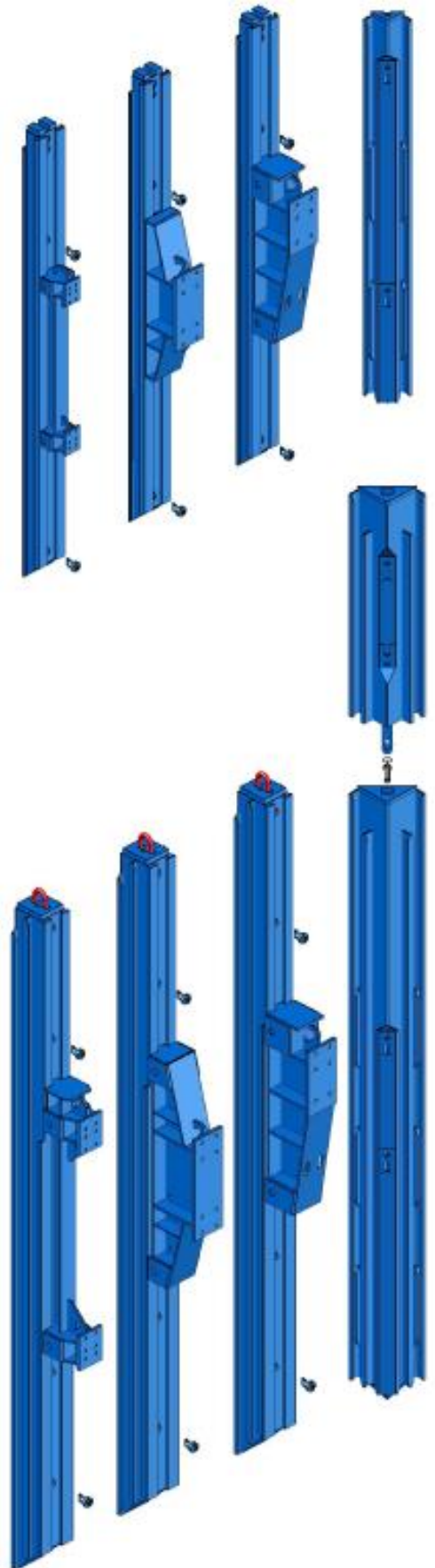
Description	Rail length	Rail thickness	Limit state design moment $M_d$	Weight
	[ m ]	$t_{Tr}$ [ mm ]		$G_{Tr}$ [ kg ]
<b>EG PV</b>	4,00	177	338	495
<b>Corner - EG</b>	3,00	218	147	310
<b>Corner - EG</b>	3,50			355
<b>Corner - EG</b>	4,00			400

#### Double Slide Rail - Type DG PV

Description	Rail length	Rail thickness	Limit state design moment $M_d$	Weight
	[ m ]	$t_{Tr}$ [ mm ]		$G_{Tr}$ [ kg ]
<b>DG PV</b>	4,80	320	1020	1075
<b>DG PV</b>	6,00			1355
<b>DG PV</b>	7,00			1555
<b>DG PV</b>	7,50	325	1106	1780
<b>Corner - DG</b>	4,50	305	363	715
<b>Corner - DG</b>	5,00			780
<b>Corner - DG</b>	5,50			840
<b>Corner-DG-A</b>	2,00	236	322	315

#### Shoring Frame

working for	Roller spacing	Flange dimension	minimum working width $b_{C, min}$	Weight
	[ m ]			[ mm ]
<b>EG LW</b>	1,39	160 * 205	0,45	107
<b>EG H-LW</b>	1,40	300 * 660	0,70	234
<b>EG U-LW</b>	1,25	300 * 480	0,82	404
<b>DG LW</b>	2,00	240 * 305	0,73	308
<b>DG LW</b>	2,80			343
<b>DG H-LW</b>	1,80	300 * 900	1,10	470
<b>DG U-LW</b>	1,45	300 * 580	0,92	488



# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV

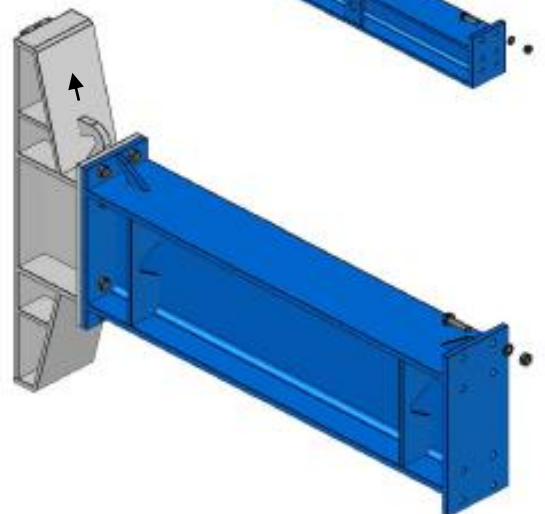
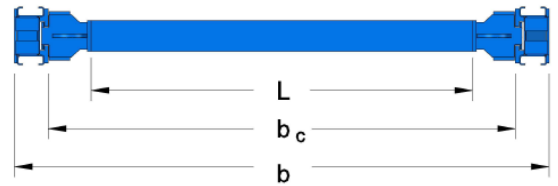


### BRACE EXTENSIONS - EG PV

#### Flange 160 \* 205 - HEB 160

Screw Set M16\*70 HV - Torque moment 250 Nm

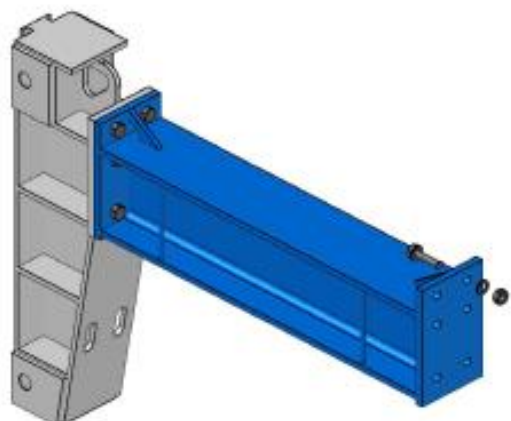
Brace Extension [ m ]	Working width b <sub>c</sub> [ m ]	Shoring width b [ m ]	Weight G [ kg ]
-	0,45	0,80	-
0,25	0,70	1,05	19
0,50	0,95	1,30	32
0,75	1,20	1,55	43
1,00	1,45	1,80	54
1,50	1,95	2,30	75
2,00	2,45	2,80	98
2,50	2,95	3,30	120



#### Flange 300 \* 660 - HEA 500

Screw Set M24\*85 HV - Torque moment 800 Nm

Brace Extension [ m ]	Working width b <sub>c</sub> [ m ]	Shoring width b [ m ]	Weight G [ kg ]
-	0,70	1,05	-
0,25	0,95	1,30	112
0,50	1,20	1,55	163
0,75	1,45	1,80	202
1,00	1,70	2,05	255
1,50	2,20	2,55	334
2,00	2,70	3,05	414
2,50	3,20	3,55	493



#### Flange 300 \* 480 - HEB 360

Screw Set M30\*105 HV - Torque moment 1650 Nm

Brace Extension [ m ]	Working width b <sub>c</sub> [ m ]	Shoring width b [ m ]	Weight G [ kg ]
-	0,82	1,17	-
0,25	1,07	1,42	95
0,50	1,32	1,67	133
0,75	1,57	1,92	169
1,00	1,82	2,17	206
1,50	2,32	2,67	279
2,00	2,82	3,17	353
2,50	3,32	3,67	426

# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV

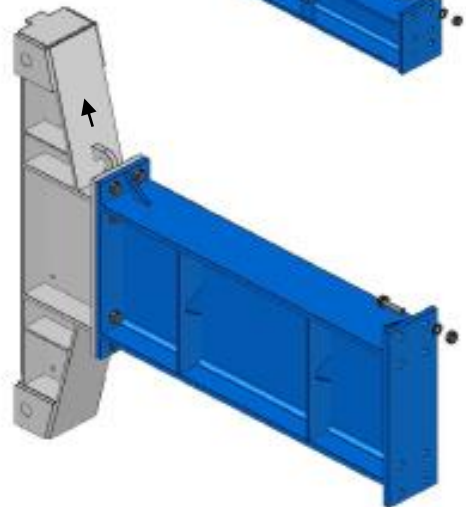
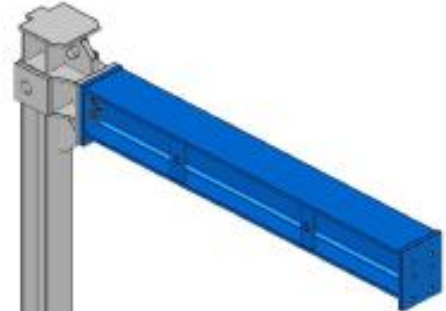
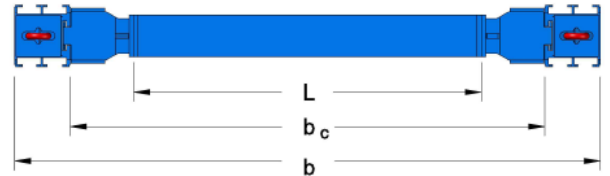


### BRACE EXTENSIONS - DG PV

#### DG PV - Flange 240 \* 305 - HEB 240

Screw Set M24\*85 HV - Torque moment 800 Nm

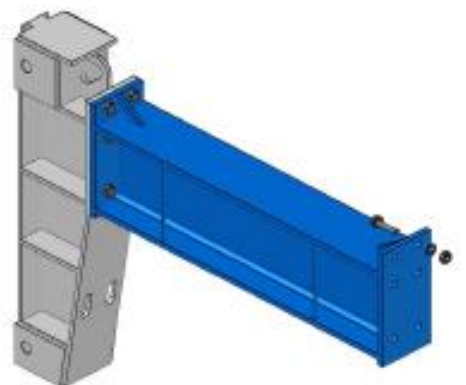
Brace Extension [ m ]	Working width b <sub>c</sub> [ m ]	Shoring width b [ m ]	Weight G [ kg ]
-	0,73	1,36	-
0,25	0,98	1,61	45
0,50	1,23	1,86	69
0,75	1,48	2,11	90
1,00	1,73	2,36	112
1,50	2,23	2,86	154
2,00	2,73	3,36	199
2,50	3,23	3,86	242



#### DG PV - Flange 300 \* 900 - HEA 700

Screw Set M30\*105 HV - Torque moment 1650 Nm

Brace Extension [ m ]	Working width b <sub>c</sub> [ m ]	Shoring width b [ m ]	Weight G [ kg ]
-	1,10	1,74	-
0,50	1,60	2,24	231
0,75	1,85	2,49	290
1,00	2,10	2,74	361
1,50	2,60	3,24	465
2,00	3,10	3,74	570
2,50	3,60	4,24	674



#### DG PV - Flange 300 \* 580 - HEB 450

Screw Set M30\*105 HV - Torque moment 1650 Nm

Brace Extension [ m ]	Working width b <sub>c</sub> [ m ]	Shoring width b [ m ]	Weight G [ kg ]
-	0,92	1,56	-
0,50	1,42	2,06	161
0,75	1,67	2,31	204
1,00	1,92	2,56	248
1,50	2,42	3,06	336
2,00	2,92	3,56	425
2,50	3,42	4,06	513

# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV

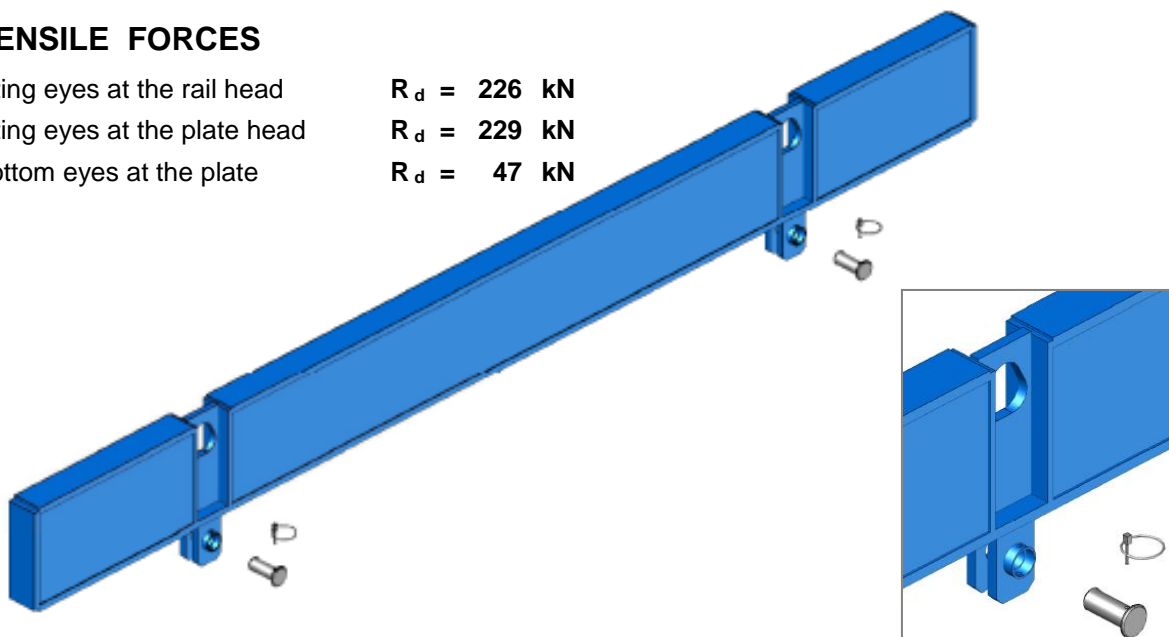


### ACCESSORIES

Description	Dimension	specified use for	Weight [kg]
locking bolt	Ø50 * 114	locking feature for shoring frame	2,1
bolt	Ø40 * 128	connection between Base and Extension Plates	1,4
bolt	Ø40 * 198	connection Base and Extension Corner Slide Rails	2,2
locking clip [R]	Ø6	locking clip for connecting bolt at plates	0,05
hexagon screw	M16*70 HV	for flange 160 * 205 EG PV	0,14
hex-nut	M16 HV		0,04
washer	for M16		0,02
hexagon screw	M24*85 HV	for flange 300 * 660 EG PV & for flange 240 * 305 DG PV	0,57
hex-nut	M24 HV		0,17
washer	für M24		0,03
hexagon screw	M30*105 HV	for flange 300 * 480 EG PV for flange 300 * 580 DG PV for flange 300 * 900 DG PV	0,9
hex-nut	M30 HV		0,2
washer	für M30		0,05
protection rail	L = 1800	for Plate length 2,00m	151
protection rail	L = 2300	for Plate length 2,50m	188
protection rail	L = 2500	for Plate length 3,00m	203
protection rail	L = 3300	for Plate length 3,50m	264
protection rail	L = 3800	for Plate length 4,00m	304
protection rail	L = 4300	for Plate length 4,50m	341
protection rail	L = 4800	for Plate length 5,00m	378
clamping device		for strut free pits (long pipes etc.)	220

### TENSILE FORCES

lifting eyes at the rail head       $R_d = 226 \text{ kN}$   
 lifting eyes at the plate head       $R_d = 229 \text{ kN}$   
 bottom eyes at the plate               $R_d = 47 \text{ kN}$



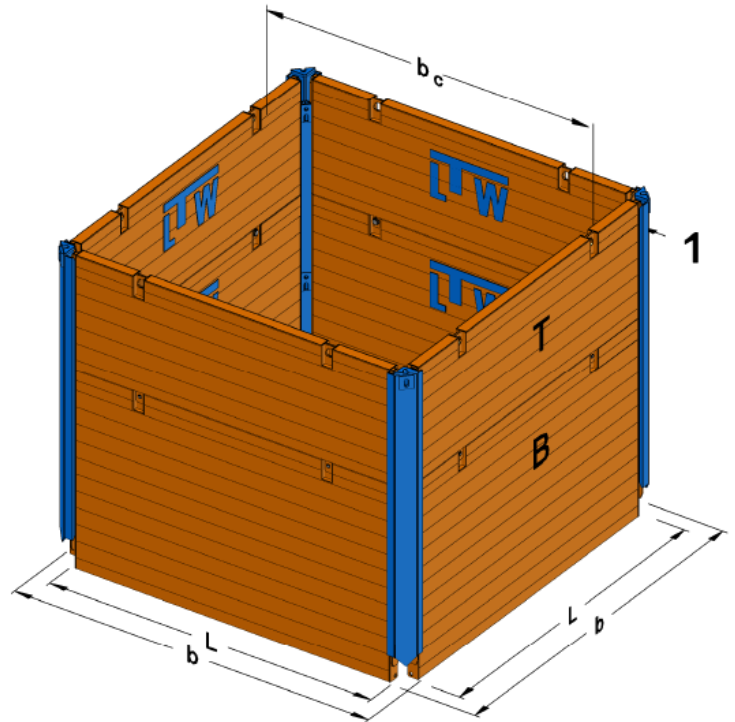
# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV

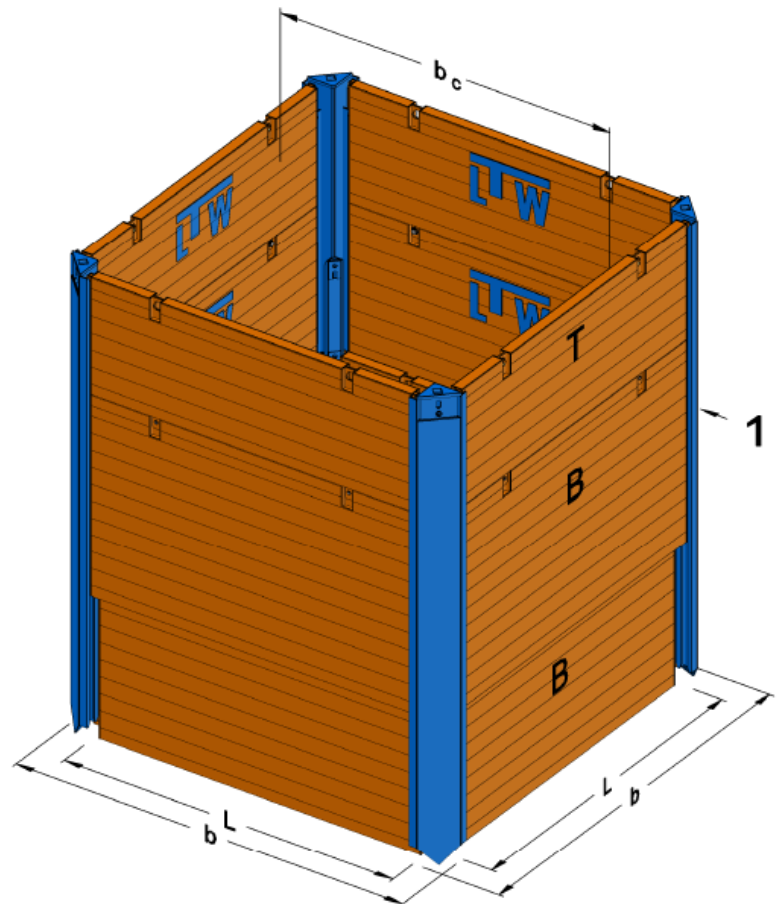


### PITS

#### Corner Single Slide Rails



#### Corner Double Slide Rails



1 Corner slide rail  
B Base Plate

T Top Plate  
b Shoring Width

b<sub>c</sub> Inner Working Width  
L Plate Length



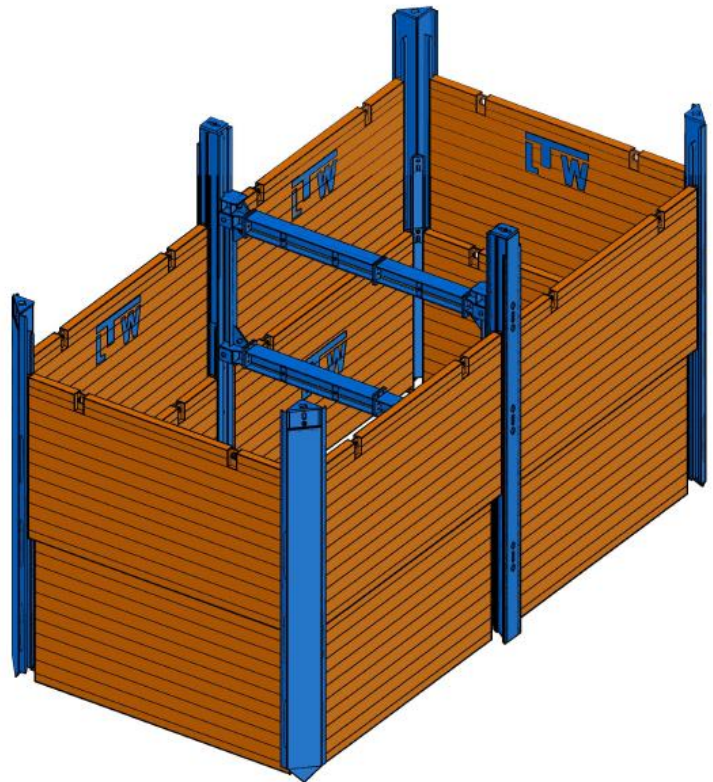
# TECHNICAL CHARACTERISTICS

## LTW SLIDE RAIL SYSTEM - Type PV



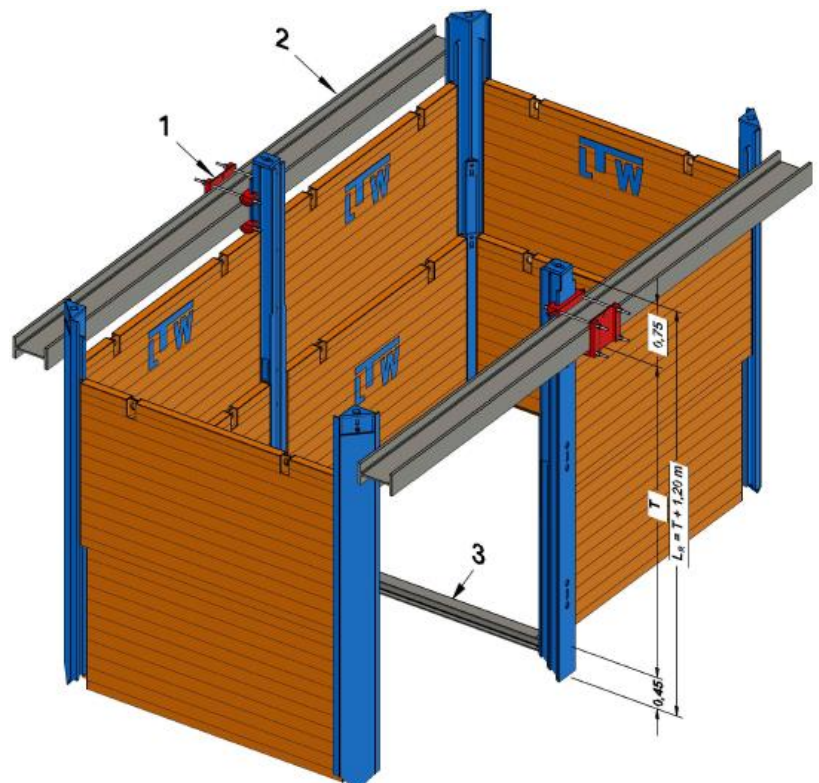
### 2 BAY PIT

Corner Slide Rails & DG PV



### CLAMPING DEVICE - Strut free 2 Bay Pit

Corner Slide Rails & DG PV



- 1 Clamping Device
- 2 upper waler H-Beam
- 3 bottom support or concrete floor

- T trench depth
- $L_R$  Rail Length =  $T + 1,20$  m

# TECHNICAL CHARACTERISTICS

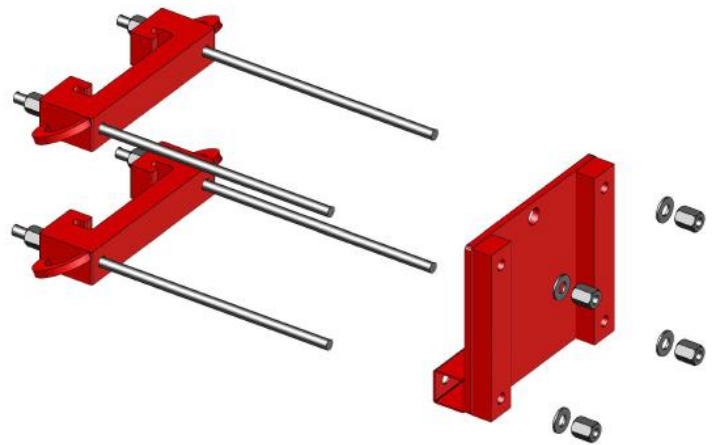
## LTW SLIDE RAIL SYSTEM - Type PV



### CLAMING DEVICE

consisting of:

Description	Qty.	Weight [ kg/pce.]
<i>Socket</i>	2	50,9
<i>End Plate</i>	1	94,2
<i>threaded rod</i>	4	4,5
<i>hex-nut</i>	8	0,5
<i>washer</i>	8	0,1
<b>complete kid</b>	<b>1</b>	<b>220</b>



The clamping device engages behind the outer rail guidance and clamps the outside horizontal upper waler (e.g. HEB 500). It creates a load-carrying connection which enables the forces that arise being discharged into the outer Slide Rails.