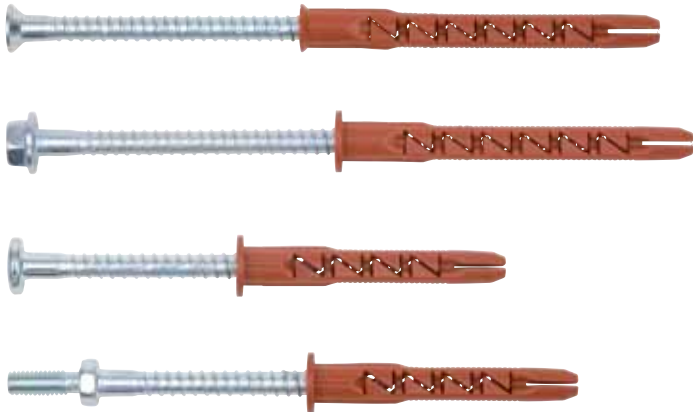


## FRAME FIXING W-UR



### Approvals and certificates



### Type of installation

Pre-positioned	In-place	Stand-off
-	✓	-

### Application references



### Installation



### Loads in Concrete

Screw Diameter			Ø 8				Ø 10		
Nominal embedment depth	$h_{nom}$	[mm]	50	70	50	70			
<b>Concrete C12/15</b>									
Tension	W-UR /S	$N_{rec}$	[kN]	1.19	1.59	0.79	0.99		
Shear		$V_{rec}$	[kN]	3.37	3.37	5.37	5.37		
Tension	W-UR /A4	$N_{rec}$	[kN]	1.19	1.59	0.79	0.99		
Shear		$V_{rec}$	[kN]	3.16	3.16	4.99	4.99		
Edge distance	W-UR/S; /A4	$c_{min}$	[mm]	60	60	70	70		
<b>Concrete ≥ C16/20</b>									
Tension	W-UR /S	$N_{rec}$	[kN]	1.59	2.38	1.19	1.59		
Shear		$V_{rec}$	[kN]	3.37	3.37	5.37	5.37		
Tension	W-UR /A4	$N_{rec}$	[kN]	1.59	2.38	1.19	1.59		
Shear		$V_{rec}$	[kN]	3.16	3.16	4.99	4.99		
Edge distance	W-UR/S; /A4	$c_{min}$	[mm]	40	40	50	50		

<sup>1)</sup> Loads are valid for anchors in indeterminate non-structural applications. Material safety factor  $\gamma_m$  and safety factor for action  $\gamma_1 = 1.4$  are included.

<sup>2)</sup> Loads for anchorages close to edge and/or with small spacing have to be reduced and should be calculated based on performance data given in the ETA.

<sup>3)</sup> The loads given are valid for the bricks and blocks which have been given. The loads can be taken for bricks and blocks of larger sizes, larger compressive strength of the masonry unit and same configuration of the cavities. The loads of the injection anchor may be determined by the so-called „job site tests“ according to ETAG029 and TR053.

## FRAME FIXING W-UR


### Loads in Masonry

Brick and Block	Type	Size	Compressive strength	Density	Drilling method	Screw Diameter	Nominal Embedment depth	Edge distance	In any direction <sup>1),2)</sup>
		[mm]	$f_b \geq$ [N/mm <sup>2</sup> ]	$\rho \geq$ [kg/dm <sup>3</sup> ]			$h_{nom}$	$c_{min}$ [mm]	$F_{rec}$ [kN]
Fired clay brick Mz	solid	240x115x71	20	1.8	Hammer	Ø 8	50	100	0.57
						Ø 8	70	100	0.57
						Ø 10	50	250	0.43
						Ø 10	70	100	0.86
Fired clay brick Hlz	perforated	240x115x113	12	1.2	Rotary	Ø 8	50	100	0.26
						Ø 8	70	100	0.43
						Ø 10	50	250	0.14
						Ø 10	70	100	0.43
Light aggregate block Vbl	Solid	500x365x238	2	0.6	Hammer	Ø 8	70	100	0.34
						Ø 10	70	100	0.43
Hollow brick concrete 2K Hbn	hollow	495x200x190	4	1.2	Rotary	Ø 8	70	100	0.43
Calcium silicate brick KS	solid	240x115x71	20	2.0	Hammer	Ø 8	50	100	0.71
						Ø 8	70	100	0.71
						Ø 10	50	50	0.43
						Ø 10	70	100	0.86
Calcium silicate block KSL	hollow	373x240x238	12	1.4	Rotary	Ø 10	50	60	0.21
						Ø 10	70	100	0.43
Aerated concrete block AAC	solid	499x175x249	6	0.3	Hammer	Ø 8	70	-	0.89
						Ø 10	70	-	0.93




<sup>1)</sup> Loads are valid for anchors in indeterminate non-structural applications. Material safety factor  $\gamma_m$  and safety factor for action  $\gamma_t = 1.4$  are included.

<sup>2)</sup> Loads for anchorages close to edge and/or with small spacing have to be reduced and should be calculated based on performance data given in the ETA.

<sup>3)</sup> The loads given are valid for the bricks and blocks which have been given. The loads can be taken for bricks and blocks of larger sizes, larger compressive strength of the masonry unit and same configuration of the cavities. The loads of the injection anchor may be determined by the so-called „job site tests“ according to ETAG029 and TR053.

Type	Total Length l [mm]	Fixture thickness t <sub>fix</sub> [mm]	Art. no.		Drive	P. Qty
			Carbon steel galvanized	Stainless steel A4		
W-UR countersunk head 						
Ø 8	60	10	0912 808 402	-	AW 30	50
	80	30/10	0912 808 403	-	AW 30	50
	100	50/30	0912 808 404	-	AW 30	50
	120	70/50	0912 808 405	-	AW 30	50
	140	90/70	0912 808 406	-	AW 30	50
	160	110/90	0912 808 407	-	AW 30	50
	60	10	-	0912 808 502	AW 30	50
	80	30/10	-	0912 808 503	AW 30	50
	100	50/30	-	S-procurement	AW 30	50
	120	70/50	-	S-procurement	AW 30	50
Ø 10	80	10	0912 810 401	0912 810 501	AW 40	50
	100	30	0912 810 402	0912 810 502	AW 40	50
	115	45	0912 810 403	0912 810 503	AW 40	50
	135	65	0912 810 404	0912 810 504	AW 40	50
	160	90	0912 810 405	0912 810 505	AW 40	50
	185	115	0912 810 406	0912 810 506	AW 40	50
	200	130	0912 810 407	0912 810 507	AW 40	50
	230	160	0912 810 408	-	AW 40	50
	260	190	0912 810 409	-	AW 40	50
	290	220	0912 810 410	-	AW 40	50
	320	250	0912 810 411	-	AW 40	50

## FRAME FIXING W-UR

Type	Total Length l [mm]	Fixture thickness t <sub>fix</sub> [mm]	Art. no.		Drive	P. Qty
			Carbon steel galvanized	Stainless steel A4		
W-UR Hex-bolt screw and pressed-on washer 						
Ø 8	60	10	<b>0912 808 602</b>	-	AW 25, SW 10	50
	80	30/10	<b>0912 808 603</b>	-	AW 25, SW 10	50
	100	50/30	<b>0912 808 604</b>	-	AW 25, SW 10	50
	120	70/50	<b>0912 808 605</b>	-	AW 25, SW 10	50
	60	10	-	<b>0912 808 702</b>	SW 10	50
	80	30/10	-	<b>0912 808 703</b>	SW 10	50
	100	50/30	-	S-procurement	SW 10	50
	120	70/50	-	S-procurement	SW 10	50
Ø 10	80	10	<b>0912 810 601</b>	-	AW 40 & SW 13	40
	100	30	<b>0912 810 602</b>	-	AW 40 & SW 13	40
	115	45	<b>0912 810 603</b>	-	AW 40 & SW 13	40
	135	65	<b>0912 810 604</b>	-	AW 40 & SW 13	40
	160	90	<b>0912 810 605</b>	-	AW 40 & SW 13	40
	185	115	<b>0912 810 606</b>	-	AW 40 & SW 13	40
	200	130	<b>0912 810 607</b>	-	AW 40 & SW 13	40
	230	160	<b>0912 810 608</b>	-	AW 40 & SW 13	40
	80	10	-	<b>0912 810 701</b>	SW 13	40
	100	30	-	<b>0912 810 702</b>	SW 13	40
	115	45	-	<b>0912 810 703</b>	SW 13	40
	135	65	-	<b>0912 810 704</b>	SW 13	40
	160	90	-	<b>0912 810 705</b>	SW 13	40
	W-UR Panhead 					
Ø 8	60	10	<b>0912 808 802</b>	-	AW 30	50
	80	30/10	<b>0912 808 803</b>	-	AW 30	50
	60	10	-	<b>0912 808 902</b>	AW 30	50
	80	30/10	-	<b>0912 808 903</b>	AW 30	50
W-UR stair bolt M6 						
Ø 8	60	10	<b>0912 808 202</b>	-	SW 10	50
	80	30/10	<b>0912 808 203</b>	-	SW 10	50
	60	10	-	<b>0912 808 302</b>	SW 10	50
	80	30/10	-	<b>0912 808 303</b>	SW 10	50
	60	10	<b>0912 808 252</b>	-	SW 10	50
	80	30/10	<b>0912 808 253</b>	-	SW 10	50