

R-KEX II with Post-Installed Rebars

Premium pure epoxy resin approved for use with post-installed rebar connections



Approvals and Reports

- ETA-13/0585



Product information

Features and benefits

- The strongest resin in the epoxy resin class
- Approved for use with post-installed rebars in non-cracked concrete (ETAG001 Option 7)
- Suitable for use in dry and wet substrates including under water
- High depth of anchoring – 2,5 m for rebar applications
- Very high chemical resistance – suitable for applications exposed to influence of various agents (industrial or marine environment)
- Minimal shrinkage provides option of use in diamond-drilled holes and oversized holes
- Extended bonding time ensures easy installation of metal components (up to 30 min. in 20°C)
- For use in positive temperatures

Applications

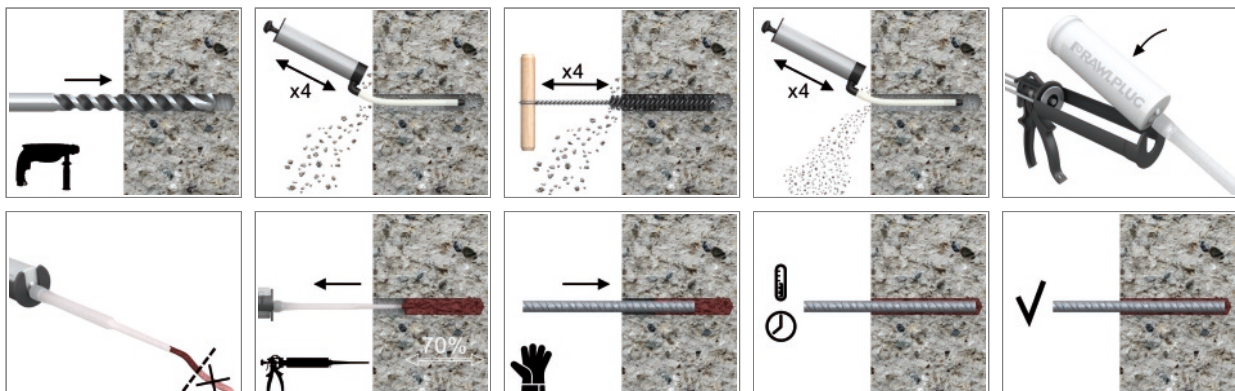
- Post-installed rebar connections
- Rebar
- Safety barriers
- Barriers
- Platforms

Base materials

Approved for use in:

- Concrete C20/25-C50/60

Installation guide



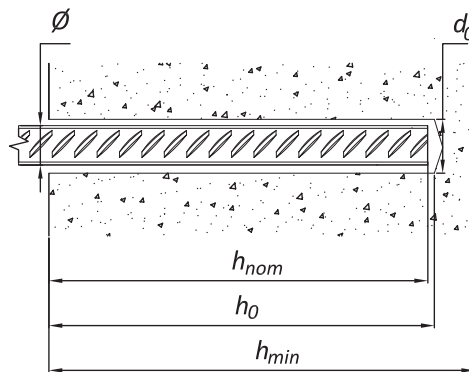
Product information

1. Drill hole to the required diameter and depth for stud size being used.
2. Clean the hole with brush and hand pump at least four times each. It is very important and necessary before installation.
3. Insert cartridge into gun and attach nozzle.
4. Dispense to waste until even colour is obtained.
5. Insert the mixing nozzle to the far end of the hole and inject resin, slowly withdrawing the nozzle as the hole is filled to 2/3 of its depth.
6. Immediately insert the rebar, slowly and with slight twisting motion. Remove any excess resin around the hole before it sets and leave it undisturbed until the curing time elapses.

Size	Product Code	Resin	Description / Resin Type	Volume
				[ml]
M8	R-KEX-II-385	R-KEX II	Epoxy Resin	385
M30	R-KEX-II-600			600

Product Code	Resin	Description / Resin Type	Volume
			[ml]
R-KEX-II-385	R-KEX II	Epoxy Resin	385
R-KEX-II-600			600

Installation data



POST INSTALLED REBARS

Size			Ø8	Ø10	Ø12	Ø14	Ø16	Ø20	Ø25	Ø28	Ø32
Rebar diameter	d_s	[mm]	8	10	12	14	16	20	25	28	32
Hole diameter in substrate	d_0	[mm]	12	14	16	18	20	25	30	35	40
Brush diameter	-	[mm]	14	16	18	20	22	27	32	37	42
Min. anchorage length (C20/25) A-II	$l_{b, min.}$	[mm]	100	101	121	141	161	201	252	282	322
Min. anchorage length (C50/60) A-II	$l_{b, min.}$	[mm]	100	100	120	140	160	200	250	280	320
Min. anchorage length (C20/25) A-III	$l_{b, min.}$	[mm]	100	116	140	163	186	233	291	326	372
Min. anchorage length (C50/60) A-III	$l_{b, min.}$	[mm]	100	100	120	140	160	200	250	280	320
Min. anchorage length (C20/25) A-IIIN	$l_{b, min.}$	[mm]	113	142	170	198	227	284	354	397	454
Min. anchorage length (C50/60) A-IIIN	$l_{b, min.}$	[mm]	100	100	120	140	160	200	250	280	348
Min. lap length (overlap splice)	$l_{o, min.}$	[mm]	200	200	200	210	240	300	375	420	480
Max. anchorage length	$l_{v, max.}$	[mm]	700	900	1100	1300	1400	1800	2200	2500	2500

Installation data

Minimum working and curing time

Resin temperature	Concrete temperature	Curing time*	Working time
[°C]	[°C]	[min]	[min]
5	5	960	180
10	10	600	120
15	15	300	60
20	20	270	50
25	25	240	40
25	30	180	20

Mechanical properties

POST INSTALLED REBARS

Size			Ø8	Ø10	Ø12	Ø14	Ø16	Ø20	Ø25	Ø28	Ø32
RB500/BSt500S											
Nominal ultimate tensile strength - tension	f_{uk}	[N/mm ²]	550	550	550	550	550	550	550	550	550
Nominal yield strength - tension	f_{yk}	[N/mm ²]	500	500	500	500	500	500	500	500	500
Cross sectional area - tension	A_s	[mm ²]	50.3	78.5	113.1	153.9	201.1	314.2	490.9	615.8	804.2
Elastic section modulus	W_{el}	[mm ³]	50.3	98.2	169.6	269.4	402.1	785.4	1534	2155.1	3217
Characteristic bending resistance	$M^0_{Rk,s}$	[Nm]	33	65	112	178	265	518	1012	1422	2123
Allowable bending resistance	M_{rec}	[Nm]	22	43	74	118	176	345	674	948	1415
B500SP											
Nominal ultimate tensile strength - tension	f_{uk}	[N/mm ²]	575	575	575	575	575	575	575	575	575
Nominal yield strength - tension	f_{yk}	[N/mm ²]	500	500	500	500	500	500	500	500	500
Cross sectional area - tension	A_s	[mm ²]	50.3	78.5	113.1	153.9	201.1	314.2	490.9	615.8	804.2
Elastic section modulus	W_{el}	[mm ³]	50.3	98.2	169.6	269.4	402.1	785.4	1534	2155.1	3217
Characteristic bending resistance	$M^0_{Rk,s}$	[Nm]	35	68	117	186	277	542	1059	1487	2220
Allowable bending resistance	M_{rec}	[Nm]	23	45	78	124	184	361	706	991	1480
34G5											
Nominal ultimate tensile strength - tension	f_{uk}	[N/mm ²]	500	500	500	500	500	500	500	500	500
Nominal yield strength - tension	f_{yk}	[N/mm ²]	410	410	410	410	410	410	410	410	410
Cross sectional area - tension	A_s	[mm ²]	50.3	78.5	113.1	153.9	201.1	314.2	490.9	615.8	804.2
Elastic section modulus	W_{el}	[mm ³]	50.3	98.2	169.6	269.4	402.1	785.4	1534	2155.1	3217
Characteristic bending resistance	$M^0_{Rk,s}$	[Nm]	30	59	102	162	241	471	920	1293	1930
Allowable bending resistance	M_{rec}	[Nm]	20	39	68	108	160	314	613	862	1286
18G2											
Nominal ultimate tensile strength - tension	f_{uk}	[N/mm ²]	480	480	480	480	480	480	480	480	480
Nominal yield strength - tension	f_{yk}	[N/mm ²]	355	355	355	355	355	355	355	355	355
Cross sectional area - tension	A_s	[mm ²]	50.3	78.5	113.1	153.9	201.1	314.2	490.9	615.8	804.2
Elastic section modulus	W_{el}	[mm ³]	50.3	98.2	169.6	269.4	402.1	785.4	1534	2155.1	3217
Characteristic bending resistance	$M^0_{Rk,s}$	[Nm]	29	57	98	155	232	452	884	1241	1853
Allowable bending resistance	M_{rec}	[Nm]	19	38	65	103	154	301	589	827	1285

Basic performance data

ANCHORAGES – DESIGN RESISTANCE – CONCRETE C20/25, STEEL A-II (18G2) [kN]																											
$\frac{l_{bd}}{d_s}$ [mm]	100	105	125	145	165	185	205	230	255	285	300	325	350	400	450	500	550	600	700	800	850	900	950	1000	1100	Steel failure	
8	5.8	6.1	7.2	8.4	9.5	10.7	11.9	13.3	14.7	15.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.51	
10	-	7.6	9.0	10.5	11.9	13.4	14.8	16.6	18.4	20.6	21.7	23.5	24.2	-	-	-	-	-	-	-	-	-	-	-	-	24.23	
12	-	-	10.8	12.6	14.3	16.0	17.8	19.9	22.1	24.7	26.0	28.2	30.3	34.7	34.9	-	-	-	-	-	-	-	-	-	-	34.89	
14	-	-	-	14.7	16.7	18.7	20.7	23.3	25.8	28.8	30.3	32.9	35.4	40.5	45.5	47.5	-	-	-	-	-	-	-	-	-	47.50	
16	-	-	-	-	19.1	21.4	23.7	26.6	29.5	32.9	34.7	37.6	40.5	46.2	52.0	57.8	62.0	-	-	-	-	-	-	-	-	62.04	
20	-	-	-	-	-	-	29.6	33.2	36.9	41.2	43.4	47.0	50.6	57.8	65.0	72.3	79.5	86.7	96.9	-	-	-	-	-	-	96.93	
25	-	-	-	-	-	-	-	-	46.1	51.5	54.2	58.7	63.2	72.3	81.3	90.3	99.4	108.4	126.4	144.5	151.5	-	-	-	-	151.45	
28	-	-	-	-	-	-	-	-	-	57.7	60.7	65.8	70.8	80.9	91.0	101.2	111.3	121.4	141.6	161.9	172.0	182.1	190.0	-	-	189.98	
32	-	-	-	-	-	-	-	-	-	-	-	75.1	80.9	92.5	104.0	115.6	127.2	138.7	161.9	185.0	196.5	208.1	219.7	231.2	248.1	248.14	

ANCHORAGES – DESIGN RESISTANCE – CONCRETE C50/60, STEEL A-II (18G2) [kN]																											
$\frac{l_{bd}}{d_s}$ [mm]	100	120	140	160	170	180	200	230	250	280	290	320	350	400	450	500	550	600	650	700	725	750	775	800	825	Steel Failure	
8	10.1	12.1	14.1	15.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.51	
10	12.6	15.1	17.6	20.1	21.4	22.6	24.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.23	
12	-	18.1	21.1	24.1	25.6	27.1	30.2	34.7	34.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.89	
14	-	-	24.6	28.1	29.9	31.7	35.2	40.5	44.0	47.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47.50	
16	-	-	-	32.2	34.2	36.2	40.2	46.2	50.3	56.3	58.3	62.0	-	-	-	-	-	-	-	-	-	-	-	-	-	62.04	
20	-	-	-	-	-	-	46.5	53.5	58.1	65.1	67.4	74.4	81.4	93.0	96.9	-	-	-	-	-	-	-	-	-	-	96.93	
25	-	-	-	-	-	-	-	-	72.6	81.4	84.3	93.0	101.7	116.2	130.8	145.3	151.5	-	-	-	-	-	-	-	-	151.45	
28	-	-	-	-	-	-	-	-	-	83.7	86.7	95.7	104.7	119.6	134.6	149.5	164.5	179.4	190.0	-	-	-	-	-	-	189.98	
32	-	-	-	-	-	-	-	-	-	-	-	96.5	105.6	120.6	135.7	150.8	165.9	181.0	196.0	211.1	218.7	226.2	233.7	241.3	248.1	248.14	

OVERLAP SPLICE – DESIGN RESISTANCE* – CONCRETE C20/25, STEEL A-II (18G2) [kN]																											
$\frac{l_b}{d_s}$ [mm]	200	210	240	250	260	300	330	375	400	420	440	460	480	500	530	550	600	670	750	800	830	900	930	1000	1100	Steel Failure	
8	11.6	12.1	13.9	14.5	15.0	15.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.51	
10	14.5	15.2	17.3	18.1	18.8	21.7	23.8	24.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.23	
12	17.3	18.2	20.8	21.7	22.5	26.0	28.6	32.5	34.7	34.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.89	
14	-	21.2	24.3	25.3	26.3	30.3	33.4	37.9	40.5	42.5	44.5	46.5	47.5	-	-	-	-	-	-	-	-	-	-	-	-	47.50	
16	-	-	27.7	28.9	30.1	34.7	38.2	43.4	46.2	48.6	50.9	53.2	55.5	57.8	61.3	62.0	-	-	-	-	-	-	-	-	-	62.04	
20	-	-	-	-	-	43.4	47.7	54.2	57.8	60.7	63.6	66.5	69.4	72.3	76.6	79.5	86.7	96.8	96.9	-	-	-	-	-	-	96.93	
25	-	-	-	-	-	-	-	67.7	72.3	75.9	79.5	83.1	86.7	90.3	95.7	99.4	108.4	121.0	135.5	144.5	149.9	151.5	-	-	-	151.45	
28	-	-	-	-	-	-	-	-	-	85.0	89.0	93.1	97.1	101.2	107.2	111.3	121.4	135.6	151.7	161.9	167.9	182.1	188.2	190.0	-	189.98	
32	-	-	-	-	-	-	-	-	-	-	-	-	111.0	115.6	122.5	127.2	138.7	154.9	173.4	185.0	191.9	208.1	215.0	231.2	248.1	248.14	

OVERLAP SPLICE – DESIGN RESISTANCE* – CONCRETE C50/60, STEEL A-II (18G2) [kN]																											
$\frac{l_b}{d_s}$ [mm]	200	210	240	270	300	325	350	375	400	420	450	480	500	525	550	575	600	625	650	675	700	725	750	800	825	Steel Failure	
8	15.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.51	
10	24.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.23	
12	30.2	31.7	34.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.89	
14	-	36.9	42.2	47.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47.50	
16	-	-	48.3	54.3	60.3	62.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62.04	
20	-	-	-	-	69.7	75.6	81.4	87.2	93.0	96.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96.93	
25	-	-	-	-	-	-	-	109.0	116.2	122.1	130.8	139.5	145.3	151.5	-	-	-	-	-	-	-	-	-	-	-	151.45	
28	-	-	-	-	-	-	-	-	-	125.6	134.6	143.6	149.5	157.0	164.5	172.0	179.4	186.9	190.0	-	-	-	-	-	-	189.98	
32	-	-	-	-	-	-	-	-	-	-	-	144.8	150.8	158.3	165.9	173.4	181.0	188.5	196.0	203.6	211.1	218.7	226.2	241.3	248.1	248.14	

Basic performance data

ANCHORAGES – DESIGN RESISTANCE – CONCRETE C20/25, STEEL A-III (34GS) [kN]																										
$\frac{l_{bd}}{d_s}$ [mm]	100	120	140	165	190	210	235	290	310	330	375	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300	Steel failure
8	5.8	6.9	8.1	9.5	11.0	12.1	13.6	16.8	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.91
10	-	8.7	10.1	11.9	13.7	15.2	17.0	21.0	22.4	23.8	27.1	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	27.99
12	-	-	12.1	14.3	16.5	18.2	20.4	25.1	26.9	28.6	32.5	34.7	39.0	40.3	-	-	-	-	-	-	-	-	-	-	-	40.30
14	-	-	-	16.7	19.2	21.2	23.8	29.3	31.4	33.4	37.9	40.5	45.5	50.6	54.9	-	-	-	-	-	-	-	-	-	-	54.85
16	-	-	-	-	22.0	24.3	27.2	33.5	35.8	38.2	43.4	46.2	52.0	57.8	63.6	69.4	71.7	-	-	-	-	-	-	-	-	71.65
20	-	-	-	-	-	-	34.0	41.9	44.8	47.7	54.2	57.8	65.0	72.3	79.5	86.7	93.9	101.2	108.4	112.0	-	-	-	-	-	111.95
25	-	-	-	-	-	-	-	52.4	56.0	59.6	67.7	72.3	81.3	90.3	99.4	108.4	117.4	126.4	135.5	144.5	162.6	174.9	-	-	-	174.92
28	-	-	-	-	-	-	-	-	-	66.8	75.9	80.9	91.0	101.2	111.3	121.4	131.5	141.6	151.7	161.9	182.1	202.3	219.4	-	-	219.42
32	-	-	-	-	-	-	-	-	-	-	86.7	92.5	104.0	115.6	127.2	138.7	150.3	161.9	173.4	185.0	208.1	231.2	254.3	277.5	286.6	286.59

ANCHORAGES – DESIGN RESISTANCE – CONCRETE C50/60, STEEL A-III (34GS) [kN]																											
$\frac{l_{bd}}{d_s}$ [mm]	100	120	140	160	190	200	240	250	280	290	300	320	350	400	450	500	550	600	700	750	800	850	900	950	1000	Steel Failure	
8	10.1	12.1	14.1	16.1	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.91	
10	12.6	15.1	17.6	20.1	23.9	25.1	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.99	
12	-	18.1	21.1	24.1	28.7	30.2	36.2	37.7	40.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.30	
14	-	-	24.6	28.1	33.4	35.2	42.2	44.0	49.3	51.0	52.8	54.9	-	-	-	-	-	-	-	-	-	-	-	-	-	54.85	
16	-	-	-	32.2	38.2	40.2	48.3	50.3	56.3	58.3	60.3	64.3	70.4	71.7	-	-	-	-	-	-	-	-	-	-	-	71.65	
20	-	-	-	-	-	46.5	55.8	58.1	65.1	67.4	69.7	74.4	81.4	93.0	104.6	112.0	-	-	-	-	-	-	-	-	-	111.95	
25	-	-	-	-	-	-	-	72.6	81.4	84.3	87.2	93.0	101.7	116.2	130.8	145.3	159.8	174.4	174.9	-	-	-	-	-	-	174.92	
28	-	-	-	-	-	-	-	-	83.7	86.7	89.7	95.7	104.7	119.6	134.6	149.5	164.5	179.4	209.4	219.4	-	-	-	-	-	219.42	
32	-	-	-	-	-	-	-	-	-	-	-	96.5	105.6	120.6	135.7	150.8	165.9	181.0	211.1	226.2	241.3	256.4	271.4	286.5	286.6	286.59	

OVERLAP SPLICE – DESIGN RESISTANCE* – CONCRETE C20/25, STEEL A-III (34GS) [kN]																											
$\frac{l_b}{d_s}$ [mm]	200	210	240	250	300	310	375	380	400	420	460	480	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	Steel Failure	
8	11.6	12.1	13.9	14.5	17.3	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.91	
10	14.5	15.2	17.3	18.1	21.7	22.4	27.1	27.5	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.99	
12	17.3	18.2	20.8	21.7	26.0	26.9	32.5	32.9	34.7	36.4	39.9	40.3	-	-	-	-	-	-	-	-	-	-	-	-	-	40.30	
14	-	21.2	24.3	25.3	30.3	31.4	37.9	38.4	40.5	42.5	46.5	48.6	50.6	54.9	-	-	-	-	-	-	-	-	-	-	-	54.85	
16	-	-	27.7	28.9	34.7	35.8	43.4	43.9	46.2	48.6	53.2	55.5	57.8	63.6	69.4	71.7	-	-	-	-	-	-	-	-	-	71.65	
20	-	-	-	-	43.4	44.8	54.2	54.9	57.8	60.7	66.5	69.4	72.3	79.5	86.7	93.9	101.2	108.4	112.0	-	-	-	-	-	-	111.95	
25	-	-	-	-	-	-	67.7	68.6	72.3	75.9	83.1	86.7	90.3	99.4	108.4	117.4	126.4	135.5	144.5	153.5	162.6	174.9	-	-	-	174.92	
28	-	-	-	-	-	-	-	-	-	85.0	93.1	97.1	101.2	111.3	121.4	131.5	141.6	151.7	161.9	172.0	182.1	202.3	219.4	-	-	219.42	
32	-	-	-	-	-	-	-	-	-	-	-	111.0	115.6	127.2	138.7	150.3	161.9	173.4	185.0	196.5	208.1	231.2	254.3	277.5	286.6	286.59	

OVERLAP SPLICE – DESIGN RESISTANCE* – CONCRETE C50/60, STEEL A-III (34GS) [kN]																											
$\frac{l_b}{d_s}$ [mm] [mm]	200	210	240	260	280	300	330	350	375	400	420	450	480	500	525	550	600	650	700	750	800	850	900	950	1000	Steel Failu- re	
8	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.91	
10	25.1	26.4	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.99	
12	30.2	31.7	36.2	39.2	40.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.30	
14	-	36.9	42.2	45.7	49.3	52.8	54.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54.85	
16	-	-	48.3	52.3	56.3	60.3	66.4	70.4	71.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71.65	
20	-	-	-	-	-	69.7	76.7	81.4	87.2	93.0	97.6	104.6	111.6	112.0	-	-	-	-	-	-	-	-	-	-	-	111.95	
25	-	-	-	-	-	-	-	-	109.0	116.2	122.1	130.8	139.5	145.3	152.6	159.8	174.4	174.9	-	-	-	-	-	-	-	174.92	
28	-	-	-	-	-	-	-	-	-	-	125.6	134.6	143.6	149.5	157.0	164.5	179.4	194.4	209.4	219.4	-	-	-	-	-	219.42	
32	-	-	-	-	-	-	-	-	-	-	-	-	144.8	150.8	158.3	165.9	181.0	196.0	211.1	226.2	241.3	256.4	271.4	286.5	286.6	286.59	

Basic performance data

ANCHORAGES – DESIGN RESISTANCE – CONCRETE C20/25, STEEL A-IIIN (RB500/BS1500S/BS500SP) [kN]																											
$\frac{l_{bd}}{d_s}$ [mm]	115	145	160	170	200	230	250	285	300	355	375	400	455	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	Steel failure	
8	6.6	8.4	9.2	9.8	11.6	13.3	14.5	16.5	17.3	20.5	21.7	21.8	-	-	-	-	-	-	-	-	-	-	-	-	-	21.84	
10	-	10.5	11.6	12.3	14.5	16.6	18.1	20.6	21.7	25.7	27.1	28.9	32.9	34.1	-	-	-	-	-	-	-	-	-	-	-	34.13	
12	-	-	-	14.7	17.3	19.9	21.7	24.7	26.0	30.8	32.5	34.7	39.5	43.4	49.2	-	-	-	-	-	-	-	-	-	-	49.15	
14	-	-	-	-	20.2	23.3	25.3	28.8	30.3	35.9	37.9	40.5	46.0	50.6	60.7	66.9	-	-	-	-	-	-	-	-	-	66.90	
16	-	-	-	-	-	26.6	28.9	32.9	34.7	41.0	43.4	46.2	52.6	57.8	69.4	80.9	87.4	-	-	-	-	-	-	-	-	87.37	
20	-	-	-	-	-	-	-	41.2	43.4	51.3	54.2	57.8	65.8	72.3	86.7	101.2	115.6	130.1	136.5	-	-	-	-	-	-	136.52	
25	-	-	-	-	-	-	-	-	-	64.1	67.7	72.3	82.2	90.3	108.4	126.4	144.5	162.6	180.6	198.7	213.3	-	-	-	-	213.32	
28	-	-	-	-	-	-	-	-	-	-	-	80.9	92.1	101.2	121.4	141.6	161.9	182.1	202.3	222.6	242.8	263.0	267.6	-	-	267.58	
32	-	-	-	-	-	-	-	-	-	-	-	-	105.2	115.6	138.7	161.9	185.0	208.1	231.2	254.3	277.5	300.6	323.7	346.8	349.5	349.50	

ANCHORAGES – DESIGN RESISTANCE – CONCRETE C50/60, STEEL A-IIIN (RB500/BS500S/BS500SP) [kN]																											
$\frac{l_{bd}}{d_s}$ [mm]	100	120	140	160	180	200	220	250	280	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1200	Steel Failure	
8	10.1	12.1	14.1	16.1	18.1	20.1	21.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.84	
10	12.6	15.1	17.6	20.1	22.6	25.1	27.6	31.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.13	
12	-	18.1	21.1	24.1	27.1	30.2	33.2	37.7	42.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.15	
14	-	-	24.6	28.1	31.7	35.2	38.7	44.0	49.3	52.8	61.6	66.9	-	-	-	-	-	-	-	-	-	-	-	-	-	66.90	
16	-	-	-	32.2	36.2	40.2	44.2	50.3	56.3	60.3	70.4	80.4	87.4	87.4	-	-	-	-	-	-	-	-	-	-	-	87.37	
20	-	-	-	-	-	46.5	51.1	58.1	65.1	69.7	81.4	93.0	104.6	116.2	127.9	136.5	-	-	-	-	-	-	-	-	-	136.52	
25	-	-	-	-	-	-	-	72.6	81.4	87.2	101.7	116.2	130.8	145.3	159.8	174.4	188.9	203.4	213.3	-	-	-	-	-	-	213.32	
28	-	-	-	-	-	-	-	-	83.7	89.7	104.7	119.6	134.6	149.5	164.5	179.4	194.4	209.4	224.3	239.3	254.2	267.6	-	-	-	267.58	
32	-	-	-	-	-	-	-	-	-	-	105.6	120.6	135.7	150.8	165.9	181.0	196.0	211.1	226.2	241.3	256.4	271.4	286.5	301.6	349.5	349.50	

OVERLAP SPLICE – DESIGN RESISTANCE – CONCRETE C20/25, STEEL A-IIIN (RB500/BS500S/BS500SP) [kN]																										
$\frac{l_b}{d_s}$ [mm] [mm]	200	210	240	270	300	330	375	420	480	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1600	Steel Failu- re
8	11.6	12.1	13.9	15.6	17.3	19.1	21.7	21.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.84
10	14.5	15.2	17.3	19.5	21.7	23.8	27.1	30.3	34.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.13
12	17.3	18.2	20.8	23.4	26.0	28.6	32.5	36.4	41.6	43.4	47.7	49.2	-	-	-	-	-	-	-	-	-	-	-	-	-	49.15
14	-	21.2	24.3	27.3	30.3	33.4	37.9	42.5	48.6	50.6	55.6	60.7	65.8	66.9	-	-	-	-	-	-	-	-	-	-	-	66.90
16	-	-	27.7	31.2	34.7	38.2	43.4	48.6	55.5	57.8	63.6	69.4	75.1	80.9	86.7	87.4	-	-	-	-	-	-	-	-	-	87.37
20	-	-	-	-	43.4	47.7	54.2	60.7	69.4	72.3	79.5	86.7	93.9	101.2	108.4	115.6	122.8	130.1	136.5	-	-	-	-	-	-	136.52
25	-	-	-	-	-	-	67.7	75.9	86.7	90.3	99.4	108.4	117.4	126.4	135.5	144.5	153.5	162.6	180.6	198.7	213.3	-	-	-	-	213.32
28	-	-	-	-	-	-	-	85.0	97.1	101.2	111.3	121.4	131.5	141.6	151.7	161.9	172.0	182.1	202.3	222.6	242.8	263.0	267.6	-	-	267.58
32	-	-	-	-	-	-	-	-	111.0	115.6	127.2	138.7	150.3	161.9	173.4	185.0	196.5	208.1	231.2	254.3	277.5	300.6	323.7	346.8	349.5	349.50

OVERLAP SPLICE – DESIGN RESISTANCE – CONCRETE C50/60, STEEL A-IIIN (RB500/BS500S/BS500SP) [kN]																											
$\frac{l_b}{d_s}$ [mm]	0	210	230	240	290	300	330	350	375	390	410	420	470	480	550	600	650	700	750	800	850	900	1000	1100	1200	Steel Failu- re	
8	20.1	21.1	21.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.84	
10	25.1	26.4	28.9	30.2	34.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.13	
12	30.2	31.7	34.7	36.2	43.7	45.2	49.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.15	
14	-	36.9	40.5	42.2	51.0	52.8	58.1	61.6	66.0	66.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66.90	
16	-	-	-	48.3	58.3	60.3	66.4	70.4	75.4	78.4	82.4	84.4	87.4	-	-	-	-	-	-	-	-	-	-	-	-	87.37	
20	-	-	-	-	-	69.7	76.7	81.4	87.2	90.7	95.3	97.6	109.3	111.6	127.9	136.5	-	-	-	-	-	-	-	-	-	136.52	
25	-	-	-	-	-	-	-	-	109.0	113.3	119.1	122.1	136.6	139.5	159.8	174.4	188.9	203.4	213.3	-	-	-	-	-	-	213.32	
28	-	-	-	-	-	-	-	-	-	-	-	125.6	140.6	143.6	164.5	179.4	194.4	209.4	224.3	239.3	254.2	267.6	-	-	-	267.58	
32	-	-	-	-	-	-	-	-	-	-	-	-	-	144.8	165.9	181.0	196.0	211.1	226.2	241.3	256.4	271.4	301.6	331.8	349.5	349.50	

Design performance data

POST INSTALLED REBARS

Size			Ø8	Ø10	Ø12	Ø14	Ø16	Ø20	Ø25	Ø28	Ø32
TENSION LOAD											
Mean ultimate bond resistance C12/15	f_{bd}	[N/mm ²]	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Mean ultimate bond resistance C16/20	f_{bd}	[N/mm ²]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Mean ultimate bond resistance C20/25	f_{bd}	[N/mm ²]	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Mean ultimate bond resistance C25/30	f_{bd}	[N/mm ²]	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Mean ultimate bond resistance C30/37	f_{bd}	[N/mm ²]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Mean ultimate bond resistance C35/45	f_{bd}	[N/mm ²]	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.00
Mean ultimate bond resistance C40/50	f_{bd}	[N/mm ²]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.40	3.00
Mean ultimate bond resistance C45/55	f_{bd}	[N/mm ²]	4.00	4.00	4.00	4.00	4.00	3.70	3.70	3.40	3.00
Mean ultimate bond resistance C50/60	f_{bd}	[N/mm ²]	4.00	4.00	4.00	4.00	4.00	3.70	3.70	3.40	3.00

Product commercial data

Size	Product Code	Volume [ml]	Quantity [pcs]			Weight [kg]			Bar Codes
			Box	Outer	Pallet	Box	Outer	Pallet	
Ø32	R-KEX-II-385 ¹⁾	385	10	10	380	6.7	6.7	285.0	5906675028538
	R-KEX-II-600 ¹⁾	600	7	7	441	7.0	7.0	472.7	5906675293721

¹⁾ ETA-13/0585