



Certificates and approvals



Base material

- Concrete
- Concrete block
- Solid and hollow brick

Features

- CE-approved anchor for threaded rods and rebar.
- Compact and easy-to-use system.
- Clean and simple: the mixer ensures correct dosing.
- Cost-effective: no resin waste. An unused cartridge can be reused multiple times.
- Safe: high-performance mechanical anchoring.
- Versatile: suitable for use in both hollow and solid materials. Can be used with threaded rods, rebars, grilles, etc.
- Excellent mechanical resistance (higher than epoxy-acrylate resins).
- Better resistance to chemical agents than epoxy-acrylate resins.
- Good fire resistance.
- Free from phthalates and styrene (safe for users and installers).
- Sets even in the presence of water.
- Installation temperature: -10°C to 40°C.
- Shelf life: 18 months.
- Service life of the anchor: 50 years.
- Materials:
 - Two-component vinyl resin.
 - Threaded rod (grade 5.8, 8.8 or stainless steel).
 - Deformed steel rebar.

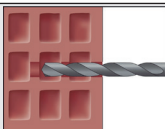
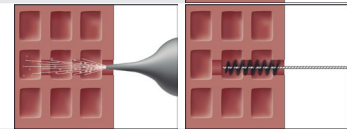
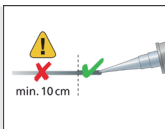
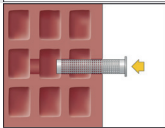
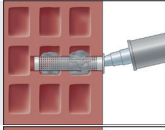
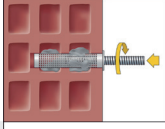
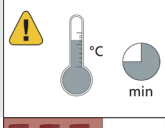
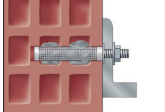
Cartridge formats

Cartridge	Dispensing gun
280 ml cartridge	OL 280 
410 ml cartridge	OL 410/420 and "COX" 

Installation procedure in concrete

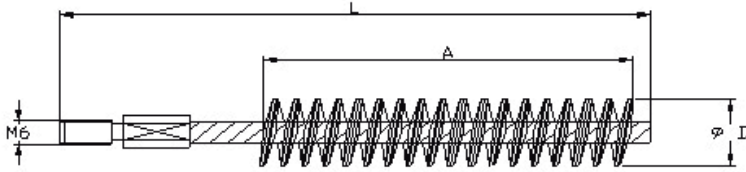
		Drill a hole in the base material with the required diameter and depth for the selected anchor size.
		Starting from the bottom, clean the hole with compressed air or with the manual brush a minimum of 4 times. If the bottom cannot be reached, an extension must be used. The manual brush can be used for hole diameters up to 20 mm. For diameters greater than 20 mm or holes deeper than 240 mm, compressed air must be used (minimum 6 bar).
		Use a brush of the required diameter according to table 5 of the CE approval and insert the brush into a drill or an electric screwing machine. Clean the hole a minimum of 4 times with a brush length > db, min. If the bottom cannot be reached, an extension must be used.
		Finally, clean the hole again with compressed air or with the manual brush a minimum of 4 times. If the bottom cannot be reached, an extension must be used. The manual brush can be used for hole diameters up to 20 mm. For diameters greater than 20 mm or holes deeper than 240 mm, compressed air must be used (minimum 6 bar).
		Attach the mixing nozzle to the cartridge and insert the cartridge into the appropriate injection gun. Whenever the injection is interrupted for longer than the recommended working time, the mixing nozzle must be changed.
		Mark the required embedment depth on the rod before inserting it into the resin-filled hole.
		Before filling the hole, dispense the resin separately and discard the improperly mixed material until it acquires a uniform grey color.
		Starting from the bottom, fill the clean hole approximately two-thirds full. Slowly withdraw the mixing nozzle from the back of the hole during injection to prevent air voids. For embedment depths greater than 190mm, use an extension tube. For horizontal installations with hole diameters greater than 20mm, use a piston plug to support the anchor rod. Refer to the resin curing times.
		Push the threaded rod or rebar into the hole with a slight twisting motion to ensure homogeneous distribution. The hole must be free of dirt, grease, oil, or other materials.
		Ensure the rod is inserted to the end of the hole and that the mixture overflows from it. If these conditions are not met, the hole must be refilled and a new rod installed.
		Allow the mixture to cure properly, observing the curing time. Do not apply any load or tighten the anchor until the resin has fully cured.
		After the curing time, the installation can be completed with the appropriate tightening torque using a torque wrench.

Installation procedure in hollow brick

	Drill a rotary-only hole into the base material to the required diameter and depth for the anchor.
	If water is present in the hole, it must be removed (e.g., using compressed air or a blow-out pump). Clean the hole with a brush, starting from the bottom, a minimum of 2 times. Finally, blow out the hole 2 more times.
Attach the mixing nozzle to the cartridge and insert the cartridge into the appropriate dispensing gun. If injection is interrupted for longer than the recommended working time, the mixing nozzle must be replaced.	
Before inserting the rod into the resin-filled hole, the embedment depth must be marked on it.	
	Before filling the hole, dispense the resin separately and discard the improperly mixed material until it acquires a uniform grey color.
	Insert the perforated sleeve into the hole, ensuring its correct placement. Never cut the sleeve. Only use sleeves that have the correct depth.
	Starting from the bottom, fill the sleeve completely with resin. Observe the gel time (hardening start time).
	Push the threaded rod or rebar into the hole with a slight twisting motion to ensure homogeneous distribution. The hole must be free of dirt, grease, oil, or other materials.
	Allow the mixture to cure properly, observing the curing time. Do not apply any load or tighten the anchor until the resin has fully cured.
	After the curing time, the installation can be completed with the appropriate tightening torque using a torque wrench.

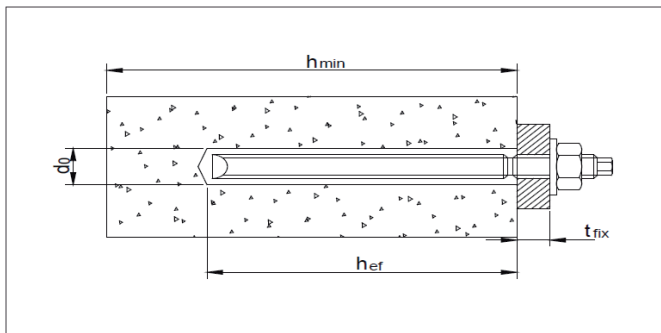
Hole cleaning (concrete)

Available in 280 ml and 410 ml formats.

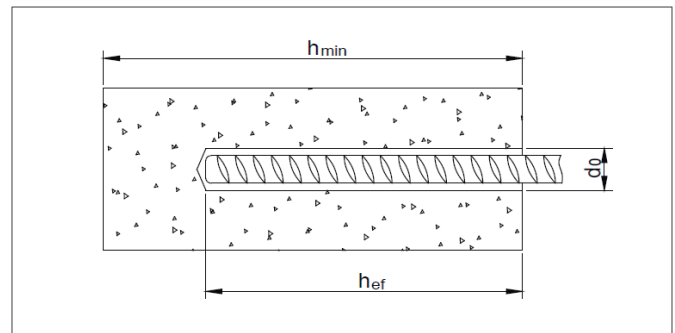


Threaded rod (mm)	Rebar (mm)	Drill hole Ø (mm)	Brush Ø d _p (mm)	Min. brush Ø d _p min (mm)
M8		70	80	100
M10	8.0	90	90	100
M12	10.0 12.0	14.0 16.0	16.0 18.0	14.5 16.5
M16	14.0 16.0	18.0 20.0	20.0 22.0	18.5 20.5
M20	20.0	24.0	26.0	24.5
M24		28.0	30.0	28.5
M27	25.0	32.0	34.0	32.5
M30	28.0 32.0	35.0 40.0	37.0 41.5	35.5 40.5

Installation parameters (concrete)



Threaded rod



Reinforcing steel

Threaded rod		M8	M10	M12	M16	M20	M24	M27	M30
Drill bit Ø (mm)	d ₀	10	12	14	18	24	28	32	35
Drill hole Ø in the fixture (mm)	d _f	9	12	14	18	22	26	30	33
Minimum effective depth (mm)	h _{ef,min}	60	60	70	80	22	26	30	33
Maximum effective depth (mm)	h _{ef,max}	160	200	240	320	400	480	540	600
Minimum concrete thickness (mm)	h _{min}	h _{ef} + 30 mm ≥ 100 mm					h _{ef} + 2d ₀		
Maximum tightening torque (Nm)	T _{inst}	10	20	40	80	120	160	180	200
Characteristic spacing between anchors (mm)	S _{cr,N}	184	252	304	376	506	582	624	658
Minimum spacing between anchors (mm)	S _{min}	40	50	60	80	100	120	135	150
Characteristic edge distance (mm)	C _{cr,N}	92	126	152	188	253	291	312	329
Minimum edge distance (mm)	C _{min}	40	50	60	80	100	120	135	150

TECHNICAL DATA SHEET

ResiFIX VY / VINYLESTER

FIXING

CELO

Reinforcing steel		Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 20	Ø 25	Ø 28	Ø 32
Drill bit Ø (mm)	d_0	12	14	16	18	20	24	32	35	40
Minimum effective depth (mm)	$h_{ef,min}$	60	60	70	75	80	90	100	112	128
Maximum effective depth (mm)	$h_{ef,max}$	160	200	240	280	320	400	480	540	640
Minimum concrete thickness (mm)	h_{min}	$h_{ef} + 30 \text{ mm}$ $\geq 100 \text{ mm}$					$h_{ef} + 2d_0$			
Characteristic spacing between anchors (mm)	$S_{cr,N}$	184	252	304	346	376	506	606	646	682
Minimum spacing between anchors (mm)	S_{min}	40	50	60	70	80	100	125	140	160
Characteristic edge distance (mm)	$C_{cr,N}$	92	126	152	173	188	253	303	326	341
Minimum edge distance (mm)	C_{min}	40	50	60	70	80	100	125	140	160

Recommended load in dry concrete C20/25

Reinforcing steel				M8	M10	M12	M16	M20	M24	M27	M30
Recommended load in steel grade 5.8											
Tensile load (kg)	24°C	Non-cracked concrete	N _{Rec. stat}	860	1280	1970	2800	4440	6100	7920	9390
		Cracked concrete	N _{Rec. stat}	340	530	910	1370	2330	3460	5470	6690
			N _{Rec. seis}	220	330	620	930	1590	2380	3770	4710
Shear load (kg) ⁽²⁾		Non-cracked concrete	V _{Rec. stat}	510	860	1200	2290	3540	5090	6570	8060
		Cracked concrete	V _{Rec. stat}	510	860	1200	1860	3040	4280	5650	6800
			V _{Rec. seis} ⁽¹⁾	360	600	840	1600	2480	3560	4600	5640
Embedment depth (mm)			h _{ef}	80	90	110	125	170	210	250	270
Edge distance (mm)			C _{cr,N}	92	126	152	188	253	291	312	329
Anchor spacing (mm)			S _{cr,N}	2 x C _{cr,N}							

(1) The gap between the rod and the fixing hole must be filled with mortar.

(2) Shear with lever arm according to TR029; for seismic load according to TR045.

$N_{Rec.stat}$, $V_{Rec.stat}$ Recommended loads under static or quasi-static actions.

$N_{Rec.seis}$, $V_{Rec.seis}$ Recommended loads under seismic actions.

Bst 500 S reinforcing bar				Ø 8 ⁽¹⁾	Ø 10 ⁽¹⁾	Ø 12	Ø 14	Ø 16	Ø 20	Ø 25	Ø 28	Ø 32
Recommended load in steel grade 5.8												
Tensile load (kg)	24°C	Non-cracked concrete	N _{Rec. stat}	860	1280	1970	2410	2800	4440	6100	7920	8890
		Cracked concrete	N _{Rec. stat}	340	530	910	1100	1370	2330	3600	5650	6340
			N _{Rec. seis}	220	330	620	750	930	1610	2480	3910	4830
Shear load (kg) ⁽²⁾		Non-cracked concrete	V _{Rec. stat}	800	1260	1770	2270	2620	4290	6080	8030	9180
		Cracked concrete	V _{Rec. stat}	690	1060	1470	1610	1860	3040	4310	5680	6500
			V _{Rec. seis} ⁽¹⁾	370	670	1240	1510	1860	3040	4310	5680	6500
Embedment depth (mm)			h _{ef}	80	90	110	115	125	170	210	250	270
Edge distance (mm)			C _{cr,N}	92	126	152	173	188	253	303	323	341
Anchor spacing (mm)			S _{cr,N}	2 x C _{cr,N}								

(1) The gap between the rod and the fixing hole must be filled with mortar.

(2) Shear with lever arm according to TR029; for seismic load according to TR045.

$N_{Rec.stat}$, $V_{Rec.stat}$ Recommended loads under static or quasi-static actions.

$N_{Rec.seis}$, $V_{Rec.seis}$ Recommended loads under seismic actions.

Increase factor depending on concrete

The load must be multiplied by the correction factor depending on the type of concrete.

Concrete type	Increase factor
Concrete C30/37	1.04
Concrete C40/50	1.08
Concrete C50/60	1.10

Fire resistance

Fire resistance time of threaded rods (M8 to M30), zinc-plated, grade 5.8 or higher, or A4-70 stainless steel rods.

Anchor dimension	Tiempo de resistencia al fuego (MIN.)			
	30 min. max.F (kN)	60 min. max.F (kN)	90 min. max.F (kN)	120 min. max.F (kN)
M8	≤ 1.6	≤ 1.1	≤ 0.6	≤ 0.3
M10	≤ 2.6	≤ 1.8	≤ 0.9	≤ 0.5
M12	≤ 3.4	≤ 2.6	≤ 1.8	≤ 1.4
M16	≤ 6.2	≤ 4.8	≤ 3.4	≤ 2.7
M20	≤ 9.8	≤ 7.5	≤ 5.3	≤ 4.2
M24	≤ 14.0	≤ 10.8	≤ 7.6	≤ 6.0
M27	≤ 18.3	≤ 14.1	≤ 9.9	≤ 7.9
M30	≤ 22.3	≤ 17.2	≤ 12.1	≤ 9.6

Minimum curing time

Concrete temperature	Start of setting	Final setting	
		Dry concrete	Wet concrete
-10 °C*	90 min.	24 h.	48 h.
-5 °C	90 min.	14 h.	28 h.
0 °C	45 min.	7 h.	14 h.
5 °C	25 min.	2 h.	4 h.
10 °C	15 min.	80 min.	160 min.
20 °C	6 min.	45 min.	90 min.
30 °C	4 min.	25 min.	50 min.
35 °C	2 min.	20 min.	40 min.

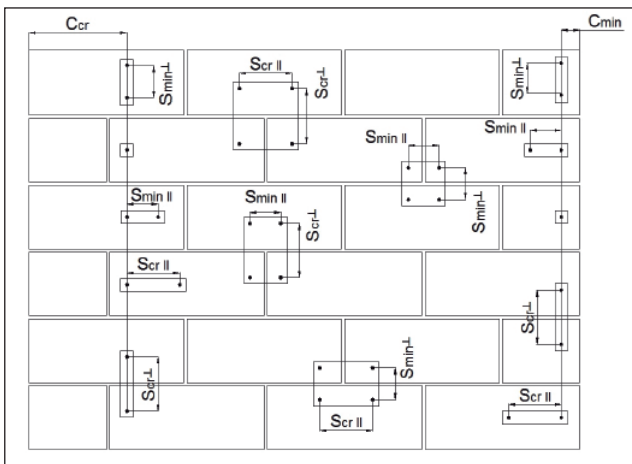
*The cartridge temperature must be at least 15°C.

Installation parameters

Installation without sleeve								
Solid brick		M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Drill bit Ø (mm)	d ₀	10	12	14	18	10	12	16
Drill hole Ø in the fixture (mm)	d _f	9	12	14	18	7	9	12
Effective embedment depth (mm)	h _{ef}	80	90	100	100	90	100	100

Installation without sleeve									
Hollow and solid brick		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12x80	16x85	16x85	20x85	20x85	16x85	20x85	20x85
			16x130	16x130	20x130	20x130	16x130	20x130	20x130
			16x200	16x200	20x200	20x200	16x200	20x200	20x200
Drill bit Ø (mm)	d ₀	12	16	16	20	20	16	20	20
Drill hole Ø in the fixture (mm)	d _f	9	9	12	14	18	7	9	12
Effective embedment depth (mm)	h _{ef}	80	85	85	85	85	85	85	85
			130	130	130	130	130	130	130
			200	200	200	200	200	200	200
Hole depth (mm)	h ₀	85	90	90	90	90	90	90	90
			135	135	135	135	135	135	135
			205	205	205	205	205	205	205

Spacing between anchors and edge distance



S: Spacing
E: Edge distance

Recommended loads in masonry

Solid calcium silicate brick (KS-NF):

- Dimensions: 240 × 115 × 71 mm.
- Compressive strength $\geq 10 \text{ N/mm}^2$.
- Density $\geq 2 \text{ kg/dm}^3$.

Without sleeve		M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Effective embedment depth (mm)	h_{ef}	80	90	100	100	90	100	100
Minimum wall thickness (mm)	h_{min}	115	240	240	240	240	240	240
Tightening torque (N·m)	T_{inst}	2						
Characteristic edge distance (mm)	C_{cr}	120	135	150	150	135	150	150
Minimum edge distance (mm)	C_{min}	60						
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$	240	270	300	300	270	300	300
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$	240	270	300	300	270	300	300
Recommended tensile load (kg)	N_{per}	153	153	153	143	153	153	143
Recommended shear load (kg)	V_{per}	114						

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80			85 ; 130 ; 200				
Minimum wall thickness (mm)	h_{min}	115			$h_{ef} + 30$ mm				
Tightening torque (N·m)	T_{inst}				2				
Characteristic edge distance (mm)	C_{cr}	120			127.5				
Minimum edge distance (mm)	C_{min}				60				
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$	240			255				
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$	240			255				
Recommended tensile load (kg)	N_{per}	153	143	143	114	114	143	114	114
Recommended shear load (kg)	V_{per}				144				

Solid clay brick (Mz-1DF):

- Dimensions: 240 × 115 × 55 mm.
- Compressive strength ≥ 10 N/mm².
- Density ≥ 1.6 kg/dm³.

Without sleeve		M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Effective embedment depth (mm)	h_{ef}	80	90	100	100	90	100	100
Minimum wall thickness (mm)	h_{min}	115	240	240	240	240	240	240
Tightening torque (N·m)	T_{inst}				14			
Characteristic edge distance (mm)	C_{cr}	120	135	150	150	135	150	150
Minimum edge distance (mm)	C_{min}				60			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$	240	270	300	300	270	300	300
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$	240	270	300	300	270	300	300
Recommended tensile load (kg)	N_{per}	129	157	171	171	157	171	171
Recommended shear load (kg)	V_{per}				143			

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80			85 ; 130 ; 200				
Minimum wall thickness (mm)	h_{min}	115			$h_{ef} + 30$ mm				
Tightening torque (N·m)	T_{inst}				2				
Characteristic edge distance (mm)	C_{cr}	120			127.5				
Minimum edge distance (mm)	C_{min}				60				
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$	240			255				
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$	240			255				
Recommended tensile load (kg)	N_{per}	153	143	143	114	114	143	114	114
Recommended shear load (kg)	V_{per}				144				

Lightweight and solid concrete block (LAC):

- Dimensions: 300 × 123 × 248 mm.
- Compressive strength $\geq 2 \text{ N/mm}^2$.
- Density $\geq 0.6 \text{ kg/dm}^3$.

Without sleeve		M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Effective embedment depth (mm)	h_{ef}	80	90	100	100	90	100	100
Minimum wall thickness (mm)	h_{min}				300			
Tightening torque (N·m)	T_{inst}				2			
Characteristic edge distance (mm)	C_{cr}	120	135	150	150	135	150	150
Minimum edge distance (mm)	C_{min}				60			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$	240	270	300	300	270	300	300
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$	240	270	300	300	270	300	300
Recommended tensile load (kg)	N_{per}	86	86	100	86	86	100	86
Recommended vertical shear load (kg)	$V_{per V}$				86			
Recommended horizontal shear load (kg)	$V_{per H}$	60	78	86	86	67	86	86

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130 ; 200			
Minimum wall thickness (mm)	h_{min}					300			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}	120				127.5			
Minimum edge distance (mm)	C_{min}					60			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$	240				255			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$	240				255			
Recommended tensile load (kg)	N_{per}	71	86	86	71	71	86	71	71
Recommended vertical shear load (kg)	$V_{per V}$					86			
Recommended horizontal shear load (kg)	$V_{per H}$	67	81	81	86	86	81	86	86

Autoclaved aerated concrete (AAC):

- Dimensions: 499 × 249 × 240 mm.
- Compressive strength $\geq 6 \text{ N/mm}^2$.
- Density $\geq 0.6 \text{ kg/dm}^3$.

Without sleeve		M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Effective embedment depth (mm)	h_{ef}	80	90	100	100	90	100	100
Minimum wall thickness (mm)	h_{min}				240			
Tightening torque (N·m)	T_{inst}				2			
Characteristic edge distance (mm)	C_{cr}	120	135	150	150	135	150	150
Minimum edge distance (mm)	C_{min}				75			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$	240	270	300	300	270	300	300
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$	240	270	300	300	270	300	300
Recommended tensile load (kg)	N_{per}	89	143	179	232	143	179	232
Recommended vertical shear load (kg)	$V_{per V}$	241	303	357	357	179	321	357
Recommended horizontal shear load (kg)	$V_{per H}$	129	168	213	232	144	188	201

Hollow concrete block (Bloc Creux B40):

- Dimensions: 499 × 200 × 190 mm.
- Compressive strength $\geq 4 \text{ N/mm}^2$.
- Density $\geq 0.8 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130			
Minimum wall thickness (mm)	h_{min}					200			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}	100	100	100	120	120	100	120	120
Minimum edge distance (mm)	C_{min}					120			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					495			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					190			
Recommended tensile load (kg)	N_{per}					34			
Recommended vertical shear load (kg)	$V_{per V}$					86			
Recommended horizontal shear load (kg)	$V_{per H}$					26			

Hollow calcium silicate brick (KS-L-3DF):

- Dimensions: 240 × 175 × 113 mm.
- Compressive strength $\geq 12 \text{ N/mm}^2$.
- Density $\geq 1.4 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130			
Minimum wall thickness (mm)	h_{min}					175			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					60			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					240			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					120			
Recommended tensile load (kg)	N_{per}	57	57	57	171	171	57	171	171
Recommended vertical shear load (kg)	$V_{per V}$					114			
Recommended horizontal shear load (kg)	$V_{per H}$					43			

Hollow calcium silicate brick (KS-L-3DF):

- Dimensions: 498 × 175 × 238 mm.
- Compressive strength $\geq 12 \text{ N/mm}^2$.
- Density $\geq 1.4 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130			
Minimum wall thickness (mm)	h_{min}					175			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					120			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					500			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					240			
Recommended tensile load (kg)	N_{per}					21			
Recommended vertical shear load (kg)	$V_{per V}$	86	186	186	186	186	179	186	186
Recommended horizontal shear load (kg)	$V_{per H}$					36			

Hollow clay brick (HLZ-16DF):

- Dimensions: 497 × 240 × 238 mm.
- Compressive strength $\geq 8 \text{ N/mm}^2$.
- Density $\geq 0.8 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130 ; 200			
Minimum wall thickness (mm)	h_{min}					240			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					120			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					500			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					240			
Recommended tensile load (kg)	N_{per}					86			
Recommended vertical shear load (kg)	$V_{per V}$	86	157	157	171	171	157	171	171
Recommended horizontal shear load (kg)	$V_{per H}$					36			

Hollow clay brick (POROTHERM HOMEBRIC):

- Dimensions: 500 × 200 × 300 mm.
- Compressive strength $\geq 6 \text{ N/mm}^2$.
- Density $\geq 0.7 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130			
Minimum wall thickness (mm)	h_{min}					200			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					120			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					500			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					300			
Recommended tensile load (kg)	N_{per}					26			
Recommended vertical shear load (kg)	$V_{per V}$	71	71	71	86	86	71	86	86
Recommended horizontal shear load (kg)	$V_{per H}$					36			

Hollow clay brick (BGV THERMO):

- Dimensions: 500 × 200 × 314 mm.
- Compressive strength $\geq 6 \text{ N/mm}^2$.
- Density $\geq 0.6 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130			
Minimum wall thickness (mm)	h_{min}					200			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					120			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					500			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					314			
Recommended tensile load (kg)	N_{per}					26			
Recommended vertical shear load (kg)	$V_{per V}$	71	71	71	86	86	71	86	86
Recommended horizontal shear load (kg)	$V_{per H}$					36			

Hollow clay brick (URBANBRIC):

- Dimensions: 560 × 200 × 274 mm.
- Compressive strength $\geq 9 \text{ N/mm}^2$.
- Density $\geq 0.7 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130			
Minimum wall thickness (mm)	h_{min}					200			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					120			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					500			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					274			
Recommended tensile load (kg)	N_{per}					26			
Recommended vertical shear load (kg)	$V_{per V}$	114	114	114	129	129	114	129	129
Recommended horizontal shear load (kg)	$V_{per H}$					36			

Hollow clay brick (BRIQUE CREUSE):

- Dimensions: 500 × 200 × 200 mm.
- Compressive strength $\geq 4 \text{ N/mm}^2$.
- Density $\geq 0.7 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130			
Minimum wall thickness (mm)	h_{min}					200			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					120			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					500			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					200			
Recommended tensile load (kg)	N_{per}					17			
Recommended vertical shear load (kg)	$V_{per V}$					26			
Recommended horizontal shear load (kg)	$V_{per H}$					26			

Hollow clay brick (BLOCCHI LEGGERI):

- Dimensions: 250 × 120 × 250 mm.
- Compressive strength $\geq 8 \text{ N/mm}^2$.
- Density $\geq 0.6 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130 ; 200			
Minimum wall thickness (mm)	h_{min}					$h_{ef} + 30 \text{ mm}$			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					60			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					250			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					120			
Recommended tensile load (kg)	N_{per}					17			
Recommended vertical shear load (kg)	$V_{per V}$					86			
Recommended horizontal shear load (kg)	$V_{per H}$					34			

Hollow clay brick (DOPPIO UNI):

- Dimensions: 250 × 120 × 120 mm.
- Compressive strength $\geq 20 \text{ N/mm}^2$.
- Density $\geq 0.9 \text{ kg/dm}^3$.

With sleeve		M8	M8	M10	M12	M16	IG-M6	IG-M8	IG-M10
Perforated sleeve		12	16	16	20	20	16	20	20
Effective embedment depth (mm)	h_{ef}	80				85 ; 130 ; 200			
Minimum wall thickness (mm)	h_{min}					$H_{ef} + 30 \text{ mm}$			
Tightening torque (N·m)	T_{inst}					2			
Characteristic edge distance (mm)	C_{cr}					120			
Minimum edge distance (mm)	C_{min}					60			
Minimum spacing between anchors parallel to horizontal position (mm)	$S_{cr, II}$					250			
Minimum spacing between anchors perpendicular to horizontal position (mm)	$S_{cr, T}$					120			
Recommended tensile load (kg)	N_{per}					26			
Recommended vertical shear load (kg)	$V_{per V}$					57			
Recommended horizontal shear load (kg)	$V_{per H}$					34			