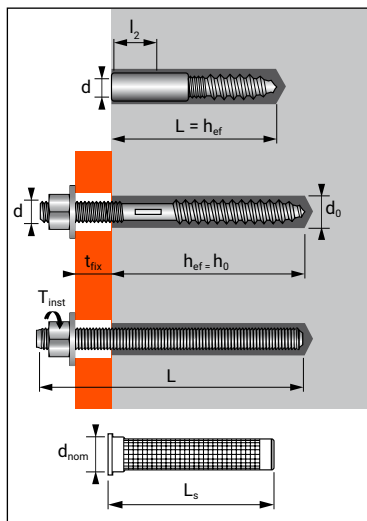




Polyester resin for fixing in concrete and hollow and solid masonries



TECHNICAL DATA

VERSION	RANGE	Minimum anchor depth (mm) h _{ef}	Drilling depth		Drilling diameter		Thread / Sleeve diameter	Thread length	Stud / Sleeve length	Maxi. thick. of part to be fixed	Tighten torque	Code
			Hollow (mm) h ₀	Solid h ₀	Hollow (mm) d ₀	Solid (mm) d ₀	d / d _{nom}	(mm) d	(mm) L / L _s	(mm) t _{fix}	(Nm) T _{inst}	
MALE STUDS	M8X100	75	80	75	15	10	8	-	100	12	5	061650
	M10X100	75	80	75	16		10	-	100	20	8	061660
	M12X100	75	80	75	16		12	-	100	20	8	061670
FEMALE STUDS	M8X58	58	80	58			8	20	58	-	8	061740
	M10X58	58	80	58			10	23	58	-	8	061750
SLEEVES ⁽¹⁾	Ø15X85	-	90		15		15	-	85	-	-	557070
	Ø15X130	-	135		15		15	-	130	-	-	557080
	Ø20X85	-	90		20		20	-	85	-	-	557090
THREADED STUDS	M8X110	80	-	80	-	10	8	-	110	15	10	055800
	M10X130	90	-	90	-	12	10	-	130	20	20	055801
	M12X160	110	-	110	-	14	12	-	160	25	30	055802
	M16X190	125	-	125	-	18	16	-	190	35	60	055803

C-MIX PLUS (grey) cartridge 380 ml*	055881
C-MIX PLUS (stone) cartridge 380 ml*	055882
C-MIX PLUS (grey) cartridge 300 ml*	055866
C-MIX PLUS (stone) cartridge 300 ml*	055865

* Shelf life : 18 months

(1) Plastic sleeve Ø15X85 for male studs M8 and M10 in hollow material.

Plastic sleeve Ø15X130 for threaded stud M8X170 - Using standard threaded rods.

Plastic sleeve Ø20X85 for male studs M12 and female studs M8 and M10 in hollow material.

CHARACTERISTICS



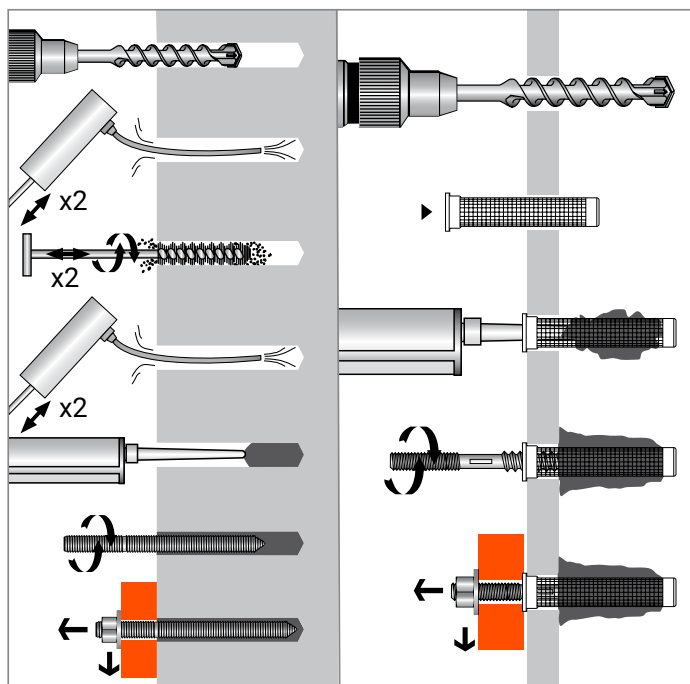
APPLICATION

- Signs
- Scaffolding
- Electrical switchboards
- Radiators
- Air conditioning ducts
- Rail guard returns
- Blinds
- Climbing walls
- Metal scale
- Hand rails
- Pole and ducts
- Demountable partitions
- Kitchen furniture

SETTING TIME

TEMPERATURE	MAX. TIME FOR INSTALLATION		CURING TIME	
	cartridge 300 ml	cartridge 380 ml	cartridge 300 ml	cartridge 380 ml
-5°C ▶ 0°C	40 min.	-	180 min.	-
0°C ▶ 10°C	20 min.	10 min.	90 min.	75 min.
10°C ▶ 20°C	9 min.	4 min.	60 min.	40 min.
20°C ▶ 30°C	5 min.	2 min.	30 min.	25 min.
30°C ▶ 40°C	3 min.	1 min.	20 min.	20 min.

INSTALLATION





CHARACTERISTIC & MINIMUM DISTANCES FOR SPACING, EDGE

SIZE - THREADED STUD			M8	M10	M12	M16
NON-CRACKED CONCRETE	$C_{min} = C_{cr}$	[mm]	80	90	110	125
	$S_{min} = S_{cr}$	[mm]	160	180	220	250
SIZE - SLEEVE			15X85	15X85	20X85	-
SOLID CLAY BRICK	$C_{min} = C_{cr}$	[mm]	80	90	110	125
	$S_{min} = S_c$	[mm]	160	180	220	250
HOLLOW CLAY BRICK	$C_{min} = C_{cr}$	[mm]	100	100	100	100
	$S_{min} = S_{cr}$	[mm]	200	200	200	200
HOLLOW CONCRETE BLOCK	$C_{min} = C_{cr}$	[mm]	100	100	100	100
	$S_{min} = S_{cr}$	[mm]	200	200	200	200

CHARACTERISTIC RESISTANCES [kN]

Characteristic resistances are shown as informative, and have to be used by application of safety factors.

TENSILE

NON-CRACKED CONCRETE - C20/25

SIZE	M8*	M10*	M12*	M16*
N_{Rk} [kN]	17,9	25,2	37,0	56,0

* Threaded stud

MASONRIES

SIZE	SLEEVE + MALE STUD			SLEEVE + FEMALE STUD			SLEEVE M15X130 STUD* M8
	M8	M10	M12	M8	M10	M12	

Solid clay bricks BP 400

N_{Rk} [kN]	5,2			5,2			-
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Solid concrete blocks B80

N_{Rk} [kN]	20,0			20,0			-
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Hollow clay bricks C40 rendered

N_{Rk} [kN]	4,0			4,0			2,4
---------------	-----	--	--	-----	--	--	-----

Hollow clay bricks C40 not rendered

N_{Rk} [kN]	2,4			2,4			2,4
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Hollow concrete blocks B40 rendered

N_{Rk} [kN]	6,4			6,4			4,0
---------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

N_{Rk} [kN]	3,6			3,6			3,6
---------------	-----	--	--	-----	--	--	-----

* Sleeve Ø15X130 + threaded stud M8X170

SHEAR

NON-CRACKED CONCRETE - C20/25

SIZE	M8*	M10*	M12*	M16*
V_{Rk} [kN]	11,4	18,4	26,6	50,4

* Threaded stud

MASONRIES

SIZE	SLEEVE + MALE STUD			SLEEVE + FEMALE STUD			SLEEVE M15X130 STUD* M8
	M8	M10	M12	M8	M10	M12	

Solid clay bricks BP 400

V_{Rk} [kN]	7,2	10,0	16,0	8,0	10,0	16,0	-
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Solid concrete blocks B80

V_{Rk} [kN]	7,2	8,8	12,8	7,2	8,8	12,8	-
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Hollow clay bricks C40 rendered

V_{Rk} [kN]	8,0			8,0			2,4
---------------	-----	--	--	-----	--	--	-----

Hollow clay bricks C40 not rendered

V_{Rk} [kN]	5,2			5,2			5,2
---------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

V_{Rk} [kN]	8,0			8,0			8,0
---------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

V_{Rk} [kN]	7,2			7,2			7,2
---------------	-----	--	--	-----	--	--	-----

* Sleeve Ø15X130 + threaded stud M8X170

RECOMMENDED LOADS OF ONE ANCHOR WITHOUT INFLUENCE OF SPACING & CONCRETE EDGE [kN]

Recommended values are given for spacing $\geq S_{cr}$ and edge distance $\geq C_{cr}$.

TENSILE

NON-CRACKED CONCRETE - C20/25

SIZE	M8*	M10*	M12*	M16*
N_{Rec} [kN]	4,5	6,3	9,3	14,0

* Threaded stud

MASONRIES

SIZE	SLEEVE + MALE STUD			SLEEVE + FEMALE STUD			SLEEVE M15X130 STUD* M8
	M8	M10	M12	M8	M10	M12	

Solid clay bricks BP 400

N_{Rec} [kN]	1,3			1,3			-
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Solid concrete blocks B80

N_{Rec} [kN]	5,0			5,0			-
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Hollow clay bricks C40 rendered

N_{Rec} [kN]	1,0			1,0			0,6
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Hollow clay bricks C40 not rendered

N_{Rec} [kN]	0,6			0,6			0,6
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Hollow concrete blocks B40 rendered

N_{Rec} [kN]	1,6			1,6			1,0
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Hollow concrete blocks B40 rendered

N_{Rec} [kN]	0,9			0,9			0,9
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* Sleeve Ø15X130 + threaded stud M8X170

SHEAR

NON-CRACKED CONCRETE - C20/25

SIZE	M8*	M10*	M12*	M16*
V_{Rec} [kN]	2,9	4,6	6,7	12,6

* Threaded stud

MASONRIES

SIZE	SLEEVE + MALE STUD			SLEEVE + FEMALE STUD			SLEEVE M15X130 STUD* M8
	M8	M10	M12	M8	M10	M12	

Solid clay bricks BP 400

V_{Rec} [kN]	1,8	2,5	4,0	2,0	2,5	4,0	-
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Solid concrete blocks B80

V_{Rec} [kN]	1,8	2,2	3,2	1,8	2,2	3,2	-
----------------	-----	-----	-----	-----	-----	-----	---

Hollow clay bricks C40 rendered

V_{Rec} [kN]	2,0			2,0			0,6
----------------	-----	--	--	-----	--	--	-----

Hollow clay bricks C40 not rendered

V_{Rec} [kN]	1,3			1,3			1,3
----------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

V_{Rec} [kN]	2,0			2,0			2,0
----------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

V_{Rec} [kN]	1,8			1,8			1,8
----------------	-----	--	--	-----	--	--	-----

* Sleeve Ø15X130 + threaded stud M8X170



Design resistances for static loads are given for spacing $\geq S_{cr}$ and edge distance $\geq C_{cr}$.

For project with reduced spacing and edge distance, we recommend to use SPIT i-Expert software to design your project according to EN 1992-4.

DESIGN RESISTANCE FOR STATIC LOADS IN NON-CRACKED CONCRETE [kN]

TENSILE

NON-CRACKED CONCRETE - C20/25

SIZE	M8*	M10*	M12*	M16*
N_{Rd} [kN]	6,0	8,4	12,3	18,6

* Threaded stud

SHEAR

NON-CRACKED CONCRETE - C20/25

SIZE	M8*	M10*	M12*	M16*
V_{Rd} [kN]	3,8	6,1	8,8	16,8

* Threaded stud

DESIGN RESISTANCE FOR STATIC LOADS IN MASONRIES [kN]

TENSILE

MASONRIES

SIZE	SLEEVE + MALE STUD			SLEEVE + FEMALE STUD			SLEEVE M15X130 STUD* M8
	M8	M10	M12	M8	M10	M12	

Solid clay bricks BP 400

N_{Rd} [kN]	1,7			1,7			-
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Solid concrete blocks B80

N_{Rd} [kN]	6,7			6,7			-
---------------	-----	--	--	-----	--	--	---

Hollow clay bricks C40 rendered

N_{Rd} [kN]	1,3			1,3			0,8
---------------	-----	--	--	-----	--	--	-----

Hollow clay bricks C40 not rendered

N_{Rd} [kN]	0,8			0,8			0,8
---------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

N_{Rd} [kN]	2,1			2,1			1,3
---------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

N_{Rd} [kN]	1,2			1,2			1,2
---------------	-----	--	--	-----	--	--	-----

* Sleeve Ø15X130 + threaded stud M8X170

SHEAR

MASONRIES

SIZE	SLEEVE + MALE STUD			SLEEVE + FEMALE STUD			SLEEVE M15X130 STUD* M8
	M8	M10	M12	M8	M10	M12	

Solid clay bricks BP 400

V_{Rd} [kN]	2,4	3,3	5,3	2,7	3,3	5,3	-
---------------	-----	-----	-----	-----	-----	-----	---

Solid concrete blocks B80

V_{Rd} [kN]	2,4	2,9	4,3	2,4	2,9	4,3	-
---------------	-----	-----	-----	-----	-----	-----	---

Hollow clay bricks C40 rendered

V_{Rd} [kN]	2,7			2,7			0,8
---------------	-----	--	--	-----	--	--	-----

Hollow clay bricks C40 not rendered

V_{Rd} [kN]	1,7			1,7			1,7
---------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

V_{Rd} [kN]	2,7			2,7			2,7
---------------	-----	--	--	-----	--	--	-----

Hollow concrete blocks B40 rendered

V_{Rd} [kN]	2,4			2,4			2,4
---------------	-----	--	--	-----	--	--	-----

* Sleeve Ø15X130 + threaded stud M8X170