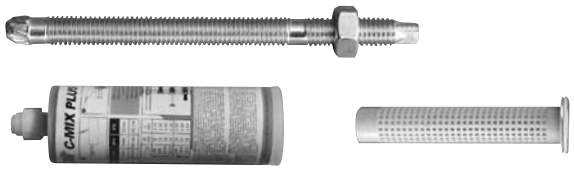
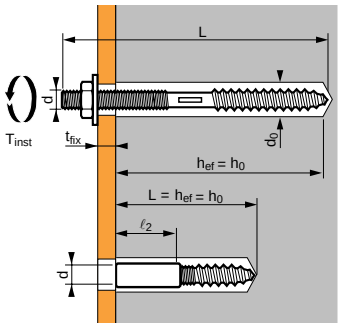
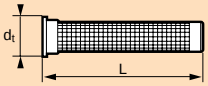
SPIT CMIX PLUS

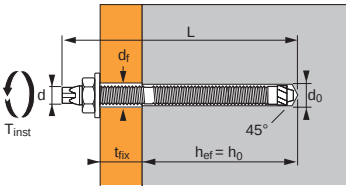




Studs



Perforated sleeve



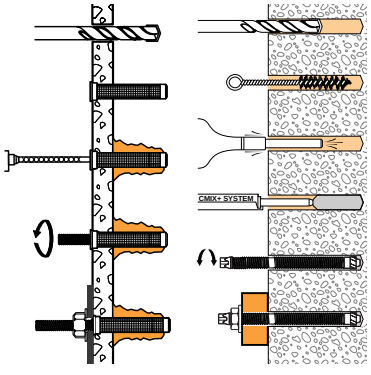
Threaded stud

APPLICATION

- Signs
- Scaffolding
- Electrical switchboards
- Radiators
- Frames
- Air conditioning ducts
- Rail guard returns
- Blinds
- Climbing walls
- Metal scales
- Hand rails
- Poles and ducts
- Demountable partitions
- Kitchen furniture
- Decoration
- ...

MATERIAL

- Male & female studs, class 5,8



Hollow material **Solid material**

Polyester resin for fixing in hollow material and in concrete

Technical data

CMIX+		Anchor depth	Max thick of part to be fixed	Ø thread	Thread length	Drill bit		Drilling depth		Ø sleeve	Total anchor length	Max tightening torque	Code
						hollow	solid	hollow	solid				
		(mm)	(mm)	(mm)	(mm)	(mm)		(mm)		(mm)	(mm)	(Nm)	
		h_{ef}	t_{fix}	d	l_2	d_0		h_0		d_t	L	T_{inst}	
male stud	M8	75	12	8	–	16	10	80	–	–	100	5	061650
	M10	75	20	10	–	16	12	80	–	–	100	8	061660
	M12	75	20	12	–	20	14	80	–	–	100	8	061670
female stud	M8	58	–	8	20	20	14	80	–	–	58	8	062350
	M10	58	–	10	23	20	14	80	–	–	58	8	062360
	M12	75	–	12	30	20	20	100	–	–	75	8	061760
plast. sleeve	Ø16x80	–	–	–	–	16	–	85	–	16	80	–	061600
	Ø20x85	–	–	–	–	20	–	90	–	20	85	–	061490
threaded stud	M8	80	15	8	-	-	10	-	80	-	110	10	050950
	M10	90	20	10	-	-	12	-	90	-	130	20	050960
	M12	110	25	12	-	-	14	-	110	-	160	30	050970

Polyester resin - cartridge 300 ml - code 050981 - styrene free

NOTE : • Sleeve Ø 16 x 80 for male studs M8 and M10 in hollow material.
• Sleeve Ø 20 x 80 and Ø 20 x 85 for male studs M12 and female studs M8, M10 and M12 in hollow material.

Design loads (N_{Rd}, V_{Rd}) and Recommended loads (N_{rec}, V_{rec}) for one anchor without edge or spacing influence

$$N_{Rd} = \frac{N_{Ru,m}^{*}}{3} \quad ; \quad N_{Rec} = \frac{N_{Ru,m}^{*}}{4} \qquad V_{Rd} = \frac{V_{Ru,m}^{*}}{3} \quad ; \quad V_{Rec} = \frac{V_{Ru,m}^{*}}{4}$$

*Derived from test results

*Derived from test results

IN MASONRIES

TENSILE IN kN / SHEAR IN kN

Base material \ Anchor size	Male stud M8-M10-M12 Female stud M8-M10-M12		Male stud M8	Male stud M10	Male stud M12	Female stud M8	Female stud M10	Female stud M12
Hollow concrete blocks type B40 not rendered (fc = 6,5 N/mm²)								
	N_{Rd}	1,0	V_{Rd}	2,4	2,4	2,4	2,4	2,4	2,4
	N_{Rec}	0,75	V_{Rec}	1,8	1,8	1,8	1,8	1,8	1,8
Hollow concrete blocks type B40 rendered (fc = 6,5 N/mm²)								
	N_{Rd}	2,1	V_{Rd}	2,65	2,65	2,65	2,65	2,65	2,65
	N_{Rec}	1,6	V_{Rec}	2,0	2,0	2,0	2,0	2,0	2,0
Hollow clay bricks type Eco-30 not rendered (fc = 4,5 N/mm²)								
	N_{Rd}	0,5	V_{Rd}	1,7	1,7	1,7	1,7	1,7	1,7
	N_{Rec}	0,4	V_{Rec}	1,3	1,3	1,3	1,3	1,3	1,3
Hollow clay bricks type Eco-30 rendered (fc = 4,5 N/mm²)								
	N_{Rd}	1,3	V_{Rd}	2,65	2,65	2,65	2,65	2,65	2,65
	N_{Rec}	1,0	V_{Rec}	2,0	2,0	2,0	2,0	2,0	2,0
Clay bricks								
	N_{Rd}	1,7	V_{Rd}	2,4	3,3	5,3	2,65	3,3	5,3
	N_{Rec}	1,3	V_{Rec}	1,8	2,5	4,0	2,0	2,5	4,0
Solid concrete blocks								
	N_{Rd}	6,6	V_{Rd}	2,3	2,9	4,2	2,3	2,9	4,2
	N_{Rec}	5,0	V_{Rec}	1,75	2,2	3,15	1,75	2,2	3,15

IN CONCRETE

TENSILE IN kN / SHEAR IN kN

Anchor size	M8	M10	M12	M16		M8	M10	M12	M16
h_{ef}	*80*	*90*	*110*	*125*					
N_{Rd}	5,0	8,2	12,1	18,7	V_{Rd}	3,2	5,2	7,6	14,2
N_{Rec}	3,8	6,2	9,1	14,1	V_{Rec}	2,4	3,9	5,7	10,7
S_{min}*	120	135	165	187					
C_{min}*	80	90	110	125					

* Minimum distance for guaranteeing the design and recommended loads.