

SIGILLITE VE CE PLUS C2

Two-component, styrene-free vinyl ester chemical anchor with seismic qualification



DESCRIPTION

Two-component resin with strong grip and very low odor; specific for fixing anchors, screws, threaded bars to concrete and other solid or perforated building materials and anchoring panels, railings, shutters, facade cladding etc. It also allows application on wet surfaces. CE certificate with seismic qualification C1 and C2; Resistance up to EI240.

CERTIFICATIONS:

ETA-22/0391 – EAD 330499-01-0601 M8 ÷ M30; Ø 8 mm ÷ Ø 32 mm for concrete

ETA-22/0392 – EAD 330087-01-0601 Ø 8 mm ÷ Ø 32 mm for post-installed rebar

APPLICATION FIELDS

High adhesion anchor for medium-heavy fastenings. Suitable for all support materials; thanks to the absence of styrene and the characteristic slightly pungent odor, it allows easy use even indoors. It does not require premixing: the resin and hardener are mixed only during extrusion in the special static mixer supplied.

FEATURES

- High mechanical performance
- Fast hardening
- Styrene free - Low odor
- Does not expand, does not create tensions
- Suitable for concrete (also cracked) and masonry both solid and perforated.
- **EI 240** for post installed connections (rebars) according to **ETA 22/0392**.

SETTING TIMES and TEMPERATURES

Resin temperature [°C]	Gel time	Cure time after...
-10	1h 45 min	24 h
-5	65 min	14 h
0	45 min	7 h
5	25 min	1 h 30 min
10	16 min	1 h
20	7,5 min	40 min
25	5 min	35 min
30	3 min	30 min
35	2 min	25 min

Minimum resin temperature +5°C. In presence of water the curing time must be double.

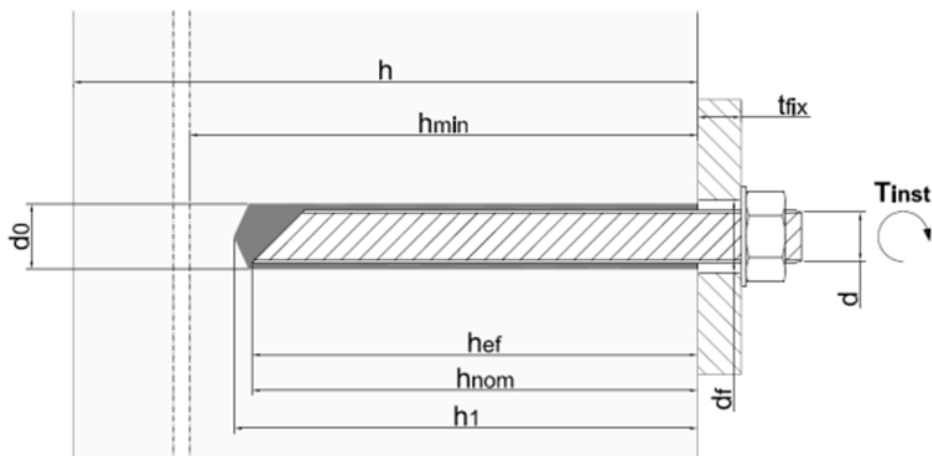
TECHNICAL DATA

FIXING ON CONCRETE with THREADED ROD

The product is homologated for being used with a wide range of threaded rods (from M8 to M30) and anchorage depths. Certified service temperatures are in the ranges -40°C/+40°C (T° max long period = 24°C); -40°C/+80°C (T° max long period = 50°C) and -40°C/+120°C (T° max long period = 72°C). Suitable for fixing in wet concrete and flooded hole.

Fixing on concrete C20/25 with zinc plated threaded rods class 5.8

Dimensioni caratteristiche Characteristic measurements			M8	M10	M12	M16	M20	M24	M27	M30
d₀	Diametro foro Hole diameter	[mm]	10	12	14	18	24	28	30	35
T_{inst}	Coppia di serraggio Fixing torque	[Nm]	10	20	40	80	130	200	250	280
S_w	Chiave Hex key	[mm]	13	17	19	24	30	36	41	46
d_f	Ø foro nell'oggetto da fissare Hole trough fixture	[mm]	9	12	14	18	22	26	30	33



Minimum anchorage depth

Dimensioni caratteristiche <i>Characteristic measurements</i>			M8	M10	M12	M16	M20	M24	M27	M30
h₁	Profondità foro <i>Hole depth</i>	[mm]	65	75	85	105	125	150	150	150
h_{nom}	Profondità nominale di ancoraggio <i>Embedment depth</i>	[mm]	60	70	80	100	120	145	145	145
h_{min}	Spessore minimo materiale di base <i>Minimum base material thickness</i>	[mm]	100	100	110	136	168	201	210	220
s_{cr}	Interasse <i>Centre spacing</i>	[mm]	180	210	240	300	360	435	435	435
c_{cr}	Distanza dal bordo <i>Edge distance</i>	[mm]	90	105	120	150	180	218	218	218
s_{min}	Interasse minimo <i>Minimum spacing</i>	[mm]	40	50	60	75	100	115	120	140
c_{min}	Distanza dal bordo minima <i>Minimum edge distance</i>	[mm]	40	50	60	75	100	115	120	140

Medium anchorage depth										
Dimensioni caratteristiche Characteristic measurements			M8	M10	M12	M16	M20	M24	M27	M30
h₁	Profondità foro Hole depth	[mm]	85	95	115	130	175	215	245	275
h_{nom}	Profondità nominale di ancoraggio Embedment depth	[mm]	80	90	110	125	170	210	240	270
h_{min}	Spessore minimo materiale di base Minimum base material thickness	[mm]	100	114	138	161	218	266	300	340
s_{cr}	Interasse Centre spacing	[mm]	240	270	330	375	510	630	720	810
c_{cr}	Distanza dal bordo Edge distance	[mm]	120	135	165	187	255	315	360	405
s_{min}	Interasse minimo Minimum spacing	[mm]	40	50	60	75	100	115	120	140
c_{min}	Distanza dal bordo minima Minimum edge distance	[mm]	40	50	60	75	100	115	120	140

Max anchorage depth										
Dimensioni caratteristiche Characteristic measurements			M8	M10	M12	M16	M20	M24	M27	M30
h₁	Profondità foro Hole depth	[mm]	165	205	245	325	405	485	545	605
h_{nom}	Profondità nominale di ancoraggio Embedment depth	[mm]	160	200	240	320	400	480	540	600
h_{min}	Spessore minimo materiale di base Minimum base material thickness	[mm]	180	224	268	356	448	536	600	670
s_{cr}	Interasse Centre spacing	[mm]	480	600	720	960	1200	1440	1620	1800
c_{cr}	Distanza dal bordo Edge distance	[mm]	240	300	360	480	600	720	810	900
s_{min}	Interasse minimo Minimum spacing	[mm]	40	50	60	75	100	115	120	140
c_{min}	Distanza dal bordo minima Minimum edge distance	[mm]	40	50	60	75	100	115	120	140

RECOMMENDED LOADS									
Minimum anchorage depth									
Coeff. di sicurezza globale applicato / General safety factor included									
Fixing on uncracked concrete C20/25 with threaded rods class 5.8									
		M8	M10	M12	M16	M20	M24	M27	M30
Trazione <i>Tensile</i>	[kN]	9,0	12,0	17,0	24,0	31,6	41,9	42,0	42,0
Taglio <i>Shear</i>	[kN]	5,4	8,6	12,5	23,3	36,3	52,5	68,2	83,4

RECOMMENDED LOADS									
Medium anchorage depth									
Coeff. di sicurezza globale applicato / General safety factor included									
Fixing on uncracked concrete C20/25 with threaded rods class 5.8									
		M8	M10	M12	M16	M20	M24	M27	M30
Trazione <i>Tensile</i>	[kN]	9,0	14,3	20,8	33,6	49,8	72,9	80,3	99,2
Taglio <i>Shear</i>	[kN]	5,4	8,6	12,5	23,3	36,3	52,5	68,2	83,4

RECOMMENDED LOADS									
Max anchorage depth									
Coeff. di sicurezza globale applicato / General safety factor included									
Fixing on uncracked concrete C20/25 with threaded rods class 5.8									
		M8	M10	M12	M16	M20	M24	M27	M30
Trazione <i>Tensile</i>	[kN]	13,9	22,1	32,1	59,5	96,6	139,5	180,6	108,8
Taglio <i>Shear</i>	[kN]	8,3	13,2	19,2	35,7	58,0	83,7	220,5	133,1

- > Load for service temperature range between -40°C/+40°C
- > Loads for single anchor with no influence of spacing and edge distance and with thickness of concrete $\geq 2h_{ef}$
- > Shear directed away from the edge
- > **With flooded hole the loads must be reduced of 20%**

RECOMMENDED LOADS							
Minimum anchorage depth							
Coeff. di sicurezza globale applicato / General safety factor included							
Fixing on cracked concrete C20/25 with threaded rods class 5.8							
		M8	M10	M12	M16	M20	M24
Trazione <i>Tensile</i>	[kN]	-	9,1	12,2	17,1	22,5	-
Taglio <i>Shear</i>	[kN]	-	8,6	12,5	23,3	34,3	-

RECOMMENDED LOADS							
Medium anchorage depth							
Coeff. di sicurezza globale applicato / General safety factor included							
Fixing on cracked concrete C20/25 with threaded rods class 5.8							
		M8	M10	M12	M16	M20	M24
Trazione <i>Tensile</i>	[kN]	-	11,7	17,8	23,9	33,8	-
Taglio <i>Shear</i>	[kN]	-	8,6	12,5	23,3	36,2	-

RECOMMENDED LOADS							
Max anchorage depth							
Coeff. di sicurezza globale applicato / General safety factor included							
Fixing on cracked concrete C20/25 with threaded rods class 5.8							
		M8	M10	M12	M16	M20	M24
Trazione <i>Tensile</i>	[kN]	-	22,1	32,1	59,5	79,5	-
Taglio <i>Shear</i>	[kN]	-	13,2	19,2	35,7	58,0	-

- > Load for service temperature range between -40°C/+40°C
- > Loads for single anchor with no influence of spacing and edge distance and with thickness of concrete $\geq 2h_{ef}$
- > Shear directed away from the edge
- > **With flooded hole the loads must be reduced of 20%**

FIXING ON CONCRETE with REINFORCED BAR (REBAR)

The product is homologated, for being used with a wide range of reinforced bar (from Ø 8 mm a Ø 32 mm) and anchorage depths up to 1 m. Certified service temperatures are in the range -40°C/+80°C (T° max long period = 50°C). Can be installed in wet concrete. Design according to EC2 for post-installed rebar connection.

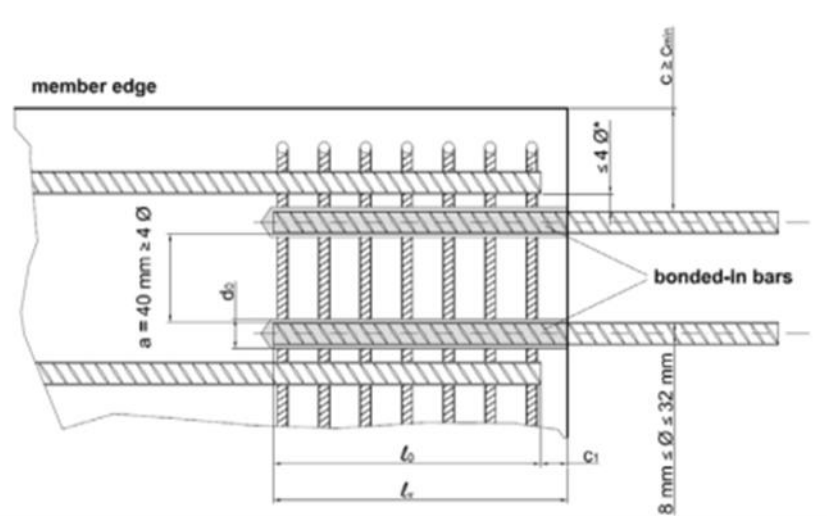
ETA-22/0391	TECHNICAL DATA								
	Fixing on concrete C20/25 with reinforced bar (REBAR)								
Diametro barra d'armatura <i>Rebar diameter</i>	Ø8	Ø10	Ø12	Ø14	Ø16	Ø20	Ø25	Ø28	Ø32
Diametro del foro <i>Hole diameter</i>	12	14	16	18	20	25	30	35	40
Minima profondità di ancoraggio <i>Minimum anchorage depth</i>	115	145	170	200	230	285	355	400	455
Minima profondità di sovrapposizione <i>Minimum overlap joint depth</i>	200	200	200	210	240	300	375	420	480
Massima profondità di posa <i>Max anchorage depth</i>	400	500	600	700	800	1000	1000	1000	1000

Values in mm

Minimum concrete cover: $c_{min} = 30 \text{ mm} + 0,06 l_v \geq 2 \cdot \varnothing$ per $\varnothing < 25 \text{ mm}$

$c_{min} = 40 \text{ mm} + 0,06 l_v \geq 2 \cdot \varnothing$ per $\varnothing \geq 25 \text{ mm}$

Minimum rebar spacing: $a = 40 \text{ mm} \geq 4 \cdot \varnothing$



ETA-22/0392	
	INTENDED USE WITH REINFORCED BAR

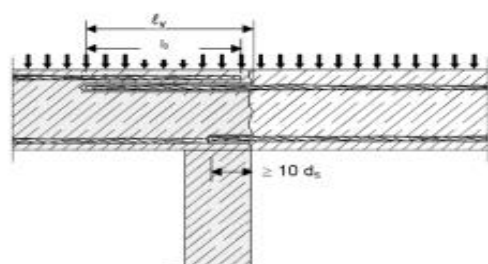


Figura 1: giunzione per sovrapposizione di piastre e travi.

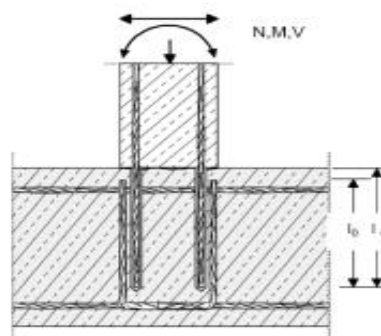


Figura 2: giunzione per sovrapposizione di pilastri sollecitati a flessione o muri a fondazioni.

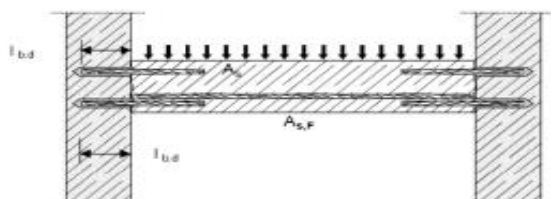


Figura 3: ancoraggio terminale di piastre e travi.

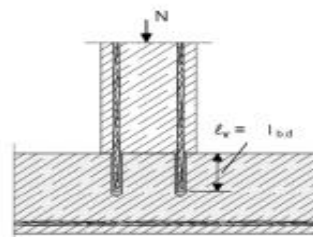


Figura 4: ancoraggio di elementi costruttivi sollecitati a compressione.

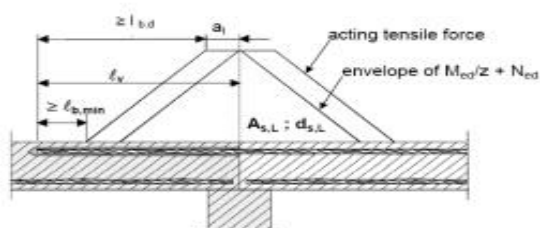


Figura 5: ancoraggio di ferri d'armatura per soddisfare la linea di inviluppo.

Note per figure da 1 a 5:

Nelle immagini non è visualizzata nessuna armatura a taglio; l'armatura a taglio necessaria secondo EN 1992-1-1 deve essere presente. La trasmissione dei carichi a taglio tra calcestruzzo nuovo ed esistente deve essere verificata secondo EN 1992-1-1.

Fig. 1 - Overlap joints Fig. 2 - Junctions by overlapping of pillars Fig. 3 - Terminal anchoring Fig. 4 - Anchoring of elements stressed by compression Fig. 5 - Anchoring of reinforcing bars / Note - For shear reinforcement: the load transmission between new and existing concrete must be verified according to EN 1992-1-1

ETA-22/0392

DESIGN LOAD - ANCHORAGE OF POST INSTALLED REBAR
Values for pre-calculation of anchoring rebars connections

 Examples for anchorage length¹⁾ ($f_{y,k} = 500 \text{ N/mm}^2$; concrete C20/25; $f_{bd} = 2,3 \text{ N/mm}^2$)

Rebar Ø	Tensile load B500	$\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = 1,0$			$\alpha_1 = \alpha_3 = \alpha_4 = 1,0$ and α_2 or $\alpha_5 = 0,7$		
		Anchorage length $l_{bd}^{(1)}$	Tension load	Mortar volume V	Anchorage length $l_{bd}^{(1)}$	Tension load	Mortar volume V
[mm]	[kN]	[mm]	[kN]	[ml]	[mm]	[kN]	[ml]
8	21,85	115	6,65	8,50	115	9,50	8,50
		180	10,40	13,31	180	14,86	13,31
		250	14,45	18,48	200	16,52	14,78
		320	18,50	23,65	220	18,17	16,26
		378	21,85	27,95	265	21,85	19,56
10	34,15	145	10,48	12,86	145	14,97	12,86
		230	16,62	20,40	230	23,74	20,40
		310	22,40	27,50	260	26,84	23,06
		390	28,18	34,59	290	29,93	25,72
		473	34,15	41,92	331	34,15	29,34
12	49,17	170	14,74	17,59	170	21,06	17,59
		270	23,41	27,94	270	33,44	27,94
		370	32,08	38,29	300	37,16	31,05
		470	40,75	48,64	330	40,88	34,15
		567	49,17	58,69	397	49,17	41,08
14	66,93	200	20,23	23,65	200	28,90	23,65
		320	32,37	37,85	320	46,24	37,85
		440	44,51	52,04	360	52,02	42,58
		560	56,65	66,23	400	57,81	47,31
		662	66,93	78,25	463	66,93	54,78
16	87,42	230	26,59	30,60	230	37,99	30,60
		360	41,62	47,90	360	59,46	47,90
		490	56,65	65,20	400	66,06	53,22
		620	71,68	82,49	440	72,67	58,54
		756	87,42	100,61	529	87,42	70,43
20	136,59	285	41,19	59,25	285	58,84	59,25
		450	65,03	93,55	450	92,90	93,55
		620	89,60	128,90	500	103,22	103,95
		790	114,17	164,24	550	113,55	114,34
		945	136,59	196,50	662	136,59	137,55
25	213,42	355	64,13	90,21	355	91,61	90,21
		520	93,93	132,13	520	134,19	132,13
		680	122,84	172,79	600	154,84	152,46
		840	151,74	213,44	650	167,74	165,16
		1000	180,64	254,10	700	180,64	177,87
28	267,72	400	80,93	162,99	400	115,61	162,99
		550	111,28	224,12	550	158,96	224,12
		700	141,62	285,24	700	202,32	285,24
		850	171,97	346,36	850	245,67	346,36
		1000	202,32	407,48	926	267,72	377,44
32	349,67	455	105,21	242,16	455	150,29	242,16
		590	136,42	314,01	500	165,16	266,11
		730	168,79	388,52	550	181,67	292,72
		870	201,16	463,03	600	198,19	319,33
		1000	231,22	532,22	700	231,22	372,56

 The given values are valid for good bond condition according to EN 1992-1-1. For all other bond condition the values for tension load shall be multiplied by 0,7. The mortar volume V can be calculated using the equation: $V = l_{bd} \cdot \pi \cdot (d_b^2 - d^2) / (4 \cdot 0,85)$ with the nominal hole diameter.

ETA-22/0392

DESIGN LOAD - ANCHORAGE OF POST INSTALLED REBAR AS OVERLAP
Values for pre-calculation of overlap joint connections

 Examples for the lap splice length¹⁾ ($f_{y,k} = 500 \text{ N/mm}^2$; concrete C20/25; $f_{bd} = 2,3 \text{ N/mm}^2$)

Rebar Ø	Tensile load B500	$\alpha_1 = \alpha_2 = \alpha_3 = \alpha_5 = \alpha_6 = 1,0$			$\alpha_1 = \alpha_3 = \alpha_5 = 1,0$ and α_2 or $\alpha_6 = 0,7$		
		Lap splice length $l_o^{1)}$	Tension load	Mortar volume V	Lap splice length $l_o^{1)}$	Tension load	Mortar volume V
[mm]	[kN]	[mm]	[kN]	[ml]	[mm]	[kN]	[ml]
8	21,85	200	11,56	14,78	200	16,52	14,78
		240	13,87	17,74	-	-	-
		280	16,19	20,70	-	-	-
		320	18,50	23,65	-	-	-
		378	21,85	27,95	-	-	-
10	34,15	200	14,45	17,74	200	20,64	17,74
		270	19,51	23,95	235	24,26	20,85
		340	24,57	30,16	270	27,87	23,95
		410	29,63	36,37	305	31,48	27,05
		473	34,15	41,92	331	34,15	29,34
12	49,17	200	17,34	20,70	200	24,77	20,70
		290	25,15	30,01	250	30,97	25,87
		380	32,95	39,33	300	37,16	31,05
		470	40,75	48,64	350	43,35	36,22
		567	49,17	58,69	397	49,17	41,08
14	66,93	210	21,24	24,84	210	30,35	24,84
		320	32,37	37,85	270	39,02	31,93
		430	43,50	50,86	330	47,69	39,03
		540	54,63	63,87	390	56,36	46,13
		662	66,93	78,25	463	66,93	54,78
16	87,42	240	27,75	31,93	240	39,64	31,93
		370	42,78	49,23	310	51,20	41,25
		500	57,81	66,53	380	62,76	50,56
		630	72,83	83,83	450	74,32	59,88
		756	87,42	100,61	529	87,42	70,43
20	136,59	300	43,35	62,37	300	61,93	62,37
		460	66,48	95,63	390	80,51	81,08
		620	89,60	128,90	480	99,09	99,79
		780	112,72	162,16	570	117,68	118,50
		945	136,59	196,50	662	136,59	137,55
25	213,42	375	67,74	95,29	375	96,77	95,29
		530	95,74	134,67	670	172,90	170,25
		690	124,64	175,33	780	201,29	198,20
		850	153,55	215,98	800	206,45	203,28
		1000	180,64	254,10	827	213,42	210,14
28	267,72	420	84,97	171,14	420	121,39	171,14
		570	115,32	232,27	720	208,10	293,39
		720	145,67	293,39	810	234,11	330,06
		870	176,02	354,51	900	260,12	366,73
		1000	202,32	407,48	926	267,72	377,44
32	349,67	480	110,99	255,47	480	158,55	255,47
		610	141,04	324,66	610	201,49	324,66
		740	171,10	393,84	740	244,43	393,84
		870	201,16	463,03	870	287,37	463,03
		1000	231,22	532,22	1000	330,32	532,22

The given values are valid for good bond condition according to EN 1992-1-1. For all other bond condition the values for tension load shall be multiplied by 0,7. The mortar volume V can be calculated using the equation: $V = l_{oe} \cdot \pi \cdot (d_o^2 - d^2) / (4 \cdot 0,85)$ with the nominal hole diameter.

Fixing on solid brick and solid masonry

DIAMETRO BARRA ROD DIAMETER	TIPOLOGIA DI BARRA TYPE OF ROD	SPESSORE MIN. DEL SUPPORTO MIN. THICKNESS BASE MATERIAL	DIAMETRO FORO HOLE DIAMETER	PROFONDITÀ DEL FORO HOLE DEPTH	PROFONDITÀ DI INSERIMENTO EMBEDMENT DEPTH	PROFONDITÀ EFF. ANCORAGGIO EFFECTIVE ANCHORAGE DEPTH	INTERASSE CARATTERISTICO CHARACTERISTIC SPACING	DISTANZA DAL BORDO CARATTERISTICA CHARACTERISTIC EDGE DISTANCE	INTERASSE MIN. ALLOWABLE SPACING	DISTANZA MIN. DAL BORDO MIN. ALLOWABLE EDGE DISTANCE	SPESS. FISSABILE MAX FIXTURE THICKNESS	DIAMETRO FORO SPESS. FISSABILE DIAMETER OF CLEARANCE HOLE IN THE FIXTURE	CHIAVE KEY	COPIA DI SERRAGGIO INSTALLATION TORQUE
d [mm]		h _{min} [mm]	d ₀ [mm]	h ₁ [mm]	h _{nom} [mm]	h _{ef} [mm]	S _{cr} [mm]	C _{cr} [mm]	S _{min} [mm]	C _{min} [mm]	t _{fix} [mm]	d _i [mm]	S _w [mm]	T _{inst} [Nm]
M8	≥ 4.6 A2-70 A4-70	200	10	85	80	80	160	200	100	100	10	9	13	7
M10	≥ 4.6 A2-70 A4-70	250	12	90	85	85	200	200	100	100	20	12	17	15
M12	≥ 4.6 A2-70 A4-70	300	14	100	95	95	240	200	100	100	30	14	19	25
M16	≥ 4.6 A2-70 A4-70	350	18	130	125	125	320	200	100	100	35	18	24	30

Fixing on perforated brick using the plastic sleeve

DIAMETRO BARRA ROD DIAMETER	TIPOLOGIA DI BARRA TYPE OF ROD	GABBIA PLASTIC SLEEVE	SPESSORE MIN. DEL SUPPORTO MIN. THICKNESS BASE MATERIAL	DIAMETRO FORO HOLE DIAMETER	PROFONDITÀ DEL FORO HOLE DEPTH	PROFONDITÀ DI INSERIMENTO EMBEDMENT DEPTH	PROFONDITÀ EFF. ANCORAGGIO EFFECTIVE ANCHORAGE DEPTH	INTERASSE CARATTERISTICO CHARACTERISTIC SPACING	DISTANZA DAL BORDO CARATTERISTICA CHARACTERISTIC EDGE DISTANCE	INTERASSE MIN. ALLOWABLE SPACING	DISTANZA MIN. DAL BORDO MIN. ALLOWABLE EDGE DISTANCE	SPESS. FISSABILE FIXTURE THICKNESS	DIAMETRO FORO SPESS. FISSABILE DIAMETER OF CLEARANCE HOLE IN THE FIXTURE	CHIAVE KEY	COPIA DI SERRAGGIO INSTALLATION TORQUE
d [mm]		(*)	h _{min} [mm]	d ₀ [mm]	h ₁ [mm]	h _{nom} [mm]	h _{ef} [mm]	S _{cr} [mm]	C _{cr} [mm]	S _{min} [mm]	C _{min} [mm]	t _{fix} [mm]	d _i [mm]	S _w [mm]	T _{inst} [Nm]
M8	≥ 4.6 A2-70 A4-70	GC 12x80	100	12	85	80	80	l _{unit,max}	0,5 x l _{unit,max}	100	100	10	9	13	3
M10	≥ 4.6 A2-70 A4-70	GC 15x85	100	16	90	85	85	l _{unit,max}	0,5 x l _{unit,max}	100	100	20	12	17	4
M12	≥ 4.6 A2-70 A4-70	GC 20x85	100	20	90	85	85	l _{unit,max}	0,5 x l _{unit,max}	120	120	30	14	19	6

l_{unit,max} = Max length of masonry unit

Fixing on laminated wood

DIAMETRO BARRA ROD DIAMETER	TIPOLOGIA DI BARRA TYPE OF ROD	SPESSORE MIN. DEL SUPPORTO MIN. THICKNESS BASE MATERIAL	DIAMETRO FORO HOLE DIAMETER	PROFONDITÀ DEL FORO HOLE DEPTH	PROFONDITÀ DI INSERIMENTO EMBEDMENT DEPTH	PROFONDITÀ EFF. ANCORAGGIO EFFECTIVE ANCHORAGE DEPTH	INTERASSE CARATTERISTICO CHARACTERISTIC SPACING	DISTANZA DAL BORDO CARATTERISTICA CHARACTERISTIC EDGE DISTANCE	INTERASSE MIN. ALLOWABLE SPACING	DISTANZA MIN. DAL BORDO MIN. ALLOWABLE EDGE DISTANCE	SPESS. FISSABILE MAX FIXTURE THICKNESS	DIAMETRO FORO SPESS. FISSABILE DIAMETER OF CLEARANCE HOLE IN THE FIXTURE	CHIAVE KEY	COPPIA DI SERRAGGIO INSTALLATION TORQUE
d [mm]		h _{min} [mm]	d ₀ [mm]	h ₁ [mm]	h _{nom} [mm]	h _{ef} [mm]	S _{cr} [mm]	C _{cr} [mm]	S _{min} [mm]	C _{min} [mm]	t _{fix} [mm]	d _r [mm]	S _w [mm]	T _{inst} [Nm]
M8	≥ 4.6 A2-70 A4-70	160	10	85	80	80	100	80	50	50	10	9	13	7
M10	≥ 4.6 A2-70 A4-70	200	12	105	100	100	125	100	50	50	20	12	17	15
M12	≥ 4.6 A2-70 A4-70	240	14	125	120	120	150	120	60	60	30	14	19	25
M16	≥ 4.6 A2-70 A4-70	320	18	165	160	160	200	160	80	80	35	18	24	30

Recommended load data - Solid brick / perforated brick / laminated wood

TIPOLOGIA DI BARRA TYPE OF ROD	DIAMETRO BARRA ROD DIAMETER	CARICO AMMISSIBILE A TRAZIONE ADMISSIBLE TENSILE LOAD	CARICO AMMISSIBILE A TAGLIO ADMISSIBLE SHEAR LOAD
	d [mm]	N _{rec} [kN]	V _{rec} [kN]
≥ 4.6 A2-70 A4 -70	M8	2,0	3,0
≥ 4.6 A2-70 A4 -70	M10	2,6	3,4
≥ 4.6 A2-70 A4 -70	M12	2,8	3,9
≥ 4.6 A2-70 A4 -70	M16	4,0	4,2
≥ 4.6 A2-70 A4 -70	M8	0,9	2,0
≥ 4.6 A2-70 A4 -70	M10	0,9	2,0
≥ 4.6 A2-70 A4 -70	M12	0,9	2,5
≥ 4.6 A2-70 A4 -70	M8	3,2	> Per valori a taglio riferirsi alle istruzioni CNR-DT 206/2007 (7.10.2.3) > For shear loads refer to CNR-DT 206/2007 (7.10.2.3)
≥ 4.6 A2-70 A4 -70	M10	4,2	
≥ 4.6 A2-70 A4 -70	M12	6,1	
≥ 4.6 A2-70 A4 -70	M16	10,7	

Recommended load data for applications on base materials with medium mechanical characteristics. Given the variety of masonry substrates and/or wood, for applications on different supports from those indicated, the load values must be obtained by means of appropriate in situ tests.

APPLICATION/INSTALLATION

- 1) Drill the hole with the correct diameter and depth using a rotary percussive machine. Check the perpendicularity of the hole during the drilling operation.
- 2) Clean the hole from drilling dust: the hole shall be cleaned by at least 4 blowing operations, by at least 4 brushing operations followed again by at least 4 blowing operations; before brushing clean the brush and check if the brush diameter is sufficient.
- 3) Unscrew the cap, screw on the mixer and insert the cartridge into the gun.
In 300 ml formats, unscrew the cap and remove the metal clip by inserting the mixer into the slot of the plastic extractor and pulling the extractor to remove the metal clip closing the bag.
Then screw the mixer, insert the cartridge into the gun.
- 4) Extrude a first part of the product making sure that the two components are completely mixed. Complete mixing is achieved when the product, obtained from the union of the two components, comes out of the mixer with a uniform color. Only then the cartridge is ready for use.
- 5) Extrude the resin into the hole until it is 2/3 full. In case of perforated material, insert the plastic cage and then extrude into the cage.
- 6) Use a threaded rod cut at 45° in the end towards the hole. Insert the bar with a rotating movement to release the air bubbles.
- 7) Wait for the hardening and installation times indicated in the technical sheet.

CLEANING OF EQUIPMENT AND PERSONAL PROTECTIVE MEASURES

Clean used tools with acetone. When the adhesive has not yet hardened, it can be removed from the squeegee using paper or a cloth. Once hardened, the product can only be removed mechanically. It is advisable to protect the face. Avoid contact with the skin, possibly using latex, rubber or polyethylene gloves. In case of contact with the skin, wash immediately with soap and water.

PACKAGING

PE-cartridge 300ml; 12 cartridges per box
PE-cartridge 400ml; 12 cartridges per box

STORAGE AND SHELF LIFE

SIMP FIX can be stored for 12 months - for 300 ml, **16 months - for 400 ml** in its original packaging, in a cool and dry place. Keep away from sources of humidity, sources of heat and direct contact with sunlight.

GENERAL INFORMATION

The information contained in this technical data sheet is to the best of our knowledge correct, being based on our knowledge and experience to date and cannot be used as a guarantee, due to the various different materials present on the market and the fact that the application conditions are not under our direct control and supervision. NPT srl, however, guarantees constant product quality. NPT srl, has the right to modify or up-date this technical data sheet according to requirements. Customers are kindly requested to verify that they are in possession of the latest version.

ALWAYS CONSULT THE MATERIAL SAFETY DATA SHEET BEFORE USING THE PRODUCT