

# Sika AnchorFix®-2+

## DICHIARAZIONE DI PRESTAZIONE N. 88587701

<b>1</b>	<b>CODICE DI IDENTIFICAZIONE UNICO DEL PRODOTTO- TIPO:</b>	88587701
<b>2</b>	<b>USI PREVISTI</b>	ETA-13/0779 of 07/10/2016 Resina per fissaggio di ferri di ripresa post-installati dal diametro 8 mm a 32 mm.
<b>3</b>	<b>FABBRICANTE:</b>	Sika Services AG Tüffenwies 16-22 8064 Zürich
<b>4</b>	<b>MANDATARIO:</b>	
<b>5</b>	<b>SISTEMI DI VVCP:</b>	System 1
<b>6b</b>	<b>DOCUMENTO DI VALUTAZIONE EUROPEA:</b>	„Metal Anchors for use in Concrete“, ETAG 001, Part 1 ‘Anchors in general’, Part 5 ‘Bonded anchors’ 2008.
	Valutazione tecnica europea:	ETA-13/0779 of 07/10/2016
	Organismo di valutazione tecnica:	TECHNICKY A ZKUSEBNI USTAV STAVEBNI PRAHA s.p.
	Organismi notificati:	1020

**Dichiarazione di Prestazione**

Sika AnchorFix®-2+

88587701

2017.08 , ver. 1

1138

## 7 PRESTAZIONI DICHIARATE

**Reaction to fire** - Anchorages satisfy requirements for Class A1

**Resistance to fire** - No performance assessed

### **Anchorages subject to:**

- Static and quasi-static load.

### **Base materials**

- Reinforced or unreinforced normal weight concrete according to EN 206-1:2000-12
- Strength classes C12/15 to C50/60 according to EN 206-1:2000-12.
- Maximum chloride concrete of 0,40% (CL 0.40) related to the cement content according to EN 206-1:2000-12.
- Non-carbonated concrete.

Note: In case of a carbonated surface of the existing concrete structure the carbonated layer shall be removed in the area of the post installed rebar connection (with a diameter  $d_s + 60$  mm) prior to the installation of the new rebar. The depth of concrete to be removed shall correspond to at least minimum concrete cover in accordance with EN 1992-1-1:2004.

The foregoing may be neglected if building components are new and not carbonated.

### **Temperature range:**

- -40°C to +80°C (max. short. term temperature +80°C and max. long term temperature +50°C)

### **Use conditions (Environmental conditions)**

- The rebars may be installed in dry or wet concrete.

### **Design:**

- The anchorages are designed under the responsibility of an engineer experienced in anchorages and concrete work.
- Verifiable calculation notes and drawings are prepared taking account of the forces to be transmitted.
- Design according to EN 1992-1-1:2004
- The position of the reinforcement in the existing structure shall be determined on the basis of the construction documentation and taken into account when designing.

### **Installation:**

- Dry or wet concrete.
- It must not be installed in flooded holes.
- Hole drilling by hammer drill or compressed air drill mode.
- The installation of post-installed rebars shall be done only by suitable trained installer and under supervision on site. The conditions under which an installer may be considered as suitable trained and the conditions for supervision on site are up to the Member States in which the installation is done.
- Check the position of the existing rebars

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**Table A1:** Materials

Product form		Bars and de-coiled rods	
Class		B	C
Characteristic yield strength $f_{y,k}$ or $f_{0,2k}$ (MPa)		400 to 600	
Minimum value of $k = (f_t / f_y)_k$		$\geq 1,08$	$\geq 1,15$ $< 1,35$
Characteristic strain at maximum force $\varepsilon_{uk} (\%)$		$\geq 5,0$	$\geq 7,5$
Bendability		Bend / Rebend test	
Maximum deviation from nominal mass (individual bar) (%)	Nominal bar size (mm)		
	$\leq 8$	$\pm 6,0$	
Bond: Minimum relative rib area, $f_{R,min}$	$> 8$	$\pm 4,5$	
	Nominal bar size (mm)		
	8 to 12	0,040	
	$> 12$	0,056	

**Table B1:** Minimum concrete cover min c of the bonded-in rebar depending on drilling method

Drilling method	Without drilling
Hammer drilling	$30\text{mm} + 0,06 \ell_v \geq 2 d_s$
Compressed air drilling	$50\text{ mm} + 0,08 \ell_v$

**Table B2:** Minimum anchorage length<sup>1)</sup> and lap lengths for C20/25 and maximum installation length  $l_{max}$  for good bond conditions.

Rebar		$\ell_{b,min}$	$\ell_{0,min}$	$\ell_{max}$
$\varnothing d_s [\text{mm}]$	$f_{y,k} [\text{N/mm}^2]$	[mm]	[mm]	[mm]
8	500	113	200	400
10	500	142	200	500
12	500	170	200	600
14	500	198	210	700
16	500	227	240	800
20	500	284	300	1000
25	500	354	375	1000
28	500	595	630	1000
32	500	681	720	1000

<sup>1)</sup> According to EN 1992-1-1:  $\ell_{b,min}$  (8.6) and  $\ell_{0,min}$  (8.11) for good bond conditions and  $\alpha_6 = 1,0$  with maximum yield stress  $\sigma_{sd} = 435 \text{ N/mm}^2$  for rebar B500-B and  $\gamma_M = 1,15$  and maximum installation length.

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**Table B3:** Drilling diameter and maximum anchorage depth

Rebar diameter $d_{\text{nom}}^{1)}$	Nominal drilling diameter $d_{\text{cut}}$	Max permissible embedment depth $\ell_v$
[mm]	[mm]	[mm]
8	12 (10)	400
10	14 (12)	500
12	16	600
14	18	700
16	20	800
20	25	1000
25	32	1000
28	35	1000
32	40	1000

<sup>1)</sup> The maximum outer rebar diameter over the ribs shall be:

nominal diameter of the bar  $d_{\text{nom}} + 0,20 d_{\text{nom}}$

**Table B4:** Processing and Load time

Sika AnchorFix® -2+		
Application temperature	Processing time	Load time
+5 to +10°C	10 mins	145 mins
+10 to +15°C	8 mins	85 mins
+15 to +20°C	6 mins	75 mins
+20 to +25°C	5 mins	50 mins
+25 to +30°C	4 mins	40 mins

Processing time refers to the highest temperature in the range. Load time refers to the lowest temperature in the range.

Cartridge must be conditioned to a minimum +5°C.

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**Table B6: Brush**

Sizes	$\varnothing 8$	$\varnothing 10$	$\varnothing 12$	$\varnothing 14$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$	$\varnothing 28$	$\varnothing 32$
Drill hole diameter $d_0$ [mm]	12(10)	14(12)	16	18	20	25	32	35	40
Brushes head diameter [mm]	14	14	19	22	22	29	40	40	42
Brushes head length [mm]					75				

If required use additional accessories and extension for air nozzle and brush to reach back of hole

Max. hole depth	Brush / extension configuration	Part
250 mm	Standard brush	(a)
550 mm	Brush head unit + handle unit	(b)+(c)
850 mm	Brush head unit + extension piece + handle unit	(b)+(d)+(c)
1150 mm	Brush head unit + 2x extension piece + handle unit	(b)+(d)+(d)+(c)



Part (a)



Part (b)



Part (c)



Part (d)

**Table B7: Extension hose for deep holes**

Sizes	$\varnothing 8$	$\varnothing 10$	$\varnothing 12$	$\varnothing 14$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$	$\varnothing 28$	$\varnothing 32$
Hole diameter [mm]	10	12	16	18	20	25	32	35	40
Extension hose [mm]		9				14			
Resin stopper [mm]	-	-	-	-	18	22	30	30	36

**Table C1: Design values of the ultimate bond resistance  $f_{bd}^1$  in N/mm<sup>2</sup> for all drilling methods for good bond conditions**

Rebar $\varnothing d_s$ [mm]	Concrete								
	C12/15	C16/20	C20/25	C25/30	C30/37	C35/45	C40/50	C45/55	C50/60
8 to 16	1,6	2,0	2,3	2,7	3,0	3,4	3,7	4,0	4,3
20								3,7	
25								3,0	
28								2,7	
32								2,3	

<sup>1)</sup>Tabulated values  $f_{bd}$  are valid for good bond conditions according to EN 1992-1-1. For all other bond conditions multiply the values for  $f_{bd}$  by 0,7.

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**8 DOCUMENTAZIONE TECNICA APPROPRIATA E/O DOCUMENTAZIONE TECNICA SPECIFICA**

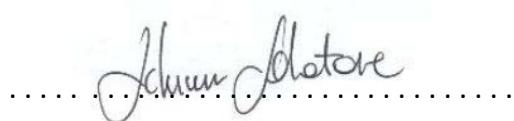
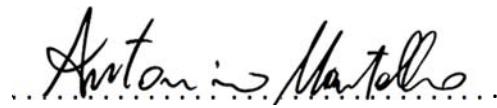
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La prestazione del prodotto sopra identificato è conforme all'insieme delle prestazioni dichiarate. La presente dichiarazione di responsabilità viene emessa, in conformità al regolamento (UE) n. 305/2011, sotto la sola responsabilità del fabbricante sopra identificato.

Firmato a nome e per conto del fabbricante da:

Name : Antonino Montalbano  
Function: PE Refurbishment  
At Peschiera Borromeo  
on 01 March 2018

Name : Salvatore Schirinzi  
Function: General Manager  
At Peschiera Borromeo  
on 01 March 2018



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End of information as required by Regulation (EU) No 305/2011

**RELATED DECLARATION OF PERFORMANCE**

Product Name	Harmonised technical specification	DoP Number
Sika AnchorFix-2+ galvanized or stainless steel bonded ancho	ETA-14/0346	75735322

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## LABEL CE COMPLETA

CE

13

Sika Services AG, Zurich, Switzerland

DoP No. 88587701

ETAG 001, Part 1 'Anchors in general', Part 5 'Bonded anchors'

Notified Body 1020

Resina per fissaggio di ferri di ripresa post-installati dal diametro 8 mm a 32 mm.

**Reaction to fire** - Anchorages satisfy requirements for Class A1

**Anchorage subject to:** Static and quasi-static load.

### Base materials

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<http://dop.sika.com>

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## CE MARKING TO BE PLACED ON THE LABEL

CE

13

Sika Services AG, Zurich, Switzerland

DoP No. 88587701

ETAG 001, Part 1 'Anchors in general', Part 5 'Bonded anchors.'

Notified Body 1020

Resina per fissaggio di ferri di ripresa post-installati dal diametro 8 mm a 32 mm

Per dettagli far riferimento alla documentazione di accompagnamento

<http://dop.sika.com>

## ECOLOGY, HEALTH AND SAFETY INFORMATION (REACH)

Per informazioni e consigli sulla manipolazione, sullo stoccaggio e sullo smaltimento sicuro di prodotti chimici, chi fa uso dei prodotti deve consultare la versione più recente della Scheda di sicurezza (SDS) che riporta le informazioni sulle caratteristiche fisiche, ecologiche e tossicologiche dei prodotti, insieme ad altri informazioni sulla sicurezza.

## NOTE LEGALI

Le informazioni e, in particolare, le istruzioni relative all'applicazione e all'uso finale dei prodotti Sika sono fornite in buona fede in base alle conoscenze ed all'esperienza attuale di Sika sui prodotti a condizione che gli stessi vengano adeguatamente immagazzinati, movimentati ed utilizzati in condizioni normali ed osservando le raccomandazioni di Sika. In pratica, le differenze di materiale, substrati e reali condizioni del luogo sono tali da non permettere una garanzia per la commerciabilità o l'idoneità per uno scopo particolare, allo stesso modo nessuna responsabilità può emergere da queste informazioni, da qualsiasi raccomandazione scritta o da ogni altra consulenza prestata. L'utilizzatore del prodotto deve testarne l'idoneità per l'uso e lo scopo intesi. Sika si riserva il diritto di modificare le proprietà dei suoi prodotti. Devono essere rispettati i diritti di proprietà di terzi. Tutti gli ordini vengono accettati alle nostre vigenti condizioni di vendita e consegna. Gli utilizzatori devono fare sempre riferimento alla versione più recente della locale scheda dati relativa al prodotto in questione, le cui copie verranno fornite su richiesta.

### Sika ITALIA

Via Luigi Einaudi, 6  
20068 Peschiera Borromeo  
(MI)  
Italia  
[www.sika.com](http://www.sika.com)

### Dichiarazione di Prestazione

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BUILDING TRUST

