



Anchorfix **PSC**

Anchorfix **PSF**



Anchorfix PSC

Polyester resin for use in concrete



Description

SVM-PSC is general purpose non-cracked resin, with a relatively short cure time.

Typical applications

- Masonry support
- Fixing into tarmac
- Overhead applications
- Guard rails
- Handrails
- Canopies
- Masonry support
- Balustrading
- Cable trays
- Curtain walling
- Fencing & gates

Suitable for use in



Non-cracked Concrete

Features and benefits

Economical fixings resin for medium duty load applications
Can be used in damp conditions and underwater applications (except sea water)

Suitable for repetitive use. Partly used product can be reused by fitting a new mixing nozzle



Product description	Quantity per Box	Cartridge Type	Product Code
Cartridge of polyester resin styrene containing + 2 nozzles	12	300 ml chubpack	ANCHORFIX-PSC-300

MINIMUM CURING AND WORKING TIME

DRY/WET concrete	RESIN temperature	CONCRETE temperature	CURING time	WORKING time
	5°C / 41°F	-5°C / 23°F	6,0 h	60 min
	5°C / 41°F	0°C / 32°F	3,0 h	40 min
DRY CONCRETE	5°C / 41°F	5°C / 41°F	2,0 h	20 min
	10°C / 50°F	10°C / 50°F	80 min	12 min
	15°C / 59°F	15°C / 59°F	60 min	8 min
	20°C / 68°F	20°C / 68°F	45 min	5 min
	25°C / 77°F	30°C / 86°F	20 min	2 min

Store below 25 deg Celsius

PSC RESIN + STEEL RODS M8 - M30

NON-CRACKED CONCRETE

Performance data for single anchor without influence of edge distance and spacing

SIZE	EMBEDMENT DEPTH h_{ef} [mm]	STEEL CLASS 5.8							STEEL CLASS 8.8							STEEL GRADE A4						
		M8	M10	M12	M16	M20	M24	M30	M8	M10	M12	M16	M20	M24	M30	M8	M10	M12	M16	M20	M24	M30
MEAN ULTIMATE LOADS																						
TENSION LOAD	$N_{Rd,m}$ [kN]	21,6	34,8	48,3	82,9	119,3	132,7	157,1	22,7	38,0	48,3	82,9	119,3	132,7	157,1	22,7	38,0	48,3	82,9	119,3	132,7	157,1
SHEAR LOAD	$V_{Rd,m}$ [kN]	18,3	29,0	42,2	78,5	122,5	176,5	280,5	29,3	46,4	67,4	125,6	196,0	282,4	448,4	25,6	40,6	59,0	109,9	171,5	247,1	392,7
CHARACTERISTIC LOADS																						
TENSION LOAD	N_{Rk} [kN]	18,0	28,3	39,4	56,5	90,8	110,8	113,1	19,1	28,3	39,4	56,5	90,8	110,8	113,1	19,1	28,3	39,4	56,5	90,8	110,8	113,1
SHEAR LOAD	V_{Rk} [kN]	9,0	14,0	21,0	39,0	61,0	88,0	140,0	15,0	23,0	34,0	63,0	98,0	141,0	224,0	13,0	20,0	29,0	55,0	86,0	124,0	196,0
DESIGN LOADS																						
TENSION LOAD	N_{Rd} [kN]	10,6	15,7	21,9	31,4	50,4	52,8	53,9	10,6	15,7	21,9	31,4	50,4	52,8	53,9	10,6	15,7	21,9	31,4	50,4	52,8	53,9
SHEAR LOAD	V_{Rd} [kN]	7,2	11,2	16,8	31,2	48,8	70,4	112,0	12,0	18,4	17,2	50,4	78,4	112,8	179,2	8,3	12,8	18,6	35,3	55,1	79,5	125,6
RECOMMENDED LOADS *																						
TENSION LOAD	N_{rec} [kN]	7,6	11,2	15,6	22,4	36,0	37,7	38,5	7,6	11,2	15,6	22,4	36,0	37,7	38,5	7,6	11,2	15,6	22,4	36,0	37,7	38,5
SHEAR LOAD	V_{rec} [kN]	5,1	8,0	12,0	22,3	34,9	50,3	80,0	8,6	13,1	12,3	36,0	56,0	80,6	128,0	5,9	9,1	13,3	25,2	39,4	56,8	89,7

* Partial safety factor 1.4

Steel failure

Anchorfix PSF

Polyester resin for use in concrete and lightweight substrates

Description

SVM-PSF is general purpose resin, for solid and hollow structures with a relatively short cure time.

Features and benefits

The most convenient bonded anchor for general purpose use

Ideal for applications where mechanical anchors are not suitable

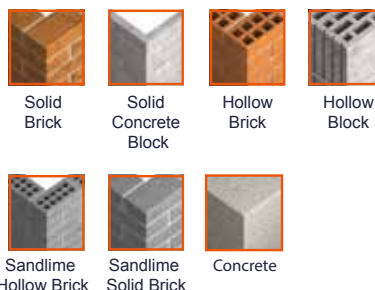
Easy dosage thanks to patented self-opening system and use of manual silicone gun

Suitable for multiple use. Partly used product can be reused after fitting spare nozzle

Typical applications

- Masonry support
- Fixing into tarmac
- Overhead applications
- Staircases, Gates
- High racking
- Canopies
- Sanitary appliances
- Steel construction
- Railings, Handrails
- Consoles
- Ladders
- Cable trays

Suitable for use in



MINIMUM CURING AND WORKING TIME

DRY/WET concrete	RESIN temperature	CONCRETE temperature	CURING time	WORKING time
DRY CONCRETE	5°C / 41°F	-5°C / 23°F	8,0 h	70 min
	5°C / 41°F	0°C / 32°F	4,0 h	45 min
DRY CONCRETE	5°C / 41°F	5°C / 41°F	2,0 h	25 min
	10°C / 50°F	10°C / 50°F	90 min	15 min
	15°C / 59°F	15°C / 59°F	60 min	9 min
	20°C / 68°F	20°C / 68°F	45 min	5 min
	25°C / 77°F	30°C / 86°F	30 min	2 min

Product description	Quantity per Box	Cartridge Type	Product Code
Cartridge of poliestere resin styrene containing + 2 nozzles	12	300 ml chubpack	ANCHORFIX-PSF-300



Store below 25 deg Celsius

PSF RESIN + STEEL RODS M8 - M30

NON-CRACKED CONCRETE

Performance data for single anchor without influence of edge distance and spacing

SIZE		STEEL CLASS 5.8							STEEL CLASS 8.8							STEEL GRADE A4						
		M8	M10	M12	M16	M20	M24	M30	M8	M10	M12	M16	M20	M24	M30	M8	M10	M12	M16	M20	M24	M30
EMBEDMENT DEPTH	h_{ef} [mm]	80	90	110	125	170	210	240	80	90	110	125	170	210	240	80	90	110	125	170	210	240
MEAN ULTIMATE LOADS																						
TENSION LOAD	$N_{RU,m}$ [kN]	20,4	32,2	42,6	68,6	102,6	115,4	150,8	20,4	32,2	42,6	68,6	102,6	115,4	150,8	20,4	32,2	42,6	68,6	102,6	115,4	150,8
SHEAR LOAD	$V_{RU,m}$ [kN]	18,3	29,0	42,2	78,5	122,5	176,5	280,5	29,3	46,4	67,4	125,6	196,0	282,4	448,4	25,6	40,6	59,0	109,9	171,5	247,1	392,7
CHARACTERISTIC LOADS																						
TENSION LOAD	N_{Rk} [kN]	18,0	26,9	37,3	50,3	85,5	102,9	124,4	19,1	26,9	37,3	50,3	85,5	102,9	124,4	19,1	26,9	37,3	50,3	85,5	102,9	124,4
SHEAR LOAD	V_{Rk} [kN]	9,0	14,0	21,0	39,0	61,0	88,0	140,0	15,0	23,0	34,0	63,0	98,0	141,0	224,0	13,0	20,0	29,0	55,0	86,0	124,0	196,0
DESIGN LOADS																						
TENSION LOAD	N_{Rd} [kN]	9,1	14,9	20,7	27,9	47,5	57,2	69,1	9,1	14,9	20,7	27,9	47,5	57,2	69,1	9,1	14,9	20,7	27,9	47,5	57,2	69,1
SHEAR LOAD	V_{Rd} [kN]	7,2	11,2	16,8	31,2	48,8	70,4	112,0	12,0	18,4	17,2	50,4	78,4	112,8	179,2	8,3	12,8	18,6	35,3	55,1	79,5	125,6
RECOMMENDED LOADS *																						
TENSION LOAD	N_{rec} [kN]	6,5	10,6	14,8	19,9	33,9	40,9	49,4	6,5	10,6	14,8	19,9	33,9	40,9	49,4	6,5	10,6	14,8	19,9	33,9	40,9	49,4
SHEAR LOAD	V_{rec} [kN]	5,1	8,0	12,0	22,3	34,9	50,3	80,0	8,6	13,1	12,3	36,0	56,0	80,6	128,0	5,9	9,1	13,3	25,2	39,4	56,8	89,7

* Partial safety factor 1.4

Steel failure

PSF RESIN + STEEL RODS M8 - M16 (steel class 5.8, 8.8, A4)

MASONRY – SOLID SUBSTRATE

Performance data for single anchor without influence of edge distance and spacing

SIZE		SOLID CLAY BRICK 20MPa				AERATED CONCRETE AAC7 6MPa				SILICATE SOLID BRICK 20MPa			
		M8	M10	M12	M16	M8	M10	M12	M16	M8	M10	M12	M16
EMBEDMENT DEPTH	h_{ef} [mm]	80	85	95	105	80	90	110	125	80	90	110	125
CHARACTERISTIC LOADS													
TENSION LOAD	N_{Rk} [kN]	6,0	7,0	7,0	7,0	1,5	2,0	2,5	3,0	5,0	5,0	5,0	5,0
SHEAR LOAD	V_{Rk} [kN]	3,5	5,0	7,0	7,0	1,5	2,0	2,5	3,0	3,5	5,0	5,0	5,0
DESIGN LOADS													
TENSION LOAD	N_{Rd} [kN]	2,4	2,8	2,8	2,8	0,8	1,0	1,3	1,5	2,0	2,0	2,0	2,0
SHEAR LOAD	V_{Rd} [kN]	1,4	2,0	2,8	2,8	0,8	1,0	1,3	1,5	1,4	2,0	2,0	2,0
RECOMMENDED LOADS *													
TENSION LOAD	N_{rec} [kN]	1,7	2,0	2,0	2,0	0,5	0,7	0,9	1,1	1,4	1,4	1,4	1,4
SHEAR LOAD	V_{rec} [kN]	1,0	1,4	2,0	2,0	0,5	0,7	0,9	1,1	1,0	1,4	1,4	1,4

PSF RESIN + STEEL RODS M8 - M16 (steel class 5.8, 8.8, A4)

MASONRY – SOLID SUBSTRATE

Performance data for single anchor without influence of edge distance and spacing

SIZE		PERFORATED CERAMIC BLOCKS 12MPa*						LIGHTWEIGHT CONCRETE HOLLOW BLOCKS 2MPa*						SILICATE HOLLOW BLOCKS 12MPa*								
		M8	M10	M12	M16	M8	M10	M8	M10	M12	M16	M8	M10	M12	M16							
EMBEDMENT DEPTH	h_{ef} [mm]	12x50	12x80	16x85	16x130	16x85	16x130	20x85	12x50	12x80	16x85	16x130	16x85	16x130	20x85	12x50	12x80	16x85	16x130	16x85	16x130	20x85
CHARACTERISTIC LOADS																						
TENSION LOAD	N_{Rk} [kN]	2,0	2,5	3,0	3,5	3,5	4,0	4,0	1,2	1,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	3,5	3,0	3,0	3,0
SHEAR LOAD	V_{Rk} [kN]	2,0	2,5	2,5	2,5	2,5	2,5	2,5	1,2	1,5	2,5	2,0	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
DESIGN LOADS																						
TENSION LOAD	N_{Rd} [kN]	0,8	1,0	1,2	1,4	1,4	1,6	1,6	0,5	0,6	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,4	1,2	1,2	1,2
SHEAR LOAD	V_{Rd} [kN]	0,8	1,0	1,0	1,0	1,0	1,0	1,0	0,5	0,6	1,0	0,8	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0
RECOMMENDED LOADS *																						
TENSION LOAD	N_{rec} [kN]	0,6	0,7	0,9	1,0	1,0	1,1	1,1	0,3	0,4	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	1,0	0,9	0,9	0,9
SHEAR LOAD	V_{rec} [kN]	0,6	0,7	0,7	0,7	0,7	0,7	0,7	0,3	0,4	0,7	0,6	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7

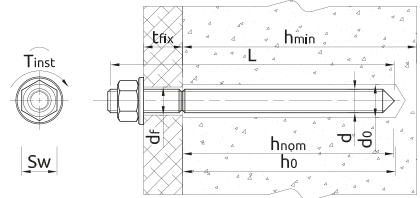
* The anchor can be embedded in several substrates. For more information please contact with our technical department.

Anchorfix PSC / Anchorfix PSF

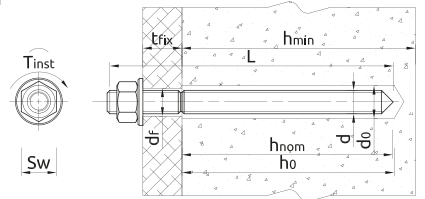
INSTALLATION DATA

CONCRETE									
SIZE			M8	M10	M12	M16	M20	M24	M30
Thread diameter	d	[mm]	8	10	12	16	20	24	30
Hole diameter in substrate	d_o	[mm]	10	12	14	18	24	28	35
Installation torque	T_{inst}	[Nm]	10	20	40	80	120	180	300
Wrench size	Sw	[mm]	13	17	19	24	30	36	46
Min. hole depth in substrate	h_o	[mm]	85	95	115	130	175	215	245
Standard installation depth*	h_{nom}	[mm]	80	90	110	125	170	210	240
MMin. substrate thickness	h_{min}	[mm]	110	120	140	155	218	266	310
Min. spacing	s_{min}	[mm]	40	45	55	63	85	105	120
Min. edge distance	c_{min}	[mm]	40	45	55	63	85	105	120

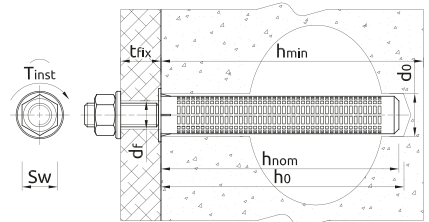
* The anchor can be embedded with several installation depths. For more information please contact with our technical department.



LIGHTWEIGHT SOLID SUBSTRATES		CLAY BRICK				AERATED CONCRETE				
SIZE		M8	M10	M12	M16	M8	M10	M12	M16	
Thread diameter	d	[mm]	8	10	12	16	8	10	12	16
Hole diameter in substrate	d_o	[mm]	10	12	14	18	10	12	14	18
Installation torque	T_{inst}	[Nm]	5	8	10	15	3	4	6	10
Wrench size	Sw	[mm]	13	17	19	24	13	17	19	24
Min. hole depth in substrate	h_o	[mm]	85	90	100	110	85	90	100	110
Installation depth	h_{nom}	[mm]	80	85	95	105	80	85	95	105
Min. spacing	s_{min}	[mm]	50	50	50	50	54	50	50	54
Min. edge distance	c_{min}	[mm]	50	50	50	50	54	50	50	54



HOLLOW SUBSTRATES									
SIZE		M8	M10	M12	M16				
Thread diameter	d	[mm]	8	10	12	16			
Mesh sleeve size	d x l	[mm]	12 x 50	12 x 80	15 x 85	15 x 125	15 x 85	15 x 125	20 x 85
Hole diameter in substrate	d_o	[mm]	12	16	16	20			
Installation torque	T_{inst}	[Nm]	3	4	6	10			
Wrench size	Sw	[mm]	13	17	19	24			
Min. hole depth in substrate	h_o	[mm]	55	85	90	130	90	130	90
Installation depth	h_{nom}	[mm]	50	80	85	125	85	125	85
Min. spacing	s_{min}	[mm]	100	100	100	100	100	100	120
Min. edge distance	c_{min}	[mm]	100	100	100	100	100	100	120



INSTALLATION GUIDE

1A i 1B Drill a hole to the required diameter and depth for stud size being used.

2A i 2B Clean the hole with brush and hand pump at least four times each.

3B Hollow substrates: Insert a mesh sleeve into the hole.

Insert cartridge into a dispenser and attach mixing nozzle.

Dispense to waste until an even gray colour is obtained.

Insert the mixing nozzle to the far end of the hole and inject the resin, slowly withdrawing the nozzle as the hole is filled to:

3A Solid substrates: 2/3 of its depth.

4B Hollow substrates: full mesh.

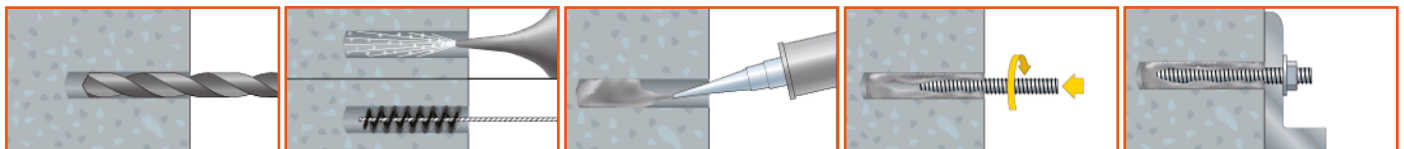
4A Immediately insert the stud, slowly and with a slight twisting motion.

Please mind working time in case the stud must be re-adjusted.

Remove excess of resin around the hole before it sets and leave it undisturbed until the curing time elapses.

5A i 5B Attach fixture and tighten the nut to the required torque.

A Solid



B Hollow

