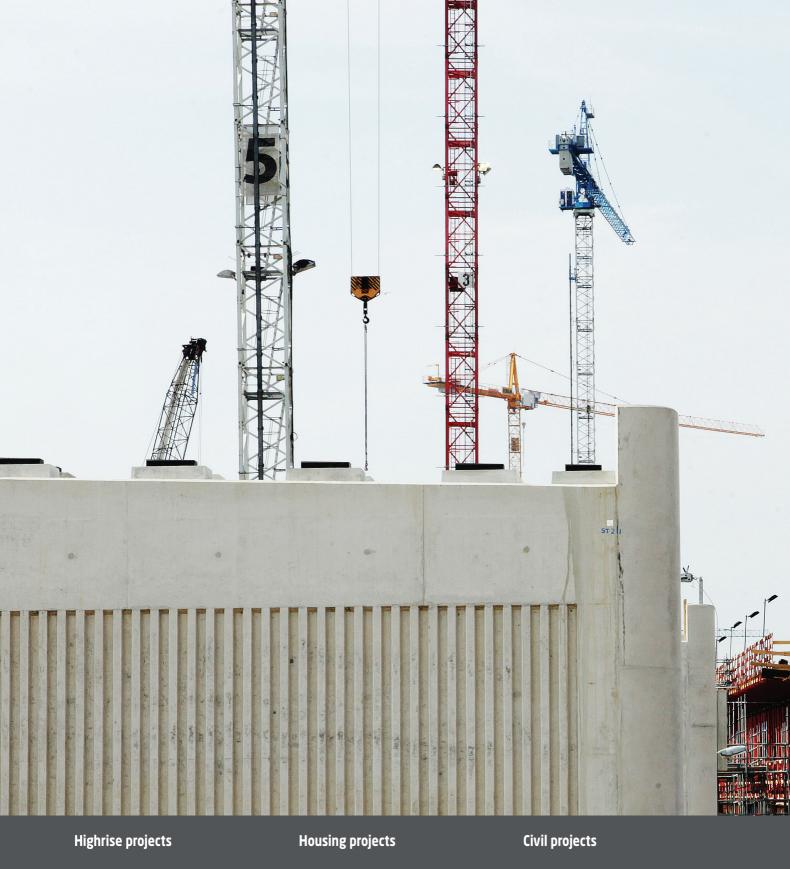
SYMPAFIX®

serious fixings















Commercial projects



Contents

Chemicals	8
Anchors	26
Screws	48
Nails	54
Tools	68

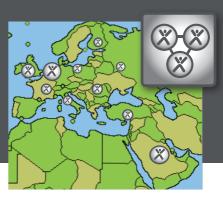


Sympafix Engineer -Anchor calculation software

Experienced and competent customer service

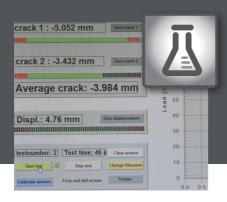


International dealer network



'Serious fixings mean more than just fixings.'

Serious anchor test facilities



Logistics centre to ensure complete and timely delivery

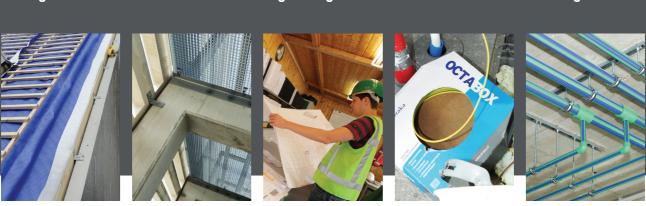


Serious gas technology



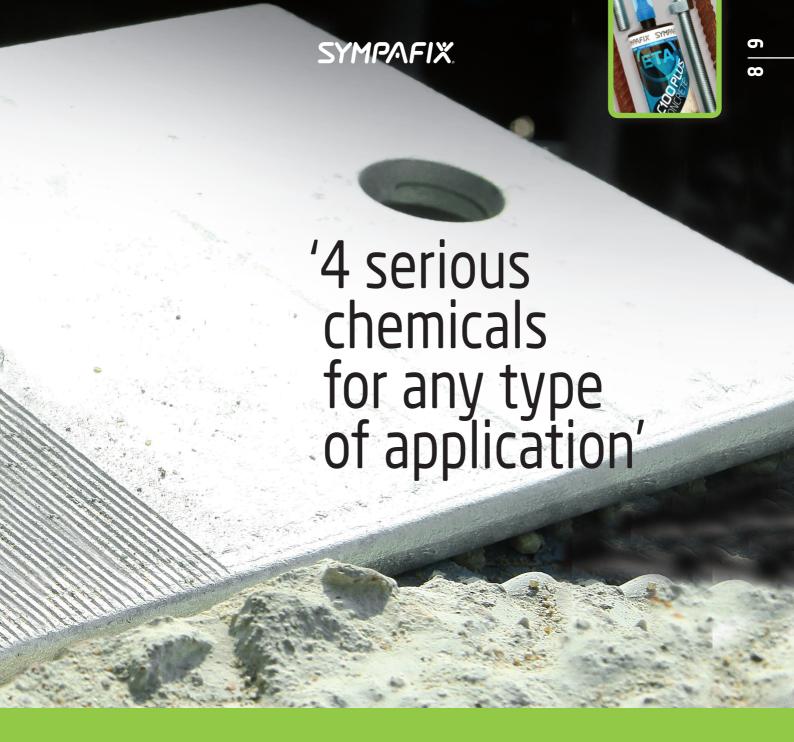












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X150+PLUS

FEATURES

- ETA approved for applications under **seismic** action, category C1 and category C2
- ETA Option 1 approval for use of threaded rods and rebar in cracked and uncracked concrete,
- ETA TRO23 approval for post installed rebar applications, including in diamond drilled holes
- ETA approved for overhead installation and waterfilled drillholes

BENEFITS

- Approved for **shallow as well as (very) deep** drillholes
- Designed for **extreme applications**, f.e. rebar or threaded rod in waterfilled diamond drilled holes
- Shrink free
- Approved for the use in **three temperature ranges**
- Longer setting time allows for **flexibility** during installation







European Technical Approvals











Extreme pure epoxy resin anchor X150+PLUS

Туре	Art. Nr.	QTY	QTY	71160 QTY	ML	
X150+PLUS 385ML	71098	1	15	1	385	
X150+PLUS 585ML	71100	1	15	1	585	
X150+PLUS 1400ML	71102	1	5	1	1400	



C100-PLUS

Tested and approved













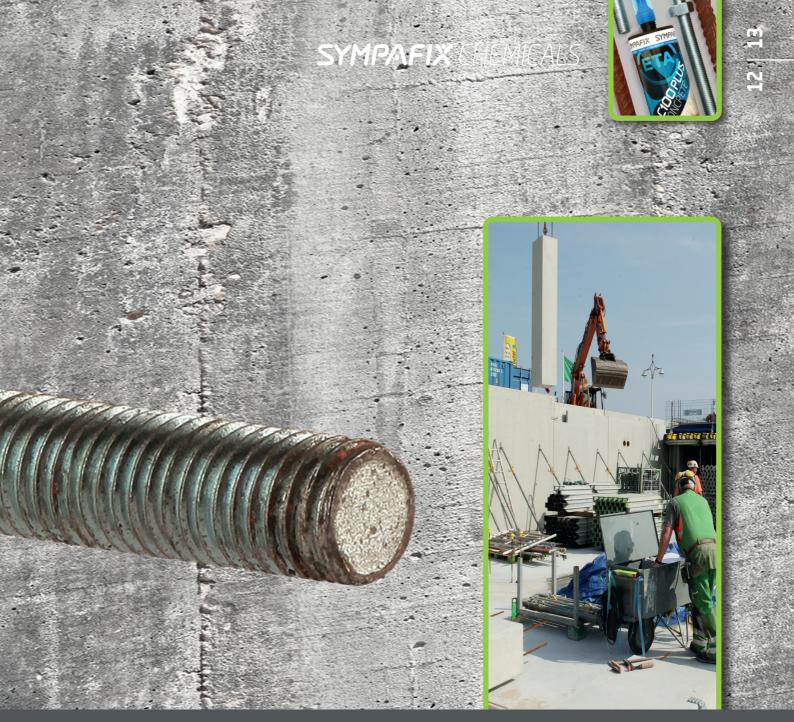
UC200-PLUS ULTRABOND

FEATURES

- ETA approved for applications under seismic action, category C1 and category C2
- ETA Option 1 approval for use of threaded rods and rebar in cracked and uncracked concrete
- ETA TR023 **approval for post installed rebar** applications
- Approved in hammerdrilled, airdrilled and hollow drillbit drillboles
- ETA approved for overhead installation and waterfilled drillholes

BENEFITS

- **Spectacular bond strengths** up to 81% increase in cracked and 127% in noncracked concrete compared to C100-PLUS
- Approved for **shallow as well as (very) deep** drillholes
- Approved for up to 45% **smaller edge distances**
- Approved for the use in three temperature ranges, up to 160°C
- Up to 30% faster curing time
- Approved for use with threaded rods in **all common steelclasses**
- No drillhole cleaning required when using hollow drillbits



European Technical Approvals

1343-CPR-M 536-7 ETA-17/0650 ETAG 001 Option 1 Seismic C1 and C2

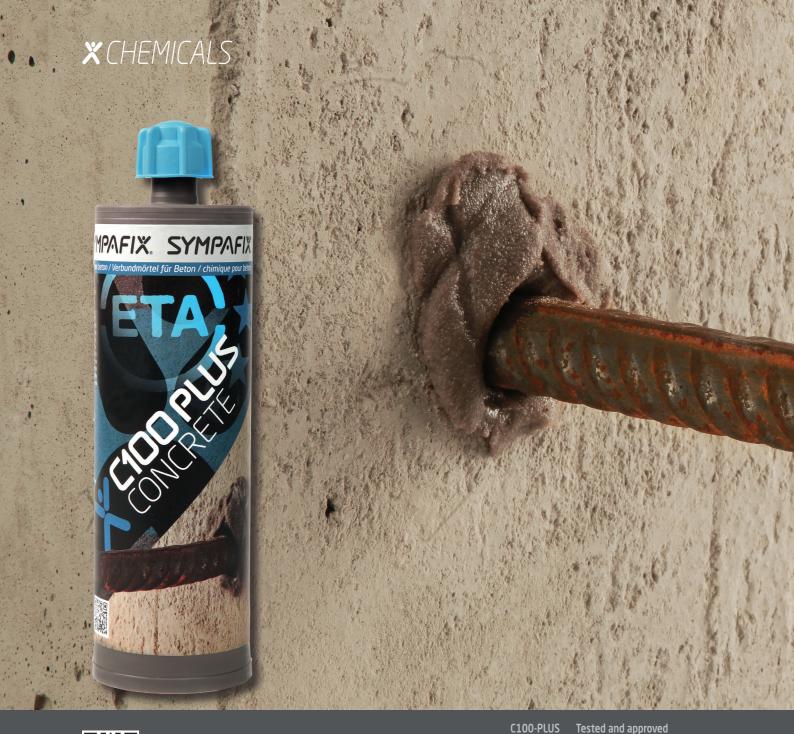








			\$	71156	
Туре	Art. Nr.	ΥTQ	QTY	QTY	ML
UC200-PLUS 420ML	71132	1	15	1	420















C100-PLUS

FEATURES

- ETA approved for applications under **seismic** action, category C1
- ETA Option 1 approval for use of threaded rods and rebar in cracked and uncracked concrete
- ETA TR029 approved for **brickwork and masonry**
- ETA TRO23 **approval for post installed rebar** applications
- ETA approved for overhead installation and waterfilled drillholes

BENEFITS

- Approved for **shallow as well as (very) deep** drillholes
- Designed for almost any application; threaded rods and rebar, concrete and masonry, dry and waterfilled holes, low and high temperatures
- Approved for concrete temperatures from -10°C
- Short curing time allows for the anchor to be loaded quickly
- **High performance fast curing** vinylester anchor
- **Approved** for use with threaded rods in steelclasses 4.6, 5.8 and 8.8 as well as stainless steel





European Technical Approvals











0756-CPD-0550 ETA-13/0265 TR029 Masonry





Concrete vinylester resin anchor C100-PLUS

				71158			Stockbox		Startkit*
Туре	Art. Nr.	QTY	QTY	QTY	ML	Art. Nr.	QTY	Art. Nr.	QTY
C100-PLUS 150ML	71108	1	20	1	150				
C100-PLUS 300ML	71110	1	20	1	300	71402	20	71422	4
C100-PLUS 360ML	71112	1	15	1	360				
C100-PLUS 420ML	71114	1	15	1	420	71406	20	71424	4
C100-PLUS 825ML	71116	1	9	1	825				

^{*} The Startkit contains 4 cartridges, a cartridge gun, brushes, blowpump, mesh sleeves in a stackable stockbox.













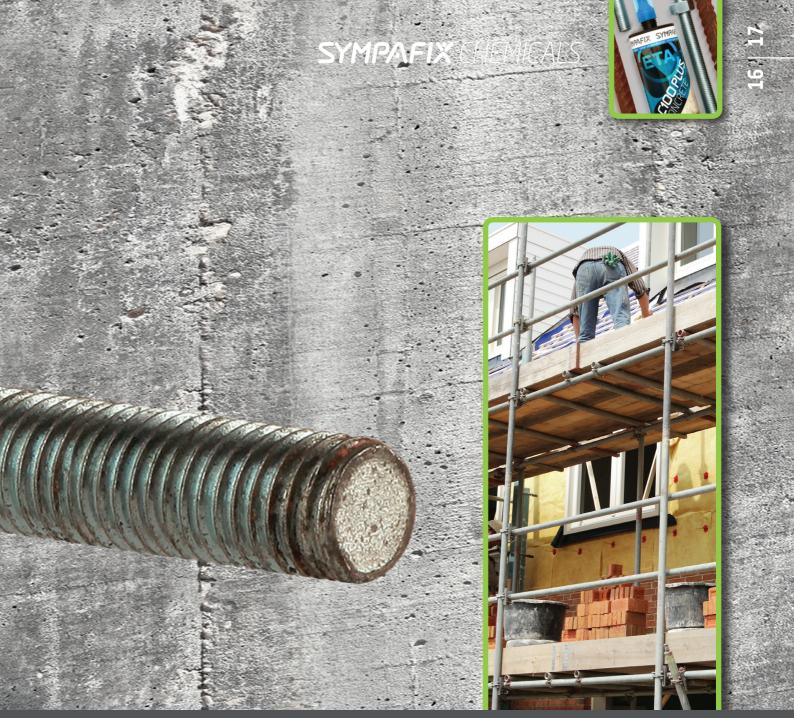
M50-PLUS

FEATURES

- ETA Option 7 approval for use of **threaded rods in uncracked**
- ETA TR029 approved for **brickwork and masonry**
- ETA approved for **overhead installation** and **waterfilled** drillholes

BENEFITS

- **Approved for most common applications:** threaded rods in concrete and masonry
- Approved for concrete temperatures from -5°C
- Short curing time allows for the anchor to be loaded **quickly**
- High performance fast curing epoxy acrylate anchor
- **Approved** for use with threaded rods in steelclasses 4.6, 4.8, 5.8 and 8.8 as well as stainless steel



European Technical Approvals

0756-CPD-0488 ETA-12/0205 ETAG 001 Option 7





0756-CPD-0479 ETA-13/0326 TR029 Masonry





Multi-Base epoxy acrylate resin anchor M50-PLUS

			*	71158			Stockbox		Startkit*
Туре	Art. Nr.	QTY	QTY	QTY	ML	Art. Nr.	QTY	Art. Nr.	QTY
M50-PLUS 300ML	71122	1	20	1	300	71404	20	71426	4
M50-PLUS 360ML	71124	1	15	1	360				
M50-PLUS 410ML	71126	1	15	1	410	71408	20	71428	4

^{*} The Startkit contains 4 cartridges, a cartridge gun, brushes, blowpump, mesh sleeves in a stackable stockbox.





'High performance chemicals perform best with serious quality cartridge guns '





385ML & 585ML **X150+PLUS** manual cartridge gun

			*	Û		Ĥ	
Туре	Art. Nr.	QTY	QTY			ML	
CG-585PLUS	71128	1		X150+PLUS		385+585	



300ML C100-PLUS & M50-PLUS manual cartridge gun

			*	Û	Û	Û	
Туре	Art. Nr.	QTY	QTY			ML	
CG-300	71136	1		C100-PLUS	M50-PLUS	300	



345ML & 360ML C100-PLUS & M50-PLUS manual cartridge gun

Туре	Art. Nr.	QTY	QTY	Ĥ	Û	Î ML	
CG-345	71138	1		C100-PLUS	M50-PLUS	345+360	





Cartridge Guns

To install the Sympafix line of chemical anchors comfortably, **quickly and correctly**, a **wide range** of quality cartridge guns is available. The range consists of standard manual tools, **battery tools** designed for serial work and pneumatic tools for large volume applications.



410ML & 420ML UC200-PLUS, C100-PLUS & M50-PLUS manual cartridge guns

			*	Û	Ĥ	Ĥ	Ĥ	
Туре	Art. Nr.	QTY	QTY				ML	
CG420-PLUS	71134	1		UC200-PLUS	C100-PLUS	M50-PLUS	410 + 420	
CG-420	71140	1		UC200-PLUS	C100-PLUS	M50-PLUS	410 + 420	



300ML & 420ML UC200-PLUS, C100-PLUS & M50-PLUS battery cartridge guns

			*	Û	Û	Û	Û
Туре	Art. Nr.	QTY	QTY				ML
CG-BAT300	71142	1			C100-PLUS	M50-PLUS	300
CG-BAT420	71144	1		UC200-PLUS	C100-PLUS	M50-PLUS	410 + 420



420ML, 825ML & 1400ML pneumatic **X150+PLUS**, **UC200-PLUS**, **C100-PLUS** & **M50-PLUS** cartridge guns

				Î		Î	Û
Туре	Art. Nr.	QTY	QTY				ML
CG-PNEUM420	71150	1		UC200-PLUS	C100-PLUS	M50-PLUS	410 + 420
CG-PNEUM825	71146	1			C100-PLUS		825
CG-1400 PNEUM	71130	1			X150+PLUS		1400





Mixing nozzles

For the Sympafix line of chemical anchors **special designed mixing nozzles** are available. The nozzles are designed to ensure **proper mixing** and to safeguard **quick and correct extrusion**. Each cartridge size in the extreme, ultrabond, concrete and multibase lines **use specific mixing nozzles**. For **deeper rebar applications nozzle extensions** are available.

Plastic and steel mesh sleeve

For using Sympafix chemical anchors in **brickwork and hollow** material, specific designed **plastic and metal sleeves** are available that ensure proper installation. The
mortar that protrudes through the holes forms a **good grip on the base material**. The plastic sleeves have a fixed length,
and the one meter metal sleeves **cut to the required length**.





Red mixing nozzle, Black mixing nozzles and Extensions

				E
Туре	Art. Nr.	QTY	QTY	for
X150-PLUS RED MIXING NOZZLE				
NOZZLE-RED-18	71160	10	100	X150+PLUS
UC200-PLUS MIXING NOZZLE				
NOZZLE-SQUARE-UC200	71156	10	100	UC200-PLUS
BLACK MIXING NOZZLE				
NOZZLE-BLACK-14	71158	10	100	All cartridges EXCEPT X150+PLUS and UC200-PLUS
MIXING NOZZLE EXTENSIONS				
EXTENSION-200MM	71162	10		All nozzles
EXTENSION-500MM	71164	10		All nozzles
EXTENSION-1000MM	71166	1		All nozzles
EXTENSION-2000MM	71168	1		All nozzles





Plastic sleeves, PSM-PRO plastic sleeves and One meter mesh sleeves

				Ø		
Туре	Art. Nr.	QTY	QTY	mm	mm	M
PLASTIC SLEEVES						
PS-M6/M8-80	71184	10		12	80	M8
PS-M8/M12-85	71186	10		16	85	M8+M12
PS-M12/M16-85	71188	10		20	85	M12+M16
PSM-PRO PLASTIC SLEEVES						
PS-PLUS13x100	71190	10		13	100	M8
PS-PLUS15x100	71192	10		15	100	M10+M12
ONE METER MESH SLEEVES						
MS121000	71194	1	50	12	1000	M8
MS161000	71196	1	50	16	1000	M10+M12
MS201000	71198	1	25	20	1000	M16

European Technical Approvals

B-1109-CPR-0089 ETA-14/0309 ETAG 001 Option 7 M8-M30







Tested and approved



Glass capsules and steel rods

- **ETA option 7** for uncracked concrete
- Approved for 2 temperature ranges, namely 24°C/40°C and
- Approved also for **standard threaded rod** (cut to length with 1 side under angle)
- Suitable for diamond cored holes

- No injection needed, so **quick installation**
- **Exact dosing**, so no waste of material
- Usable under **many weather conditions**, also in wet drill holes
- **Styrenefree and odourless**
- No geltime restrictions



GC-PLUS glass capsules

			*	Ø		
Туре	Art. Nr.	QTY	QTY	mm	`M	h _{nom} mm
GC-PLUS M8	71170	10	500	10	M8	80
GC-PLUS M10	71172	10	500	12	M10	90
GC-PLUS M12	71174	10	200	14	M12	110
GC-PLUS M16	71176	10	200	18	M16	125
GC-PLUS M20	71178	10	150	22	M20	170
GC-PLUS M24	71180	5	100	26	M24	210



			\$	//a	<u></u>	<u> </u>
Turne	Art. Nr.	QTY	QTY	Z ø	 	
Type ZINC PLATED	AI C. NI.	riy	QIT	mm	mm	h _{nom} mm
GC-AS8110	71254	10		10	110	80
GC-AS10130	71256	10		12	130	90
GC-AS12160	71258	10		14	160	110
GC-AS16190	71260	10		18	190	12
GC-AS20260	71262	10		22	260	170
GC-AS24300	71264	5		26	300	210
A4 STAINLESS STEEL						
GC-AS8110SS	71266	10		10	110	80
GC-AS10130SS	71268	10		12	130	90
GC-AS12160SS	71270	10		14	160	110
GC-AS16190SS	71272	10		18	190	125
GC-AS20260SS	71274	10		22	260	170
GC-AS24300SS	71276	5		26	300	210





Tailor made threaded rods, 4.8 steel, M6 - M20

The grade designation of the mechanical properties of threaded rods consists out of two numbers separated by a point (for example, 8.8). The number in front of the point corresponds to 1/100 of the nominal tensile strength in N / mm². In the case of 4.8: $4\times100 = 400$ N / mm². The nominal tensile strength is the maximum mechanical tension that can be reached by the steel as it is plastically deformed. Multiplication of the two numbers results into 1/10 of the nominal yield strength. For 4.8 the yield strength can thus be calculated as $4\times8\times10 = 320$ N / mm². The yield strength corresponds with the load at which the steel starts to deform plastically. The "elasticity" of the steel has reached its limit. A constructive engineer will not design structures where the material is loaded above the yield strength. When ordering tailor made threaded rods, please clearly indicate the exact desired length.



Threaded rods 4.8 Steel (zinc plated)

Туре	Art.nr.	QTY	Steel grade
M6x50-100	90600	20	4.8, DIN 976
M6x101-125	90605	16	4.8, DIN 976
M6x126-140	90610	14	4.8, DIN 976
M6x141-165	90615	12	4.8, DIN 976
M6x166-200	90620	10	4.8, DIN 976
M6x201-250	90625	8	4.8, DIN 976
M6x251-330	90630	6	4.8, DIN 976
M6x331-500	90635	4	4.8, DIN 976
M6x501-999	90640	2	4.8, DIN 976
M6x1000	90645	2	4.8, DIN 976
M8x50-100	90800	20	4.8, DIN 976
M8x101-125	90805	16	4.8, DIN 976
M8x126-140	90810	14	4.8, DIN 976
M8x141-165	90815	12	4.8, DIN 976
M8x166-200	90820	10	4.8, DIN 976
M8x201-250	90825	8	4.8, DIN 976
M8x251-330	90830	6	4.8, DIN 976
M8x331-500	90835	4	4.8, DIN 976
M8x501-999	90840	2	4.8, DIN 976
M8x1000	90845	2	4.8, DIN 976
M10x50-100	91000	10	4.8, DIN 976
M10x101-125	91005	8	4.8, DIN 976
M10x126-140	91010	7	4.8, DIN 976
M10x141-165	91015	6	4.8, DIN 976
M10x166-200	91020	5	4.8, DIN 976
M10x201-250	91025	4	4.8, DIN 976
M10x251-330	91030	3	4.8, DIN 976
M10x331-500	91035	2	4.8, DIN 976
M10x501-999	91040	2	4.8, DIN 976
M10x1000	91045	2	4.8, DIN 976

		1	
Туре	Art.nr.	QTY	Steel grade
M12x50-100	91200	10	4.8, DIN 976
M12x101-125	91205	8	4.8, DIN 976
M12x126-140	91210	7	4.8, DIN 976
M12x141-165	91215	6	4.8, DIN 976
M12x166-200	91220	5	4.8, DIN 976
M12x201-250	91225	4	4.8, DIN 976
M12x251-330	91230	3	4.8, DIN 976
M12x331-500	91235	2	4.8, DIN 976
M12x501-999	91240	2	4.8, DIN 976
M12x1000	91245	2	4.8, DIN 976
M16x50-100	91600	10	4.8, DIN 976
M16x101-125	91605	8	4.8, DIN 976
M16x126-140	91610	7	4.8, DIN 976
M16x141-165	91615	6	4.8, DIN 976
M16x166-200	91620	5	4.8, DIN 976
M16x201-250	91625	4	4.8, DIN 976
M16x251-330	91630	3	4.8, DIN 976
M16x331-500	91635	2	4.8, DIN 976
M16x501-999	91640	2	4.8, DIN 976
M16x1000	91645	2	4.8, DIN 976
M20x50-100	92000	10	4.8, DIN 976
M20x101-125	92005	8	4.8, DIN 976
M20x126-140	92010	7	4.8, DIN 976
M20x141-165	92015	6	4.8, DIN 976
M20x166-200	92020	5	4.8, DIN 976
M20x201-250	92025	4	4.8, DIN 976
M20x251-330	92030	3	4.8, DIN 976
M20x331-500	92035	2	4.8, DIN 976
M20x501-999	92040	2	4.8, DIN 976
M20x1000	92045	2	4.8, DIN 976



Nuts (zinc plated)

		1	
Туре	Art.nr.	QTY	Steel grade
NUT ZP. M6	93061	a.o.	DIN 934/8
NUT ZP. M8	93081	1	DIN 934/8
NUT ZP. M10	93101	1	DIN 934/8
NUT ZP. M12	93121	1	DIN 934/8
NUT ZP. M16	93161	1	DIN 934/8
NUT ZP. M20	93201	1	DIN 934/8



Washers (zinc plated)

		1	
Туре	Art.nr.	QTY	Steel grade
WASHER ZP. M6 (6.4X12X1.6)	93062	o.a.	DIN125A
WASHER ZP. M8 (8.4X16X1.6)	93082	1	DIN125A
WASHER ZP. M10 (10.5X20X2.0)	93102	1	DIN125A
WASHER ZP. M12 (13.0X24X2.5)	93122	1	DIN125A
WASHER ZP. M16 (17.0X30X3.0)	93162	1	DIN125A
WASHER ZP. M20 (21.0X37X3.0)	93202	1	DIN125A





Tailor made threaded rods, 8.8 steel, M6 - M20

The grade designation of the mechanical properties of threaded rods consists out of two numbers separated by a point (for example, 8.8). The number in front of the point corresponds to 1/100 of the nominal tensile strength in N / mm². In the case of 8.8: $8\times100 = 800$ N / mm². The nominal tensile strength is the maximum mechanical tension that can be reached by the steel as it is plastically deformed. Multiplication of the two numbers results into 1/10 of the nominal yield strength. For 8.8 the yield strength can thus be calculated as $8\times8\times10 = 640$ N / mm². The yield strength corresponds with the load at which the steel starts to deform plastically. The "elasticity" of the steel has reached its limit. A constructive engineer will not design structures where the material is loaded above the yield strength. When ordering tailor made threaded rods, please clearly indicate the exact desired length.



Threaded rods 8.8 Steel (zinc plated)

		1	
Туре	Art.nr.	QTY	Steel grade
M6x50-100	80600	20	8.8, DIN 976
M6x101-125	80605	16	8.8, DIN 976
M6x126-140	80610	14	8.8, DIN 976
M6x141-165	80615	12	8.8, DIN 976
M6x166-200	80620	10	8.8, DIN 976
M6x201-250	80625	8	8.8, DIN 976
M6x251-330	80630	6	8.8, DIN 976
M6x331-500	80635	4	8.8, DIN 976
M6x501-999	80640	2	8.8, DIN 976
M6x1000	80645	2	8.8, DIN 976
M8x50-100	80800	20	8.8, DIN 976
M8x101-125	80805	16	8.8, DIN 976
M8x126-140	80810	14	8.8, DIN 976
M8x141-165	80815	12	8.8, DIN 976
M8x166-200	80820	10	8.8, DIN 976
M8x201-250	80825	8	8.8, DIN 976
M8x251-330	80830	6	8.8, DIN 976
M8x331-500	80835	4	8.8, DIN 976
M8x501-999	80840	2	8.8, DIN 976
M8x1000	80845	2	8.8, DIN 976
M10x50-100	81000	10	8.8, DIN 976
M10x101-125	81001	8	8.8, DIN 976
M10x126-140	81002	7	8.8, DIN 976
M10x141-165	81004	6	8.8, DIN 976
M10x166-200	81006	5	8.8, DIN 976
M10x201-250	81007	4	8.8, DIN 976
M10x251-330	81028	3	8.8, DIN 976
M10x331-500	81009	2	8.8, DIN 976
M10x501-999	81018	2	8.8, DIN 976
M10x1000	81022	2	8.8, DIN 976

		1	
Туре	Art.nr.	QTY	Steel grade
M12x50-100	81200	10	8.8, DIN 976
M12x101-125	81205	8	8.8, DIN 976
M12x126-140	81210	7	8.8, DIN 976
M12x141-165	81215	6	8.8, DIN 976
M12x166-200	81220	5	8.8, DIN 976
M12x201-250	81225	4	8.8, DIN 976
M12x251-330	81230	3	8.8, DIN 976
M12x331-500	81235	2	8.8, DIN 976
M12x501-999	81240	2	8.8, DIN 976
M12x1000	81245	2	8.8, DIN 976
M16x50-100	81600	10	8.8, DIN 976
M16x101-125	81605	8	8.8, DIN 976
M16x126-140	81610	7	8.8, DIN 976
M16x141-165	81615	6	8.8, DIN 976
M16x166-200	81620	5	8.8, DIN 976
M16x201-250	81625	4	8.8, DIN 976
M16x251-330	81630	3	8.8, DIN 976
M16x331-500	81635	2	8.8, DIN 976
M16x501-999	81640	2	8.8, DIN 976
M16x1000	81645	2	8.8, DIN 976
M20x50-100	82000	10	8.8, DIN 976
M20x101-125	82005	8	8.8, DIN 976
M20x126-140	82010	7	8.8, DIN 976
M20x141-165	82015	6	8.8, DIN 976
M20x166-200	82020	5	8.8, DIN 976
M20x201-250	82025	4	8.8, DIN 976
M20x251-330	82030	3	8.8, DIN 976
M20x331-500	82035	2	8.8, DIN 976
M20x501-999	82040	2	8.8, DIN 976
M20x1000	82045	2	8.8, DIN 976



Nuts (zinc plated)

		1	
Туре	Art.nr.	QTY	Steel grade
NUT ZP. M6	93061	o.a.	DIN 934/8
NUT ZP. M8	93081	1	DIN 934/8
NUT ZP. M10	93101	1	DIN 934/8
NUT ZP. M12	93121	1	DIN 934/8
NUT ZP. M16	93161	1	DIN 934/8
NUT ZP. M20	93201	1	DIN 934/8



Washers (zinc plated)

		1	
Туре	Art.nr.	QTY	Steel grade
WASHER ZP. M6 (6.4X12X1.6)	93062	o.a.	DIN125A
WASHER ZP. M8 (8.4X16X1.6)	93082	1	DIN125A
WASHER ZP. M10 (10.5X20X2.0)	93102	1	DIN125A
WASHER ZP. M12 (13.0X24X2.5)	93122	1	DIN125A
WASHER ZP. M16 (17.0X30X3.0)	93162	1	DIN125A
WASHER ZP. M20 (21.0X37X3.0)	93202	1	DIN125A





Tailor made threaded rods, A2 stainless steel, M8 - M16

Stainless A2 and A4 steel are both corrosion resistant steel types. Stainless steel threaded rods are always 'greased' to prevent cold welding. When the threaded rod is installed in combination with a chemical mortar, the rods therefore need to be degreased. Sympafix carries this out on request. The 'standard' grade A2 stainless steel (SS304) usually consists of 8 to 13 percent nickel and 17 to 20 percent chromium. A4 stainless steel (stainless steel (stainless steel on 14 percent nickel, 16 to 18.5% of chromium, and also 2 to 3% of the element molybdenum. The molybdenum provides additional resistance to pit corrosion, and to some extent it enhances self-lubricating effect. Remember to always use stainless steel installation tools, in order to prevent contact corrosion. When ordering tailor made threaded rods, please clearly indicate the exact desired length.



Threaded rods Stainless steel A2

		1	
Туре	Art.nr.	QTY	Steel grade
M8x50-100	90850	20	ST. A2
M8x101-125	90855	16	ST. A2
M8x126-140	90860	14	ST. A2
M8x141-165	90865	12	ST. A2
M8x166-200	90870	10	ST. A2
M8x201-250	90875	8	ST. A2
M8x251-330	90880	6	ST. A2
M8x331-500	90885	4	ST. A2
M8x501-999	90890	2	ST. A2
M8x1000	90895	2	ST. A2
M10x50-100	91050	10	ST. A2
M10x101-125	91055	8	ST. A2
M10x126-140	91060	7	ST. A2
M10x141-165	91065	6	ST. A2
M10x166-200	91070	5	ST. A2
M10x201-250	91075	4	ST. A2
M10x251-330	91080	3	ST. A2
M10x331-500	91085	2	ST. A2
M10x501-999	91090	2	ST. A2
M10x1000	91095	2	ST. A2
M12x50-100	91250	10	ST. A2
M12x101-125	91255	8	ST. A2
M12x126-140	91260	7	ST. A2
M12x141-165	91265	6	ST. A2
M12x166-200	91270	5	ST. A2
M12x201-250	91275	4	ST. A2
M12x251-330	91280	3	ST. A2
M12x331-500	91285	2	ST. A2
M12x501-999	91290	2	ST. A2
M12x1000	91295	2	ST. A2

		1	
Туре	Art.nr.	QTY	Steel grade
M16x50-100	91650	10	ST. A2
M16x101-125	91655	8	ST. A2
M16x126-140	91660	7	ST. A2
M16x141-165	91665	6	ST. A2
M16x166-200	91670	5	ST. A2
M16x201-250	91675	4	ST. A2
M16x251-330	91680	3	ST. A2
M16x331-500	91685	2	ST. A2
M16x501-999	91690	2	ST. A2
M16x1000	91695	2	ST. A2



Nuts (Stainless steel A2)

		1	
Туре	Art.nr.	QTY	Steel grade
NUTS ST. A2 M8	93083	1	ST. A2 DIN 934
NUTS ST. A2 M10	93103	1	ST. A2 DIN 934
NUTS ST. A2 M12	93123	1	ST. A2 DIN 934
NUTS ST. A2 M16	93163	1	ST. A2 DIN 934



Washers (Stainless steel A2)

		1	
Туре	Art.nr.	QTY	Steel grade
WASHER ST. A2 M8	93084	1	ST. A2 DIN 125A
WASHER ST. A2 M10	93104	1	ST. A2 DIN 125A
WASHER ST. A2 M12	93124	1	ST. A2 DIN 125A
WASHER ST. A2 M16	93164	1	ST. A2 DIN 125A





Tailor made threaded rods, A2 stainless steel, M8 - M16

Stainless A2 and A4 steel are both corrosion resistant steel types. Stainless steel threaded rods are always 'greased' to prevent cold welding. When the threaded rod is installed in combination with a chemical mortar, the rods therefore need to be degreased. Sympafix carries this out on request. The 'standard' grade A2 stainless steel (SS304) usually consists of 8 to 13 percent nickel and 17 to 20 percent chromium. A4 stainless steel (stainless steel 316) consists of 10 to 14 percent nickel, 16 to 18.5% of chromium, and also 2 to 3% of the element molybdenum. The molybdenum provides additional resistance to pit corrosion, and to some extent it enhances self-lubricating effect. Remember to always use stainless steel installation tools, in order to prevent contact corrosion. When ordering tailor made threaded rods, please clearly indicate the exact desired length.



Threaded rods Stainless steel A4

		1	
Туре А	rt.nr.	QTY	Steel grade
M6x50-100 80	0650	20	ST. A4
M6x101-125 80	0655	16	ST. A4
M6x126-140 80	0660	14	ST. A4
M6x141-165 80	0665	12	ST. A4
M6x166-200 80	0670	10	ST. A4
M6x201-250 80	0675	8	ST. A4
M6x251-330 80	0680	6	ST. A4
M6x331-500 80	0685	4	ST. A4
M6x501-999 80	0690	2	ST. A4
M6x1000 80	0695	2	ST. A4
M8x50-100 80	0850	20	ST. A4
M8x101-125 8 0	0855	16	ST. A4
M8x126-140 8 0	0860	14	ST. A4
M8x141-165 8 0	0865	12	ST. A4
M8x166-200 8 0	0870	10	ST. A4
M8x201-250 8 0	0875	8	ST. A4
M8x251-330 8 0	0880	6	ST. A4
M8x331-500 8 0	0885	4	ST. A4
M8x501-999 8 0	0890	2	ST. A4
M8x1000 80	0895	2	ST. A4
M10x50-100 8:	1050	10	ST. A4
M10x101-125 8:	1055	8	ST. A4
M10x126-140 8 :	1060	7	ST. A4
M10x141-165 8 :	1065	6	ST. A4
M10x166-200 8:	1070	5	ST. A4
M10x201-250 8 :	1075	4	ST. A4
M10x251-330 8 :	1080	3	ST. A4
M10x331-500 8 :	1085	2	ST. A4
M10x501-999 8 :	1090	2	ST. A4
M10x1000 8:	1095	2	ST. A4

		1	
Туре	Art.nr.	QTY	Steel grade
M12x50-100	81250	10	ST. A4
M12x101-125	81255	8	ST. A4
M12x126-140	81260	7	ST. A4
M12x141-165	81265	6	ST. A4
M12x166-200	81270	5	ST. A4
M12x201-250	81275	4	ST. A4
M12x251-330	81280	3	ST. A4
M12x331-500	81285	2	ST. A4
M12x501-999	81290	2	ST. A4
M12x1000	81295	2	ST. A4
M16x50-100	81650	10	ST. A4
M16x101-125	81655	8	ST. A4
M16x126-140	81660	7	ST. A4
M16x141-165	81665	6	ST. A4
M16x166-200	81670	5	ST. A4
M16x201-250	81675	4	ST. A4
M16x251-330	81680	3	ST. A4
M16x331-500	81685	2	ST. A4
M16x501-999	81690	2	ST. A4
M16x1000	81695	2	ST. A4



Nuts (Stainless steel A4)

		1	
Туре	Art.nr.	QTY	Steel grade
NUTS ST. A4 M6	93065	1	ST. A4 DIN 934
NUTS ST. A4 M8	93085	1	ST. A4 DIN 934
NUTS ST. A4 M10	93105	1	ST. A4 DIN 934
NUTS ST. A4 M12	93125	1	ST. A4 DIN 934
NUTS ST. A4 M16	93165	1	ST. A4 DIN 934



Washers (Stainless steel A4)

		1	
Туре	Art.nr.	QTY	Steel grade
WASHER ST. A4 M6	93066	1	ST. A4 DIN 125A
WASHER ST. A4 M8	93086	1	ST. A4 DIN 125A
WASHER ST. A4 M10	93106	1	ST. A4 DIN 125A
WASHER ST. A4 M12	93126	1	ST. A4 DIN 125A
WASHER ST. A4 M16	93166	1	ST. A4 DIN 125A







Drill Hole Cleaning Brushes

Proper **hole cleaning** is mandatory for the **proper installation** of every chemical anchor.

The range of steel brushes is designed to obtain the **best results** of the Sympafix line of chemical anchors.

Extensions for the steel brushes make **deep drill hole** cleaning possible, for example for **post installed rebar** applications.



			*		Ø
Туре	Art. Nr.	QTY	QTY		M
BR 8-10MM	71204	1			M8+M10
BR 10-14MM	71206	1			M10-M14
BR 16-18MM	71208	1			M16-M18



SDS Steel Brushes

			#	Ø	Ø	Ø	Ø
Туре	Art. Nr.	QTY	QTY	mm	mm	М	rebar
BRSDS CONNECTOR	71210	1	20				
BRSDS 300MM EXTENSION	71212	1	20				
BRSDS 12MM Steel Brush	71214	1	10	12	10	M8	
BRSDS 14MM Steel Brush	71216	1	10	14	12	M10	8
BRSDS 16MM Steel Brush	71218	1	10	16	14	M12	10
BRSDS 18MM Steel Brush	71220	1	10	18	16		12
BRSDS 20MM Steel Brush	71222	1	10	20	18	M16	14
BRSDS 22MM Steel Brush	71224	1	10	22	20		16
BRSDS 26 MM Steel Brush	71226	1	10	26	24	M20	20
BRSDS 30 MM Steel Brush	71228	1	10	30	28	M24	
BRSDS 34 MM Steel Brush	71230	1	10	34	32	M27	25
BRSDS 37 MM Steel Brush	71232	1	10	37	35	M30	28
BRSDS 42 MM Steel Brush	71234	1	10	42	40		32







Piston piu{

Drill Hole Cleaning Blow Pumps

Also **blowing out** the anchorhole with compressed air is **crucial** for the correct and **safe installation** of a chemical anchor. Sympafix has 2 blowpumps in its assortment, each with a different air volume.

Piston Plugs

To fill holes correctly and to **avoid air pockets**, piston plugs are available. The piston plugs are placed on a **flexible small hose** and are pushed back to opening by the injected mortar. Especially for horizontal and overhead applications.





			#		Ø	
Туре	Art. Nr.	QTY	QTY		М	
BIG BLOW PUMP	71200	1				
SMALL BLOW PUMP	71202	1				





Piston Plugs

		1	*	Ø	Ø
Туре	Art. Nr.	QTY	QTY	М	rebar
PISTONPLUG#14	71236	10	100	M12	10
PISTONPLUG#16	71238	10	100		12
PISTONPLUG#18	71240	10	100	M16	14
PISTONPLUG#20	71242	10	100		16
PISTONPLUG#24	71244	10	100	M20	
PISTONPLUG#25	71246	10	100		20
PISTONPLUG#28	71248	10	100	M24	22
PISTONPLUG#32	71250	10	100	M27	24-25
PISTONPLUG#35	71252	10	100	M30	28-30





*ANCHORS



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Tested and approved



European Technical Approvals











Screwbolt SB2-PLUS for concrete

HEAVY &

FEATURES

- One piece heavy duty concrete anchor
- ETA Option 1 approval for **cracked and uncracked concrete**
- Diameter and length **identification** on the head
- Throughfixing
- **Easy identification** drill diameter and thread diameter; for example 8(10)

BENEFITS

- **Quick** installation; drill & drive!
- Underhead grip for **better holding** strength
- **Removable** and reusable
- **Aesthetical** appearance
- Suitable for **close edge** installation



Screwbolts SB2-PLUS (carbon steel zinc plated)

				Ø	→: <	→+	*	SWS
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	t _{fix} mm	mm
ZINC PLATED								
SB2-PLUS 5(6)x 10/50*	70452	100	800	5	50	12	10	8
SB2-PLUS 6(8)x 10/50*	70458	100	800	6	50	14	10	10
SB2-PLUS 6(8)x 30/80*	70460	50	400	6	80	14	30	10
SB2-PLUS 6(8)x 50/100*	70462	100	400	6	100	14	50	10
SB2-PLUS 8(10)x 5/50	70464	50	400	8	50	19	5	13
SB2-PLUS 8(10)x30/75	70466	50	400	8	75	19	10-25-30	13
SB2-PLUS 8(10)x55/100	70468	50	200	8	100	19	35-50-55	13
SB2-PLUS 10(12)x10/60	70470	50	200	10	60	23	10	15
SB2-PLUS 10(12)x25/75	70472	50	200	10	75	23	15-25	15
SB2-PLUS 10(12)x 50/100	70474	50	200	10	100	23	25-40-50	15
SB2-PLUS 10(12)x70/120	70476	25	100	10	120	23	45-60-70	15
SB2-PLUS 12(14)x25/75	70478	25	100	12	75	27	15-25	16
SB2-PLUS 12(14)x50/100	70480	25	100	12	100	27	5-40-50	16
SB2-PLUS 12(14)x100/150	70482	20	80	12	150	27	55-90-100	16
SB2-PLUS 14(16)x20/80	70484	25	100	14	80	31	10-20	18
SB2-PLUS 14(16)x40/100	70486	25	100	14	100	31	30-40	18
SB2-PLUS 14(16)x70/130	70488	25	100	14	130	31	15-60-70	18
SB2-PLUS 16(18)x 20/100*	70490	20	80	16	100	36	20	21

^{*} When this catalogue was printed, this item was not included in the approval. Tests are being carried out. For the current status of the approval for this item, please contact us.

Tested and approved







Screwbolt SB2-A4 & GRABCON for concrete

HEAVY

FEATURES

- **One piece** heavy duty concrete anchor
- Diameter and length **identification** on the head (SB2-A4)
- **A4 grade** stainless steel for outdoor use (SB2-A4)

BENEFITS

- **Quick** installation; drill & drive!
- Underhead grip for **better holding** strength
- **Removable** and reusable
- **Aesthetical** appearance
- Suitable for **closed edge** installation



Screwbolts SB2 - A4 (stainless steel)

			*	Ø	→: ; <	*	DWS	
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	mm	
A4								
SB2 - A4 6x5/45	70492	100	800	6	45	5	10	
SB2 - A4 6x10/60	70494	100	800	6	60	10	10	



GRABCON

			*	Z ø	→! ← !!!!!	*	⊉	
Туре	Art. Nr.	QTY	QTY	inch	mm	t _{fix} mm	Hef mm	
GRABCON-HEX 6,3x32	70980	100	500	3/16	32	7	25	
GRABCON-HEX 6,3x45	70982	100	500	3/16	45	20	25	





European Technical Approvals

1488-CPD-0386/W ETA-10/0114 Part 6, M8/M10 SB Internal Thread











HEAVY &

SB dome head

- **One piece** heavy duty concrete anchor
- Torx 30 (dome head)
- **Quick installation:** drill & drive
- **Underhead grip** for better holding strength
- Suitable for **fixing cable trays**

SB internal thread

- ETA approval for redundant fixings in cracked & uncracked concrete
- ETA approval for redundant fixings in **hollow core prestressed**
- One anchor suitable for both M8 and M10 rods
- **Up to 6 times faster installation** than drop-in anchors
- **Decreased risk** of installation errors





Screwbolts SB dome head

Туре	Art. Nr.	QTY	QTY	Ø mm		↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	TORX	
ZINC PLATED								
SB 6x5/40D0ME*	70214	100	800	6	40	5	T-30	
SB 6x30/65D0ME*	70216	100	800	6	65	30	T-30	

^{*} Not part of approval







Screwbolts SB Internally threaded

			*	Ø	→: ← ←	TÉ	DWS	
Туре	Art. Nr.	QTY	QTY	mm	mm	H1 _{min} mm	mm	
ZINC PLATED								
SB 6x35 M8/10 WS 13	70250	50	200	6	35	45	13	





Tested and approved



Screwbolt SBA for aerated concrete

HEAVY &



- Especially designed for **safe and secure fixing** in aerated
- Made from zinc plated steel
- Steep thread pitch for **quick installation**

BENEFITS

- **Tension free fixing** (if pre-drilled): suitable for small edge
- Ideal for through-fixing
- **High load values**
- Installation possible either with or without pre-drilling
- Easily removable and re-usable



SBA-TX

			*	Ø	→ ←	↓	③	Nm Nm	
Туре	Art. Nr.	УТУ	QTY	mm	mm	t _{fix} mm	TORX	T _{inst} Nm	
ZINC PLATED									
SBA-TX 8x110	70252	100	400	0 or 4	110	30	T-25	8	
SBA-TX 10x110	70254	100	400	0 or 4	110	10	T-30	11	
SBA-TX 10x160	70256	100	400	0 or 4	160	60	T-30	11	



SBA-SW

		1	\$	Z ø	→	↓	W S	S Nm	
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	mm	T _{inst} Nm	
ZINC PLATED									
SBA-SW 10x110	70258	100	400	0 or 4	110	10	10	11	
SBA-SW 10x160	70260	50	200	0 or 4	160	60	13	11	



European Technical Approvals

0679-CPR-1079 ETA-14/0215 ETAG 001 Option 1





Tested and approved







Thoughbolt TB1-PLUS

HEAVY 🚴

FEATURES

- Universal heavy duty expansion anchor
- ETA Option 1 approval for **cracked and uncracked** concrete
- Stainless steel clip for improved performance
- Ideal for throughfixing
- Also availlable with large washer DIN 9021

BENEFITS

- Big range of **applications**
- Common used anchor
- Cone angle optimised for easy installation
- **Unique clip** design for higher loads



Throughbolts TB1-PLUS

			\$	Ø	→ ←	*	N/S	Nm Nm
Туре	Art. Nr.	QTY	QTY	mm	mm	↑೪ t _{fix} mm	mm	T _{inst} Nm
ZINC PLATED								
TB1-PLUS 6/5x55*	70496	200	800	6	55	5	10	10
TB1-PLUS 8/2x50*	70548	100	400	8	50	2	13	30
TB1-PLUS 8/5x60	70550	100	400	8	60	5	13	30
TB1-PLUS 8/20x75	70552	100	400	8	75	20	13	30
TB1-PLUS 8/30x85	70554	100	400	8	85	30	13	30
TB1-PLUS 8/40x95	70556	100	400	8	95	40	13	30
TB1-PLUS 8/50x105	70558	100	400	8	105	50	13	30
TB1-PLUS 8/60x115	70508	100	400	8	115	65	13	30
TB1-PLUS 8/75x130	70510	50	400	8	130	75	13	30
TB1-PLUS 8/100x155	70512	50	200	8	155	100	13	30
TB1-PLUS 10/2x60*	70560	50	200	10	60	2	17	50
TB1-PLUS 10/5x85	70562	50	200	10	85	5	17	50
TB1-PLUS 10/10x90	70564	50	200	10	90	10	17	50
TB1-PLUS 10/20x100	70566	50	200	10	100	20	17	50
TB1-PLUS 10/30x110	70568	50	200	10	110	30	17	50
TB1-PLUS 10/40x120	70570	50	200	10	120	40	17	50
TB1-PLUS 10/50x130	70572	50	200	10	130	50	17	50
TB1-PLUS 10/80x160	70574	50	200	10	160	80	17	50

^{*}When this catalogue was printed, this item was not included in the approval. Tests are being carried out. For the current status of the approval of this item, please contact us





European Technical Approvals

0679-CPR-1079 ETA-14/0215 ETAG 001 Option 1





Tested and approved





HEAVY &

Thoughbolt TB1-PLUS

FEATURES

- **Universal** heavy duty expansion anchor
- ETA Option 1 approval for **cracked and uncracked** concrete
- Stainless steel clip for improved performance
- Ideal for throughfixing
- Also availlable with large washer DIN 9021

BENEFITS

- Big range of **applications**
- **Common** used anchor
- Cone angle optimised for easy installation
- **Unique clip** design for higher loads





Throughbolts TB1-PLUS

			*	Ø	→ ← 4≣1000	₩	NS	S Nm
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	mm	T _{inst} Nm
TB1-PLUS 12/2x80*	70522	50	200	12	80	2	19	70
TB1-PLUS 12/5x90	70576	50	200	12	90	5	19	70
TB1-PLUS 12/15x100	70578	50	200	12	100	15	19	70
TB1-PLUS 12/30x115	70580	25	100	12	115	30	19	70
TB1-PLUS 12/50x135	70582	25	100	12	135	50	19	70
TB1-PLUS 12/80x165	70584	25	100	12	165	80	19	70
TB1-PLUS 12/90x175	70586	25	100	12	175	90	19	70
TB1-PLUS 12/100x185	70588	25	100	12	185	100	19	70
TB1-PLUS 12/135x220	70590	10	40	12	220	135	19	70
TB1-PLUS 16/2x90*	70592	25	100	16	90	2	24	130
TB1-PLUS 16/15x125	70594	20	80	16	125	15	24	130
TB1-PLUS 16/40x150	70596	20	80	16	150	40	24	130
TB1-PLUS 16/50x160	70598	10	40	16	160	50	24	130
TB1-PLUS 16/100x210	70600	10	40	16	210	100	24	130
TB1-PLUS 20/35x160*	70542	10	40	20	160	35	30	200
TB1-PLUS 20/90x215*	70544	10	40	20	215	90	30	202
ZINC PLATED WITH LARGE WASHER DIN 9021								
TB1-PLUS 8x50 DIN 9021*	70602	100	400	8	50	2	13	30
TB1-PLUS 8x60 DIN 9021	70604	100	400	8	60	5	13	30
TB1-PLUS 8x75 DIN 9021	70606	100	400	8	75	20	13	30
TB1-PLUS 10x60 DIN9021*	70608	50	200	10	60	2	17	50
TB1-PLUS 10x90 DIN 9021	70610	50	200	10	90	10	17	50

^{*} When this catalogue was printed, this item was not included in the approval. Tests are being carried out. For the current status of the approval of this item, please contact us





European Technical Approvals

0679-CPR-1025 ETA-14/0123 ETAG 001 Option 1











Throughbolt TB1-A4-PLUS (A4 stainless steel)

HEAVY KG

FEATURES

- A4 stainless steel universal heavy duty expansion anchor
- Stainless steel clip for improved performance
- Ideal for throughfixing
- ETA option 1 approval for cracked and uncracked concrete

BENEFIT

- Big range of **applications**
- **Common** used anchor
- Cone angle optimised for easy installation
- A4 Stainless steel for outdoor use



Throughbolts TB1-A4-PLUS

			#	Ø	→ ← (*	WS	S Nm
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	mm	T _{inst} Nm
A4 STAINLESS STEEL								
TB1-A4-PLUS 8/10X65	71294	100	400	8	65	10	13	25
TB1-A4-PLUS 8/15X75	71296	100	400	8	75	15	13	25
TB1-A4-PLUS 8/40X100	71298	100	400	8	100	40	13	25
TB1-A4-PLUS 8/60X120	71300	50	200	8	120	60	13	25
TB1-A4-PLUS 10/10X90	71302	50	200	10	90	10	17	45
TB1-A4-PLUS 10/20X100	71304	50	200	10	100	20	17	45
TB1-A4-PLUS 10/60X140	71306	50	200	10	140	60	17	45
TB1-A4-PLUS 12/15X100	71308	50	200	12	100	15	19	70
TB1-A4-PLUS 12/55X140	71310	25	100	12	140	55	19	70





Tested and approved



Throughbolt TB-G (carbon steel galvanised)

HEAVY



- Universal heavy duty expansion anchor
- Stainless steel clip for improved performance
- Ideal throughfixing for **non-structural** applications

BENEFITS

- Big range of **applications**
- **Common** used anchor
- Has galvanised coating for better **corrosion resistance**



Throughbolts TB-G

		1	*	Ø	→ (·	↓	W S	Nm
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	mm	T _{inst} Nm
GALVANISED								
TB-G 8/30x85	70724	100	400	8	85	30	13	30
TB-G 10/2x60	70728	50	200	10	60	2	17	55
TB-G 10/10x90	70730	50	200	10	90	10	17	55
TB-G 10/20x100	70732	50	200	10	100	20	17	55
TB-G 10/40x120	70734	50	200	10	120	40	17	55
TB-G 12/2x80	70738	50	200	12	80	2	19	70
TB-G 12/15x100	70740	50	200	12	100	15	19	70
TB-G 12/30x115	70742	25	100	12	115	30	19	70
TB-G 16/2×90	70748	25	100	16	90	2	24	120
TB-G 16/15x125	70752	20	80	16	125	15	24	120





Tested and approved



Sleeve anchor STAM

HEAVY KG



- Plastic endcover prevents drill dust to block the thread
- Cone nut attached to expansion sleeve **prevents unwanted** losing of parts

BENEFITS

Large expansion sleeve designed for use in **hollow core** concrete





Sleeve anchors STAM

		1	\$	Ø	→! ←		W S	
Туре	Art. Nr.	QTY	QTY	mm	mm	М	mm	
STAM 12/M8x55	70630	50	400	12	55	M8	13	
STAM 12/M8x60	70632	50	400	12	60	M8	13	
STAM 12/M8x75	70634	50	400	12	75	M8	13	
STAM 12/M8x90	70636	50	400	12	90	M8	13	
STAM 12/M8x120	70638	40	320	12	120	M8	13	
STAM 12/M8x160	70642	25	100	12	160	M8	13	







European Technical Approvals 0679-CPR-1037 ETA-14/0481 ETAG 001









Drop-in anchor

MEDIUM _ 👶

- Drop in anchor with **internal thread**
- ETA approval for multipoint redundant systems in cracked and uncracked concrete
- The drop-in anchor setting tools are **designed** to install the DI range of drop-in anchors
- The **safety grip** version provides a **better hold** of the setting tool and protects the hand, and is ideal for overhead use

- Suitable for **bolts and threaded rod**
- **Collared version** making correct installation easier; setting tool leaves mark on collar
- Can be installed with **safety grip** tool, avoiding hand injuries





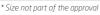






Drop-in anchors DI-LIP-PLUS (zinc plated with lip) and DI-PLUS (zinc plated)

				N _{\tilde{}	≯!	
Туре	Art. Nr.	QTY	QTY	mm	mm	M_
DI-LIP-PLUS M6*	70766	100	1600	8	25	M6
DI-LIP-PLUS M8	70768	100	800	10	30	M8
DI-LIP-PLUS M10	70770	100	800	12	40	M10
DI-LIP-PLUS M12	70772	100	400	16	50	M12
DI-LIP-PLUS M16*	70774	25	100	20	65	M16
DI-LIP-PLUS M20*	70776	25	100	25	80	M20
DI-PLUS M6*	70778	100	1600	8	25	M6
DI-PLUS M8	70780	100	800	10	30	M8
DI-PLUS M10	70782	100	800	12	40	M10
DI-PLUS M12	70784	100	400	16	50	M12
DI-PLUS M16*	70786	25	100	20	65	M16
DI-PLUS M20*	70788	25	100	25	80	M20





Drop-in setting tools DI-ST-SG (with safety grip)

			#	
Туре	Art. Nr.	QTY	QTY	м
DI-ST-SG M6	70814	1		M6
DI-ST-SG M8	70816	1		M8
DI-ST-SG M10	70818	1		M10
DI-ST-SG M12	70820	1		M12
DI-ST-SG M16	70822	1		M16
DI-ST-SG M20	70824	1		M20









Expresse nail and ceiling nail anchor



FEATURES

- Made of **spring steel**
- **Reinforced** head
- **Tapered** front

RENEEIT

- Drill and drive fixing, no secondary installation needed
- Suitable for **concrete and masonry**
- Ideal for fixing wood to concrete
- Ceiling nail anchor with eye for suspended ceilings



Expresse nails

			*	Ø	≯	↓	
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	
XN 640	70844	200	2000	6	40	10	
XN 650	70846	200	2000	6	50	20	
XN 660	70848	200	2000	6	60	30	
XN 680	70850	200	2000	6	80	50	
XN 870	70852	100	1000	8	70	30	
XN 890	70854	100	1000	8	90	50	
XN 8110	70856	100	1000	8	110	70	
XN 8130	70858	100	1000	8	130	90	



Ceiling nail anchor

			*	Z ø	→! 	(Q)	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
XN-CEILING	70860	100	1000	8	47	5	



European Technical Approvals

0679-CPR-1035 ETA-14/0459 ETAG 001 Part 6











Wedgenail ceiling anchor

LIGHT

FEATURES

- Light duty steel expansion anchor
- Large collar (12 mm) to clamp down fixture
- ETA approval for multipoint redundant systems in cracked and uncracked concrete

BENEFITS

- **Easy** installation
- Hammer-in anchor ideal for **overhead use**
- Ideal to clamp down fixtures or metal hangers



Wedgenail ceiling anchors

Туре	Art. Nr.	QTY	QTY	Mm mm		↓ ↑ t _{fix} mm	
CA6x5/35-PLUS	70832	200	1600	6	35	5	
CA6x35/65-PLUS	70834	100	800	6	65	35	





Tested and approved



Gypsum board anchor

LIGHT ARG

FEATURES

- All steel or all nylon anchor
- Wing style thread for holding in **plasterboard**
- Self drilling tip

BENEFITS

- Quick installation with **screwdriver** (bit)
- Ideal for light duty fixing to plasterboard
- Self drilling tip has space to let **screw** pass
- Supplied with screw, 4,5x35mm





Gypsum board anchors

			#	→
Туре	Art. Nr.	QTY	QTY	mm
GYPS/Metal	70862	100	1000	25
GYPS/Nylon	70864	100	1000	25









Hollow wall anchor

MEDIUM 🖟

CEATURE

- Medium load anchor for **hollow materials** like plywood
- Installation with installation tool
- Large contact surface
- Full metal anchor, therefore **less risk of melting** than with nylon

BENEFITS

- Suitable for medium loads
- To be used **with bolt** to hold down fixture
- Metal anchor, so **less risk** for melting
- Bolt can be **reinstalled**



Hollow Wall Anchors

			*	Ø	→: ← 	*	
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	М
HW-441	70866	200	1600	8	41	3-14	M4
HW-454	70868	100	800	8	54	16-26	M4
HW-545	70870	100	800	10	45	6-12	M5
HW-560	70872	100	400	10	60	3-16	M5
HW-571	70874	50	400	10	71	16-32	M5
HW-645	70876	50	400	12	45	6-12	M6
HW-660	70878	50	400	12	60	3-16	M6
HW-670	70880	50	400	12	71	16-32	M6





Hollow Wall Anchor Setting Tool

			#			
Туре	Art. Nr.	QTY	QTY			
HW-Tool	70882	1				









Nylon hammer screw



FEATURES

- Pre-assembled screw
- Hammerscrew with countersunk head for fixing wood to concrete
- Collared hammerscrew for fixings **metal profiles to concrete**

BENEFITS

- Screw makes removal possible
- Hammer installation for direct loading
- Made of high quality virgin nylon PA 6





Nylon hammer screws

			*	Ø	→ :	↓		Stockbox
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	Art. Nr.	QTY
YZF 5x2/27	70912	100	2000	5	27	2		
YZF 6x10/40	70916	100	2000	6	40	10	71436	800
YZF 6x25/55	70918	100	1200	6	55	25	71438	600
YZF 6x40/67	70920	100	1200	6	67	40		
YZF 6x50/80	70922	100	400	6	80	50		
YZF 8x25/60	70924	100	800	8	60	25	71440	300
YZF 8x40/75	70926	100	800	8	75	40	71442	300
YZF 8x65/100	70928	50	400	8	100	65	71444	200
YZF 8x85/120	70930	50	400	8	120	85		
YZF 8x100/140	70932	50	400	8	140	100		





Collared hammer screws

		1	\$	S ø	₩ ₩	↓
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm
YZP 5x2/27	70934	200	1600	5	27	2
YZP 5x12/37	70936	200	1600	5	37	12
YZP 6x3/32	70940	100	2000	6	32	3
YZP 6x10/40	70942	200	2000	6	40	10
YZP 6x25/55	70944	100	800	6	55	25







Special application nylon fixings

LIGHT

FEATURES

- Universal plug with **4-legged** expansion zone, collar and solid front
- Large collar hammer screw with flat collar
- **All nylon hammer screw**: nylon sleeve and nylon nail

- For hollow and solid base material
- **Collar** for holding down for example metal window frames
- Yzzy **large collar** hammer screw for fixing brackets to concrete



Large collar hammer screw

			*	Ø	→ ⊬	
Туре	Art. Nr.	QTY	QTY	mm	mm	
YZPX8x45	71334	100	1200	8	45	





All nylon hammer screws

			#	Zø	→! 	
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm
ANHS 5x2/30	71336	200	1600	5	30	2
ANHS 5x10/40	71338	200	800	5	40	10
ANHS 6x10/40	71340	200	800	6	40	10
ANHS 6x30/60	71342	100	400	6	60	30
ANHS 8x30/80	71344	100	400	8	80	30
ANHS 8x50/100	71346	100	400	8	100	50



Universal plugs

			*	Ø	→	→#←		Stockbox
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	Art. Nr.	QTY
SY-X6	70898	200	4000	6	30	4,0 - 5,0	71430	2500
SY-X8	70900	100	2000	8	40	4,5 - 6,0	71432	1000
SY-X10	70902	50	1000	10	50	6,0 - 8,0	71434	500





Tested and approved

ETA-12/0261 Multipoint redundant fixings







Nylon construction plug NHS-ST

LIGHT

FEATURES

- Construction plug for panels, facades and general construction
- ETA approval for multipoint redundant systems in cracked and uncracked concrete
- Material plug: nylon
- Material screw: zinc plated steel

BENEFIT

- **Wings** prevent rotation of the plug in the drilled hole
- For use in **solid and hollow stone**, **brick and masonry**
- Excellent expansion for high load values





Nylon construction plug NHS-ST

			*	<u>Z</u> ø	≯∷ ⊬	****	
Туре	Art. Nr.	QTY	УТУ	mm	mm	t _{fix} mm	
NHS-CONSTR 8x80 ST	71350	100	800	8	80	10	
NHS-CONSTR 8x100 ST	71352	50	400	8	100	30	
NHS-CONSTR 8x120 ST	71354	50	400	8	120	50	
NHS-CONSTR 8x140 ST	71356	50	400	8	140	70	





Tested and approved

ETA-12/0261 Multipoint redundant fixings







Nylon construction plug NHS-S

LIGHT ARE

FEATURES

- Construction plug for panels, facades and general construction
- ETA approval for multipoint redundant systems in cracked and uncracked concrete
- Material plug: **nylon**
- Material screw: zinc plated steel

RENEELTS

- **Wings** prevent rotation of the plug in the drilled hole
- For use in **solid and hollow stone**, **brick and masonry**
- Excellent expansion for high load values



Nylon construction plug NHS-S

			*	Ø	≯! 	*
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm
NHS-CONSTR 10x80 S	71358	50	400	10	80	10
NHS-CONSTR 10x100 S	71360	50	400	10	100	30
NHS-CONSTR 10x120 S	71362	50	400	10	120	50
NHS-CONSTR 10x140 S	71364	50	400	10	140	70
NHS-CONSTR 10x160 S	71366	50	400	10	160	90
NHS-CONSTR 10x200 S	71370	25	200	10	200	130
NHS-CONSTR 10x240 S	71372	20	160	10	240	170
NHS-CONSTR 10x260 S	71374	20	160	10	260	190









Window screws for wooden frames

LIGHT

FEATURES

- **Hardened screw** with thread for cutting into concrete
- Relief points in thread to allow debris to be removed
- Hardened cutting thread: screws directly into concrete or stone

- For fixing wooden frames to concrete
- **Good loads**
- **Easy to install**



Window screws W-SZ (for wooden frames)

			*	Øø	→ : ⊬	¥ IIII	(2)
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	torx
W-SZ 7,5x72	70946	100	400	6,0	72	42	T25
W-SZ 7,5x92	70948	100	400	6,0	92	62	T25
W-SZ 7,5x112	70950	50	200	6,0	112	82	T25
W-SZ 7,5x132	70952	50	200	6,0	132	102	T25
W-SZ 7,5x152	70954	50	200	6,0	152	122	T25
W-SZ 7,5x182	70956	50	200	6,0	182	152	T25







Window screws for plastic and aluminum frames

LIGHT A KG

FEATURES

- Hardened screw with thread for cutting into concrete
- Relief points in thread to allow debris to be removed
- Torx head
- Hardened cutting thread: screws directly into concrete or stone

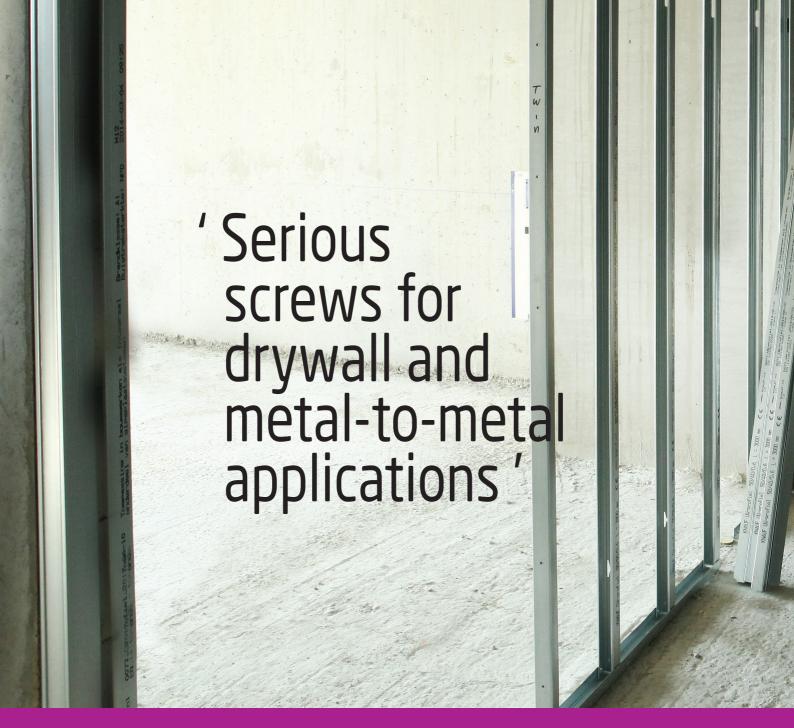
RENEELT

- for fixing plastic and aluminium frames to concrete
- Good loads
- Easy to install



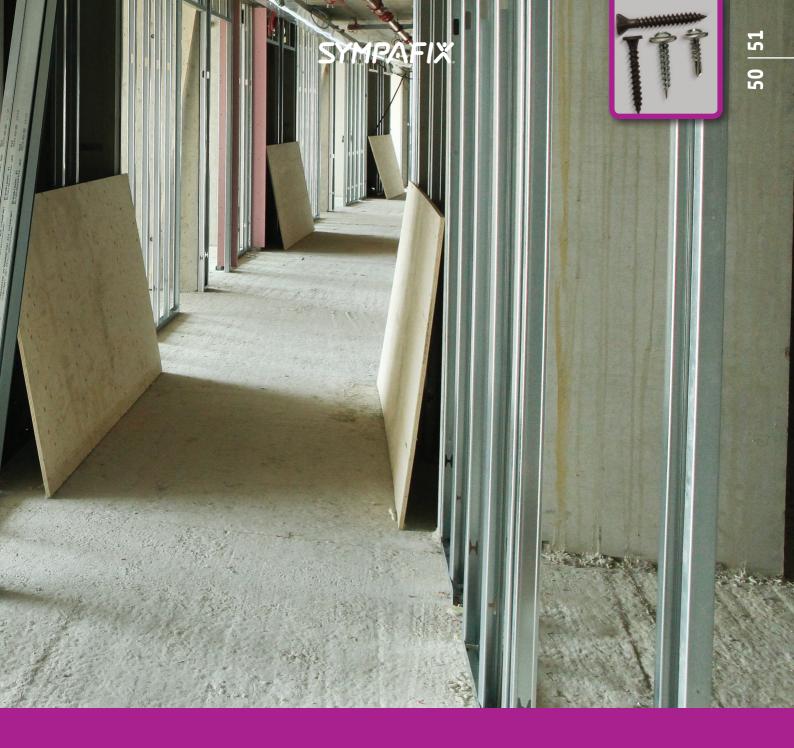
Window screws K-SZ (for plastic and aluminum frames)

			#	Ø	→ : ⊬	***	(2)
Туре	Art. Nr.	QTY	QTY	mm	mm	t _{fix} mm	torx
K-SZ 7,5x72	70962	100	400	6,0	72	42	T30
K-SZ 7,5x92	70964	100	400	6,0	92	62	T30
K-SZ 7,5x112	70966	50	200	6,0	112	82	T30
K-SZ 7,5x132	70968	50	200	6,0	132	102	T30
K-SZ 7,5x152	70970	50	200	6,0	152	122	T30
K-SZ 7,5x182	70972	50	200	6,0	182	152	T30





SYMPAFIX. SCREWS



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Drywall screws collated	52
Drywall screws loose	53
Drywall screws for special applications	54
Self drilling screws	55

SYMPAFIX. SCREWS







CE CANPAR

Tested and approved

Drywall screws collated (fine and coarse)

FEATURES

- Quality plastic **collation** tested in most guns
- Conforms norm EN14566:2008+A1:2009
- Marked SX
- Black phosphate plating

BENEFITS

- Complies with latest norms
- For use in most collated screwguns
- Quick to install
- Marked SX makes **inspection** easy





Drywall screws collated (fine thread for metal applications) **Needlepoint** (NP), **bugle head** (BH), **black phosphated** (BP), **fine thread** (FN)

					→#←	→	→ <u>1</u> 11111+
Туре	Art. Nr.	QTY	QTY	QTY	mm	mm	mm
Ø3,5MM							
NP-BU-BP-FN3,5x25CL	71018	1000	10000	180.000	3,5	8,0	25
NP-BU-BP-FN3,5x35CL	71020	1000	10000	180.000	3,5	8,0	35
NP-BU-BP-FN3,5x45CL	71022	1000	10000	180.000	3,5	8,0	45
Ø3,9MM							
NP-BU-BP-FN3,9x35CL	71028	1000	10000	180.000	3,9	8,0	35

Drywall screws collated (coarse thread for wood applications) **Needlepoint** (NP), **bugle head** (BH), **black phosphated** (BP), **coarse thread** (CO)

			*		→#←	→#←	→! ←	
Туре	Art. Nr.	QTY	QTY	QTY	mm	mm	mm	
Ø3,5MM								
NP-BU-BP-CO3,5x35CL	71034	1000	10000	180.000	3,5	8,0	35	
NP-BU-BP-CO3,5x45CL	71036	1000	10000	180.000	3,5	8,0	45	
NP-BU-BP-CO3,5x55CL	71038	1000	8000	144.000	3,5	8,0	55	
Ø3,9MM								
NP-BU-BP-CO3,9x35CL	71042	1000	10000	180.000	3,9	8,0	35	



Tested and approved





Drywall screws loose (fine and coarse)

- Conforms norm **EN14566:2008+A1:2009**
- Black phosphate plating
- Marked SX

- Complies with **latest norms**
- **Quick** to install
- Marked SX makes **inspection** easy
- Comes with bit



Drywall screws loose (fine thread for metal applications) Needlepoint (NP), bugle head (BH), black phosphated (BP), fine thread (FN)

Туре	Art. Nr.	QTY	₽ I QTY	₽	→ F ← mm	→ *	→
Ø3,5mm							
NP-BU-BP-FN3,5x25	71052	1000 + 1	15000 + 15	360.000 +360	3,5	8,0	25
NP-BU-BP-FN3,5x35	71056	1000 + 1	10000 + 10	240.000 + 240	3,5	8,0	35
NP-BU-BP-FN3,5x45	71060	1000 + 1	8 + 0008	192.000 + 192	3,5	8,0	45
NP-BU-BP-FN3,5x50	71062	1000 + 1	6000 + 6	144.000 + 144	3,5	8,0	50
NP-BU-BP-FN3,5x55	71064	500 + 1	5000 + 5	120.000 + 240	3,5	8,0	55



Drywall screws loose (coarse thread for wood applications) Needlepoint (NP), bugle head (BH), black phosphated (BP), coarse thread (CO)

			\$1	\$ 1	→#←	→#←	→ ←
Туре	Art. Nr.	QTY	QTY	QTY	mm	mm	mm
Ø3,5MM							
NP-BU-BP-CO3,5x35	71074	1000 + 1	10000 + 10	240.000 + 240	3,5	8,0	35
NP-BU-BP-CO3,5x45	71076	1000 + 1	8000 + 8	192.000 + 192	3,5	8,0	45
NP-BU-BP-CO3,5x55	71078	500 + 1	5000 + 5	120.000 + 240	3,5	8,0	55

SYMPAFIX SCREWS





Tested and approved



Drywall screws for special applications and self drilling screws

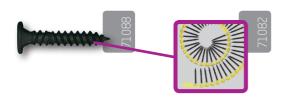
- Conforms norm **EN14566:2008+A1:2009**
- Grey phosphate (GP) and zinc plated (ZP)
- Very **sharp point Return thread** (RT) version
- Selfdrilling point (SD) for fixing metal drywall frames on metal drywall frames

- Complies with latest norms
- Quick to install
- Marked SX makes inspection easy
- **Return thread** (RT) for use in diamond board® and other hard
- Countersunk (C) head for use in **fibreboard / fermacell®** ribs ensure a clean and smooth finish



Countersunk Fermacell ® screws Needlepoint (NP), countersunk (C), grey phosphate (GP), fine thread (FN)

			\$1	# 1	→#←	→ #←	→ TIII	
Туре	Art. Nr.	QTY	QTY	QTY	mm	mm	mm	
GREY PHOSPHATE								
NP-C-GP-FN3,8x22	71488	1000 + 1	15000 + 15	360.000 + 360	3,8	8,0	22	
NP-C-GP-FN3,8x35	71086	1000 + 1	9000 + 9	216.000 + 216	3,8	8,0	35	





Diamond board drywall screws (collated and loose)

Needlepoint (NP), bugle head (BH), black phosphate (BP), return thread (RT)

			\$1	\$1	→	→#←	→ 111112-	
Туре	Art. Nr.	QTY	QTY	QTY	mm	mm	mm	
DIAMONDBOARD® COLLATED								
NP-BU-BP-RT3,9x25CL	71080	1000	10000	180.000	3,9	8,0	25	
NP-BU-BP-RT3,9x34CL	71082	1000	10000	180.000	3,9	8,0	34	
DIAMONDBOARD® LOOSE								
NP-BU-BP-RT3,9x25	71088	1000 +1	13000 + 13	312.000 + 312	3,9	8,0	25	
NP-BU-BP-RT3,9x34	71090	1000 +1	9000 + 9	216.000 + 216	3,9	8,0	34	

54



Tested and approved



Self drilling screws

FEATURE

- Conforms norm **EN14566:2008+A1:2009**
- Bright zinc plating
- Very **sharp point**
- Selfdrilling point for fixing metal drywall frames on metal drywall frames

BENEFITS

- Quick to install
- Marked SX makes inspection easy







Self-drilling (SD), needle point (NP), button head (BH), zinc plated (ZP)

		1	\$1	# 1	→	→#←	→ — ←
Туре	Art. Nr.	QTY	QTY	QTY	mm	mm	mm
ZINC PLATED							
SD-BH-ZP-4,2x13	71094	1000 + 1	13000 + 13	312.000 + 312	4,2	11,0	13
NP-BH-ZP-4,2x13	71096	1000 + 1	13000 + 13	312.000 + 312	4,2	11,0	13



Self-drilling (SD), double head (DBL), black phosphate (BP), fine thread (FN)

		11	\$1	# 1	→	→	→: ←
Туре	Art. Nr.	QTY	QTY	QTY	mm	mm	mm
GREY PHOSPHATE							
SD-DBL-GP-FN3,5x25	71480	1000	15000	360.000	3,5	8,0	25
SD-DBL-GP-FN3,5x35	71482	1000	10000	240.000	3,5	8,0	35
SD-DBL-GP-FN3,5x45	71484	1000	80000	200.000	3,5	8,0	45
SD-DBL-GP-FN3,5x55	71486	500	5000	120.000	3,5	8,0	55





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GT/C70 Gas Tool See page 74



Pins and gas for Sympafix GT/C70 and GT4C

FEATURE

- Diameter 2,6, 3,0 and 3,7 to suit standard and special applications
- Rolled **ballistic** points
- Aerosol can
- For Sympafix GT/C70 and GT4C
- Also fits Powers® C4

BENEFITS

- Probably the best gas fired nails in the market: if it doesn't work with Sympafix pins, it doesn't work with any pin
- No special storage or special transport requirements
- **XH-pins** for hard concrete

High performance gas, without special storage and transport requirements



2,6mm diameter nails with ballistic point for most applications



3,7mm diameter heavy duty nails for high shear loads



3,0mm diameter special hardened nails for hard concrete



GT/C70 tool pins and gas

		10日	\$ A		→	→ ←	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
GT/C70 Fuel Cell	70012	1	100				
C70-20	70014	700+1	3500+5	20	2,6	6,3	
C70-25	70016	700+1	3500+5	25	2,6	6,3	
C70-40	70018	700+1	3500+5	40	2,6	6,3	
C70-50	70020	700+1	3500+5	50	2,6	6,3	
C70-60	70022	700+1	3500+5	60	2,6	6,3	
C70-65	70024	700+1	3500+5	65	2,6	6,3	
C70-20-HD	70036	700+1	3500+5	20	3,7	6,3	
C70-40-HD	70026	700+1	3500+5	40	3,7	6,3	
C70-50-HD	70028	700+1	3500+5	50	3,7	6,3	
C70-55-HD	70030	700+1	3500+5	55	3,7	6,3	
C70-65-HD	70032	700+1	3500+5	65	3,7	6,3	
C70-70-HD	70046	700+1	3500+5	70	2,6	6,3	
C70-17-XH	70034	700+1	3500+5	17	3,0	6,3	
C70-22-XH	70038	700+1	3500+5	22	3,0	6,3	
C70-27-XH	70040	700+1	3500+5	27	3,0	6,3	
C70-38-XH	70044	700+1	3500+5	38	3,0	6,3	



For GT/C45 Gas Tool



Pins and gas for Sympafix GT/C45

- Diameter 2,6 and 3,0 to suit standard and special applications
- Rolled **ballistic** points
- Aerosol can
- For Sympafix GT/C45

- Probably the best gas fired nails in the market: if it doesn't work with Sympafix pins, it doesn't work with any pin
- No special storage or special transport requirements
- **XH-pins** for hard concrete

High performance gas, without special storage and transport requirements



2,6mm diameter nails with ballistic point for most applications



3,0mm diameter special hardened nails for hard concrete



GT/C45 tool pins and gas

		1	\$ A		→ [[←	→= ←	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
GT/C45 Fuel Cell	70058	1	100				
C45-15	71502	1000+1	5000+5	15	2,6	6,3	
C45-20	71504	1000+1	5000+5	20	2,6	6,3	
C45-25	71506	1000+1	5000+5	25	2,6	6,3	
C45-30	71508	1000+1	5000+5	30	2,6	6,3	
C45-35	71510	1000+1	5000+5	35	2,6	6,3	
C45-40	71512	1000+1	5000+5	40	2,6	6,3	
C45-45	71528	800+1	4000+5	45	2,6	6,3	
C45-17-XH	71516	1000+1	5000+5	17	3,0	6,3	
C45-22-XH	71520	1000+1	5000+5	22	3,0	6,3	
C45-27-XH	71522	1000+1	5000+5	27	3,0	6,3	
C45-32-XH	71524	1000+1	5000+5	32	3,0	6,3	
C45-38-XH	71526	1000+1	5000+5	38	3,0	6,3	





Pins and gas for Sympafix GT3C

FEATURES

- Diameter 2,6 and 3,0 to suit most applications
- Rolled ballistic points
- Aerosol can
- For **Sympafix GT3C**, with extension foot
- Also fits Powers® C3

BENEFITS

- Probably the best gas fired nails in the market: if it doesn't work with Sympafix pins, it doesn't work with any pin
- No special storage or special transport requirements.
- **XH-pins** for hard concrete

High performance gas, without special storage and transport requirements



2,6mm diameter with ballistic point for most applications



3,0mm diameter special hardened nails for hard concrete



GT3C tool pins and gas

		11日	\$ A		→	→ ←	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
GT3C Fuel Cell	70058	1	100				
GT3C-13	70060	1000+1	5000+5	13	2,6	6,3	
GT3C-19	70062	1000+1	5000+5	19	2,6	6,3	
GT3C-25	70066	1000+1	5000+5	25	2,6	6,3	
GT3C-32	70068	1000+1	5000+5	32	2,6	6,3	
GT3C-38	70070	1000+1	5000+5	38	2,6	6,3	
GT3C-17XH	70072	1000+1	5000+5	17	3,0	6,3	
GT3C-22XH	70074	1000+1	5000+5	22	3,0	6,3	
GT3C-27XH	70076	1000+1	5000+5	27	3,0	6,3	
GT3C-38XH	70080	1000+1	5000+5	38	3,0	6,3	







For use with **Powers® C5 Gas Tool**

Pins and gas for Powers® C5

CEATURE

- Diameter 2,6 and 3,0 to suit **most applications**
- Rolled ballistic points
- Aerosol can

RENEELTS

- Probably the best gas fired nails in the market: if it doesn't work with Sympafix pins, it doesn't work with any pin
- No special storage or special transport requirements.
- **XH-pins** for hard concrete

High performance gas, without special storage and transport requirements



2,6mm diameter with ballistic point for most applications



3,0mm diameter special hardened nails for hard concrete



Pins and gas for Powers® C5

					→ [[←	→	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
C5 Fuel Cell	70082	1	100				
C5-15	70084	800+1	4000+5	15	2,6	6,3	
C5-20	70086	800+1	4000+5	20	2,6	6,3	
C5-25	70088	800+1	4000+5	25	2,6	6,3	
C5-30	70090	800+1	4000+5	30	2,6	6,3	
C5-35	70092	800+1	4000+5	35	2,6	6,3	
C5-40	70094	800+1	4000+5	40	2,6	6,3	
C5-17-XH	70096	800+1	4000+5	17	3,0	6,3	
C5-22-XH	70100	800+1	4000+5	22	3,0	6,3	
C5-27-XH	70102	800+1	4000+5	27	3,0	6,3	
C5-32-XH	70104	800+1	4000+5	32	3,0	6,3	
C5-38-XH	70106	800+1	4000+5	38	3,0	6,3	





For use with **P700 Gas Tool**

Pins and gas for Spit® Pulsa 700

FEATURES

- Diameter 2,6 and 3,0 to suit most applications
- Rolled ballistic points
- Aerosol can

FEATURES

- Probably the best gas fired nails in the market: if it doesn't work with Sympafix pins, it doesn't work with any pin
- No special storage or special transport requirements
- **XH-pins** for hard concrete

High performance gas, without special storage and transport requirements



2,6mm diameter with ballistic point for most applications



3,0mm diameter special hardened nails for hard concrete



Pins and gas for Spit® Pulsa 700

Tura	Out No				→ ←	→ ←	
Type 700 Fuel Cell	Art. Nr. 70108	QTY' '	100	mm	mm	mm	
SP-700-13	70110	1000+2	5000+10	13	2,6	6,3	
SP-700-19	70112	1000+2	5000+10	19	2,6	6,3	
SP-700-25	70116	1000+2	5000+10	25	2,6	6,3	
SP-700-32	70118	1000+2	5000+10	32	2,6	6,3	
SP-700-38	70120	1000+2	5000+10	38	2,6	6,3	
SP-700-17XH	70122	1000+2	5000+10	17	3,0	6,3	
SP-700-22XH	70124	1000+2	5000+10	22	3,0	6,3	
SP-700-27XH	70126	1000+2	5000+10	27	3,0	6,3	
SP-700-38XH	70130	1000+2	5000+10	38	3,0	6,3	





Gas tool accessories

- Washers for fastening **soft materials**
- Tie wrap washer to hold down electrical wire
- **Quick installation**: fix on the barrel, shoot, finished!
- Size for the **most common** applications

Perfoband and conduit clips

- Conduit clips to hold down pipes BENEFITS
- **Works** with all gas and powder tools
- **Excellent performance** in hard concrete









Gas tool accessories

			#	→ ←	→ ←	→(+	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
GT-CS-LW-25mm	70132	200	2000				
GT-CS-MAGNETIC ADAPTOR (o.r.)	70134	1	10				
GT-CS-CBL-TIE-25mm	70136	100	1000				
GT3C-ISO-60-025	70688	50	1000	25	3,2/2,8	60	
GT3C-ISO-60-050	70690	50	900	50	3,2/2,8	60	
GT3C-ISO-60-060	70686	50	800	60	3,2/2,8	60	
GT3C-ISO-60-075	70692	50	600	75	3,2/2,8	60	
GT3C-ISO-60-080	70694	50	600	80	3,2/2,8	60	
GT3C-ISO-60-090	70696	50	600	90	3,2/2,8	60	
GT3C-ISO-60-100	70698	50	600	100	3,2/2,8	60	
GT3C-ISO-60-120	70700	25	400	120	3,2/2,8	60	
GT3C-ISO-60-140	70702	25	300	140	3,2/2,8	60	
GT3C-ISO-60-150	70704	20	300	150	3,2/2,8	60	
GT3C-ISO-60-200	70710	20	200	200	3,2/2,8	60	





Perfoband and conduit clips (for use with 16, 18, 20 and 25mm conduits)









Single shot pins for Sympafix PX60M

FEATURES

- Plastic washer to hold nail in tool barrel
- Washers to hold down soft materials
- Rolled ballistic point

BENEFIT

- Works in most PAT tools with internal barrel diameter of 5mm up to 7mm
- Good performance in hard concrete





Single shot pins

			*		→ ←	→ ←	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
PA-32	70184	100	1600	32	3,7	7,6	
PA-44	70188	100	1600	44	3,7	7,6	
PA-51	70190	100	1600	51	3,7	7,6	
PA-57	70192	100	1600	57	3,7	7,6	
PA-64	70194	100	1600	64	3,7	7,6	
PA-76	70198	100	1600	76	3,7	7,6	



22mm washers and pins for fixing soft materials

			*		→ [←	→ ←	→
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	mm
PA-25W	70200	100	800	25	3,7	7,6	22
PA-37W	70202	100	800	37	3,7	7,6	22



36mm washered pin for fixing soft material

			#		→ ←	→ ←	→ ‡←	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	mm	
PA-38IW	70204	100	400	38	3,7	7,6	36	







PX60M Powder Actuated Tool See page 85

Pins for Sympafix PX60M

FEATURES

- Rolled ballistic point
- Collated
- Rubber spring **included** in each box
- Fits Sympafix PX60M tool

RENEEITS

- Suitable for hard concrete and steel
- Collated for repetitive jobs

3,7mm diameter with ballistic point for most applications



PX60M pins in strip

			*		→ [←	→ ←
Туре	Art. Nr.	QTY	QTY	mm	mm	mm
PX60M-19	70148	500	2500	19	3,7	7,8
PX60M-22	70150	500	2500	22	3,7	7,8
PX60M-27	70152	500	2500	27	3,7	7,8
PX60M-42	70154	500	2500	42	3,7	7,8
PX60M-47	70156	500	2500	47	3,7	7,8
PX60M-52	70158	300	1500	52	3,7	7,8
PX60M-60	70160	300	1500	60	3,7	7,8



Rubber spring for piston return

			#			
Туре	Art. Nr.	QTY	YTQ			
PX60M-RUBBER-SPRING	70164	10	100			





DN collated pins

FEATURES

- **DN pins fits most Hilti®** strip tools
- Rolled **ballistic** point

BENEFITS

- Good performance in hard concrete
- Ballistic point for maximum impact

3,7mm diameter with ballistic point for most requirements



DN collated pins

		1	\$		→ ←	→	
Туре	Art. Nr.	QTY	QTY	mm	mm	mm	
DN-19	71278	500	2500	19	3,7	7,8	
DN-22	71280	500	2500	22	3,7	7,8	
DN-27	71282	500	2500	27	3,7	7,8	
DN-42	71284	500	2500	42	3,7	7,8	
DN-47	71286	500	2500	47	3,7	7,8	
DN-52	71288	300	1500	52	3,7	7,8	
DN-62	71290	300	1500	62	3,7	7,8	
DN-72	71292	300	1500	72	3,7	7,8	





Disc and strip loads powder actuated tools

FEATURES

- **Disc loads** to fit PX60M
- **Strip loads** to fit most powder tools

RENEELTS

- CIP approved
- Colour identification for power level



Disc loads for PX60M



			*		*		
Туре	Art. Nr.	QTY	QTY	Colour	Explosion		
PA-DL-YELLOW 10MM	70144	100	10000		Medium		
PA-DL-RED 10MM	70146	100	10000		Strong		



Strip loads



			#		*		
Туре	Art. Nr.	QTY	QTY	Colour	Explosion		
PA-SL-GREEN	70168	100	10000		Light		
PA-SL-YELLOW	70170	100	10000		Medium		
PA-SL-RED	70172	100	10000		Strong		
PA-SL-BLACK	70174	100	10000		Extra strong		













34° D-Head collated nails and gas for Sympafix GT/W90 and f.e. Paslode® IM350

GT/W90 Gas Tool

- Conforms norm **EN** 14592+A1(2012)
- Available in bright, electrical zinc plated and A2 stainless steel
- Available in **smooth and ring** shank

- Meets latest norms
- **Quick** to install
- Handy boxes suitable for **job site** use











34° D-Head collated nails and gas

		1 1	511	1		→ ←			
Туре	Art. Nr.	QTY	PN (no gas) Art. Nr.	QTY	mm	mm	Surface	Coating	Servi
Framing Fuel Cell	70282	1							
NAILS SMOOTH - BRIGHT									
W34-DH63x2,8-S-BR	70286	3300+3	70287	3300	63	2,8	Smooth	Bright	
W34-DH75x2,8-S-BR	70290	2200+2	70291	2200	75	2,8	Smooth	Bright	
W34-DH80x2,8-S-BR	70294	2200+2	70295	2200	80	2,8	Smooth	Bright	
W34-DH90x3,1-S-BR	70296	2200+2	70297	2200	90	3,1	Smooth	Bright	
NAILS RING - BRIGHT									
W34-DH51x2,8-R-BR	70298	3300+3	70299	3300	51	2,8	Ring	Bright	•
W34-DH63x2,8-R-BR	70300	3300+3	70301	3300	63	2,8	Ring	Bright	•
W34-DH75x2,8-R-BR	70304	2200+2	70305	2200	75	2,8	Ring	Bright	
W34-DH80x2,8-R-BR	70306	2200+2	70307	2200	80	2,8	Ring	Bright	
NAILS SMOOTH - ZINC PLATED									
W34-DH90x3,1-S-EL	70310	2200+2	70311	2200	90	3,1	Smooth	Zinc plated	
NAILS RING - ZINC PLATED									
W34-DH51x2,8-R-EL	70312	3300+3	70313	3300	51	2,8	Ring	Zinc plated	
W34-DH63x2,8-R-EL	70314	3300+3	70315	3300	63	2,8	Ring	Zinc plated	
W34-DH70x2,8-R-EL	70320	2200+2	70321	2200	70	2,8	Ring	Zinc plated	
W34-DH75x2,8-R-EL	70316	2200+2	70317	2200	75	2,8	Ring	Zinc plated	
W34-DH80x3,1-R-EL	70322	2200+2	70323	2200	80	3,1	Ring	Zinc plated	
W34-DH90x3,1-R-EL	70350	2200+2	70351	2200	90	3,1	Ring	Zinc plated	
W34-DH98x3,1-R-EL	70352	2200+2	70353	2200	98	3,1	Ring	Zinc plated	
NAILS RING - A2 ENOX									
W34-DH50x2,8-R-A2	70354	2200+2	70355	2200	50	2,8	Ring	A2 Stainless	
W34-RH55x2,8-R-A2	70356	2200+2	70357	2200	55	2,8	Ring	A2 Stainless	









Angle brads and gas for Sympafix GT/F16A

FEATURES

- High grade steel
- Pinched point
- 20-21 degree angle

DENICEITS

- **Reliable** performing nails
- Optimal holding power



Brads for Sympafix GT/F16A, Paslode® IM250A / IM65A, DeWalt® DCN660 and Senco® F16A Fusion

			*		→	
Туре	Art. Nr.	QTY	QTY	mm	mm	Coating/Material
ANGLE BRADS ZINC PLATED						
PN-16ANBRAD-32EL	70380	2000	32000	32	1,6	Zinc plated
PN-16ANBRAD-38EL	70382	2000	32000	38	1,6	Zinc plated
PN-16ANBRAD-45EL	70384	2000	24000	45	1,6	Zinc plated
PN-16ANBRAD-50EL	70386	2000	24000	50	1,6	Zinc plated
PN-16ANBRAD-64EL	70388	2000	24000	64	1,6	Zinc plated
ANGLE BRADS STAINLESS STEEL A2						
PN-16ANBRAD-32A2	70390	2000	32000	32	1,6	A2 Stainless
PN-16ANBRAD-38A2	70392	2000	32000	38	1,6	A2 Stainless
PN-16ANBRAD-45A2	70394	2000	24000	45	1,6	A2 Stainless
PN-16ANBRAD-50A2	70396	2000	24000	50	1,6	A2 Stainless
PN-16ANBRAD-64A2	70398	2000	24000	64	1,6	A2 Stainless

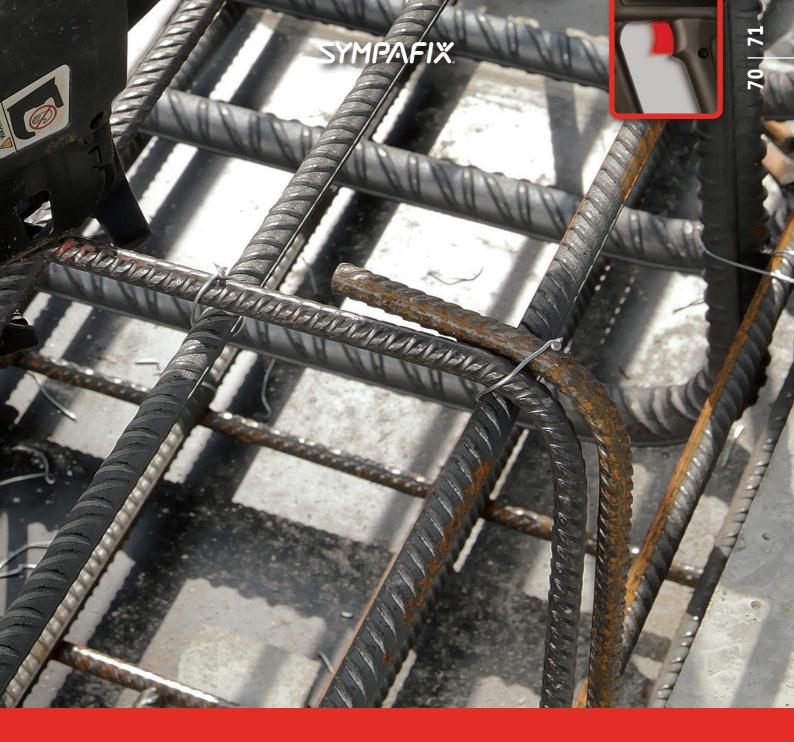


Fuel cell for Sympafix GT/F16A and Paslode® IM250A / IM65A

Туре	Art. Nr.	QTY T	₽			
Mini Fuel Cell	70400	1	100			







CONTENTS	PAGE	CONTENTS	PAGE
RT200 rebar tool & wire	72	GT/W100 framing nailer	80
GT/C70 concrete & steel nailer	74	GT/W90 framing nailer	82
GT/C45 concrete & steel nailer	76	GT/F16A finishing nailer	84
GT/ISO insulation nailer	78	PX60M powder actuated tool	85

SYMPAFIX. TOOLS









RT200-X Rebar tool

FEATURES

- Dial to select between **5 choices of wire tightness**
- Choice between 2 and 3 windings
- 2 lithium ion batteries included
- **100 meter** wire per coil
- Wire diameter **0,8mm**
- Wire suitable for use in Sympafix RT200, Max 398 and Tjep
- Patented wire coil

BENEFITS

- Multipurpose: many applications
- Optimised battery position for **better balance**



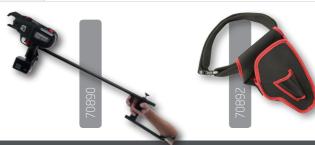


RT200-X Rebar tool

			#
Туре	Art. Nr.	QTY	QTY
RT200 REBAR TYING TOOL	70904	1	
RT200 GALVANISED WIRE	70896	50	2500
RT200 BATTERY	70886	1	
RT200 CHARGER	70888	1	
RT200 EXTENTION-ARM	70890	1	
RT200 HOLSTER	70892	1	







RT200-X Rebar tool

- 1 Dial for # of windings and bindings strength
- 2 Suitable for 12-40mn
- 3 Trigger safety lock
- 4 Li-lon battery

- **5** Soft grip
- 6 Easy access door for replacing wire
- LED signal light



Aspect	Specification
DIMENSIONS (LXBXH):	293 x 284 x 100 MM
CLAMPING THICKNESS:	12-40 MM
WEIGHT:	2,3 KG
LIMIT OF USE:	2200 BINDINGS / FULL BATTERY
NUMBER OF BINDINGS PER SECOND:	1
BATTERY:	4,4 AH LI-ION; 14,4 V
CHARGING TIME BATTERY:	90 MINUTES
NUMBER OF WINDINGS:	2 OR 3









GT/C70 gas tool for concrete and steel

FEATURES

- Shoots pins up to 70mm length
- Including **2 Li-ion batteries** and quickcharger
- **Indication light** for battery capacity
- **150 Joules** power

BENEFITS

- Designed for fixing deflection heads and footplates
- Wide range of pins for many applications
- Robust design minimizes downtime
- Magazine removable
- Depth of drive adjuster
- Optimised battery position for **better balance**



Size	Short
Magazine	40 pins
Power	150 Joules

GT/C70 gas tool

			*
Туре	Art. Nr.	QTY	QTY
GT/C70 NAILER	70000	1	
7,2V 2Ah BATTERY	70280	1	
7,2v 2Ah CHARGER BASE	70278	1	







GT/C70 gas tool specification

- 1 Improved dust filter
- 2 Unique 70mm nails magazine
- 3 Improved motor for longer toollife
- 4 Removable magazine

- **5** Easy maintenance design
- 6 Open magazine for quick nail length identification
- 2 Li-ion battery with level indicator



Aspect	Specification
DIMENSIONS (LXBXH):	485 x 120 x 23 MM
NAIL TYPE:	20-70MM
WEIGHT:	4,72KG
LIMIT OF USE:	300 SHOTS / HOUR
NUMBER OF SHOTS PER SECOND:	2
BATTERY:	2,0 AH LI-ION WITH LEVEL INDICATION
CHARGING TIME BATTERY:	60 MINUTES
NUMBER OF SHOTS PER FULLY CHARGED BATTERY:	7.200
NUMBER OF SHOTS PER FUEL CELL:	700







GT/C45 gas tool for concrete and steel

FEATURES

- Compact and powerful nail gun
- Suitable for concrete and steel nails, lengths 15 45mm
- Supplied with 2 Li-lon batteries, quick charger and carry case
- Fully charged battery lasts 7200 shots
- Battery has **LED level indication**

RENEELTS

- Depth adjustment for optimal drive of nails
- **Removable magazine** for quick jam clearance
- In combination with Sympafix fuel cells usable from 10C°



GT/C45 gas tool

		1	#
Туре	Art. Nr.	QTY	QTY
GT/C70 NAILER	70000	1	
7,2V 2Ah BATTERY	70280	1	
7,2v 2Ah CHARGER BASE	70278	1	





GT/C45 gas tool specifications

- Depth aduster
- 2 Improved dust filter
- 3 Improved engine for longer life
- 4 Removable magazine

- **5** Metal magazine
- 6 Soft grip
- 7 Li-lon battery with LED level indication
- 8 Easy maintenance design



Aspect	Specification
DIMENSIONS (LXBXH):	435 X 120 X 380 MM
NAIL TYPE:	15 – 45 MM C45 PINS
WEIGHT:	3,99 KG
LIMIT OF USE:	500 SHOTS / HOUR
NUMBER OF SHOTS PER SECOND:	2
BATTERY:	2,0 AH LI-ION WITH LEVEL INDICATION
CHARGING TIME BATTERY:	60 MINUTES
NUMBER OF SHOTS PER FULLY CHARGED BATTERY:	7.200
NUMBER OF SHOTS PER FULL GASCAN:	1.100









GT/ISO Isolation tool

FEATURES

- Deep embedment Our embedment is 17-30mm, better than

 any direct fixing systems in the market. It gives lowest failure
 rate with the system designed for your jobsite
 •
- Suitable for different insulation materials Our various options allow you to shoot both rigid insulation boards (e.g. extruded polystyrene insulation) and insulation foams (e.g. fiberglass insulation) materials.

BENEFITS

- **Ease of maintenance and services** The tool is easy to disassemble, change of spare parts, and it is easy to carry around!
- No drill bits, extension leads or generators
- **4-times faster** than "screw type" insulation fasteners



		1	*
Туре	Art. Nr.	ОТҮ	ОТҮ
.570		4	¥
GT/ISO INSULATION TOOL	70346	1	
7,2V 2Ah BATTERY	70280	1	
7, L V LAHDA I ILIXI	70200	1	
7,2v 2Ah CHARGER BASE	70278	1	





GT/ISO Isolation tool specifications

- Improved dust filte
- 2 Improved engine for longer life
- 3 Soft grip

- 4 Li-lon battery with LED level indication
- **5** Easy maintenance design



Aspect	Specification
DIMENSIONS (LXH):	490 X 350 MM
TOOL WEIGHT:	3,5 KG
ENERGY (EST.):	105]
FUEL CELL LIFE:	1100 SHOTS
TEMPERATURE RANGE:	10°C TO 49 °C
ENGINE:	420 CC
PIN HEAD DIAMETER:	8 MM
PIN SHANK DIAMETER	3.65 MM
PIN LENGTH	51MM
INSULATION THICKNESS	25MM-200MM
BATTERY VOLTAGE	7,2V
BATERY CAPACITY	2 AH WITH LEVEL INDICATION
BATTERY CHARGE TIME	MAX. 60 MIN.
BATTERY LIFE	APPROX 7200 SHOTS





Getest en goedgekeurd



GT/W100 Framing nailer

FEATURES

- Compact and powerful nail gun
- Suitable for woodnail lengths **63mm 100mm**
- Supplied with 2 Li-Ion batteries, quick charger and carry case
- Fully charged battery lasts **7200 shots**
- Battery has **LED level indication**

BENEFITS

- Depth adjustment for optimal drive of nails
- Removable magazine for quick jam clearance
- In combination with Sympafix fuel cells usable from **-10°C**
- Wide assortment of nails conforming CE and EC5 standards



GT/W100 Framing nailer

			\$
Туре	Art. Nr.	QTY	QTY
GT/W100 NAILER	70276	1	
7,2V 2Ah BATTERY	70280	1	
7,2v 2Ah CHARGER BASE	70278	1	





GT/W100 specifications

- Depth aduster
- 2 Low noise and vibrations
- 3 Low maintenance steel mesh filter
- 4 Removable magazine

- **5** Open metal magazine
- 6 Soft grip
- 7 Li-lon battery with LED level indication



Aspect	Specification
DIMENSIONS (LXBXH):	350 x 120 410 mm
NAIL TYPE:	63 - 100 MM D-HEAD AND OFFSET NAILS
WEIGHT:	4,08 KG
LIMIT OF USE:	160 SHOTS / HOUR
NUMBER OF SHOTS PER SECOND:	2
BATTERY:	2,0 AH LI-ION WITH LEVEL INDICATION
CHARGING TIME BATTERY:	60 MINUTES
NUMBER OF SHOTS PER FULLY CHARGED BATTERY:	7.200
NUMBER OF SHOTS PER FULL GASCAN:	1.100









GT/W90 gas woodnailer

- Shoots 34° wood nails up to 90mm
- **Depth** of drive adjuster
- Including 2 batteries and quickcharger

BENEFITS

- Designed for roofing work
- Maintenance has never been easier
- **Robust design** keeps downtime to a minimum
- Optimised battery position for **better balance**



90 Joules Power

			*
Туре	Art. Nr.	QTY	QTY
GT/W90 NAILER	70270	1	
GT/W90 BATTERY	71388	1	
GT/W90 CHARGER	71390	1	

GT/W90 specifications

- Depth aduster
- 2 Low noise and vibrations
- 3 Low maintenance steel mesh filter
- 4 Removable magazine

- **5** Open metal magazine
- 6 Soft grip
- 7 Li-lon battery with LED level indication



Aspect	Specification
DIMENSIONS (LXBXH):	360 X 120 X 385 mm
NAIL TYPE:	51 - 90 MM D-HEAD AND OFFSET NAILS
WEIGHT:	3,52 KG
LIMIT OF USE:	500 SHOTS / HOUR
NUMBER OF SHOTS PER SECOND:	2
BATTERY:	2,0 AH LI-ION WITH LEVEL INDICATION
CHARGING TIME BATTERY:	60 MINUTES
NUMBER OF SHOTS PER FULLY CHARGED BATTERY:	7.200
NUMBER OF SHOTS PER FULL GASCAN:	1.100









GT/F16A Finishing tool

FEATURES

- Powerful Engine
- Compact and lightweight tool
- Depth adjustment system
- Single shot system
- Suitable for nail lengths **32mm 64mm**
- Suitable for f.e. wood, multiplex, triplex and thin aluminium

BENEFITS

- Supplied with 2 batteries and quickcharger
- Slim nosepiece with door lever for quick removal of jammed nails
- **Quick and easy loading system** for angled 16 gauge nails
- Safety mechanism with empty magazine
- Shoots in hard-to-reach corners due to angled magazine



GT/F16A Finishing tool

Туре	Art. Nr.	QTY
GT/F16A FINISHING TOOL	71460	1
GT/F16A-W34 BATTERY	71462	1
GT/F16A-W34 CHARGER BASE + 220V ADAPTER CORD	71468	1



















PX60M powder actuated tool with magazine

FEATURES

- Disc load tool
- Nails up to 60mm
- Fires collated nails and single shot nails

BENEFITS

- Disc loads **optimizes load use** and closed chamber reduces noise
- **Flexibility** with collated nails for repetitive work and single shot for installation work
- **Ergonomic design** for easy handling
- Quickly converted to single shot, for example isolation.



PX60M powder actuated tool with magazine

W	leight eight	2.88kg		
Si	ze	455mm		

			#	Max. nagellengte	
Туре	Art. Nr.	QTY	QTY	mm	
PX60M Tool Kit	70142	1		60	







All items displayed are included in the kit



GENERAL TERMS AND CONDITIONS OF DELIVERY OF SYMPAFIX B.V.

Article 1. Definitions

These general terms and conditions contain a number of terms marked with a capital letter which, unless expressly stated otherwise, are defined as follows

Buyer: the other party involved, acting in the capacity of a

trade or company.

Offer: the written tender from Sympafix relating to the Products to be delivered

Agreement: the contractual agreement between Sympafix

Parties: Sympafix and the Buyer jointly;

Sympafix: Sympafix B.V., with company seat in Ridderkerk, user of these Terms and Conditions;

Products: the goods produced and/or delivered by Sympafix; Terms and Conditions: the present general conditions, as registered at the Chamber of Commerce in Rotterdam under number 59195495.

Article 2. General

- **2.1** The provisions of these Terms and Conditions are applicable to all quotations made by Sympafix (including Offers and related queries) and Agreements relating to Products to be delivered by Sympafix insofar as the Parties have not expressly, and in writing, deviated from
- these Terms and Conditions.

 2.2 The application of general Terms and Conditions as applied by the Buyer shall be expressly excluded. By agreeing to this contract, the Buyer rescinds the right to his own potentially existing general Terms and Conditions to ensure that all Agreements are exclusively subject to the present Terms and Conditions.

 2.3 Deviations from these Terms and Conditions shall only be
- binding if and insofar as Sympafix has confirmed them in
- **2.4** In the event that the Terms and Conditions and an Agreement should contain contradicting clauses, the Agreement shall prevail.
- **2.5** In the event that one or more provisions of the Terms and Conditions are null and void the remaining provisions of these Terms and Conditions shall remain fully in force. Sympafix has the right to replace the voided provision(s) with new provisions, whereby, if and where possible, the aim and scope of the original provisions shall be observed.

Article 3. Offers

- 3.1 All tenders, in whichever form, are made without obligation. They shall not bind Sympafix and are only deemed to be an invitation to place an order, unless
- stated otherwise and in writing.

 3.2 All details provided in an Offer such as but not limited to - price lists, calculations, brochures etc. shall, at all times, remain the property of Sympafix and must be returned, postage paid, to Sympafix promptly, at first request
- 3.3 The Buyer shall use all information provided by Sympafix exclusively for the purpose it was intended and shall not disclose any information to a third party.

Article 4. Agreement

- **4.1** An Offer binding Sympafix shall lead to an Agreement if it is accepted on time and completely, in writing, the failure of which shall deem an Agreement to be unexisting. Deviations from sub-clauses in the acceptance of the Offer shall be deemed unmentioned so that the Agreement shall be concluded in complete accordance with the Offer
- 4.2 "On time", as specified in the previous Article, means that the acceptance of the Offer shall arrive at the office of Sympafix within the time limit stated in the Offer and, if no such time limit is specified, within 30 working days after the date of the Offer.
- **4.3** In all other cases any orders from the Buyer shall only bind Sympafix and therefore an Agreement shall only be concluded after Sympafix has confirmed this in writing, or Sympafix has commenced with the implementation of the order, without prejudice to the provisions stated in Article 4.5 of these Terms and Conditions. In the case that Sympafix has not confirmed the order within 10 working days after the order has arrived at its offices and if Sympafix have not commenced with the implementation of the order within that time limit, then no Agreement shall have been concluded.
- 4.4 The order confirmation from Sympafix shall be considered accurate, unless an objection to the contrary

is made to Sympafix in writing upon receipt of the confirmation. In this event, an Agreement shall not have been concluded

- 4.5 Sympafix shall have the right to verbally accept an order. The verbal acceptance of an order shall only be binding upon Sympafix if it was agreed by an authorised person. In this event the existence and the content of the Agreement shall be subject to Dutch evidential law.
- **4.6** Possible subsequent supplementary agreements or amendments, including (verbal) agreements and/or confirmation by employees of Sympafix or made on behalf of Sympafix by sales personnel, agents, company representatives or other intermediaries, shall only bind Sympafix in the event and as far as these persons have been granted written authorisation from Sympafix.
- 4.7 For those services, for which no Offer or even order confirmation would be sent because of their nature and scope, the invoice shall also be deemed to act as the order confirmation, which in its turn is deemed to contain the accurate and complete details of the Agreement.

 4.8 In the event – entirely at the discretion of Sympafix –
- that the Buyer appears to be unable to fulfil the payments specified in the Agreement, Sympafix shall have the right to dissolve the Agreement without the prerequisite of further default or judicial intervention, without prejudice to its remaining rights and with no liability for potential damages.
- 4.9 Sympafix shall have the right to instruct a third party to undertake certain work.

Article 5. Prices

- **5.1** Unless agreed otherwise and in writing, all prices are fixed and are deemed to be carriage paid place of delivery, exclusive of VAT and other official duties, as well as being exclusive of all expenses necessary for the execution of the Agreement, among which - but not limited to - transport charges, packaging, insurance etc
- 5.2 Sympafix shall, insofar as no delivery has been carried out, at all times have the right, even after conclusion of the Agreement, to make adjustments to prices as a result of changes in one or more circumstances that may have affected the quoted prices.
- 5.3 A quotation shall not bind Sympafix to a partial delivery of the Products included in the Agreement for a
- concordant part of the quoted price. **5.4** Offers or quotes shall not automatically apply to repeat

Article 6. Payment and surety

- 6.1 Payment shall be made within 30 days after the invoice date, unless stated otherwise.
- 6.2 All payments shall be made within The Netherlands, in Euros, and the Buyer shall have no right to suspension, deduction or off-setting of costs.

 6.3 In the event that Sympafix accepts a security in
- connection with a payment, the security shall only be accepted as surety and payment shall not be deemed completed until all outstanding receivables have been
- credited or have been received by Sympafix in cash. **6.4** Any payments made by the Buyer shall first be added to outstanding interest, then to the debt collecting charges and/or administration costs incurred by Sympafix and nly then to the oldest outstanding receivable/invoice
- 6.5 In the event that the Buyer defaults on an obligation toward Sympafix - whether it be completely, partially or late - or has requested a moratorium of payment or is declared bankrupt or has made an application in this respect or has gone into liquidation, he shall be deemed to be officially in default and all outstanding payments to Sympafix shall be due at call and interest shall be outstanding from this date or the previous due date. The Buyer shall be obliged to pay for all out of court expenses that Sympafix incurs without prejudice to its claim for potential legal expenses.

 6.6 Additionally Sympafix shall have the right, in such an
- instance, to suspend the (further) execution of its duties for a maximum of 2 months and to reclaim the Products owned by Sympafix or to partially or fully dissolve the existing Agreement and any other potential Agreements made with the Buyer, without prejudice to the remaining rights. During the suspension period, Sympafix shall have the right and ultimately the obligation, to decide whether to (re)commence execution or to completely or partially dissolve the suspended Agreement(s)
- **6.7** Where there are justified reservations with regard to the

Buyer's solvency, Sympafix shall have the right to make deliveries under C.O.D. terms, whereby the delivery costs shall be charged to the Buyer or (several) forms of security shall be required to ensure that payments as well as other obligations are fulfilled. The Buyer is in particular obliged to cooperate in establishing a (silent) right of distraint or lien to the goods as specified by Sympafix. In the event that the Buyer refuses or is unable to provide adequate security, Sympafix shall have the right to rescind the Agreement in part or in full without judicial intervention, without prejudice to its remaining rights and without being held liable for compensation.

Article 7. Delivery risk and delivery date

- 7.1 Unless otherwise agreed, the delivery terms are ex works from the location of the factory/warehouse/or other storage areas as soon as Sympafix has made the Products available to the Buyer. As soon as the Products are available to the Buyer, the risk of loss or damage of these Products shall be transferred to the Buyer. The Buyer is obliged to check the Products and/or packaging for any shortages and/or visible damage upon collection. or to have them checked by whomever is collecting the Products on their behalf. Defects should be reported within 14 days after delivery, in accordance with Article 13 of these Terms and Conditions.
- 7.2 The Buyer should mark down any shortages of or damages to the Products and/or packaging that (may) be established upon delivery on the delivery note, the invoice and/or the transport documentation. Failure to do so will result in the damaged goods not being retaken. Decisions will be based on the administration of Sympafix.

 7.3 Sympafix shall have the right to partial consignments (partial deliveries) of the Products, which may be invoiced
- separately. In this event the Buyer shall be obliged to make payments in accordance with Article 6 of these Terms and Conditions.
- **7.4** Delivery periods shall be estimates. The proposed delivery date should not be viewed as being the ultimate lead-time, unless expressly agreed otherwise.
- **7.5** Sympafix shall not be liable for compensation as a result of late deliveries. In the event of repeated delays in delivery, the Buyer shall formally declare Sympafix to be in default and notify them of a final (reasonable) date for delivery. In the event that the delivery has not taken place within the agreed final delivery period, the Buyer shall have the right to dissolve the Agreement, unless Sympafix has invoked force majeure (see Article 10 of these Terms and Conditions).
- **7.6** In the event that the Products, after notification from Sympafix that they are ready for collection, have not been collected by the Buyer within a period of 4 weeks, Sympafix shall have the right to resell these Products. The potential loss of profit and the expenses will be charged to the Buyer, without prejudice to the remaining rights of Sympafix.

Article 8. Transport and risk

- **8.1** Instructions from the Buyer to Sympafix to arrange transport, carriage and/or insurance of the Products, shall only be undertaken by Sympafix if the Buyer has confirmed in writing that he will bear the costs thereof and accept and cover the resulting (additional) risk by means of (supplementary) insurance, thus without prejudice to the provisions as stated in Article 7.

 8.2 The Buyer shall bear the costs and risks for the transport
- of the Products, even in the event that the hauler insists on adding a clause to the bill of lading, transport addresses, etc. stating that the sender of the Products shall bear the costs and risks arising from transport

Article 9. Retention of title

9.1 Sympafix shall retain the title to all Products delivered to the Buyer until Sympafix have received full payment for the delivery based on this Agreement, including potential compensation payments, expenses, interest and

penalties and also if security payments have been made.

9.2 The Buyer shall not be authorised to pledge, in any way encumber, or dispose of the Products under retention of title.

- **9.3** In the event that a third party claims the delivered Products under retention of title, or asserts to have a right to the same, the Buyer shall be obliged to inform Sympafix as quickly as can reasonably be expected, and shall also inform such third party that the Products
- belong to Sympafix. **9.4** The Buyer shall be obligated to store the Products separately, to mark them clearly as the property of Sympafix, and to insure and continue to insure them against fire, water and other damage as well as against theft and provide the insurance policy for the perusal of Sympafix at their first request, until title in such Products has vested in the Buyer pursuant to this Article 9.

 9.5 As long as the retention of title applies to the Products
- delivered by Sympafix to the Buyer, the Buyer shall not be authorised to process, manipulate or modify the Products, except and in as far as in the ordinary course of
- **9.6** In the event that the Buyer fails to pay any sums due by the date that such payment is due, Sympafix shall have the right to retake all unpaid Products insofar as they have already been delivered to the Buyer. The Buyer shall authorise the return of all Products to Sympafix at his expense. In the event that the Buyer has disposed of any Products prior to title vesting in him, Sympafix shall be entitled to take other Products that are in the possession of the Buyer (notwithstanding that payment in respect of such Products may have been made already or is not yet due) to the value of the unpaid Products.
- **9.7** The Buyer hereby grants Sympafix and its designated representatives the irrevocable right to enter his premises for the purpose of recovery of all Products in which Sympafix retains title pursuant to Article 9.6.

Article 10. Force majeure

- 10.1 Sympafix obligations to implement the Agreement shall be suspended for the period that the implementation is prevented as a result of force majeure. Prevention shall be interpreted as "with serious difficulty".
- **10.2** Force majeure also comprises war, threat of war, civil
- unrest, risk of civil unrest, fire, earthquake, water damage, flooding, strike, occupation of premises, obstructions to import and export, government regulations, defects on machinery and interruptions in the delivery of water and/or power to the premises of Sympafix.
- **10.3** Force majeure also comprises circumstances such as specified in Article 10.2 of these Terms and Conditions occurring within the companies of third parties, whose services, materials, raw materials, etc. Sympafix requires
- either fully or partially. **10.4** Forces majeure also comprises circumstances as those specified in Article 10.2 of these Terms and Conditions whereby damage occurs during storage or transport of the Products, whether or not occurring under personal management.
- **10.5** Force majeure also relates to all other circumstances outside Sympafix' scope of control, with the exception of intent or gross negligence on the part of Sympafix and of those people who have been charged by Sympafix vith the responsibility of executing the Agreement.
- 10.6 In the event that the execution of (a part of) the Agreement is delayed by more than a month, both Parties shall have the right to dissolve the (remainder of) the Agreement. This shall not automatically lead to reciprocal indemnification. Sympafix shall return any possible advance payments on the condition that the services already rendered shall be paid for by the Buyer and/or shall be off-set pro rata against the agreed invoice value

Article 11. Guarantee

- 11.1 Sympafix guarantees that the parts and accessories of its delivered Products will be in proper working order for a period of 1 year, from the date of delivery. Sympafix guarantees that the battery and charger of the Products, if included in the delivery by Sympafix will be in proper working order for a period of 6 months, to be counted from the date of delivery.
- 11.2 In the event that the delivered Products do not satisfy these guarantees, the Buyer shall make a report in writing to Sympafix in accordance with Article 13 of these Terms and Conditions. Sympafix shall only be

- obliged to replace the defective part or accessory and shall not be liable for further charges of whatever nature. The Buyer, here and now and for the future, agrees to return the part or accessory that is to be replaced to Sympafix at their first request and to transfer the title of the part of accessory to Sympafix. In accordance with Article 11.1., the guarantee for the part or accessory that is to be replaced shall be valid for the remainder of the guarantee period that applied for the original part or
- 11.3 The guarantee named in this Article shall not be valid for defects that result from inappropriate or incorrect use or when the Buyer or third parties have made modifications or have attempted to make modifications to the Products without the written consent of Sympafix or if the Products have been used for unsuitable purposes. 11.4 In the event that the guarantee made by Sympafix
- relates to a part or accessory that was produced by a third party, the guarantee shall be limited to the manufacturers' guarantee.

Article 12. Liability

- 12.1 Sympafix shall not be liable for any damages, barring in cases where wilful or gross negligence cannot officially be excluded. This refers to direct and indirect damage operational damage and damage as a result of thirdparty liability. In the case of wilful or gross negligence the burden of proof rests with the Buyer.
- **12.2** Sympafix shall not be liable for direct or indirect damages, operational damage and damage as a result of third-party liability caused by Sympafix' employees or others employed during the execution of the Agreement, who have not been made responsible for its execution. This exclusion also comprises intent and gross
- 12.3 With the exception of the specifications of Article 11, Sympafix shall not be liable for direct or indirect damage, company damage and damage as a result of liability of the Buyer held against third parties, caused by or in connection with the type of defects of the delivered Products or by the fact that the delivered Products do not consist of the quality that the Buyer would be expecting on the basis of the Agreement.
- **12.4** Subject to Sympafix' fulfilling the conditions as specified in Article 13, the liability of Sympafix shall, at all times, be limited to the net invoice value of the delivered Products or, at the discretion of Sympafix, to the maximum amount paid out by the liability insurance of Sympafix.
- 12.5 As far as those Products are concerned which are bought
- in by Sympafix from third parties, the liability towards the Buyer for those shall never exceed the third-party liability to Sympafix.
- **12.6** For delivered Products and/or in the event of services undertaken within the framework of delivery, the Buyer shall indemnify Sympafix against claims from third parties, in those instances where Sympafix' liability towards the Buyer has been excluded.

Article 13. Complaints and returns

- **13.1** Without prejudice to what is mentioned elsewhere in these Terms and Conditions, all complaints regarding immediately visible defects must be reported to Sympafix in writing within 14 days after delivery, with exact details of the nature and extent of the complaints being provided. The same lead-time of 14 days after the delivery date shall also apply to invoices.

 13.2 To those complaints with regard to flaws/defects that
- may not be apparent before use (and are therefore not visible on delivery) a final time limit of 6 months after delivery shall apply, whereby the complaint must be made within 8 days following the detection of the
- **13.3** After the time limit(s) has (or have) expired, the Buyer shall be deemed to have accepted the delivery, respectively the invoice, and, as a result, Sympafix shall no longer accept complaints.
- **13.4** Honouring complaints for Products that have been delivered shall only occur in accordance with the terms of Article 11.
- **13.5** The submission of a complaint shall never release the Buyer from his payment obligations.
- 13.6 Returns of delivered Products can only be undertaken after prior written agreement from Sympafix and after Sympafix has allocated a goods' return number (GRN) to

- these Products. The Buyer shall include the GRN on the delivery note. The Buyer shall return the Products, carriage paid, to the warehouse of Sympafix in The
- **13.7** In the case that the Buyer returns Products in accordance with Article 13.6, excluding flaws/defects, then the Buyer shall owe 20% of the invoice value pertaining to these Products to Sympafix. Products with a sell-by date cannot be returned, with the exception of flaws/defects and without prejudice to the terms of Article 13.6

Article 14. Intellectual property rights

- **14.1** All rights to intellectual and industrial property with regard to goods and services that are or shall be developed, established and registered, such as copyright, design rights, patent rights, database rights etc., shal solely rest with Sympafix.
- **14.2** The Buyer is not entitled to claim any intellectual and industrial property rights relevant to the Products. Furthermore, the Buyer is not entitled to claim any rights to intellectual and industrial property corresponding with intellectual and industrial property rights held by Sympafix or which could confuse the general public.
- **14.3** The Buyer shall under no circumstances be permitted to alter the Products or to change or remove any trademarks in or on the Products referring to the manufacturer or to Sympafix.

Article 15. Jurisdiction

In the event that the Buyer consists of more than one legal person, then they shall all be liable for fulfilling the obligations of the Buyer to Sympafix.

Article 16. Abbreviated limitation period

All legal claims of the Buyer on Sympafix based on this Agreement or the law shall expire after the period of one year after the limitation period has commenced.

Article 17. SecrecySympafix shall handle all information provided by the Buyer as strictly confidential; this also applies after termination of the business relationship. The Buyer shall be obligated to secrecy with regard to all information he has received or has been made aware of in respect of Sympafix and its products.

Article 18. Applicable Law

- **18.1** The legal relationship between Sympafix and the Buyer, with the exclusion of the Vienna Purchase Agreement (Convention on International Sales of Goods 1980) shall be governed by Dutch law.
- **18.2** The official Dutch version of these Terms and Conditions is deemed binding. In the event of any legal disputes with regard to one or more clauses of these Terms and Conditions, the remaining clauses shall not be affected. Furthermore, Article 2.5 shall apply in this case
- 18.3 With regard to the interpretation of international commercial terminology, the "Incoterms 2000" as compiled by the International Chamber of Commerce in Paris (I.C.C.) are applicable, meaning the most recent version thereof.

Article 19. Autorised Judge

- **19.1** All disputes that arise from the legal relationship between Sympafix and the Buyer shall be submitted for judgement to and settled by the Dutch courts. If the court of first instance is authorised, then disputes shall exclusively be submitted for judgement to the court in
- 19.2 Notwithstanding what is stated in Article 19.1 Sympafix shall have the right to submit the dispute to the authorised civil judge for judgement, in accordance with the normal competency rules, or to resolve the dispute by means of arbitration or binding advice.

