# **ORIGINAL**



Adjufix method is used to fasten window and doorframes quickly and easily without wedges.

The one-of-a-kind frame sleeve made in Sweden is galvanised and is provided with a DNV certificate.

Adjufix sleeves enable a durable structure to be created. This solution is also well-known to the leading Swedish window manufacturers.

### **FRAME FASTENERS**

Installation instructions \_\_\_\_\_\_ 61
Adjufix sleeves, screws and accessories \_\_\_ 61–63



# Installation instructions Adjufix sleeves

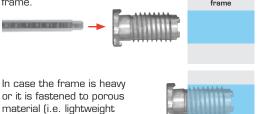
# **Adjufix**

#### Do as follows:

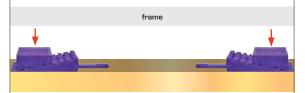
concrete) add a pressure dis-

tribution plate to the sleeve.

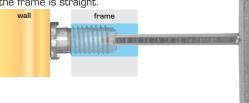
1. The frame must be provided with a through-hole with a length of 12–14 mm. The sleeve is fastened in the hole with Adjufix installation tool from outside of the frame.



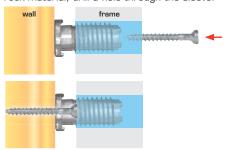
2. Place level adjustment blocks under the frame. Adjust the blocks to equal height and thereat fix with nails or screws.



3. Lift the frame in its place and using the same Adjufix tool turn the sleeve from inside of the frame to fasten the frame to the wall. Check that the diagonals of the frame are equal and the frame is straight.



**4.** Fasten Adjufix screws through the sleeve. Choose the screws suitable for the fastening material. When mounting to concrete or other rock material, drill a hole through the sleeve.



5. The frame can still be adjusted. By releasing the screw, adjusting the sleeve and fastening the screw once again the frame can be installed precisely and safely.

Attention! It is important that the gap between the frame and wall is insulated with flexible insulation material (not with polyurethane foam). In such a way the frame can be adjusted also later, if necessary.

#### **Sleeves**

#### For a wooden frame



#### Sleeves for a wooden frame

Length, mm	Pcs/box	Boxes/ del.pack	Part num- ber:
28	100	6	120081
28	500	1	120094
38	100	6	120083
38	500	1	120096

Suitable for 12–14 mm hole, for easier fastening 14 mm is recommended. Choose as long sleeve as possible. Frame thickness 30 mm: choose 28 mm sleeve, the adjustment range of which is 0–13 mm outside of the frame surface.

Frame thickness 35 mm: choose 33 mm sleeve, the adjustment range of which is 0-18 mm outside of the frame surface.

Frame thickness 40 mm: choose 38 mm sleeve, the adjustment range of which is 0-23 mm outside of the frame surface.

In case even the longest sleeve is not sufficient, the sleeve can be extended with an extension element (10 mm). See Adjufix accessories.



#### A sleeve for connecting wooden frames

Length,	Pcs	Boxes/	Part
mm	/box	del.pack	number:
38	50	8	120097

For connecting two wooden frames with 10 mm Allen wrench

# For plastic, aluminium and steel frame



Sleeves for plastic, aluminium and steel frames

Length, mm	Pcs/box	Boxes/ del.pack	Part number:
28	500	1	120125
38	500	1	120126

A sleeve for aluminium, plastic or steel frames. The sleeve has M16 male thread. Adjustment range 20 mm or 30 mm.



### Sleeves for plastic, aluminium and steel frames

Length, mm	Pcs/ box	Boxes/ del.pack	Part number:
28	500	1	120127
38	500	1	120128

A sleeve for fastening together with PHM installation ring to plastic or aluminium frame. Adjustment range 20 mm or 30 mm.



#### Installation ring

Pcs/box	Boxes/ del.pack	Part number:
500	1	120129

An installation ring to be used with PH sleeves. Installation opening 18 mm.



#### **Screws**

Choose the screws suitable for the fastening material. After the frame has been installed in its place, use a screw and fasten the frame through the sleeve from inside the frame



# Screws for fastening a standard frame to a wooden frame

Ø × length, mm	Pcs/box	Boxes/ del.pack	Part number:
6 × 50	100	24	120101
6 × 65	100	8	120102

For normal sized window and doorframes. Torx 25.



# For lightweight concrete, aerated bricks and Leca blocks use screws and nylon dowels.

Ø x length, mm	Pcs/box	Boxes/ del.pack	Part number:
8 × 100	50	6	120112

The dowel is specially designed so that it can be installed through Adjufix sleeve. Drill bit @ 8 mm, Torx 25.



## Screws for fastening a heavy frame to a wooden frame

Ø × length, mm	Pcs /box	Boxes/ del.pack	Part number:
8 × 64	8	60	120065
8 × 64	100	8	120103

For heavy window and doorframes. Torx 30.



# Screws for lightweight concrete, aerated bricks and Leca blocks.

Ø × length, mm	Pcs /box	Boxes/ del.pack	Part number:
7.5 × 125	8	14	123822
7.5 x 125	100	8	120458

Drill bit  $\varnothing$  6 mm for aerated bricks. The aerated concrete and Leca block do not have to be pre-drilled. Torx 30



## Screws and nylon dowels for concrete and solid bricks.

Ø × length, mm	Pcs /box	Boxes/ del.pack	Part number:
8 × 60	100	6	120109
8 ~ 80	100	6	120111

The dowel is specially designed so that it can be installed through Adjufix sleeve. Drill bit, Ø 8 mm, Torx



#### Self-drilling screws for steel

Ø × length, mm	Pcs /box	Boxes/ del.pack	Part number:
5,4 × 32	8	80	120213
5,4 × 32	100	24	120105
5,4 × 50	100	24	120104

For steel profile 1.0–2.5 mm. Torx 25.



#### Screws for concrete and solid bricks.

Ø × length, mm	Pcs /box	Boxes/ del.pack	Part number:
$7.5 \times 50$	100	8	120456
7.5 × 70	100	8	120457

Drill bit, Ø 6 mm. Torx 30.



#### Self-drilling screws for steel

Ø × length, mm	Pcs/box	Boxes/ del.pack	Part number:
6,7 × 42	100	24	120106

For steel profile 1.0–3.5 mm. For steel profile 3.5–5 mm a hole  $\varnothing$  5.8 mm is drilled. Torx 30.

# Adjufix

#### **Accessories**

See user guides of accessories on previous pages.

### Frame installation tools

For adjusting sleeves and tensioning of Adjufix screws use the below listed tools.

#### Adjustable heightening element

Pcs/box	Boxes/ del. pack		Part number:
4	14	1	120122
20	6	1	120107

An adjustable heightening element to be installed under 10–17 mm frame to support the frame in horizontal direction.



#### Plug

Colour	Pcs/box	Part number	•:
Light brown	200	120243	3
White	200	120076	6

Ø 14/19 mm.



#### Ratchet 8 + 10 mm

Pcs/box	Part number:
1	120089



#### Adjufix internal Allen-key

Pcs/box	Part number:
1	120078

A tool, which has:

- 8 mm hexagonal socket for fastening the sleeves in the frame
- 10 mm hexagonal socket for fastening the sleeves out from the frame  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right)$
- Screw head magnet holder



#### Pressure washer

Pcs/box	Boxes/ del. pack	Part number:
100	6	120099

A pressure washer is installed together with a sleeve, when installing a heavy window or door. Also when fastening to lightweight concrete, aerated brick or Leca block.



#### Adjufix sleeve installation blade

Pcs/box	Part number:
1	120093

A tool to be connected to a screwdriver and to be used for installing a sleeve in the frame quickly, horizontally and to the required depth. Adjustable installation depth.



#### Heightening element

Pcs/box	Boxes/ del. pack	Part number:
200	6	120098

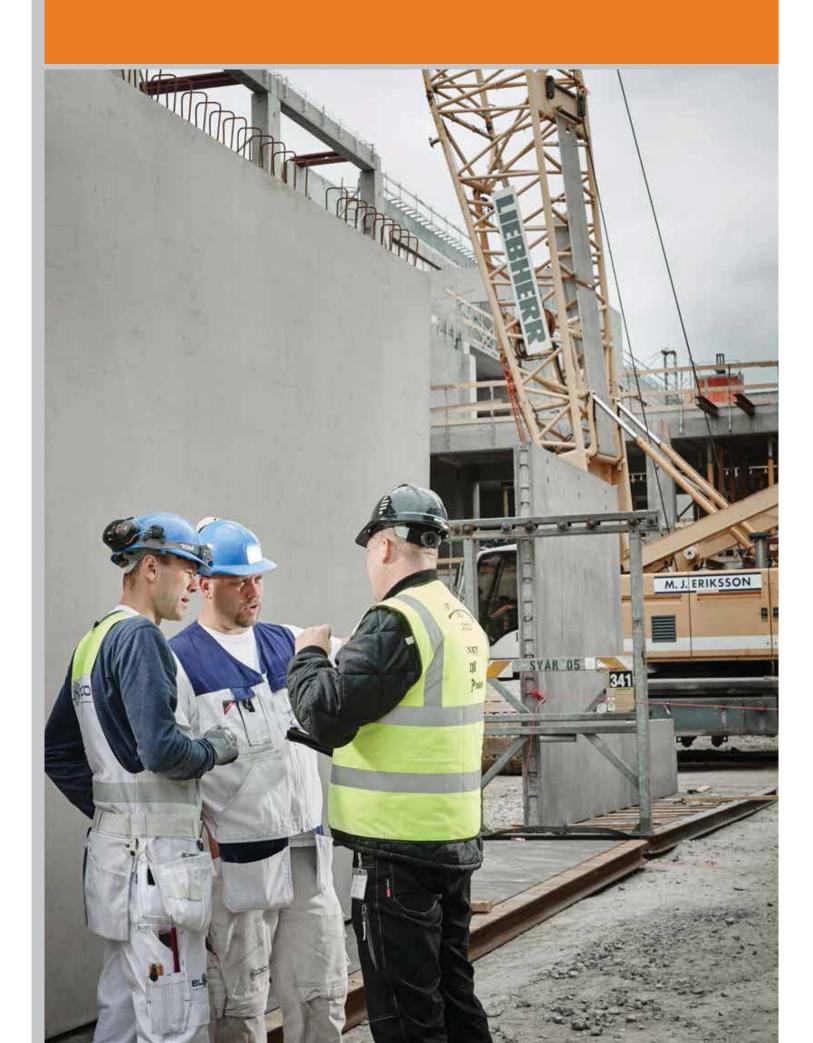
Fasten 10 mm heightening element to the sleeve, when the installation gap is bigger than the installation reserve of the sleeve (23 mm). Depending on the length of the fastening screw use maximum two heightening elements per sleeve.



#### Hexagonal tip

Pcs/box	Part number:
1	AM8

Hexagonal tip M8  $\times$  50 mm guides the sleeve during fastening.





# **ORIGINAL**



Almost 25 years ago Spit introduced to the market the world's first gas-powered Pulsa nailer for fastening steel and concrete fasteners.

Spit is well-known in its birth place France, as concrete is a widely used construction material there. Numerous specialists in Spit have been developing and manufacturing various solutions in the field of concrete, steel and gypsum plasterboard fasteners since the 1950s. SPIT: Société de Prospection et d'Inventions Techniques

### FASTENING AND DRILLING TO AND IN CONCRETE AND STEEL.

Impulse fasteners, nails and fastening accessories 66-69

Nail shooting, nails

Nail shooting, nails	
and fastening accessories	70-72
Screwdrivers and collated screws	73-75
Drill, combi and spike hammers	76-84
Angle grinders and concrete grinding	
tools + discs	85–86
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Chemical anchoring	_ 128–135
Drill bits, chisels and spikes	136-14





steel, rock and concrete sur-

- Steel and wooden
- framework

  Plaster grids
- Ceiling rails
- Finishing panels
- Insulation

faces

- applications
- Façade applications
- Element casting formwork
- Fastening of an assembly tape on ventilation duct holders

Pulsa 800P+ for common steel, rock and concrete fasteners and Pulsa 800E especially for fastening cable, pipe and electrical systems. Very modern, dust resistant and durable. Safe fastening in deep grooves, ducts or cabinets. Also available with a long 50-nail magazine. With a lithium battery up to 3000 consecutive shots.

Technical specification:

ree initial epeciments	
Part number: 800P+ and 800E	018342 and 018340
Weight:	3.8 kg
Dimensions:	396 × 309 mm
Fuel cell life:	approx. 600 shots
Shots per charge:	approx. 3000
Battery charging time:	90 min.
Nail range:	15–40 mm
Impact force 800P+ and 800E	100 and 82 J
Vibration:	4.5 ±1.0 m/s2

Accessories:	Part number:
Pulsa 800 pin	018424
Pulsa 800E pin	018423
Magnetic pin for a base plate	014641
Magnetic pin for P-CLIP	014642
A washer for a plaster grid fastener.  Ø 25 mm. 1000 pcs/box	011204
A set of cleaning accessories	013690
50 pin magazine (with a support foot)	014640
20 pin magazine (with a support foot)	014623
3.7 V, 2.2 Ah lithium battery	018483
Battery charger for a lithium battery	018482
Pulsa800 fuel cell (2 pcs/packaging)	011773









#### Toolless tip replacement

Four different tips for fastening any fasteners (compatible with models 800P+ and 800E)



#### Clear LED display

Battery and fuel cell capacity is visible, the saving function switches the device automatically off, when not in use.



# A wide range of application temperatures.

Thanks to an innovative gas technology works problem-free also in temperatures –15°C and +49°C.



#### Keyless depth adjustment

Nailing depth can be adjusted without tools, also with gloved hands.

Sold in a comfortable carry case, which contains also a lithium battery, charger, safety glasses and a user manual.





# Modified atmosphere nail pack-

aging
For common and hard concrete and steel and rock.

Length	Pcs/box	Boxes/ packag-	Part num- ber:
		ing	

C6 NAILS + FUEL CEL FOR CONCRETE/ROC		99999	<del>opppp</del>
20 mm	1500 + 3 fuel cells	4	057545
25 mm	1500 + 3 fuel cells	4	057546
30 mm	1500 + 3 fuel cells	4	057547
35 mm	1500 + 3 fuel cells	4	057548
40 mm	1500 + 3 fuel cells	4	057549

HC6 NAILS + FUEL CELLS HARD CONCRETE/STEEL/ROCK Plastic strip of FH nails releases during nailing					
15 mm	1500 + 3 fuel cells	4	057559		
17 mm	500 + 1 fuel cell	10	057551		
17 mm <b>FH</b>	500 + 1 fuel cell	10	057556		
22 mm	500 + 1 fuel cell	10	057552		
22 mm <b>FH</b>	500 + 1 fuel cell	10	057557		
27 mm	500 + 1 fuel cell	10	057553		
32 mm	500 + 1 fuel cell	10	057554		





• recommended static load = 120 kg

Concrete: • recommended static load = 25 kg



Recommended loads for HC6 nails

Material	Tension (kN)
Steel S235, min. thickness 5 mm	1.2
Concrete C20/25	0.25

Length	Pcs/box	Boxes/packaging	Part number:
	O ROD HOLDER stic washer, ø 3	•	
M6-M8	1000	6	011430
<b>E-CLIP</b> <b>PIPE HOLD</b> Plastic, C			
16 mm	100	12	567214
20 mm	100	12	565032
25 mm	100	12	565033
32 mm	50	12	565034
40 mm	50	12	565035
50 mm	50	12	567215
	LDER ARCS d, 8 pcs/packa	aging	
3 × 1.5 mm²	50	12	565915
Double-side	ed, 16 pcs/pad	ckaging	
3 × 1.5 mm²	25	12	565916
MULTICAB CABLE HO			
30 mm	100		827155
CT-CLIP			20-4

30 mm	100		827155
CT-CLIP LASTAV CABL	E TIE		13
16–32 mm	100	12	565508
CLIPELEC CABLE TIE HO	OLDER		41
Black	100	5	011203
Grey	100	5	053881

P-CLIP PIPE/CABL Single-sided		S 1	A. Re
16 mm	100	12	567206
20 mm	100	12	565082
22 mm	100	12	565083
25 mm	50	12	567208
Double-side	d		
16 mm	50	12	567209
20 mm	50	12	565086
22 mm	50	12	565087
From metal			
16 mm	200	4	057495
20 mm	200	4	057496
25 mm	200	4	057497
32 mm	100	4	057498

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