773 Fixing equipment
We supply routing jigs developed in-house for flush-fitting sets (AGL®, page 284) and roses (17 1736/1737, round, page 285, or 17 1733/1734, angular, page 286) that are precision-adapted to these hardware solutions. Machine-turned or milled edge radii on roses guarantee accurate alignment in combination with our routing jigs. Exclusive door designs are easy to achieve even without CNC equipment in this way.
Fixing equipment
Simply precise

FSB lever/lever sets have to be fitted correctly if they are to function properly.

It is FSB policy to supply paper positioning templates with all orders. If these templates have inadvertently not been enclosed, please request that this to be made good forthwith. Their product codes are listed in the footers of the pages that follow.

FSB supplies trade installers with metal templates, the product codes for which are specified on the pages that follow.

A considerable amount of force is exerted when operating lever/lever sets. This holds particularly true for fittings on frequently used doors. Long-term trouble-free use can only be guaranteed if sufficient care is taken when marking out, drilling and fixing the hardware.

FSB has looked very carefully into the complaints received over recent years. It often transpires that the reason the goods were faulty was that they were incorrectly fitted.

The principal causes were as follows:

– The lugs on roses and backplates had broken off, making it impossible to hold fittings securely in place. They moved about on the door surface when operated.

– Hardware was ordered for the wrong door thickness and fitted anyway regardless of the consequences. The spindles were either too long, causing the attached handles to slip back and forth, or too short, forcing the handles to be fitted too near to the end, thus causing the spindle to break.

– When connecting lever/lever sets, the cup-point grub screw was not turned into the handle neck with sufficient care, as a result of which the spring clamping plate was not pierced and the handle was able to slip about on the spindle or else the spindle cup points were not properly secured.

– Drill holes were made without using a template. Drill centres were marked out in haphazard manner, producing oversize holes. Backplates and roses moved about in the oversize mounting holes.

– FSB hardware was combined with spindles, screws, backplates and roses by other firms.

– Spindles on window handles were shortened by the customer. This could cause filings to get into the ball-catch mechanism, thus impairing its functioning.

FSB is at pains to stress that – as is assuredly the case for all its competitors – it can only accept liability for its products if they have been correctly and professionally fitted.

We would additionally like to draw attention to growing public sensitivity regarding the issue of product liability. Improperly installed door and window fittings and their accessories can seriously jeopardise potential claims for liability. FSB puts its trust in the great experience and craft skills both of its own customers and of their subpurchasers. Our mutual end-customers have a right to properly fitted hardware that works.
Jigs and templates
for short backplates with visible screw fixing

03 0453

Fixing template for FSB standard short backplates, with locating lugs and the option of visible screw fixing
Covers WL/PC/WC 55–78 mm

Paper template
78 8429 0252
for FSB short backplates with lugs
Standard and bathroom sets

fsb.de/030453
Fixing templates for all FSB roses prepared for concealed screw fixing:

- FSB handle and key roses for ASL® bearings, AGL® heavy-duty bearings and AGL® fire-safety hardware
- FSB security roses
- FSB security hardware with rose screw-fastening

Paper templates

78 8429 00250 for FSB ASL® rose sets and AGL® + AGL® FS heavy-duty sets

78 8429 00251 for FSB ASL® and AGL® bathroom roses
Jigs and templates
for crossbar fittings
with concealed screw fixing

Fixing templates for FSB crossbar fittings

03 0457

Insert FSB special-purpose spindle 03 0125 into the lock and fit the cylinder. Position borehole template over spindle and cylinder and drill through the bushes. Repeat the process on the hinge side. Then work out the length of the crossbar and reinforcement bar: this is calculated by multiplying the backset by two, adding a further 68 mm and subtracting the figure arrived at from the width of the door. Once the bars have been cut to size, insert plastic end-caps into the tube where this is in stainless steel. Assembling the panic hardware and connecting it to the fittings on the other side is very straightforward. Full instructions are enclosed with each set. Once the stop device has been adjusted (77 7970 only) and the cover caps have been fitted, check the functioning of the fitting.

79 8430 00085
Fixing instructions for crossbar fittings 77 7970
Universal template

03 0460

In addition to its wide range of dedicated templates, FSB has developed a universal template covering virtually every borehole configuration. This universal template should be a part of every trade installer’s standard equipment.

Contents:
1 Metal template
2 Borehole-layout templates
3 Guide pins
4 Knurled screw
5 Drill bits
6 Adaptor for greater door thicknesses of approx. 60 mm upwards, depending on lock position

Instructions for use:
1. Select borehole layout desired from the paper patterns provided.
2. Slot the borehole layout selected into the flanges on the front of the metal template.
3. Firmly secure borehole layout with knurled screw.
4. Select guide pins for lock follower (7 mm, 8 mm, 9 mm, 10 mm) and keyway (warded, PC, WC thumbturn) to suit the dimensions of the lock in question and screw them into the metal template from the back until they become visible in the borehole layout from the front.
5. Having attached the pre-assembled universal template to the door lock, now drill the boreholes indicated on either side.
6. Remove the template and assemble the FSB hardware as per the fixing instructions.

fsb.de/030460
Routing jig
for round
flush roses

Austrian c:c distances

How to use: push the centring device into the boreholes on the timber routing jig and place the assembly against the door. Slot the guide pins on the centring device into the follower and cylinder or other keyway and align the routing jig parallel to the door leaf. Using C-clamps to secure the routing jig to the door at the position thus arrived at, then drill fixing holes through the bushes on the centring device for the roses and hardware respectively. Now remove the centring device and rout out the relevant recesses:

03 0462 00001
(PC 88 mm, PC/warded 90 mm, WC/T/7/90 mm – ÖNORM)
for flush heavy-duty hardware 7 mm deep to suit door thicknesses of 45 mm upwards (FSB 72 and 76/79), Ø 55.6 mm, and for flush roses 3 mm deep (FSB 17 1736/17 1737) to suit doors 38-44 mm thick, Ø 55.6 mm. 20 mm-Ø routing bit, 30 mm-Ø collar ring. Repeat procedure on reverse.

03 0462 00010
for flush security roses
73 7396: outside Ø 60.8 mm, depth 12.5 mm (20 mm-Ø routing bit, 30 mm-Ø collar ring), inside Ø 55.8 mm, depth 7 mm (20 mm-Ø routing bit, 35 mm-Ø collar ring).

03 0462 00020
for flush pulls 42 4250-42 4254

Additional information:
fsb.de/flush
Routing jig
for round and angular flush roses

03 0462

German c.c distances

How to use for 17 1733/17 1734: push the centring device into the boreholes on the timber routing jig and place the assembly against the door. Slot the guide pins on the centring device into the follower and the cylinder or other key hole and align the routing jig parallel to the door leaf. Using C-clamps to secure the routing jig to the door at the position thus arrived at, then drill fixing holes through the bushes on the centring device for the roses and hardware respectively. Now remove the centring devices and, using the small insert, rout out the recesses to a depth of 3 mm and a diameter of 55.6 mm with the aid of a 20 mm-Ø bit and a 30 mm-Ø collar ring. Then, changing to the large insert, rout out the corner areas, likewise to a depth of 3 mm and with a 30 mm-Ø collar ring but using a 4 mm-Ø bit. Repeat procedure on reverse.

How to use for heavy-duty hardware and 17 1736/17 1737: rout out with circular insert to a depth of 3 or 7 mm with a 20 mm-Ø bit and a 30 mm-Ø collar ring.

03 0462 00030
(PC 72 + 92 mm, WC/T/8/78 mm)

for round flush roses
FSB 17 1736/17 1737, door thicknesses 38–44 mm, depth 3 mm, Ø 55.6 mm

for angular flush roses
FSB 17 1733 / 17 1734, door thicknesses 38–44 mm, depth 3 mm, 55.6 x 55.6 mm

for flush heavy-duty hardware (round roses) FSB 72 and 76/79, door thicknesses of 45 mm upwards, depth 7 mm, Ø 55.6 mm

Additional information:
fsb.de/flush
Jigs and templates
for short backplates
with concealed screw fixing

03 0477

Fixing template for
– FSB short backplate sets with AGL® compensating bearing and AGL® fire-safety hardware
– FSB short backplate sets with FSB ASL® bearing
Covers WL/PC/WC 55–78 mm

Paper templates
78 8429 00253
for FSB ASL® short backplates and short backplates in standard and heavy-duty AGL® + FS sets
**Jigs and templates**
for long and broad backplates 
with concealed screw fixing

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**03 0476**

Fixing template for
- FSB long backplate sets with AGL® compensating bearing and AGL® fire-safety hardware
- FSB long backplate sets with FSB ASL® bearing
- FSB security hardware for narrow stile doors
  FSB 73 7330 and 73 7331
  FSB 73 7590 and 73 7531
- FSB narrow-frame sets with long backplates
  FSB 06 7816

Covers WL/PC/WC 72–92 mm

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**03 0478**

Fixing template for
- FSB broad-backplate sets with AGL® compensating bearings
  FSB 72 .... ... WL/PC/WC 72–78 mm
- FSB broad backplate sets as fire-safety variants
  FSB 76 .... ... PC 72 mm

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**Paper templates**

78 8429 00256 AGL®
78 8429 00292 AGL® FS
for FSB broad backplates with bases

78 8429 00254
for FSB long backplates with FSB ASL® and heavy duty AGL® + FS sets
78 8429 00255
Bathroom/WC sets

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fsb.de/030476
fsb.de/030478
Jigs and templates
for narrow-door roses
with rivet-nut fixing

03 0481
Fixing template for oval FSB roses with rivet nuts and when using FSB 03 0526 fastenings
PC 72 mm

03 0482
Fixing template for oval FSB roses with rivet nuts and when using FSB 03 0526 fastenings
PC 92 mm

Paper template
78 8429 00258
for FSB narrow-door handles on oval roses with rivet nuts

fsb.de/030481
fsb.de/030482
Jigs and templates
for Design + Security

03 0487
Fixing template for FSB security set with long backplates
Covers PC 72–92 mm

03 0488
Fixing template for FSB security set with short backplates
PC 72 mm

Paper templates
78 8429 0211-78 8429 00216
(depending on variant) for FSB security set

fsb.de/030487
fsb.de/030488