

Fire penetration seals > Planning

Fixing types

If possible, the seals are fixed to an overhead wall pipe and to the medium pipe using clamps. If no wall pipe is planned, the elastic seals can also be made with a flange and then attached to the wall using a clamping flange (see adjacent table).




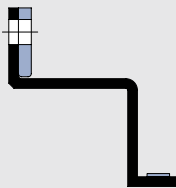
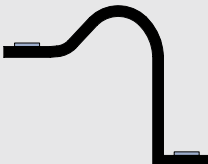
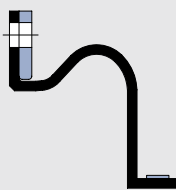
To fix the flange to the wall, take the following into account: The fixing screws of size \geq M8 or through wall anchors must have a Fire Safety Certification and should be fitted at a distance of 100 mm to ensure its impermeability to smoke. In addition, the fire protection bulkheads are covered with silicone glue to counterbalance any potential unevenness in the wall or ceiling. When selecting an appropriate approved fixing method, a few points need to be remembered and ascertained in advance:

> *Manufacturer Fire Safety Certification*

Often, not all sizes of the dowels or anchors in a product line possess the general building authority approval, even if the product documentation and labels list "general building authority approval" and "fire protection". In some cases, limitations are listed with respect to substrate and the type and height of the permitted load.

> *Fixing*

Not all dowels or anchors are certified for all common anchoring materials.

| TYPE | | Wall pipe fixing | | Medium pipe fixing | |
|--------|---|------------------|--|--------------------|--|
| W200SS |  | Sleeve | Screw thread belt 1/2" or Small clamp width depending on ø: 9–12 mm | Sleeve | Screw thread belt 1/2" or Small clamp width depending on ø: 9–12 mm |
| W200FS |  | Flange | Steel flange min. 30x6 mm Total clamp thickness 8 mm | Sleeve | Screw thread belt 1/2" or Small clamp width depending on ø: 9–12 mm |
| W400SS |  | Sleeve | Clamp belt 3/4" | Sleeve | Clamp belt 3/4" or Hinge bolt clamp width depending on ø: 18–30 mm |
| W400FS |  | Flange | Steel flange min. 40x6 mm Total clamp thickness 8 mm | Sleeve | Clamp belt 3/4" or Hinge bolt clamp width depending on ø: 18–30 mm |
| W410SS |  | Sleeve | Clamp belt 3/4" | Sleeve | Clamp belt 3/4" or Hinge bolt clamp width depending on ø: 18–30 mm |
| W410FS |  | Flange | Steel flange min. 40x6 mm Total clamp thickness 8 mm | Sleeve | Clamp belt 3/4" or Hinge bolt clamp width depending on ø: 18–30 mm |

> *Edge distance to the breach*

In order to prevent the material from breaking in the area of the connection, dowel and anchor manufacturers specify edge distances of between 50 and 100 mm, depending on the load. In general, we design with an edge distance of 50 mm between the breach and hole circle, since the force per dowel or screw is less than 0.25 kN for screw distances of approx. 100.

All screws support only the weight of the expansion joint or membrane, and must ensure a reliable seal against the wall or ceiling.

> *Material of the fixing screws*

We recommend using galvanised steel in covered buildings and stainless steel fasteners outdoors.