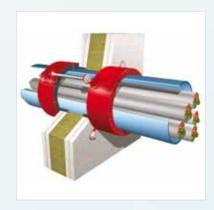




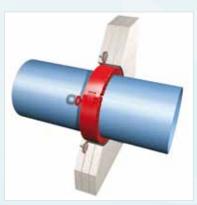
Basic Requirements for Creating a Penetration

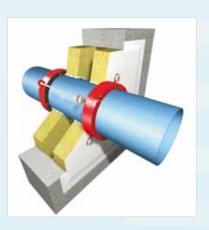
Determine the required period of fire resistance of the element, and for loadbearing structures, ascertain the required load. The area to be sealed requires the same fire resistance as the complete floor or wall construction. In order to ensure the stability of the services is maintained under fire conditions, we recommend that all services must be adequately supported at maximum 250mm away from the wall or floor on both sides of the penetration. System fixings, impact protection and suspension elements must be steel. Monal alloys, aluminium etc are not permitted. Accessories such as guard-rails, steel angles, threaded rods. Suspension elements etc. must only be fixed to adjacent solid substrates such as concrete or masonry.



General Information on Intumex® RS10

- ⇒ Intumex® RS10/../30 and Intumex® RS10/../60 are suitable for surface-mounted and built-in conditions.
- ⇒ Fire stopping collars are installed in pairs in both surface-mounted and built-in conditions in walls. A single collar only is required on the underside of floors or ceilings.
- ⇒ Suitable for all common plastic piping materials refer to the chart "Areas of Application" on next page;
- ⇒ The collars can be fixed to a solid substrate (concrete, masonry, block etc) with a fire resistance at least equal to that of the collar. Drill a hole 80 mm in depth and insert a non combustible anchor of a type appropriate to the substrate.
- ⇒ Intumex® RS10 is suitable for pipe diameters of 30 to 315 mm;
- ⇒ Suitable for pipes carrying non-flammable liquids and gases, and pipemail line, incl. control cables;
- ⇒ Intumex® RS10 is also suitable for non linear pipe applications, such as over clip couplings or around penetrations though which the pipe passes at an angle.
- ⇒ For surface mounted collars, several collars can be fixed adjacent to one another without consideration of minimum spacing requirements. However for collars built into the thickness of a wall, there must be a minimum distance of 100 mm between collars;
- ⇒ Acoustic insulation at a maximum thickness of 4 mm can be included.









Areas of Application

RS10 Overview Pipe Diameter/Wall Thicknesses of Pipes acc. to EN 13501-2: El120, U/U

Substrate	Position	RS10//30	RS10//60
Drywall, Solid wall >100 mm	surface-mounted or built-in on both sides	PVC, PE, PP: d=30-110 mm, s=1.8-10 mm d=125 mm, s<=6.0 mm d=160 mm, s<=4.0 mm	PVC, PE, PP: d=30-250 mm, s=1.8-11.4 mm
Drywall >125 mm Solid wall >100 mm	surface-mounted or built-in on both sides		PVC, PE, PP: d= up to 160 mm, s= 3.9 mm incl. cable bundle with maximum 60% pipe diameter
Solid wall >100 mm	surface-mounted on both sides	PVC, PE, PP: d=30-110 mm, s=1.8-10 mm d=125 mm, s<=6.0 mm d=160 mm, s<=4.0 mm	PVC, PE, PP: d=30-250 mm, s=1.8-11.4 mm PP, d=320 mm, s=15 mm
Aerated concrete or concrete floor d=>150 mm	surface-mounted on the underside of the floor	PVC, PE, PP: d=30-110 mm, s=1.8-10 mm d=125 mm, s<=6.0 mm d=160 mm, s<=4.0 mm	PVC, PE, PP: d=30-250 mm, s=1.8-11.4 mm PP, d=320 mm, s=15 mm PVC; PP; PE: d= up to 160 mm, s= 3.9 mm incl. cable bundle with maximum 60 % pipe diameter
Soft penetration 2 x 50 mm wall	surface-mounted on both sides	*, PVC, PE, PP: d=30-110 mm, s=1.8-10 mm d=125 mm, s<=6.0 mm d=160 mm, s<=4.0 mm	**, PVC, PE, PP: d=30-250 mm, s=1.8-11.4 mm
Soft penetration 2 x 50 mm floor	surface-mounted on the underside of the floor	*, PVC, PE, PP: d=30-110 mm, s=1.8-10 mm d=125 mm, s<=6.0 mm d=160 mm, s<=4.0 mm	**, PVC, PE, PP: d=30-250 mm, s=1.8-11.4 mm
Mortar-system penetration wall >100 mm	surface-mounted or built-in on both sides	PVC, PE, PP: d=30-110 mm, s=1.8-10 mm d=125 mm, s<=6.0 mm d=160 mm, s<=4.0 mm	PVC, PE, PP: d=30-250 mm, s=1.8-11.4 mm
Mortar-system penetration floor >150 mm	surface-mounted or built-in on the underside of the floor	PVC, PE, PP: d=30-110 mm, s=1.8-10 mm d=125 mm, s<=6.0 mm d=160 mm, s<=4.0 mm	PVC, PE, PP: d=30-250 mm, s=1.8-11.4 mm

^{*} Soft penetration systems CSP, AS, and AB

Please contact us for fire stopping requirements not included in above list.

Bip GmbH products must be applied in accordance with EU directives and national regulations for construction material in general, and the fire stopping in particular, with the applicable national test certificates, classification reports and approvals, and in accordance with applicable national building regulations. Product may only be applied by trained professionals with adequate knowledge of and experience in the use of fire stopping products, and only after a thorough review of the installation guidelines, the technical data sheets, the safety data sheets, and the national test certificates, classification reports and approvals. All the relevant documents can be obtained free-of-charge by contacting bip GmbH or from your local dealer via telephone or in writing: in addition all installation guidelines and the safety data sheets can be downloaded free-of-charge from the bip GmbH website (see www.intumex.at/. For Non-European Union countries separate guidelines are relevant. If required, please contact bip GmbH.

^{**} Soft penetration system CSP





Plastic pipe material

ABS: up to pipe diameter of 200 mm PVDF: up to pipe diameter of 63 mm

All B1 and B2 plastic pipes and all reinforced plastic hoses with a neoprene insulation of between 9 mm and 34 mm have been tested.

Intumex® RS10 can be installed with a 4 mm acoustic insulation in wall and floor conditions.

For special conditions such as over clip couplings or around penetrations though which the pipe passes at an angle please refer to the respective certificates.



The screws included within the packaging are suitable for use in solid walls and floors (concrete, solid brick, stone and aerated concrete). The washer included within the packaging must be inserted between the collar fixing flange and the srew head. Do not over-tighten the screws!

Where collars are fixed to drywall constructions, the fixing must consist of minimum M6 threaded rods, which pass through the entire thickness of the partition construction; the collars are held into place by the use of nuts and washers onto each end of these threaded rods.

Application Conditions

⇒ No known limits.

Installation: wall condition; collar pair Intumex® RS10/../30 and Intumex® RS10/../60

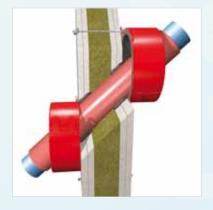
Surface-mounted condition:

- ⇒ If necessary install acoustic insulator and tape joints;
- ⇒ Fill gap (maximum 15 mm) between pipe and wall with mineral wool (Melting point >1000 °C), plaster, mortar, concrete or sealant;
- ⇒ Place the fire stopping collar around the pipe;
- ⇒ Snap shut and bend the collar flange(s) back through 180 °C;
- ⇒ Fix the pipe collar to the wall with the included fixings (drywall/soft penetration M6 threaded rod);
- ⇒ Fix identification label.

Built-in condition:

- ⇒ Straighten out collar fixing flanges;
- ⇒ Place the fire stopping collar around the pipe with the closed metal end towards you;
- ⇒ Snap shut and bend the collar flange(s) back through 180 °C;
- ⇒ Slide the collar into the wall until the closed metal end of the collar is either flush with or proud of the wall;
- ⇒ Fill the remaining gaps with fire stopping mortar (covering of mortar or sealant is not permitted);
- ⇒ Fix identification label.





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Installation: floor condition; single collar Intumex® RS10/../30 and Intumex® RS10/../60

Surface-mounted condition:

- ⇒ If necessary install acoustic insulator and tape joints
- ⇒ Fill gap (maximum 15 mm) between pipe and wall with mineral wool (Melting point >1000 °C), plaster, mortar, concrete or sealant;
- ⇒ Place the fire stopping collar around the pipe;
- ⇒ Snap shut and bend the collar flange(s) back through 180 °C;
- ⇒ Fix the pipe collar to the wall with the included fixings (drywall/soft penetration M6 threaded rod);
- ⇒ Fix identification label.

Built-in condition:

- ⇒ Straighten out collar fixing flanges;
- ⇒ Place the fire stopping collar around the pipe with the closed metal end towards you;
- ⇒ Snap shut and bend the collar flange(s) back through 180 °C;
- ⇒ Slide the collar into the wall until the closed metal end of the collar is either flush with or proud of the wall;
- ⇒ If necessary fix appropriate collar support
- ⇒ Apply shuttering and fill the remaining gap with fire stopping mortar (covering of mortar or sealant is not permitted);
- ⇒ Remove collar support;
- ⇒ Fix identification label.

For additional information on how and where to use this product please refer to our systems database www.intumex.info, or visit our website at http://www.intumex.at