

Application

The illustration on the left indicates a range of typical applications facing the designer.

Construction may consist of:

- concrete / masonry
- wood
- gypsum / drywall

The problem areas are:

- 1** Movement joints
- 2** Rigid or low movement joints
- 3** Head of wall and perimeter joints
- 4** Metal and plastic pipes
- 5** Plastic pipes
- 6** Multiple penetrations, pipes and/or cables
- 7** Cable trays (with permanent sealing of opening during construction, or temporary sealing allowing additional cables to be installed subsequently)
- 8** Cable trays (with permanent sealing of opening during construction)
- 9** Cables (single or bundled)
- 10** Electrical boxes
- 11** Heating/ventilation/air conditioning

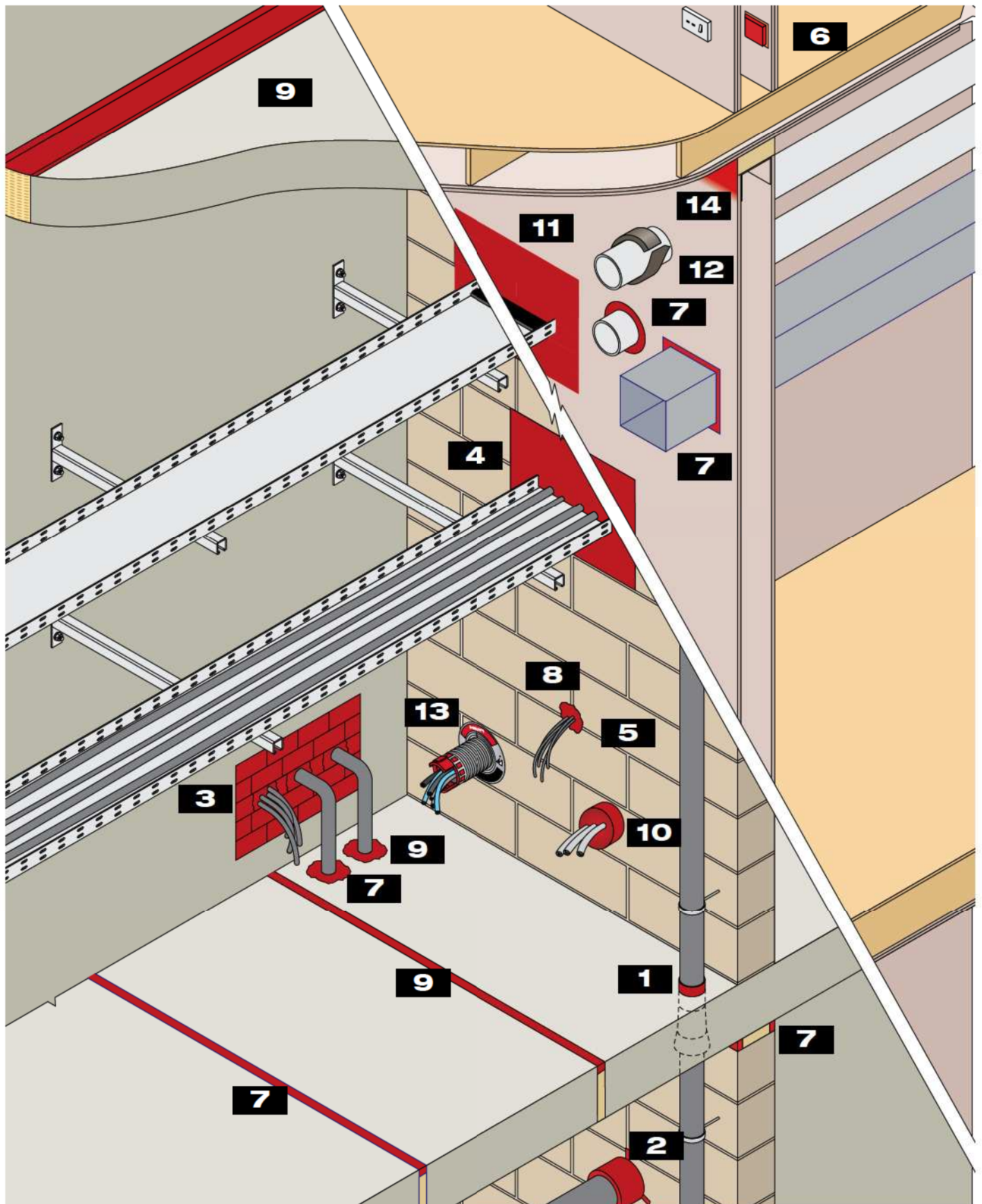
Fire resistance rating

To help prevent the rapid spread of fire within a building, compartment walls, floors and joints are required to meet a specific fire resistance rating. Through-penetrations and joints created during the construction process require the installation of firestop systems in order to bring the wall or floor back up to its original fire-rating.

Firestopping

It is essential that every penetration or joint in a fire-rated wall or floor is adequately protected by sealing — or “firestopping” — such that the building component is restored to its original fire-rated condition in order to maintain compartmentalisation. The quality and excellence of Hilti Firestop Systems help ensure that fire, smoke and toxic gases are contained to reduce the tragic loss of human life and damage to property.

Hilti has the solution...





Hilti Firestop Solutions

For each of the firestopping applications illustrated on the facing page, Hilti has designed and tested a specific solution. Not only is there a solution for each type of opening, but Hilti also offers a choice of firestop systems for several applications, according to the size of the opening and whether the installation is permanent or temporary.

Hilti Product	Description	Application	Fire rating
Metallic and Non-metallic Pipes			
1 CP 680N	Cast-in Firestop Device	Metal and plastic pipes with diameters up to 160mm	up to 4 hours
2 CP 644	Firestop Collar	Plastic pipes with diameters 200 - 250mm	up to 2 hours
2 CP 643N	Firestop Collar	Plastic pipes with diameters 160mm or less	up to 4 hours
7 CP 606	Intumescent Firestop Mastic	Metal pipes	up to 4 hours
7 CP 645	Fire sleeve	Metal pipes with diameters up to 168mm	up to 2 hours
8 CP 660	Fire Foam	Metal pipes (in conjunction with CP 648-E)	up to 3 hours
9 CP 604	Self-Leveling Firestop Sealant	Metal pipes	up to 3 hours
12 CP 648-S	Firestop Wrap Strip	Single wrap for plastic pipes	up to 4 hours
12 CP 648E	Firestop Wrap Strip	Continuous wrap for plastic pipes	up to 4 hours
12 CP 646	Firestop Bandage	Continuous wrap for insulated metal pipes	up to 3 hours
Cables and Cable Trays			
1 CP 680N	Cast-in Firestop Device	Cable bundles	up to 3 hours
3 CP 657	Fire Block	Temporary and permanent sealing of cables and cable trays	up to 4 hours
3 CP 651N	Firestop Cushion	Ready to use firestop intumescent cushion	up to 4 hours
4 CP 636/37/38	Firestop Mortar	Permanent sealing of cables and cable trays	up to 4 hours
5 CP 618	Firestop Putty Stick	Single or bundled cables	up to 4 hours
6 CP 617	Firestop Putty Pad	Electrical boxes	up to 2 hours
7 CP 606	Intumescent Firestop Mastic	Jacketed cables and cable bundles	up to 4 hours
8 CP 660	Fire Foam	Permanent sealing of cables and cable trays	up to 2 hours
8 CP 611A	Firestop Mastic	Permanent sealing of single and bunched cables	up to 4 hours
10 CP 658	Firestop Plug	Single or bundled cables	up to 4 hours
11 CP 670	Firestop Board / coating	Temporary and permanent sealing of cables and cable trays	up to 2 hours
13 CP 653	Speed Sleeve	Cable bundles	up to 3 hours
Multiple Penetrations			
1 CP 680N	Cast-in Firestop Device	Multiple metallic and non-metallic pipes	up to 3 hours
3 CP 657	Fire Block	Temporary and permanent sealing of metal and plastic pipes, cables and cable trays	up to 4 hours
4 CP 636/37/38	Firestop Mortar Mastic	Permanent sealing of metal and plastic pipes cables and cable trays	up to 4 hours
7 CP 606	Intumescent Firestop	Metal pipes, jacketed cables and cable bundles	up to 3 hours
11 CP 670	Firestop Board	Temporary and permanent sealing of cables, cable trays and metal pipes	up to 2 hours
Heating / Ventilation / Air-conditioning			
4 CP 636/37/38	Firestop Mortar Mastic	Permanent sealing of duct work dampers	up to 4 hours
7 CP 601S	Elastomeric Firestop Sealant	Sealing around metal ducts	up to 3 hours
7 CP 606	Flexible Firestop Sealant	Sealing around metal ducts	up to 3 hours
11 CP 604	Self-Leveling Firestop Sealant	Sealing around metal ducts	up to 3 hours
Joints / Curtain Walls			
7 CP 606	Flexible Firestop Sealant	Sealing floor joints, head of wall and wall to wall joints	up to 3 hours
7 CP 601S	Elastomeric Firestop Sealant	Sealing floor, head of wall and wall to wall joints	up to 4 hours
9 CP 604	Self-Leveling Firestop Sealant	Sealing floor to wall joints (Perimeter/Curtain Walls)	up to 2 hours
14 CFS-SP WB	Firestop Joint Spray	Sealing head of wall, wall to wall and floor to walls (Perimeter/Curtain Walls)	up to 4 hours