



# Abesco Z120 Fire Collars

## Technical Data Sheet

### Product Description

Abesco Z120 Fire Collars are designed to maintain the fire resistance of fire rated walls & floors where they are penetrated by plastic pipes.

They consist of a zintec cylindrical steel shell which is fitted around the pipe using the 2 integral 'slidelock' mechanisms. The steel shell contains a heat reactive graphite based intumescent material. Each collar is fastened to the wall using the integral 'fixing lugs' at the base of the unit.

Abesco Z120 Fire Collars are suitable for use on uPVC, cPVC, HDPE, MDPE & PP plastic pipes up to 160mm diameter.

### Fire Performance Table

| Installation                              | Size     | Insulation | Integrity |
|---|----------|------------|-----------|
| Surface mounting to concrete wall / floor | 55-160mm | 120 mins   | 120 mins  |
| Cast in to concrete wall / floor          | 55-110mm | 60 mins    | 120 mins  |
| Semi cast in to concrete wall / floor     | 55-110mm | 60 mins    | 120 mins  |

### Typical Dimensions

| Size     | Height | Shell O/D |
|----------|--------|-----------|
| 55-140mm | 50mm   | *         |
| 160mm    | 60mm   | 186mm     |

\* Depending on Fire Collar internal diameter

### Test Standards

Testing in accordance with the methodology and criteria described in:

- BS 476 part 20:1987
- SABS 0177 part 2 (1991)

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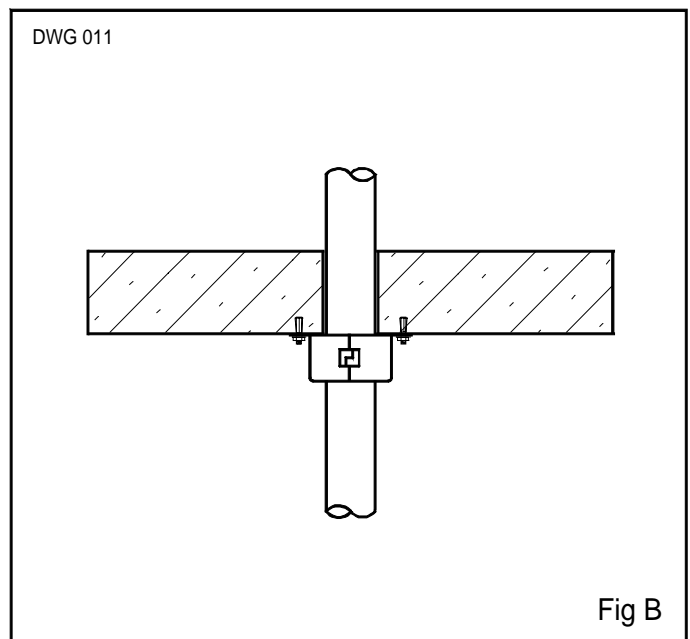
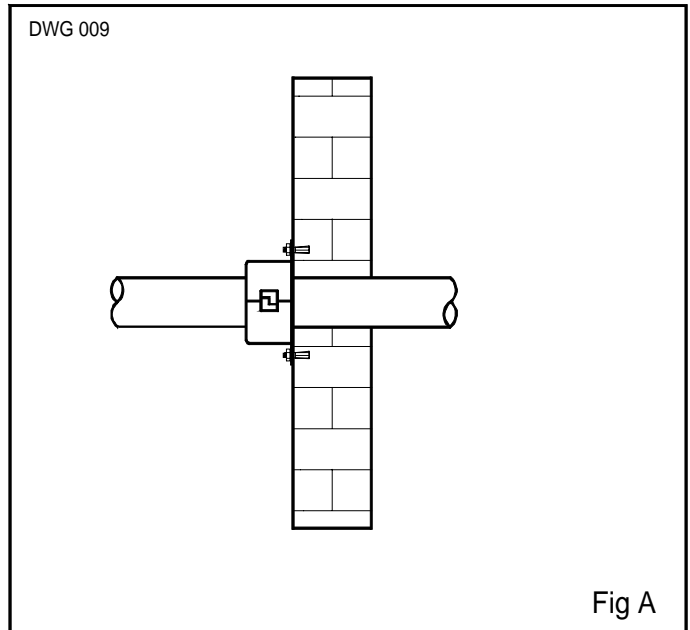
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### Installation Instructions

#### Surface Mounting to Concrete Wall or Floor

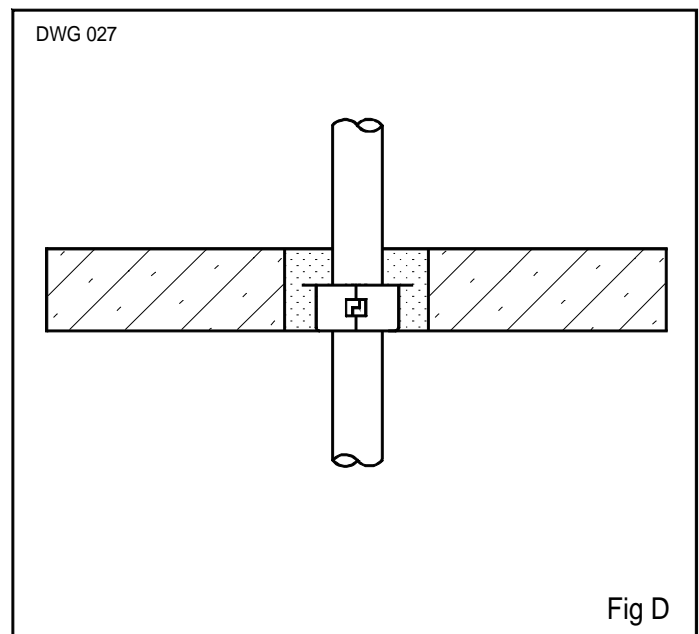
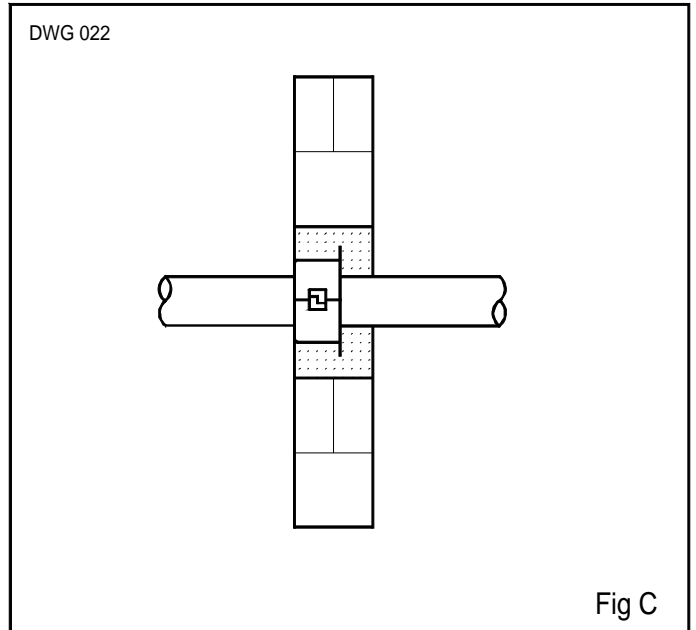
- 1 Please refer to Fig A and B (Typical Installation Details)
- 2 Attach the Z120 Fire Collar around the pipe so that the integral fixing lugs are pressed tight to the surface of the concrete / blockwork wall or soffit (underside) of the concrete floor.
- 3 Mark the position of the bolts through the slots in the integral fixing lugs onto the concrete surface with a marker pen.
- 4 Drill the bolt holes at the pre marked positions to suit the anchor bolts being used.
- 5 If the surface of the wall or floor is very uneven, it is recommended to bed the collar onto a bead of Abesco FR Intumescent Mastic or FR Silicone mastic to improve the smoke seal efficiency.
- 6 Insert the anchor bolts & tap home. Relocate the collar in position ensuring that the bolt heads are protruding through the slots in the mounting lugs, and that both halves of the collar are correctly fastened using the slidelock fixings on each side of the Z120 Fire Collar.
- 7 Finally, ensure that the collar is secured in position by tightening the retaining nuts onto the anchor bolts.
- 8 **NOTE: WALL FIXING ONLY** Where there is a fire risk on both sides of a wall, or the direction of fire risk has not been determined, then an Abesco Z120 Fire Collar should be fitted to both sides of the wall.



### Installation Instructions

#### Cast In to Concrete Wall or Floor

- 1 Please refer to Fig C and D (Typical Installation Details)
- 2 Ensure that there is adequate annular space between the pipe and the concrete floor or wall to allow for the Z120 Fire Collar and sufficient Abesco 'FR' Mortar to cast the Z120 Fire Collar in situ.
- 3 Attach the Z Collar around the pipe and ensure that both halves of the Z120 Fire Collar are correctly fastened together using the slidelock fixings on each side of the Z120 Fire Collar.
- 4 Slide the Z120 Fire Collar into place, so that the bottom edge is flush with the surface of the wall or the soffit (underside) of the concrete floor.
- 5 Fill the remaining space between the collar and the surrounding concrete floor with Abesco 'FR' Mortar (or other suitable non-combustible mortar). If necessary use a temporary shutter to retain the FR Mortar / non combustible mortar whilst it cures.
- 6 Check that the bottom edge of the Z120 Fire Collar will remain exposed and be visible from the fire risk side of the wall or from the underside of the floor.
- 7 Remove any temporary shuttering or damming materials from around the seal only when the Abesco FR Mortar (or other suitable non-combustible mortar) has set or cured sufficiently.
- 8 **NOTE: WALL FIXING ONLY** Where there is a fire risk on both sides of a wall, or the direction of fire risk has not been determined, then an Abesco Z120 Fire Collar should be fitted to both sides of the wall.



### Installation Instructions

#### semi Cast In to Concrete Wall or Floor

- 1 Please refer to Fig E and F (Typical Installation Details)
- 2 Ensure that there is adequate annular space between the pipe and the concrete floor or wall to allow for the Z120 Fire Collar and sufficient Abesco 'FR' Mortar to cast the collar in.
- 3 Attach the Z120 Fire Collar around the pipe and ensure that both halves of the collar are correctly fastened together using the slidelock fixings on each side of the Z120 Fire Collar.
- 4 Slide the Z120 Fire Collar into place, so that approximately half of the Z120 Fire Collar is protruding from the surface of the wall or the soffit (underside) of the concrete floor, and the remaining half is positioned within the thickness of the wall or floor.
- 5 Fill the remaining space between the collar and the surrounding concrete floor with Abesco 'FR' Mortar (or other suitable non-combustible mortar). If necessary use a temporary shutter around the pipe / collar to retain the FR Mortar / non combustible mortar whilst it cures.
- 6 Remove any temporary shuttering or damming materials from around the seal only when the Abesco FR Mortar (or other suitable non-combustible mortar) has set or cured sufficiently.
- 7 **NOTE: WALL FIXING ONLY** Where there is a fire risk on both sides of a wall, or the direction of fire risk has not been determined, then an Abesco Z120 Fire Collar should be fitted to both sides of the wall.

