

INTUMESCENT PIPE COLLARS - Installation Guide



NHBC
TYPE APPROVAL

Introduction

The purpose of this document is to give guidance to approved contractors and suppliers who are engaged in the fire stopping of fire rated structures using the Astro collar.

All service holes through floors and compartment walls must be fire stopped to prevent the passage of fire, smoke and hot gases.

The key points for intumescent passive fire protection products are :-

- Prevent the spread of fire, smoke and hot gases through a building by containing it in the compartment of origin.
- Maintain the integrity of escape routes from a building.
- Reduce loss or damage to property from the effect of fire and smoke.
- Maintain pressure differential between compartments and ventilation channels.

THE ASTRO Collar SYSTEM

ASTROflame Intumescent Fire Collars are designed to maintain the fire resistance of compartment walls and floors where they are penetrated by UPVC, MDPE, HDPE, ABS & PP plastic pipes.

Consisting of a powder coated, split / hinged cylindrical steel collar which can be opened and fitted around the pipe; the steel shell contains a heat reactive graphite based intumescent material.

Each collar is fastened by means of a toggle clasp and has integral lugs at one end for ease of installation.

ASTRO Fire Collars are suitable for use on UPVC, MDPE, HDPE, ABS & PP plastic pipes up to 355mm diameter.

Availability

2 hour and up to 4 hour range available.

Installation

Fitted to Masonry / Block Wall

1 Attach the Astro Collar to the pipe so that the integral mounting lugs are pressed tight to the surface of the wall.

2 Mark the position of the bolt slots in the mounting lugs onto the surface of the wall with a marker pen.

3 Rotate the collar slightly, (or if access is restricted remove from pipe), and drill holes at the pre-marked positions to suit the anchor bolts being used.

4 If the surface of the wall is very uneven, it is recommended to bed the collar onto a bead of ASTRO Intumescent mastic or ASTRO FR Silicone to improve the smoke seal efficiency.

5 Insert the anchor bolts and tap home. Relocate the collar in position ensuring that the toggle clasp is snapped closed and that the bolt heads are protruding through the slots in the mounting lugs. Tighten the nuts onto the bolts.

6 NOTE Where there is a fire risk on both sides of the wall, or the direction of fire risk has not been determined, then a Astro Collar should be fitted to both sides of the wall.

7 the collar can also be semi or fully cast into the masonry wall using astro fire rated mortar

Fitted under concrete floor slab

1 Attach the astro collar to the pipe so that the integral mounting lugs are pressed tight to the soffit (underside) of the concrete floor.

2 Mark the position of the bolt slots in the mounting lugs onto the concrete surface with a marker pen.

3 Drill the bolt holes at the pre-marked positions to suit the anchor bolts being used, (the minimum recommended size of non-combustible anchor bolt is 6mm dia. X 25mm long).

4 If the soffit (underside) of the concrete is very uneven, it is recommended to bed the collar onto a bead of Astroflame Intumescent Mastic or Astroflame Silicone to improve the smoke seal efficiency.

5 Insert the anchor bolts and tap home. Relocate the collar in position ensuring that the toggle clasp is snapped closed and that the bolt heads are protruding through the slots in the mounting lugs. Tighten the nuts onto the bolts.

6 The collar can also be semi or fully cast into the soffit using astroflame fire rated mortar

Fitted to metal stud partition walls

Fit to both sides of the wall

1 Attach the astro collar to the pipe to the pipe so that the integral mounting lugs are pressed tight to the surface of the partition wall.

2 Mark the position of the bolt slots in the mounting lugs onto the surface of the wall with a marker pen.

3 Rotate the collar slightly, (or if access is restricted remove from pipe), and drill holes at the pre-marked positions to suit the fixings used.

4 If the surface of the wall is very uneven, it is recommended to bed the collar onto a bead of Astroflame Intumescent mastic or astro FR Silicone mastic to improve the smoke seal efficiency.

5 Insert the non-combustible fixings. Relocate the collar in position ensuring that the toggle clasp is snapped closed and that the bolt heads are protruding through the slots in the mounting lugs. Tighten the nuts onto the fixings.

6 NOTE: Where there is a fire risk on both sides of a partition wall, or the direction of fire risk has not been determined, then the Astro collar should be fitted to both sides of the wall

Compliance

Astro collars are manufactured in the EU, meeting the highest quality standard in compliance with ISO EN 9001:2000 . For fire test certification contact Astroflame Fireseals technical department.

Fire Test and Assessment Reports

Passed and certified to BS 476 part 20 and EN1366-3
NHBC Type Approval.

Storage and disposal

Astro collars should be stored indoors. No shelf life is giving as the collars will not deteriorate in storage.

For additional testing, certification or technical information please contact ASTROFLAME FIRESEALS LTD.

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