

# Heatshield PC120 Pipe Collars

## Surface Mounted Seal for Plastic Pipes

### Product Description

**Heatshield PC120 Pipe Collars** comprise of a robust, zinc coated steel shell which contains a high expansion graphite based intumescent material which activates at elevated temperatures and are designed specifically for use on plastic pipes where they penetrate through compartment walls and floors. In a fire situation, the intumescent in the **PC120 Pipe Collars** rapidly expands to close off the softening plastic pipe and fill any voids created as the pipe burns away. This creates a resilient fire resistant barrier which prevents the passage of flames and hot gases and restricts the temperature rise on the non-fire side of the wall or floor.

**PC120 Pipe Collars** are comprehensively tested and independently certified for use with PVC-U Pipes up to 160mm diameter, and can be used in conjunction with other Greentech Heatshield products, such as M1150 Mortar, B50-ST Batts and S500 Intumescent Sealant.

**Heatshield PC120 Pipe Collars** are easily surface mounted to walls and floors.

### Intended Uses

**Heatshield PC120 Pipe Collars** are tested and independently certified in a range of applications where plastic pipes penetrate concrete walls and floors.

#### A. Concrete Floors

120 mins fire resistance (Insulation & Integrity) when used to seal PVC-U Pipes up to 160mm penetrating concrete floors.

#### B. Concrete Walls

120 mins fire resistance (Insulation & Integrity) when used to seal PVC-U pipes up to 160mm penetrating concrete walls (1 collar each side of wall).

### Installation Instructions

**Heatshield PC120 Pipe Collars** are 'ready to fit' and are easily installed using readily available hand tools (tape measure, power drill and drill bits, standard cartridge gun for sealant).

#### A. Plastic Pipe Penetration Seals in Concrete Walls

1. A PC120 Pipe Collar is normally required to be fitted on both sides of a compartment Wall (i.e. 1 collar each side of wall).
2. Attach the collar around the pipe and slide firmly against the wall surface.
3. Mark location of fixing holes on wall and securely fasten collar to slab using suitable non combustible anchors, masonry screws or bolts (recommended 50mm minimum length).
4. If the pipe is tightly fitted into a corner, separate the 2 halves and fit one half of the collar behind the pipe. Once this is securely fastened to the wall, the other half can be attached using the slide fasteners and then fixed onto the wall.
5. Apply a bead of **S500** Intumescent sealant around circumference of the collar, and bed the collar into the sealant before mechanical attachment to the wall surface.
6. Repeat on the other side of wall.

#### B. Plastic Pipe Penetration Seals in Concrete Floors

1. A **PC120 Pipe Collar** is only required to be fitted to the soffit / underside of concrete floor slab.
2. Please follow steps 2 to 5 in section A above when fitting and attaching to soffit of floor slab.



### Key Benefits

- Independently Tested & Certified
- International Approvals
- Non Hazardous
- Easy to Use
- Robust & Durable
- Readily Available via Local Representatives
- Economic Solution
- 3rd Party Audited & Accredited
- ISO 9001 Quality Assured



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European Assessment Documents:  
EAD350454-00-1104 - Sep 2017

ETA 23/0834

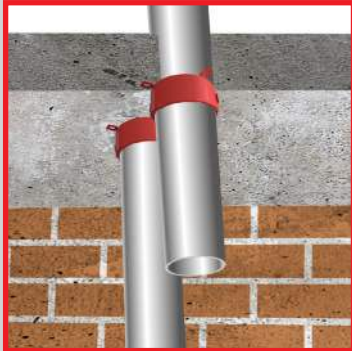
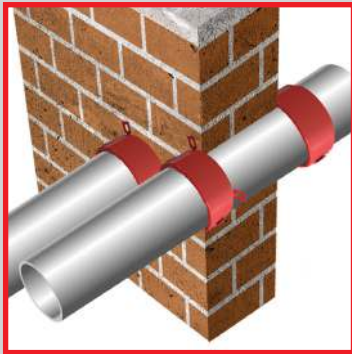


ENCG R.40333

Certificate No:  
UL-EU-01305-EN

# Heatshield PC120

## Pipe Collars



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## Physical Properties

Composition	Zinc coated steel shell powder coated
Colour	Red or Plain Zinc finish
Sizes	55mm to 160mm
Bulk Density (Intumescent)	Typically 1291 Kg/M3 (+/-10%)
Activation Temperature	Approximately 180°C
Average Relative Expansion Rate	Min 40 to 55 times (300°C, 20min free expansion) Min 40 to 48 times (500°C, 30min free expansion)
Expansion Pressure	Load test expansion with pressure min 1.2 to 2.2 N/mm <sup>2</sup>
Combustibility	Non-combustible EN ISO 1182
Limitations	Do not use in conditions of continuous immersion, below ground or in areas of high mechanical abrasion.
Storage	Store in clean dry conditions off floor between 5°C - 35°C
Shelf Life	N/A - Unlimited

## Fire Performance

Reaction to Fire	BS EN13501.1	Class E
Resistance to Fire	BS EN13501.2	

## Penetration Seals - BS EN1366.3

**Min 125mm thick rigid wall with PC120 fitted around service and mechanically fixed to both sides of wall (ie PC120 on each side of wall)**

Penetration Specifications	Intumescent Inlay	PC120 Size / Model	Fire Performance Classification
PVC Pipe $\varnothing \leq 50$ mm	50mm x 4mm	55mm	E 120 C/C EI 120 C/C
PVC Pipe $\varnothing \leq 110$ mm	50mm x 8mm	110mm	E 120 C/C EI 120 C/C
PVC Pipe $\varnothing \leq 160$ mm	60mm x 10mm	160mm	E 120 C/C EI 120 C/C

**Min 150mm thick rigid floor with PC120 fitted around service and mechanically fixed to soffit of floor slab**

Penetration Specifications	Intumescent Inlay	PC120 Size / Model	Fire Performance Classification
PVC Pipe $\varnothing \leq 50$ mm	50mm x 4mm	55mm	E 120 C/C EI 120 C/C
PVC Pipe $\varnothing \leq 110$ mm	50mm x 8mm	110mm	E 120 C/C EI 120 C/C
PVC Pipe $\varnothing \leq 160$ mm	60mm x 10mm	160mm	E 120 C/C EI 120 C/C

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