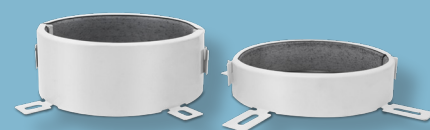


E411d.pl Technical Data Sheet



Firewin

2018-12

Knauf Firecollar

Product description

Knauf Firecollar consists of a white coated circular steel shell that splits in two to fit around the service penetrations by means of a simple 'slide-lock' system.

The steel frame contains a graphite based swelling material that reacts to heat and fills the opening from the melting plastic through-penetration in case of a fire.

Storage

Unlimited storage time when stored in temperatures between 5°C and 30°C.

Scope of application

Knauf Firecollar are designed to maintain the fire resistance of fire rated walls and floors where these are breached by continuous plastic pipes, and may be used in gypsum, masonry and concrete walls and floors.

It may be fitted both on the outside of a wall or a floor.

Available in the following sizes:

Ø32mm/30mm, Ø32mm/50mm, Ø40mm/30mm, Ø40mm/50mm, Ø55mm/30mm, Ø55mm/50mm, Ø63mm/30mm, Ø63mm/50mm, Ø75mm/30mm, Ø75mm/50mm, Ø82mm/30mm, Ø82mm/50mm, Ø90mm/30mm, Ø90mm/50mm, Ø110mm/30mm, Ø110mm/50mm, Ø125mm/60mm, Ø140mm/60mm Ø160mm/60mm

Properties

- Classified for fire sealing in all types of constructions
- Excellent sound insulation
- No emissions - environmentally and user friendly
- Simple to install using widely available standard screws
- Collars come in two different heights for different fire classifications to maximize cost efficiency
- Very high fire classifications up to 240 minutes for both integrity and insulation
- 30 years working life guarantee
- ETA 18/0934
- EAD 350141-00-1104

| Technical Data | |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Technical Approval | EAD 350454-00-1104 |
| Durability according to EAD 350454-00-1104 | Z2 intended for use in internal conditions with humidity classes other than Z1, excluding temperatures below 0 °C. |
| Shell | Powder coated 1mm steel |
| Conditioning procedure | EN 13238:2010 |
| Expansion ratio | 17:1 |
| Expansion pressure | 65.4 N |
| Colour | White shell with anthracite inlay |
| Graphite weight | 1.4 kg/m ² per mm thickness |
| Graphite density | 1409 kg/m ³ |
| Normal expansion time | Less than 2 minutes |
| Minimum expansion temperature | 105 °C |
| Storage | Store in temperatures between 5 °C and 30 °C |
| Life | Under normal conditions; 30 years + |

Pipe end configurations

When testing pipes, one can choose not to cap (or close) the pipe, or cap the pipe inside the furnace, or outside the furnace, or on both sides. The configuration chosen depends on the intended application of the pipe and/or the installation environment. The code defining if a pipe is capped is stated after the fire classification. For instance EI 60 C/U which means the pipe was capped inside the furnace, and uncapped outside the furnace. The test configuration defines the approvals possible.

Our suggestions for engineering judgments are:

| Pipe end configurations: | | | Sound insulation: | | Safety: | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|----------------------|--|--------------------|-------------------------|---------|-----|---------------|-----|----------------------------------|-------------|-----|---------------|-----|-----------------------------------------------------------------|--|-----|-----------------------------------------------------------|--|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------|-----------------|-----------------------------------------|----------|-------------------------------------------------|
| <table border="1"> <thead> <tr> <th colspan="2">Intended use of pipe</th> <th>Pipe end condition</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Rainwater pipe, plastic</td> <td>At roof</td> <td>C/U</td> </tr> <tr> <td>Further below</td> <td>C/C</td> </tr> <tr> <td rowspan="2">Drainage or sewage pipe, plastic</td> <td>At drainage</td> <td>C/U</td> </tr> <tr> <td>Further below</td> <td>C/C</td> </tr> <tr> <td colspan="2">Pipes in closed circuits (water, gas, vacuum systems, el. etc.)</td> <td>C/C</td> </tr> <tr> <td colspan="2">Pipes with open ends and at least 50cm pipe on both sides</td> <td>U/U</td> </tr> </tbody> </table> | | | Intended use of pipe | | Pipe end condition | Rainwater pipe, plastic | At roof | C/U | Further below | C/C | Drainage or sewage pipe, plastic | At drainage | C/U | Further below | C/C | Pipes in closed circuits (water, gas, vacuum systems, el. etc.) | | C/C | Pipes with open ends and at least 50cm pipe on both sides | | U/U | <table border="1"> <thead> <tr> <th>Description</th> <th>Sound reduction</th> </tr> </thead> <tbody> <tr> <td>Collars installed as described in walls</td> <td>58 dB RW</td> </tr> </tbody> </table> <p>The sound insulation value is only valid for the collar/pipe and not for other elements in the building construction.</p> <p>The sound insulation has been tested by the accredited laboratory Exova BM Trada in Great Britain according to EN ISO 10140-2. Test report is available upon request.</p> | | Description | Sound reduction | Collars installed as described in walls | 58 dB RW | <p>Please observe the EC Safety Data Sheet.</p> |
| Intended use of pipe | | Pipe end condition | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rainwater pipe, plastic | At roof | C/U | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Further below | C/C | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drainage or sewage pipe, plastic | At drainage | C/U | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Further below | C/C | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pipes in closed circuits (water, gas, vacuum systems, el. etc.) | | C/C | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pipes with open ends and at least 50cm pipe on both sides | | U/U | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Description | Sound reduction | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Collars installed as described in walls | 58 dB RW | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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