FernoCollar HH®

Low-profile fire collar for plastic pipes, cables, etc.

TDS FernoCollar HH 2305EN

Fernocollar HH is a 30mm high prefabricated two sided pipe collar which consists of an intumescent lining incorporated in a coated steel shell. When exposed to fire the intumescent lining provide a high volume expansion, closing off and insulating the void left by combustible materials, so retaining the structure's integrity. Once expanded FernoCollar gives up to 4 hours resistance against fire (EI240).

Properties

- Provides up to 240 minutes of fire resistance (EI240)
- Easy to install around the pipe due to the fire collar consisting of 2 halves
- Tested for plastic pipes up to Ø 110 mm
- Tested and certified for U/U pipe-end applications
- Suitable for diagonal penetrations between 45° and 90°
- CE certified
- High sound insulation
- Maintenance-free

Applications

- Flexible walls
- Rigid walls and floors

- To be used in combination with the Fernoboard fire barrier system
- Standard plastic pipes up to Ø 110 mm made of PVC-C, PVC-U, PP, PE, ABS, SAN+PVC
- Electrical cables and cable bundles
- Insulated copper and steel pipes

Testing / certification

- Tested according to NEN 6069 and EU Standard EN 1366-3, ETA 22/0706
- CE Certificate No. 2531-CPR-CXO10396
- Certification according to EAD 350454-00-1104

Technical data

Description:	Intumescent fire collar
Classification:	Up to E240, EI240*
Approval according to:	ETA 22/0706
Shell	Powder coated steel
Application temperature:	+5°C to +30°C (sealant)
Expansion rate:	up to 20 times
Sound isolation:	Rw 58dB i.c.w. Fernocryl
Service life:	30 years

*For the fire resistance per application, please refer to the test report (ETA 22/0706).

Colour

Red

Storage and shelf life

Fernocollar should be stored in dry place between +5°C and +25°C. There is no maximum shelf life.

Safety measures

There are no known health risks during processing and use. Normal personal hygiene should be observed for application.

Transportation classification

Not applicable; no special measures are required.

Product code height - diameter	Product name and diameter	Quantity per box
BW15L30-32	Fernocollar HH Ø 32mm	24
BW15L30-40	Fernocollar HH Ø 40mm	24
BW15L30-55	Fernocollar HH Ø 55mm	24
BW15L30-63	Fernocollar HH Ø 63mm	24
BW15L30-75	Fernocollar HH Ø 75mm	24
BW15L30-82	Fernocollar HH Ø 82mm	24
BW15L30-90	Fernocollar HH Ø 90mm	24
BW15L30-110	Fernocollar HH Ø 110mm	24

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Technical Data Sheet to ETA 22/0706

FIRE PROTECTION SYSTEMS

Installation

- Substrates should be clean, free from dust, oil and grease. Loose particles should be removed beforehand.
- Openings between the service and the construction should first be sealed with Fernocryl. Openings ≥ 10mm. should be sealed with Fernocryl over a depth of 25mm.
- Place the Fernocollar HH around the service penetration, and make sure the collar is tight against the wall or floor surface to be able to fully insert the (metal) anchors/fixings.
- Where the surface is uneven, fill the space between the construction and the collar with Fernocryl.
- Fasten FernoCollar HH with steel screws, anchors or bolts that are suitable for the substrate on which the collar is applied. When the use of wall plugs is required, they should be made of metal and not plastic.

Supporting constructions

- Flexible walls must have a minimum thickness of 75 mm and comprise steel studs lined on both faces with minimum 1 layer of 12.5 mm thick boards.
- Timber walls must have a minimum thickness of 100 mm and comprise solid wood or cross-laminated timber.
- Timber floors must have a minimum thickness of 150 mm and comprise solid wood or cross-laminated timber.
- Rigid walls must have a minimum thickness of 75 mm and comprise concrete.
- Rigid Floors must have a minimum thickness of 150 mm and comprise concrete.
- Rigid walls and floors must comprise concrete, aerated concrete or masonry, with a minimum density of 650kg/m³.
- The service support must be classified in accordance with EN 13501-2 for the required fire resistance period.

*no part of the penetration seal may be closer than 100 mm to a stud, the cavity must be closed between the penetration seal and the stud, and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1 must be provided within the cavity between the penetration seal and the stud.

Pipe end configuration

Different intended uses of pipes can lead to the need for different requirements for the pipe end configuration within a test. During a fire the conditions of the pipe and sealing system which are exposed, depend on whether both or either ends of the pipe are sealed in practice. Within the EN 1366-3 Test standard can be chosen not to cover (or close) the pipe, or to cover the pipe in the furnace, or outside the furnace, or on one or both sides.

For instance EI 60 U/C means the pipe was uncapped inside the furnace, and capped outside the furnace. The pipe end configuration / pipe system relations listed below may be used as a rule of thumb.

Intended use of pipe		Test Condition [4]
Drainage or sewage pipe, plastic	Ventilated drain	U/U [1]
	Unventilated drain	U/C [1]
	Drain w/water trap	U/C [1]
	Not at drainage	C/C [2]
Rainwater Pipe, Plastic	At drainage	U/U [1]
	Not at Drainage	C/C [2]
Pipe in closed circuit (water, gas, air, electricity etc.)		C/C [2] [3]
Flue gas recovery system pipe, plastic		U/C [1]
Pipe with open ends and ≥ 50cm length on both sides, plastic		U/U [2]
Pipe supported by suspension system, metal	Fire rated support	C/U [1]
	Non-fire rated	U/C [1]
Waste disposal shaft pipe, metal		U/C [1]

[1] Stated in NEN EN 1366-3.
[2] Bloem Sealants judgment based on tests.
[3] Metal pipes should have fire rated support.
[4] U/U classified fire seals cover C/U, U/C and C/C. C/U classified fire seals cover U/C and C/C. U/C classified fire seals cover C/C.