

Ferno Pipewrap®

Brandwerende wikkelmanchet op grafietbasis voor doorvoeringen

TDS Ferno PipeWrap 2305EN

Ferno PipeWrap is an intumescent wrap used for smoke and fire sealing of combustible pipes in fire-resistant walls, floors, and Fernoboard. Ferno PipeWrap is supplied in rolls and should be wrapped around the pipe in multiple layers before being inserted into the wall. In case of a fire, the graphite-based strip will rapidly expand, providing smoke and fire resistance for up to 240 minutes.



Properties

- Ferno Pipewrap provides up to 240 minutes of fire resistance in terms of integrity and insulation (EI240).
- Delivery on roll makes it suitable for most pipe sizes.
- Easy to install without anchors or drilling.
- Suitable for plastic pipes and metal pipes with combustible insulation.
- Supplied on 25-meter rolls, to be cut on site.
- CE certified
- Tested on plastic pipes up to Ø 400 mm.
- Tested and certified for U/U pipe end applications.
- High sound insulation
- Maintenance-free

Applications

- Flexible walls
- Rigid walls and floors
- Standard plastic pipes up to Ø 400 mm made of PVC-C, PVC-U, PP, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC
- Plastic pipes and cables
- Insulated metal pipes
- Can be used in combination with the Fernoboard system

Testing / Certificates

- Tested according to NEN 6069 and EU Standard EN 1366-3, ETA 22/0707
- CE Certificate No. 2531-CPR-CXO10395
- Certification according to EAD 350454-00-1104

Technical data

Product:	Fire-resistant wrap
Classification:	Up to E240, EI240*
Processing temperature:	+5°C to +30°C (Fernocryl)
Expansion coefficient:	1 : 25
Sound insulation:	Rw 52dB (with Fernoboard)

*For achieved fire resistance per application, see test report (ETA 22/0707)

Colour

Grey

Packaging:

50 mm width: in boxes of 25 meters
75 mm width: in boxes of 25 meters

Storage and shelf life

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

Safety measures

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

Transport classification

Not applicable. No special measures are required.

Installation instructions

- Surfaces should be clean and free from dust, oil, and grease. Loose particles should be removed beforehand.
- Measure the circumference of the pipe and determine the length of Ferno PipeWrap to be cut. Allow for an extra length of at least 10 cm for overlap.
- For most pipes, a 3- or 4-fold wrap including overlap will suffice.
- Refer to our **ETA Test Report 22/0707** for the number of layers and pipe diameters required.
- Wrap the required number of layers of PipeWrap tightly around the pipe and secure the overlap with tape.
- Slide the wrap as a whole over the pipe until it reaches the opening.
- Seal the gap between the wrap and the opening with Fernocryl fire-resistant acrylic sealant or FernoMortar.

Supporting constructions

- Flexible walls must have a minimum thickness of 100 mm and comprise steel studs or timber studs* lined on both faces with minimum 2 layers of 12.5 mm thick boards.
- Rigid walls must have a minimum thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³.
- Rigid floors must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m³.
- The supporting construction 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.

Limitations

Bloem Fernocryl should not be used for permanently moist areas.

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 ¹⁾
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.