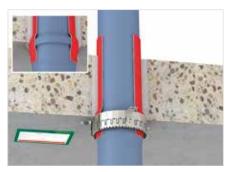
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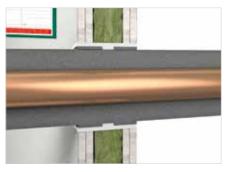
Special applications



Zero distance possible between the collars (non-insulated pipes).









Zero distance possible between the collars



Suitable for corner penetrations (2/3 fire collar). Distance between wall and pipe ≤ 10 mm.



Multiple penetrations (max. 3 pipes through 1 Fire Collar). Oval shaped installations for angled penetrations.



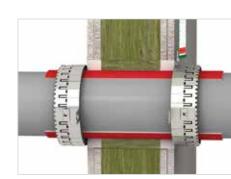
Non-combustible pipes with insulation into the floor.



Multilayer pipes up to outer diameter 110 mm insulated



Angled penetrations.



Penetration through metal stud wall sealed with loose mineral wool and BIS Pacifyre® FPM Fire Protection Mortar.



Non-combustible pipes with a collar on the underside

The right combination

BIS Pacifyre® FPM Fire Protection Mortar

Fire protecting and smoke tight mortar (A1) for safe sealing of annular holes and joints Part No.: 218 0 015300

BIS Pacifyre® EFC ID-Card

For marking, identification and inspection of the BIS Pacifyre® EFC Fire Collar Part No.: 213 2 100603 (card, for walls and ceilings)



Fire rated fixing products

It's of vital importance that an escape route or emergency exit remains free of obstacles. In the event of a fire, those present should be able to find a way out without delay.

Walraven offers an extensive range of fixing solutions which have been tested for their fire resistance. In this way a fixing system, in conformity with RAL-GZ 655, RAL-GZ 656

and EN 1363-1 can be supplied enabling to fix pipes in a fire safe way.

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A selection of our fire rated fixing products:







BIS RapidStrut * Slide Nuts

BIS RapidStrut® Rail

walraven.com





BIS TSM Concrete Screws



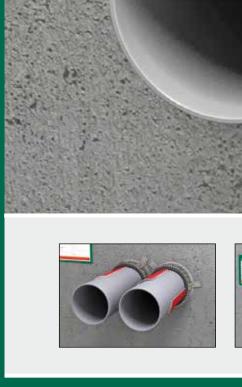


BIS Star plugs





BIS Sprinkler Clamps



BIS Pacifyre® EFC Fire Collar







√ Flexible

√ Efficient

√ Approved

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BIS Pacifyre® EFC Fire Collar

The problem solver for multiple situations!

The BIS Pacifyre® EFC Fire Collar is flexible in size and can be modified on site, which means that it's perfect to protect you against the unexpected!

The BIS Pacifyre® EFC Fire Collar is suitable for insulated and non-insulated plastic (combustible) pipes up to an outside diameter of 160 mm, for insulated copper pipes up to 88.9 mm and for steel or stainless pipes up to 108 mm in diameter. Due to its low height of 42 mm and multiple approved special applications the fire collar can be assembled in almost any area.

High performance

The BIS Pacifyre® EFC consists of a high performance intumescent material and stainless steel band and hooks to secure the fire collar to the wall or floor. In the event of a fire, the intumescent material expands with a high pressure and seals the opening against flames and smoke.

Efficient

Because only a small number of intumescent layers are required, 1 BIS Pacifyre® EFC Fire Collar is sufficient to (fire proof) seal 6 pipes with an outer diameter of 110 mm, or 38 pipes with an outer diameter of 32 mm when adding the BIS Pacifyre® Refill Sets for more stainless steel components!







The fire collar is packed in a carton box including fixing products and 6 BIS Pacifyre® EFC ID-Cards. The carton box has an easy separate pull-out system for the stainless steel band and the intumescent fire strip.

Features and benefits

- Only 1 box for numerous penetrations and all pipe dimensions $(\emptyset \leq 160 \text{ mm})$
- Expansion and contraction of the pipe remains possible*
- Suitable for damp conditions
- Innovative, effective and safe

- Prevents the spreading of fire and smoke
- Strong intumescent fire strip
- Emits no toxic gases or smoke in the event of a fire
- Contains no dangerous materials

- Fire safe tested up to 240 minutes (EI)
- Tested according to EN 1366-3 and ETAG 026-2
- * By using 4 mm (acoustic) PE-insulation

Installation benefits

- Simple and easy to install, without special training
- High flexibility due to close wall distance
- Max. 3 pipes through 1 fire collar ($\emptyset \le 75$ mm) when space in between is ≤ 15 mm
- Zero distance between fire collars is possible
- Only 3 fixing points for a fire collar of 110 mm
- Well suitable for corner penetrations that are difficult to access
- The required length of the stainless steel and intumescent strip can be determined on the job site
- Only the needed amount of intumescent band is required: minimal use of material per penetration
- Left-over material can be coupled and/or stuck to another BIS Pacifyre® EFC Fire Collar
- Maintenance free

Part No: 213 2 100600

This carton box contains: 3 m stainless steel band, 10 m fire strip, 18 fixing brackets, 18 BIS Star Plugs, screws en rings, 6 BIS Pacifyre® EFC ID-Cards

Applications

Approved for:

- Solid walls with a thickness of \geq 100 mm made of e.g.:
- mortared brick
- aerated concrete blocks
- reinforced concrete blocks
- Flexible walls (e.g. metal-stud) with a thickness of ≥ 94 mm
- Solid floors / ceilings with a thickness of ≥ 150 mm

Approved pipes:

- PVC pipes Ø ≤ 160 mm
- PE pipes $\emptyset \le 160 \text{ mm}$
- PP pipes $\emptyset \le 160 \text{ mm}$
- Mineral fibre pipe systems $\emptyset \le 160$ mm, suchs as:
- Poloplast Polokal NG
- Wavin SI Tech
- Geberit Silent PP
- Rehau Raupiano Plus
- Coes Blue Power
- Valsir TRIplus
- Multilayer pipes $\emptyset \le 110$ mm, suchs as:
- Fusiotherm Stabi

Mainpex - Mainpower

Uponor Unipipe

Refill sets

3 m Stainless Steel Band

Part No: 213 2 100601

- Alpex F50 / Alpex L Copper pipes $\emptyset \le 88,9 \text{ mm}$
- (Stainless) Steel pipes $\emptyset \le 108 \text{ mm}$

Approved insulations:

Pipe systems can be insulated with:

- Synthetic rubber insulation (Armaflex, Kaiflex, Thermaflex, etc.) with a thickness of ≤ 35 mm
- Polyethylene insulation with a thickness of ≤ 4 mm

Approved seals:

The rest gap between pipe and wall or ceiling can be sealed with:

BIS Pacifyre® EFC ID-Card

Part No: 213 2 100603

■ BIS Pacifyre® FPM Fire Protection Mortar



Built-in situation light partition walls

18 fixing brackets, 18 BIS Star Plugs, screws en rings

Part No: 213 2 100602



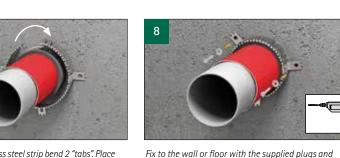
Built-in situation ceilings ≥ 150 mm

Cut desired length of stainless steel strip* by using fixing

Installation

Install pipe and if desired apply insulation.

bracket. No additional tools needed.

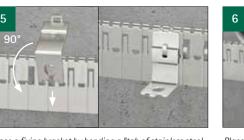


At the end of the stainless steel strip bend 2 "tabs". Place both ends over each other and fold "tabs" back in place to



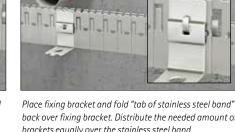


Wrap the fire strip (or insulation) around the pipe (note the number of layers required*). Attach with an overlap



Place a fixing bracket by bending a "tab of stainless steel band" 90° by using the long nose of the fixing bracket.

screws. In drywall partitions, use threaded rods M6



back over fixing bracket. Distribute the needed amount of brackets equally over the stainless steel band.



Apply a BIS Pacifyre* ID-Card to the wall / floor for identification by inspection bodies.

*see consumption table

Consumption table

Combustible pipes (f.ex. PVC / PE / PP)

Consumption of materials per collar		Pipe Ø (mm)										
		32	40	50	63	75	90	110	125	140	160	
Intumorcont	N° of layers	2	2	2	3	3	4	4	5 / 6*	6	6 / 8*	
Intumescent	Length (cm)	26	31	38	69	81	128	153	218 / 265*	293	330 / 450*	
Stainless steel band	Sections (pcs)	12	14	16	19	22	25	29	33 / 34*	37	41 / 43*	
	Length (cm)	18	20	24	29	33	39	45	51 / 52*	57	63 / 66*	
Hooks	Amount (pcs)	2	2	2	3	3	3	3	4	4	4	

		Pipe Ø (mm)									
	Potential number of collars per 1 BIS Pacifyre® EFC Carton Box	32	40	50	63	75	90	110	125	140	160
		38,4	32,2	26,3	14,4	12,3	7,8	6,5	4,5	3,4	3

^{*} Check the assembly instruction for more detailed information

All indications given are subject to change due to local conditions on site and are given only as a guide. The number of layers depends on the pipe material. Please see ETA-13/0793 or your national approval for more details.



Non-combustible pipes

Detailed information for non-combustible pipes can be found in the assembly instruction (placed in the BIS Pacifyre® EFC Carton Box) or on www.walraven.com. You can also scan the QR-code for direct access to the assembly instruction.



