

Flexible, efficient  
and approved

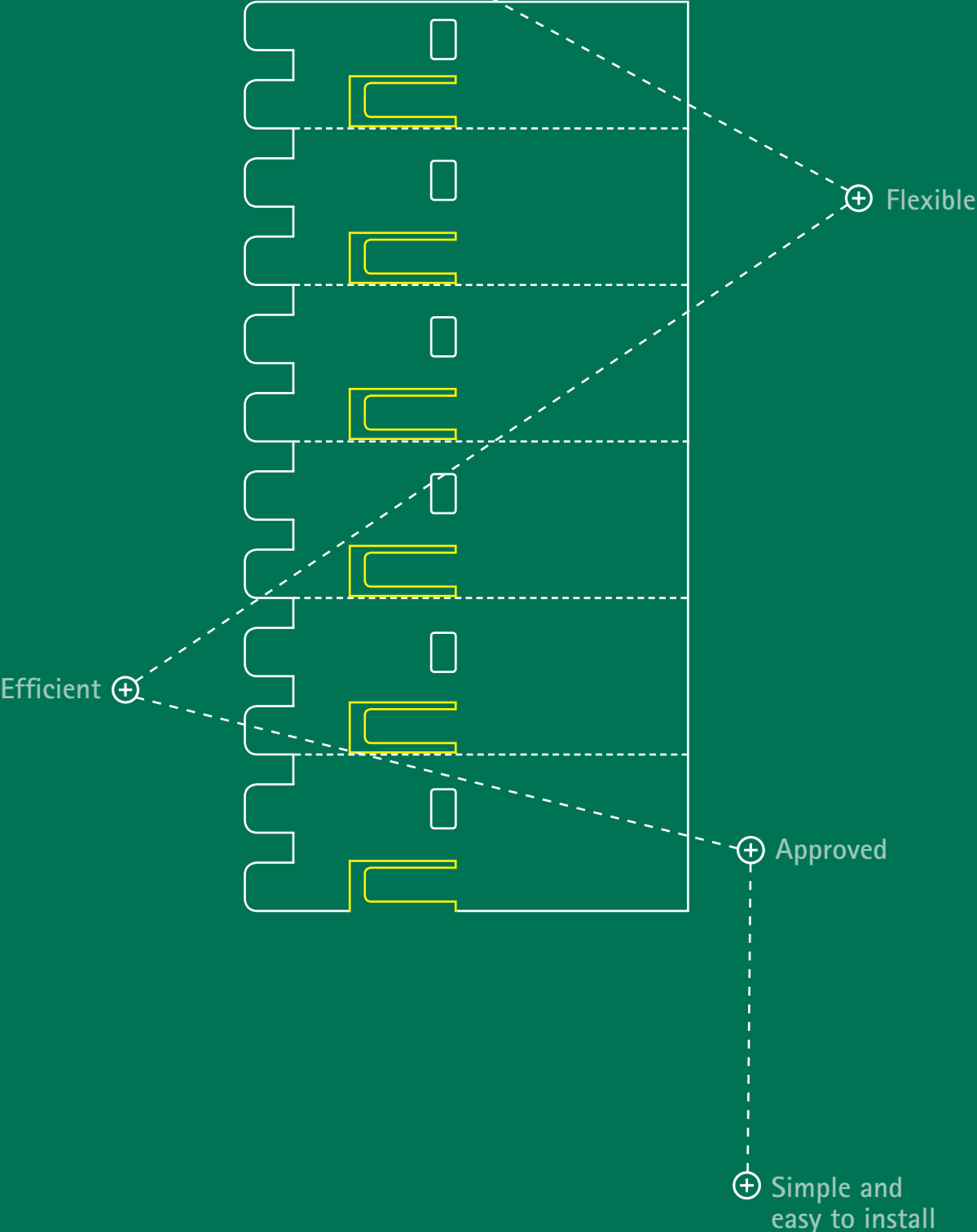


## Pacifyre<sup>®</sup> EFC

Endless Fire collar



Pacifyre® EFC



# Pacifyre® EFC Fire Collar

The problem solver for multiple situations!

The Pacifyre® EFC is flexible in size and can be modified on site, giving you protection against the unexpected.

The 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 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.

## Features and benefits

### General

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

### Safety

- 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

### Test results

- 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



## Efficient

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

### Installation benefits

- Simple and easy to install, without special training
- High flexibility due to close wall distance
- Max. 3 pipes through 1 fire collar ( $\varnothing \leq 75$  mm) when space in between is  $\leq 15$  mm
- Zero distance between fire collars is possible
- Only 3 fixing points for a fire collar of 110 mm
- 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 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 Star Plugs, screws and rings, 6 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  $\geq 94$  mm
- Solid floors / ceilings with a thickness of  $\geq 150$  mm

## Approved pipes

- PVC pipes  $\varnothing \leq 160$  mm
- PE pipes  $\varnothing \leq 160$  mm
- PP pipes  $\varnothing \leq 160$  mm
- Mineral fibre pipe systems  $\varnothing \leq 160$  mm, such as:
  - Poloplast – Polokal NG
  - Wavin – SI Tech
  - Geberit – Silent PP
  - Rehau – Raupiano Plus
  - Coes Blue Power
  - Valsir – TRIplus
  - Mainpex – Mainpower
- Multilayer pipes  $\varnothing \leq 110$  mm, such as:
  - Fusiotherm Stabi
  - Uponor Unipipe
  - Alpex F50 / Alpex L
- Copper pipes  $\varnothing \leq 88,9$  mm
- (Stainless) Steel pipes  $\varnothing \leq 108$  mm

## Approved insulations

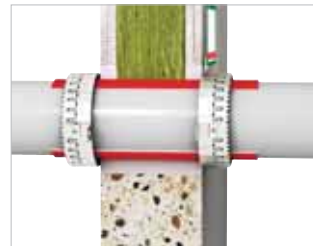
Pipe systems can be insulated with:

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

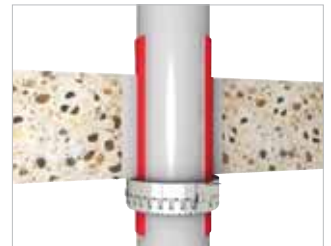
## Approved seals

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

- Pacifyre® FPM Fire Protection Mortar



- Built-in situation light partition walls  $\geq 100$  mm



- Built-in situation ceilings  $\geq 150$  mm

## Refill sets



Part No.: 213 2 100601

- 3 m Stainless Steel Band



Part No.: 213 2 100602

- 18 fixing brackets, 18 Star Plugs, screws and rings



Part No.: 213 2 100603

- Pacifyre® EFC ID-Card

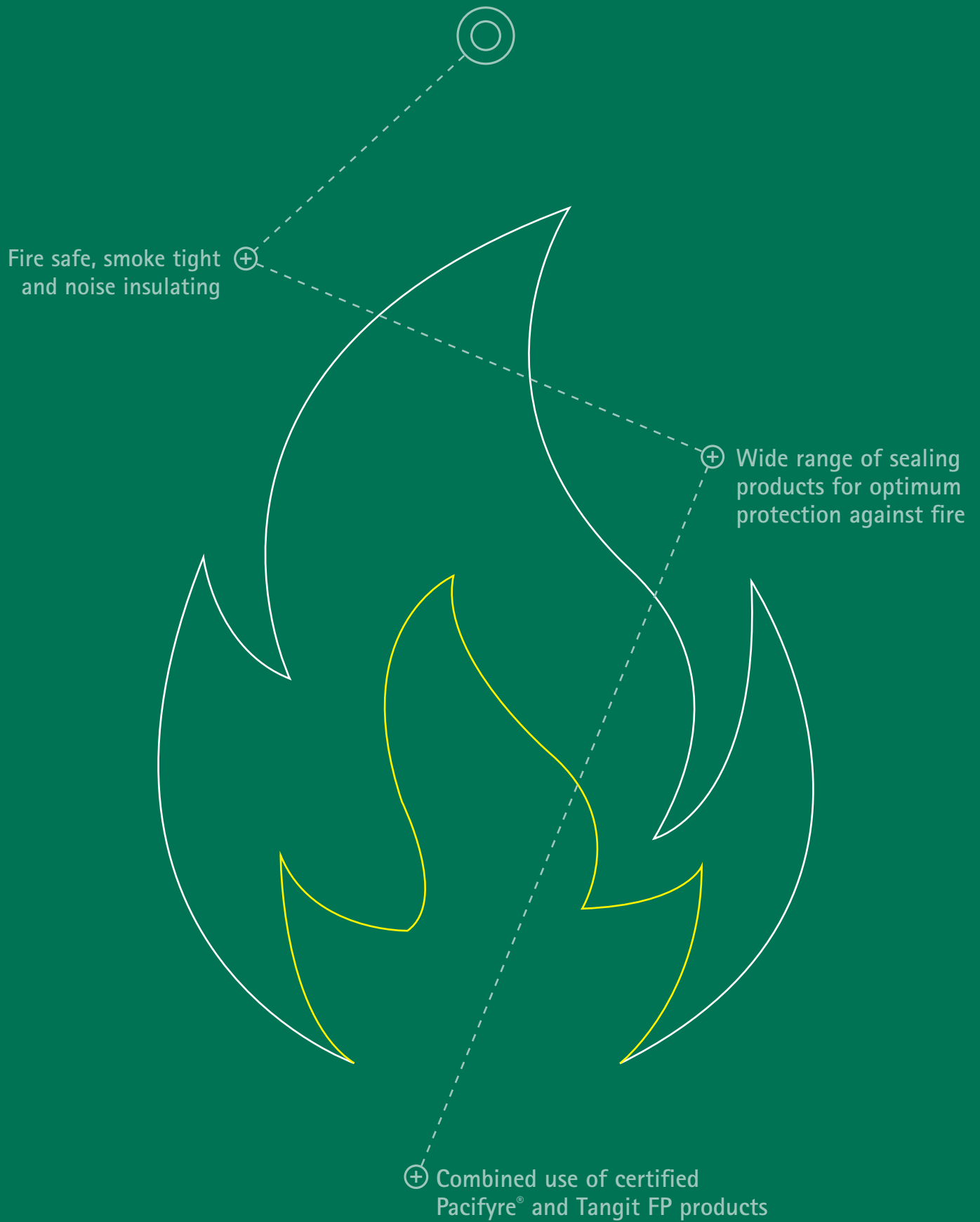


## Endless solutions in one

The Pacifyre® EFC has been extensively tested and proven to provide safety for the building occupants. With stainless steel metal refill sets it is not only durable, left over materials can be used with the next Pacifyre® EFC. This gives you the most efficient solution.

[www.walraven.com](http://www.walraven.com)

## Fire Protection Systems



# Installation



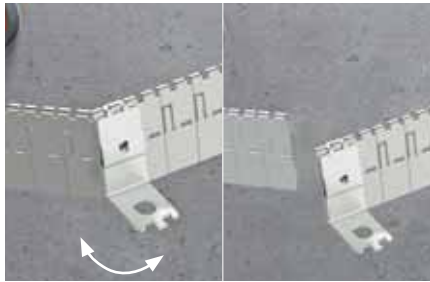
1. Install pipe and if desired apply insulation.



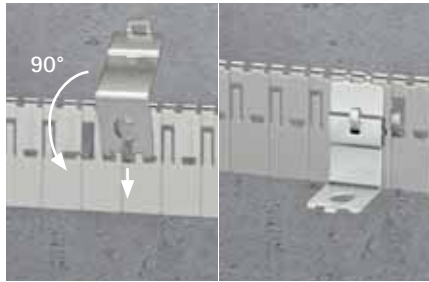
2. Make sure the annular space around the pipe is properly sealed and smoke tight with Pacifyre® FPM Mortar or *equivalent*.



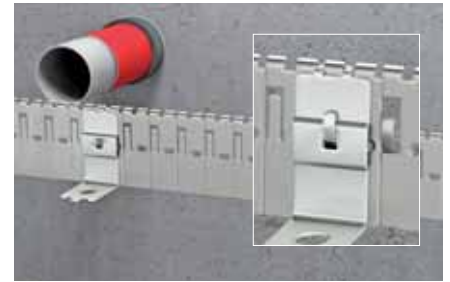
3. Wrap the fire strip (or insulation) around the pipe (note the number of layers required\*). Attach with an overlap of 15 mm.



4. Cut desired length of stainless steel strip\* by using fixing bracket. No additional tools needed.



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



6. Place fixing bracket and fold "tab of stainless steel band" back over fixing bracket. Distribute the needed amount of brackets equally over the stainless steel band.



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



8. Fix to the wall or floor with the supplied plugs and screws. In drywall partitions, use threaded rods M6 and M8.



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

\* See consumption table next page

# Installation

## Consumption table

### Combustible pipes (e.g. PVC / PE / PP)

Consumption of materials per collar		Pipe Ø (mm)									
		32	40	50	63	75	90	110	125	140	160
Intumescent	N° of layers	2	2	2	3	3	4	4	5 / 6*	6	6 / 8*
	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

Potential number of collars per 1 Pacifyre® EFC Carton Box		Pipe Ø (mm)									
		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 Pacifyre® EFC Carton Box) or on [www.walraven.com](http://www.walraven.com).

*Now no need to order specific sizes  
as the efficient and universal collar  
can solve all complex situations.*





# Pacifyre® EFC

## Operational benefits

- One solution for multiple applications
- Zero waste of materials
- Always ready to be used when you are

# Special applications



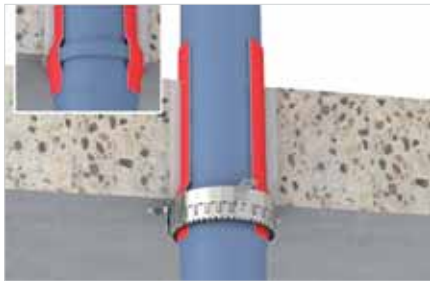
- Zero distance possible between the collars (non-insulated pipes).



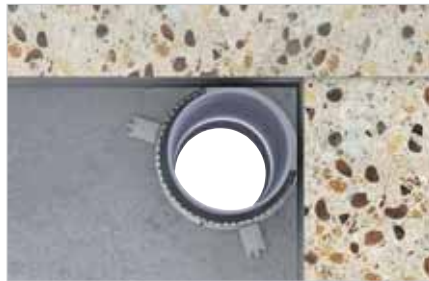
- Zero distance possible between the collars (insulated pipes).



- Multilayer pipes up to outer diameter 110 mm insulated with synthetic rubber.



- Socket penetrations.



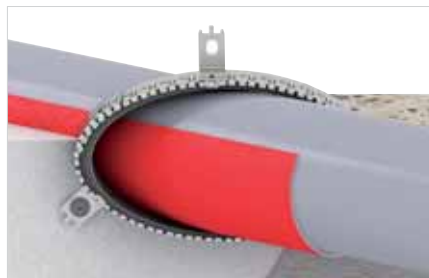
- Suitable for corner penetrations (2/3 fire collar). Distance between wall and pipe  $\leq 10$  mm.



- Angled penetrations.



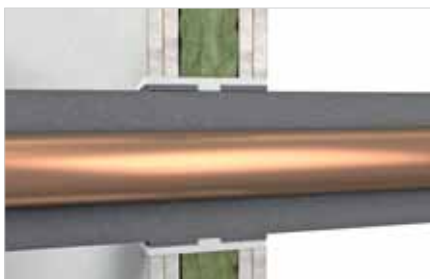
- Multiple penetrations (max. 3 pipes through 1 Fire Collar). Distance between pipes  $\leq 15$  mm.



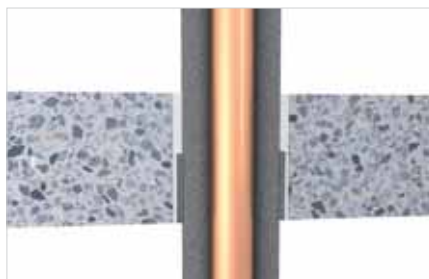
- Oval shaped installations for angled penetrations.



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



- Non-combustible pipes with insulation into the wall.



- Non-combustible pipes with insulation into the floor.



- Non-combustible pipes with a collar on the underside of the floor.

# The right combination

## 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



## Pacifyre® EFC ID-Card

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



## Fire rated fixing products

In the event of a fire, those present should be able to find a way out without delay. Therefore, it is vitally important that any escape routes or any emergency exits remain free of obstacles. Walraven offers an

extensive range of fixing solutions which have been tested for their fire resistance and can be supplied in accordance with RALGZ 656 and EN 1363 to enable a fire safe solution when fixing to pipes.

## A selection of our fire rated fixing products



■ BISMAT® Flash



■ BISMAT® 2000



■ BIS HD 1501



■ BIS HD 500



■ BISMAT® 5000



■ BIS RapidStrut® Rail



■ BIS RapidStrut®  
Slide Nuts



■ WCS Concrete Screws



■ BIS Star plugs



■ BIS Sprinkler Clamps

## Find out how we can support you

Would you like to find out more about any of the solutions described in this brochure?

Or would you like to discuss how we could help you find the best possible solution for your project? Get in touch today!

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