

# Declaration of Performance

According to Annex III of the Regulation (EU) Nr.305/2011 (Construction Products Regulation).

## Pacifyre® BFC Fire Collar

Nr. 0843-CPR-17-0285.

### 1. Unique identification code of the product-type:

- Pacifyre® BFC Fire Collar

### 2. Intended use of the construction product:

- Fire Stopping and Sealing Products for Penetration Seals, see ETA-17/0285

Pipe Penetrations

Plastic and Multilayer pipes

The field of application has to comply with the content of the ETA-17/0285.

### 3. Name and contact address:

- J. van Walraven Holding B.V. - Industrieweg 5 - 3641RK Mijdrecht - The Netherlands

### 4. System of assessment and verification of constancy of performance (AVCP) of the construction product:

- System 1

### 5. In case of the declaration of performance concerning a construction product covered by a harmonized standard:

- Not applicable

### 6. European Assessment Document, European Technical Assessment, Technical Assessment Body & Notified Body:

EAD	ETA	TAB	NB
ETAG 026-2	ETA-17/0285	ETA-Danmark A/S	UL International (UK) Ltd, No. 0843

### 7. Declared performance:

Essential characteristics	Declared performance / Harmonised technical specification
Reaction to fire	Class E according EN 13501-1
Resistance to fire	In accordance with EN 13501-2. See annex
Dangerous substances	See annex
Durability and serviceability	Use category Type Y <sub>1</sub>
Other	Not applicable / No performance determined

### 8. The performance of the product identified in points 1 is in conformity with the declared performance in point 7.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 3.

Signed for and on behalf of the manufacturer by:



Frank Nijdam

Group Director Product Marketing & Innovation

Mijdrecht, 25.04.2017

J. van Walraven Holding B.V

# Annex

## Release of dangerous substances

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The manufacturer of the intumescent material "Pacifyre® IM 3" declares the product does not contain dangerous substances detailed in Council Directive 67/548/EEC and Regulation (EC) no 1272/2008 above the acceptable limits.

In addition to the specific clauses relating to dangerous substances contained in this European technical approval, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Product Directive, these requirements need also to be complied with, when and where they apply.

### General installation notes:

Distance between two single penetration seals of non-insulated pipes (distance from the pipe wall)  $\geq 100$  mm.

Distance between two single penetration seals of insulated pipes (distance from the insulation)  $\geq 100$  mm.

## List of abbreviations

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Abbreviation	Explanation
PP	Polypropylene pipes according to EN ISO 1873-1, ÖNORM B 5174 and DIN 8077/8087
PE	Polyethylene pipes (PE 100 / PE 80) according to EN ISO 1872-1, EN 13244, DIN 8074/8075, EN 12201-2, EN 1622, EN ISO 15494 or EN 12201
PVC	Polyvinyl Chloride Pipes (PVC-U) according to EN ISO 1452, EN ISO 15493, DIN 8061/8062, EN ISO 1453, KOMO-BRL 2023, EN 1329-1, EN 1453-2, EN 1452-1 and PVC-C pipes according to EN 1566-1
ML	Multilayer pipes: PE-RT Type II / AI / PE-RT Type II-pipes (like UPONOR MLCP according to EN ISO 21003 and DIN 16836)
Mortar	Pacifyre® FPM mortar or Gypsum mortar (class A1 or A2)

## Installation in lightweight or flexible walls:

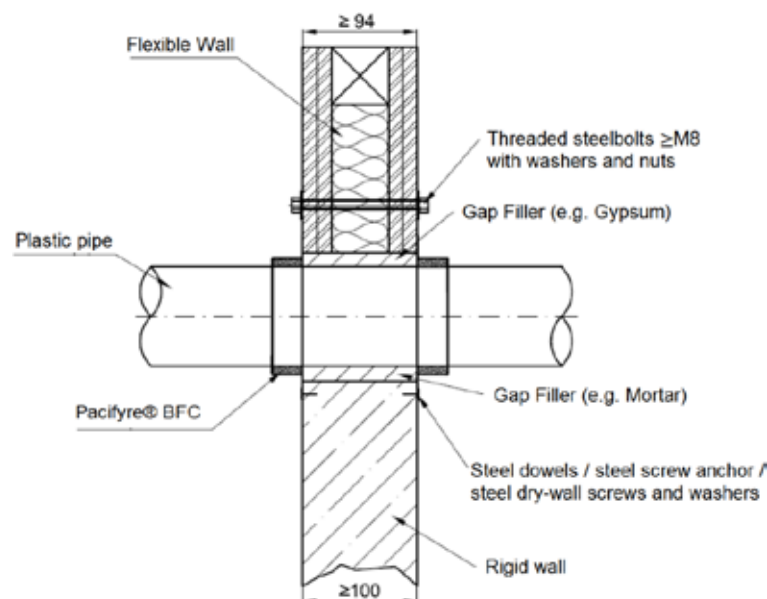
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At least 100 mm thick standard lightweight wall construction with a standard value for fire resistance of 90 minutes according to EN1366-3. The above mentioned pipe penetration seals may be mounted into all lightweight wall constructions of same fire resistance classification provided that:

- The construction is classified according to EN 13501-2.
- The construction has a total thickness which is not less than the minimum thickness of the standard lightweight wall of 94-100 mm, that has been used in the test.
- This regulation is not valid for pipe closure systems which are arranged within the supporting construction. In case of higher thickness of the supporting construction the length of the penetration seal has to be increased by the same amount as the increased amount of wall. The distance to the surface of the supporting construction remain the same on both sides.
- The number of panel layers is  $\geq 2$  and the total thickness of the panel layer is  $\geq 25$  when no soffit covering is used.
- Lightweight construction walls with timber stud frame when the number of panel layers is  $\geq 2$  and the total thickness of the panel layer is  $\geq 25$ . No part of the penetration seal is allowed to be closer than 100 mm to a timber stud. The cavity between penetration seal and timber stud is closed by using 100 mm insulation classified as A1 or A2 according to EN 13501-1 which is put into the gap between seal and stud.
- The filling of the remaining gap (1-3 cm gap width) has to be made in the thickness of the building element with gypsum/gypsum filling compound.

## Installation in solid or massive walls:

- Walls made of concrete, aerated concrete or masonry must have a wall thickness of  $\geq 100$  mm.
- The pipe penetration seals are only allowed to be designed as single penetration seals.
- The pipes are only allowed to be put through the penetration seal in a right angle.
- The first support (service support constructions) of the pipes both-sided of the separating element have to be arranged in a distance of  $\leq 650$  mm. The support must be non-combustible, according to EN 13501-1 Euro class A. The filling of the remaining gap (1-3 cm gap width) has to be carried out by using a casting compound with mineral construction material (class A1 or A2) such as cement mortar, gypsum etc.

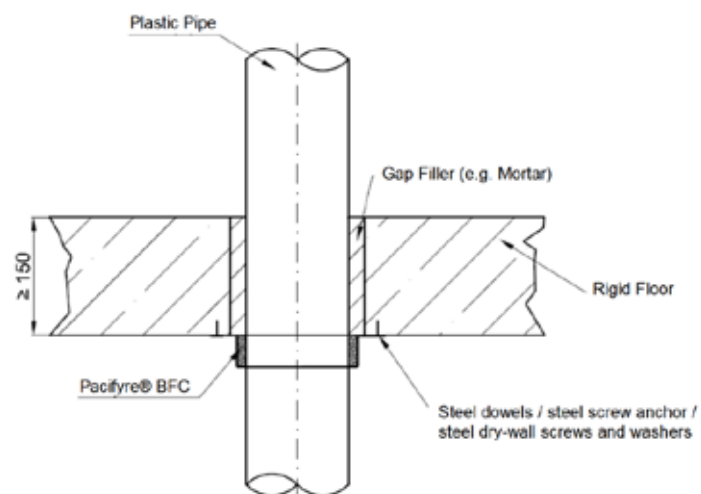


The below table applies to the tested seals for 100 mm lightweight wall construction with a standard value for fire resistance of 90 min according to EN 1366-3 clause 7.2.2.1.2.

Pipe type	Pipe diameter (mm)	Pipe thickness (mm)	Annular seal	Annular space $a_1$ (mm)	Fire resistance	ETA 17/0163 page:
PVC	$\leq 50$ to 160	1,8/3,2 to 11,9	Mortar	0 – 30	EI120 / E120 U/C	9
PE	$\leq 50$ to 110	1,8/2,7 to 10,0	Mortar	0 – 30	EI90 / E120 U/C	9
PP	$\leq 50$ to 160	1,8/4,0 to 14,6	Mortar	0 – 30	EI120 / E120 U/C	9
Blue Power	$\leq 50$ to 110	1,8 to 3,4	Mortar	0 – 30	EI120 / E120 U/C	10
Wavin SI Tech	$\leq 50$	2,0	Mortar	0 – 30	EI120 / E120 U/C	10
Wavin SI Tech	$>50$ to $\leq 110$	2,6 to 3,6	Mortar	0 – 30	EI90 / E120 U/C	10
Aquatherm green	$\leq 50$	2,2 to 6,9	Mortar	0 – 30	EI120 / E120 U/C	10
Geberit Silent PP	$>50$ to $\leq 110$	2,0 to 3,6	Mortar	0 – 30	EI120 / E120 U/C	11
POLO-KAL NG	$\leq 50$	2,0	Mortar	0 – 30	EI120 / E120 U/C	11
POLO-KAL NG	75 to 110	2,6 to 3,4	Mortar	0 – 30	EI90 / E120 U/C	11
POLO-KAL NG	125 to 160	3,9 to 4,9	Mortar	0 – 30	EI120 / E120 U/C	11
Raupiano Plus	$\leq 50$ to 160	1,8 to 3,9	Mortar	0 – 30	EI120 / E120 U/C	11
Triplus 3 Schicht	$\leq 50$ to 160	1,8 to 3,1	Mortar	0 – 30	EI120 / E120 U/C	12

## Installation in floors:

- Floors must be made of concrete or aerated concrete with floor thickness of  $\geq 150$  mm and a density of  $\geq 550$  kg/m<sup>3</sup> according to EN1366-3, clause 13.2.1. The filling of the remaining gap (1-5 cm gap width) has to be carried out by using a casting compound with mineral construction material (class A1 or A2) such as cement mortar, gypsum etc.



The below table applies to the tested seals for floors made of concrete or aerated concrete with floor thickness of  $\geq 150$  mm and a density of  $\geq 550$  kg/m<sup>3</sup> according to EN1366-3, clause 13.2.1.

Pipe type	Pipe diameter (mm)	Pipe thickness (mm)	Annular seal	Annular space a <sub>1</sub> (mm)	Fire resistance	ETA 17/0163 page:
PVC	≤ 50 to 110	1,8 to 12,3	Mortar	0 – 50	EI240 / E240 U/C	14
PVC	125	2,2 to 12,1	Mortar	0 – 50	EI120 / E120 U/C	14
PVC	125	12,1	Mortar	0 – 50	EI240 / E240 U/C	14
PVC	≤ 160	3,2 to 11,9	Mortar	0 – 50	EI120 / E120 U/C	14
PE	≤ 50 to 110	1,8 to 10,0	Mortar	0 – 50	EI120 / E120 U/C	14
PP	≤ 50 to 75	1,8 to 8,4	Mortar	0 – 50	EI240 / E240 U/C	14
PP	>75 to 110	2,7	Mortar	0 – 50	EI240 / E240 U/C	14
PP	>75 to 110	>2,7 - 10,0	Mortar	0 – 50	EI180 / E180 U/C	14
ML	>50 to 110	2,0 to 10,0	Mortar	0 – 50	EI120 / E120 U/C	15
Aquatherm green	≤ 16 to 110	2,2 to 15,2	Mortar	0 – 50	EI120 / E120 U/C	15
Wavin SI Tech	≤ 50 to 160	2,0 to 4,9	Mortar	0 – 50	EI120 / E120 U/C	15
Geberit Silent PP	≤ 50 to 110	2,0 to 3,6	Mortar	0 – 50	EI120 / E120 U/C	16
POLO-KAL NG	≤ 50 to 75	2,0 to 2,6	Mortar	0 – 50	EI90 / E120 U/C	16
POLO-KAL NG	>75 to 110	3,6	Mortar	0 – 50	EI120 / E120 U/C	16