

Fire protection solutions
you can trust



Walraven Pacifyre® Technical Handbook

How to use innovative fire protection solutions for optimum protection

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About Walraven

Walraven

Walraven is a fast-growing company. Since 1942, we have grown from a small family business to an international company. Today, we have over 1.400 employees worldwide with production and sales facilities all over Europe, North America, the Middle East, and the Far East. Ever since its foundation, our headquarters has been in the same city in the Netherlands: Mijdrecht.

A multinational with a heart

As a family-owned company, keeping the long-term interests of our employees, customers, and suppliers in mind comes naturally to us. We aim to make a sustainable difference by building a multinational with a heart. We genuinely look after all our internal and external stakeholders and invest time and effort into building personal, meaningful relationships.



■ Walraven headquarters in Mijdrecht

Product-systems

We think beyond individual products. Our products are designed to work together seamlessly as a system supporting the installation work to be more efficient, effective, safe and sustainable. We offer a wide range of products, including fastening, passive fire protection, and sanitary systems. Throughout our history, we have applied our expertise to finding smart new solutions for clients. Sometimes big, sometimes small, always meaningful.

Know-how

Our main business is to provide smart solutions for installation work. We have complete control over the entire process, from the initial concept to manufacturing – hence, providing smart installation materials is our speciality. Our global know-how, together with our local presence, enables us to serve our customers better. With our technical and logistical expertise in installation processes, we develop smart solutions that can significantly impact the installation value chain.

Services

As technology advances and building requirements change, working with fixing and passive fire protection solutions becomes increasingly complex. However, our team of experts is here to help you find the most effective solutions for your construction challenges. We offer tailor-made services that include smart packaging, logistics, and digital solutions to add value to your daily work. Moreover, we take our technical support one step further in co-engineering by offering customised solutions to meet specific project demands.

The combination of our product systems, know-how, and services enables us to deliver our added value.

Walraven. The value of smart

Walraven worldwide

- 30 companies
- 1.400+ employees
- 20 countries



Market served by:

- *Walraven companies*
- *Distributor*

The Netherlands (NL) ■ Belgium (BE) ■ Germany (DE) ■ United Kingdom (UK) ■ Sweden (SE) ■ France (FR) ■ Spain (ES)
 Poland (PL) ■ Czech Republic (CZ) ■ Ukraine (UA) ■ Türkiye (TR) ■ Greece (GR) ■ Italy (IT) ■ Hungary (HU) ■ United States (US)
 Canada (CA) ■ China (CN) ■ Singapore (SG) ■ United Arab Emirates (AE) ■ India (IN)

Walraven Pacifyre® fire protection solutions



Fire safe, smoke-tight and noise insulating ⊕

⊕ Standard and premium products available

⊕ Extensive certifications and approvals

⊕ Walraven Pacifyre® Product Selector available to easily find the right solution



Fire protection solutions you can trust

The correct selection and installation of fire protection solutions can ultimately save people's lives. It is important to consider not just the product you require, but also the environment and situation where the product will be installed as every situation has its own unique requirements. Due to our extensive experience with developing and manufacturing passive fire protection solutions, we can give you the trusted products, support and advice you need.

Our fire protection product range includes

Walraven Pacifyre® fire collars

- Standard and premium ranges available
- Suitable for many plastic pipes, metal pipes and more challenging installation situations

Walraven Pacifyre® fire sleeves

- Unique product for more complex fire protection requirements
- Installation case studies available online

Walraven Pacifyre® fire protection wraps

- Intumescent strip for build-in fire protection solutions
- One roll for multiple installations

Walraven Pacifyre® sealants and mortar

- Easy to use sealants to prevent the spread of smoke and fire through joints in walls and floors

We are proud to offer

- ETA certified and CE marked products based on an ETA
- Easy to install products to minimise risk of incorrect installation
- Products that are suitable for renovations and remedial fire protection
- Unique product features to suit more complex building requirements
- Testing above and beyond standard requirements
- Free technical advice service including consultation and problem-solving
- Onsite training and support



Want to know more?

- For technical documents see: walraven.com/pacifyre
- Find out more about fire protection on our website: walraven.com/en/fire-stopping-systems/
- To find the right solution for most of your fire protection situations: walraven.com/en/pacifyre-product-selector/
- To contact our technical support by email: technical.uk@walraven.com

Compartmentalisation

Compartmentalisation and Penetrations of Technical Installations

To keep fire manageable, regulations impose requirements on the resistance to fire spread and fire transfer between fire compartments. A building is divided into compartments with different functions:

1. **Fire Compartment:** A portion of one or more structures designated as the maximum fire expansion area.
2. **Sub fire Compartment:** A portion of a fire compartment intended to limit smoke spread and further restrict the fire expansion area. Dimensions are based on minimum walking distance.
3. **Protected Sub fire Compartment:** A section of a sub fire compartment that offers more protection against fire and smoke than a regular sub fire compartment.

Local regulations dictate the maximum sizes of fire compartments for various usage functions. Effective fire-protected separations keep the fire manageable, allowing building occupants to evacuate safely and providing firefighters the opportunity to extinguish fires and perform rescue work.

Penetrations of Building Services threaten Compartmentalisation

Fire compartments consist of fire-resistant walls, floors, doors, glass structures, and, importantly, joints and penetrations. These compartments are penetrated by various technical installations, such as plumbing pipes, heating pipes, ventilation system ducts, electrical cables, and data cables. Penetrations and their openings pose a threat to fire resistance and must be protected against fire spread.

The key systems include:

- Plastic Pipes
- Metal Pipes
- Joints, Seams, Expansion Gaps

Each of these penetrations through walls or floors requires a specific approach. The valid test report is always the starting point.

Plastic Pipes

A plastic pipe that passes through a wall or floor without proper measures is not fire-resistant. During a fire, the plastic material melts, leaving only the opening. With Walraven Pacifyre® collars, wraps and in some situations our Graphite Sealant, will seal the opening in a fire-resistant manner. These collars, wraps and graphite sealant contain a material that expands (intumescent) when exposed to fire, effectively sealing the opening. They rely on the energy from the fire to function, so they should be placed on the side where the fire is expected. For floors, a collar or wrap on the underside is always enough, as European regulations do not consider fire spreading from top to bottom. If you choose to use the Walraven Pacifyre® G Graphite Sealant, it should be used on both sides of the floor. For a wall, collars, wraps or the usage of graphite sealant are needed on both sides.

Metal Pipes

In the case of a fire, a steel pipe will not melt and remains part of the fire seal. Walraven has conducted an extensive testing program with sealants that can fireproof steel pipes. The sealants effectively close off the penetration of the steel pipe. Temperature conduction continues for larger pipes. For metal pipes with a diameter up to 50 mm, using an expanding graphite sealant like Walraven Pacifyre® G graphite sealant is sufficient when the pipe is insulated with Elastomeric foam such as Aerofoam or Armaflex. For metal pipes with a diameter greater than 50 mm, insulation must be applied to the pipe. This can be done by using Stone wool pipe insulation, like Rockwool 800/810 over a length of at least 50 centimetres on both sides of the wall. Existing stone wool insulation systems have also been tested and, in combination with Walraven Pacifyre® A acrylic sealant, can achieve the desired fire resistance.

Uncapped and Capped: U/U and U/C

During a test, pipes can either be sealed with a cap or left uncapped. This sealing simulates the difference between vented and unvented piping systems. In a vented system, the heat from the fire can penetrate the pipe due to the positive pressure in the burning space, since there is no counterpressure. The collar must react quickly and robustly because the pipe is attacked from both the outside and inside. This configuration is denoted as U/U (uncapped/uncapped). In unvented systems, there is counterpressure, which keeps the heat of the fire out of the pipe, resulting in lower stress. This configuration is denoted as U/C (uncapped/capped). The Walraven Pacifyre® Selection Chart specifies the range for U/U and U/C for each application.

Joints, Seams, Expansion Gaps, and Small Openings

During a fire, not only the openings around penetrations need protection, but also joints, seams, expansion gaps, and small openings must be handled in a way that prevents fire from spreading through these gaps. For this purpose, a sealant is used that maintains a high degree of flexibility after curing, allowing it to withstand movement or pressure buildup. The Walraven Pacifyre® H hybrid sealant has been specifically tested for these applications and is highly suitable. Additional benefit is that it is paintable.

Technical Advice and Application Selector

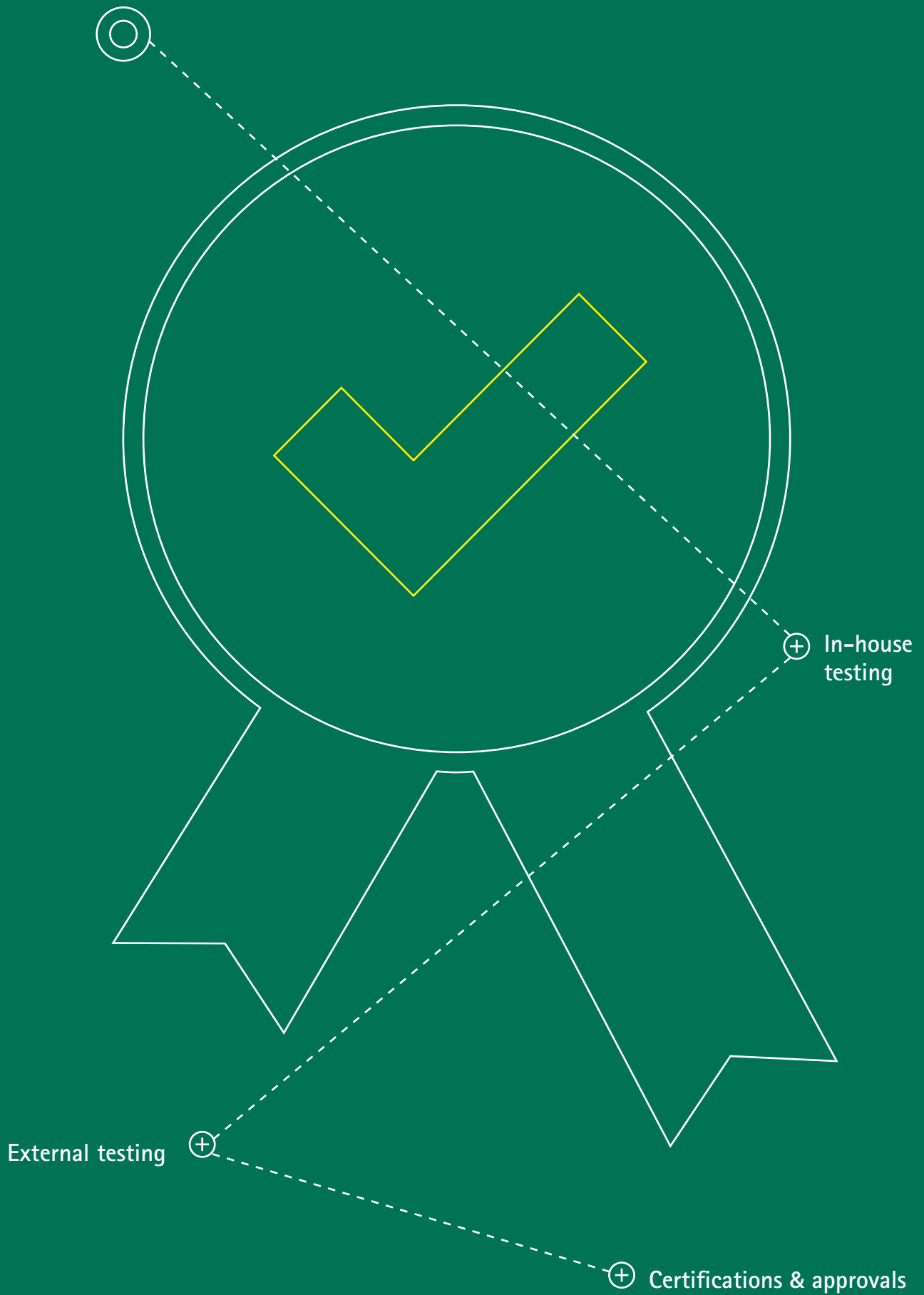
Especially when sealing penetrations of technical installations, practical situations are numerous and complex. Reliable technical advice based on tested constructions is crucial! Take advantage of Walraven's free technical consultation and choose certainty.

You can find all tested applications in the Walraven Pacifyre® Selection Chart on page 78 or online via our tool:

Walraven Pacifyre® Product Selector:

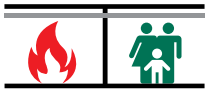
www.walraven.com/en/pacifyre-product-selector/

Walraven Pacifyre® Certifications



Certifications

Passive fire solutions are an essential part of improving the chance of survival (and limiting damage to a building) in case of a fire. Therefore, testing our passive fire solutions to the highest standards possible is always a top priority.



Fire safety tested by Walraven



The Ü(bereinstimmungs)-Zeichen is a German quality seal for building products



European Technical Approval (ETA) with CE marking



Independent certification institute for sprinkler systems, among others



Factory Mutual (FM), U. S. Certification for installation of sprinkler systems



Canadian and U.S. product safety certification and verification



RAL = German Institute for Quality Assurance and Certification

RAL quality mark = Quality mark for fastening products which are fire tested and certified according to the guidelines of the RAL Gütegemeinschaft Rohrbefestigung



Material Testing Institute North Rhine-Westphalia, Germany



The Royal Netherlands standardisation Institute



Institute for research in fire safety, engineering testing, inspection and certification, Rijswijk

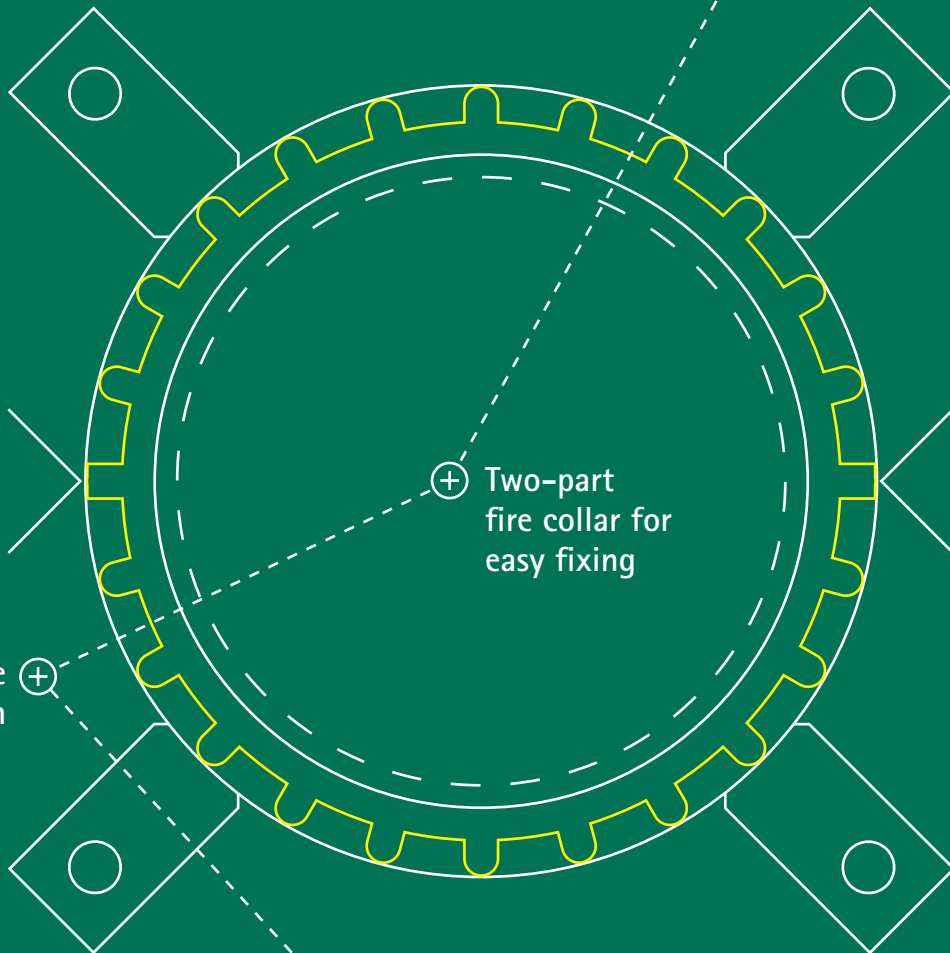


Conformité Européenne; in accordance with European regulations valid within the EEA (European Union, Liechtenstein, Norway and Iceland)

Walraven Pacifyre® FPC



+ Easy to install due to the connection tabs



+ Two-part fire collar for easy fixing

+ Built-in noise insulation

+ For various combustible pipe materials

Walraven Pacifyre® FPC Fire Collar

The easy-to-install fire collar for fire resistant sealing of plastic and multilayer pipes

A high quality passive fire protection collar that allows a fire resistance up to EI 120 U/U for a range of combustible pipe penetrations in walls and floors up to Ø 315 mm.



Features and benefits

- Easy to install
- Built-in noise insulation
- Collar stays in place during installation in vertical situations due to foam layer
- Suitable for combustible pipes with intended use as rainwater, sewage, drinking water and heating or cooling
- For application in flexible walls, rigid walls and rigid floors
- With a fire resistance up to EI 120 U/U
- Tested and approved according to EN 1366-3

Approved for

Wall application ≥ 100 mm

- PVC-U / PVC-C pipes up to Ø 160 mm EI 120 U/U and up to Ø 315 mm EI 120 U/C
- PE, PE-X ABS & SAN+PVC pipes up to Ø 250 mm EI 120 U/U and up to Ø 160 mm EI 60 U/U and up to Ø 315 mm EI 120 U/C
- PP-H (DIN 8077) pipes up to Ø 160 mm EI 120 U/U
- Geberit Silent PP, Geberit Silent Pro, Wavin AS+, Wavin SiTech POLO KAL 3S, REHAU RAUPIANO PLUS up to Ø 125 mm EI 120 U/U and up to Ø 160 mm EI 90 U/ U
- Conel Drain, POLO KAL NG, up to Ø 160 mm EI 120 U/U (except Ø 90 > EI 90)
- Georg Fischer Silenta Premium up to Ø 160 mm EI 120 U/U
- Conel Drain up to Ø 110 mm EI 120 U/U

Floor application ≥ 150 mm

- PVC-U / PVC-C pipes up to Ø 160 mm EI 120 U/U and up to Ø 315 mm EI 120 U/C
- PE, PE-X , ABS & SAN+PVC pipes up to Ø 160 mm EI 120 U/U up to Ø 250 mm EI 120 U/C and up to Ø 315 mm EI 90 U/C
- PP-H (DIN 8807) pipes up to Ø 160 mm EI 120 U/U
- Geberit Silent PP, Geberit Silent Pro, Georg Fischer Silenta Premium, Conel Drain, Wavin AS+, Wavin SiTech +, POLO KAL NG, POLO KAL 3S, REHAU RAUPIANO PLUS up to Ø 160 mm EI 120 U/U
- Conel Drain up to Ø 110 mm EI 120 U/U



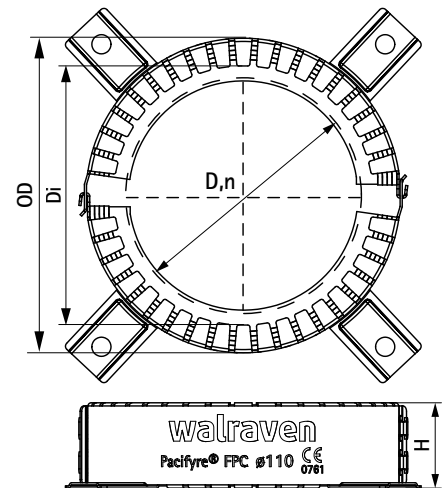
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Walraven Pacifyre® FPC Fire Collar

The easy-to-install fire collar for fire resistant sealing of plastic and multilayer pipes

Selection table

Part No.	Pipe	Walraven Pacifyre® FPC fire protection collar			
	D,n Ø (mm)	Di Ø (mm)	OD Ø (mm)	H (mm)	# of fixing tabs
2122000032	32	28.4	59.4	30	2
2122000050	50	46.4	77.6	30	2
2122000063	63	59.8	95.6	30	4
2122000075	75	71.8	112.2	40	4
2122000090	90	87.2	127.6	40	4
2122000110	110	107.2	147.6	40	4
2122000125	125	122.6	167.6	60	4
2122000140	140	138.2	192.4	60	6
2122000160	160	158.8	213	60	6
2122000180	180	177.3	227	100	8
2122000200	200	198.8	266.2	100	10
2122000225	225	223.8	291.2	100	10
2122000250	250	248.8	316.2	100	10
2122000280	280	278.8	358	100	10
2122000300	300	298.8	378	100	10
2122000315	315	313.8	393	100	10



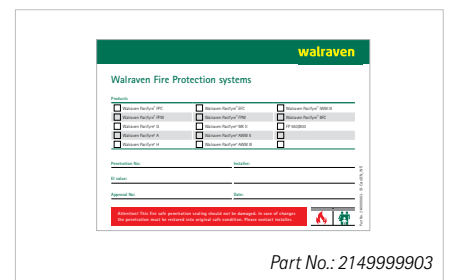
Complementary products



- Walraven Pacifyre® A acrylic sealant



- Walraven Pacifyre® fixing set 1



- Walraven Pacifyre® ID-Card

Installation instruction



1. Clean the pipe and check the dimensions.
Annular joint width max. 30 mm.



2. Close the gap with loose mineral wool and seal it with the gap filler Walraven Pacifyre®
A acrylic sealant (fill depth = 10 mm).



3. Choose the right size of collar.



4. Mount the collar around the pipe with the closing mechanism.

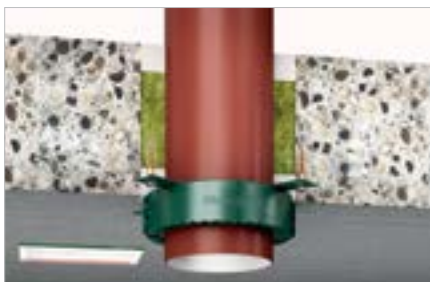


5. Mount the collar to the wall with an approved fixing set (as shown in the section Complementary products).

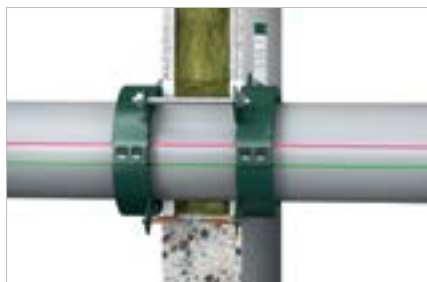


6. Fill out and place the Walraven Pacifyre® ID-Card next to the penetration.

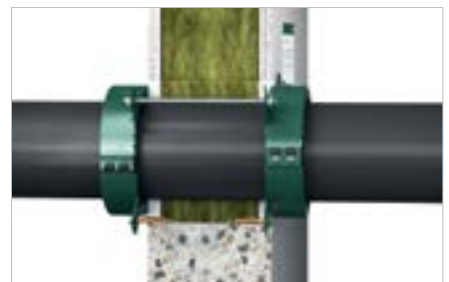
Installation options



■ Floor penetrations

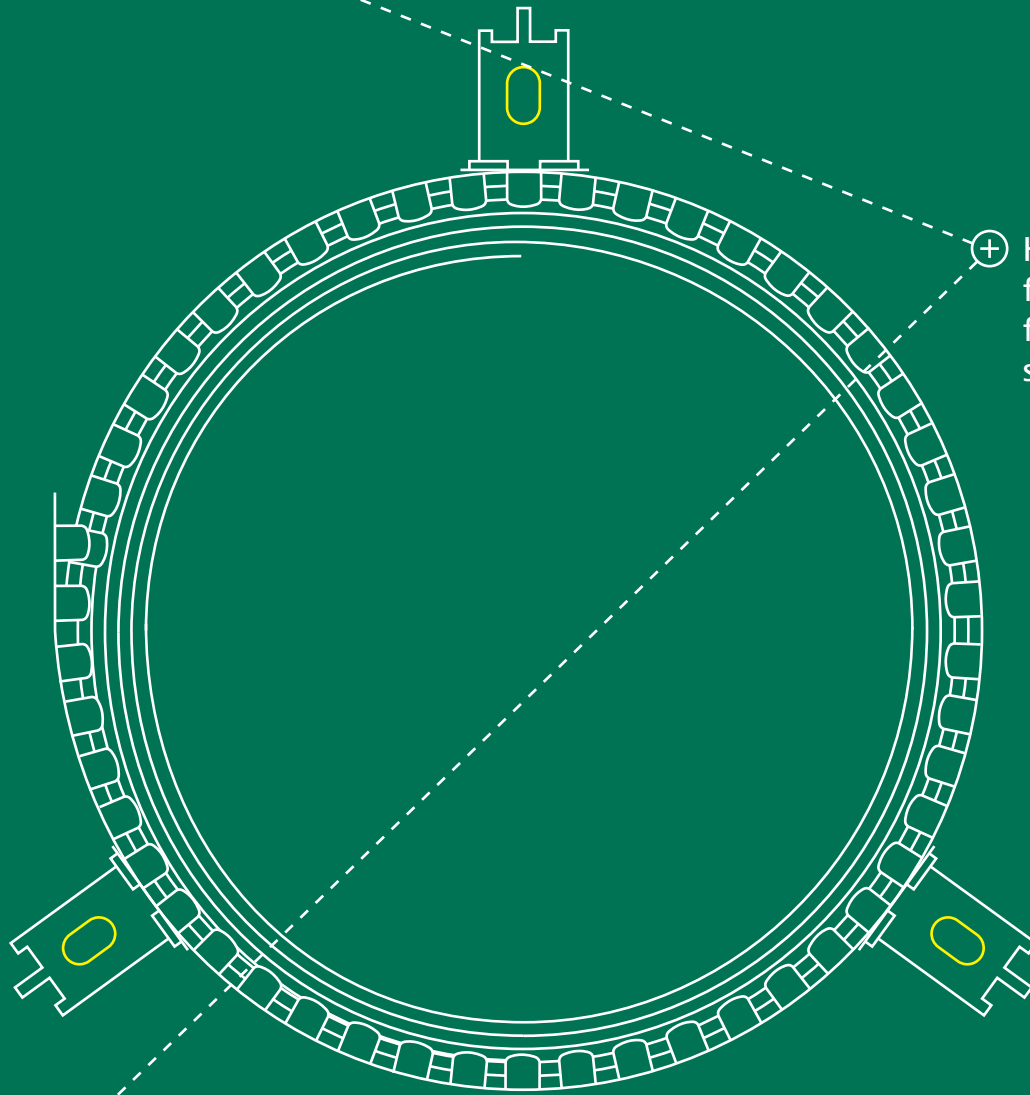


■ Flexible wall penetrations



■ Rigid wall penetrations

Walraven Pacifyre® EFC



+ High flexibility for complex situations

+ Easy on-site modifications

+ Suitable for damp conditions

+ Left-overs can be reused

Walraven Pacifyre® EFC Fire Collar

The flexible collar solution for simple to complex situations with plastic and multilayer pipes

The Walraven Pacifyre® EFC is a problem solver for complex installations, such as angled, corner and multiple pipe penetrations with zero distance between the pipes. In the event of a fire, the intumescent material of the collar expands with high pressure and seals the opening against flames and smoke.



This carton box contains: 3 m stainless steel band, 10 m fire strip, 18 fixing brackets, 18 sets of fixings and 6 Walraven Pacifyre® EFC ID-Cards.

Features and benefits

- Simple and easy to install, without special training
- Only one box for numerous penetrations and all pipe dimensions ($\varnothing \leq 160$ mm)
- High flexibility due to close wall distance
- Suitable for difficult to access penetrations
- Zero distance between fire collars is possible
- Expansion and contraction of the pipe remains possible
- Suitable for damp conditions
- Contains no dangerous materials
- Only 3 fixing points for a fire collar of 110 mm
- The required length of the stainless steel and intumescent strip can be determined on the job site
- Only the exact amount of intumescent band is required: minimal use of material per penetration
- Left-over material can be attached to another Walraven Pacifyre® EFC fire collar
- Max. 3 pipes through 1 fire collar ($\varnothing \leq 75$ mm) when space in between is ≤ 15 mm
- Fire safe tested up to EI 120 U/U
- Tested and approved according to EN 1366-3

With one EFC set you can create multiple collars of various sizes!

Walraven Pacifyre® EFC Fire Collar

The flexible collar solution for simple and complex situations with plastic and multilayer pipes

Approved for

Walls / floors

- Solid walls with a thickness of ≥ 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 $\varnothing \leq 160$ 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 – TRlplus
 - 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



■ Built-in situation flexible walls ≥ 100 mm



■ Built-in situation ceilings ≥ 150 mm

Approved insulations

Pipe systems can be insulated with:

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

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 Walraven Pacifyre® EFC carton box		38	32	26	14	12	7	6	4	3	3

Complementary products



Part No.: 2132100601

- 3 m stainless steel band (refill)



Part No.: 2132100602

- 18 fixing brackets, 18 Walraven star plugs, screws and rings (refill)



Part No.: 2180100010

- Walraven Pacifyre® A acrylic sealant



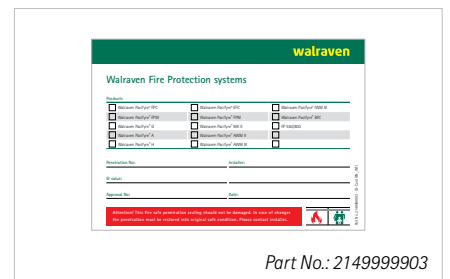
Part No.: 2180100030

- Walraven Pacifyre® H hybrid sealant



Part No.: 2180015300

- Walraven Pacifyre® FPM fire protection mortar



Part No.: 2149999903

- Walraven Pacifyre® ID-Card

Walraven Pacifyre® EFC Fire Collar

The flexible collar solution for simple to complex situations with plastic and multilayer pipes

Installation instructions



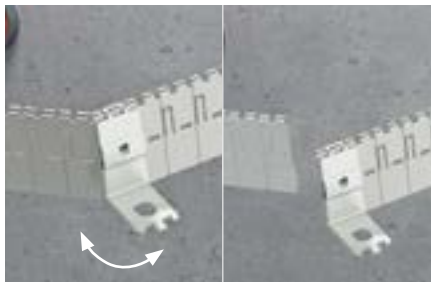
1. Install pipe and if desired apply insulation.



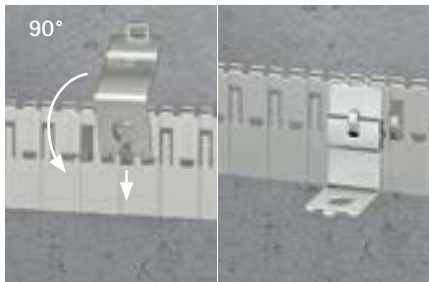
2. Ensure smoke tight seal of the annular gap. Seal it with a gap filler like Walraven Pacifyre® A acrylic sealant, Pacifyre® H hybrid sealant or Walraven Pacifyre® FPM fire protection mortar (fill depth = 10 mm).



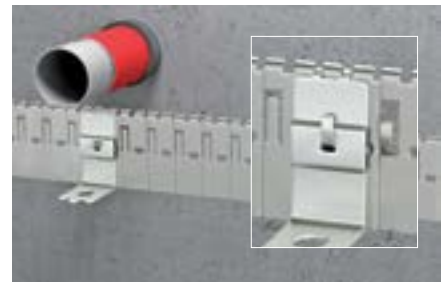
3. Wrap the fire strip (or insulation) around the pipe (note the number of layers required*). Attach with an overlap of 15 mm.



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 required 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 Walraven Pacifyre® ID-Card to the wall/ floor for identification by inspection bodies.

*See consumption table on the previous page

Installation options



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



- Multilayer pipes up to outer Ø 110 mm insulated with elastomeric foam



- Socket penetrations



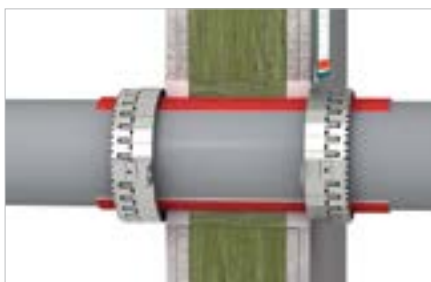
- Suitable for corner penetrations (¾ fire collar). Distance between wall and pipe ≤ 10 mm



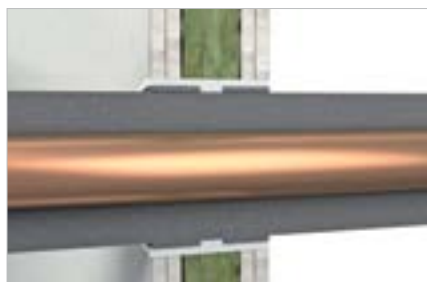
- Angled penetrations



- Multiple penetrations (max. 3 pipes through 1 fire collar). Distance between pipes ≤ 15 mm



- Penetration through wall sealed with loose mineral wool and Walraven Pacifyre® FPM fire protection mortar

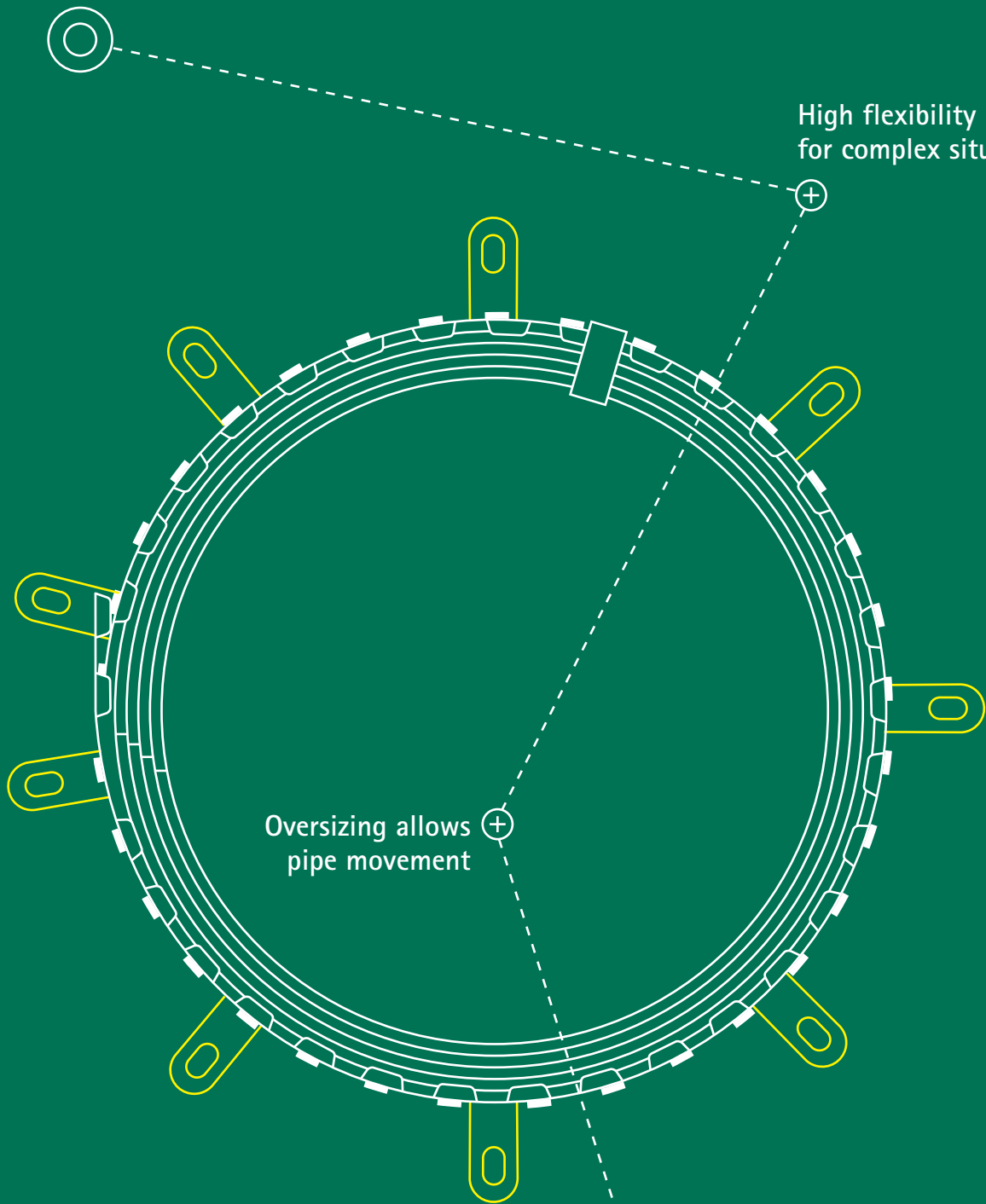


- Non-combustible pipes with insulation through the wall



- Non-combustible pipes with insulation through a floor

Walraven Pacifyre® BFC



High flexibility
for complex situations

Oversizing allows
pipe movement

Suitable for
damp conditions

Walraven Pacifyre® BFC Fire Collar

Basic fire collar for plastic and multilayer pipes

A standard fire collar designed for plastic (combustible) pipes up to Ø 160 mm. It works effectively with both thin- and thick-walled pipes, making it suitable for flexible walls, solid walls, and ceilings.



The carton box contains: 2 collars.

Features and Benefits

- Easy to install
- Suitable for damp conditions
- Oversized for increased flexibility in positioning
- Up to 2 hours fire protection in wall penetrations
- Up to 4 hours fire protection on floor penetrations
- Low height increases installation flexibility
- For thin- and thick-walled pipes
- For flexible walls, solid walls and floors
- With a fire resistance up to EI 120 U/C
- Tested and approved according to EN 1366-3

Approved for

Standard pipes

- PVC
- PE
- PP
- PP-R
- Multilayer

Noise reducing pipes

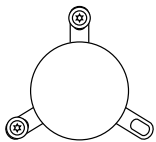
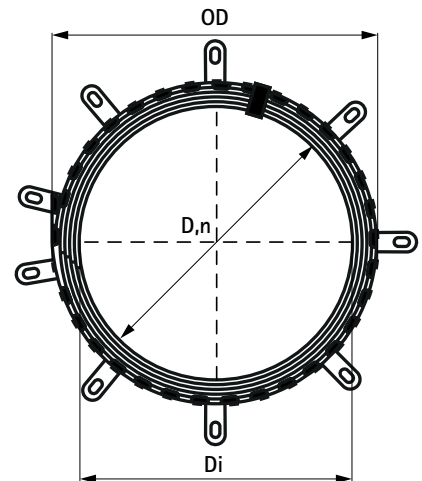
- Blue Power
- Wavin SITECH
- Aquatherm Green
- Geberit Silent PP
- POLO-KAL NG
- Rehau Raupiano Plus
- Triplus 3

Walraven Pacifyre® BFC Fire Collar

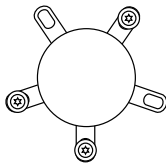
Basic fire collar for plastic and multilayer pipes

Selection table

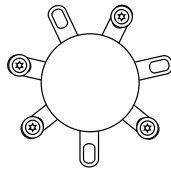
Part No.	Pipe	Walraven Pacifyre® BFC fire collar		
	D,n Ø (mm)	Di Ø (mm)	OD Ø (mm)	# of fixing tabs
2133000050	≤ 50	56	70	2
2133000063	63	67	90	3
2133000075	75	80	100	3
2133000090	90	98	125	3
2133000110	110	118	150	3
2133000125	125	130	160	4
2133000140	140	145	180	4
2133000160	160	165	200	4



Ø = 50 mm;
at least 2 fixing points



63 mm ≤ Ø ≤ 110 mm;
at least 3 fixing points



125 mm ≤ Ø ≤ 160 mm;
at least 4 fixing points

Complementary products



■ Walraven Pacifyre® A acrylic sealant



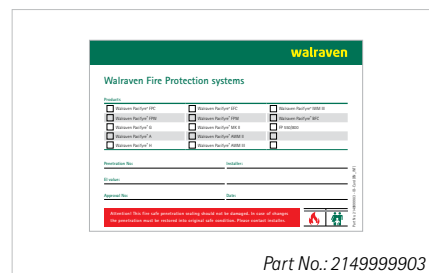
■ Walraven Pacifyre® H hybrid sealant



■ Walraven Pacifyre® FPM fire protection mortar



■ Walraven Pacifyre® fixing set 1



■ Walraven Pacifyre® ID-Card

Installation instructions



1. Install pipe.



2. Close the gap with loose mineral wool and seal it with a gap filler like Walraven Pacifyre® A acrylic sealant, Pacifyre® H hybrid sealant or Walraven Pacifyre® FPM fire protection mortar (fill depth = 10 mm).



3. Place the collar around the pipe.



4. Close the collar by inserting the strip from the inside out through the second hole and bending it back.



5. Mount the collar to the hole with an approved fixing set (as shown in the complementary products).



6. Fill out and place the Walraven Pacifyre® ID-Card next to the penetration.

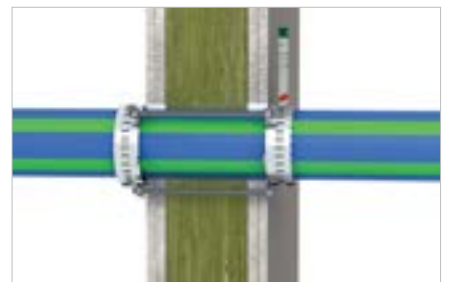
Installation options



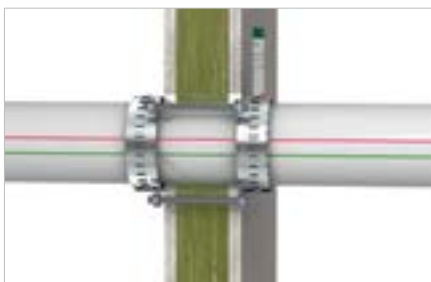
■ Combustible pipe penetration through a rigid floor construction



■ Combustible pipe penetration through a flexible wall construction ≥ 100 mm

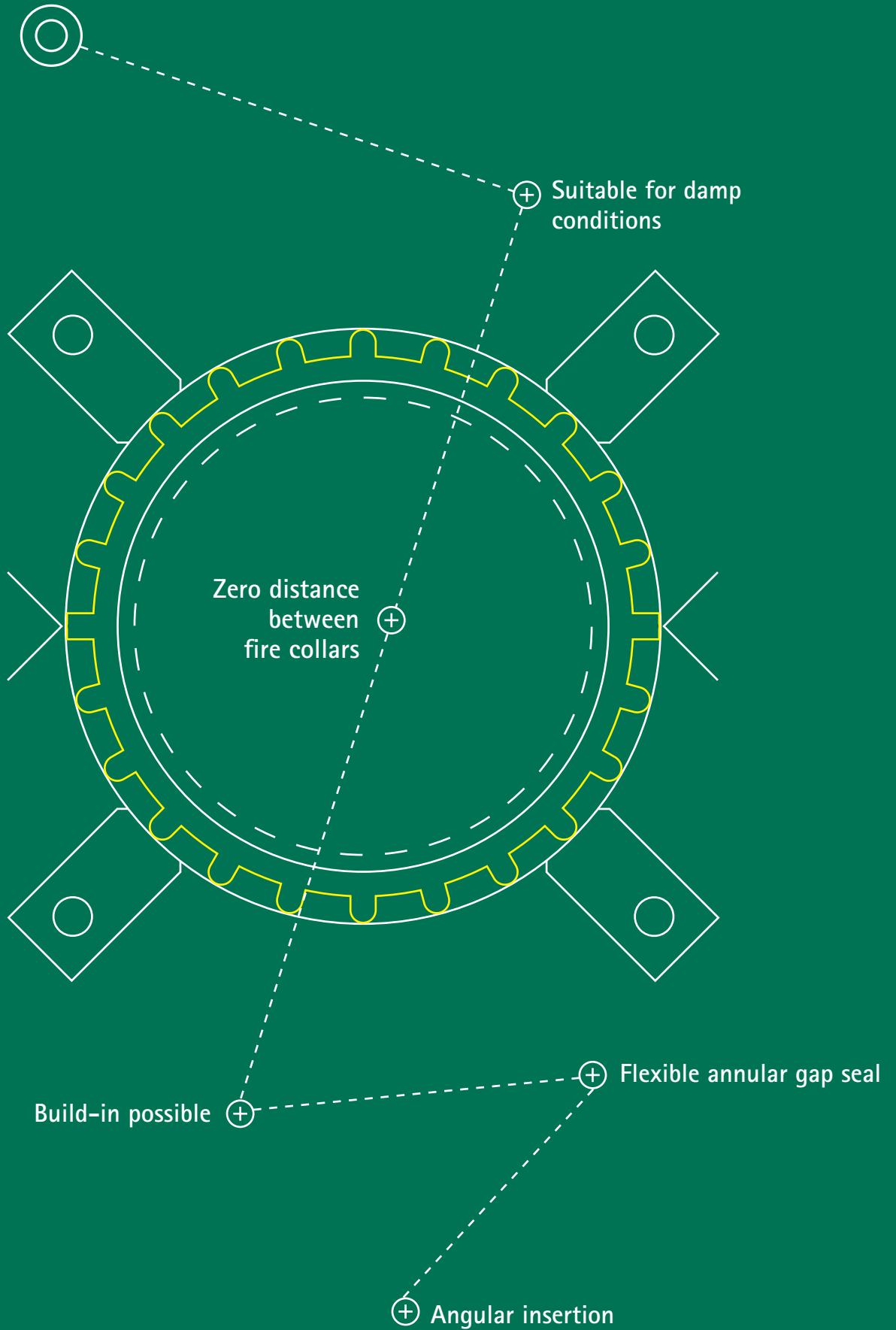


■ Aquatherm Green pipe penetration through a flexible wall construction ≥ 100 mm



■ Rehau Raupiano Plus pipe penetration through a flexible wall construction ≥ 100 mm

Walraven Pacifyre® AWM II



Walraven Pacifyre® AWM II Fire Collar

Innovative fire collar for complex installations of plastic and multilayer pipes

The Walraven Pacifyre® AWM II fire collar is an innovative collar suitable for a range of applications where a standard fire collar may not be appropriate.

It can be used to fire seal (un)insulated PVC and PE pipes with a \varnothing of 200 mm up to even 500 mm. It is easily installed and can be fitted to provide added noise insulation benefits.



Features and benefits

- Zero distance is possible between fire collars
- Built-up fire collar for plastic (combustible) pipes and pipe systems. For apertures in walls (solid walls or flexible walls) and floors with fire protection
- Installation of elbows, pipe couplings or branch pipes into the wall or, directly in, or under the ceiling is possible
- With a fire resistance up to EI 120 U/U
- Installation of telecommunications pipeline or protective piping with up to 2 cables is possible
- The use of PE noise insulation hose up to a thickness of 4 mm of composite natural rubber insulation to a thickness of 43 mm is allowed
- Tested and approved according to EN 1366-3

Approved for

Approved pipes resp. piping systems

Flammable pipes:

- PVC pipes $\varnothing \leq 400$ mm
- PE pipes $\varnothing \leq 400$ mm
- PP pipes $\varnothing \leq 200$ mm
- Noise reducing pipes $\leq \varnothing 200$ mm
- Aquatherm Blue pipe & Aquatherm Greenpipe $\leq \varnothing 355$ mm

Approved insulation materials

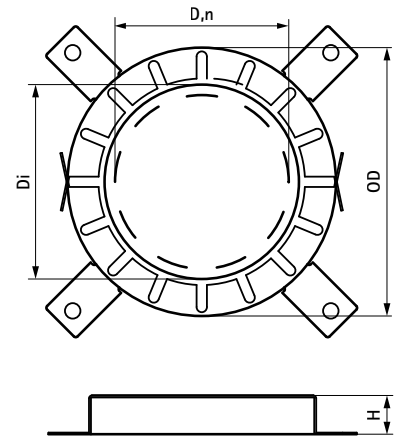
- Plastic elastomeric foam (FEF) insulation < 50 mm
 - Elastomeric foam (Armaflex, Kaiflex, Thermaflex etc.) with a thickness ≤ 32 mm
 - Polyethylene with a thickness ≤ 4 mm
- Fire class $\geq B2$*

Walraven Pacifyre® AWM II Fire Collar

Innovative fire collar for complex installations of plastic and multilayer pipes

Selection table

Part No.	Pipe	Walraven Pacifyre® AWM II fire collar			
	D Ø (mm)	Di Ø (mm)	OD Ø (mm)	H (mm)	# of fixing tabs
2134032034	32	36-40	50-54	26	2
2134040042	40	44-48	58-62	26	2
2134050052	50	54-57	68-71	26	2
2134063065	63	67-70	94-97	26	4
2134075077	75	79-83	106-110	26	4
2134090092	90	94-100	132-138	26,6	4
2134110112	110	114-120	155-161	26,6	4
2134125125	125	129-135	172-178	40	4
2134140140	140	144-152	200-206	40	6
2134160160	160	164-169	220-225	40	6
2134180180	180	184	264	40	8
2134200200	200	204	284	40	8
2134225225	225	239	328	51.5	10
2134250250	250	264	353	51.5	10
2134280280	280	289	378	51.5	12
2134300300	300	314	403	51.5	12
2134315315	315	328	417	51.5	12
2134355355	355	370	459	51.5	12
2134400400	400	415	504	51.5	12
*	450	465	554	51.5	14
*	500	515	604	51.5	14



*For more information please contact your local dealer

Complementary products



- Walraven Pacifyre® A acrylic sealant



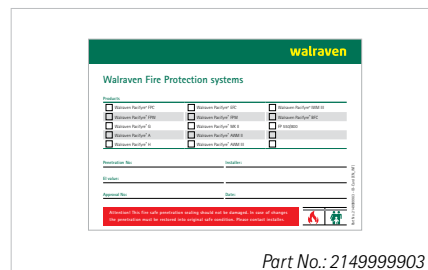
- Walraven Pacifyre® H hybrid sealant



- Walraven Pacifyre® FPM fire protection mortar



- Walraven Pacifyre® fixing set 1



- Walraven Pacifyre® ID-Card

Installation instructions



1. Install pipe and if necessary apply noise insulation.



2. Ensure smoke tight seal of the annular gap. Seal it with a gap filler like Walraven Pacifyre® A acrylic sealant, Pacifyre® H hybrid sealant or Walraven Pacifyre® FPM fire protection mortar (fill depth = 10 mm).



3. Select the correct collar size.



4. Drill (bending and sliding of fixing tabs is permitted).

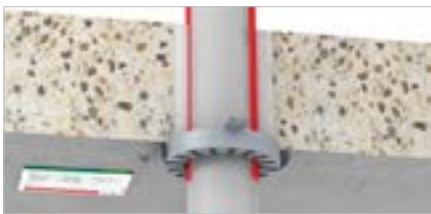


5. Fix using the screws supplied.

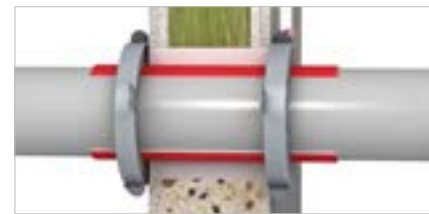


6. Apply the Walraven Pacifyre® ID-Card.

Installation options



■ Combustible pipes in rigid floors



■ Combustible pipes in rigid and flexible walls



■ Bundles of plastic conduits (including single penetrations) in rigid and flexible walls



■ Combustible pipes with collars in zero distances



■ Combustible pipes installed transverse (45°) in rigid floors



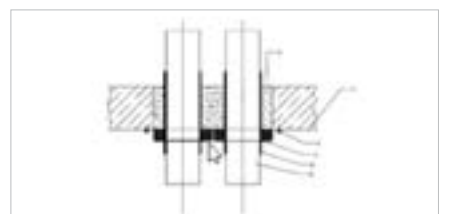
■ Combustible pipes with pipe socket in rigid floors



■ Installation of combustible pipes with pipe collar in rigid floors. 2 x 45° pipe bows

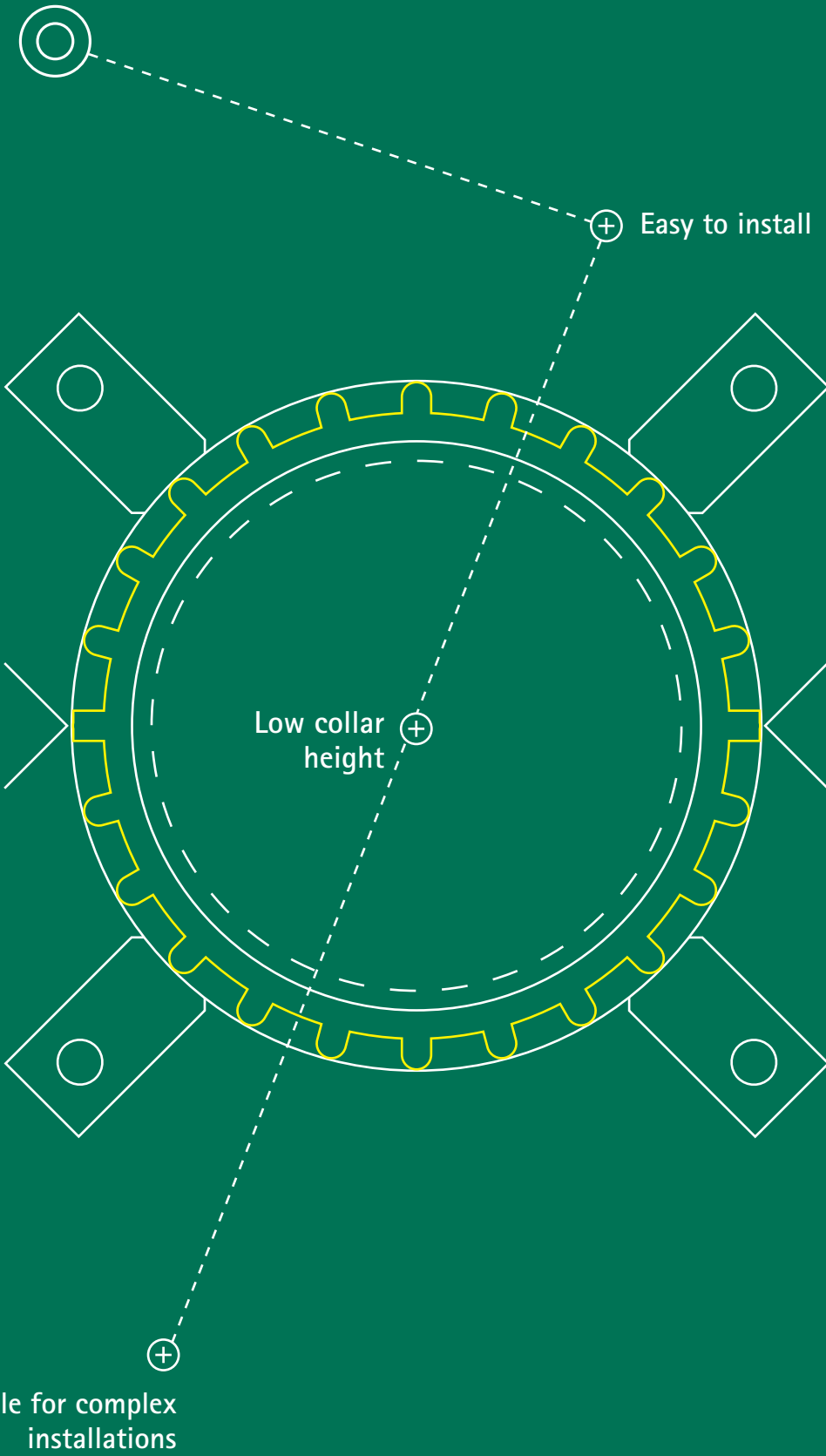


■ Installations with GF Cool-Fit pipes 2.0 and 4.0



■ Zero distance possible between the collars

Walraven Pacifyre® AWM III



Walraven Pacifyre® AWM III Fire Collar

Standard collar with low collar height for plastic pipes

The Walraven Pacifyre® AWM III fire collar is an innovative collar for complex installations. It can be used to fire seal plastics (combustible) pipes up to Ø 180 mm in walls and ceilings. It is easily installed and can be fitted to provide added noise insulation benefits.



Features and benefits

- Two-part fire collar designed for easy installation
- Zero distance is possible between fire collars
- With a fire resistance up to EI 120 U/C
- Low collar height, allowing building of bends, sockets and T-joints close to the wall or ceiling
- Should be fixed on both sides of the wall / ceiling
- Tested according to EN 1366-3

Approved for

Approved pipes / pipe systems in EI 240 quality:

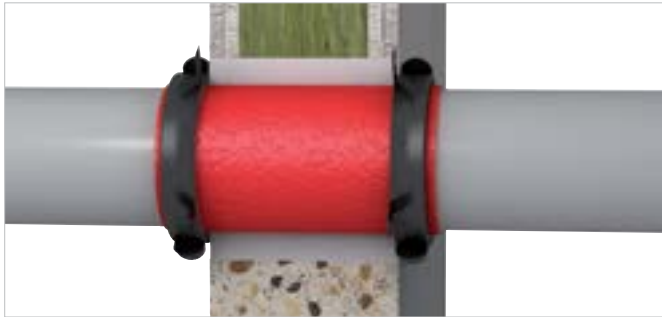
- Noise reducing pipe systems e.g.:
 - Friatec: Friaphon®, dBlue
 - Geberit: Silent-db20, Silent-PP
 - Wavin: Wavin AS, SiTech
 - PipeLife: PP Master
 - Rehau: Raupiano PLUS
- Combustible pipe systems (up to outer Ø 180 mm) in all common pipe materials, e.g.:
 - PVC
 - PP
 - PE
 - PE-X
 - ABS or ASA

Approved insulations:

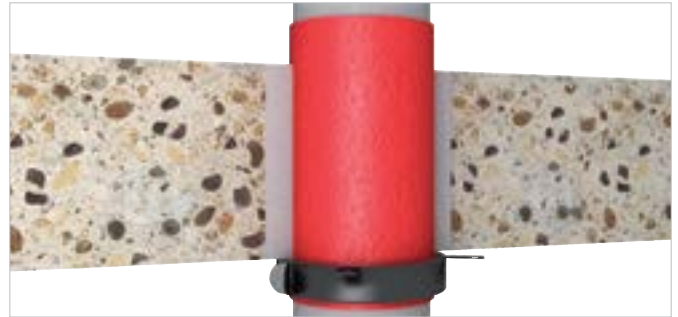
- PE-noise insulation ≤ 9 mm
- Elastomeric foam insulation ≤ 32 mm

Walraven Pacifyre® AWM III Fire Collar

Standard collar with low collar height for plastic pipes



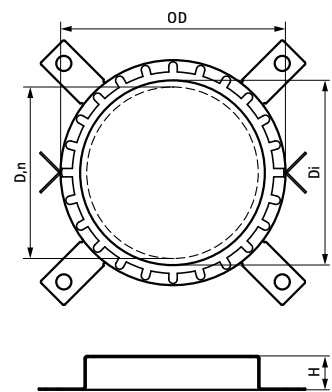
■ Built-in situation solid and flexible walls ≥ 100 mm



■ Built-in situation rigid floors ≥ 150 mm

Selection table

Part No.	Pipe	Walraven Pacifyre® AWM III fire collar			
	D,n Ø (mm)	Di Ø (mm)	OD Ø (mm)	H (mm)	# of fixing tabs
2135032034	32	38	47	26	2
2135040042	40	46	55	26	2
2135050052	50	56	65	26	2
2135063065	63	69	82	26	4
2135075077	75	81	94	26	4
2135090092	90	96	114	26	4
2135110112	100/110	116	134	26	4
2135125125	125	132	150	40	4
2135140140	135/140	144	168	40	4
2135160160	160	164	188	40	4
2135180180	180	184	218	40	4



Complementary products



Part No.: 2180100010

■ Walraven Pacifyre® A acrylic sealant



Part No.: 2180100030

■ Walraven Pacifyre® H hybrid sealant



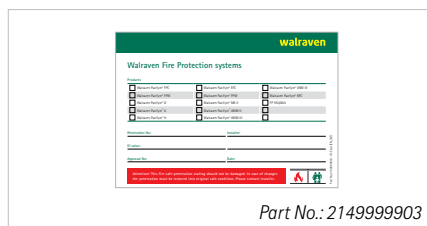
Part No.: 2180015300

■ Walraven Pacifyre® FPM fire protection mortar



Part No.: 2121000024

■ Walraven Pacifyre® fixing set 1



Part No.: 2149999903

■ Walraven Pacifyre® ID-Card

Installation instructions



1. Install pipe and if necessary apply noise insulation.



2. Ensure smoke tight seal of the annular gap. Seal it with a gap filler like Walraven Pacifyre® A acrylic sealant, Pacifyre® H hybrid sealant or Walraven Pacifyre® FPM fire protection mortar (fill depth = 10 mm).



3. Select the correct collar size (in problematic built-in situations the use of an oversized collar is permitted up to max. 3 sizes bigger).



4. Drill (bending and sliding of fixing tabs is permitted).



5. Fix using the screws supplied.



6. Apply the Walraven Pacifyre® ID-Card.

Installation options



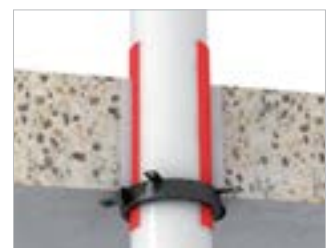
■ Zero distance possible between the collars



■ Combustible pipes up to Ø 180 mm outer



■ Fixing tabs mortared (90° reversed)



■ With PE-Insulation ≤ 9 mm (or ≤ 32 mm elastomeric foam insulation)



■ Bends directly under the ceiling

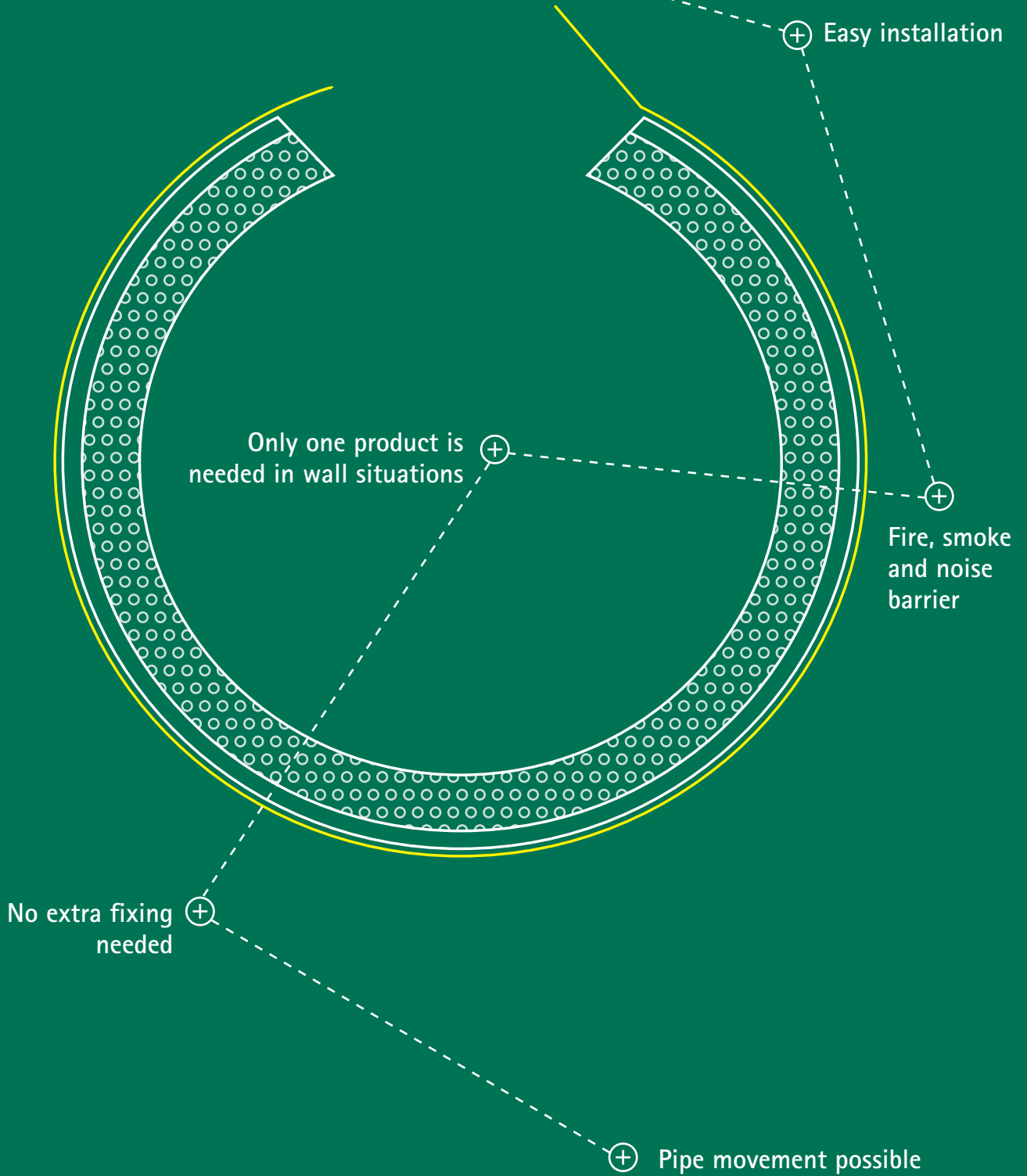


■ Also suitable for diagonal penetrations



■ T-joint close to penetration

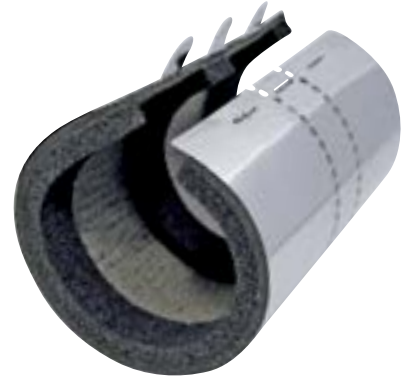
Walraven Pacifyre® MK II



Walraven Pacifyre® MK II Fire Sleeve

The single component solution for plastic pipes

A single component fire sleeve that allows you to make an aperture for pipes, smoke-free, noise-free and fire-resistant. This passive fire product can be installed around pipes through floors, ceilings, solid walls, and modular walls.



Features and benefits

- The sleeve provides a guaranteed protection against fire, smoke and noise
- With a fire resistance up to EI 120 U/C
- Expansion and contraction of the pipe remains possible
- Minimum space required, therefore can be applied in areas of hard accessibility
- A higher flexibility due to minimal overhang on wall and floor seals
- Only one product per penetration needed in walls and floors
- No tools, drilling or extra fixing materials needed
- Noise reduction test report from IRB (Fraunhofer Institute – Germany) available
- Tested and approved according to EN 1366-3

Approved for

Plastic pipes

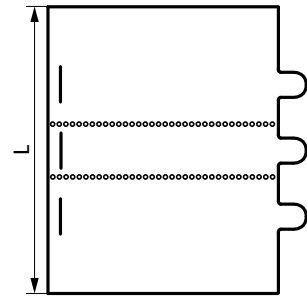
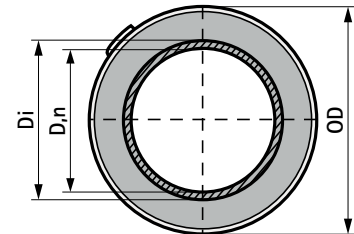
- PE
- PP
- PVC
- Multilayer
- Mixed penetration of plastic pipes

Walraven Pacifyre® MK II Fire Sleeve

The single component solution for plastic pipes

Selection table

Part No.	Pipe	Walraven Pacifyre® MK II fire sleeve		
	D,n Ø (mm)	Di Ø (mm)	OD Ø (mm)	L (mm)
2151015017	16	17	40	205
2151018020	20	20	45	205
2154024026	25	28	50	205
2154030032	32	36	55	205
2154039041	40	44	65	205
2154048050	50	52	75	205
2154051053	52	55	75	205
2154054056	56	58	80	205
2154057059	58	61	85	205
2154063065	63	67	90	205
2154075077	75	79	100	205
2154078080	80	82	105	205
2154090092	90	94	115	205
2154108110	110	113	135	205
2158123125	125	128	160	205
2158135137	135	139	170	205
2158138140	140	144	175	205
2158159161	160	164	195	205
2158180182	180	184	215	205
2152198200	200	204	245	205



Drilling $\varnothing = d + 1X (\geq/\leq)$

Kit		Mortar	
\geq mm	\leq mm	\geq mm	\leq mm
10	20	20	100

Complementary products



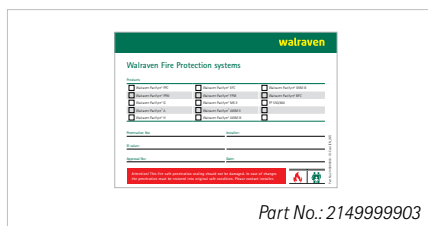
- Walraven Pacifyre® A acrylic sealant



- Walraven Pacifyre® H hybrid sealant



- Walraven Pacifyre® FPM fire protection mortar



- Walraven Pacifyre® ID-Card

Installation instructions



1. Wrap the sleeve around the pipe.



2. Fold the tabs in proper position.



3. Bend and lock the tabs.



4. Slide the sleeve into the aperture and centre it.



5. Ensure smoke tight seal of the annular gap. Seal it with a gap filler like Walraven Pacifyre® A acrylic sealant, Pacifyre® H hybrid sealant (fill depth = 10 mm) or Walraven Pacifyre® FPM fire protection mortar.



6. Fill out and place the Walraven Pacifyre® ID-Card (Part No. 2149999903).

Installation options



■ Small spaces

Suitable for places with difficult accessibility (for example an aperture that is only accessible from one side). The Walraven Pacifyre® MK II fire sleeve can also be used when the distance between the wall or floor and pipe is very small.



■ Close spacing

The Walraven Pacifyre® MK II fire sleeve is kept in place due to its closing tabs. It has no obtrusive fixing tabs, which is an advantage when parallel running pipes are installed. Thanks to its compact design the centre distance between pipes is very small.



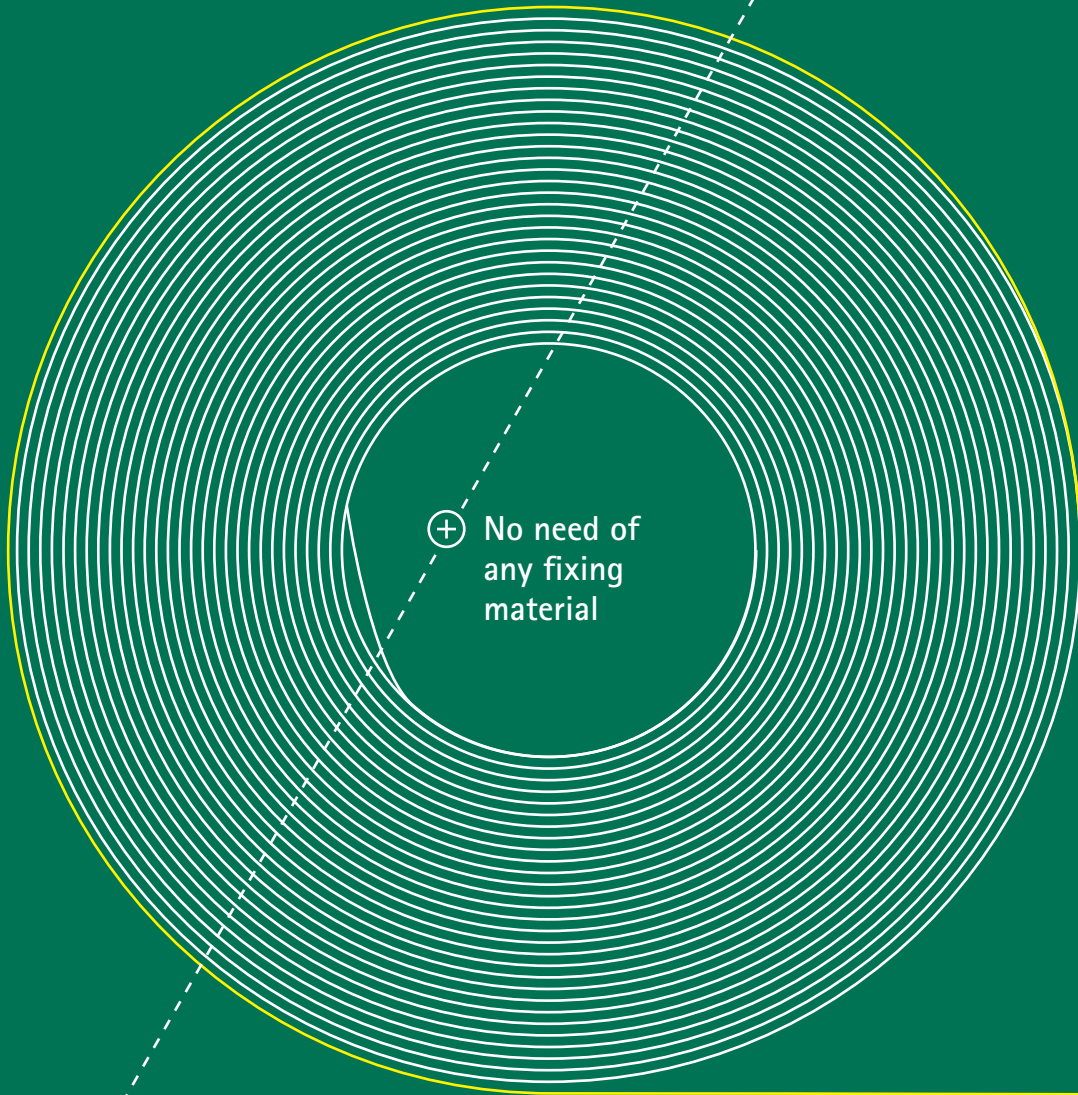
■ Any direction

The Walraven Pacifyre® MK II fire sleeve can be used for horizontal, vertical and even diagonal running pipes!

Walraven Pacifyre® FPW



Easy to install
due to self
adhesive strip



⊕ No need of
any fixing
material

Only one roll
for multiple
penetrations



⊕ High flexibility

Walraven Pacifyre® FPW Fire Protection Wrap

The most flexible fire protection wrap for plastic and multilayer pipes

An endless and self adhesive intumescent strip that will allow a fire resistance up to EI 120 U/U for a range of combustible pipe penetrations in walls and floors up to a Ø of 160 mm.



Features and benefits

- Allows for installation with zero distance between pipes
- Easy to install without any additional fixing material due to self-adhesiveness
- Only one roll for numerous penetrations
- Dimension: 9.2 m x 50 mm x 2.0 mm
- Suitable for combustible pipes with intended use as rainwater, sewage, gas, drinking water and heating or cooling
- For application in flexible walls, rigid walls and rigid floors
- For various combustible pipe materials such as PP-H, PVC and PE
- Suited for certain branded pipes
- With a fire resistance up to EI 120 U/U
- Tested according to EN 1366-3

Approved for

Wall application ≥ 100 mm

- PVC-U / PVC-C pipes up to Ø 160 mm EI 120 U/U
- PE, PE-X, ABS & SAN+PVC pipes up to Ø 160 mm EI 120 U/U
- PP-H (DIN 8077) pipes up to Ø 110 mm EI 120 U/C
- Geberit Silent PP, Geberit Silent Pro, Georg Fischer Silenta Premium up to Ø 75 mm EI 120 U/U and up to Ø 110 mm EI 120 U/C
- Conel Drain, Wavin AS+, Wavin SiTech+, POLO-KAL NG, POLO-KAL 3S, REHAU RAUPIANO PLUS up to Ø 110 mm EI 120 U/U
- Aquatherm Greenpipe up to Ø 63 mm EI 120 U/C
- Multilayer Composite pipes such as Alpex F50 and Uponor MLC up to Ø 110 mm EI 120 U/C with and without elastomeric foam insulation

Floor application ≥ 150 mm

- PVC-U / PVC-C pipes up to Ø 110 mm EI 120 U/U and up to Ø 160 mm EI 90 U/C
- PE, PE-X, ABS & SAN+PVC pipes up to Ø 110 mm EI 120 U/U and up to Ø 160 mm EI 60 U/C
- PP-H (DIN 8077) pipes up to Ø 75 mm EI 120 U/U and up to Ø 160 mm EI 120 U/C
- Geberit Silent PP, Geberit Silent Pro, Georg Fischer Silenta Premium, Conel Drain, Wavin AS+, Wavin SiTech+, POLO KAL NG, POLO KAL 3S, REHAU RAUPIANO PLUS up to Ø 110 mm EI 120 U/U
- Conel Drain, Wavin AS+, Wavin SiTech+, POLO KAL NG, POLO KAL 3S, REHAU RAUPIANO PLUS up to Ø 110 mm EI 120 U/U
- Aquatherm Greenpipe up to Ø 110 mm EI 120 U/C
- Multilayer Composite pipes such as Alpex F50 and Uponor MLC up to Ø 110 mm EI 120 U/C with and without elastomeric foam insulation



ETA 22/0022



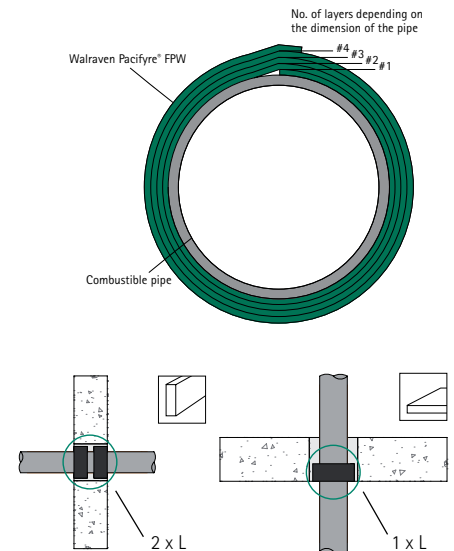
Walraven Pacifyre® FPW Fire Protection Wrap

The most flexible fire protection wrap for plastic and multilayer pipes

Consumption table

Combustible pipes according to ETA 22/0022			
Ø (mm)	Layer #	L (mm)	Nr. of penetration with one roll #
32	2	295	35
40	2	345	29
50	2	408	24
63	3	750	13
75	3	863	11
90	4	1366	7
110	4	1617	5
125	7	3314	2
140	7	3644	2
160	7	4083	2

* Check application details in the Walraven Pacifyre® FPW Fire Protection Wrap Technical data sheet for the maximum allowed dimension per material



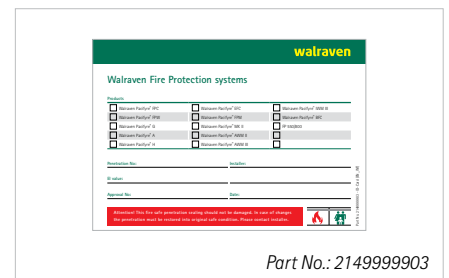
Complementary products



- ≤ 10 mm Walraven Pacifyre® A acrylic sealant



- Mortar, plaster, cement (e.g. Walraven Pacifyre® FPM fire protection mortar)



- Walraven Pacifyre® ID-Card

Installation instructions



1. Clean the pipe and check the dimensions.



2. Wrap around the required amount of layers of Walraven Pacifyre® FPW.



3. Close the gap between the wrap and the wall / floor with loose mineral wool.



4. Ensure smoke tight seal of the annular gap. Seal it with a gap filler like Walraven Pacifyre® A acrylic sealant (fill depth = 10 mm) or Walraven Pacifyre® FPM fire protection mortar.



5. Flatten the acrylic with a jointing knife or trowel.



6. Fill out and place the Walraven Pacifyre® ID-Card next to the penetration.

Installation options



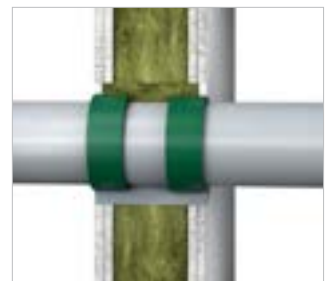
■ Combustible pipes made of different materials up to \varnothing 160 mm EI 120 U/U



■ Multilayer pipes with and without elastomeric foam insulation up to \varnothing 110 mm EI 120 U/C



■ Floor penetration with an installation of the Walraven Pacifyre® FPW just at the ceiling



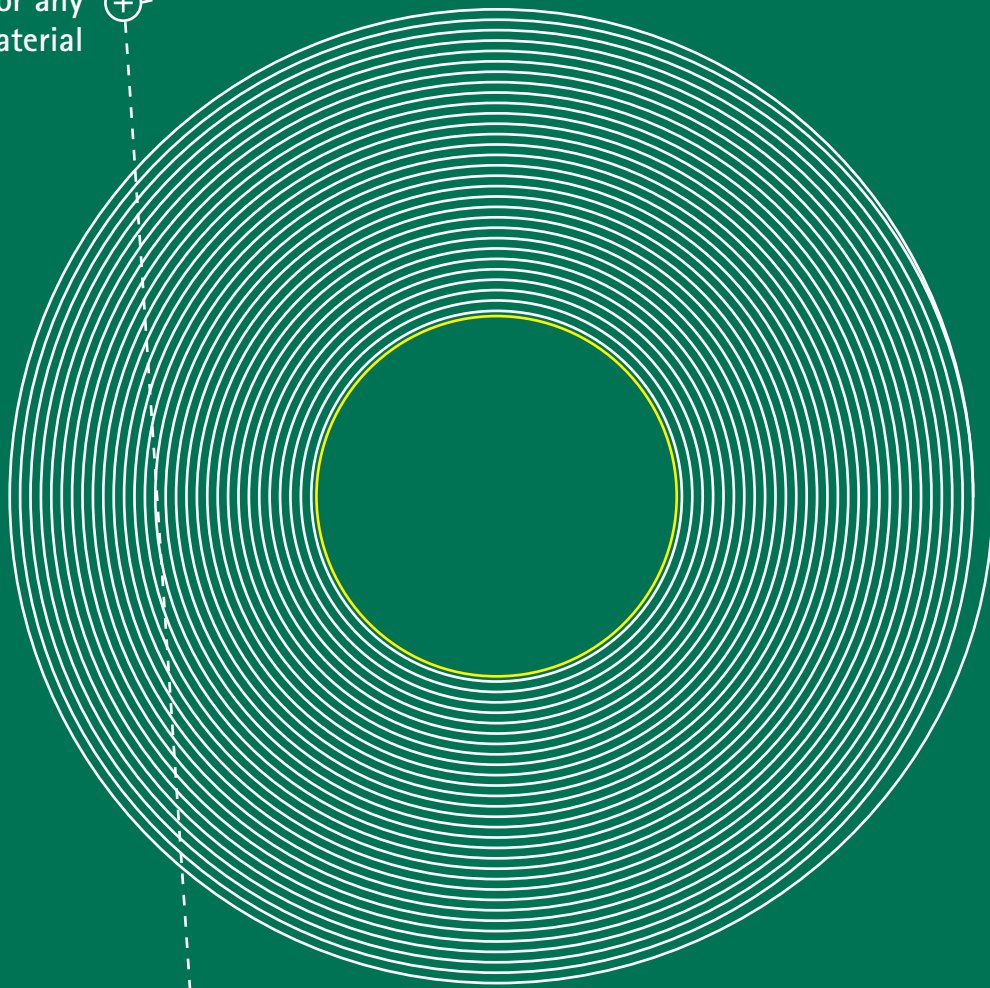
■ Penetration through flexible and rigid walls \geq 100 mm

Walraven Pacifyre® IWM III



⊕ Easy to install
due to self
adhesive strip

⊕ No need for any
fixing material



⊕ Only one roll for
multiple penetrations

⊕ High flexibility

Walraven Pacifyre® IWM III Fire Strip

The flexible fire strip for plastic and multilayer pipes

Walraven Pacifyre® IWM III fire strip was designed for plastic (combustible) pipes, pipe systems, apertures in walls (rigid or flexible walls) and rigid floors with passive fire protection requirements in accordance with the legislation.



Features and benefits

- Allows for an installation with zero distance between pipes
- Easy to install without any additional fixing material due to self-adhesive strip
- Only one roll for numerous penetrations
- A small number of layers is required, so a smaller drill hole is possible
- Suitable for 40 mm shaft walls
- Suitable for damp conditions
- Easy on-site modification
- Also suitable for areas which are difficult to access, for example, corner penetrations
- With a fire resistance up to EI 120 U/U
- Tested according to EN 1366-3

Approved for

Approved pipes / pipe systems:

- Noise reducing pipe systems (insulated or non-insulated) e.g.:
 - Friatec: Friaphon®, dBlue
 - Geberit: Silent-db20, Silent-PP
 - Wavin: Wavin AS, SiTech
 - PipeLife: PP Master
 - Rehau: Raupiano PLUS
- Combustible pipe systems (up to outer Ø 160 mm) in all common pipe materials, e.g.:
 - PVC
 - PP
 - PE
 - PE-X
 - ABS or ASA

- Multilayer pipes ≤ 110 mm (insulated or non-insulated)

Approved insulation:

- Elastomeric foam ≤ 32 mm
- PE sound insulation ≤ 4 mm



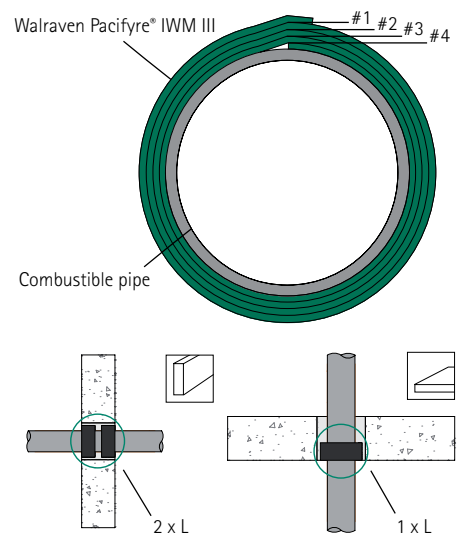
ETA 18/0918

Walraven Pacifyre® IWM III Fire Strip

The flexible fire strip for plastic and multilayer pipes

Consumption table

Pipe-Ø		Without insulation	
Ø (mm)	Layer #	L (mm)	Nr. of penetration with one roll #
16	2	126	99
20	2	151	83
25	2	183	68
32	2	227	55
40	2	277	45
50	2	340	37
	3	528	24
	4	733	17
63	3	651	19
	4	896	14
	6	1433	9
75	3	764	16
	4	1047	12
	5	1345	9
90	3	905	14
	4	1235	10
	5	1581	8
110	3	1094	11
	4	1487	8
	5	1895	7
	6	2319	5
160	6	3262	4



* Check application details in the Walraven Pacifyre® IWM III fire strip ETA 18-0918 for more detailed information

Complementary products



Part No.: 2180100010

- Walraven Pacifyre® A acrylic sealant



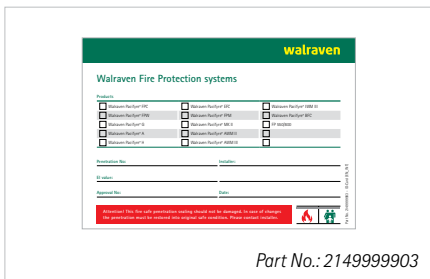
Part No.: 2180100030

- Walraven Pacifyre® H hybrid sealant



Part No.: 2180015300

- Walraven Pacifyre® FPM fire protection mortar



Part No.: 2149999903

- Walraven Pacifyre® ID-Card

Walraven Pacifyre® IWM III Fire Strip

The flexible fire strip for plastic and multilayer pipes

Installation instructions



1. Install pipe and if necessary apply noise insulation.



2. Wrap the strip around the pipe (for insulation) with an overlap of 20 mm (note the number of layers required).



3. Slide the strip into the wall / ceiling (ensuring it is flush to the surface).



4. Ensure smoke tight seal of the annular gap. Seal it with a gap filler like Walraven Pacifyre® A acrylic sealant, Pacifyre® H hybrid sealant (fill depth = 10 mm) or Walraven Pacifyre® FPM fire protection mortar.



5. Double check the penetration.



6. Fill out and place the Walraven Pacifyre® ID-Card next to the penetration.

Installation options



- Zero distance possible between pipe penetrations



- Plastic pipe ($\varnothing \leq 110$ mm), insulated with elastomeric foam ≤ 32 mm



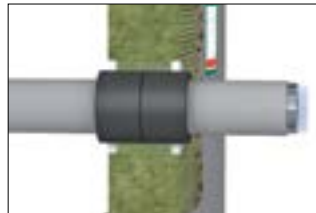
- Multilayer pipe ($\varnothing \leq 110$ mm), non-insulated



- Multilayer pipe ($\varnothing \leq 110$ mm), insulated with synthetic rubber ≤ 32 mm



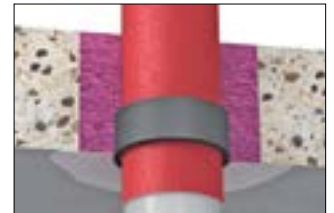
- Plastic pipe ($\varnothing \leq 160$ mm), in rigid and flexible walls



- Multilayer pipe ($\varnothing \leq 110$ mm), in mineral wool board

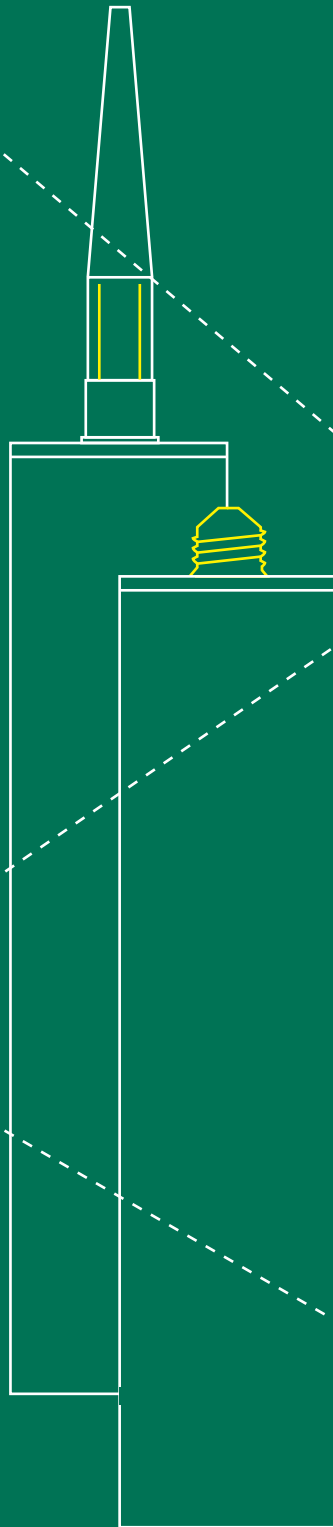


- Plastic pipe ($\varnothing \leq 110$ mm), in gypsum shaft wall



- Plastic pipe ($\varnothing \leq 160$ mm), in rigid floors ≥ 150 mm

Walraven Pacifyre® G



Easy to apply with a regular cartridge gun



Penetrations of multiple pipes in one opening



No additional product needed

Walraven Pacifyre® G Graphite Fire Sealant

The perfect fire protection sealant for small pipes & cables

An intumescent sealant that will heavily expand in case of fire. It is certified to be used as a penetration seal of small combustible pipes, multilayer, and metal pipes as well as small cable bundles.



Features and benefits

- Easy to apply with a regular cartridge gun
- Suitable for application in a penetration with multiple pipes in one opening
- Small cable bundles up to Ø 50 mm
- Fire sealant for combustible pipes, insulated and non-insulated multilayer pipes, insulated metal pipes and cables
- For application in flexible walls, rigid walls and rigid floors
- Suitable for combustible pipes with intended use as rainwater, sewage, gas, drinking water and heating or cooling
- Suitable for insulated metal pipes with an intended use as drinking water, heating or cooling
- With a fire resistance up to EI 120 U/U
- Tested according to EN 1366-3

Approved for

Wall application ≥ 100 mm

- PVC-U / PVC-C pipes up to Ø 50 mm EI 120 U/C
- PE, PE X, ABS & SAN+PVC pipes up to Ø 50 mm EI 120 U/U
- PP-H (DIN pipes up to Ø 50 mm EI 120 U/U
- Multilayer pipes such as Alpex F50 and Uponor MLC up to Ø 32 mm EI 120 U/C with and without synthetic rubber insulation
- Metal pipes such as copper, steel or stainless steel up to Ø 35 mm EI 120 C/U with synthetic rubber insulation
- Small cable bundles up to Ø 50 mm EI 120

Floor application ≥ 150 mm

- PVC-U / PVC C pipes up to Ø 50 mm EI 120 U/C
- PE, PE X, ABS & SAN pipes up to Ø 50 mm EI 120 U/U
- PP-H (DIN 8077) pipes up to Ø 50 mm EI 120 U/U
- Multilayer pipes such as Alpex F50 and Uponor MLC up to Ø 32 mm EI 120 U/C with and without synthetic rubber insulation
- Metal pipes such as copper, steel or stainless steel up to Ø 35 mm EI 120 C/U with synthetic rubber insulation
- Small cable bundles up to Ø 50 mm EI 120



ETA 22/0023

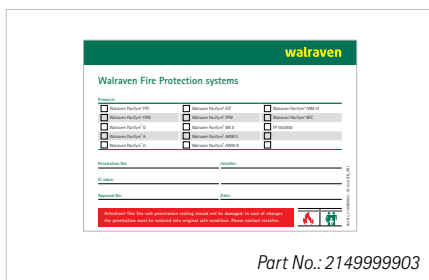
Walraven Pacifyre® G Graphite Fire Sealant

The perfect fire protection sealant for smaller pipes & cables

Selection table

Product	Part No.	ETA	DoP	Colour	Cont.	Pack 1
Walraven Pacifyre® G graphite fire sealant	2180100040	ETA 22/0023	DoP: 0749 CPR 22-023	Grey	300 ml	15

Complementary products



- Walraven Pacifyre® ID-Card



- WIS dispenser gun

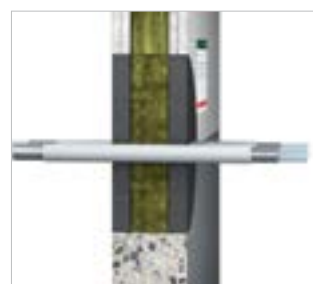
Installation options



- Floor penetrations with combustible pipes made of different materials up to \varnothing 50 mm EI 120 U/C.



- Floor penetrations with insulated composite plastic pipes including aluminium, with combustible insulation up to \varnothing 32 mm EI 120 U/C.



- Wall penetrations with composite plastic pipes including aluminium up to \varnothing 32 mm EI 120 U/C.

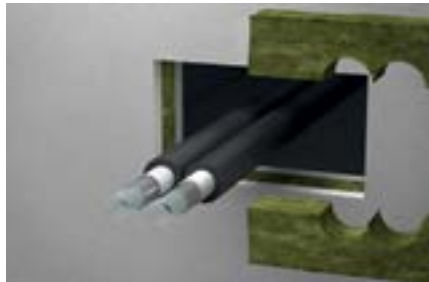


- Wall penetrations with sheathed cables up to 21 mm or cable bundles up to 50 mm EI 120.

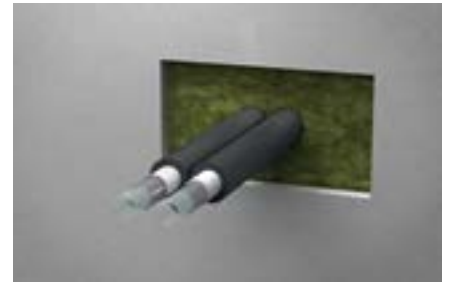
Installation instructions



1. Clean the opening and check the dimensions



2. Place the pre-cut mineral wool boards



3. Check that the distance from the surface of the wall to the board is 25 mm



4. Apply the Walraven Pacifyre® G graphite fire sealant

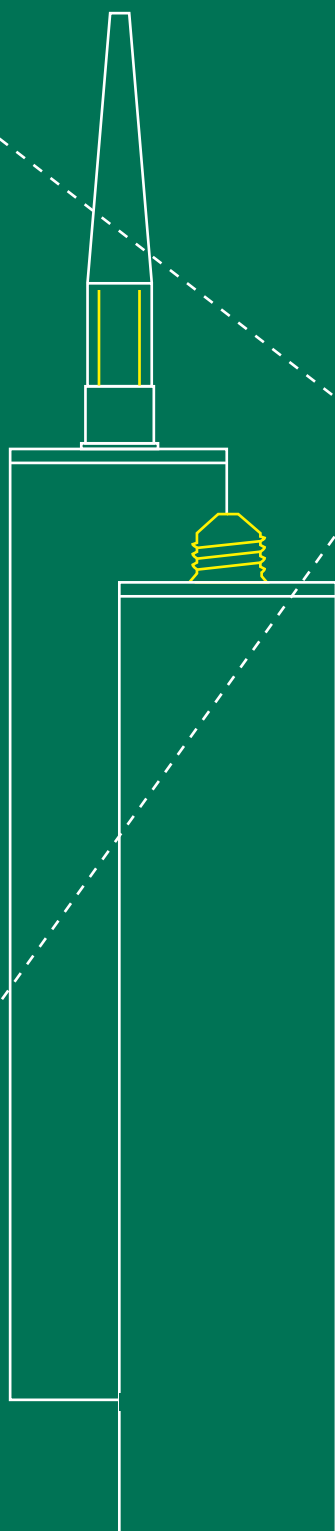


5. Flatten the Walraven Pacifyre® G graphite fire sealant with a jointing knife or trowel



6. Place the filled out Walraven Pacifyre® ID-Card next to the penetration

Walraven Pacifyre® A



Indoor emission level A+

Noise reduction ⊕



Walraven Pacifyre® A Acrylic Fire Sealant

The standard acrylic sealant with low indoor emission

Single component acrylic sealant for fire-resistant and smoke tight closing of linear building joints and pipe or cable penetration seals in walls and ceilings.



Features and benefits

- Remains elastic after curing
- Colourfast, waterproof and paintable after curing
- Indoor emission level A+
- Sound reduction up to 62db
- For sealing annular joints around pipes, fire collars and fire sleeves or wraps
- Single insulated metal pipes up to DN 200
- Multiple insulated metal pipes up to DN80
- Cable bundles up to Ø 50 mm (max. Ø 21 mm each cable)
- Shrinkage approx. 15% (DIN 52451)
- Temperature resistance from -20 °C to +80 °C
- Application temperature: +5 °C up to +30 °C
- Pipe and cable penetrations: tested according to EN 1366-3
- Linear gap seals: tested according to EN 1366-4

Approved for

Penetration application

Different kind of penetrations of metal pipes with mineral wool insulation:

- Single copper pipes up to Ø 88.9 mm EI 120 C/U
- Multiple copper, steel and stainless steel pipes up to Ø 54.0 mm EI 120 C/U
- Single steel and stainless steel pipes up to Ø 219.1 mm EI 120 C/U
- Small cable bundles up to Ø 50 mm EI 60 / E 120

Walls ≥ 100 mm and floors ≥ 150 mm.

Linear joint application

Fire protection sealant for non-movement joints and seals:

- Vertical joints in rigid walls
- Vertical and horizontal joints in flexible walls
- Horizontal joints in rigid floor constructions
- Up to EI 240
- Up to a width of 20 mm with a PU backer rod

Flexible walls ≥ 75 mm, rigid walls ≥ 100 mm, floors ≥ 150 mm.



ETA 22/0037

Walraven Pacifyre® A Acrylic Fire Sealant

The standard acrylic sealant with low indoor emission

Selection table

Product	Part No.	ETA	DoP	Colour	Cont.	Pack 1
Walraven Pacifyre® A acrylic fire sealant	2180100010	ETA 16/1008 ETA 22/0037	0749 CPR 16-1008	White	300 ml	12

Complementary products



■ Walraven Pacifyre® FPC fire collar



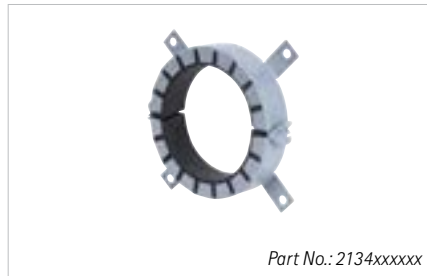
■ Walraven Pacifyre® EFC fire collar



■ Walraven Pacifyre® BFC fire collar



■ Walraven Pacifyre® MK II fire sleeve



■ Walraven Pacifyre® AWM II fire collar



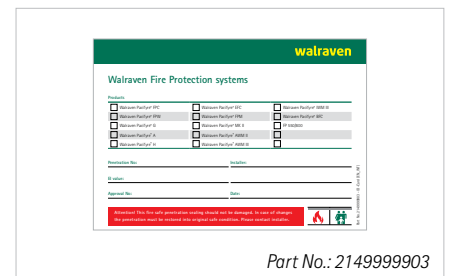
■ Walraven Pacifyre® FPW fire protection wrap



■ Walraven Pacifyre® IWM III fire strip



■ WIS dispenser gun

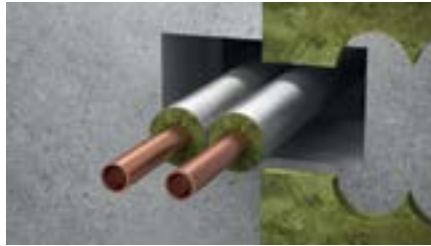


■ Walraven Pacifyre® ID-Card

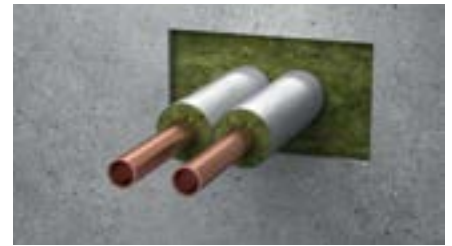
Installation instructions



1. Clean the opening and check the dimensions.



2. Place the pre-cut mineral wool boards.



3. Check that the distance from the surface of the wall to the board is 10 mm.



4. Apply the Walraven Pacifyre® A acrylic sealant.



5. Flatten the Walraven Pacifyre® A acrylic sealant with a jointing knife or trowel.



6. Place the filled out Walraven Pacifyre® ID-Card next to the penetration.

Installation options



■ Sealing linear construction joint

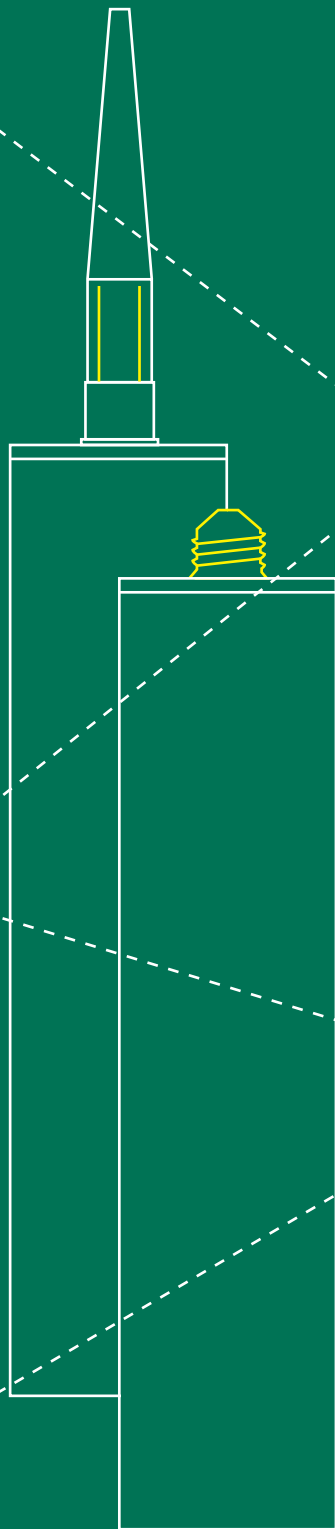


■ Close a gap with loose mineral wool and seal it with Walraven Pacifyre® A acrylic sealant (fill depth = 10 mm)



■ Ensure smoke tight seal of the annular hole

Walraven Pacifyre® H



+ Good adhesion to most substrates

+ Easy to apply with a regular cartridge gun

+ Paintable after curing

+ Suitable for joint with movement

Walraven Pacifyre® H Hybrid Sealant

Paintable sealant for linear joints and penetration seals

For sealing annular joint seals around pipes, fire collars, and fire sleeves or wraps. Suitable for linear joints in walls and floors with max. 25% movement.



Features and benefits

- Good adhesion to most substrates
- Easy to apply with a regular cartridge gun
- Colour fast, UV-stable and paintable after curing
- Remains permanently elastic after curing
- Indoor emission level A+
- No blistering in hot or humid weather conditions
- Suitable for linear joints in walls and floors with max. 25% movement
- For sealing annular joints around pipes, fire collars and fire sleeves or wraps
- Skin formation in approx. 20 min.
- Fire class E (EN 13501-1)
- Up to EI 240 for linear joint seals and penetration seals
- Tested and approved according to EN 1366-4 and EN 1366-3

Approved for

- Linear joints with a max. width of 20 mm in flexible wall.
- Linear joints with a max width of 30 mm in a rigid wall.
- As a penetration seal around pipes in combination with Walraven Pacifyre® MKII, Walraven Pacifyre® EFC and Walraven Pacifyre® BFC.



ETA 16/1009

Walraven Pacifyre® H Hybrid Sealant

Paintable sealant for linear joints and penetration seals

Selection table

Product	Part No.	ETA	DoP	Cont.	Pack 1
Walraven Pacifyre® H hybrid sealant	2180100030	ETA 16/1009	0749 CPR 16-1009	290 ml	12

Complementary products



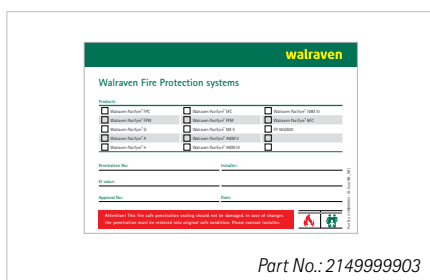
■ Walraven Pacifyre® MK II fire sleeve



■ Walraven Pacifyre® EFC fire collar



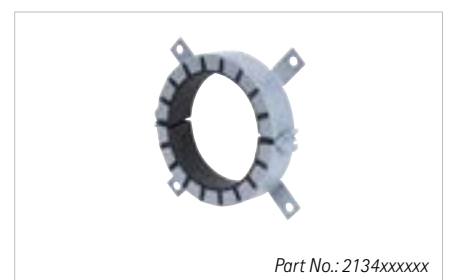
■ Walraven Pacifyre® BFC fire collar



■ Walraven Pacifyre® ID-Card



■ WIS dispenser gun



■ Walraven Pacifyre® AWM II fire collar

Installation instructions



1. Slide the sleeve into the aperture and centre it.



2. Put some mineral wool as backfilling, fill 25 mm in the depth with the Walraven Pacifyre® H hybrid sealant.



3. Fix Walraven Pacifyre® ID-Card.

Installation options



■ Sealing linear construction joints



■ Close a gap with loose mineral wool and seal it with Walraven Pacifyre® H hybrid sealant (fill depth = 10 mm)



■ Ensure smoke tight seal of the annular hole

Walraven Pacifyre® Product Selector

Our **Walraven Pacifyre®** Product Selector is here to assist you in making the right decision!



Do you sometimes find it challenging to choose the appropriate product(s) for your passive fire protection projects?

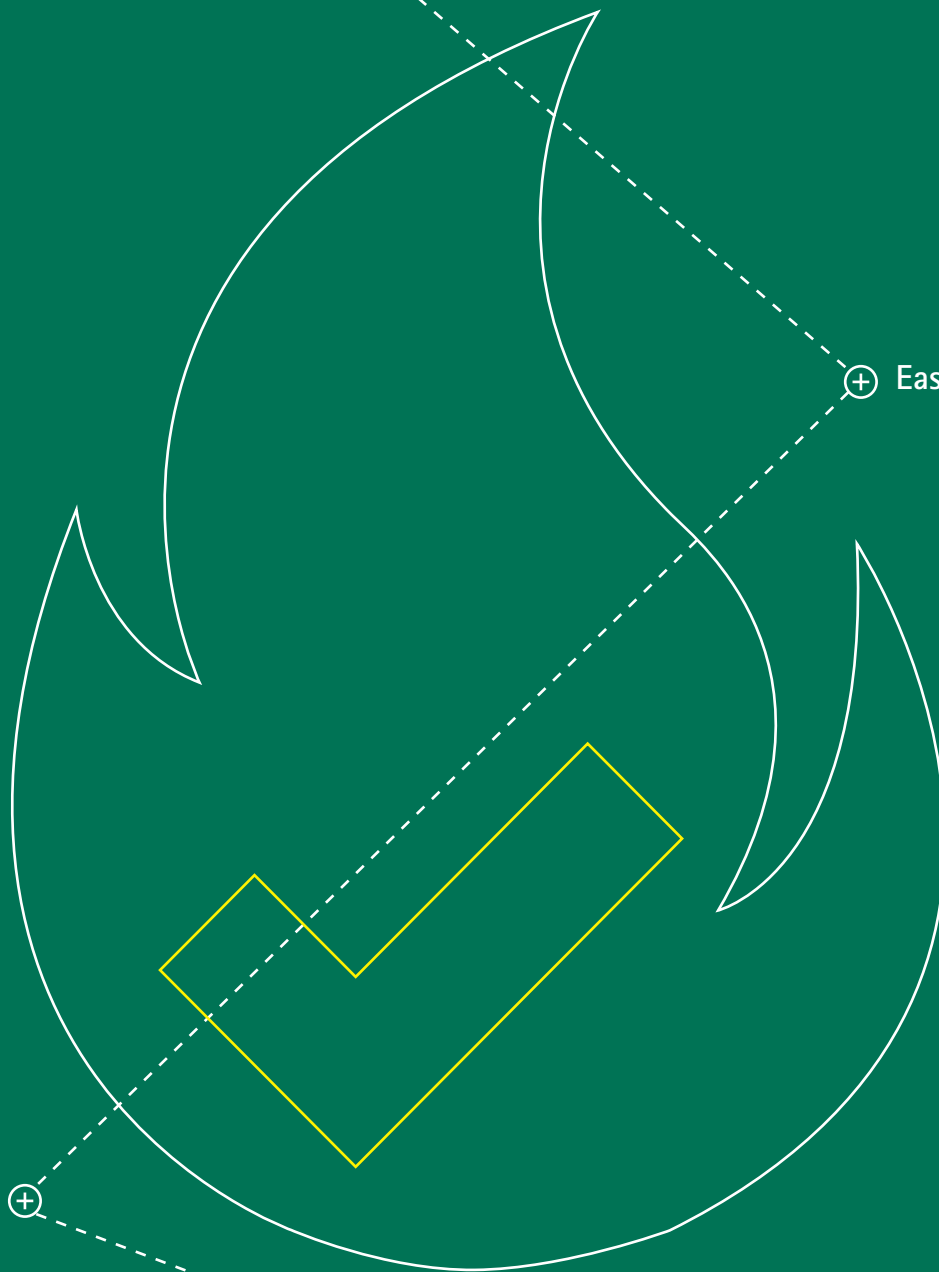
Whether you need to seal a joint or a penetration, our Walraven Pacifyre® Product Selector is here to assist you in making the right decision! By selecting various essential parameters, our Walraven Pacifyre® Product Selector will provide the best product options to meet the requirement and be certified for your specific situation. In the unlikely event that no solution is given, our specialists are happy to help you further.



walraven.com/selector/



Other Walraven fire tested solutions



⊕ Easy to install

⊕ Tested and certified

⊕ Complete solution

Other Walraven fire tested solutions



■ Fire test Walraven Fixing Systems

It is vital to ensure that all passageways, escape routes, and exits in a building are free from any obstructions or obstacles. This is essential for the safety of the building's occupants in the event of an emergency such as a fire. The occupants should be able to find a way out quickly and easily without any delays.

It has been observed in recent years that more and more pipes are being installed in escape routes. In such installations, a fire-resistant suspended ceiling is often fixed to hide the pipes. However, it is essential to note that suspended ceilings should not be mechanically loaded during a fire. This means that nothing should fall on or put pressure on the suspended ceiling, as it can cause the ceiling to break or crack, damaging the fire compartmentation and affecting the escape route.







Thus, the fastening materials used in these installations must be tested for their fire-safe technical properties. This includes all the products that comprise the total fastening system, including the plugs and anchors used.

If fire-safe tested fastening materials are used and installed correctly, the escape routes can be used confidently during a fire. At Walraven, we consider the fire safety requirements when designing our product range. Our fastening systems are tested in accordance with RAL GZ-655, RAL GZ-656, and NEN-EN 1363, Part 1. This enables the safe and secure installation of pipes in fire-protective spaces between floor panels and ceilings.



Fire safety tested Walraven Clamps



Product	Size (mm)	Connecting nut	Part No.	RAL-GZ 656 Cert. No.
 Walraven BISMAT® Flash	15 - 63	M8	3373XXX	2011-09
	15 - 63	M8	3374XXX	2011-09
 Walraven BISMAT® 2000	15 - 63	M8	3413 XX	2011-10
	15 - 63	M8 / M10	3403XXX	2011-10
 Walraven BISMAT® 2000	57 - 114	M8 / M10	3403XXX	2011-10
 Walraven BISMAT® 2000 'S'	15 - 63	M8	34140XX	2011-11
	15 - 63	M8 / M10	34040XX	2011-11
 Walraven HD1501 Walraven BIS UltraProtect® 1000*	15 - 64	M8 / M10	331380XX	2011-14
	65 - 227	M10 / M12	33148XXX	2011-14
	159 - 227	M16	33168XXX	2011-14
	15 - 227	G½"	33178XXX	2011-14
 Walraven HD500 Walraven BIS UltraProtect® 1000*	15 - 71	M8 / M10	330380XX	2011-05
	72 - 227	M10 / M12	33048XXX	2011-05
	15 - 227	G½"	33078XXX	2011-05



* The product is part of the Walraven BIS UltraProtect® 1000 system and is proven to be suitable for corrosive environments. The surface protection effortlessly withstands a salt spray test of at least 1000 hours in line with ISO 9227, until the occurrence of maximum 5% red rust and with a layer thickness of 50 - 80 µm.





Chemical Anchors

WVSF 200

✓	✓	✓	✓	
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				✓
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✓	✓	✓	✓	✓
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✓	✓	✓	✓	✓
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			✓	
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ETA-16/0971	ETA-16/0783	ETA-16/0783	ETA-16/0783	ETA-16/0783
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✓	✓	✓	✓	✓
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Material	Zinc Plated	
	Zinc-flake Coated	
	Stainless Steel (SSt)	

Substrates	Non-cracked Concrete	✓
	Cracked Concrete	✓
	Hollow core slab	
	Silicate Brick	
	Solid Brick	
	Hollow Brick	
	Aerated Concrete	
Stone		

Certification	ETA	ETA-16/0543 ETA-16/0544
	Seismic	C1
	Fire	✓



Fire safety tested Walraven RapidStrut® Rail system

Walraven BIS UltraProtect® 1000*, Pre-galvanized, Zinc Plated

Product	Surface protection	Size	Part No.	
	Walraven RapidStrut® Fixing Rail	Walraven BIS UltraProtect® 1000	41 H (41 x 41 x 2.5 mm)	65018X47
			62 H (41 x 62 x 2.5 mm)	65018X67
	Walraven RapidStrut® Fixing Rail	Pre-galvanized	41 H (41 x 41 x 2.5 mm)	6505X45
			62 H (41 x 62 x 2.5 mm)	6505X65
	Walraven RapidStrut® Base Plate G2	Walraven BIS UltraProtect® 1000	For Walraven RapidStrut® 21, 41, 51, 62, 82	665885400
	Walraven RapidStrut® Base Plate G2	Zinc plated	For Walraven RapidStrut® 21, 41, 51, 62, 82	66583804
	Walraven RapidStrut® Cantilever Arm	Walraven BIS UltraProtect® 1000	41 H (41 x 41 x 2.5 mm)	660841XX
	Walraven RapidStrut® Hammerfix G2	Walraven BIS UltraProtect® 1000	M10	6527850XX
			M12	65278520X
	Walraven RapidStrut® Slide Nuts G2	Walraven BIS UltraProtect® 1000	M10	665185110
			M12	665185112
	Walraven RapidStrut® Slide Nuts Plastic Tabs	Walraven BIS UltraProtect® 1000	M10	651868010
			M12	651868012
	Walraven RapidStrut® Slide Nuts Plastic Tabs	Zinc plated	M10	6518610
			M12	6518612
	Walraven RapidStrut® Slide Nut	Zinc plated	M10	6517010
			M12	6517012
	Walraven RapidStrut® Slide Nut	Walraven BIS UltraProtect® 1000	M10	65188010
			M12	65188012
	Walraven RapidStrut® Washer – U-shaped	Walraven BIS UltraProtect® 1000	Ø 11	66588010
			Ø 13	66588012
	Walraven Hexagon Nut	Zinc plated	M10	6123010
			M12	6123012
	Walraven Hexagon Nut	Walraven BIS UltraProtect® 1000	M10	61281010
			M12	61281012
	Walraven Threaded Rod	Zinc plated	M10	6303X10
			M12	6303X12
	Walraven Threaded Rod	Walraven BIS UltraProtect® 1000	M10	6308X010
			M12	6308X012

* The product is part of the Walraven BIS UltraProtect® 1000 system and is proven to be suitable for corrosive environments. The surface protection effortlessly withstands a salt spray test of at least 1000 hours in line with ISO 9227, until the occurrence of maximum 5% red rust and with a layer thickness of 50 - 80 µm.



Fire safety tested Walraven RapidStrut® Rail system

Stainless Steel

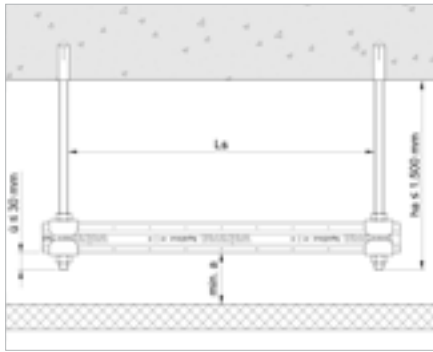
Product	Size	Part No.
 Walraven RapidStrut® Stainless Steel Fixing Rail	41 x 41 x 2.5 mm	6507X27
 Walraven RapidStrut® Stainless Steel Base Plate G2	For Walraven RapidStrut® Fixing Rail up to 82 mm height	665875400
 Walraven RapidStrut® Stainless Steel Cantilever Arm	41 x 41 x 2.5 mm	660786X 660787X
 Walraven RapidStrut® Washer – U-shaped	Ø 11 Ø 13	6571010 6571012
 Walraven RapidStrut® Stainless Steel Tee-Bolt	M10 M12	6527744 6527754
 Walraven RapidStrut® Stainless Steel Slide Nut G2	M10	665175110
 Walraven Stainless Steel Hexagon Nut	M10 M12	6127010 6127012
 Walraven WIS Threaded Rod SSt	M10 M12	63079110 63079112
 Walraven RapidStrut® Stainless Steel Slide Nut	M10 M12	6517710 6517712
 Walraven RapidStrut® Stainless Steel Slide Nut with Tabs	M10 M12	651867010 651867012



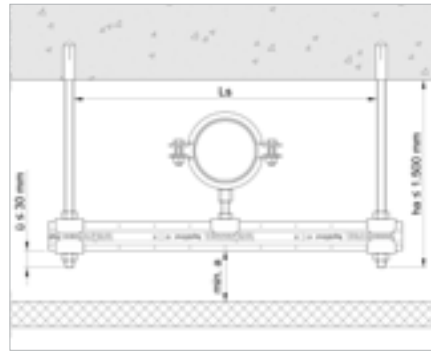
** Tested and certified by MPA Braunschweig / Germany:

Assessment of loaded Walraven RapidStrut® Fixing Rails combined with threaded rods fixed to solid structural elements with regard to loadbearing capacity and deformation under exposure to fire along the standard temperature-time curve (ETK) in accordance with DIN EN 1361-1.

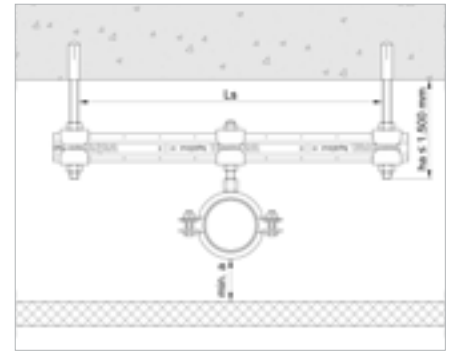
Tested and certified installation situations



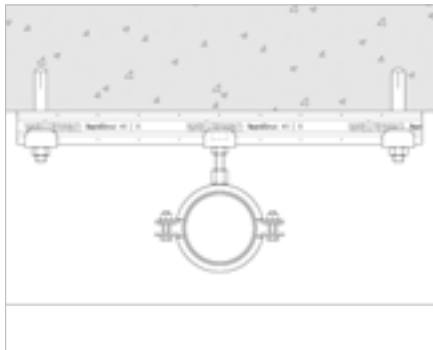
■ Channel suspended from the ceiling



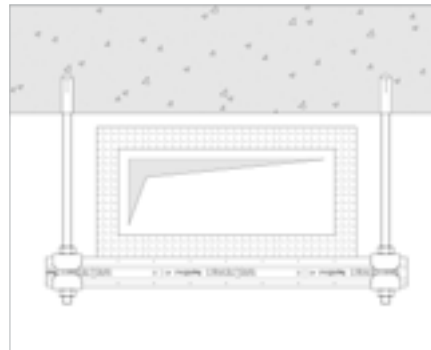
■ Channel suspended from the ceiling with pipe clamps above the channel



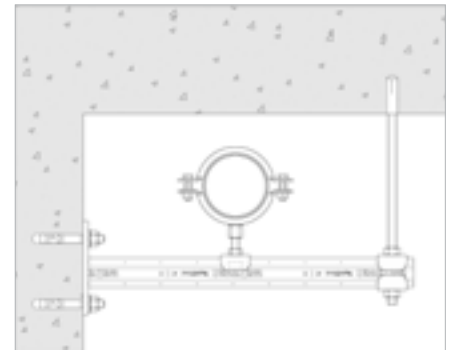
■ Channel suspended from the ceiling with pipe clamps below the channel



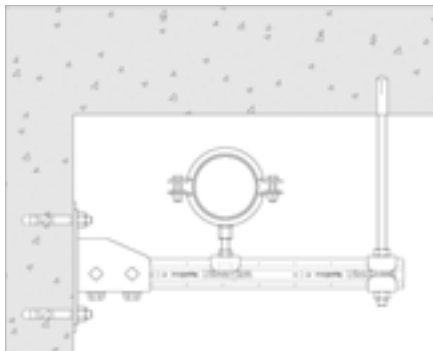
■ Channel fixed directly to the ceiling with pipe clamp below



■ Channel suspended from the ceiling with airduct channel above



■ Cantilever arm fixed to the wall, suspended from the ceiling and pipe clamp above



■ Rail Baseplate fixed to the wall, with horizontal channel, suspended from the ceiling and pipe clamp above

Note: The built-in guidelines of the general building regulations must be adhered to.

Sprinkler Systems

Automatic sprinkler systems are nowadays the most widely used fire protection systems in the world. For over a hundred years, sprinkler systems have proven their reliability and optimal protection against fire. Sprinkler systems were previously mainly used to limit fire and fire damage in industrial facilities, but further technological developments have broadened the application.

Over the years, sprinklers have become increasingly sensitive, so sprinkler systems now also serve as specific fire protection for individuals. Limiting damage to the environment and directly suppressing the fire, thereby preventing a calamity in the early stages of the fire, are important factors driving the increasing use of sprinkler systems.

The wide application of sprinkler systems is found in, among other things, industrial facilities, high storage of goods, protection of value concentrations, storage of hazardous substances, aircraft hangars, ships, offshore platforms, garages, and process industry, but also increasingly in: shopping centres, department stores, hotels, office buildings, hospitals, nursing homes, schools and libraries.

This growing application will continue to evolve due to new sprinkler protection methodologies, which will play a significant



role in designing even more cost-effective automatic fire protection installations in the future.

Sprinklers have proven their reliability multiple times over the years. Survival chances in a building with a sprinkler system installed are better than in a building without such an installation. It has often happened that the sprinkler system has extinguished the (incipient) fire before the fire brigade arrives.

Spacing and placement of fittings









A sprinkler system consists of water pipes with sprinklers mounted on them. As soon as a sprinkler starts spraying water, water flows at the beginning of the piping system, causing an alarm valve or flow switch to detect a fire somewhere. This detection is reported to the building's users via the fire alarm control panel and usually to the regional fire service as well.

The sprinklers have a fusible link that breaks at a certain temperature, causing the water to impinge on a deflector plate, distributing the water widely across the space. Sprinklers are available in different temperatures, indicated by a colour code. The sprinkler sprays water around under the ceiling. This is important because, during a fire, hot gases accumulate against the ceiling. By not only extinguishing the fire but also cooling these hot gases with water, the situation in the space becomes safer quickly.

Installation of sprinkler systems

The installation and fixing of a sprinkler system must be carried out in accordance with standard CEA 4001. When installing sprinkler systems, VdS-approved pipe fixings are frequently prescribed in Europe. Walraven offers a wide range of VdS-approved pipe fixings.

Overview of sprinkler fixings

Pipe fixings					
Product	Size	Connecting nut	Part No.	Cert. No.	
	Walraven Sprinkler Clamp TA41 Sendzimir galvanised	1/2" - 8" 23 - 221 mm	M10, M12	4535XXX	FM UL
	Walraven Sprinkler Clamp FM VdS Sendzimir galvanised	3/4" - 8" 26.9 - 219.1 mm	M8, M10, M12, M16	45555XXX 45565XXX	FM VdS
	Walraven Sprinkler Clamp HD500 Walraven BIS UltraProtect® 1000* Electrogalvanised	3/4" - 8"	M8, M10, M12, M16		VdS
Anchors					
Product	Size	Connecting nut	Part No.	Cert. No.	
	WDI1R Drop-in Anchor Electrogalvanised		M8 - M12	61032XX	CEA 4001
	WCA1 Ceiling Anchor Electrogalvanised		-	60964XX	CEA 4001
	WGB-M Aerated Concrete Anchor Electrogalvanised		M10 - M12	610351X	VdS 2001
	WTB1 Throughbolt Anchor Electrogalvanised		M8 - M16	609831XXX	CEA 4001
	WCS1N Concrete Screw Anchor Electrogalvanised	L = 35 mm L = 55 mm	M8, M10 M8, M10	6243330X	CEA 4001

Products for pipe fixings

Product	Size	Part No.	Cert. No.
 Walraven Beam Clamp Model C Electrogalvanised	M8 - M12 Ø 9 - 13 mm Up to flange thickness 26 mm	60XXXXX	VdS FM
 Walraven Safety Strap for Beam Clamp Model C Pre-galvanized	Ø 10.5 mm L 350 mm Ø 12.5 mm L 400 mm	601511X	CEA 4001
 Walraven Swivel Beam Clamp Model P Electrogalvanised	M10 Up to flange thickness 17 mm	6078010	VdS CEA 4001 FM
 Walraven Strut 'Heavy Duty' Beam Clamp Galvanised	Up to flange thickness 35 mm	6072002	CEA 4001
 Walraven Roofing Sheet Hanger VdS Electrogalvanised	M8 - M10 Ø 13 mm	67850XX	VdS
 Walraven Toggle Plug Electrogalvanised	M10 x 100 mm	067060X	VdS
 Walraven U-Clamp	M8 - M20	2084XXXXXX	CEA 4001
 Walraven RapidStrut® Fixing rail Walraven BIS UltraProtect® 1000 Pre-galvanized	41 H (41 x 41 x 2.5 mm) 62 H (41 x 62 x 2.5 mm) 82 H (41 x 82 x 2.5 mm) 62 H - Double	65018XXX 6505XXX	CEA 4001
 Walraven RapidStrut® Cantilever Arm Walraven BIS UltraProtect® 1000	41 H (41 x 41 x 2.5 mm)	660841XX	CEA 4001
 Walraven RapidStrut® G2 Accessoires Walraven BIS UltraProtect® 1000		665XXXXXX	CEA 4001
 Walraven Wall Plate 670 Electrogalvanised	M8 - 1"	67X30XX	CEA 4001
 Walraven Threaded Rod Walraven BIS UltraProtect® 1000 Pre-galvanized	M8 - M24 1.000 mm	63X3XXX	CEA 4001

Note:

VdS 2100 VdS rules for water extinguishing systems - specifications and testing methods for component parts, edition 1988-05
CEA 4001 VdS CEA guidelines for sprinkler systems: planning and installation, edition 2018-01 (06)

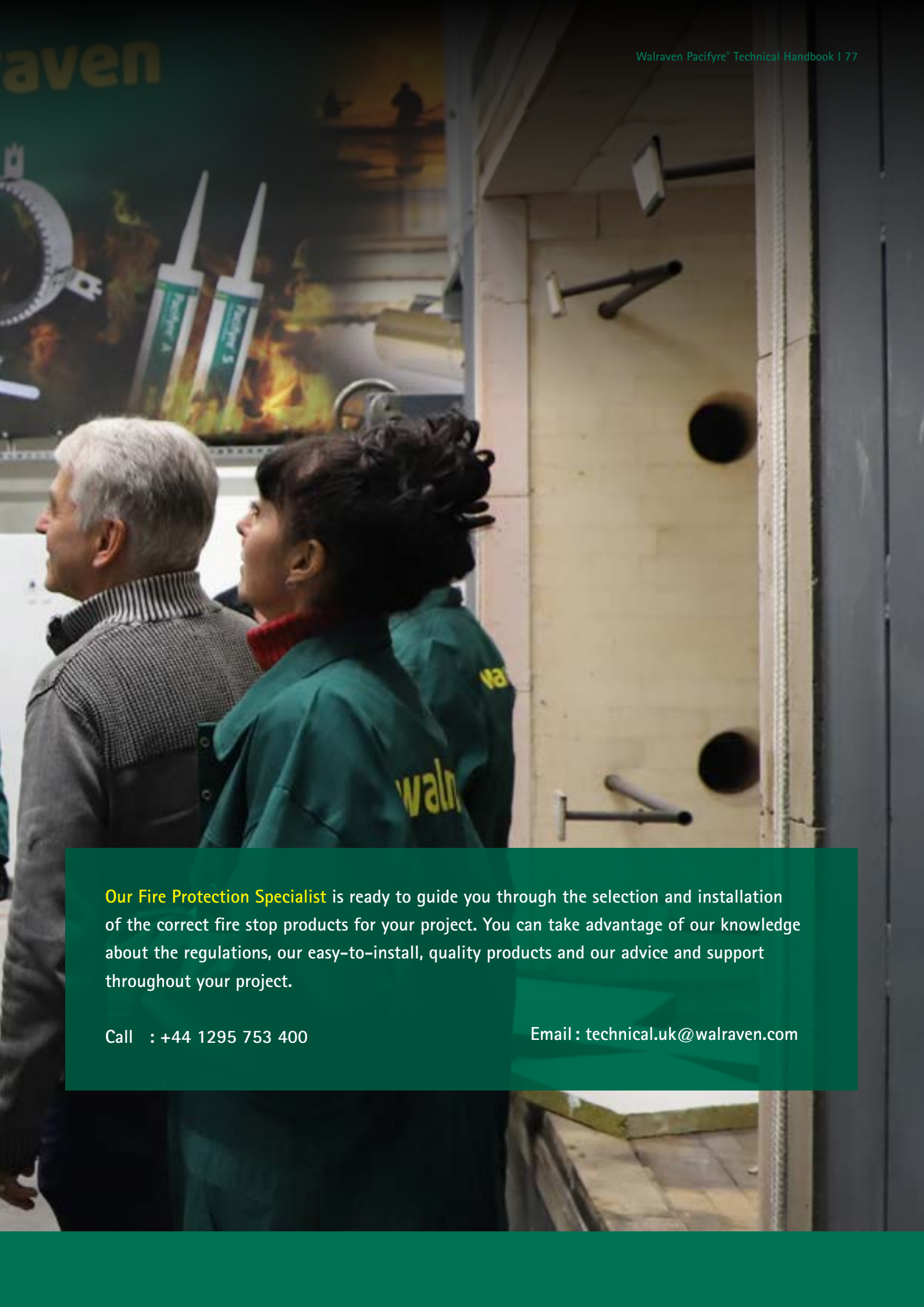
Application diagrams

Sprinkler fixing solutions from the structural shell to the pipe

Structural shell (substrate)/ component	Aerated Concrete	Concrete	Steel Beam	Trapezoidal Sheet
Shell anchoring/ component attachment	<p>WGB-M Aerated Concrete Anchor</p>  <p>VdS</p>	<p>Heavy Duty Anchor CEA 4001</p> <p>WDI1R Drop-in Anchor</p>  <p>WHC Hollow Ceiling Anchor Easy</p>  <p>WTB1 Bolt Anchor</p>  <p>W-LX-N Concrete Screw</p> 	<p>Walraven Beam Clamp Model C</p>  <p>UL LISTED FM APPROVED VdS</p> <p>Walraven Swivel Beam Clamp Model P</p>  <p>FM APPROVED</p>	<p>Walraven Trapezoidal Sheet Hanger VdS</p>  <p>VdS</p> <p>Walraven Toggle Anchor</p>  <p>VdS</p>
Attachment parts/ threaded components	<p>Walraven Threaded Rods and Pins</p> 			
Pipe fixings	<p>Walraven Sprinkler Clamp HD500</p> <p>M8, M10, M12, M16</p>  <p>VdS</p>		<p>Walraven Sprinkler Hanger FM VdS</p> <p>M8, M10, M12, M16</p>  <p>FM APPROVED VdS</p>	

Technical Support and Advice





Our Fire Protection Specialist is ready to guide you through the selection and installation of the correct fire stop products for your project. You can take advantage of our knowledge about the regulations, our easy-to-install, quality products and our advice and support throughout your project.

Call : +44 1295 753 400

Email : technical.uk@walraven.com

Walraven Pacifyre® Selection chart

Introducing the Walraven Pacifyre Selection Chart – your go-to tool for finding the correct information easily.

This chart is designed to help you navigate our Walraven Pacifyre® Portfolio.

The data is organised by the component in which your penetration occurs and then by the type of material that will penetrate the component. Simply click on the scenario that matches your application, and you will be directed to the relevant information.

Cables	Rigid Floors
Combustible pipes, insulated	
Combustible pipes, uninsulated	
Metal pipes, insulated	Flexible walls
Aircon bundles	
Cables	
Combustible pipes, insulated	
Combustible pipes, uninsulated	Rigid walls
Metal pipes, insulated	
Aircon bundles	
Cables	
Combustible pipes, insulated	Shaft walls
Combustible pipes, uninsulated	
Metal pipes, insulated	
Combustible pipes, uninsulated	

Rigid floors

Cables						Rigid floors	
Material	Service type	Max. dimension	With or without cable carrier	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Any type	Cable bundle	100	With	EI 90	Tangit FP 550 2C	2181550	≥150
Any type	Cable bundle	100	Without	EI 90	Tangit FP 550 2C	2181550	≥150
Any type	Single cable	Any dimension	With	EI 90	Tangit FP 550 2C	2181550	≥150
Any type	Single cable	Any dimension	Without	EI 90	Tangit FP 550 2C	2181550	≥150
Sheathed	Single cable	21	Without	EI 90	Walraven Pacifyre® A	2180100010	≥150
Sheathed	Single cable	21	Without	EI 120	Walraven Pacifyre® G	2180100040	≥150
Sheathed	Cable bundle	30	Without	EI 90	Walraven Pacifyre® A	2180100010	≥150
Sheathed	Cable bundle	50	Without	EI 60	Walraven Pacifyre® A	2180100010	≥150
Sheathed	Cable bundle	50	Without	EI 120	Walraven Pacifyre® G	2180100040	≥150

Combustible pipes, insulated						Rigid floors	
Material	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)		
Alpex	75	EI 120	Walraven Pacifyre® EFC	2132100600	≥150		
Alpex Duo	63	EI 90	Tangit FP 550 2C	2181550	≥150		
Alpex Duo	40 - 75	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150		
Aquatherm Blue Pipe SDR 11 MF RP	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥150		
Aquatherm Blue Pipe SDR 11 MF RP	355	EI 120	Walraven Pacifyre® AWM II	2134355355	≥300		
Aquatherm Blue Pipe SDR 17,6 MF RP	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥150		
Aquatherm Blue Pipe SDR 17,6 MF RP	355	EI 120	Walraven Pacifyre® AWM II	2134355355	≥300		
Aquatherm Blue Pipe SDR 9 MF RP	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥150		
Aquatherm Green Pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150		
Aquatherm Green Pipe SDR 11 S	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥200		
Aquatherm Green Pipe SDR 11 S	315	EI 120	Walraven Pacifyre® AWM II	2134315315	≥300		
Aquatherm Green Pipe SDR 6 S	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥150		
Aquatherm Green Pipe SDR 7,4 S	63	EI 120	Walraven Pacifyre® AWM II	2134063065	≥150		
Aquatherm Green Pipe SDR 9 MF RP	90	EI 120	Walraven Pacifyre® AWM II	2134090092	≥150		
Aquatherm Green Pipe SDR 9 MF RP	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥200		
Aquatherm Green Pipe SDR 9 MF RP	355	EI 120	Walraven Pacifyre® AWM II	2134355355	≥300		
Coolfit	125 - 630	EI 120	Walraven Pacifyre® AWM II	2134125125	≥300		
Coolfit	140/75 - 315/225	EI 90	Walraven Pacifyre® AWM II	2134225280	≥300		
Coolfit	180 - 110	EI 90	Walraven Pacifyre® AWM III	2135180180	≥100		
Coolfit	315 - 225	EI 120	Walraven Pacifyre® AWM II	2134225315	≥300		
Coolfit	90 - 125	EI 120	Walraven Pacifyre® AWM III	2135125125	≥100		
Coolfit 2.0	110 - 160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥150		
Coolfit 2.0	140 - 200	EI 90	Walraven Pacifyre® AWM II	2134200200	≥150		
Coolfit 4.0	355 - 500	EI 120	Walraven Pacifyre® AWM II	2134500500	≥150		
Coolfit 4.0F	225 - 315	EI 120	Walraven Pacifyre® AWM II	2134315315	≥150		
Frankische Alpex F50 PROFI	32	EI 120	Walraven Pacifyre® FPW	2122250920	≥150		
Frankische Alpex F50 PROFI	32	EI 120	Walraven Pacifyre® G	2180100040	≥150		
Frankische Alpex L	32	EI 120	Walraven Pacifyre® FPW	2122250920	≥150		
Frankische Alpex L	32	EI 120	Walraven Pacifyre® G	2180100040	≥150		
Fusiotherm	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥150		
PE	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150		
PVC	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150		

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid floors

Combustible pipes, insulated

Rigid floors

Material	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Uponor Unipipe MLCP	32	EI 120	Walraven Pacifyre® G	2180100040	≥150
Uponor Unipipe MLCP	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Uponor Unipipe MLCP	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Uponor Unipipe MLCP	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Uponor Unipipe MLCP	32 - 75	EI 90	Tangit FP 550 2C	2181550	≥150

Combustible pipes, uninsulated

Rigid floors

Material	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
ABS	50	EI 120	Walraven Pacifyre® G	2180100040	≥150
ABS	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
ABS	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥300
ABS	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
ABS	110 - 160	EI 60	Walraven Pacifyre® FPW	2122250920	≥150
Alpex	75	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Alpex Duo	75	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Aquatherm Blue Pipe SDR 11 MF RP	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥150
Aquatherm Blue Pipe SDR 11 MF RP	250	EI 120	Walraven Pacifyre® AWM II	2134250250	≥200
Aquatherm Blue Pipe SDR 17,6 MF RP	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥150
Aquatherm Blue Pipe SDR 17,6 MF RP	250	EI 120	Walraven Pacifyre® AWM II	2134250250	≥200
Aquatherm Blue Pipe SDR 17,6 MF RP	315	EI 45	Walraven Pacifyre® AWM II	2134315315	≥200
Aquatherm Blue Pipe SDR 9 MF RP	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥150
Aquatherm Blue Pipe SDR 9 MF RP OT	250	EI 120	Walraven Pacifyre® AWM II	2134250250	≥150
Aquatherm Green Pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥150
Aquatherm Green Pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Aquatherm Green Pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Aquatherm Green Pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Aquatherm Green Pipe SDR 11 S	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥150
Aquatherm Green Pipe SDR 11 S	315	EI 120	Walraven Pacifyre® AWM II	2134315315	≥200
Aquatherm Green Pipe SDR 6 S	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥150
Aquatherm Green Pipe SDR 7,4 S	63	EI 120	Walraven Pacifyre® AWM II	2134063065	≥150
Aquatherm Green Pipe SDR 9 MF RP	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥150
Aquatherm Green Pipe SDR 9 MF RP	355	EI 120	Walraven Pacifyre® AWM II	2134355355	≥200
Blue Power	50	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Blue Power	50 - 110	EI 90	Walraven Pacifyre® EFC	2132100600	≥150
Conel Drain	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥150
Conel Drainpipes	75	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Conel Drainpipes	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥150
Frankische Alpex F50 PROFI	32	EI 120	Walraven Pacifyre® G	2180100040	≥150
Frankische Alpex F50 PROFI	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Frankische Alpex L	32	EI 120	Walraven Pacifyre® G	2180100040	≥150
Frankische Alpex L	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Fusiotherm	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Geberit Silent PP	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥150
Geberit Silent PP	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors
Flexible walls
Rigid walls
Shaft walls

Rigid floors

Combustible pipes, uninsulated

Rigid floors

Material	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Geberit Silent PP	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Geberit Silent PP	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥150
Geberit Silent PP	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Geberit Silent PP	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
Geberit Silent PP	40 - 110	EI 90	Tangit FP 550 2C	2181550	≥150
Geberit Silent Pro	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Geberit Silent Pro	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥150
Geberit Silent Pro	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
Georg Fischer Silenta Premium	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Georg Fischer Silenta Premium	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥150
Georg Fischer Silenta Premium	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
Multilayer with aluminium	75	EI 120	Walraven Pacifyre® MKII	2154075077	≥150
Ostendorf Skolan dB	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥150
PE	50	EI 120	Walraven Pacifyre® G	2180100040	≥150
PE	75	EI 240	Walraven Pacifyre® EFC	2132100600	≥150
PE	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
PE	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
PE	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
PE	160	EI 180	Walraven Pacifyre® BFC	2133000160	≥150
PE	160	EI 120	Walraven Pacifyre® MKII	2158159161	≥150
PE	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥300
PE	280	EI 120	Walraven Pacifyre® FPC	2122000250	≥150
PE	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
PE	110 - 160	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
PE	110 - 160	EI 60	Walraven Pacifyre® FPW	2122250920	≥150
PE	280 - 315	EI 90	Walraven Pacifyre® FPC	2122000315	≥150
PE	75 - 110	EI 180	Walraven Pacifyre® EFC	2132100600	≥150
PE-HD	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥150
PE-HD	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
Pelletschlauch PUR - Cu	60	EI 120	Walraven Pacifyre® AWM II	2134063065	≥150
Pelletschlauch PVC - Cu	60	EI 120	Walraven Pacifyre® AWM II	2134063065	≥150
PE-X	50	EI 120	Walraven Pacifyre® G	2180100040	≥150
PE-X	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
PE-X	280	EI 90	Walraven Pacifyre® FPC	2122000280	≥150
PE-X	110 - 160	EI 60	Walraven Pacifyre® FPW	2122250920	≥150
PE-X	280 - 315	EI 90	Walraven Pacifyre® FPC	2122000315	≥150
Polokal 3S	125	EI 120	Walraven Pacifyre® AWM II	2134125125	≥150
Polokal NG	160	EI 90	Walraven Pacifyre® AWM II	2134160160	≥150
Polokal XS	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥150
Polokal XS	160	EI 90	Walraven Pacifyre® AWM II	2134160160	≥150
Poloplast POLO-KAL 3S	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Poloplast POLO-KAL 3S	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
Poloplast POLO-KAL NG	75	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Poloplast POLO-KAL NG	75	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Poloplast POLO-KAL NG	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥150

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid floors

Combustible pipes, uninsulated

Rigid floors

Material	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Poloplast POLO-KAL NG	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Poloplast POLO-KAL NG	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
Poloplast POLO-KAL NG	110 - 160	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
PP	75	EI 240	Walraven Pacifyre® EFC	2132100600	≥150
PP	110	EI 180	Walraven Pacifyre® BFC	2133000110	≥150
PP	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
PP	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
PP	160	EI 120	Walraven Pacifyre® MKII	2158159161	≥150
PP	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥300
PP	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
PP	110 - 160	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
PP	200 - 315	EI 90	Walraven Pacifyre® AWM II	2134225315	≥300
PP	40 - 110	EI 90	Tangit FP 550 2C	2181550	≥150
PP	75 - 110	EI 180	Walraven Pacifyre® EFC	2132100600	≥150
PP-H	50	EI 120	Walraven Pacifyre® G	2180100040	≥150
PP-H	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
PP-H	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
PP-H	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥150
PP-H	315	EI 120	Walraven Pacifyre® AWM II	2134315315	≥300
PVC	50	EI 120	Walraven Pacifyre® G	2180100040	≥150
PVC	110	EI 180	Walraven Pacifyre® BFC	2133000110	≥150
PVC	110	EI 240	Walraven Pacifyre® EFC	2132100600	≥150
PVC	110	EI 90	Tangit FP 550 2C	2181550	≥150
PVC	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
PVC	160	EI 120	Walraven Pacifyre® BFC	2133000160	≥150
PVC	160	EI 240	Walraven Pacifyre® IWM III	2136050125	≥150
PVC	160	EI 120	Walraven Pacifyre® MKII	2158159161	≥150
PVC	160	EI 90	Walraven Pacifyre® FPW	2122250920	≥150
PVC	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
PVC	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥150
PVC	315	EI 120	Walraven Pacifyre® FPC	2122000315	≥150
PVC	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥100
PVC	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
PVC	110 - 160	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Rehau Raupiano light	110	EI 90	Walraven Pacifyre® AWM II	2134110112	≥150
Rehau Raupiano Plus	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥150
Rehau Raupiano Plus	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Rehau Raupiano plus	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Rehau Raupiano Plus	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Rehau Raupiano plus	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
SAN+PVC	50	EI 120	Walraven Pacifyre® G	2180100040	≥150
SAN+PVC	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
SAN+PVC	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥300
SAN+PVC	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid floors

Combustible pipes, uninsulated

Rigid floors

Material	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
SAN+PVC	110 - 160	EI 60	Walraven Pacifyre® FPW	2122250920	≥150
Uponor Unipipe MLCP	32	EI 120	Walraven Pacifyre® G	2180100040	≥150
Uponor Unipipe MLCP	50	EI 120	Walraven Pacifyre® BFC	2133000050	≥150
Uponor Unipipe MLCP	50	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Uponor Unipipe MLCP	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Uponor Unipipe MLCP	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Uponor Unipipe MLCP	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Uponor Unipipe MLCP	50 - 110	EI 90	Walraven Pacifyre® BFC	2133000110	≥150
Uponor Unipipe MLCP	50 - 110	EI 90	Walraven Pacifyre® EFC	2132100600	≥150
Valsir TriPLUS	50	EI 90	Walraven Pacifyre® AWM II	2134050052	≥150
Wavin AS+	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Wavin AS+	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
Wavin SiTech	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥150
Wavin SiTech	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥150
Wavin SiTech+	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥150
Wavin SiTech+	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥150
Wavin SiTech+	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥150
Wavin SiTech+	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥150
Wavin SiTech+	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥150
Wavin SiTech+	110 - 160	EI 60	Walraven Pacifyre® EFC	2132100600	≥150
Wavin SiTech+	50 - 110	EI 60	Walraven Pacifyre® BFC	2133000160	≥150
Wavin SiTech+	50 - 110	EI 90	Tangit FP 550 2C	2181550	≥150

Metal pipes, insulated

Rigid floors

Material	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Copper	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Copper	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Copper	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥100
Copper	88.9	EI 90	Tangit FP 550 2C	2181550	≥100
Copper	88.9	EI 120	Walraven Pacifyre® A	2180100010	≥100
Stainless steel	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Stainless steel	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Stainless steel	219.1	EI 120	Walraven Pacifyre® A	2180100010	≥100
Stainless steel	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥100
Steel	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Steel	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Steel	139.7	EI 90	Tangit FP 550 2C	2181550	≥100
Steel	219.1	EI 120	Walraven Pacifyre® A	2180100010	≥100
Steel	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥100

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors
Flexible walls
Rigid walls
Shaft walls

Flexible walls

Aircon bundles

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Aircon bundle	PVC pipe	11	EI 120	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	Sheathed cable	14	EI 120	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	PVC pipe	24	EI 60	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	Copper pipe (insulated)	15.87	EI 60	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	Copper pipe (insulated)	9.65	EI 120	Walraven Pacifyre® G	2180100040	≥100

Cables

Flexible walls

Material	Service type	Max. dimension	With or without cable carrier	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Any type	Single cable	80	Without	EI 90	Tangit FP 550 2C	2181550	≥100
Any type	Cable bundle	100	Without	EI 90	Tangit FP 550 2C	2181550	≥100
Sheathed	Single cable	21	Without	EI 60	Walraven Pacifyre® A	2180100010	≥100
Sheathed	Single cable	21	Without	EI 120	Walraven Pacifyre® G	2180100040	≥100
Sheathed	Cable bundle	50	Without	EI 60	Walraven Pacifyre® A	2180100010	≥100
Sheathed	Cable bundle	50	Without	EI 120	Walraven Pacifyre® G	2180100040	≥100

Combustible pipes, insulated

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Alpex	Plastic pipe	16	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Alpex	Plastic pipe	50	EI 60	Walraven Pacifyre® EFC	2132100600	≥94
Alpex	Plastic pipe	75	EI 90	Walraven Pacifyre® EFC	2132100600	≥94
Alpex Duo	Plastic pipe	40	EI 120	Walraven Pacifyre® IWM III	2136050125	≥120
Alpex Duo	Plastic pipe	40 - 75	EI 90	Walraven Pacifyre® IWM III	2136050125	≥120
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Aquatherm Blue Pipe SDR 9 MF RP	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Blue Pipe SDR 9 MF RP OT	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Aquatherm Green Pipe SDR 11 S	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Aquatherm Green Pipe SDR 6 S	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Aquatherm Green Pipe SDR 7,4 S	Plastic pipe	63	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100
Aquatherm Green Pipe SDR 9 MF RP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Coolfit	Plastic pipe	90/25 - 180/110	EI 120	Walraven Pacifyre® AWM II	2134180180	≥100
Coolfit 2.0	Plastic pipe	140 - 200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Coolfit 4.0	Plastic pipe	110 - 180	EI 120	Walraven Pacifyre® AWM II	2134180180	≥100
Coolfit 4.0	Plastic pipe	63 - 110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Frankische Alpex F50 PROFI	Plastic pipe	32	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex F50 PROFI	Plastic pipe	63	EI 120	Walraven Pacifyre® G	2180100040	≥100
Frankische Alpex L	Plastic pipe	32	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex L	Plastic pipe	63	EI 120	Walraven Pacifyre® G	2180100040	≥100
Fusiotherm	Plastic pipe	50	EI 120	Walraven Pacifyre® EFC	2132100600	≥94

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Flexible walls

Combustible pipes, insulated

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Fusiotherm	Plastic pipe	75	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Fusiotherm	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Plastic with aluminium layer	Plastic pipe	75	EI 90	Tangit FP 550 2C	2181550	≥100
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PVC	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Uponor Unipipe MLCP	Plastic pipe	16	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Uponor Unipipe MLCP	Plastic pipe	50	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Uponor Unipipe MLCP	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Uponor Unipipe MLCP	Plastic pipe	63	EI 120	Walraven Pacifyre® G	2180100040	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100

Combustible pipes, uninsulated

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
ABS	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
ABS	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
ABS	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
ABS	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
ABS	Plastic pipe	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
ABS	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Alplex Duo	Plastic pipe	40	EI 120	Walraven Pacifyre® IWM III	2136050125	≥120
Alplex Duo	Plastic pipe	75	EI 120	Walraven Pacifyre® IWM III	2136050125	≥120
Aquatherm Blue Pipe SDR 11 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Aquatherm Blue Pipe SDR 9 MF RP	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Blue Pipe SDR 9 MF RP OT	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Green Pipe	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Aquatherm Green Pipe SDR 11 S	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Aquatherm Green Pipe SDR 6 S	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Aquatherm Green Pipe SDR 7,4 S	Plastic pipe	63	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100
Aquatherm Green Pipe SDR 9 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
ASA	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
Blue Power	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
Blue Power	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
COES Blue Power	Plastic pipe	90	EI 120	Walraven Pacifyre® AWM II	2134090092	≥100
COES Blue Power	Plastic pipe	110	EI 90	Walraven Pacifyre® AWM II	2134110112	≥100
Conel Drain	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Conel Drainpipes	Plastic pipe	75	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Conel Drainpipes	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Flexible walls

Combustible pipes, uninsulated

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Conel Drainpipes	Plastic pipe	75 - 110	EI 90	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex F50 PROFI	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Frankische Alpex F50 PROFI	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex L	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Frankische Alpex L	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Fusiotherm	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Geberit Silent dB20	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Geberit Silent dB20	Plastic pipe	160	EI 90	Walraven Pacifyre® AWM II	2134160160	≥100
Geberit Silent PP	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
Geberit Silent PP	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Geberit Silent PP	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
Geberit Silent PP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Geberit Silent PP	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Geberit Silent PP	Plastic pipe	125 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
Geberit Silent Pro	Plastic pipe	90	EI 90	Walraven Pacifyre® FPC	2122000090	≥100
Geberit Silent Pro	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Geberit Silent Pro	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Geberit Silent Pro	Plastic pipe	90 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
Georg Fischer Silenta Premium	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Georg Fischer Silenta Premium	Plastic pipe	135	EI 120	Walraven Pacifyre® AWM II	2134135135	≥100
Georg Fischer Silenta Premium	Plastic pipe	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
KeKelit Phonex AS	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Multilayer with aluminium	Plastic pipe	75	EI 45	Walraven Pacifyre® MKII	2154075077	≥100
Multilayer with aluminium	Plastic pipe	17 - 32	EI 90	Walraven Pacifyre® MKII	2154024026	≥100
PB	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
PE	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PE	Plastic pipe	110	EI 90	Walraven Pacifyre® BFC	2133000110	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® MKII	2154108110	≥100
PE	Plastic pipe	125	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
PE	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
PE	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
PE	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
PE	Plastic pipe	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
PE	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
PE	Plastic pipe	110 - 160	EI 90	Walraven Pacifyre® EFC	2132100600	≥94
PE	Plastic pipe	125 - 160	EI 60	Walraven Pacifyre® EFC	2132100600	≥94
PE	Plastic pipe	164 - 180	EI 90	Walraven Pacifyre® MKII	2158180182	≥100
PE-HD	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Pelletschlauch PUR - Cu	Plastic pipe	60	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100
Pelletschlauch PVC - Cu	Plastic pipe	60	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Flexible walls

Combustible pipes, uninsulated

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
PE-X	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PE-X	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
PE-X	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Pipelife Master 3 Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Polokal 3S	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Polokal NG	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Polokal XS	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Poloplast POLO-KAL 3S	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Poloplast POLO-KAL 3S	Plastic pipe	110 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
Poloplast POLO-KAL 3S	Plastic pipe	75 - 110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Poloplast POLO-KAL NG	Plastic pipe	50	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Poloplast POLO-KAL NG	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Poloplast POLO-KAL NG	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Poloplast POLO-KAL NG	Plastic pipe	160	EI 120	Walraven Pacifyre® BFC	2133000160	≥100
Poloplast POLO-KAL NG	Plastic pipe	110 - 125	EI 90	Walraven Pacifyre® FPC	2122000125	≥100
Poloplast POLO-KAL NG	Plastic pipe	125 - 160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
Poloplast POLO-KAL NG	Plastic pipe	40 - 110	EI 90	Tangit FP 550 2C	2181550	≥100
Poloplast POLO-KAL NG	Plastic pipe	50 - 160	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Poloplast POLO-KAL NG	Plastic pipe	50 - 75	EI 90	Walraven Pacifyre® EFC	2132100600	≥94
PP	Plastic pipe	110	EI 90	Walraven Pacifyre® BFC	2133000110	≥100
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PP	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
PP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
PP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM III	2135160160	≥100
PP	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
PP	Plastic pipe	180	EI 90	Walraven Pacifyre® MKII	2158180182	≥100
PP	Plastic pipe	110 - 160	EI 90	Walraven Pacifyre® BFC	2133000160	≥100
PP-H	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PP-H	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
PP-H	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
PP-H	Plastic pipe	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
PVC	Plastic pipe	50	EI 120	Walraven Pacifyre® BFC	2133000050	≥100
PVC	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PVC	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PVC	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PVC	Plastic pipe	125	EI 90	Tangit FP 550 2C	2181550	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM III	2135160160	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® BFC	2133000160	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
PVC	Plastic pipe	160	EI 90	Walraven Pacifyre® EFC	2132100600	≥94

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Flexible walls

Combustible pipes, uninsulated

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
PVC	Plastic pipe	180	EI 90	Walraven Pacifyre® MKII	2158180182	≥100
Rehau Raupiano light	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Rehau Raupiano plus	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Rehau Raupiano plus	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Rehau Raupiano Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Rehau Raupiano Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® BFC	2133000160	≥100
Rehau Raupiano Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Rehau Raupiano plus	Plastic pipe	110 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
SAN+PVC	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
SAN+PVC	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
SAN+PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
SAN+PVC	Plastic pipe	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
SAN+PVC	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Triplus	Plastic pipe	90	EI 120	Walraven Pacifyre® BFC	2133000090	≥100
Triplus	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Uponor Unipipe MLCP	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Valsir TriPLUS	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Wavin AS	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Wavin AS+	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Wavin AS+	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Wavin AS+	Plastic pipe	110 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥100
Wavin SiTech+	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
Wavin SiTech+	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Wavin SiTech+	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Wavin SiTech+	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Wavin SiTech+	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Wavin SiTech+	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Wavin SiTech+	Plastic pipe	110 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥100

Metal pipes

Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Copper	Metal pipe	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Copper	Metal pipe	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Copper	Metal pipe	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥94
Copper	Metal pipe	88.9	EI 90	Tangit FP 550 2C	2181550	≥100
Copper	Metal pipe	88.9	EI 120	Walraven Pacifyre® A	2180100010	≥100
Stainless steel	Metal pipe	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Stainless steel	Metal pipe	35	EI 120	Walraven Pacifyre® G	2180100040	≥100

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Flexible walls

Metal pipes Flexible walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Stainless steel	Metal pipe	219.1	EI 120	Walraven Pacifyre® A	2180100010	≥100
Stainless steel	Metal pipe	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥94
Steel	Metal pipe	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥94
Steel	Metal pipe	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Steel	Metal pipe	139.7	EI 90	Tangit FP 550 2C	2181550	≥100
Steel	Metal pipe	219.1	EI 120	Walraven Pacifyre® A	2180100010	≥100
Steel	Metal pipe	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥94

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid walls

Aircon bundles

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Aircon bundle	PVC pipe	11	EI 120	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	Sheathed cable	14	EI 120	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	PVC pipe	24	EI 60	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	Copper pipe (insulated)	15.87	EI 60	Walraven Pacifyre® G	2180100040	≥100
Aircon bundle	Copper pipe (insulated)	9.65	EI 120	Walraven Pacifyre® G	2180100040	≥100

Cables

Rigid walls

Material	Service type	Max. dimension	With or without cable carrier	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Any type	Single cable	80	With	EI 90	Tangit FP 550 2C	2181550	≥100
Any type	Single cable	80	Without	EI 90	Tangit FP 550 2C	2181550	≥100
Any type	Cable bundle	100	With	EI 90	Tangit FP 550 2C	2181550	≥100
Any type	Cable bundle	100	Without	EI 90	Tangit FP 550 2C	2181550	≥100
Sheathed	Single cable	21	Without	EI 60	Walraven Pacifyre® A	2180100010	≥100
Sheathed	Single cable	21	Without	EI 120	Walraven Pacifyre® G	2180100040	≥100
Sheathed	Cable bundle	50	Without	EI 60	Walraven Pacifyre® A	2180100010	≥100
Sheathed	Cable bundle	50	Without	EI 120	Walraven Pacifyre® G	2180100040	≥100

Combustible pipes, insulated

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Alpex	Plastic pipe	16	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Alpex	Plastic pipe	50	EI 60	Walraven Pacifyre® EFC	2132100600	≥100
Alpex	Plastic pipe	75	EI 90	Walraven Pacifyre® EFC	2132100600	≥100
Alpex Duo	Plastic pipe	75	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Aquatherm Blue Pipe SDR 11 MF RP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Aquatherm Blue Pipe SDR 11 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥300
Aquatherm Blue Pipe SDR 11 MF RP	Plastic pipe	355	EI 90	Walraven Pacifyre® AWM II	2134355355	≥300
Aquatherm Blue Pipe SDR 11 MF RP OT	Plastic pipe	250	EI 90	Walraven Pacifyre® AWM II	2134250250	≥240
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥240
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	355	EI 90	Walraven Pacifyre® AWM II	2134355355	≥300
Aquatherm Blue Pipe SDR 9 MF RP	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Blue Pipe SDR 9 MF RP OT	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Aquatherm Green Pipe SDR 11 S	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Aquatherm Green Pipe SDR 11 S	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥240
Aquatherm Green Pipe SDR 6 S	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Aquatherm Green Pipe SDR 7,4 S	Plastic pipe	63	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100
Aquatherm Green Pipe SDR 9 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥240
Aquatherm Green Pipe SDR 9 MF RP	Plastic pipe	355	EI 120	Walraven Pacifyre® AWM II	2134355355	≥300
Coolfit	Plastic pipe	280/200 - 315/225	EI 90	Walraven Pacifyre® AWM II	2134225315	≥300
Coolfit	Plastic pipe	90/25 - 250/160	EI 120	Walraven Pacifyre® AWM II	2134225250	≥300

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid walls

Combustible pipes, insulated

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Coolfit 2.0	Plastic pipe	140 - 200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Coolfit 4.0	Plastic pipe	110 - 180	EI 120	Walraven Pacifyre® AWM II	2134180180	≥100
Coolfit 4.0	Plastic pipe	160 - 250	EI 120	Walraven Pacifyre® AWM II	2134250250	≥240
Coolfit 4.0	Plastic pipe	355 - 500	EI 90	Walraven Pacifyre® AWM II	2134500500	≥300
Coolfit 4.0F	Plastic pipe	250 - 355	EI 120	Walraven Pacifyre® AWM II	2134355355	≥240
Coolfit 4.0F	Plastic pipe	63 - 110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Frankische Alpex F50 PROFI	Plastic pipe	32	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex F50 PROFI	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Frankische Alpex L	Plastic pipe	32	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex L	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Plastic with aluminium layer	Plastic pipe	75	EI 90	Tangit FP 550 2C	2181550	≥100
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PVC	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Uponor Unipipe MLCP	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Uponor Unipipe MLCP	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100

Combustible pipes, uninsulated

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
ABS	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
ABS	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
ABS	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
ABS	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
ABS	Plastic pipe	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
ABS	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
ABS	Plastic pipe	125 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥150
ABS	Plastic pipe	200 - 400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
Alpex Duo	Plastic pipe	40	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Alpex Duo	Plastic pipe	75	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Aquatherm Blue Pipe SDR 11 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Aquatherm Blue Pipe SDR 11 MF RP	Plastic pipe	250	EI 120	Walraven Pacifyre® AWM II	2134250250	≥240
Aquatherm Blue Pipe SDR 11 MF RP	Plastic pipe	355	EI 90	Walraven Pacifyre® AWM II	2134355355	≥240
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	250	EI 120	Walraven Pacifyre® AWM II	2134250250	≥100
Aquatherm Blue Pipe SDR 17,6 MF RP	Plastic pipe	355	EI 45	Walraven Pacifyre® AWM II	2134355355	≥240
Aquatherm Blue Pipe SDR 9 MF RP	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Blue Pipe SDR 9 MF RP OT	Plastic pipe	32	EI 120	Walraven Pacifyre® AWM II	2134032034	≥100
Aquatherm Green Pipe	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000090	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Aquatherm Green Pipe	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid walls

Combustible pipes, uninsulated

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Aquatherm Green Pipe SDR 11 S	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Aquatherm Green Pipe SDR 11 S	Plastic pipe	315	EI 90	Walraven Pacifyre® AWM II	2134315315	≥240
Aquatherm Green Pipe SDR 6 S	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Aquatherm Green Pipe SDR 7,4 S	Plastic pipe	63	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100
Aquatherm Green Pipe SDR 9 MF RP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
Aquatherm Green Pipe SDR 9 MF RP	Plastic pipe	355	EI 120	Walraven Pacifyre® AWM II	2134355355	≥240
ASA	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
Blue Power	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
Blue Power	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
COES Blue Power	Plastic pipe	90	EI 120	Walraven Pacifyre® AWM II	2134090092	≥100
COES Blue Power	Plastic pipe	110	EI 90	Walraven Pacifyre® AWM II	2134110112	≥100
Conel Drain	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Conel Drainpipes	Plastic pipe	75	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Conel Drainpipes	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Conel Drainpipes	Plastic pipe	75 - 110	EI 90	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex F50 PROFI	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Frankische Alpex F50 PROFI	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Frankische Alpex L	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Frankische Alpex L	Plastic pipe	63	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Fusiotherm	Plastic pipe	110	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Geberit Silent dB20	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Geberit Silent dB20	Plastic pipe	160	EI 90	Walraven Pacifyre® AWM II	2134160160	≥100
Geberit Silent PP	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
Geberit Silent PP	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Geberit Silent PP	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
Geberit Silent PP	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Geberit Silent PP	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Geberit Silent PP	Plastic pipe	125 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
Geberit Silent Pro	Plastic pipe	75	EI 90	Walraven Pacifyre® FPC	2122000090	≥100
Geberit Silent Pro	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Geberit Silent Pro	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Geberit Silent Pro	Plastic pipe	110 - 125	EI 120	Walraven Pacifyre® FPC	2122000125	≥150
Geberit Silent Pro	Plastic pipe	125 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
Geberit Silent Pro	Plastic pipe	90 - 110	EI 90	Walraven Pacifyre® FPC	2122000110	≥100
Georg Fischer Silenta Premium	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Georg Fischer Silenta Premium	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Georg Fischer Silenta Premium	Plastic pipe	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
KeKelit Phonex AS	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Multilayer with aluminium	Plastic pipe	75	EI 120	Walraven Pacifyre® MKII	2154075077	≥100
PB	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
PE	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid walls

Combustible pipes, uninsulated

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
PE	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
PE	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
PE	Plastic pipe	160	EI 60	Walraven Pacifyre® EFC	2132100600	≥100
PE	Plastic pipe	160	EI 90	Walraven Pacifyre® EFC	2132100600	≥100
PE	Plastic pipe	160	EI 120	Walraven Pacifyre® MKII	2158159161	≥100
PE	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
PE	Plastic pipe	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
PE	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
PE	Plastic pipe	125 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥150
PE	Plastic pipe	164 - 180	EI 90	Walraven Pacifyre® MKII	2158180182	≥100
PE	Plastic pipe	200 - 400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
PE-HD	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
PE-HD	Plastic pipe	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
Pelletschlauch PUR - Cu	Plastic pipe	60	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100
Pelletschlauch PVC - Cu	Plastic pipe	60	EI 120	Walraven Pacifyre® AWM II	2134063065	≥100
PE-X	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PE-X	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥100
PE-X	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
PE-X	Plastic pipe	125 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥150
Pipelife Master 3 Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Polokal 3S	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Polokal NG	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Polokal XS	Plastic pipe	110	EI 120	Walraven Pacifyre® AWM II	2134110112	≥100
Poloplast POLO-KAL 3S	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Poloplast POLO-KAL 3S	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Poloplast POLO-KAL 3S	Plastic pipe	110 - 125	EI 120	Walraven Pacifyre® FPC	2122000125	≥150
Poloplast POLO-KAL 3S	Plastic pipe	125 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
Poloplast POLO-KAL NG	Plastic pipe	50	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Poloplast POLO-KAL NG	Plastic pipe	110	EI 120	Walraven Pacifyre® FPC	2122000110	≥100
Poloplast POLO-KAL NG	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Poloplast POLO-KAL NG	Plastic pipe	160	EI 120	Walraven Pacifyre® BFC	2133000160	≥100
Poloplast POLO-KAL NG	Plastic pipe	110 - 125	EI 90	Walraven Pacifyre® FPC	2122000125	≥100
Poloplast POLO-KAL NG	Plastic pipe	125 - 160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
Poloplast POLO-KAL NG	Plastic pipe	40 - 110	EI 90	Tangit FP 550 2C	2181550	≥100
Poloplast POLO-KAL NG	Plastic pipe	50 - 75	EI 90	Walraven Pacifyre® EFC	2132100600	≥100
Poloplast POLO-KAL NG	Plastic pipe	75 - 160	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
PP	Plastic pipe	50	EI 120	Walraven Pacifyre® BFC	2133000050	≥100
PP	Plastic pipe	58	EI 120	Walraven Pacifyre® MKII	2154054056	≥100
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PP	Plastic pipe	140	EI 90	Tangit FP 550 2C	2181550	≥100
PP	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
PP	Plastic pipe	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
PP	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Aircon bundles

Cables

Combustible pipes, insulated

Combustible pipes, uninsulated

Metal pipes, insulated

Combustible pipes, uninsulated

Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid walls

Combustible pipes, uninsulated

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
PP	Plastic pipe	110 - 160	EI 90	Walraven Pacifyre® BFC	2133000160	≥100
PP	Plastic pipe	164 - 180	EI 60	Walraven Pacifyre® MKII	2158180182	≥100
PP	Plastic pipe	50 - 63	EI 90	Walraven Pacifyre® BFC	2133000063	≥100
PP	Plastic pipe	58 - 61	EI 60	Walraven Pacifyre® MKII	2154057059	≥100
PP	Plastic pipe	61 - 160	EI 60	Walraven Pacifyre® MKII	2158159161	≥100
PP	Plastic pipe	63 - 110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
PP-H	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PP-H	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
PP-H	Plastic pipe	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
PP-H	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
PVC	Plastic pipe	32	EI 120	Walraven Pacifyre® MKII	2154030032	≥100
PVC	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
PVC	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PVC	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
PVC	Plastic pipe	125	EI 90	Tangit FP 550 2C	2181550	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® BFC	2133000160	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
PVC	Plastic pipe	160	EI 90	Walraven Pacifyre® EFC	2132100600	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® FPC	2122000160	≥100
PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
PVC	Plastic pipe	180	EI 240	Walraven Pacifyre® AWM III	2135180180	≥100
PVC	Plastic pipe	200	EI 240	Walraven Pacifyre® AWM II	2134200200	≥100
PVC	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
PVC	Plastic pipe	400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
PVC	Plastic pipe	164 - 180	EI 90	Walraven Pacifyre® MKII	2158180182	≥100
PVC	Plastic pipe	200 - 400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
PVC	Plastic pipe	32 - 44	EI 90	Walraven Pacifyre® MKII	2154039041	≥100
PVC	Plastic pipe	44 - 160	EI 120	Walraven Pacifyre® MKII	2158159161	≥100
Rehau Raupiano light	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Rehau Raupiano plus	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Rehau Raupiano plus	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥150
Rehau Raupiano Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Rehau Raupiano Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® BFC	2133000160	≥100
Rehau Raupiano Plus	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Rehau Raupiano plus	Plastic pipe	125 - 160	EI 90	Walraven Pacifyre® FPC	2122000160	≥100
SAN+PVC	Plastic pipe	50	EI 120	Walraven Pacifyre® G	2180100040	≥100
SAN+PVC	Plastic pipe	125	EI 60	Walraven Pacifyre® FPC	2122000140	≥150
SAN+PVC	Plastic pipe	160	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
SAN+PVC	Plastic pipe	180	EI 120	Walraven Pacifyre® AWM III	2135180180	≥100
SAN+PVC	Plastic pipe	200	EI 120	Walraven Pacifyre® AWM II	2134200200	≥100
SAN+PVC	Plastic pipe	125 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥150
SAN+PVC	Plastic pipe	200 - 400	EI 120	Walraven Pacifyre® AWM II	2134400400	≥300
SAN+PVC	Plastic pipe	32 - 50	EI 240	Walraven Pacifyre® AWM III	2135050052	≥300
Triplus	Plastic pipe	90	EI 120	Walraven Pacifyre® BFC	2133000090	≥100

Cables

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Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Rigid walls

Combustible pipes, uninsulated

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Triplus	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Uponor Unipipe MLCP	Plastic pipe	32	EI 120	Walraven Pacifyre® G	2180100040	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Uponor Unipipe MLCP	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Valsir TriPLUS	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Wavin AS	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Wavin AS+	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Wavin AS+	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥150
Wavin AS+	Plastic pipe	125 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥100
Wavin SiTech+	Plastic pipe	110	EI 120	Walraven Pacifyre® BFC	2133000110	≥100
Wavin SiTech+	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥100
Wavin SiTech+	Plastic pipe	110	EI 120	Walraven Pacifyre® FPW	2122250920	≥100
Wavin SiTech+	Plastic pipe	125	EI 120	Walraven Pacifyre® FPC	2122000125	≥150
Wavin SiTech+	Plastic pipe	160	EI 120	Walraven Pacifyre® AWM II	2134160160	≥100
Wavin SiTech+	Plastic pipe	160	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Wavin SiTech+	Plastic pipe	125 - 160	EI 60	Walraven Pacifyre® FPC	2122000160	≥100

Metal pipes

Rigid walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
Copper	Metal pipe	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Copper	Metal pipe	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Copper	Metal pipe	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥100
Copper	Metal pipe	88.9	EI 90	Tangit FP 550 2C	2181550	≥100
Copper	Metal pipe	88.9	EI 120	Walraven Pacifyre® A	2180100010	≥100
Stainless steel	Metal pipe	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Stainless steel	Metal pipe	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Stainless steel	Metal pipe	219.1	EI 120	Walraven Pacifyre® A	2180100010	≥100
Stainless steel	Metal pipe	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥100
Steel	Metal pipe	28	EI 120	Walraven Pacifyre® EFC	2132100600	≥100
Steel	Metal pipe	35	EI 120	Walraven Pacifyre® G	2180100040	≥100
Steel	Metal pipe	139.7	EI 90	Tangit FP 550 2C	2181550	≥100
Steel	Metal pipe	219.1	EI 120	Walraven Pacifyre® A	2180100010	≥100
Steel	Metal pipe	28 - 108	EI 60	Walraven Pacifyre® EFC	2132100600	≥100

Cables

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Rigid Floors

Flexible walls

Rigid walls

Shaft walls

Shaft walls

Combustible pipes, uninsulated

Shaft walls

Material	Service type	Max. dimension	Max. fire resistance	Product	Part No.	Substrate thickness (mm)
PE	Plastic pipe	50	EI 90	Walraven Pacifyre® IWM III	2136050125	≥2x20
PE	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥2x20
PP	Plastic pipe	50	EI 90	Walraven Pacifyre® IWM III	2136050125	≥2x20
PP	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥2x20
PVC	Plastic pipe	50	EI 90	Walraven Pacifyre® IWM III	2136050125	≥2x20
PVC	Plastic pipe	110	EI 120	Walraven Pacifyre® IWM III	2136050125	≥2x20

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Rigid Floors

Flexible walls

Rigid walls

Shaft walls

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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