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### **Explanation of the abbreviations and pictograms**

Dn = nominal diameter	I = thermal insulation
E = integrity	GKB (type A) / GKF (type F): "GKB"
	stands for standard plasterboards (type
	A according to EN 520) while "GKF"
	plasterboards offer a higher fire resistance
	for a similar plate thickness (type F
	according to EN 520)

30%	aesthetic solution		water- and frost-resistant
PE	suitable for PE-HD pipes according to EN 1519-1, EN 12666-1 or EN 12201-2 and for ABS pipes according to EN 1455-1	PVC	suitable for PVC-U pipes according to EN 1329-1, EN 1453-1 or EN 1452-1 and for PVC-C pipes according to EN 1566-1
	suitable for built-in installation		minimal distance allowed
BASTA OK	sealing with fire resistant stone wool boards allowed, also for asymmetric opening		

### **DÉCLARATION DES PERFORMANCES**

CE\_DoP\_Rf-t\_M1\_FR =C-03/2020

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•	fication code of the product-typ	MG2						
2. Intended use/		Sealing flammable pipes in penetrations through fire compartment walls and floors.						
3. Manufacturer		Rf-Technologies NV, Lange Ambachtstraat 40, B-9860 Oosterzele System 1						
4. System/s of A								
	tandard / European Assessment Technical Assessment Body, noti		EAD 350454-00-11 BCCA-0749-CPR-BC			entification number 0749	9;	
6. Declared perf	ormance according to EAD 3504	54-00-1104		(fire resistance acco	ording to EN 1366-3	, classification accordir	ig to EN 13501-2)	
Essential charad	cteristics						Performance	
Wall type	Wall	Sealing	Type of pipe	Material pipe	Pipe diameter (mm)	Pipe wall thickness (mm)	Classification	
Rigid wall	Aerated concrete ≥ 100 mm	Gypsum	standard	PVC	40-75	1,8-8,4	EI 120 U/C, C/C	
					80-110	2,2-8,2	EI 120 U/C, C/C	
					125-160	3,2	EI 120 U/C, C/C	
					125-160	3,2-11,9	EI 90 U/C, C/C	-
				PE, ABS	40-75	3,0-6,8	EI 120 U/C, C/C	
					80-110	3,4-10,0	EI 120 U/C, C/C	
					125-160	6,2-14,6	E 120 / EI 90 U/C, C/C	
					125-160	14,6	EI 120 U/C, C/C	
			Geberit Silent db20	PE, ABS	40-75	3,6	EI 120 U/C, C/C	-
					80-110	6,0	EI 120 U/C, C/C	-
					125-160	7,0	EI 90 U/C, C/C	
			zero distance (<100 mm)	PVC, PE	40-110	see above	EI 120 U/C, C/C	
igid floor	Aerated concrete ≥ 150 mm	Mortar	standard	PVC	40-75	1,8-8.4	EI 180 U/C, C/C	_
					80-110	2,2-8,2	EI 180 U/C, C/C	
					125-160	3,2-11,9	EI 180 U/C, C/C	
				PE, ABS	40-75	3,0-6,8	EI 180 U/C, C/C	5
				1 2,7100	80-110	3,4-10,0	EI 180 U/C, C/C	Harmonised standard EAD 350454-00-1104
					125-160	6,2-14,6	EI 180 U/C, C/C	- 045
			zero distance (<100 mm)	PVC, PE	40-110	see above	EI 120 U/C, C/C	4-00
exible wall	Metal studs gypsum	Gypsum	standard	PVC	40-75	1,8-8,4	EI 120 U/C, C/C	-1-1
	plasterboard Type F (EN 520) ≥ 100 mm				80-110	2,2-8,2	EI 120 U/C, C/C	- <sup>2</sup>
					125-160	3,2	EI 120 U/C, C/C	-
					125-160	3,2-11,9	EI 90 U/C, C/C	-
				PE, ABS	40-75	3,0-6,8	EI 120 U/C, C/C	-
					80-110	3,4-10,0	EI 120 U/C, C/C	-
					125-160	6,2-14,6	E 120 / El 90 U/C, C/C	-
					125-160	14,6	EI 120 U/C, C/C	
exible wall /	Metal studs gypsum	Stone wool + coating		PVC	40-75	3,0	EI 120 U/C, C/C	-
gid wall	plasterboard Type F (EN	≥ 140 kg/m <sup>3</sup>		PE, ABS	80-110	3,2	EI 120 U/C, C/C	-
	520)/Aerated concrete ≥ 100 mm				125-160	3,2	EI 90 U/C, C/C	-
					40-75	3,0	EI 120 U/C, C/C	
					80-110	4,2	EI 120 U/C, C/C	
					125-160	6,2	EI 120 U/C, C/C	

Reaction to fire Durability and ease of maintenance class E (EN 13501-1) Y2

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by: Mathieu Steenland, Technical Manager



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#### **Product presentation MG2**

Wide range of fire resistant collars that can easily be cast in the wall. They have been tested according to EN1366-3 and are fire resistant up to 180 minutes in rigid walls and floors and in flexible walls. The fire resistant collar MG2 is affixed around plastic pipes (PVC, HDPE, ABS) and cast in the wall.

When combustible pipes burn away, openings appear in the floor or walls through which fire can spread. Fire resistant collars prevent propagation of fire by expanding through heat, thus closing off the openings and making them fire resistant.

- ☑ water- and frost-resistant
- aesthetic solution
- ☑ no space is lost at the wall crossing (built-in installation)
- ✓ easy to install
- ✓ standard tools and sealing
- ☑ CE marking according to EAD 350454-00-1104
- ☑ installation U/C, C/C (uncapped-capped / capped-capped).
- minimal distance allowed
- extensive field of application
- maintenance-free
- sealing with fire resistant stone wool boards allowed, also for asymmetric opening
- suitable for built-in installation
- suitable for PVC-U pipes according to EN 1329-1, EN 1453-1 or EN 1452-1 and for PVC-C pipes according to EN 1566-1
- suitable for PE-HD pipes according to EN 1519-1, EN 12666-1 or EN 12201-2 and for ABS pipes according to EN 1455-1
- 1. collar
- 2. intumescent strips
- 3. steel housing
- 4. fastener



#### **Range and dimensions MG2**

The fire resistant collar MG2 is cast in the wall around plastic pipes (PVC, HDPE, ABS) in order to prevent propagation of fire for up to 180'.



D1 = outside diameter of the collar

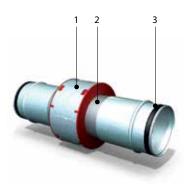
Dn = inside diameter of the collar, corresponding to the outside diameter of the pipe



#### Variant MG2+R

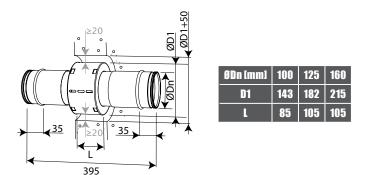
The fire resistant collar MG2+R consists of an MG2 collar with a PE pipe. Both sides of the pipe are fitted with metal flanges with rubber seal. It is cast in the wall in order to prevent propagation of fire for up to 180'. (Not CE-marked)

- ☑ water- and frost-resistant
- aesthetic solution
- ☑ no space is lost at the wall crossing (built-in installation)
- ✓ easy to install
- ✓ standard tools and sealing
- ☑ installation U/C, C/C (uncapped-capped / capped-capped).
- 1. fire resistant collar MG2
- 2. plastic pipe (HD-PE)
- 3. metal flanges with rubber seal R



Variant MG2+R

#### **Range and dimensions MG2+R**



D1 = outside diameter of the collar

Dn = inside diameter of the collar, corresponding to the outside diameter of the pipe

#### **Storage and handling**

As this product is a safety element, it should be stored and handled with care.

#### It is recommended:

- to unload in a dry area
- to keep in a cool, dry area, protected from heat
- to transport the product in a closed vehicle

#### **Installation**

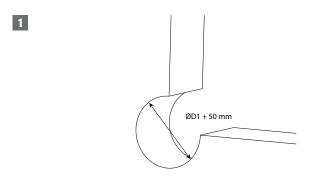
#### **General points**

- The installation must comply with the installation manual and the classification report.
- The pipe must be supported in order to guarantee the well-functioning of the sealing during a fire. Supports and fastenings should be realised according to the rules of good craftsmanship.

#### Installation in rigid wall and floor

The product was tested and approved in: see the classification overview in the Declaration of Performance. Mounting is authorised in supporting constructions with a density equal or superior to the supporting construction used during the test, as described in EN 1366-3.

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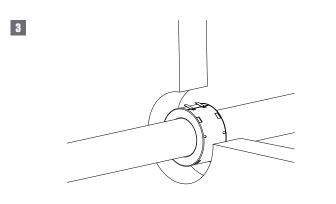


1. Provide an installation opening of ØD1 + 50 mm.

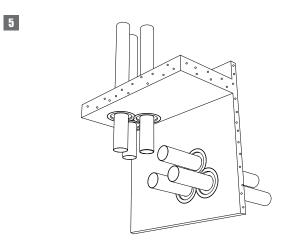
2. Remove the label. Open the fire collar and place it around the pipe.

Slide the fastening strips through the corresponding holes. Fold back the strips.

7

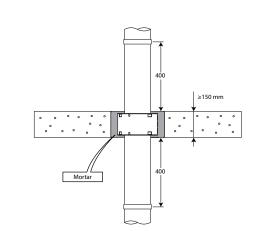


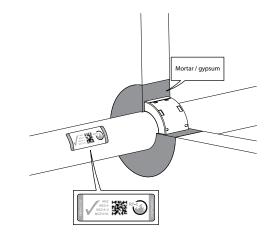
3. Slide the collar into the opening of the wall, in the middle of the wall thickness.



5. For zero distances: the collars can be placed against one another (< 100 mm). See declaration of performance for the correct classification.

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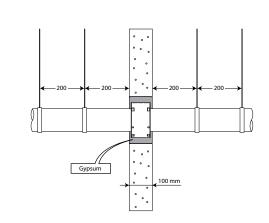




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4. Seal with standard mortar (floor) or plaster (vertical wall). Apply the label nearby the collar.



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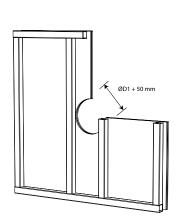
Installation in flexible wall (metal stud gypsum plasterboard wall)

The product was tested and approved in: see the classification overview in the Declaration of Performance. Mounting is authorised in supporting constructions with a density equal or superior to the supporting construction used during the test, as described in EN 1366-3.

2

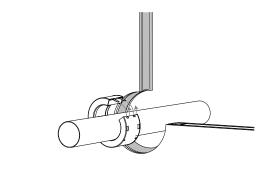
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1. Fix two gypsum boards type F with a tickness of 12,5 mm to one side of the metal stud wall.

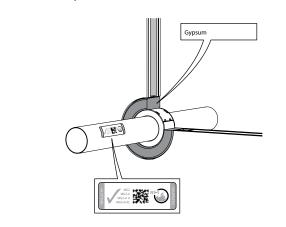
Provide a min. Installation opening in the wall of  $\emptyset$ D1 + 50 mm.



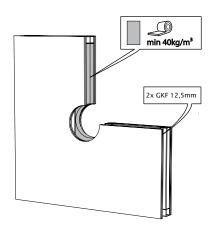
3. Place the plastic pipe.

Remove the label. Open the fire collar and place it around the pipe.

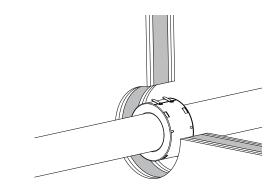
Slide the fastening strips through the corresponding holes. Fold back the strips.



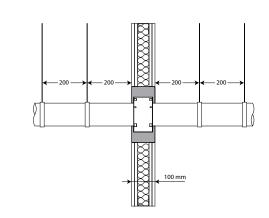
5. Seal with gypsum. Apply the label nearby the collar.



2. Insulate the wall and finish with two gypsum plasterboards type F.



4. Slide the collar into the opening of the wall, in the middle of the wall thickness.



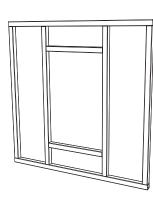
9

Installation in flexible and rigid wall, sealing with rigid rock wool boards with coating

The product was tested and approved in: see the classification overview in the Declaration of Performance. Mounting is authorised in supporting constructions with a density equal or superior to the supporting construction used during the test, as described in EN 1366-3.

2

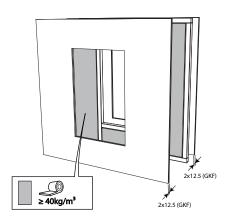
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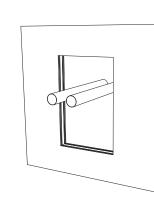
1

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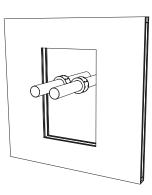
1. Provide an installation opening of maximally 1000 x 600 mm.



2. Fix two gypsum plasterboards type F of 12,5 mm thickness to each side of the metal studs and insulate the wall with 40 mm mineral wool, 40 kg/m<sup>3</sup>.



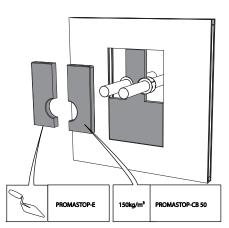
3. Place the plastic pipe(s). The distances between the pipes and the edges of the seal are min. 100 mm.



4. Place the built-in fire collars around the pipes by removing the label and fixing the collar by bending the fastening strips. Position the collars in the middle of the wall thickness.

# Installation

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5. Fix a stone wool board of min. 50 mm thickness with fire resistant coating on one side (type PROMASTOP-CB 50) around the fire collars. Use a saw or knife to dimension the stone wool boards. Apply endothermic coating (type PROMASTOP-E) on the lateral sides, as well as on the joints.

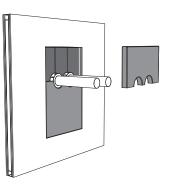
₩ 3

7. Put 3 threaded rods through the stone wool boards and fix with M6, washers and bolts. Apply the label nearby the collar.

D

x3

6



6. Put the second stone wool board of min. 50 mm thickness around the collars. Avoid the joints from coinciding. Apply endothermic coating (type PROMASTOP-E) on the lateral sides, as well as on the joints.

#### Weights

#### MG2

ØDn [mm]	40	50	56	63	75	80	90	100	110	125	160
kg	0,2	0,2	0,2	0,2	0,3	0,4	0,5	0,6	0,6	1,2	1,5

#### MG2+R

ØDn [mm]	100	125	160				
kg	1,3	2,2	2,9				

### **Approvals and certificates**

All our products are submitted to a number of tests by official test institutes. Reports of these tests form the basis for the approvals of our products.



BCCA-0749-CPR-BC1-262-464-026-2.02-2517