

# MG2

Cast-in fire resistant collars.



CE  
0749










## Table of content

Declaration of performance	3
Product presentation MG2	4
Range and dimensions MG2	4
Variant MG2+R	5
Range and dimensions MG2+R	5
Storage and handling	6
Installation	6
Installation in rigid wall and floor	6
Installation in flexible wall (metal stud gypsum plasterboard wall)	8
Installation in flexible and rigid wall, sealing with rigid rock wool boards with coating	9
Weights	11
Approvals and certificates	11

## Explanation of the abbreviations and pictograms

Dn = nominal diameter  
E = integrity

I = thermal insulation  
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)

	aesthetic solution		water- and frost-resistant
	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		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
	sealing with fire resistant stone wool boards allowed, also for asymmetric opening		

## DÉCLARATION DES PERFORMANCES

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

1. Unique identification code of the product-type:	MG2
2. Intended use/es:	Sealing flammable pipes in penetrations through fire compartment walls and floors.
3. Manufacturer:	Rf-Technologies NV, Lange Ambachtstraat 40, B-9860 Oosterzele
4. System/s of AVCP:	System 1
5. Harmonised standard / European Assessment Document; notified body / European Technical Assessment, Technical Assessment Body, notified body; certificate of constancy of performance:	EAD 350454-00-1104, ETA 16/0042; UBAtc asbl; BCCA with identification number 0749; BCCA-0749-CPR-BC1-262-464-026-2.02-2517
6. Declared performance according to EAD 350454-00-1104	(fire resistance according to EN 1366-3, classification according to EN 13501-2)

Essential characteristics							Performance				
Wall type	Wall	Sealing	Type of pipe	Material pipe	Pipe diameter (mm)	Pipe wall thickness (mm)	Classification				
Rigid wall	Aerated concrete $\geq 100$ 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			
				Rigid floor	Aerated concrete $\geq 150$ 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								
	80-110	3,4-10,0	EI 180 U/C, C/C								
	125-160	6,2-14,6	EI 180 U/C, C/C								
zero distance (<100 mm)	PVC, PE	40-110	see above					EI 120 U/C, C/C			
Flexible wall	Metal studs gypsum plasterboard Type F (EN 520) $\geq 100$ 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				
				Flexible wall / rigid wall	Metal studs gypsum plasterboard Type F (EN 520)/Aerated concrete $\geq 100$ mm	Stone wool + coating $\geq 140$ kg/m <sup>3</sup>	standard	PVC	40-75	3,0	EI 120 U/C, C/C
									80-110	3,2	EI 120 U/C, C/C
125-160	3,2	EI 90 U/C, C/C									
PE, ABS	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								

Harmonised standard  
EAD 350454-00-1104

1 Type of installation: built-in, U/C, C/C



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

Oosterzele, 03/2020



## Product presentation MG2

### 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.

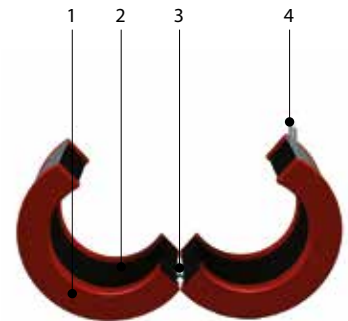
When combustible pipes burn away, openings appear in the floor or walls through which fire can spread. Fire resistant collars prevent propagation of fire by expanding through heat, thus closing off the openings and making them fire resistant.

- ✓ 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).



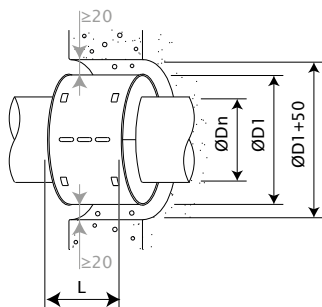
- minimal distance allowed
- extensive field of application
- maintenance-free
- sealing with fire resistant stone wool boards allowed, also for asymmetric opening
- suitable for built-in installation
- suitable for PVC-U pipes according to EN 1329-1, EN 1453-1 or EN 1452-1 and for PVC-C pipes according 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'.



ØDn [mm]	40	50	56	63	75	80	90	100	110	125	160
D1	67	77	83	90	102	123	133	143	153	182	215
L	85	85	85	85	85	85	85	85	85	105	105

D1 = outside diameter of the collar

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

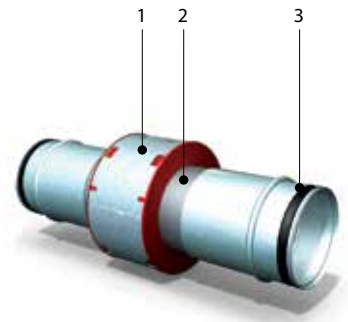
## Variant MG2+R

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)

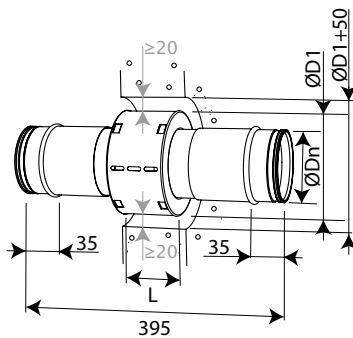
- ☑ water- and frost-resistant
- ☑ aesthetic solution
- ☑ no space is lost at the wall crossing (built-in installation)
- ☑ easy to install
- ☑ standard tools and sealing
- ☑ installation U/C, C/C (uncapped-capped / capped-capped).



1. fire resistant collar MG2
2. plastic pipe (HD-PE)
3. metal flanges with rubber seal R



## Range and dimensions MG2+R



ØDn (mm)	100	125	160
D1	143	182	215
L	85	105	105

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

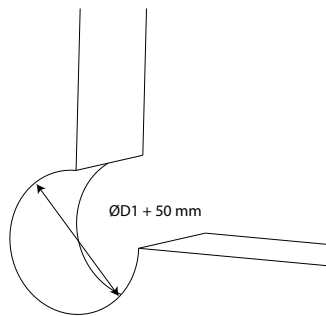
### General points

- 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

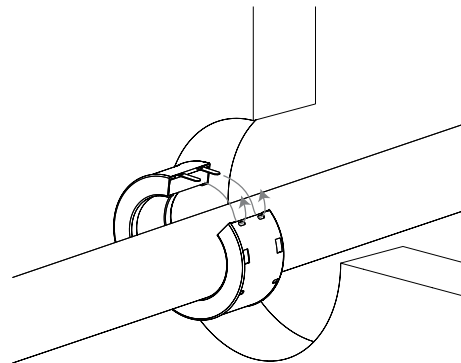
The product was tested and approved in: see the classification overview in the Declaration of Performance. Mounting is authorised in supporting constructions with a density equal or superior to the supporting construction used during the test, as described in EN 1366-3.

1



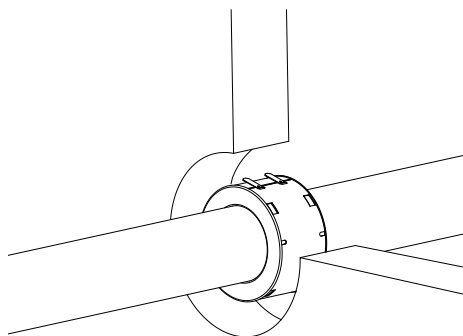
1. Provide an installation opening of  $\text{ØD1} + 50 \text{ mm}$ .

2



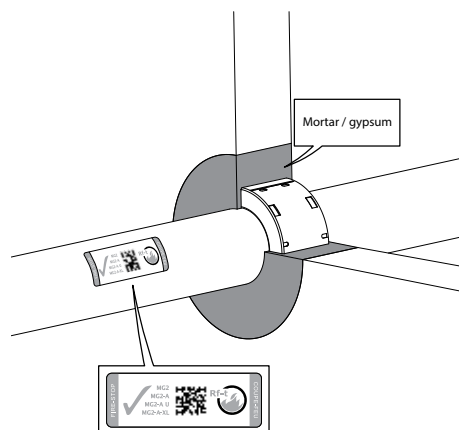
2. Remove the label. Open the fire collar and place it around the pipe.  
Slide the fastening strips through the corresponding holes.  
Fold back the strips.

3



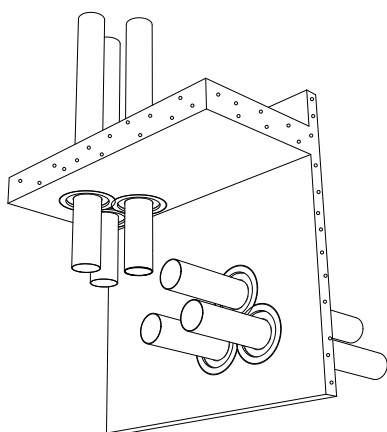
3. Slide the collar into the opening of the wall, in the middle of the wall thickness.

4



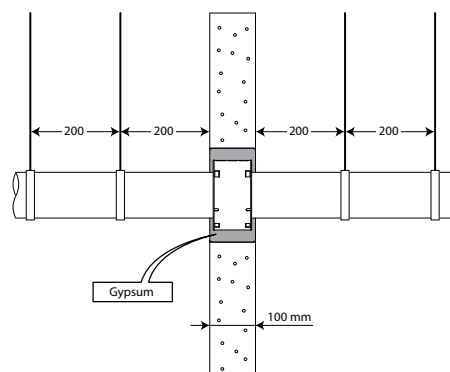
4. Seal with standard mortar (floor) or plaster (vertical wall). Apply the label nearby the collar.

5

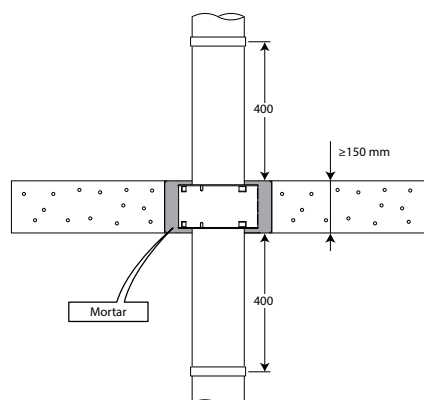


5. For zero distances: the collars can be placed against one another (< 100 mm). See declaration of performance for the correct classification.

6



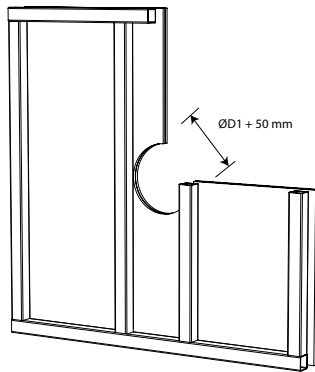
7



## Installation in flexible wall (metal stud gypsum plasterboard wall)

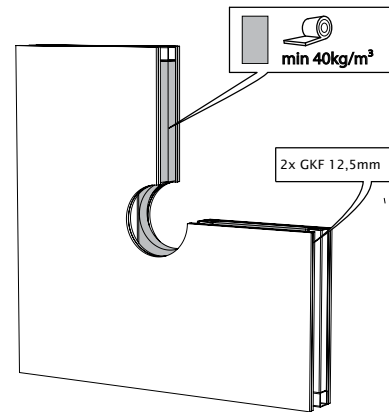
The product was tested and approved in: see the classification overview in the Declaration of Performance. Mounting is authorised in supporting constructions with a density equal or superior to the supporting construction used during the test, as described in EN 1366-3.

1



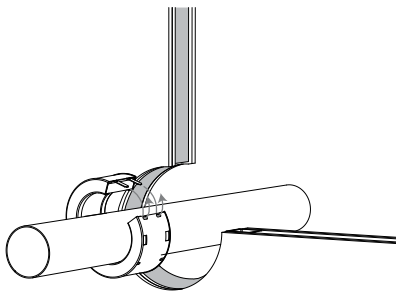
1. Fix two gypsum boards type F with a thickness of 12,5 mm to one side of the metal stud wall. Provide a min. installation opening in the wall of  $\text{ØD1} + 50 \text{ mm}$ .

2



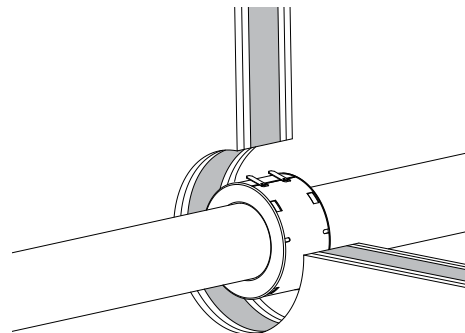
2. Insulate the wall and finish with two gypsum plasterboards type F.

3



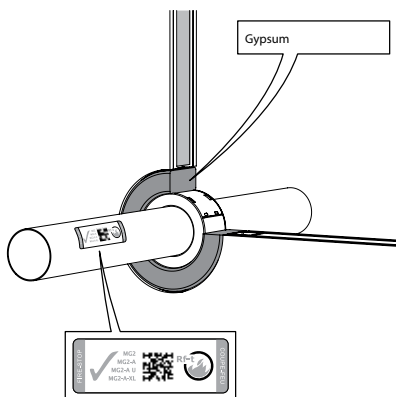
3. Place the plastic pipe. Remove the label. Open the fire collar and place it around the pipe. Slide the fastening strips through the corresponding holes. Fold back the strips.

4



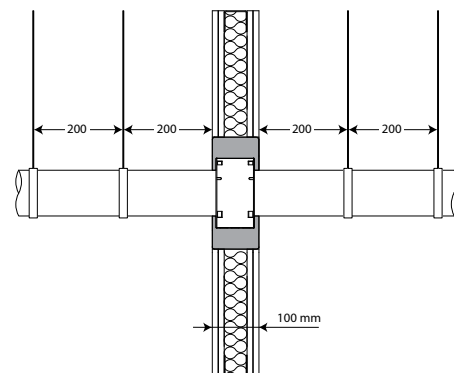
4. Slide the collar into the opening of the wall, in the middle of the wall thickness.

5



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

6

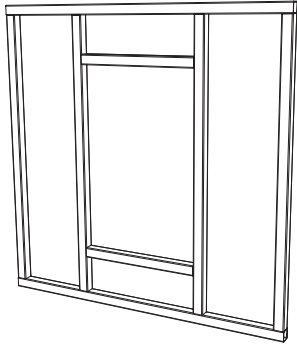




## Installation in flexible and rigid wall, sealing with rigid rock wool boards with coating

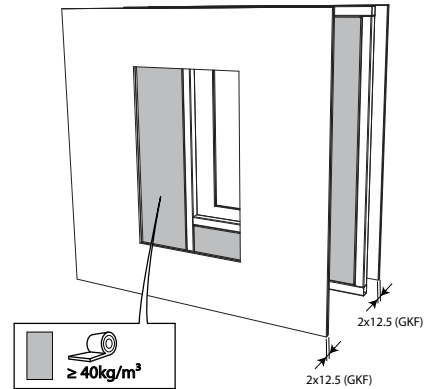
The product was tested and approved in: see the classification overview in the Declaration of Performance. Mounting is authorised in supporting constructions with a density equal or superior to the supporting construction used during the test, as described in EN 1366-3.

1



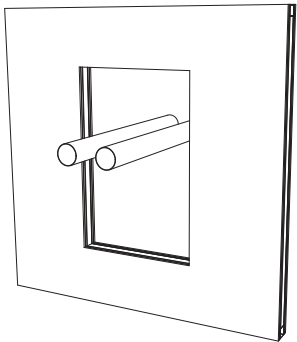
1. Provide an installation opening of maximally 1000 x 600 mm.

2



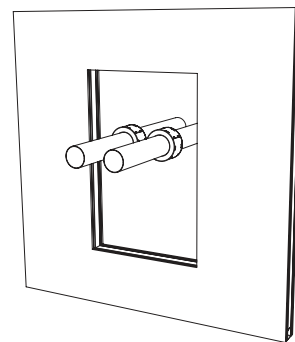
2. Fix two gypsum plasterboards type F of 12,5 mm thickness to each side of the metal studs and insulate the wall with 40 mm mineral wool, 40 kg/m<sup>3</sup>.

3



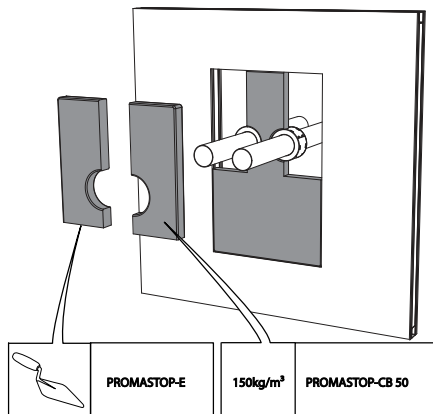
3. Place the plastic pipe(s). The distances between the pipes and the edges of the seal are min. 100 mm.

4



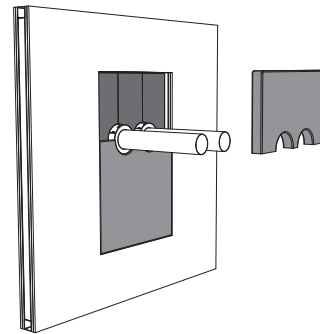
4. Place the built-in fire collars around the pipes by removing the label and fixing the collar by bending the fastening strips. Position the collars in the middle of the wall thickness.

5



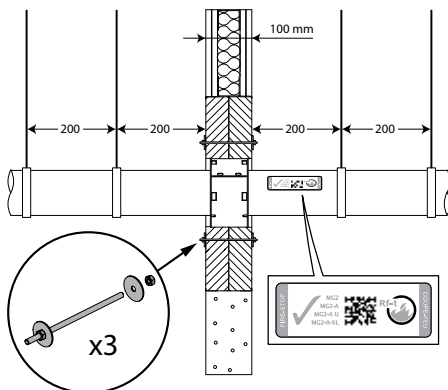
5. Fix a stone wool board of min. 50 mm thickness with fire resistant coating on one side (type PROMASTOP-CB 50) around the fire collars. Use a saw or knife to dimension the stone wool boards. Apply endothermic coating (type PROMASTOP-E) on the lateral sides, as well as on the joints.

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.

7



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

## 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