

Motorised Smoke & Heat Exhaust Dampers

Presentation of the VANTONE range



VANTONE 2 leaves



Removable terminal block

Compliance

- Certified
- Approved installation:
 - vertical smoke exhaust ducts,
 - with or without mounting frames,
 - in wall-mounted and offset duct applications.

Advantages

- No smoke leakage, no heat transfer.
- Refractory blade.

APPLICATION

- Mechanical or natural smoke exhaust installations (public assembly buildings, high-rise, multi-family housing).
- VANTONE can be used for both air supply as well as for smoke exhaust.
- Principle: VANTONE opens by command control from the fire safety central control unit, in order to create air swirl effect to evacuate the fumes and smoke.

DESCRIPTION

- Normally closed gate type damper, fire resistant, 1 or 2 leaves systems.
- Made up of a metal frame an airtight mechanism box, and a casement air inlet in refractory materials.
- Access to the electrical equipment is made via the access box cover (2 screws).
- Electrical equipment wired up to a withdrawable terminal block.

Fire resistance with grille

- 2h flame resistance rating mainly for a supply air application.
- 1h or 2h fire resistance rating for evacuation of fumes and smoke.

Mechanism

- Tripping by self-reset electromagnetic lock (24 or 48 VDC, power emission or cut-off trip mode).
- System locking the door in its safe position (to be lifted manually before re-closing the leaf).

INSTALLATION

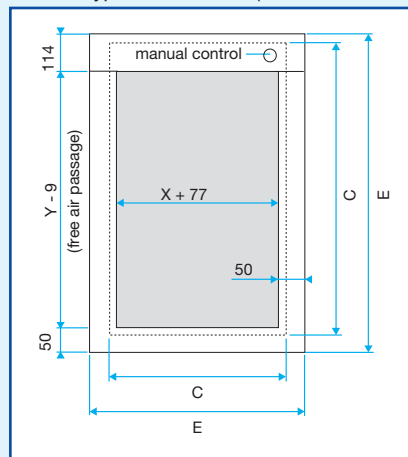
- Wall-mounted on 110 mm concrete wall fire dampers or lightweight partition smoke exhaust ducts. To be fixed or grouted depending on the types of ducts.
- The mounting frame, described in the test reports, is an accessory that can play an important role during fire resistance tests. Its use is recommended or even imposed to ensure the damper is correctly installed.
- Apply an Aldes self-adhesive intumescent seal to the mounting frame when the degree of fire resistance is higher than 1h30 or in cases where the partition wall is not rated M0 or M1 (incombustible or non-flammable).

INSTALLATION OF THE DUCTS ON LIGHTWEIGHT MATERIALS

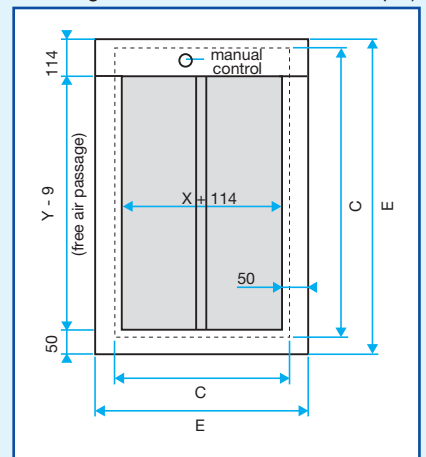
- VANTONE dampers are the subject of a test report validating their installation:
 - on PROMAT sand-lime walls with 1h, 1.5h and 2h fire protection (extension for a side-by-side assembly),
 - plasterboard walls with 2h fire protection rating,
 - staff 2h fire protection rating walls,
 - vermiculite (Mica) 2h fire protection rating walls,
 - on Pregyfeu M0 BD25,
 - 2h fire rating walls,
 - with or without mounting frames.
- For more information; please see page 58.

DIMENSIONS (mm) - OPENING (mm)

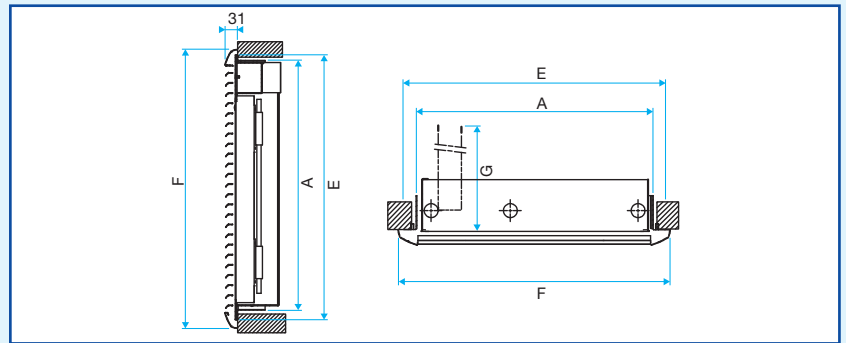
- Dimensions necessary for the installation of VANTONE smoke exhaust dampers depending on the type of installation (embedded or fixed mounting frame, embedded or fixed damper).



VANTONE 1 leaf



VANTONE 2 leaves



VANTONE DIMENSIONS		VANTONE 1 leaf		VANTONE 2 leaves	
		Width	Height	Width	Height
A	Except the frame of the fitting frame (part fitted into the duct)	X + 130	Y + 120	X + 167	Y + 120
B	Mounting frame opening (with 10 mm of grouting)	X + 150	Y + 140	X + 187	Y + 140
C	Except the VANTONE framework (part fitted into the duct)	X + 111	Y + 102	X + 148	Y + 102
D	Opening without the fitting frame (with 10 mm of grouting)	X + 131	Y + 122	X + 168	Y + 122
E	Vantone overall	X + 177	Y + 155	X + 214	Y + 155

VANTONE fire resistant		CF1/1 V	CF2/1 V	CF1/2 V	CF2/2 V
G	Depth with damper open	X + 150	X + 170	X/2 + 150	X/2 + 170
VANTONE flame resistant		PF2/1V (flame resistant 1 leaf)		PF2/2V (flame resistant 2 leaves)	
G	Depth with damper open	X + 130		X/2 + 130	

Motorised Smoke & Heat Exhaust Dampers

Presentation of the VANTONE range of smoke exhaust dampers



VANTONE



GFA 007 with removable core

Advantages

EXCLUSIVE TO ALDES:

- Tripping and signalling equipment placed in an easy access box:
 - air passage completely free,
 - vandal proof,
 - easy cable inlets and outlets.
- Optimised Installation:
 - no drilling requirement on the damper or mounting frame,
 - unpluggable connector terminal block,
 - mounting frame quality.
- Customised and computerised labelling of the mounting frame, the damper and the grille.

RANGE

- VANTONE fire resistant 2h, 1 leaf: please, see page 59.
- VANTONE fire resistant 2h, 2 leaves: please, see page 60.
- Range with a choice of options .
- Choice of mechanism positioning (top and bottom) and leaf opening direction (left or right).

AVAILABLE OPTIONS

- VDS 24 or 48 VDC: power emission tripping device.
- VM 24 or 48 VDC: power cut-off tripping device.
- FCU, DCU: single-pole open / closed position contact.
- FCB, DCB: bipolar open / closed position contact.
- STOP'AIR: cold fitted airtight seal.
- Choice of the position of the mechanism (top or bottom).
- ¼ turn screw for fixing the GFA Alu grille.
- Labelling: personalised labelling possible (name of site, floor, etc.)

NEW VANTONE MOUNTING FRAME

This mounting frame is a high performance product to obtain a solid installation in all cases:

- Adapted to installation of lightweight material of the type Promatect ; Supalux plasterboards, Pregyfeu M0 BD25, plasterboards + Stucal, plasterboards + Pregyfeu, staff, Isofire, Tecriver.
- Provided with grouting lugs and fixing holes into which the damper is screwed on (screws supplied).
- Now reversible, the installation direction no longer depends on the position of the damper mechanism (top or bottom).
- Drilled through the top and bottom to facilitate the passage of the electrical cables.
- Depth of 70 mm for good mechanical strength.
- Labelling: personalised labelling possible (name of site, floor, etc.).

AESTHETIC GRILLES IN ALUMINIUM

- GFA 007 with removable core locked by the 007 clip. For more technical details, please see page 64.

RECOMMENDATIONS

- French Standard NF-S 61.932 imposes position contacts whenever the damper is installed on a collective duct.
- French Standard NF-S 61.932 stipulates the regulatory requirements on remote control and command control lines.
- French Standard NF-S 61.933 imposes periodic operating controls on smoke exhaust dampers.

FREE AIR PASSAGES (dm²) in compliance with IT246.

VANTONE 1 LEAF

Caution, not all dimensions are available for each model (2h flame resistance, 1h and 2h fire resistance). For more precise details, turn to the following pages.

Y/X	200	250	300	350	400	450	500	550	600	650	700
250	6.7	7.9	9.1	10.3	11.5	12.7	13.9	15.1	16.3	-	-
300	8.1	9.5	11.0	12.4	13.9	15.3	16.8	18.3	19.7	-	-
350	9.5	11.2	12.9	14.6	16.3	18.0	19.7	21.4	23.1	24.8	26.5
400	10.8	12.8	14.7	16.7	18.7	20.6	22.6	24.5	26.5	28.4	30.4
450	12.2	14.4	16.6	18.8	21.0	23.2	25.9	27.7	29.9	32.1	34.3
500	13.6	16.1	18.5	21.0	23.4	25.9	28.5	30.8	33.2	35.7	38.2
550	15.0	17.7	20.4	23.1	25.8	28.5	31.2	33.9	36.6	39.3	42.0
600	-	19.3	22.3	25.2	28.2	31.2	34.1	37.1	40.0	43.0	45.9
650	-	21.0	24.2	27.4	30.6	33.8	37.0	40.2	43.4	46.6	49.8
700	-	-	26.1	29.5	33.0	36.4	39.9	43.3	46.8	50.2	53.7
750	-	-	27.9	31.6	35.4	39.1	42.8	46.5	50.2	53.9	-
800	-	-	-	33.8	37.7	41.7	45.6	49.6	53.6	-	-
850	-	-	-	35.9	40.1	44.3	48.5	52.7	-	-	-
900	-	-	-	-	42.5	47.0	51.4	-	-	-	-

VANTONE 2 LEAVES

Caution, not all dimensions are available for each model (2h flame resistance, 1h and 2h fire resistance). For more precise details, turn to the following pages.

Y/X	300	350	400	450	500	550	600	650	700	750	800	850	900
300	10.9	12.3	13.8	15.2	16.7	18.2	19.6	21.1	22.5	24.0	-	-	-
350	12.8	14.5	16.2	17.9	19.6	21.3	23.0	24.7	26.4	28.1	29.8	31.5	33.2
400	14.6	16.6	18.5	20.5	22.4	24.4	26.4	28.3	30.3	32.2	34.2	36.1	38.1
450	16.5	18.7	20.9	23.1	25.3	27.5	29.7	31.9	34.1	36.3	38.5	40.7	43.0
500	18.4	20.8	23.3	25.7	28.2	30.6	33.1	35.5	38.0	40.5	42.9	45.4	47.8
550	20.2	22.9	25.6	28.3	31.1	33.8	36.5	39.2	41.9	44.6	47.3	50.0	52.7
600	22.1	25.1	28.0	31.0	33.9	36.9	39.8	42.8	45.7	48.7	51.7	54.6	57.6
650	24.0	27.2	30.4	33.6	36.8	40.0	43.2	46.4	49.6	52.8	56.0	59.2	62.4
700	25.8	29.3	32.8	36.2	39.7	43.1	46.6	50.0	53.5	56.9	60.4	63.8	67.3
750	27.7	31.4	35.1	38.8	42.5	46.2	49.9	53.6	57.4	61.1	64.8	68.5	-
800	29.6	33.5	37.5	41.4	45.5	49.4	53.3	57.3	61.2	65.2	69.1	-	-
850	-	35.7	39.9	44.1	48.3	52.5	56.7	60.9	65.1	69.3	-	-	-
900	-	37.8	42.2	46.7	51.1	55.6	60.1	64.5	69.0	-	-	-	-

Motorised Smoke & Heat Exhaust Dampers

VANTONE CF 2/1V: 2h fire resistance rating, 1 leaf



APPLICATION

- Evacuation of smoke and fumes (conforms with paragraph 3.7.1 of IT 246).

EXCLUSIVE FEATURES

- Removable terminal block.
- Electrical devices protected in a box.
- Grille with 007 clip for maintaining the vanes in place when reset the damper.

AVAILABLE OPTIONS

Description	Code
DCU contact	OPT41136
FCU contact	OPT41135
DCB contact	OPT41162
FCB contact	OPT41161
Stop'air air supply	OPT45407
Stop'air air exhaust	OPT45406



- Reversible: there is no high / low assembly direction.
- Depth 70 mm for correct fixing to the duct.
- Designed for an assembly on all types of material.
- Drilled to allow the passage of electrical cables.
- Pre-drilled to accommodate the damper's fixing screws.
- If a 1.5h fire resistance rating >, place the self-adhesive intumescent seal (code 11045394) on the mounting frame.



DID YOU KNOW?

- The GFA 007 was designed to combine air passage, aesthetic design and operating facility. Aldes invented the 007 clip to lock the vane core perfectly in place, removable for maintenance, but especially clever enough to reset the damper smoothly, without getting off the stepladder.
- To avoid any degradation to indoor hygiene during smoke extraction tests, Aldes proposes the use of a G3 filter adapted to the dimension, positioned between the damper and the vane core.

RANGE with choice of options (opening from the left)

Y	11044225 (upper mechanism) -11044227 (bottom mechanism) Width X								
	250	300	350	400	450	500	550	600	650
250	•	•	•	•	•	•	•	•	•
300	•	•	•	•	•	•	•	•	•
350	•	•	•	•	•	•	•	•	•
400	•	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•	•
700	•	•	•	•	•	•	•	•	•
750	•	•	•	•	•	•	•	•	•
800	•	•	•	•	•	•	•	•	•

- The electromagnetic tripping device is included. When ordering, state whether the power "emission" or "cut-off" mode versions are required, in addition to a 24 or 48 V DC supply. Standard NF-S 61.937 imposes the emission mode in multi-family housing ductwork, standard NF-S 61.932 requires FCU and DCU (closed/open) contacts on multi-family housing ductwork. A grille must be fitted to ensure the fire protection rating is respected.

Mounting frame for VANTONE CF - 1 leaf dampers

Y	11045395 Width X								
	250	300	350	400	450	500	550	600	650
250	•	•	•	•	•	•	•	•	•
300	•	•	•	•	•	•	•	•	•
350	•	•	•	•	•	•	•	•	•
400	•	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•	•
700	•	•	•	•	•	•	•	•	•
750	•	•	•	•	•	•	•	•	•
800	•	•	•	•	•	•	•	•	•

- For a fire protection rating of more than 1.5h, do not forget the self-adhesive intumescent seal (Code 11045394) to be applied the fitting frame.

New GFA 007 with removable core locked by the 007 clip

Y	11045332 Width X								
	250	300	350	400	450	500	550	600	650
250	•	•	•	•	•	•	•	•	•
300	•	•	•	•	•	•	•	•	•
350	•	•	•	•	•	•	•	•	•
400	•	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•	•
700	•	•	•	•	•	•	•	•	•
750	•	•	•	•	•	•	•	•	•
800	•	•	•	•	•	•	•	•	•

- A high resistance paint may be requested depending on the RAL colour code required (except on the clips).

Motorised Smoke & Heat Exhaust Dampers

VANTONE CF 2/2V: 2h fire resistance rating, 2 leaves **NF**



APPLICATION

- Evacuation of smoke and fumes (conforms with paragraph 3.7.1 of IT 246).

EXCLUSIVE FEATURES

- Removable terminal block.
- Electrical devices protected in a box.
- Grille with 007 clip for maintaining the vanes in place when reset the damper.

AVAILABLE OPTIONS **R15**

Description	Code
DCU contact	OPT41136
FCU contact	OPT41135
DCB contact	OPT41162
DCB contact	OPT41162
Stop'air air supply	OPT45407
Stop'air air exhaust	OPT45406



- Reversible: there is no high / low assembly direction.
- Depth 70 mm for correct fixing to the duct.
- Designed for an assembly on all types of material.
- Drilled to allow the passage of electrical cables.
- Pre-drilled to accommodate the damper's fixing screws.
- If a 1.5h fire resistance rating >, place the self-adhesive intumescent seal (code 11045394) on the mounting frame.



DID YOU KNOW?

- The GFA 007 was designed to combine air passage, aesthetic design and operating facility. Aldes invented the 007 clip to lock the vane core perfectly in place, removable for maintenance, but especially clever enough to reset the damper smoothly, without getting off the stepladder.
- To avoid any degradation to indoor hygiene during smoke extraction tests, Aldes proposes the use of a G3 filter adapted to the dimension, positioned between the damper and the vane core.

RANGE with a choice of options **R15**

Y	11044245 (upper mechanism) -11044246 (bottom mechanism) Width X								
	300	350	400	450	500	550	600	650	700
300	•	•	•	•	•	•	•	•	•
350	•	•	•	•	•	•	•	•	•
400	•	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•	•
700	•	•	•	•	•	•	•	•	•
750	•	•	•	•	•	•	•	•	•

- The electromagnetic tripping device is included. When ordering, state whether the power "emission" or "cut-off" mode versions are required, in addition to a 24 or 48 V DC supply. Standard NF-S 61.937 imposes the emission mode in multi-family housing ductwork, standard NF-S 61.932 requires FCU and DCU (closed/open) contacts on multi-family housing ductwork. A grille must be fitted to ensure the fire protection rating is respected.

Mounting frame for VANTONE CF - 2 leaves dampers **R15**

Y	11045396 Width X								
	300	350	400	450	500	550	600	650	700
300	•	•	•	•	•	•	•	•	•
350	•	•	•	•	•	•	•	•	•
400	•	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•	•
700	•	•	•	•	•	•	•	•	•
750	•	•	•	•	•	•	•	•	•

- For a fire protection rating of more than 1.5h, do not forget the self-adhesive intumescent seal (code 11045394) to be applied to the fitting frame.

New GFA 007 with removable core locked by the 007 clip **R15**

Y	11045333 Width X								
	300	350	400	450	500	550	600	650	700
300	•	•	•	•	•	•	•	•	•
350	•	•	•	•	•	•	•	•	•
400	•	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•	•
700	•	•	•	•	•	•	•	•	•
750	•	•	•	•	•	•	•	•	•

- A high resistance paint may be requested depending on the RAL colour code required (except on the clips).

Motorised Smoke & Heat Exhaust Dampers

Installation of VANTONE on smoke exhaust ducts

INSTALLATION PRINCIPLE

- VANTONE exhaust damper is either wall mounted, or mounted offset on a duct. The duct is of the smoke exhaust type and can be made from several types of materials:
 - concrete 110 mm wall,
 - sand-lime (Promatect L500 or Supalux M),
 - plaster tiles - 2h fire rating (BPB placo: Standard plaster board 7 + Stucal, LAFARGE: PF3-70 + Pregelux M0 BA15),
 - prégyfeu MO BD 25 - 2h fire protection rating (Lafarge),
 - staff 2h fire rating (GEOSTAFF: Staff, EXTHA: Isofiare),
 - vermiculite (Mica) 2h fire rating (cf Distribution: Tecriver).
- Mounting frame described in the Test Reports, recommended to ensure the installation geometry is correct, which itself is necessary for correct functioning of the damper.
- Depending on the type of material, the mounting frame and/or damper can be fixed or embedded. Respect the indications given in the Test Report.

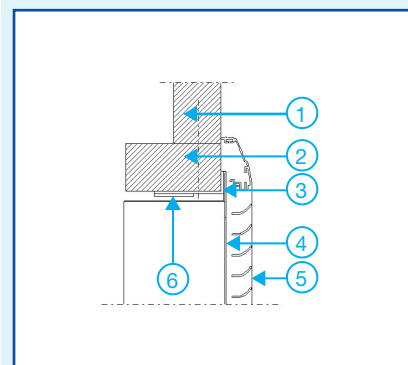
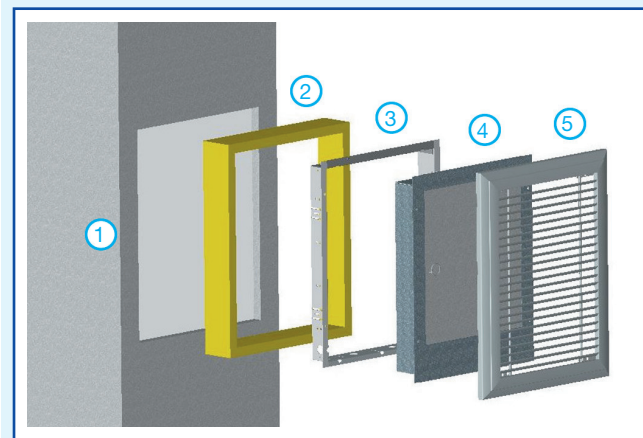
INSTALLATION AND REGULATIONS

- Assembly of the damper on the duct must follow a fire resistance rating Test Report.
- VANTONE dampers have been tested in accordance to CTICM (Effectis) Test Reports, describing:
 - fixing of the VANTONE mounting frame, developed for a professional level installation,
 - precautions to be taken when fitting the VANTONE smoke exhaust damper, especially the fitting of a sleeve or not,
 - application of an intumescent seal on the mounting frame, if necessary.
- For more information, please consult us.

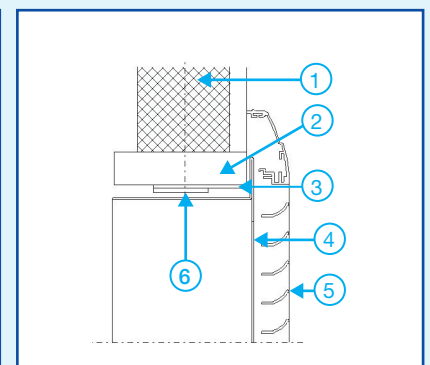
KEY TO DIAGRAMS

- Duct having the benefit of a "vertical smoke exhaust duct" Test Report.
- Sleeve with a minimum depth of 110 mm. To be carried out by the duct supplier.
- VANTONE mounting frame to be fixed to the sleeve.
- VANTONE smoke exhaust damper to be screwed on to the mounting frame ③.
- GFA 007 grille to be fixed to the damper ④, by screws, clips or hinges.
- Self-adhesive intumescent seal to be applied to the mounting frame when the degree of fire resistance is higher than 1.5h or in cases where the partition wall is not M0 or M1 (incombustible or non-flammable).
- Grouting.

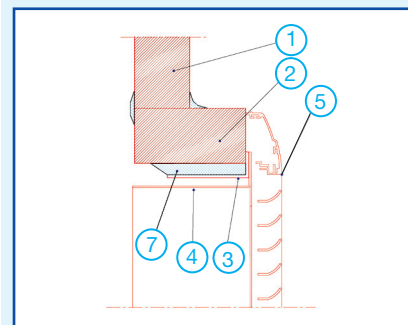
SCHEMATIC DIAGRAMS



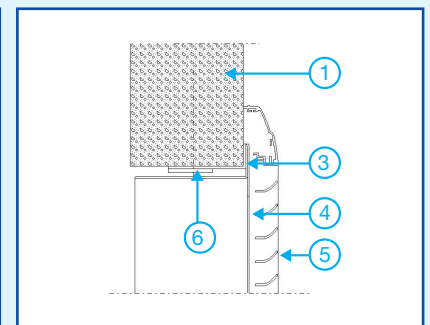
Silicate (PROMAT)



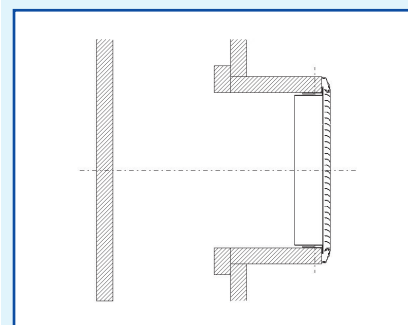
Plaster tiles + board



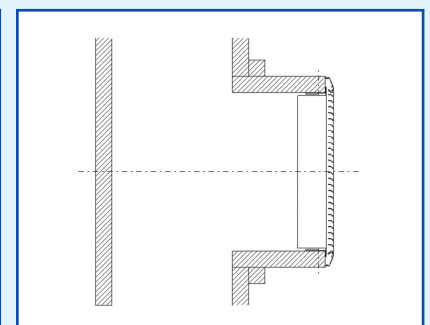
Staff



Concrete



Duct



Duct

INTUMESCENT ROLLS R14

Description	Code
Self-adhesive intumescent seal: L x l x th. = 20 m x 40 mm x 2 mm	11045394