

# Arcafacade Electric

Designation and commercial reference: Arcafacade Electric

Certificate No. :0333 CPR 219 066

**DOP** No .: **AFE** 

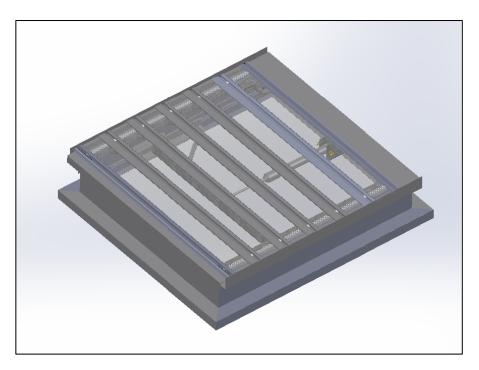
Year of certificate: 2006

**Reference standard:** NF EN 12101-2

**CE 219 Certification rule:** 

Warning: This notice cannot constitute a contractual document; the manufacturer

reserves the right to make without notice any modification he deems useful.



#### Certifying body: **AFNOR Certification**

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Websites: www.afnor.org and www.marque-nf.com

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#### 1 Identification

# 1.1 <u>Type of DENFC</u> (Natural Smoke and Heat Evacuation System)

DENFC mounted on the façade.

#### 1.2 Type of range

A smoke extraction slides opening blades of the range ARCAFADE ELECTRIC.

# 1.3 <u>Type of energy</u>

DENFC powered by internal and/or external electrical energy within the meaning of standard NF EN 12101-2. The availability of the energy source must be ensured.

#### 1.4 <u>Possible variants in the range</u>

- Types of installation:
  - o <u>Tunnel</u>
  - o Wall light
- Fills:
  - o 10 mm thick cellular polycarbonate
  - Aluminium profiles
  - o <u>Laminated glass 33.2</u>
- Options:
  - Position switch

# 2 Characteristics

# 2.1 General characteristics of Operated Safety Devices (SARs)

- A D.A.S. must not issue an order
- Devices for checking the safety and/or waiting positions of the D.A.S.
- Unblocking energy external to the D.A.S.
- Functional independence of the self-control and remote control
- No remote reset if passing in safety position by self-control
- Rearmament by remote control only if the energy to the previous rearmament has been interrupted
- End-of-life damping
- Type B or type A if height of the component to be handled less than or equal to 2.50 m from the ground

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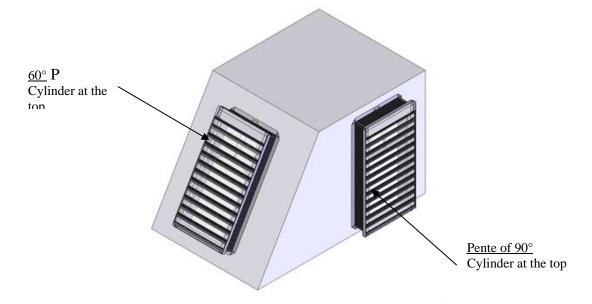
#### 2.2 General characteristics of constituents

- Control of the positions of the D.A.S.
- Class III for electrical equipment operating under very low safety voltage (TBTS)
- Isolation of electrical circuits in TBTS and electrical circuits of other equipment
- Minimum protection class IP 42
- Presence of the main connecting device
- Specific TBTS connection device
- Operation of the traction stop device
- Minimum electrical characteristics of position contacts
- Independence of control electrical circuits with other circuits

## 3 Precautions on the support

- 3.1 The support receiving the DENFC must be flat, within the normative tolerances of building construction.
- 3.2 The installation of the DENFC is carried out according to the following rule:

<u>Rule:</u> The slope of the support must be between 60° and 90° maximum regardless of the position of the axis of articulation. However, when the axis of articulation is perpendicular to the slope, the cylinder must be positioned at the top of the slope.



Warning: the device must be installed according to the standards, technical instructions, and any rules or texts in force.

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#### 4 Explanation of the product marking code



- (1) Certificate number, date of issue D.O.P number and type of installation
- <sup>2</sup> Reference standard in effect.
- Trade description of the device.
- 4 Hopper size and Useful Aperture area (Aa).

(5)

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#### Respectively:

- Type of opening of the natural smoke and heat evacuation device.
- Classification of wind load.
- Classification of snow load.
- Ambient temperature classification.
- Reliability classification.
- Power input.
- Heat resistance classification.
- Reaction to fire classification of the materials constituting the DENFC, according to the European standard in force.
- 6 Manufacturing order number.
- <sup>7</sup> Item code (for device traceability).
- Bescription of security options:
  Trigger temperature for hot melt option.
- Date of manufacture of the device.

### 5 The range

The input characteristics of the device are available on the CE marking label on the inside front of the upstand

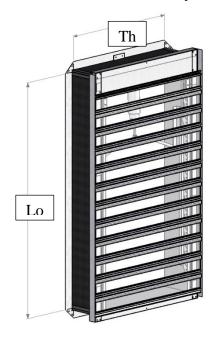
The dimensions of the upstand hopper vary from:

- 1107 mm to 3051 mm in length
- 1000 mm to 2200 mm in width

Hopper Dimension				
Width The" (in mm)		Length "Lo" (in mm)		
≥ 1000	≤ 2200	≥1107	≤ 3051	

<sup>&</sup>quot;Lo" is the length of the device

The ARCAFACE ELECTRIQUE range is able to open despite the presence of an unfavourable wind of 10 m/s.



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<sup>&</sup>quot;The" is the width of the device.



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#### 6 Installation and implementation

#### 6.1 The installation of the device

Caution:any maneuver that may damage the mechanisms and/or structure of the DENFC is prohibited. SKYDOME® cannot be held responsible for the impact of such maneuvers.

6.1.1 Installation of the ARCAFACE ELECTRIQUE according to its support

• Trimmer: Through self-drilling screws or rivets or others

Boulonneries respecting a maximum distance between 2 fastenings

of 330 mm.

• Ribbed steel sheets: Through self-drilling screws or rivets or others

Bolts respecting a maximum distance between 2 fasteners

of 330 mm.

• *Masonry support:* Through adapted fastenings respecting a center distance

Maximum between 2 fasteners of 200 mm.

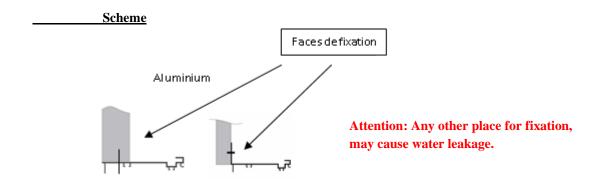
#### 6.1.2 Implementation of the ARCAELECTRIC FACADE

The center distance requirements described above are identical subject to installation on a suitable existing support, i.e. steel, concrete, wood, or any other material which has already passed the thermal deformation test.

The geometric surface (Av) of the existing support costing must be greater than or equal to the geometric surface of the capping cost.

The smoke extraction DENFC must be fixed and sealed according to the requirements defined in the waterproofing D.T.U. (Unified Technical Document) in force.

#### **6.1.3** *Schematics for fixing an apparatus according to its version*



# **6.1.4** *Installation of the ARCAELECTRIC FACADE*

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The device will be fixed according to the recommendations of the texts and standards in force.

#### 6.2 Assembly and connection

For the connection of the DENFC and its options to the safety power supply (APS): refer to the standard in force.

Cylinder	Amperage of the electric actuator
24 V Cont.	1.1 Ampere

#### 2. Instructions for use

- For commissioning, ensure that the tension at the pneumatic cylinder is in line with the values defined in the table above.
- Carry out a test(s) to verify the proper functioning of the DENFC. Check the mechanical and electrical opening and closing, as well as the holding of the lock.

#### 3. Maintenance instructions

Please note: our devices are not warranted for an exhibition that may alter the initial characteristics of an element or function of the DENFC.

The operation, maintenance and periodic verification operations will be carried out according to the requirements of the texts and standards in force as well as the following SKYDOME® requirements:

- Proceed at least 2 times a year to the opening/closing in a safe position of the DENFC.
- Verification operations:
  - o In particular, check the condition of the joints, connecting rods and cylinder rods. It is important to keep these elements lubricated (Teflon grease for slides, oil), except the cylinder stem.
  - Control the tightening of the screwed elements.
  - o Do not clean the cylinder stem with a solvent, as this can damage the inner seals.
  - O Do not paint the stem of the cylinder.
  - Clean drainage channels
  - Check that the joints are not glued.
- DENFC verification operations must be carried out at least 1 time per year.

#### 7 Replacement

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# Installation and maintenance instructions Arcafacade Electric

All components of the device are available on request from SKYDOME.®

# 8 Note

Devices equipped with a position switch are exempt from NF certification.

In accordance with the Labour Code, project owners and companies have an obligation not to endanger the staffcirculating on the roofs.

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