

**PUT INTO SERVICE:**

Once the unit assembled, make one or several test(s) to verify the good functioning of the unit. In particular, verify the mechanical and pneumatic opening and closing of the unit as well as its locking function.

ASSEMBLY AND CONNECTION:

The unit is delivered with all the connections done in the factory.
For the connection of the unit to the pneumatic security supply, please refer to the current norm.
The thermal fuse used could be equipped with a CO2 cartridge and a thermal alcohol bulb. It allows the automatic release of smoke evacuation unit in case of a temperature rise on the roof level. The releasing temperature could be calibrated from 63°C to 189°C and defined by the type of installed bulb.

MAINTENANCE AND PERIODIC CHECKINGS:

All our products are not guaranteed in case of an exposure likely to change the initial characteristics of one element or one function of the unit.

The working, maintenance and periodic verifications' operations should be done following the current texts' and norms' requirements as well as the following AMS prescriptions:

Proceed to a minimum of 2 times per year of an opening/closing in security position of the unit.

Verify especially the state of the articulations as well as the pneumatic jacks' rod.

Verify the tightening of screwed elements. (Links...)
Verify the efficiency of the locking system.

When the rod of the pneumatic jack is scratched, distorted or if there is a presence of leaks, replace it.

Do not clean the jack's rod with a solvent product. It could damage the joints.
Do not paint the jack's rod.

The verifications' operations of the unit are of minimum 1 time per year.

REPLACEMENT:

All the components of the unit are available upon request at AMS.



Impasse des Herbues ZA de l'Essart 21600 OUGES
Tel. 0033 3 80 79 25 50 - Fax. 0033 3 80 79 25 45
E-mail : contact@ams-industrie.com

N° of certificate: 0333 CPD219 054
Norm of reference: NF EN 12101-2

Year of certificate: 2006

INSTALLATION AND MAINTENANCE NOTICE OF

ARCALAM EVOLUTION PNEUMATIQUE

The following notice is not a contractual document ; the manufacturer reserves the right without prior notice to do any modification.



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S.A. au capital de 62 000 € - R.C.S. DIJON B 389 873 761 - SIRET 389 873 761 00032 - APE 281 A



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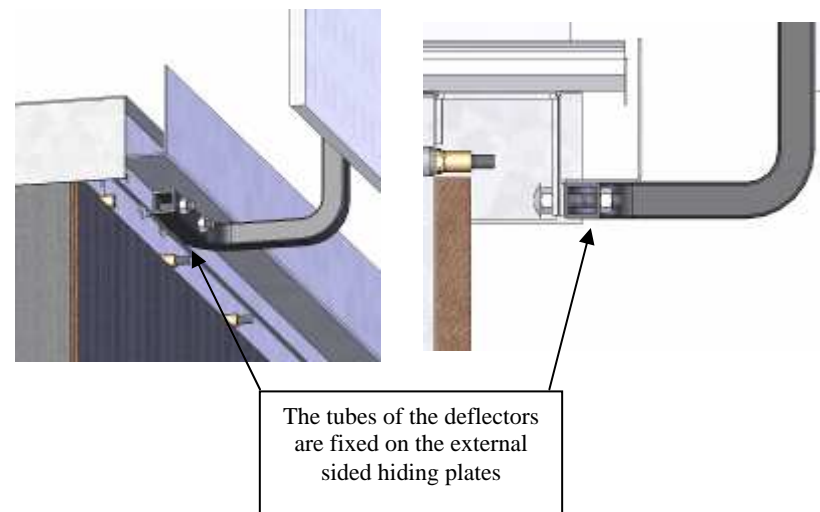
MAINTENANCE AND PERIODIC CHECKINGS: *Page 12*

REPLACEMENT: *Page 12*

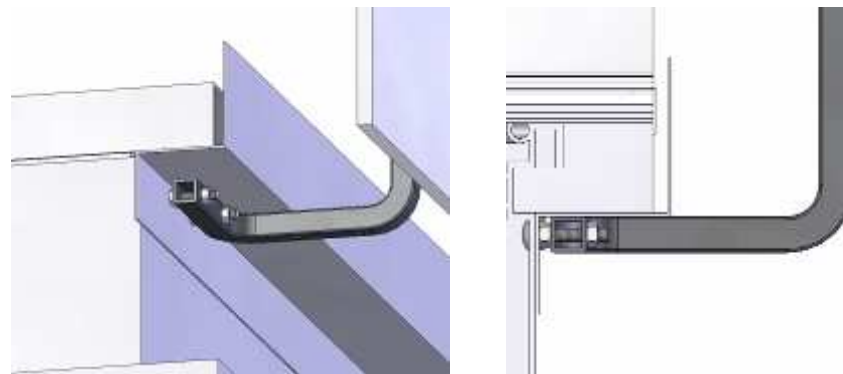
INSTALLATION OF THE DEFLECTORS:

The unit can have, as option, deflectors allowing a better smoke evacuation coefficient of the unit. These deflectors are installed in the length of the unit, as well as on the front side. They are in PCA or in aluminium and are fixed on the kerb thanks to screws (*The installation keeps the same in every case*)

Steel kerb:







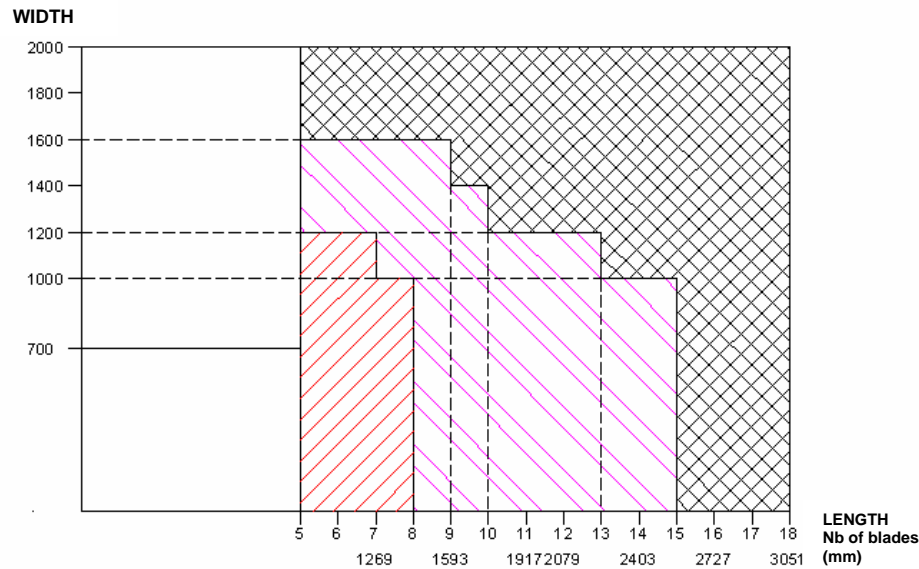
Aluminium kerb:



SNOW LOAD TESTS ON ARCALAM EVOLUTION PNEUMATIQUE GLAZING LAMINATED GLASS

LOAD OF 50 Kg/m²

-  JACK O/C C 200 DIA40
-  JACK O/C C 200 DIA50
-  JACK O/C C 200 DIA63
-  JACK O/C C 200 DIA80



Example: a unit of dimension 1000x2079, glazing PCA, snow load 50 Kg/m²

- Jack diameter: 50 mm (Table page 8)
 - Opening pressure: 15 bar
 - Closing pressure: 7 bar
 - Grams:
- } Table page 7

INTRODUCTION:

The smoke evacuation unit with single opening panel of the range PYRODOME® EVOLUTION PNEUMATIQUE is a unit working on internal and/or external pneumatic energy according to the norm NF EN 12101-2.

The availability of the energy source must be assured.

The unit has to be installed in accordance with the norms, technical instructions, and all rules or texts applied.

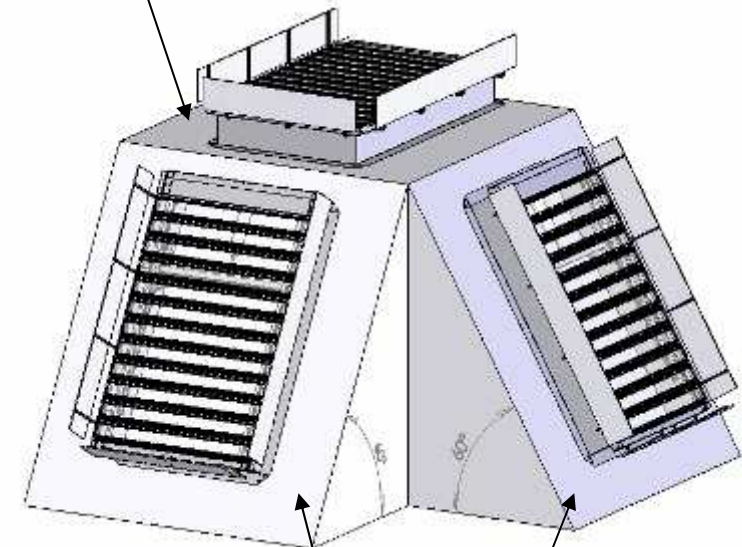
PRECAUTIONS OF THE SUPPORT:

The support getting the unit has to be realized following the normalised tolerances of the building construction.

The installation of the unit has to be done according to the following rule:

Rule: The roof slope must be between 3° and 60° maximum (that is to say 173.2%) whatever the position of the articulation axle. However when the articulation axle is perpendicular to the slope, the jack must be positioned on the top of the slope.

Horizontal plane






Slope of 60°



DESCRIPTION OF THE « CE » LABEL:




- ① Number of certificate and its obtaining date.
- ② Norm of reference in application.
- ③ Commercial name of the unit.
- ④ Opening Surface, (Aa).
- ⑤ Respectively:
 - Type of opening unit.
 - Classification of the wind loading.
 - Classification of the snow load.
 - Classification of inside temperature class.
 - Classification of reliability class.
 - Classification of heat resistance.
 - Classification of fire reaction of the unit's materials, following the applied European norm.
- ⑥ N° of production order.
- ⑦ Article Code (for the traceability of the unit).
- ⑧ Description of the security options:
Operating Temperature of the thermal fuse option.
Presence or not, of a position contactor.
- ⑨ Production date of the unit.

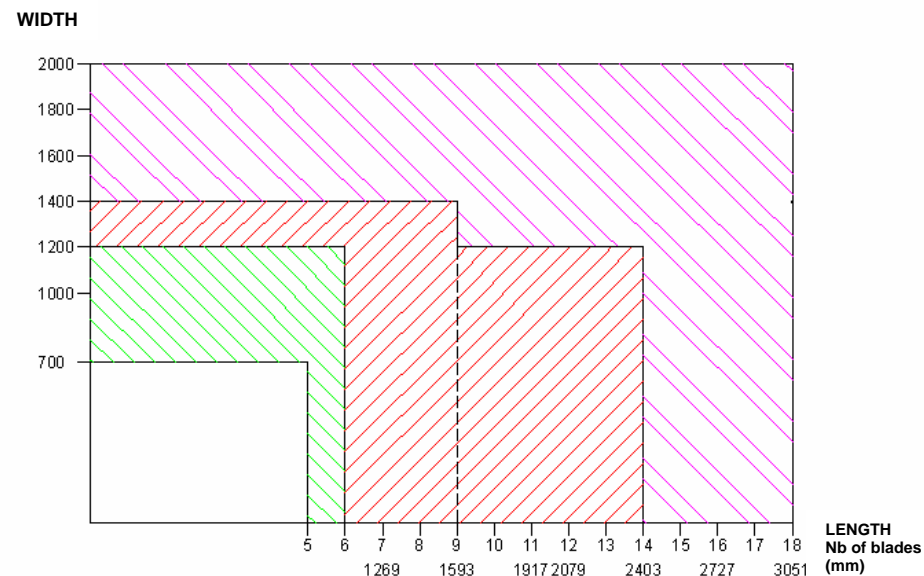
| | |
|---|---------------------|
|  | |
|  Impassé des Herbes ZA de l'Essart 21600 OUGÈS Tel. 03 80 79 25 50 - Fax: 03 80 79 25 45 E-mail : contact@ams-industrie.com | |
| N° certificat ① | 2006 |
| NF EN 12101-2:200x ② | |
| Dispositif d'évacuation naturelle de fumées et de chaleur ARCALAM EVOLUTION PNEUMATIQUE | |
| ③  | |
| Aa = XX m² ④ | |
| type B; W/L 1500; SL 500; T(0); RE 300; B 300; Ax ⑤ | |
| OF0511083XX ⑥ | Code: 8RXXXXXXXXX ⑦ |
| Options de sécurité: T=xxx; contacteur de position ⑧ | |
| Date de fabrication: Date ⑨ | |



SNOW LOAD TESTS ON ARCALAM EVOLUTION PNEUMATIQUE GLAZING LAMINATED GLASS





LOAD OF 25 Kg/m²

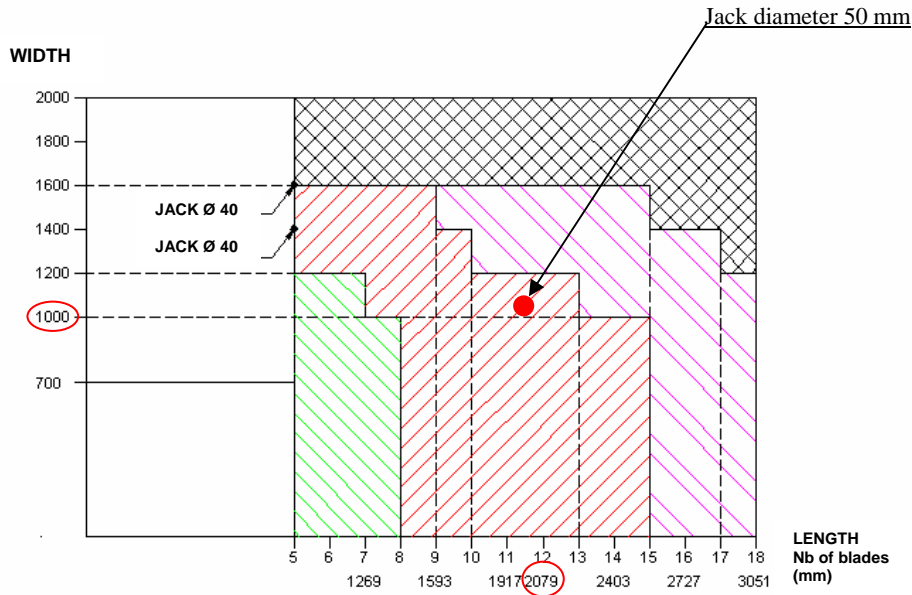
-  JACK O/C C 200 DIA40
-  JACK O/C C 200 DIA50
-  JACK O/C C 200 DIA63



SNOW LOAD TESTS ON ARCALAM EVOLUTION PNEUMATIQUE GLAZING PCA AND OPAQUE COVER

LOAD OF 50 Kg/m²

-  JACK O/C C 200 DIA40
-  JACK O/C C 200 DIA50
-  JACK O/C C 200 DIA63
-  JACK O/C C 200 DIA80



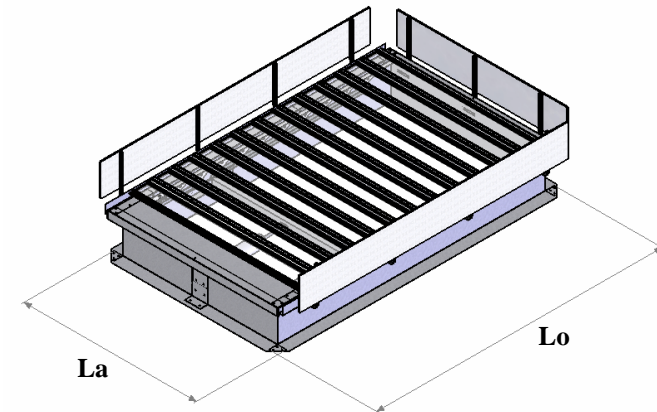
THE RANGE:

The characteristics of entries of the unit are available on the CE marked label located on the front inner side of the kerb.

- The dimensions of the kerb opening vary from:
- 1107 mm to 3051 mm in length
 - 1000 mm à 2200 mm in width

| Opening Dimension | | | |
|--------------------|--------|---------------------|--------|
| Width "La" (en mm) | | Length "Lo" (en mm) | |
| ≥ 1000 | ≤ 2200 | ≥ 1107 | ≤ 3051 |

« Lo » is the length of the unit
« La » is the width of the unit.



The range can open the ARCALAM EVOLUTION PNEUMATIQUE despite of the presence of unfavourable wind of 10 m/s and of a snow load of: 25 kg/m² or 50 kg/m².

INSTALLATION OF THE UNIT:

Any operation that could damage the mechanisms and/or the structure of the unit is forbidden. SKYDOME® could not be considered responsible for the incidents resulting from these operations.

The installation of the ARCALAM EVOLUTION PNEUMATIQUE according to its support:

Trimmer-joint:

Thanks to auto drill screws or rivets or other bolts by keeping **a maximum space of 330mm between 2 fixations.**

Ribbed steel sheets: Thanks to auto drill screws or rivets or other bolts by keeping **a maximum space of 330mm between 2 fixations.**

Concrete support: Thanks to adapted fixations by keeping **a maximum space of 200mm between 2 fixations.**

The insulation, eventually present on the unit, has a bitumen surface designed to accept torch-on waterproofing membranes.

The installation of the ARCALAM EVOLUTION PNEUMATIQUE in ADAPTER PLATE VERSION:

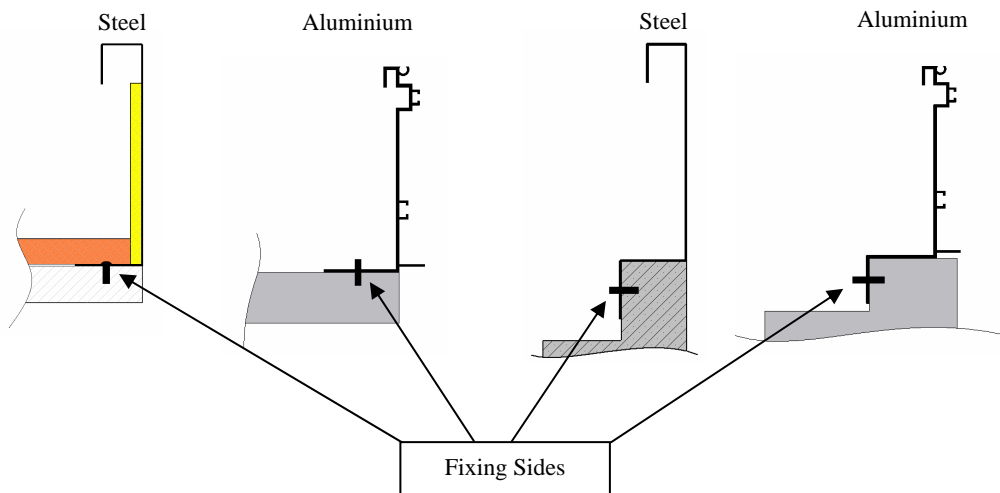
The prescriptions of the spaces described above are identical for the adapter plate version subject to an installation on an adequate existing support, that is to say: in steel, in concrete, in wood, or in all types of material having passed with success the test of thermal distortion described in the PEU (Unified Tests Procedure) smoke evacuation units.

The smoke evacuation units have to be fixed and waterproofed according to the defined prescriptions in the applied D.T.U waterproofing... (Unified Technical Document).

Diagrams of fixing principle of the unit according to its version:

Diagram 1: Standard Kerb

Diagram 2: Adapter Plate Kerb



Other places of fixing may produce water leaks.

ASSEMBLY AND CONNECTION:

The unit is delivered ready to install.
For the connection of the unit and its options to the pneumatic security supply, please refer to the current norm.

| Jack | | Opening | Closing and pressure in ventilation |
|-------------|--------------------|---|-------------------------------------|
| Ø jack (mm) | Volume (in Litres) | Pressure for 50 Kg/m ² (Bar) | Pressure (Bar) |
| 32 | 0.2 | 15 | 7 |
| 40 | 0.29 | 15 | 7 |
| 50 | 0.44 | 15 | 7 |
| 63 | 0.64 | 15 | 7 |
| 80 | 1.03 | 15 | 7 |

SNOW LOAD TESTS ON ARCALAM EVOLUTION PNEUMATIQUE GLAZING PCA AND OPAQUE COVER

LOAD OF 25 Kg/m²

- JACK O/C C 200 DIA32
- JACK O/C C 200 DIA40
- JACK O/C C 200 DIA50
- JACK O/C C 200 DIA63

