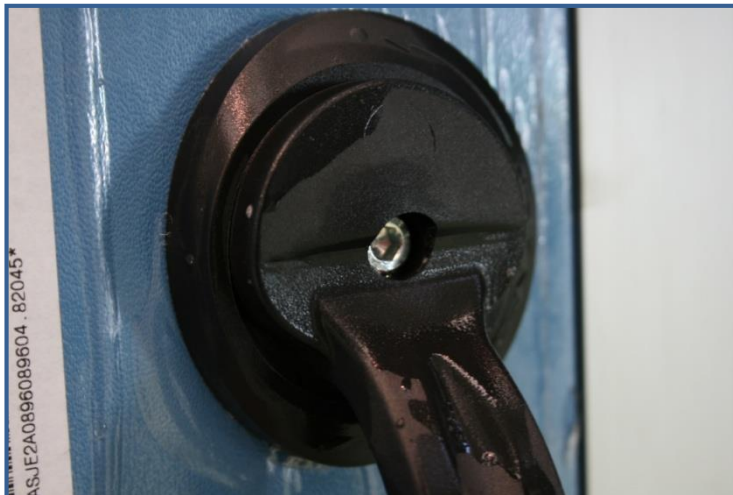


**Test for air leakage and mechanical strength of casing carried out on
a "model box" according to EN 1886**

15/05/2013



Test for air leakage and mechanical strength of casing carried out on a "model box" according to European Standard EN 1886

Material tested:

- Frame for inward opening doors PVC-P1 -48 and NP1-48 (positive pressure unit)
- Handles DN ISO
- Gasket system G002 and GS-20 (patent pending)
- Porthole W19-65

European Standard: EN 1886

- Certified instrument used during the tests (other instruments with different measuring scales were used):

Panda 230 V
Serial N. 126956
Testing: 11-10-2012
Expiry date: 11-10-2013

Calibration Certificate: Ta465-P
Serial N. Ta4651244003
In Tolerance 07-11-2012
Calibration Certificate: Pvm 620
Serial N. Pvm621243007
In Tolerance 07-11-2012

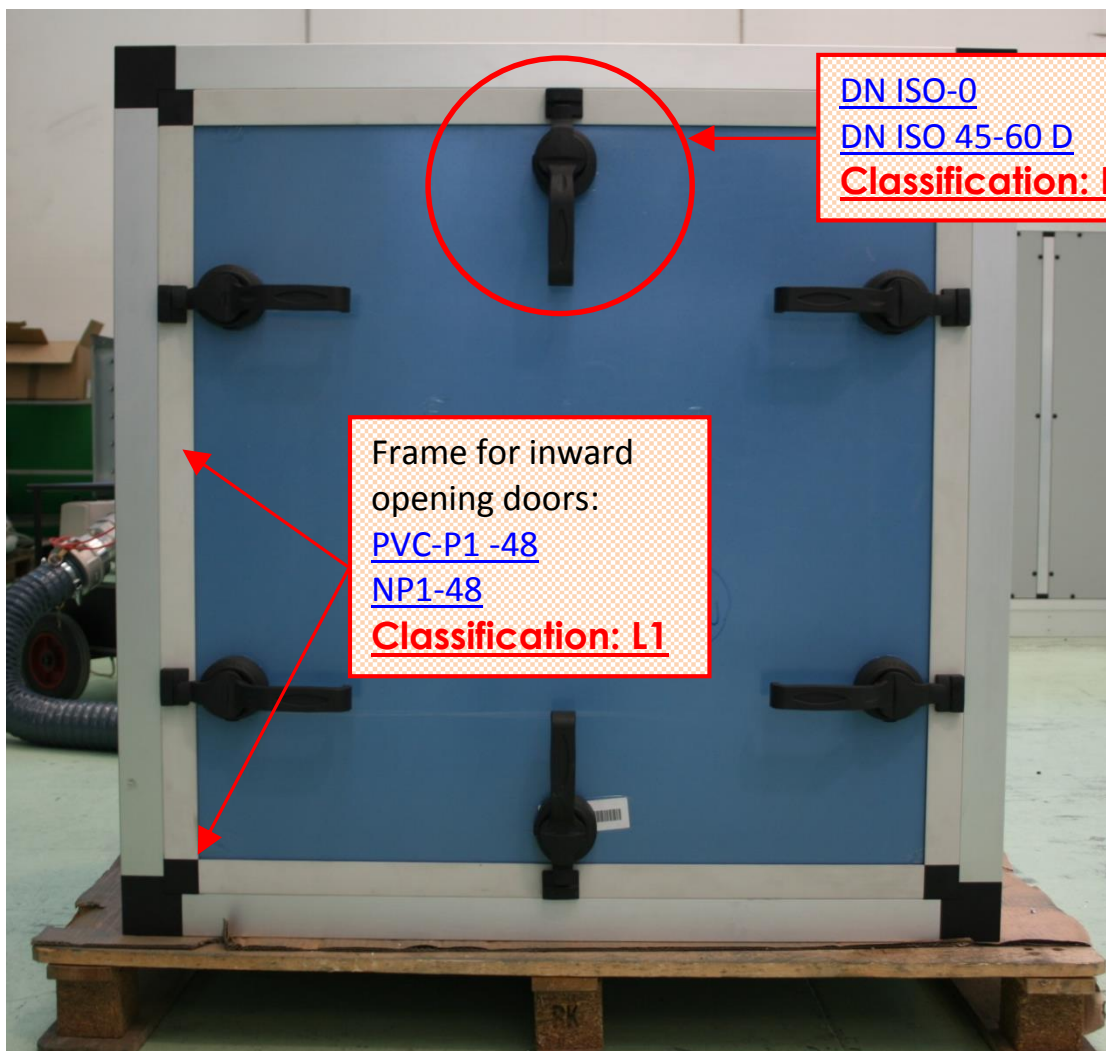
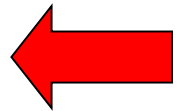


1° test carried out at a positive pressure of +700 Pa
to determine casing air leakage

Model box:

- ✓ Dimension: 1 m x 1 m x 1 m / Panel thickness: 45 mm
- ✓ Frame: aluminium profile P150/45 and corner A50/45
- ✓ Gaskets used: G002 and GS-20 (patent pending)
- ✓ Frame for inward opening doors: PVC-P1 -48 and NP1-48
- ✓ Handles: DN ISO-0 and DN ISO 45-60 D
- ✓ Porthole: W19-65

Result: Air leakage measured: 0.0136 L/sm² = **Classification: L1**



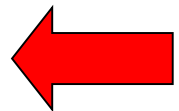
2° test carried out at a negative pressure of -400 Pa

to determine casing air leakage

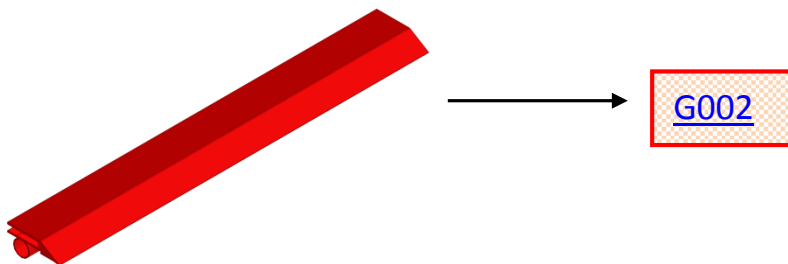
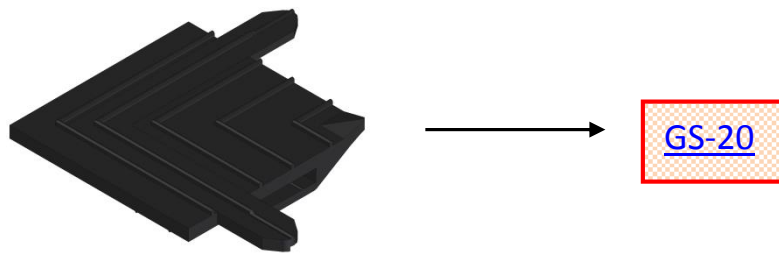
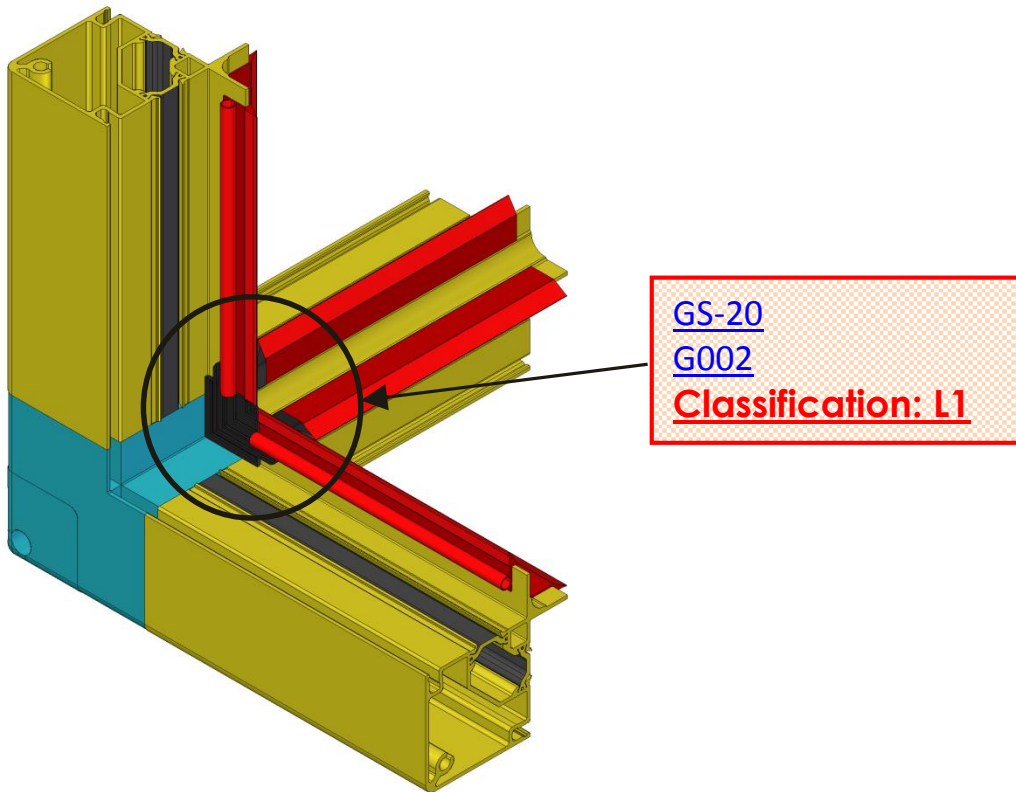
Model box:

- ✓ Dimension: 1 m x 1 m x 1 m / Panel thickness: 45 mm
- ✓ Frame: aluminium profile P150/45 and corner A50/45
- ✓ Gaskets used: G002 and GS-20 (patent pending)
- ✓ Frame for inward opening doors: PVC-P1 -48 e NP1-48
- ✓ Handles: DN ISO-0 and DN ISO 45-60 D
- ✓ Porthole: W19-65

Result: Air leakage measured: 0.1 L/sm^2 = **Classification: L1**



Gasket system used for the "model box"

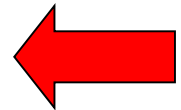


3° test carried out at a negative pressure of -1000 PA
to determine mechanical strength of casing

Model box:

- ✓ Dimension: 1 m x 1 m x 1 m / Panel thickness: 45 mm
- ✓ Frame: aluminium profile P150/45 and corner A50/45
- ✓ Gaskets used: G002 and GS-20 (patent pending)
- ✓ Handles: DN ISO-0 and DN ISO 45-60 D
- ✓ Porthole: W19-65

Result: Deflection measured: 0.57 mm/m = **Classification: D1**



P 150/45
Classification: D1

N 50/45
A 50/45
Classification: D1