

1. Introduction

- 1.1 Principal: Intelligent Membranes Ltd., Clopton Farm, Lower Road, Croydon, SG80EF Cambridgeshire, United Kingdom
- 1.2 Assignment: For Intelligent Membranes Ltd an investigation was carried out into the air permeability according to EN 12114 of a coating Passive Purple External (thickness approx. 0.5 mm.)
- 1.3 Date assignment: 16-12-2020.

2. Materials and method

2.1 Tested product:

Description:

Coating placed between two airtight multiplex plates (1000 x 1000 mm) in which 90 round holes of 51 mm have been made.

Specifications:

20.0650 01A: Passive Purple External:

Coating between two multiplex plates, closed around the end seams with aluminium tape. Equipped with 90 holes of \varnothing 51 mm. Area of openings $90 \times (0.0255^2 \times \text{Pi}) = 0.184 \text{ m}^2$.

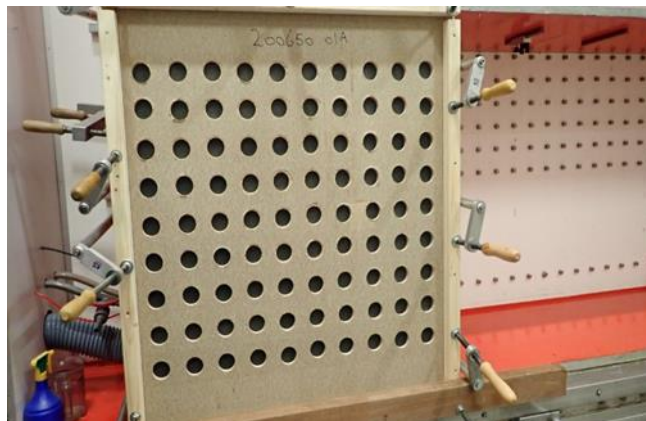


Photo 1: View of the test element 20.0650-01A

2.2 Date arrival: Week 1- 2021.

2.3 Tests performed:

Air permeability

Determination of the air permeability is carried out according to EN 12114: "Thermal performance of buildings - Air permeability of building components and building elements - Laboratory test method": March 2000.

At least 6 air losses were measured with positive and negative air pressure differences between P_{min} and P_{max} , where P_{min} is at least $1/5 P_{max}$.

2.4 Test period: 11-01-2021.

2.5 Deviations from the standard: None.

3. Results

20.0650 01A: Passive Purple External

Results of Air permeability according EN 12114:

Surface 0.184 m²

measurement data		
SHR code: 20.0650 01A		
Pressure	Air loss	Air loss
[Pa]	[m ³ /h·m ²]	[m ³ /h]
50	0.17	0.03
100	0.28	0.04
120	0.28	0.04
135	0.39	0.04
150	0.28	0.05
175	0.39	0.06
200	0.28	0.05

Appendix

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This report replaces report 20.0650-1b, February 9th 2021.

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