



Ventilated Facade with mineral wool.

IS IT:

Product

Technology

Equipment

APPLICABLE FOR:

Restoration

Rehabilitation

New Construction

APPLICABLE ON:

1. Foundations and underground structures

2. Vertical structures

3. Horizontal structures and vertical connections

4. Roof and terraces

5. Façade and building envelope

6. Finishes and completion elements

7. Integrated services

8. General strategies for building recovery

Related companies: URSA TERRA Vento Plus T0003.

DESCRIPTION

Semi-rigid mineral wool panel URSA TERRA in accordance with the UNE EN 13162 standard, non-hydrophilic with high mechanical performance and without veil/fabric.

Glass wool is characterized by having a structure of inorganic filaments that are bonded together by a thermosetting resin. Both recycled glass from the process and external glass from the glass recycling chain are included in the mix of raw materials. The filamentary structure allows air to be enclosed inside the pores so that it remains immobile and has the power to isolate.

URSA mineral wool contains more than 95% by mass of inorganic mineral materials, being rot-proof, they are not attacked by fungi, bacteria or parasites, its non-hydrophilic characteristic also makes it a material that behaves well against humidity in the environment and in conditions of high solar radiation.

WHY TO USE

The flexibility and adaptability of URSA TERRA mineral wool allows its complete integration into structures and cavities, without leaving empty spaces, avoiding the formation of thermal and acoustic bridges. The porosity of URSA TERRA mineral wool provides improved insulating power and the technologies used in the manufacture ensure the absence of fibers and good control and uniformity of the filaments. These products contain recycled glass over 50%.

HOW TO USE AND APPLY

Insulating panels:

- The insulating panels are placed directly on the outer face of the wall and without leaving gaps between them, preferably to break joints.
- Between the insulation and the exterior panel, a ventilated air chamber with a thickness of 3 to 10 cm must be guaranteed. Thanks to the ease of installation of the insulating panels, a correct planimetry of the installed panels is guaranteed.

Fixations:

- The length depends on the thickness of the insulation to be installed.

- The diameter of the head must have a minimum diameter of 90mm. Preferably flexible to allow stress distribution and reduce the 'pillow' effect.

To guarantee the correct functioning of the insulating panels, it is advisable to execute the exterior skin of the façade in the shortest possible time.

TECHNICAL CHARACTERISTICS

The designation code for URSA TERRA VENTO Plus T0003 mineral wool products establishes the properties declared on the product's CE marking (MW-EN 13162-T3-MU1-WS-AFr10-WLp-DS (70,90)-AWi). This 0.032 W/m K lambda product has an A1 reaction to fire according to Euro classes.

Substance definition:

- 93-100% Fibers with orientation random of with main composition silicate, with a oxide content alkaline and alkaline earthy (Na₂O+K₂O+CaO+MgO +BaO) greater than 18% in weight and that meets the conditions of the note Q.
- 0-7% % Polymer binder.

Safety sheets:

https://d7rh5s3nxmpy4.cloudfront.net/CMP1520/files/3/S_DS_URSA_TERRA_Espa%C3%B1ol.pdf

REACH Compliance Statement for Mineral Wool (MW):
https://d7rh5s3nxmpy4.cloudfront.net/CMP1520/files/3/R-04.03.02.02-01_ES_REACH_GW_article.pdf

Declaration A+:

https://d7rh5s3nxmpy4.cloudfront.net/CMP1520/files/1/D_eclaraci%C3%B3n_A%2B_URSA_IBERICA_AISLANTE_S_Productos_Construccion.pdf

EUCEB Certificate:

https://d7rh5s3nxmpy4.cloudfront.net/CMP1520/files/1/Certificate_Euceb.pdf

Environmental Label Type I:

http://d7rh5s3nxmpy4.cloudfront.net/CMP1520/files/ME00243_270_001_01_certificate.pdf.



RECOMMENDATIONS AND OTHER INFORMATION

The quality of URSA TERRA Vento products complies with the specifications of the

UNE-EN ISO 10456 standard, so it is not necessary to consider any correction to the thermal resistance value due to the Wind Washing effect.

The manufacturing process and the quality of URSA TERRA Vento products guarantee their behavior when occasionally in contact with water and wind. To this end, two external tests have been carried out at Tecnalia laboratory on resistance to rainwater penetration and on resistance to wind pressure (Report No. 091580-001-1 and Report No. 091580-001-2).

The specific resistivity to the passage of air provides good acoustic damping, allowing an increase in the acoustic insulation of the facades where it is installed.

The incorporation of mineral wool insulation in the facade reduces the system's own resonance frequency, displacing the frequency peak of the standing waves, which minimizes the possibility of a drum effect as much as possible. The ventilated facade with mineral wool filling in the cavities of the air chamber helps to avoid possible airborne noise transmission edges between rooms.

Tests carried out in the Applus+ laboratory to improve acoustic insulation against airborne noise according to UNE-EN ISO 10140-2:2011 and UNE-EN ISO 10140-1:2016 Annex G with various TRESPA ventilated façade systems.

EXAMPLES

Rehabilitation with ventilated façade in San Sebastián, Kursaal Rehabilitaciones (2021), with URSA TERRA Vento Plus T0003 in 80mm.

Las Fuentes work, Zaragoza (2021). Ventilated facade with URSA TERRA Vento Plus T0003 in 100mm.

AIRLAB building, Las Palmas de Gran Canaria (2021). Ventilated facade with URSA TERRA Vento Plus T0003 in 60mm.

REFERENCES / SOURCES AND LITERATURE

https://d7rh5s3nxmpy4.cloudfront.net/CMP1520/files/URSA_TERRA_VentoPlusT0003_eng.pdf

<https://www.ursa.es/producto/ursa-terra-vento-plus-t0003/>

WEBSITE OF THE COMPANY

www.ursa.es



IMAGES AND CAPTIONS



Fig.1: . Plastic fixing with a diameter of 90mm and the length of the insulating panel. © URSA Ibérica Aislantes S.A.
<https://www.youtube.com/watch?v=WfJ93GzS1SY>.

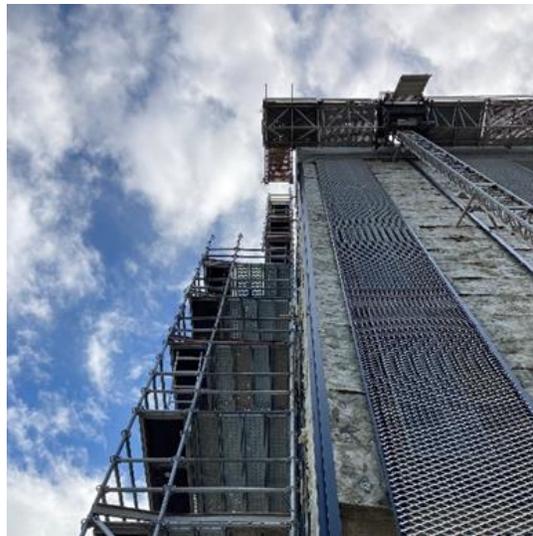


Fig.2-3: . Detail of the panel installed on the supporting wall. © URSA Ibérica Aislantes S.A.

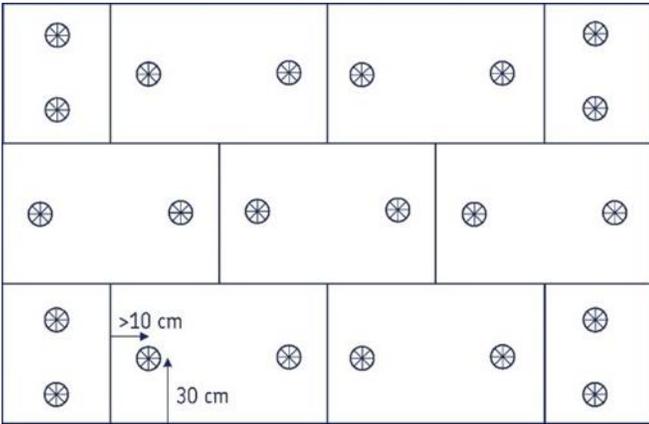


Fig.4-5: Detail on distribution of fixings by panels: In the high and low levels, 2 fixings will be installed distributed in each corner 10 cm from the ends. Panel detail installed with 90mm diameter washer fixings. © URSA Ibérica Aislantes S.A.



Fig.6: Detail on the URSA TERRA Vento Plus T0003 panels, in 80mm thickness and panel format.
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