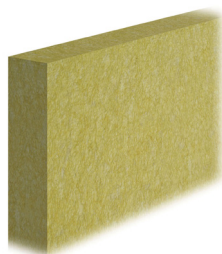


# EWI DUAL DENSITY SLAB

DATA SHEET

Dual-density Rock Mineral Wool slab for External Wall Insulation systems



Exteriors



## Composition

EWI DUAL DENSITY SLAB is an uncoated rigid dual-density mineral wool slab.

## Supply

- EWI DUAL DENSITY SLABS are supplied in polyethylene packaging.

## Use

EWI DUAL DENSITY SLABS are used for application of external thermal insulation composite systems on the exterior walls of new buildings, or in the restoration and renovation of existing buildings. The thickness of the panel will be defined according to the thermal insulation requirements and, in any case, in compliance with current legislation in force in the place where it is used.

## Substrate preparation

The application surface must be solid, clean, resistant, dry and disinfected. If it is not, you must remove any dust, dirt, traces of release agents and crumbling or loose parts. Make sure the substrate is level, and if necessary level off using plaster such as KC 1, KD 2 or KI 7. Remove the excess parts where there are any specific protrusions. Deteriorated concrete must be repaired following the FASSAREPAIR CYCLES. Any paints or coatings that are weak, crumbling or detaching must be removed mechanically. Once all the removal, repair and substrate preparation operations have been completed, the surfaces then need to be washed; when fully dry, the surfaces can be treated using a specific primer with high penetration, such as MIKROS 001.

Treat substrates with enamel or glazed surfaces by sand-blasting.



## Application

The panels are attached using Fassa A 96 or AL 88 adhesives, applying the adhesive extensively using a notched trowel, or around the perimeter and in spots in the centre. This operation shall be performed assuring the specified minimum bonding surface of at least 50% of the total panel surface area. The adhesive must always be applied on the board perimeter, making sure that it does not ooze out from the board after it is laid. The panels are applied from the bottom upwards, in a staggered pattern, avoiding gaps between panels. Any joints between panels should be filled with strips of insulating material or polyurethane sealing foam. The slabs are mechanically fixed using at least 6 anchors/m<sup>2</sup> in a "W" pattern (for buildings above 10 metres high, refer to the anchor patterns in the technical documentation). The anchor must be chosen depending on the type of substrate the External Thermal Insulation Composite System is installed on. Once the panels have been mechanically fixed, the reinforced skim coat can be applied. The panels are always finished with two layers of skim coat, using Fassa A 96 or AL 88 base coats, and reinforced using alkali-resistant fibreglass reinforcing mesh, such as FASSANET 160.

When the layer of reinforced base coat has cured, the external thermal insulation composite system finish cycle is completed by applying RSR 421, RX 561, RTA 549 thick protective coating, after having applied the specific primer.

*For further technical information and details on application procedures, see the instructions provided in the FASSATHERM External Thermal Insulation Composite System application manual. For special applications and substrates, contact Fassa Technical Service.*

## Warnings

- Apply the product at temperatures between +5°C and +35°C.
- Avoid exposing the panels to the elements before application, making sure to store them packaged in a sheltered, dry and well ventilated place and away from light or other sources of heat.
- The surfaces of the panels must be clean and intact: only remove the packaging from the panels immediately before application.
- Avoid applying the adhesive only in dots.
- Avoid using boards that are damaged, deteriorated, dirty, etc..
- Avoid possible infiltration of water when applying the panels by ensuring they are adequately protected.
- Avoid applying the rock wool insulating panels in contact with the ground.

## Quality

CE marking in accordance with EN 13162:2015, compliance with EN 13500:2005 and the careful checks performed on the panels in our factories guarantee the following performance properties: thermal conductivity, compressive strength, perpendicular tensile strength at the faces, water absorption, vapour barrier, dimensional stability and fire resistance.

## Technical Data

### Dimensions

Length	1,200 mm
Width	600 mm
Thicknesses available	from 50 to 250 mm

## Technical features

The classification of the EWI DUAL DENSITY SLABS in accordance with EN 13162:2015 requires the characteristics to be declared in terms of designation codes, showing the specific upper or lower limits.

Specifications	Designation code	Unit of measure	Value	Reference standard
Thickness	T	mm	T5 Da -1%/-1mm a +3 mm	EN 823
Declared thermal conductivity	$\lambda_D$	W/m·K	0.036	EN 12667
Compressive strength at 10% deformation	CS (10)	kPa	≥ 10	EN 826
Tensile strength perpendicular to the faces	TR	kPa	≥ 10	EN 1607
Water vapour resistance	$\mu$	-	~ 1	EN 13162
Water vapour permeability in dry conditions	$\delta_a$	kg/m·s·Pa	$1.5 \cdot 10^{-10}$	EN 13162
Water vapour permeability in wet conditions	$\delta_u$	kg/m·s·Pa	$1.5 \cdot 10^{-10}$	EN 13162
Specific thermal capacity	$C_s$	J/kg·K	1030	ISO 10456
Reaction to fire	Euroclass	-	A1	EN 13501-1

## Thermal resistance

EWI DUAL DENSITY SLABS feature different thermal resistance values depending on the thickness.

Thickness (mm)	Declared thermal resistance (m <sup>2</sup> ·K/W)
50	1.38
60	1.66
70	1.94
80	2.22
90	2.50
100	2.77
110	3.05
120	3.33
130	3.61
140	3.88
150	4.16
160	4.44
170	4.72
180	5.00
190	5.27
200	5.55
210	5.83
220	6.11
230	6.38
240	6.66
250	6.94

The above information refers to laboratory testing; it is possible that in practical applications on site these may differ considerably according to the conditions in which the material is applied. In any case the user must check that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.

Technical specifications regarding the use of Fassa Bortolo products for structural or fire prevention applications will only be officially valid if provided by Fassa Bortolo's "Technical Service" and "Research, Development and Quality System". If necessary, contact Technical Service in your country of reference (IT: [area.tecnica@fassabortolo.com](mailto:area.tecnica@fassabortolo.com), ES: [asistencia.tecnica@fassabortolo.com](mailto:asistencia.tecnica@fassabortolo.com), PT: [assistencia.tecnica@fassabortolo.com](mailto:assistencia.tecnica@fassabortolo.com), FR: [bureau.technique@fassabortolo.fr](mailto:bureau.technique@fassabortolo.fr), UK: [technical.assistance@fassabortolo.com](mailto:technical.assistance@fassabortolo.com)).

Please note that for the aforementioned products, the assessment is required by the appointed professional, in accordance with regulations in force.