TECHNICAL DATA SHEET

COVERROCK® X-2

1. PRODUCT DESCPRIPTION

Rock wool insulation boards in accordance with DIN EN 13162.

2. FIELD OF APPLICATION

Facade insulation boards for KEIM external thermal insulation composite systems according to system approval: Z-33.43-185; Z-33.47-727; Z-33.49-1505.
Generally approved by the building authorities for: exterior walls; basement ceilings.
Suitable for: Masonry or concrete, rendered and unrendered; panel material in timber construction; ETICS upgrade system.
Application type according to DIN 4108-10: WAP-zg; DI.
The complete ETIC system is non-combustible, class A2, s1-d0 in accordance with DIN EN 13501-1. Suitable for building heights up to 100 m. Permissible building height according to the State Building Code.
Not suitable for: horizontal and inclined surfaces exposed to weathering; metallic substrates; saponifiable existing substrates.

3. PRODUCT PROPERTIES

- easy to use
- with improved heat protection
- excellent render adhesion and simpler anchoring thanks to highly compacted top layer
- coated on both sides, applicable without pressure filling?
- fire behaviour: non-flammable, class A1 according to EN 13501-1
- weight reduction due to light formulation
- for increased sound insulation
- harmless to health
- completely recyclable
- resistant to aging
- The insulation panels comply with the high standards of the VDPM e.V. (association for insulation systems, renders and mortars)
- Externally monitored by the MPA University Stuttgart

MATERIAL CHARACTERISTICS:

– CE marking code:	MW-EN 13162-T5-DS(T+)-CS(10)20-TR10-WL(P)-SDi*-AFr40
– Rated value of thermal conductivity:	0,035 W/mK
– Nominal value of thermal conductivity λD:	0,034 W/mK
– Panel size:	800 x 625 mm
– Panel thickness:	80 - 200 mm
– Edge formation:	square
– Bulk density according to EN 1602:	approx. 90 kg/m³
– Melting point:	≥ 1000 °C
– Glow tolerance according to DIN EN 16733:	no tendency to continuous smouldering
– Flow resistance per unit length:	≥ 40 kPa s/m²
– Water absorption at long-term partial immersion:	WL(P) ≤ 3,0 kg/m²
– Compressive stress at 10% compression:	CS(10) ≥ 20 kPa

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– Tensile strength perpendicular to the panel plane:	TR10 ≥ 10 kPa
– Thickness tolerance:	T5 +3 / -1 mm
– Width tolerance:	W2 ±2 mm
– Length tolerance:	L5 ±5 mm
– Squareness:	S5 ±5 mm/m
– Planarity:	P ±3 mm/m
– Colour shade:	greenish

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:
The substrate must be strong, dry, clean, sound and free from adhesion-reducing residues. The permanent compatibility of any existing coatings with the adhesive mortar must be examined by an expert. Strongly sanding or unevenly absorbent surfaces should be primed with Indulaqua primer. Observe the Technical Data Sheet of the primer with regard to execution and dilution. The insulation panel may also be used as a basement ceiling insulation panel: Rusty steel beams or damp areas must not be covered with insulation until the cause itself has been properly remedied.

APPLICATION:
Cut to size using an insulation knife or a suitable insulation saw.

GLUING:
The insulation panels are butted tightly and glued in a bond from bottom to top. Apply the appropriate adhesive mortar to the insulation panels using the bead-and-dot method or over the entire surface. Push the boards into place. At the edges of the building, the insulation panels are glued offset Apply the system's adhesive mortar to the insulation panels using the bead-and-dot method, ensuring an adhesion of min. 40 %. Adhesive surface proportion from 220 mm insulation thickness: min. 40 % The insulation panels may also be adhered in 2 layers. The second layer of insulation panels is glued over the entire surface and in a staggered bond pattern (starting with half a row of panels). On panel materials in wood construction, the insulation panels are glued over the entire surface with the adhesive filler Klebespachtel. For this purpose, the adhesive filler is applied to the substrate or to the insulation panels with a notched trowel. Immediately after applying the adhesive, the insulation panels must be glued to the substrate. Closing of unavoidable defects and joints up to 5 mm wide with Iso Top Thermfoam B1 is permissible. General instruction with regard to gluing: Do not apply adhesive to the panel joints. Do not create an insulation panel joint over a joint in the substrate underneath. The insulation panel may also be used as a basement ceiling insulation panel: Apply Pulverkleber-90 with a notched trowel ≥ 10 mm to the full surface of the insulation panel, alternatively to the substrate, using the comb-bed method, and then float it into the adhesive bed with slight pressure. For full-surface bonding, it is recommended to apply adhesive mortar to both the insulation panel and the substrate (floating-buttering method). The insulation panels must be applied tightly to the substrate, cavities are not permissible.

DOWELING:
Check the adhesion of the insulation panels after at least 3 days. Insulation panels that are not bonded or damaged must be replaced. Anchoring is carried out in glued and dowelled ETIC systems with generally approved ETICS fasteners according to DIN EN 1991-1-4/NA. The required fastener quantity depends on the building height and the respective wind zone in which the object is located. The minimum distance between anchor shank and board edge is min. 150 mm, the minimum distance between anchor shank and anchor shank is min. 200 mm. For further information, please refer to our ETICS Technical Guide, Chapter #8, ETICS Wind Suction Loads. The insulation panel may also be used as a basement ceiling insulation panel: Without fire protection requirements: The insulation panels may only be glued to new substrates up to a maximum weight per unit area of 15 kg/m² (including any final coating). In the case of insufficiently load-bearing substrates (old substrates) or if the permissible weight per unit area is exceeded, dowelling is carried out using ETICS anchors approved by the general building authorities or by the European authorities. Minimum number of anchors: 2 anchors per insulation board cut. With fire protection requirements: If necessary, dowel with the basement ceiling insulation screw DDS-Z and the basement ceiling insulation washer DDT.

REINFORCEMENT:
After a sufficient setting time of the adhesive, apply the mixed, system-specific reinforcing mortar evenly to the insulation panels, preferably with a 10 mm toothed trowel. Embed the system-specific Glasfaser-Gittermatte (glass fibre mesh), overlap the edges by 10 cm and fill wet-in-wet with system-specific reinforcing mortar. The system-specific Glasfaser-Gittermatte

should be embedded in the middle (layer thicknesses up to 6 mm) or in the upper third (layer thicknesses from 6 mm). Thickness of the reinforcing layer depends on the respective system approval and can be in the range of max. 3 - 15 mm. The insulation panel may also be used as a basement ceiling insulation panel: After a sufficient setting time of the adhesive, apply the mixed, system-specific reinforcing mortar evenly to the insulation panels, preferably with a 10 mm toothed trowel. Place the Glasfaser-Gittermatte (mesh), overlap edges by 10 cm and fill wet-in-wet with system-specific reinforcing mortar. The system-specific Glasfaser-Gittermatte (mesh) should be embedded in the middle. Layer thickness of the reinforcement approx. 5 mm.
Hinweise zum Einbau von Feldbegrenzungsfugen bei Dämmplattendicken > 200 mm:
Die Feldgrößen ohne Dehnungsfugen betragen für Dickschichtsysteme (Unterputz + Schlussbeschichtung = Gesamtputzdicke ab 9 mm) 7,5 m x 7,5 m bzw. 56 m². Die Feldgrößen ohne Dehnungsfugen betragen für Dünnschichtsysteme (Unterputz Schlussbeschichtung = Gesamtputzdicke bis 8 mm) 50 m x 25 m.
Die entsprechenden Feldgrößen sind objektspezifisch vom Planer festzulegen.

5. PACKAGING / TECHNICAL DATA

Panel thickness [mm]	Dynamic stiffness s` [MN / m³]	m² per bundle	m² per pallet	Bundle per pallet
80	11	1.50	15.00	10
100	11	1.50	12.00	8
120	9	1.50	9.00	6
140	9	1.00	8.00	8
160	9	1.00	8.00	8
180	9	1.00	6.00	6
200	6	1.00	6.00	6

6. STORAGE

max. storage time	Storage conditions
no maximum storage time	dry protect against weathering

STORAGE INFORMATION:
Observe stacking height of max. 2 m. Transport packaging is not sufficient weather protection.

7. DISPOSAL

EC WASTE CODE:
Waste code: 17 06 04

8. SAFETY INSTRUCTIONS

Safety instructions UZ 140: Wear protective gloves / protective clothes / eye protection/ face protection. In case of contact with eyes: Rinse cautiously with water for several minutes. Remove any contact lenses if possible. Continue to rinse. Get immediate medical advice/attention. / Keep children away from fresh render. / Always comply with work safety instructions.

9. CERTIFICATES & QUALITY SEALS

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release the purchaser and processor from the obligation to convince themselves of the suitability of our products for the intended application with due care, which is general practice in trade and crafts. The general rules of construction technology must be observed. We reserve the right to make modifications to improve the product or its application. This edition supersedes all earlier editions.

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