

COSMO Composite Panel

ALU composite panel

ALU-XPS/ 1,5

Top coats:

pure Aluminium Al MG 1

with protective film

- o Powder coated, according to RAL
- o Coating is carried out in accordance with GSB guidelines.

Core material:

Polystyrene-rigid foam, extruded

- o Thermal conductivity group 029
- o Raw density 32kg/m³
- o Pressure resistance 0.30N/mm² as per DIN EN 826
- o Moisture-resistant
- o Free from CFC- and HFCKW

Top coats, ALU	mm	1,5	1,5	1,5	1,5	1,5
Core material, XPS	mm	17	21	24	27	30
Panel thickness	mm	20 ±0,5	24 ±0,5	27 ±0,5	30 ±0,5	33 ±0,6
U-value <small>*Calculated with λ_D¹ as per DIN EN 13164</small>	W/m ² K	1,22	1,12	1,00	0,91	0,83
Weight	Kg/m ²	9,2	9,3	9,4	9,5	9,6
Sound insulation value	dB	29²	29²	29²	29²	29²

^{*}λ_B as per DIN 4108-4 and other XPS cores on request.

¹0,033 W/m·K

²laboratory value

Formats: 2000x900 / 2000x1000 / 2500x1250 / 3000x1500 mm

Other dimensions and designs on request.

The full-surface, shear and tension proof adhesive joint of material components allows the self-supporting application of the **COSMO composite panels**. Strictly observe our instructions for installation and processing!
Tolerance limits of the composite components as per DIN or EN.

Our hints for application, guideline for installation and processing, as well as the details on product and performance are recommendations and apply only as nominal values under standard test conditions. They are descriptions of our products and are not a warranty in the legal sense. Due to the variety of the intended uses and the respective special conditions, it is in the user's interest to perform its own test on the suitability for the special case of application. Our application-specific support is unbinding and is provided without taking over any liability. We reserve the right to make changes in sense of the technical progress.



Weiss Chemie + Technik
GmbH & Co. KG
Hansastraße 2
D-35708 Haiger

Phone: + 49 (0) 2773 / 815 - 0
Fax.: + 49 (0) 2773 / 815 - 300
Email: se@weiss-chemie.de
Website: www.weiss-chemie.com

made by weiss

COSMO Composite Panel

ALU composite panel

ALU-XPS/ 1,5

1. Storage:

COSMO composite panels must be stored in a closed storage room, protected from moisture, under normal climatic conditions (18-25°C). They are horizontally stored on a plane surface or pallet. Already trimmed edges as well as surfaces must be protected from damages. This especially applies to gloss, paint-coated and glass surfaces. If single elements are taken from the stack, make sure that they are pulled over the next one and foreign particles do not damage the surface. During processing, the protective film should remain on the surface. During processing and storing, cover the pallet or the individual elements, e.g. using a flat-laid cardboard. This particularly protects **wood-, HPL-, and Quick-Tape- composite panels** from moisture and drying. If material is stored at a construction site, avoid moisture in the stack. Façade panels must be flush placed on a plane support and dry. The foam film, laid between, serves as protection for high-quality surfaces and must be inserted again after re-stacking. Stagnant moisture between the stored panels can cause impairments to the surface that cannot be removed anymore and durably damage the visible surface.

2. Application:

COSMO composite panels can be cut on vertical or horizontal sawing machines (exception: Steel sheets and cement fibre boards). The tools must be carbide-tipped. For further information on saw blades and the cutting speed contact the manufacturer.

To prevent the respective surface from scratching during the cutting procedure, we recommend working with felt supports.

Before the installation, **visually check** the elements. It is not allowed to install defective or damaged elements. During the construction work, the elements must be protected from pollution and mechanical damages.

3. Installation:

COSMO composite panels must be installed in a **frame structure** which is all-around and meets the requirements.

Make sure that the frame structure provides enough expansion space for the element. The panels may not contact the frame structure in any position.

Consider that the expansion coefficient of the top coats increases or decreases the elements in the flat direction. Additionally, the "bimetal effect" can cause slight, reversible warping due to building physics. The filling panel or the façade panel must not be clamped tensionally locked and used for deriving forces of the frame.

Generally, make sure that the fold is reliably dewatered, so that no moisture can get into the cut edge. Here, masking-off of the edges with suitable adhesive tapes provides additional protection. This vapour-diffusion tight barrier is mandatorily required for **plywood elements**. For instance, this can be done by covering with a vapour-diffusion tight aluminium film or by sealing with silicone.

It is important that double-sided top surfaces of the elements stand or lay on the block (see Technical Guidelines of the Glazing Trade – Blocking of glazing units).

After installation, immediately remove the protective film.

In case of plywood surfaces, observe our recommendations on coating (99.0002).

Always discuss other installation requirements with the manufacturer.

4. Safety:

As per DIN 52900, **COSMO composite panels** do not require any particular technical protective measures.