Product sheet

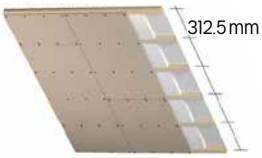
ClayTec clay building board D22 solar

Art. 09.100

- 100% CO_2 neutral production
- Solar dried
- Natural building materials combined
- Medium weight
- Stabilized with miscanthus fibers

View of Wall

View of Sloping Roof



The ClayTec clay building board D22 solar is produced 100% CO_2-neutral and dried using modern solar technology. This drywall board made of clay and miscanthus fibers is used for cladding wood and metal frame constructions of interior walls, facing shells, ceilings, and roof surfaces.

The ClayTec clay building board D22 solar serves both as a drywall board and clay plaster. With a bulk density of 900 kg/m³, it offers a significant mass of clay while being easy to process.

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Product data and application see reverse

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Area of application Clay building board for cladding wooden and metal post constructions indoors. For interior walls and facing shells. On surfaces of water impact class W0-I according to DIN 18534-1, e.g. B. in bathrooms (except shower areas) and domestic kitchens. With reinforcement layer, it serves as a substrate for YOSIMA clay design plaster or ClayTec fine Clay topcoat fine 06 with ClayTec clay paint (ready to use) or the ClayFix clay coating system.

Composition Building clay, miscanthus fibers, starch (approx. 0.2%). Paper (single-sided back).

Manufacturing Processing and shaping process with green electricity, drying exclusively by solar power.

Material Properties Bulk density: approx. 900 kg/m³, Thermal conductivity: 0.30 W/m·K, Water vapor diffusion resistance factor (μ): 18, Thermal storage capacity: Specific heat capacity (Cp): 1.1 kJ/kg·K, Areal heat capacity (D22): 21.8 kJ/m²·K

Mass and weight D=approx. 22 mm, L = 1,250 mm, W = 625 mm. Area per panel approx. 0.78 m². Mass approx. 15.5 kg/panel = approx. 19.8 kg/m²

Delivery form Sealed on pallets of 50 pieces each

Storage Lying on pallets in the warehouse, dry. Storage is possible indefinitely. Protect from moisture during transport and storage on the construction site. Carry it upright, we recommend the ClayTec transport aid 182/400. Lying on the construction site and stored flat on dry pallets or pieces of wood.

Humidity Moisture stress from wet installed plasters and screeds is not permitted. In general, the relative humidity during storage and after installation must not exceed 70%.

Material requirements Approx. 1.28 panels/m². When determining the material requirements, a reserve of approx. 10% for waste etc. must be taken into account.

Substructure Wooden stand: Solid wood (softwood) according to DIN EN 14081-1 or glued laminated timber (BSH) according to DIN EN 14080. Strength class at least C24 according to DIN EN 338. Sorting class S10 according to DIN 4074. Moisture content max. 18%. Metal stand: Sheet steel profiles according to DIN 18182-1 / DIN EN 14195.

Grid walls: Distance between axles 625 mm (= 1,250 mm/2).
Grid ceilings and sloping roofs: Distance between axis dimensions max. 312.5 mm (= 1,250 mm/4).

The wall-encircling UK links are backed with ClayTec drywall tape and fastened according to the rules of technology. When it comes to the stud structure, it must be taken into account that the panels are attached at an angle of 90° to the substructure. If, in exceptional cases, they are laid parallel to the substructure, the distance between the substructure may not exceed 312.5 mm (= 625 mm/2). We strongly advise against direct attachment to load-bearing components (e.g. rafters, ceiling beams).

Processing The panels are cut with a jigsaw or a hand-held circular saw. The FESTOOL diamond cutting system is particularly suitable DSC-AG 125 Plus-FS, see also clip on claytec.link/Lehmtrockenbau

The clay side of the board should be plastered, not the paper side. The lowest row of panels is installed with some distance ("air") from the floor. The panels are fitted onto the substructure as seamlessly as possible.

Screws: Fastening to wood with ClayTec clay building board screws 5 x 50 mm or FN drywall screws with coarse thread. On metal C profile with FN drywall screws with fine double thread, on UA profile with TB drywall screw and countersunk washer. Screw spacing ≤ 200 mm, i.e. 4 fastening points are required per plate/substructure intersection (wall 16, ceiling 20 screws/plate). Countersink the screws slightly (flush with the plate).

Staples: Fastening to wood with 45 mm staples, e.g., Haubold item no. 574941 KG 745 Cnk resin-coated, 12 µm (ETA approved). Maximum staple spacing: ≤ 80 mm. Staples must be driven flush with the board surface—not countersunk.

Cross joints and the continuation of wall opening boundaries through horizontal or vertical joints are not permitted. The assembly is carried out with joints offset by a stand center distance. Make connections to other components such as solid walls and ceilings with joints.

Further treatment For joint and coating work, the room temperature must not fall below +10°C. Basically, the moisture entry through the plaster must be kept as low as possible. The panel joint surrounding the wall is closed with ClayTec clay joint filler. Before applying the mortar, carefully remove dust from the panels and, if necessary, pre-wet them slightly (spray mist). Gaps ≥ 1 mm wide must be filled completely with fine clay mortar. Level panel thickness offsets and allow to dry.

Thin layer coating: Close screw holes and surface defects beforehand. fter drying, apply a 3 mm thick coat of ClayTec clay adhesive and reinforcing mortar or clay finishing plaster, close screw recesses and missing areas, allow to dry. It can also be sprayed on with a plastering machine; rest periods are not necessary for this application. While still wet, embed ClayTec Glass Mesh 112 across the entire surface.
Alternatively, execute the reinforcement layer ready for paint application (fresh-on-fresh coating, approx. 1 mm). Once dry, the surface may also be finished with ClayTec clay topcoat fine 06 or clay filling and smoothing putty (Q3). Finish with ClayTec clay paint (ready to use) or the ClayFix clay coating system.

Wall surface heating: Close gaps ≥ 1 mm wide as before. Pre-spray up to max. 8 mm with clay base plaster, straw, clay plaster mineral or SanReMo. After drying, fill up to the top of the wall heating pipe. Drying of the entire concealed plaster with heating support. For more information, see the ClayTec clay plaster worksheet.

Notice The proof and declaration according to DIN 18948 "Clay panels – requirements, testing and labeling" will be available shortly.

Claims for compensation that do not result from factory mixing errors are excluded.

Subject to change and errors excepted. As of 2025/6.