

# CLAYTEC HFA N+F D25

UDP Inside N+F

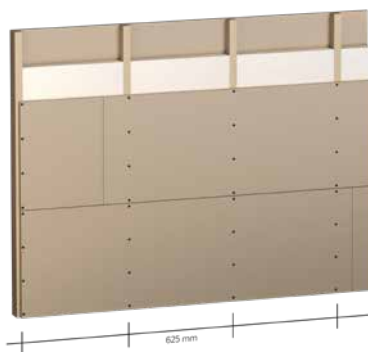
**Item No. 09.224**

Thickness= 25 mm, L= 1.890 mm, W= 610 mm, butt groove and tongue

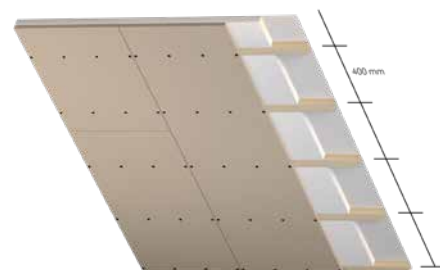
- **Ecological wood fibreboard (HFA)**
- **Lightweight**
- **Joints possible in the field**
- **Small format is ideal for the Do-It-Yourself builders**



View wall



View roof slope



Wood fibreboard for cladding of wood and metal post structures of inner walls, facing shells, ceiling and roof surfaces. CLAYTEC HFA N+F are light and breathable. The tongue-and-groove connection ensures the best workability, even joints are possible in the field. It is very reasonably priced, making drywall affordable for everyone!

As supplement to this product sheet the **ClayTec Guidelines for ecological drywalls in system apply.**

# CLAYTEC HFA N+F D25

UDP Inside N+F

**Item. No. 09.224 thickness= 25 mm, L= 1.890 mm, W= 610 mm**

**Scope of application** Wood fibreboard (HFA) for cladding of wood and metal post structures in the interiors. For inner walls and facing shells DIN 4103-1, installation area 1 or 2 for ceiling and roof surfaces. On surfaces of water exposure class W0-I as per DIN 18534-1, e.g. in bathrooms (except for shower area) and household kitchens. With reinforcing layer substrate for YOSIM clay design plaster or ClayTec clay topcoat fine 06 with CLAYFIX clay paint as well as other ClayTec clay plaster.

**Composition** Wood fibres made from wood from responsibly managed forests. PMDI adhesive approx. 3.5 %, Paraffin wax emulsion 0.5-3.0 %. Manufacturing in the dry process.

**Parameters** Compressive strength  $\geq 250$  kPa. Bulk density approx.  $270 \text{ kg/m}^3$ , Nominal value thermal conductivity  $0.051 \text{ W/mK}$ ,  $\mu 5$ . Heat storage:  $C_p 2.1 \text{ kJ/kgK}$ ,  $14.2 \text{ kJ/m}^2\text{K}$ . Fire behaviour according to DIN EN 13501-1: E, according to DIN 4102 B2.

**Component values** For stability as per DIN 4103-1, sound insulation of walls and facing shells as well as building material class and fire resistance class for walls and ceilings, please refer to **ClayTec Guidelines for ecological drywalls in the system**.

**Dimensions and weights** Thickness= 25 mm, L= 1.890 mm, W= 610 mm (Effective measure  $1.10 \text{ m}^2/\text{board}$ ). Mass of approx.  $8.00 \text{ kg}/\text{board}$  = approx.  $7.25 \text{ kg/m}^2$ .

**Delivery form** 42 boards/individual pallets

**Storage** In storage flat on pallets, dry. Storage is unlimited. Protect against moisture during transport and storage on construction site. On the construction site, store flat and even on dry pallets or wood. Protect edges against damages.

**Material requirement** When determining material requirements take into account reserves of approx. 10% for waste, etc.

**Substructure Wood posts:** Solid wood (soft wood) as per DIN EN 14081-1 or laminated timber (BSH) in accordance with DIN EN 14080. Strength class min. C24 according to DIN EN 338. Sorting class S10 according to DIN 4074 Moisture content max. 18 %. Metal posts: Sheet steel profile according to DIN 18182-1 / DIN EN 14195.

Grid walls: axles dimension distance 625 mm, grid ceilings and roof pitches: axles dimension distance 400 mm.

The edges are designed with special tongue-and-groove which allows for joints even in the field. The blanks must then be attached on two substructure components. The wall-mounted substructure sections are supported with ClayTec drywall tape and mounted according to rules of engineering.

For studding make sure that the boards are mounted on the substructure offset by  $90^\circ$ . If in exceptional cases they are laid parallel to the substructure (e.g. between ceiling beams), the distance of the substructure must not be more than 312.5 mm (=  $625 \text{ mm}/2$ ) We strongly advise against mounting directly on the load bearing components (e.g. Rafters, ceiling beams).

**Processing** The long and deep embedding tongue-and-groove connection is used for component stability. Their geometry requires special care during transport and installation. Imperfections in joint areas can be tolerated to a certain extent ( $< L 10 \text{ cm}$ ,  $<20\%$  Total joint length).

The boards can be cut, among others, with Jigsaw or hand-held circular saw, see also the clip on [www.youtube.com/watch?v=5FFMZ6PX7dY](http://www.youtube.com/watch?v=5FFMZ6PX7dY)

The bottom row of the boards must be mounted with some spacing to ("Air") the floor. They must be mounted in landscape format and as tightly as possible.

**Screws:** Mounting on wood with ClayTec clay building board screws  $5 \times 50 \text{ mm}$  or FN drywall screws with coarse thread. On the metal C-Profile with FN drywall screws with fine double-thread, on UA profile with TB drywall screws and countersunk washer. Screwing distance  $\leq 200 \text{ mm}$ , i.e. 4 mounting points are required for each board/substructure crossing. Lower the screws a bit (board flush).

**Brackets:** Mounting on wood with brackets 45 mm, e.g. Haubold Art. No. 574941 KG 745 Cnk resined  $12 \mu\text{m}$  (ETA). Bracket spacing  $\leq 65 \text{ mm}$ . Lay the boards with tongue pointing upwards. Cross jointing and continuation of wall opening limits through horizontal or vertical joints are not allowed. Mount with joints offset by a post spacing of min. 300 mm. Use joints to connect to other building parts such as solid walls and ceilings.

**Further treatment** The room temperature should not exceed  $+10^\circ \text{ C}$  for joint and coating works. In general, keep the moisture penetration through the plaster to as low as possible. Use ClayTec clay joint-filler for closing the wall-mounted board joint. Carefully dust off the boards before mortar application.

**Thin-layer coating:** Finely and deeply fill gaps at board joint at  $\geq 1 \text{ mm}$  wide with ClayTec clay adhesive and reinforcing mortar or clay topcoat fine 06, close screw recesses and imperfections, allow to dry. The surfaces are coated 3 mm thick with clay adhesive and reinforcing mortar. It can also be injected with a plaster machine, rest times are not required for this application. Glass or flax fabric is worked into the still wet surface. After drying professionally apply YOSI-MA clay design plaster. For the YOSIMA clay surfacer system or the CLAFIX clay coating system the fabric of the reinforcing layer is covered wet-on-wet.

**Thick-layer coating:** Close gap  $\geq 1 \text{ mm}$  wide as before. The surfaces are pretreated with RED primer. Apply clay undercoat plaster with straw, clay plaster MI-NERAL 20 or clay plaster SanReMo on wall surfaces in a layer thickness of max. 8 mm and max. 5 mm on ceiling or roof pitch surfaces. Glass or flax fabric is worked into the still wet surface. Allow to dry. Total paster thickness for the wall max. 15 mm, ceiling or roof pitches max. 10 mm (each at least in two layers).

**Wall surface heating:** Close gap  $\geq 1 \text{ mm}$  wide as before. Prepare the surfaces with RED primer or with notched trowel made of clay adhesive and reinforcing mortar. Allow to dry. Pre-spray up to max. 8 mm with clay plaster mortar mentioned above. Polish up after drying up to pipe crow wall heating. Drying of the entire base plaster with heating support. For further information see ClayTec work sheet Clay Plaster.

Familiarity with **ClayTec guidelines for ecological drywalls in the system** is mandatory for the handling the products (see [https://www.claytec.de/en/products/downloads\\_en](https://www.claytec.de/en/products/downloads_en)).

For instructions on working with this product see:

