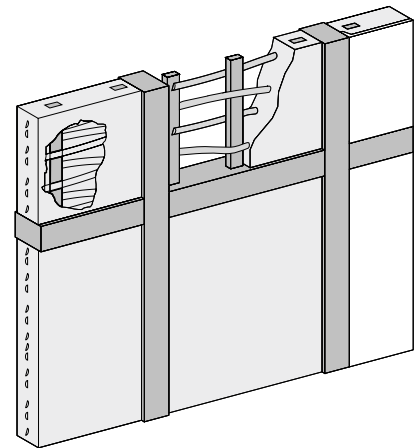
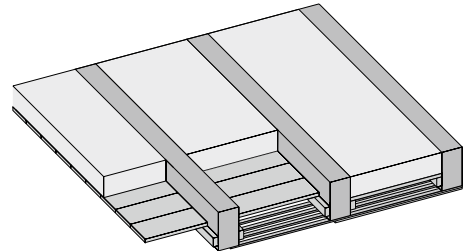


Straw clay

Item No. 04.004

- **Historically authentic**
- **Malleable during processing**
- **Solid after hardening**



Straw clay raw mixture for repairing and renewing infills and for filling timber-frame ceilings. Puddled clay or daub is the original clay building material used in timber-frame construction. The straw and clay mixture was prepared using animal power and applied by the dauber - the clay craftsman. The earth-moist mixture is best prepared using an agitator paddle and spread over the wattle or laths using a trowel while it is malleable and ductile.

Straw clay

Item No. 04.004

Clay product type Straw clay according to section 3.4 of the earth building standards issued by the Dachverband Lehm (German clay construction trade association).

Field of application Repair and renewal of clay infills for restoring timber-framed buildings, for clay fillings in historical wood-beam ceilings.

Composition Building clay up to 5 mm, sand 0-8 mm, barley straw up to 10 cm.

Material parameters Bulk density 1600 kg/m³ (thermal conductivity 0.73 W/mK, μ 5/10).

Delivery forms, yield Earth-moist in 1.0-t Big Bags (yields 700 l straw clay mixture ready for processing) .

Storage Store in a dry place. Earth-moist straw clay must be processed no later than 3 months after manufacture. During winter, earth-moist goods must be prevented from freezing in storage, otherwise their workability will be impaired by the frost.

Material requirements When calculating the material requirements, approx. 20-25 % must be subtracted for the volume of the wattle or ceiling battens, using the example of an 8.0-cm-thick building element.

Preparation Straw clay is a rich mixture. Depending on the desired consistency, the malleable building material is prepared by adding approx. 10-15 % water in a pan or trough compulsory mixer, ideally in a lifting mixer or kneader. It can also be prepared in small quantities in mortar buckets or tubs by intensively working it through using a spade, rake or powerful motorised paddle mixer.

Processing Timber-frame infills: first, apply straw clay to one side of the wattle or the batten lattice. This coat is applied to the outer surface. The mixture is thrown on or pressed through the wattle. Flatten down the resulting ridges of straw clay on the inner surface and smooth over. After a drying time of 1-2 days (depending on weather conditions), apply an additional, full-surface coat to the inside. Carefully roughen (perforate) the outer surface while still fresh to facilitate the application of a lime plaster.

Ceilings: apply the straw clay to the battens and press it through to the lath (reed matting 70 pcs. 34.001). Lightly compact the layer and trowel it flush with the top surface of the beam.

Drying Timber-frame infills: depending on ventilation and weather conditions, an 8.0-cm-thick layer of straw clay usually takes 1-2 weeks to dry out sufficiently to eliminate the risk of frost damage.

Ceilings: after application, ensure that the straw clay dries rapidly by providing sufficient cross-ventilation (i.e. all windows and doors open 24 hours a day) or using drying equipment.

Subsequent processing Timber-frame infills are usually plastered on the outside using gräfix coarse lime basecoat render with hair (ClayTec 21.200). Read the ClayTec worksheet Timber-frame construction for information on selecting a suitable plaster structure and applying the plaster.

Notes The straw clay must be completely dry before plastering the surface or subsequently installing wooden floors or the like. It is normal for shrinkage cracks to appear during the drying period. They can be plastered over without any further preparation.

If the historical building elements being repaired are made from a lean, sandy straw clay, it is advisable to adapt the new straw clay to the substrate by adding sand. For more information, see claytec.com.

Claims for compensation that do not result from factory mixing errors are excluded.
Subject to change and errors excepted. As of 2026/9.