

## Building clay

### Item No. 01.002, 01.003, 10.101

**Field of application** Binder for clay mortar, dry earth filling materials, straw clay, light clays etc. Base material for individual mixtures and producing clay timber struts.

**Composition** Natural building clay with a fine-sandy mineral structure

**Cohesion** Cohesion tested according to 2.4.3 of the "Clay building rules" of the Dachverband Lehm (German clay construction trade association)

#### Supply forms

Earth-moist 01.003 in 1.0t Big Bags with grain sizes up to 5 mm

Dry, ground 01.002 in 10 t big bags with grain sizes up to 0.5 mm

Dry, ground 10.101 in 25 kg bags, 48 bags/pal. with grain sizes up to 0.5 mm in 25 kg bags, 48 bags/pal.

**Storage** Protect earth-moist products against dehydration (clumping together) or humidification by weather. Apart from changes in consistency, can be stored for an unlimited period.

**Material needs** The material needs, depending on the intended use, are 1 part clay to 0.5 to 2.5 parts additive. If used as an infill, remember when calculating the material needs that the material is compacted by approx. 15-20% during installation.

**Preparation** With any rotary drum, turbomixer and pug mill mixer. For smaller amounts use a motor whisk or mix by hand. Mineral materials with grain sizes of 0-16 mm, plant materials or fibres are normally used as additives. First pour the water, then the clay and finally the additives into the mixer and mix thoroughly.

Building clay is intended as a base material in clay construction work by experienced craftsmen. Mixing ratios depend on the intended use and additives. Recipes can be developed individually.

**Installing ceiling infills** Pour the material between the raft battens or ceiling beams and it normally only needs to be slightly compacted. The dry bulk density and thus the weight per unit area of the ceiling infill depend on the degree of compaction. With a normal installation, the dry bulk density is around 1,300 kg/m<sup>3</sup>. Take into account the moisture stress from inserted pieces of wood or other adjacent parts of the building. After installation, it is essential to ensure that drying takes place rapidly, e.g. by means of adequate cross-ventilation (all windows and doors kept open 24 hours a day) or drying equipment. The infill must be absolutely dry before the subsequent installation of wooden flooring, etc.

**Note** If the infill needs to be very pourable and easy to work with, we recommend our leaner product, clay masonry mortar (CLAYTEC 05.020, 05.220).