Product sheet

ClayTec®
Lehm in Bestform.

Rammed earth

Item No. 02.004, 02.008, 02.100, 02.200, 02.400, 02.600

- Original and pure clay construction
- Fascinating appearance
- For walls and floors

Natural FINE rammed earth
Item No. 02.008

Natural rammed earth
Item No. 02.004

WHITE rammed earth
Item No. 02.100

YELLOW rammed earth
Item No. 02.200

RED rammed earth
Item No. 02.400

GREY rammed earth
Item No. 02.600

Rammed earth ready mix for walls and floors. Rammed earth construction is clay construction in its archaic and pure form. The raw material is directly formed into a monolithic construction element. The main reason that this ancient construction technique was rediscovered was because of the aesthetic and expressive power of the heavy monolithic components and their surfaces. Natural fine rammed earth is for covering rammed earth floors. The finer grain makes it easier to produce a floor surface. The compacted material can then be oiled or fixed and finished with wax.

GERMANY
ClayTec GmbH & Co. KG
Nettetaler Straße 113-117,
41751 Viersen
Phone: +49 2153 918-0
www.claytec.de/en

For technical consulting service teams and sales see www.claytec.de/en
Product data and application see reverse

Product sheet

Rammed earth

Item. No. 02.004, 02.008, 02.100, 02.200, 02.400, 02.600

Type of clay product Rammed earth (STL) according to 3.2 of the "Clay building rules" of the Dachverband Lehm (German clay construction trade association).

Field of application Rammed earth for load-bearing and non-load-bearing clay walls; fine rammed earth for clay floors.

Composition Building clay, mixed-grain stony additives. Grain size 0-16 mm (oversized grain up to 22 mm possible).
Fine rammed earth 02.008 grain size 0-8 mm (oversized grain up to 16 mm possible).

Material properties Dry bulk density approx. 2.300 kg/m^3, thermal conductivity 1.5 W/mK, μ 5/10, building material class A1, compressive strength Natural rammed earth 2.0 N/mm^2, other rammed earth products on demand, shrinkage approx. 0.7%.

Supply form Earth-moist in 1.0 t Big Bags

Storage Protect against dehydration (clumping together) or humidification by weather. Can be stored for long periods.

Check the moisture and homogeneity (workability) of the building material before starting work.

Material needs A Big Bag yields approx. 0.45 m^3 of finished wall component.

Processing, execution Walls: The rammed earth is filled into sufficiently strong formwork in 10-15 cm thick layers and compacted evenly up to its maximum by hand or machine. **Load-bearing walls are planned and dimensioned in accordance with the "Clay building rules" of the Dachverband Lehm (German clay construction trade association). Walls may only be made under the instruction and supervision of an expert with sufficient experience in the construction of load-bearing clay building components.**

Floors: For application over concrete slabs, plan on a total thickness of at least 10 cm, and for application over soil or insulation (e.g. foam glass gravel), plan on a total application thickness of 20 cm. Rammed earth is applied in layers onto a clean and rigid base and compacted evenly the maximum amount possible, by hand or machine. Floors in which the tread surface is to be made of clay, can only be constructed by specialists experienced in the production of such floors.

Drying walls The drying time depends on the installation thickness, season and weather. Subsequent processing may only be carried out after it has dried sufficiently.

Subsequent processing Building components are usually provided with protection against the weather. Exterior plaster mortar and execution are described in Worksheet 1.1. ClayTec clay undercoat plaster, clay topcoat plaster, coarse or mineral clay plaster are suitable interior plasters. They should be used in accordance with Worksheet 6.1 "Clay plasters".

Floors: Uneven surfaces can be reworked with a trowel applying high pressure. Surface treatments with hard wax for floors or hard oil plus hard wax for floors improve the surface strength. **Test the effect first on a sample area.**

Notes **Further information can be found in ClayTec Worksheet 1.1, available at www.claytec.de (Downloads, Worksheet Archive.)**

Working with rammed earth requires a high level of knowledge and skill. We are happy to provide professional advice and assistance during the planning and execution.

Should additional moistening or homogenisation of the rammed earth become necessary, this will not be considered grounds for complaint.

Samples should always be prepare in order to assess the final appearance of the rammed earth. Because of naturally occurring differences in the colour of the clay and additives, deviations in the colour of rammed earth are not typically regarded as grounds for complaint. We undertake to ensure the best possible colour consistency.

Damages caused by the weathering of areas that have not been plastered or lined are also not considered grounds for complaint.

For instructions on working with this product see: