



## Bioecological building

### We understand the problems

- In countries with advanced economies, man spends about 90% of his time in buildings
- Many of the materials used for building purposes release harmful substances for a very long time
- There's nothing reassuring about the choice of Bio-ecological products
- Ecological doesn't necessarily mean Biocompatible
- Costs are high

### And we know how to solve them

- Highly vapour-permeable and hygroscopic building materials and methods
- Choose products free from substances that are harmful for those who use them and for the people who will live in close contact with them
- Use products with a very low Eco-balance
- Always ask for certification from an accredited institute attesting to the Biocompatibility and Ecustainability of the materials used.
- Never think that an "Ecological" material cannot be harmful. (Just think of asbestos)
- The government has allocated financial incentives and has offered benefits for bio-building interventions.



**Technokolla S.p.A.**  
Via Radici in Piano, 558  
41049 Sassuolo (MO) • Italy  
Tel. +39 0536 862269  
Fax +39 0536 862660

[www.technokolla.com](http://www.technokolla.com)  
[marketing@technokolla.com](mailto:marketing@technokolla.com)

www.layout.it

Technokolla  
system  
design  
systems

## Bioecological building



01



## Specification

### - SCREED

Screed at least 4 cm thick reinforced with synthetic fibers and/or metal netting, made from normally setting bioecological binder certified by **ECO UMWELTINSTITUT** as bioecological, of the **GEOMAT** type by Technokolla, and siliceous aggregates with 0 to 8 mm continuous grain size. 5x5 cm Ø 2 mm mesh galvanized reinforcing netting positioned at 1/3rd of the screed thickness and grounded. A layer of compressible material at least 5 mm thick must be inserted between the screed and the vertical parts. Screed resistance must be 10/-12 N/mm<sup>2</sup> after 28 days. Dosage for 1 m<sup>3</sup> of 0 to 8 mm aggregate: 300 kg **GEOMAT** 140-160 l water 1 kg fiber **FS-18**.

### - SUBSTRATE PLASTER

Technokolla's **SALUS** vapour permeable, mould-inhibiting bio-ecological plaster based on hydraulic binders, certified by **ECO UMWELTINSTITUT**. For indoor and outdoor use. Complies with standard **EN 998-1** class **GP**. Applied either manually or with a plastering machine to vertical and horizontal surfaces also for forming strips, squaring, edges, isolate foreign bodies and all other jobs. Should be applied in two coats, the second 6-8 hours after the first. The last coat must be finely finished with a trowel. Coats between 8 and 15 mm thick. Amount required: 16 kg/m<sup>2</sup> for every cm of thickness.

### - FLOORING

Floors and skirting made of small and medium sized ceramic tiles and stable natural stones that are not affected by the damp, laid on a screed based on natural bioecological hydraulic lime and bio-ecological adhesive certified by **ECO Umweltinstitut**, such as **PROGEDOX** by Technokolla, which conforms to European standard **EN 12004 C1E**. 4-5 mm joints grouted with low modulus bioecological grouting certified by **ECO UMWELTINSTITUT**, such as Technokolla's **BIOSTUK**. Amount of adhesive required: 4 kg/m<sup>2</sup>. Amount of grouting required: 0.500 kg/m<sup>2</sup> (30x30 cm format, 4 mm joints).

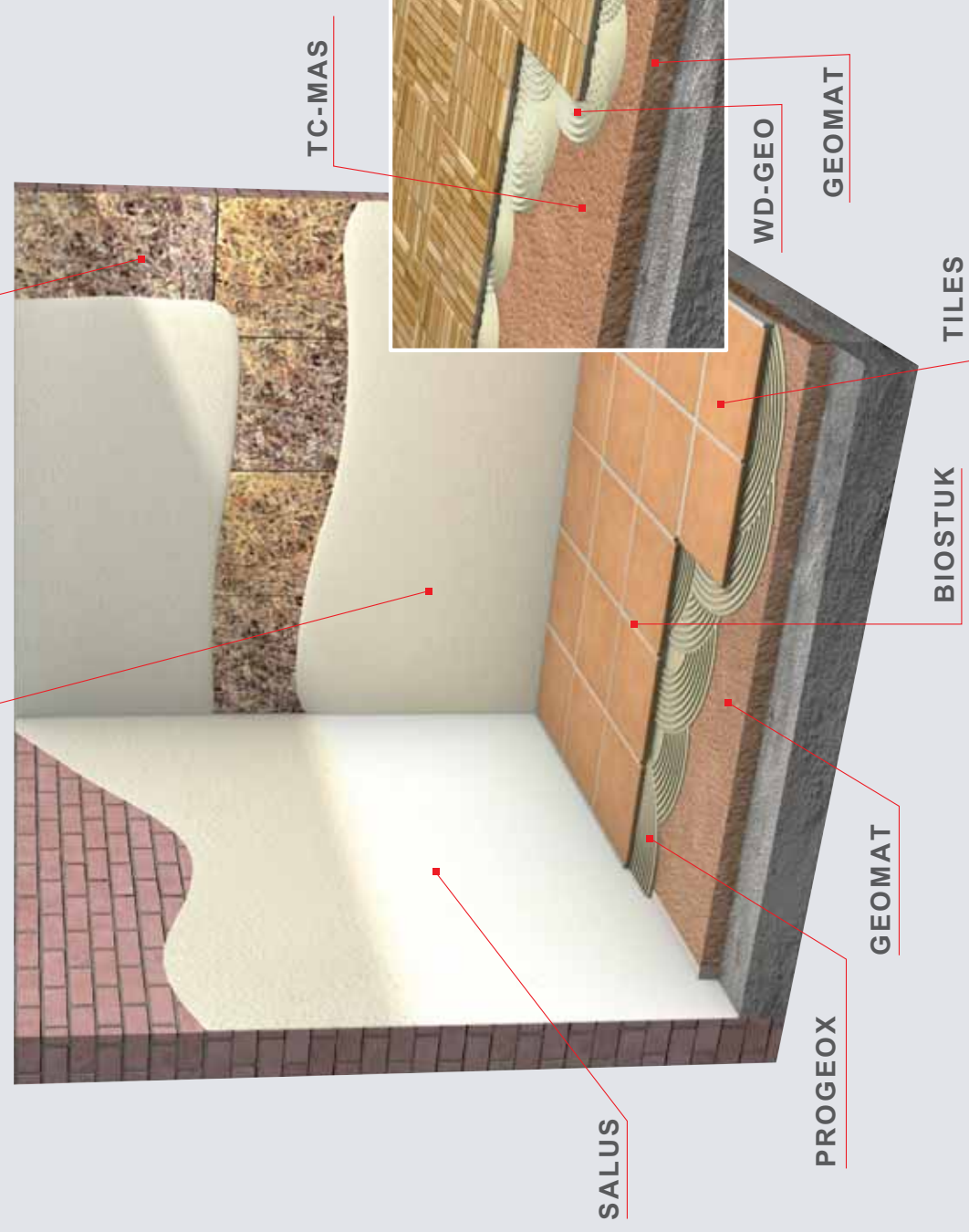
### - PARQUET

Lamparquet fixed to a natural hydraulic lime based screed, with two-pack adhesive free from solvents and harmful substances, such as Technokolla's **WD-GEO** type. Apply Technokolla's **TC-MAS** primer two days before fixing the parquet. Amount of adhesive required: 1000-1200 g/m<sup>2</sup>. Amount of primer required: 300-200 g/m<sup>2</sup> depending on the absorbency of the substrate.

# 01 Biocological building

SKIMMING LAYER WITH PROGEOX

INSULATING PANELS



TC-MAS

SALUS

PROGEOX

GEOMAT

BIOSTUK

TILES

WD-GEO

GEOMAT



## Geomat

This binder is used instead of cement to form the internal screed. It provides the same performance as a conventional cement-based screed but is also highly vapour permeable. It can be used with polyethylene fiber and/or electrowelded netting to increase its compressive and flexural strength still further. It can be covered with ceramic tiles or parquet. Recommended thickness min. 4 max. 8 cm.

**GEOMAT** has been certified by **ECO UMWELTINSTITUT** (the German authority that certifies bioecological materials).



## Salus

The substrate plaster for indoor and outdoor walls that can be applied either manually or mechanically.

**SALUS** has been certified by **ECO UMWELTINSTITUT** (the German authority that certifies bioecological materials).  
Conforms to standard **EN 998-1**.



## Progeox

The low modulus one-pack adhesive that can be applied in a thin coat to cotto, ceramic, vitrified stoneware and natural stone tiles, applicable in this system indoors with formats measuring up to 1600 cm<sup>2</sup>. **PROGEOX** has been certified by **ECO UMWELTINSTITUT** and conforms to European standard **EN 12004 C1E**.



## Biostuk

The tile grouting for 4 to 12 mm gaps, with a "rustic" appearance that makes it ideal for cotto.

**BIOSTUK** has been certified by **ECO UMWELTINSTITUT** (the German authority that certifies bioecological materials).



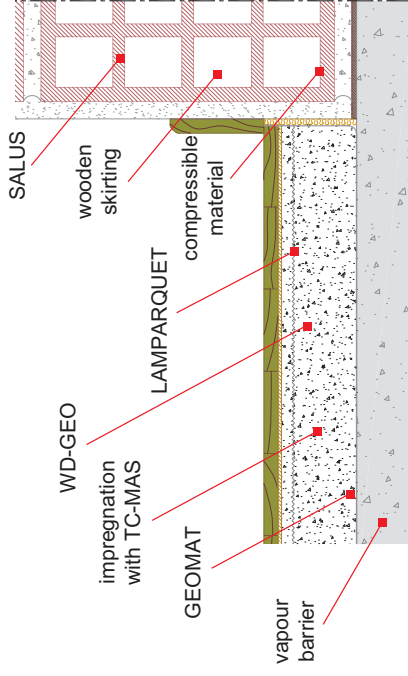
## Tc-Mas

The stabilizer for cement-based screeds and cement-based mortars. Recommended on **GEOMAT** before parquet flooring is laid.



## Wd-Geo

The **SOLVENT-FREE** two-pack adhesive for parquet flooring.  
Not labelled as a harmful product.



With parquet flooring

SALUS

WD-GEO

impregnation with TC-MAS

GEOMAT

vapour barrier

LAMPARQUET

compressible material

wooden skirting

PROGEOX

ceramic tile

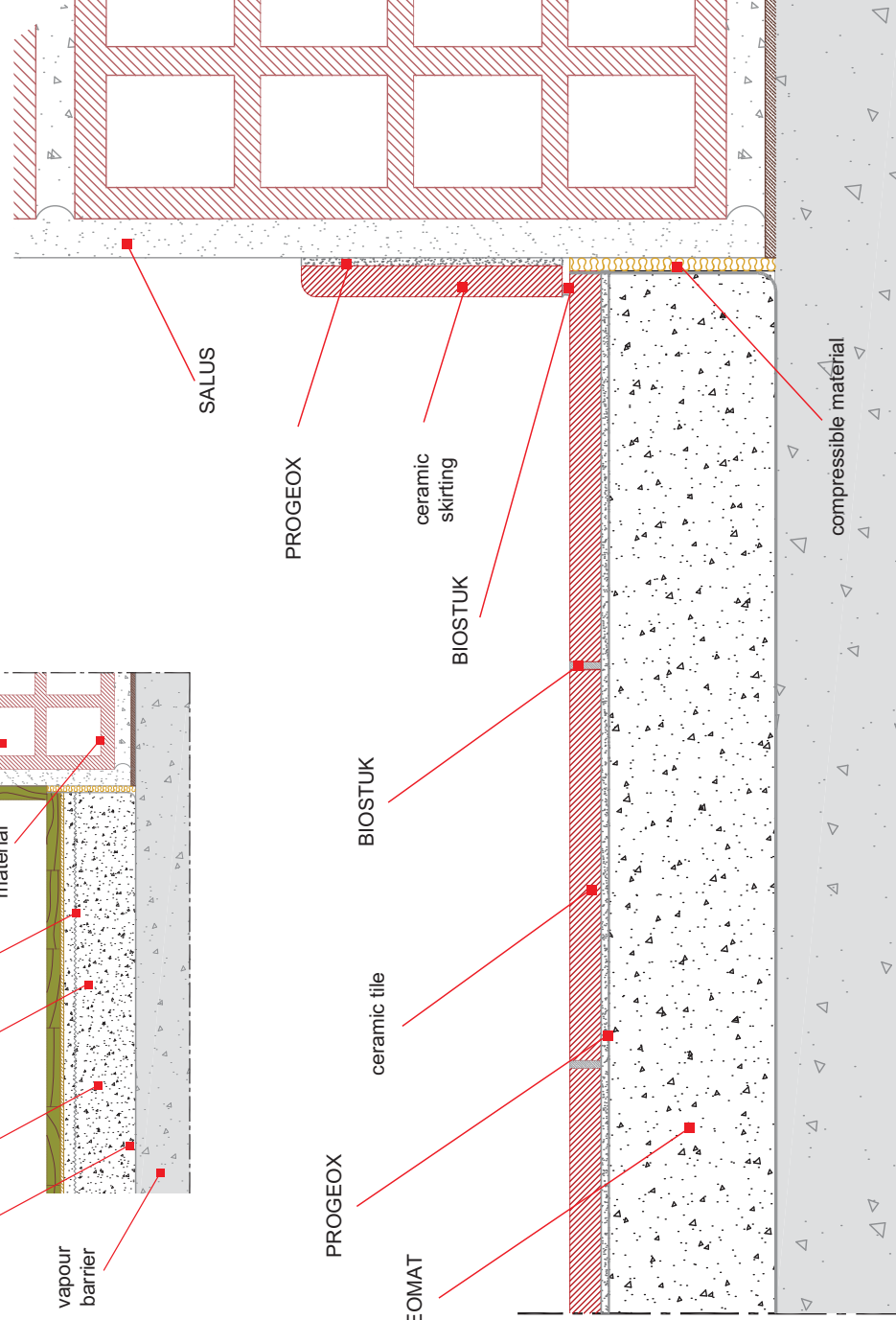
BIOSTUK

PROGEOX

ceramic skirting

BIOSTUK

SALUS



# Technical Drawings

**Technokolla**  
system  
design  
systems