



CLAY FOAM INSULATION

2026



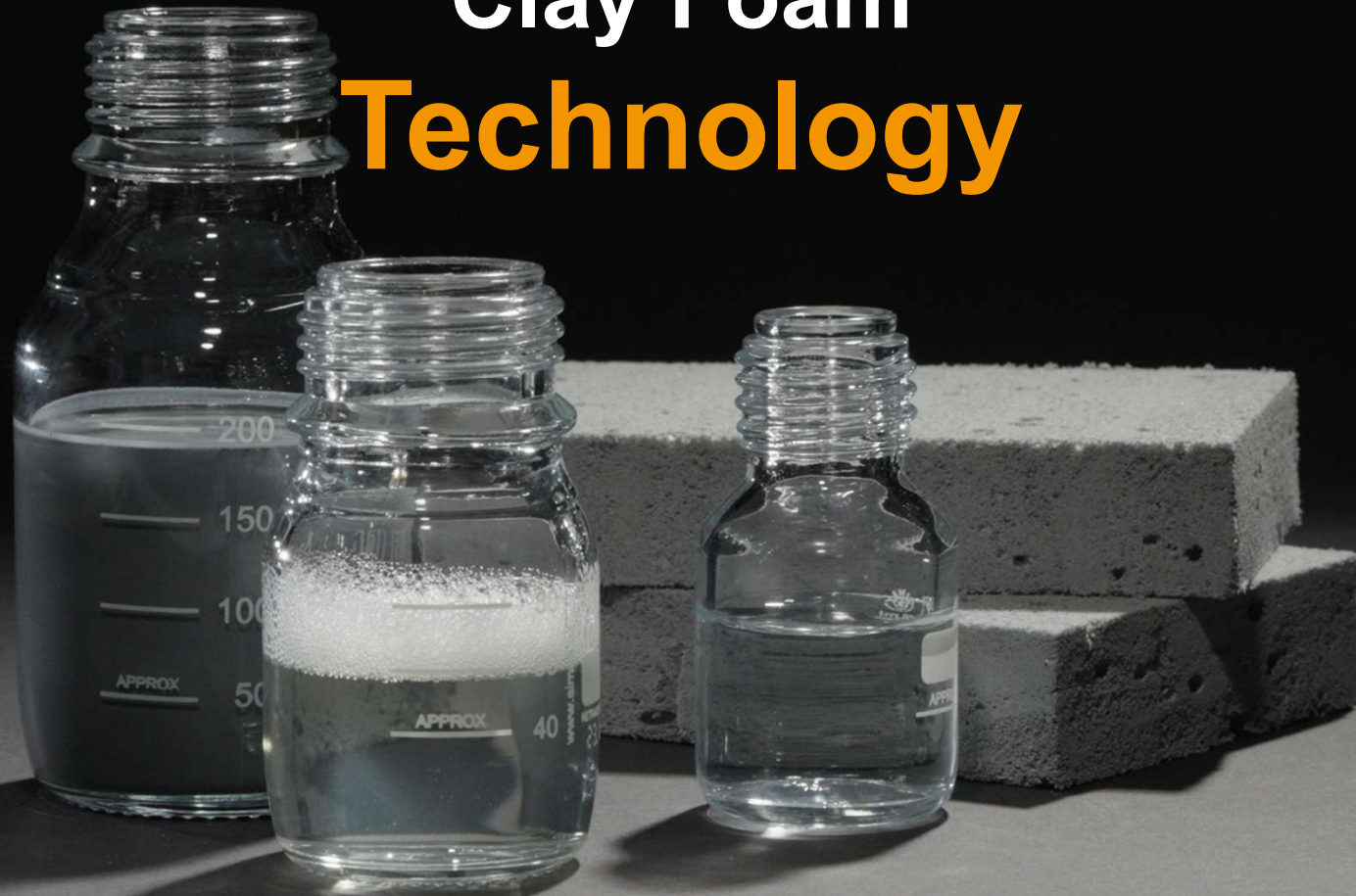
Clay foam insulation for sustainable renovation

Combining the advantages of a **mineral based insulation material** with the simple, safe, and clean processing of an **in-situ foam system**.

- ✓ made from three harmless components and air
- ✓ mineral-based, non-combustible and fully recyclable
- ✓ hydrophobic and vapor-permeable
- ✓ developed for cavity wall insulation, approved for further applications



Clay Foam Technology



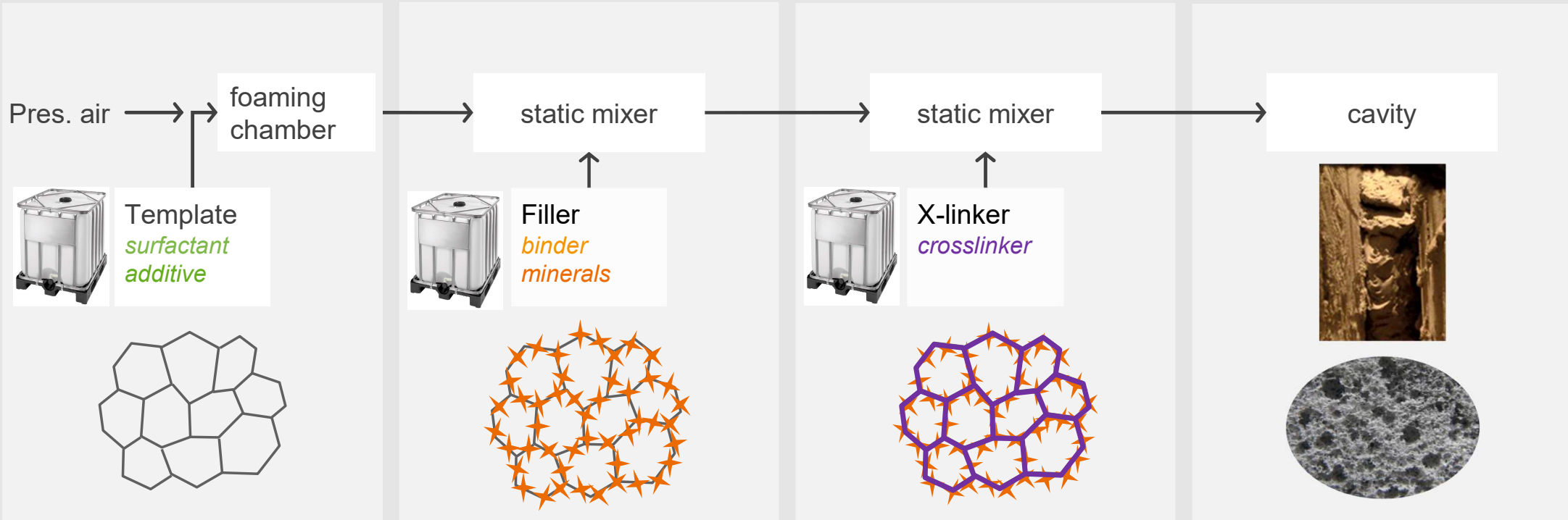
The clay foam is created in three steps

Frothing

Addition of filler

Addition of crosslinker

Setting and drying



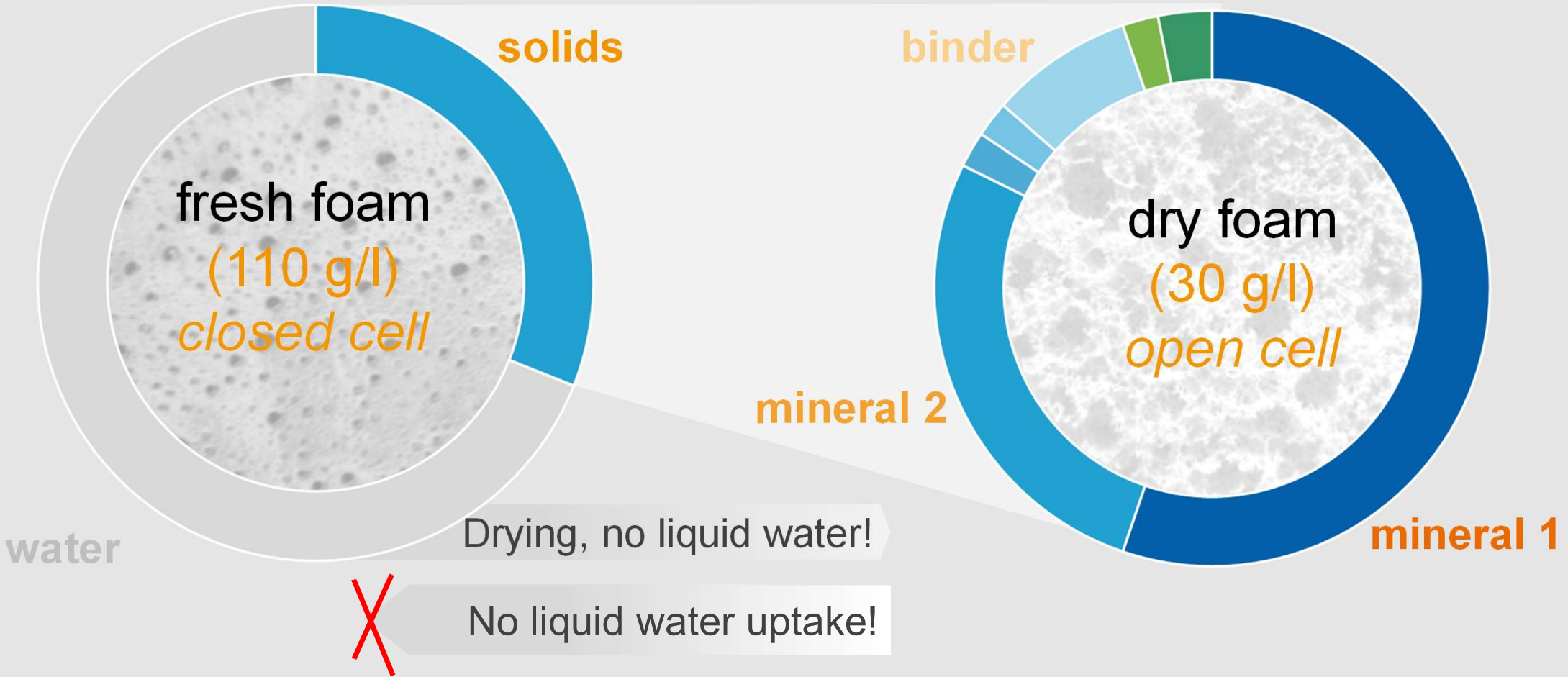
Mass ratio: Template 1 :

Filler 4

:

Crosslinker 0.6

Mass Composition



Clay foam formation – automated machine

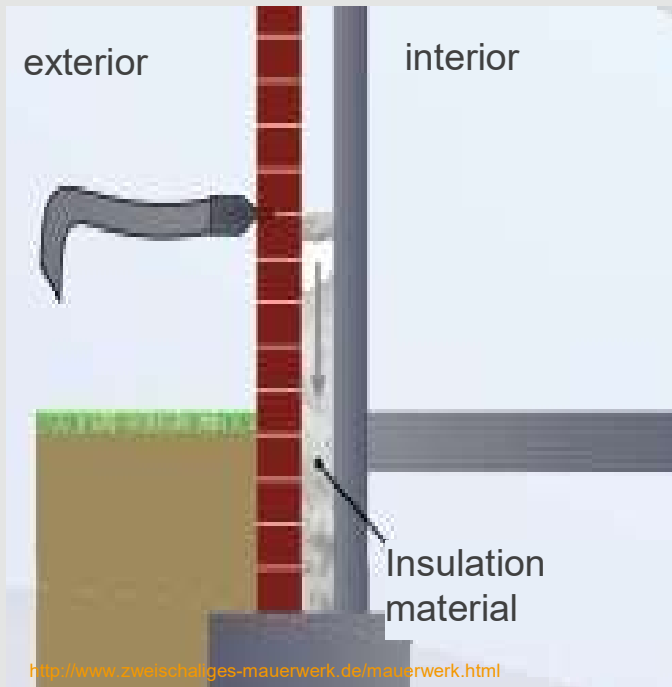


Clay Foam Application



Application – Cavity Wall Insulation (CWI)

Concept of CWI



Insulation in refurbishment or new-built

Clay foam application



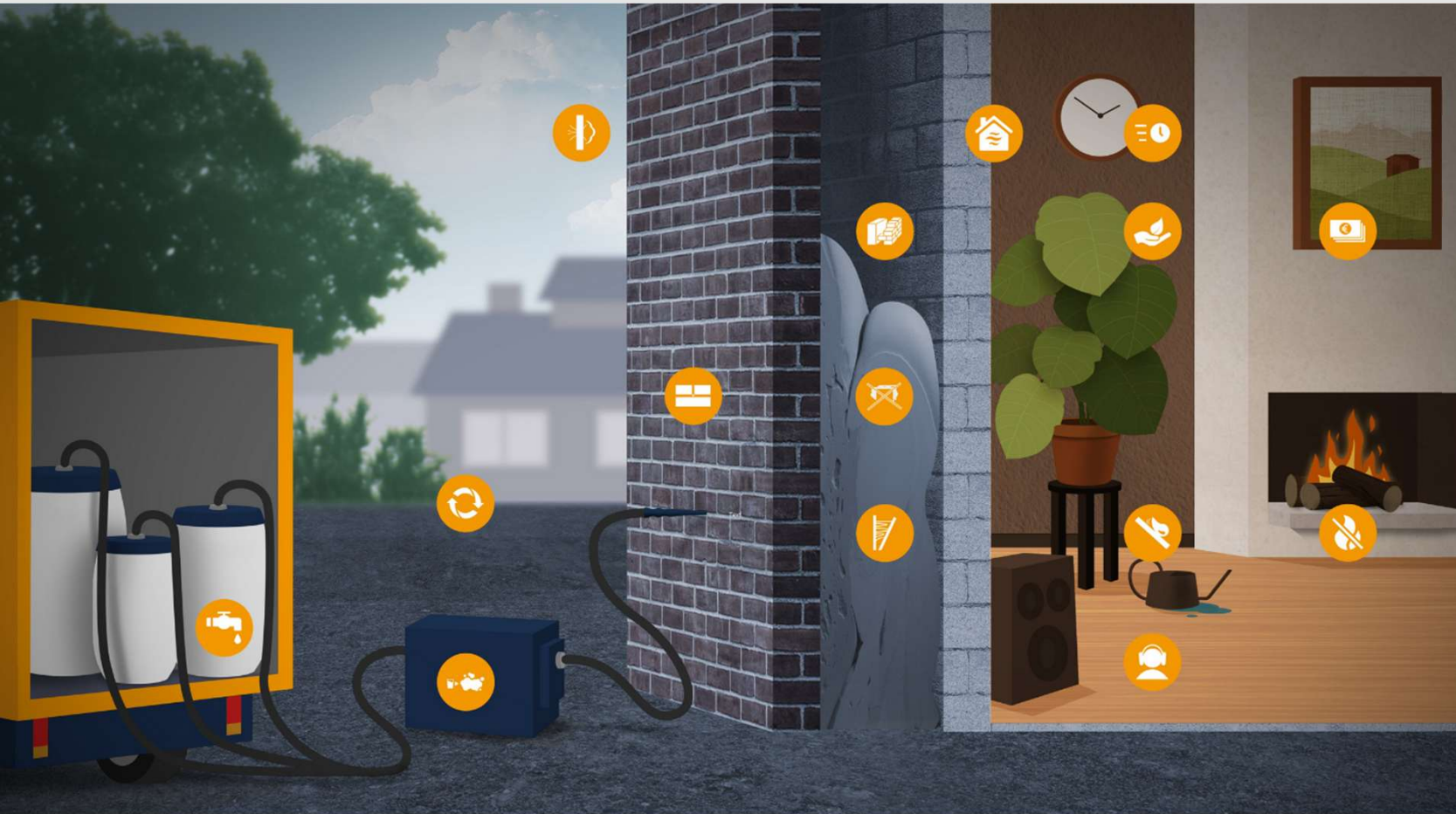
Installation through small drilling holes

Clay foam filled model wall (1500*1500*100mm)



Seamless insulation layer

Application – Cavity Wall Insulation on site



- cleanly processable
- vapor permeable
- sustainable
- space-saving
- conservatively applicable
- gap-filling
- not selfexpanding
- durable
- insulating
- safe
- water-repellant
- sound-absorbing
- non-combustible
- fast
- economic

Application – Cavity Wall Insulation on site

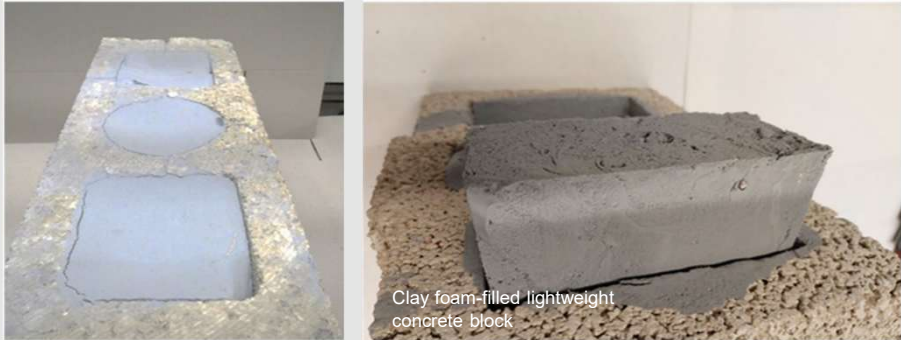


Application – further certified opportunities

Exterior and interior dry walls



Hollow building blocks



Roof and floor slab



A close-up photograph of a dark, porous material, likely clay foam, showing a complex network of interconnected, rounded, and elongated cells. The surface is highly textured with many small, irregular pores and larger, more defined chambers. The lighting creates highlights on the wet-looking surfaces of the cells, emphasizing their three-dimensional structure. The overall appearance is that of a highly porous, interconnected network of cells.

Clay Foam Properties

Material properties

property

result

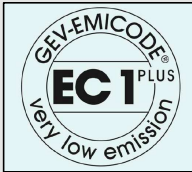
Thermal insulation

$\lambda_{23^{\circ}\text{C}/50\%\text{rH}} = 32.8 \text{ mW/K}\cdot\text{m}$
~ UF, EPS & MiWo

WLG 035

Safety

Best EMICODE emission class EC1^{PLUS} “very low VOC emissions”
No fibers
Harmless components



Non-combustibility

Caloric value < 3 MJ/kg
SBI test passed

A2 – s1,d0

Sustainability

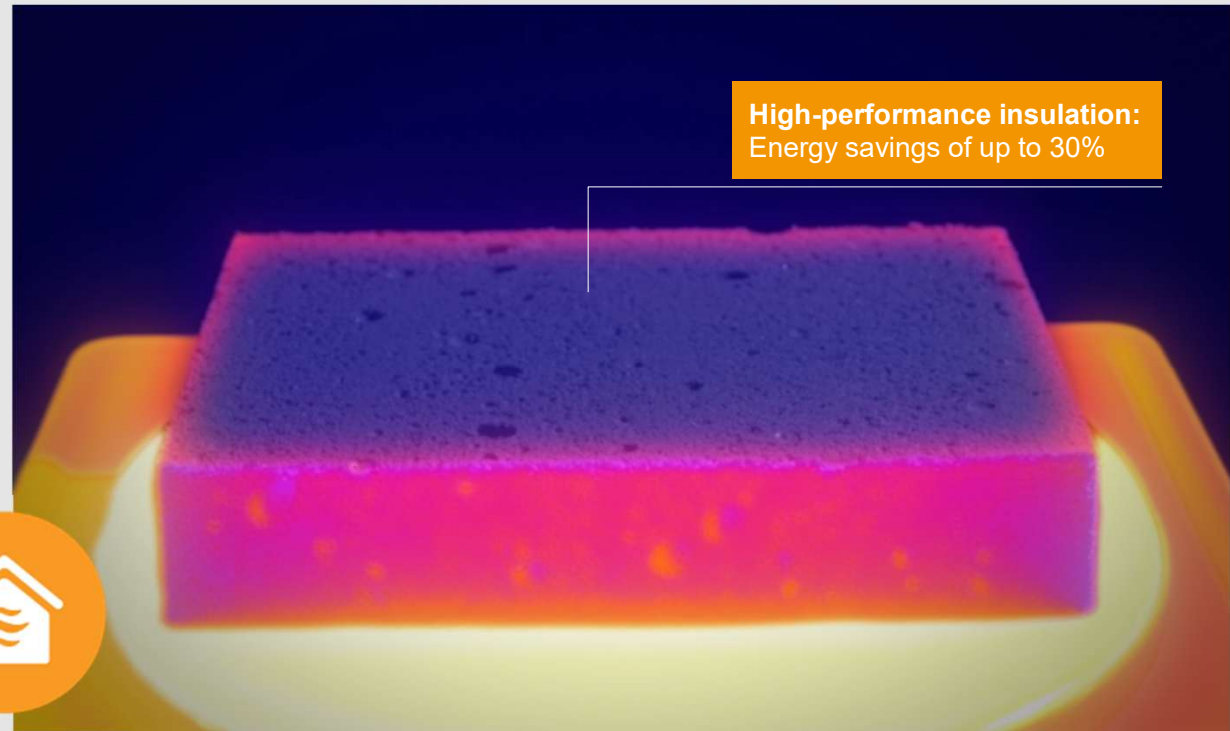
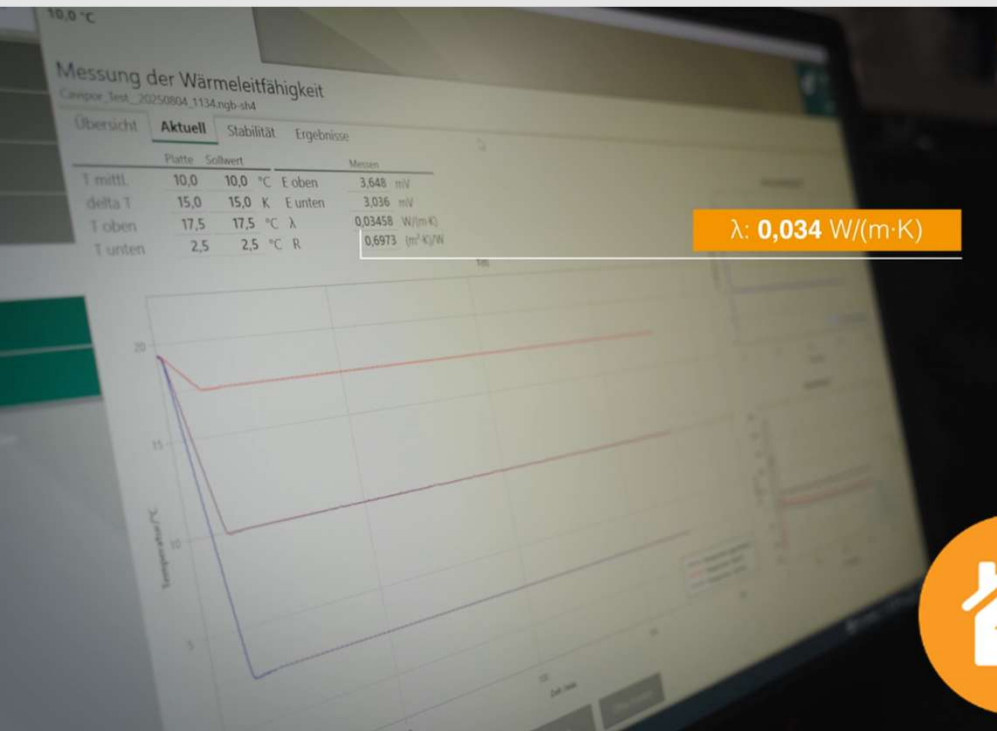
EPD-Kiwa-EE-000463-EN
CO₂-footprint: ~0.5 kg CO₂/kg << UF, EPS & PU
Recyclable

further

Sound absorbing, water repelling, vapor diffusive

More informational video clips: see clay-foam.com

Clay foam belongs to the eligible Thermal Conductivity Group 035

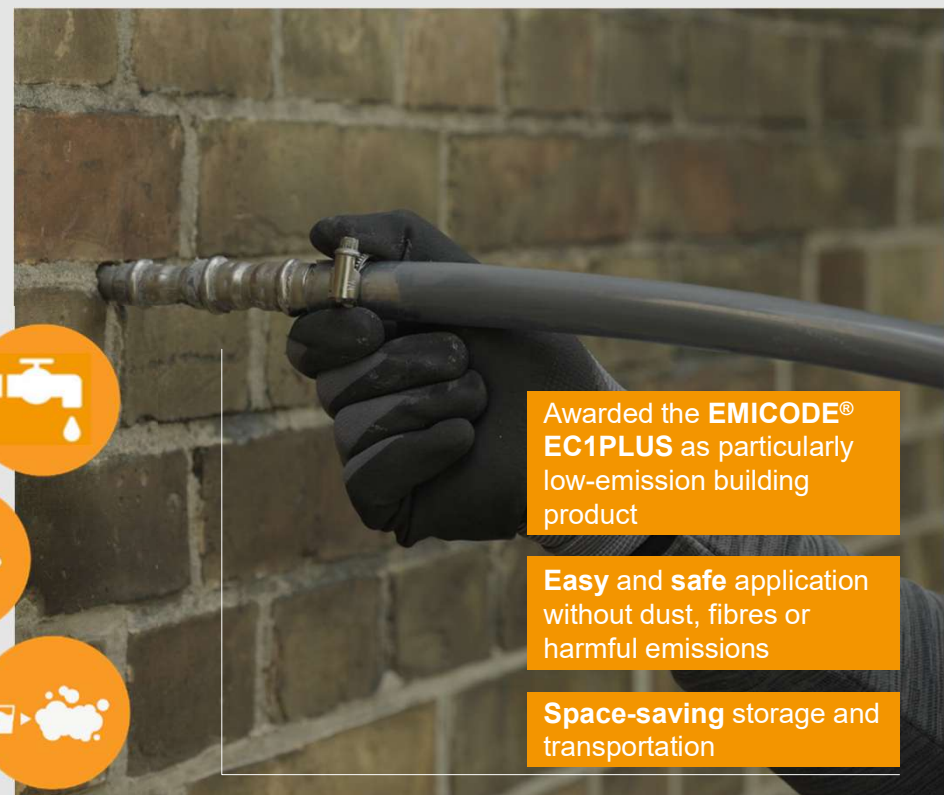


Clay foam is a safe and easy to handle mineral insulation material with water-based, harmless components

Safety

Userfriendliness

Functionality

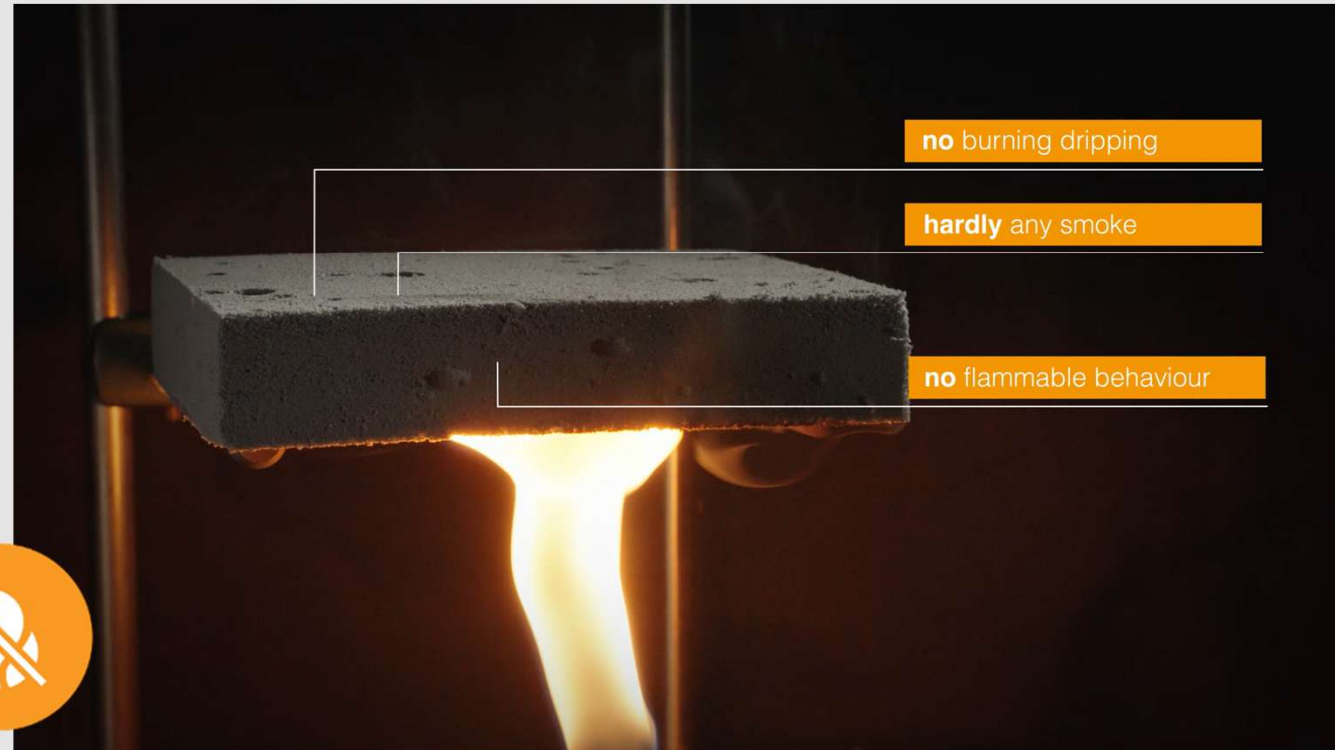


Awarded the **EMICODE® EC1PLUS** as particularly low-emission building product

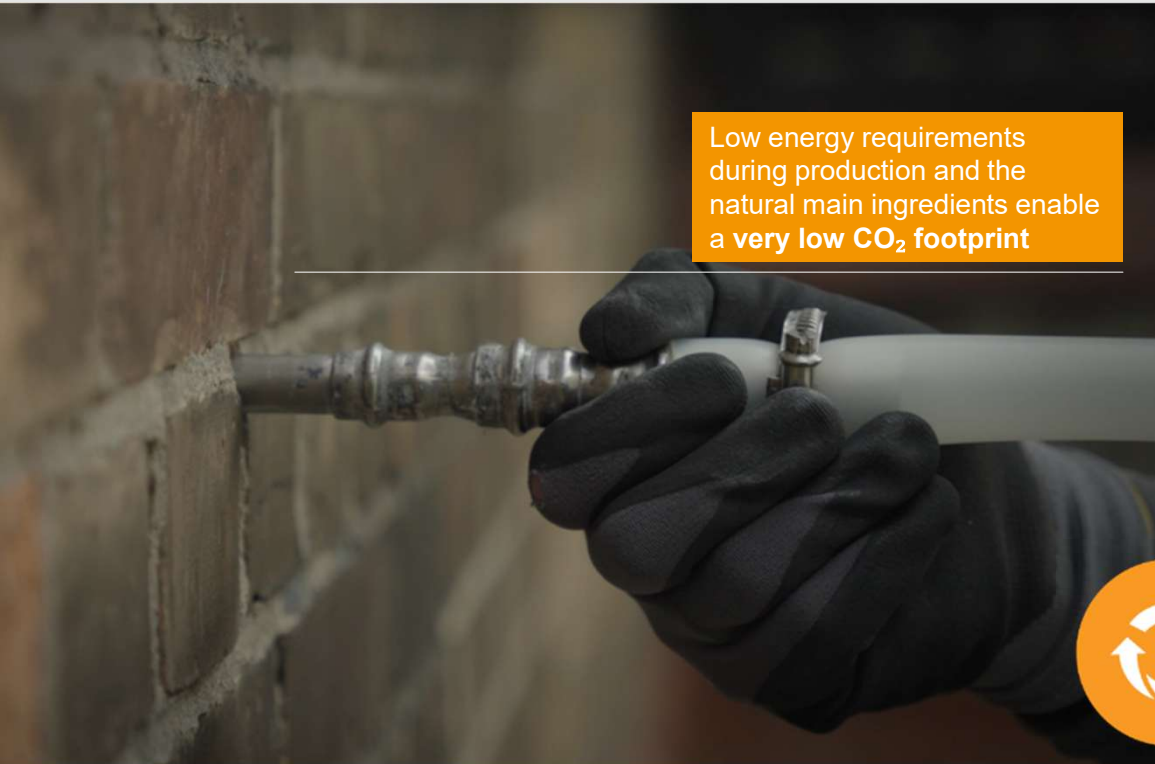
Easy and safe application without dust, fibres or harmful emissions

Space-saving storage and transportation

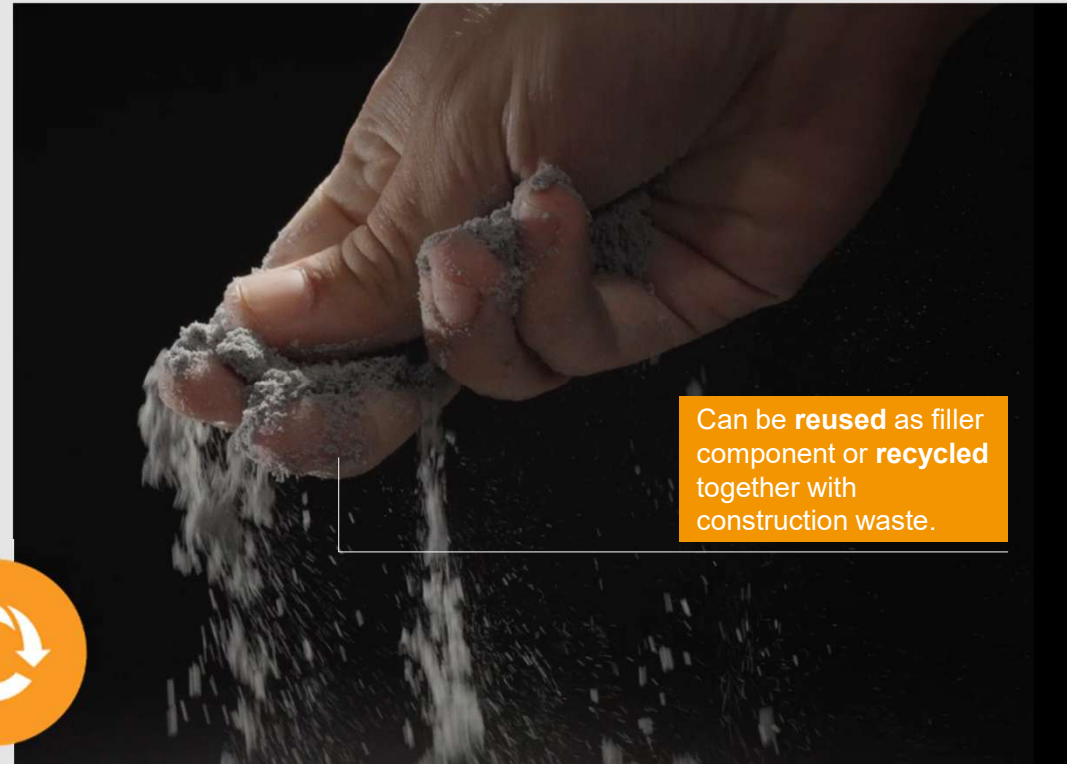
Fire behavior confirmed by SBI-Test



A sustainable building material throughout its entire life cycle



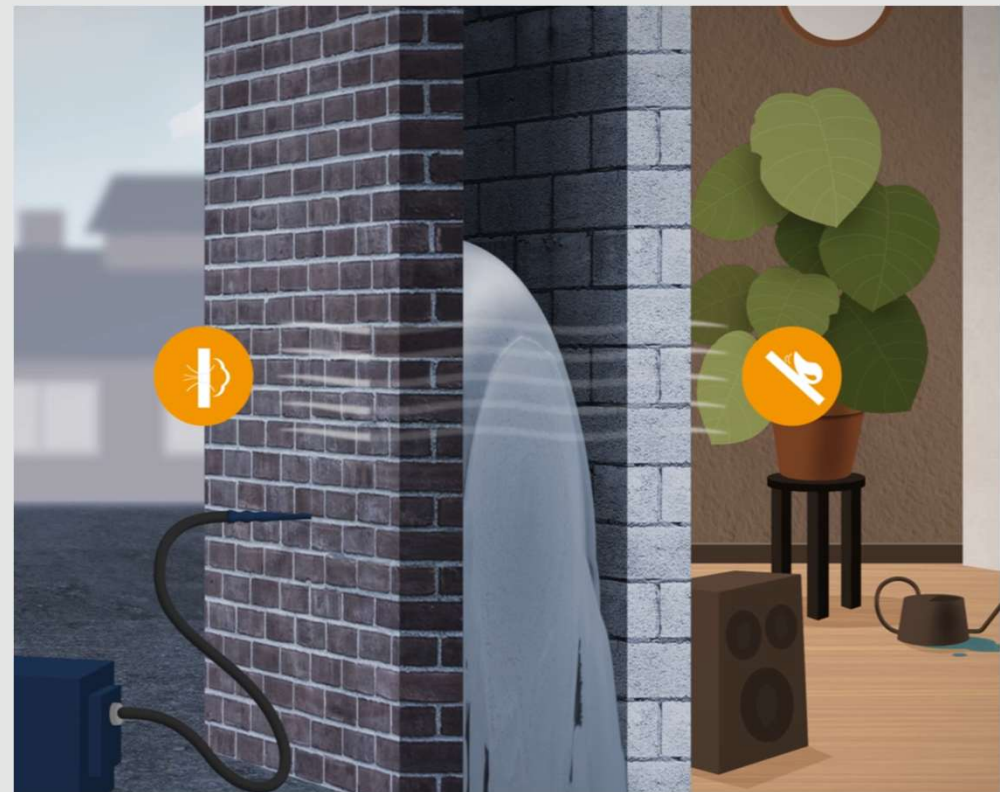
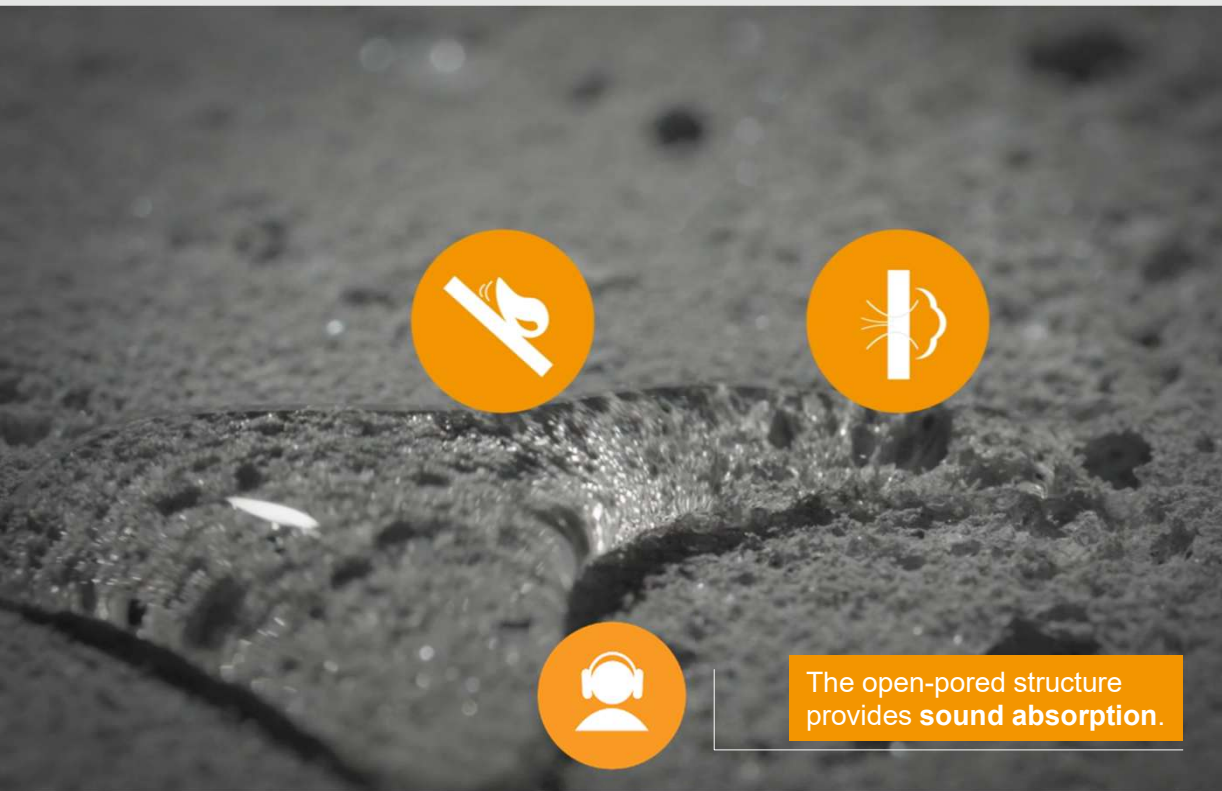
Low energy requirements during production and the natural main ingredients enable a very low CO₂ footprint



Can be **reused** as filler component or **recycled** together with construction waste.



Clay foam is water repellent, yet vapor permeable – for a pleasant indoor climate





The Clay Foam
Network

The Clay Foam Network



Clay foam suppliers

ECON Building products
Dublin, Ireland
econ-pu.com/firetite

ECON Building products
Kent, UK
econbp.com/firetite

Insu-Tec Deutschland GmbH
Vierhöfen, Germany
insu-tec.de

Iso-Team Bocholt
Bocholt, Germany
iso-team.eu

DELTHERM GmbH
Delmenhorst, Germany
thermoschaum.de

Thermo Solutions BV
Enschede, Netherlands
thermo.solutions.nl

Resnova
Brescia, Italy
piublue.it

acosorb BeLux
Brussels, Belgium
acosorb.be

Machine providers

Mahr Unipre GmbH
Werl, Germany
mahr.com

Insu-Tec Deutschland GmbH
Vierhöfen, Germany
insu-tec.de









Iso-Team Bocholt
Bocholt, Germany
iso-team.eu

More information: see clay-foam.com







Clay Foam
Summary

Clay foam is the future-proof cavity insulation solution that combines a unique set of skills

-  cleanly processable
-  vapor permeable
-  sustainable
-  space-saving
-  conservatively applicable
-  gap-filling
-  not selfexpanding
-  durable



-  insulating
-  safe
-  water-repellant
-  sound-absorbing
-  non-combustible
-  fast
-  economic



Thank
You

More Information: clay-foam.com