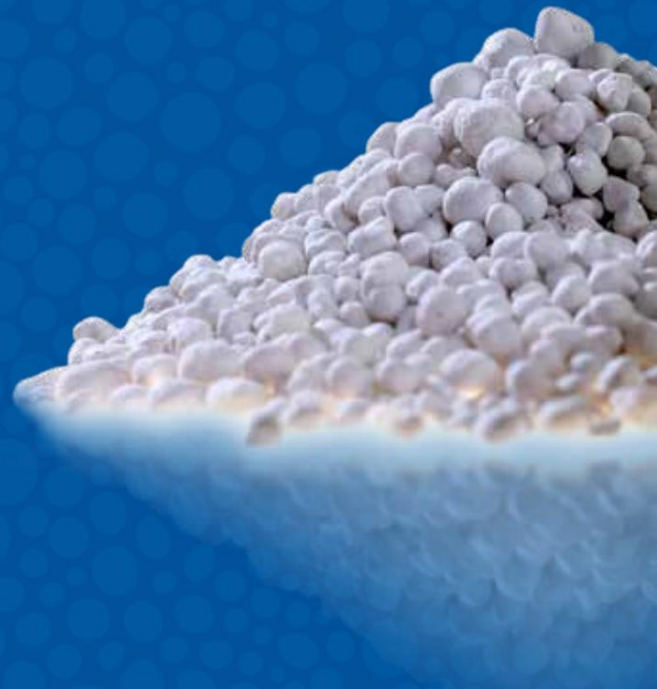


GEOMATERIALS

expanded glass

MORE REASON TO FEEL WELL.

LIGHT INSULATION
AND LEVELING LOOSE OR
BOUND.



Made from waste glass and 100% mineral.

EASY. WARM. STABLE.

GEOMATERIALS expanded glass are light spheres that are used wherever cold, moisture and noise need to be banished. This is a building material that is light as a feather, resistant to moisture, dimensionally stable and resistant to aging. It is also ideal for a loose or bound thermal insulation fill.

As a light insulation and leveling compound, this building material meets the highest quality requirements and can be used in a wide variety of applications – whether it is beam ceilings, cavities and gaps or floors.

GEOMATERIALS expanded glass is THE environmentally friendly and mineral alternative to conventional cement-bound EPS fill under the screed.



A MULTITALENT WITH MANY ADVANTAGES

• High thermal insulation

Air is a very good insulator. The numerous closed cavities therefore result in good thermal insulation - even when bound in small structural thicknesses. • Easy to process

Simply pour and distribute. No compression required.

• Resilient and dimensionally stable

No shrinkage, no swelling, no long-term settlements, dimensionally stable up to 750 °C. • Lightweight and pressure resistant

Due to its cell geometry, it is very pressure-resistant and light as a feather. •

Sound absorbing

Ideal as leveling fill in the false ceiling. Increases the acoustic effectiveness of building materials.

• Moisture resistant

Dries out again easily and does not provide mold with a breeding ground.

• Resistant to

bacteria, frost, aging, rotting, moisture, acid, insects and rodents. • Health friendly

Since it is made from waste glass, it is non-toxic, fibre-free, solvent-free, odorless, anti-allergenic and radiologically harmless. • Incombustible class A1 and it does not develop any harmful gases in a fire.

• Quickly accessible •

Sustainable

No consumption of raw materials as it is made from recycled material



This is how GEOMATERIALS expanded glass is made.

WASTE GLASS AS A RAW MATERIAL



The raw material for **GEOMATERIALS expanded glass** is waste glass. This valuable secondary raw material is recycled via collection systems.

GEOMATERIALS expanded glass is made from selected glass fractions that are not used in the production of bottles and glasses.

GEOMATERIALS expanded glass thus closes a gap in the recycling cycle and protects natural resources.

THE PRODUCTION: First,

recycled glass is finely ground, mixed and shaped. The so-called green grain is then sintered and foamed (expanded) in the rotary kiln. This process produces light, round grains with a closed fine pore structure. After cooling, the cream-white granules are divided into individual grain fractions by sieving.

SCOPE OF APPLICATION
NEW CONSTRUCTION/REFURBISHMENT

Lose
insulation fill

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

with **GEOMATERIALS expanded glass** with/without screed



Leveling fill between
upholstery wood



More info



©Photo: Poraver

As a loose fill between beam ceilings and in cavities, **GEOMATERIALS expanded glass** fills every gap. Easy and uncomplicated to process, it insulates perfectly and also creates a pleasant, pollutant-free room climate. In new builds and renovations, **GEOMATERIALS expanded glass** makes it easy to cover pipelines and cable ducts and insulates noise. In the refurbishment of listed buildings, it scores with vertical interior insulation.

Facing formwork can be filled behind without any problems, as the small balls fill every cavity. In new buildings, it is used as a thermal separation between floor panels and false ceilings.

GEOMATERIALS

expanded glass

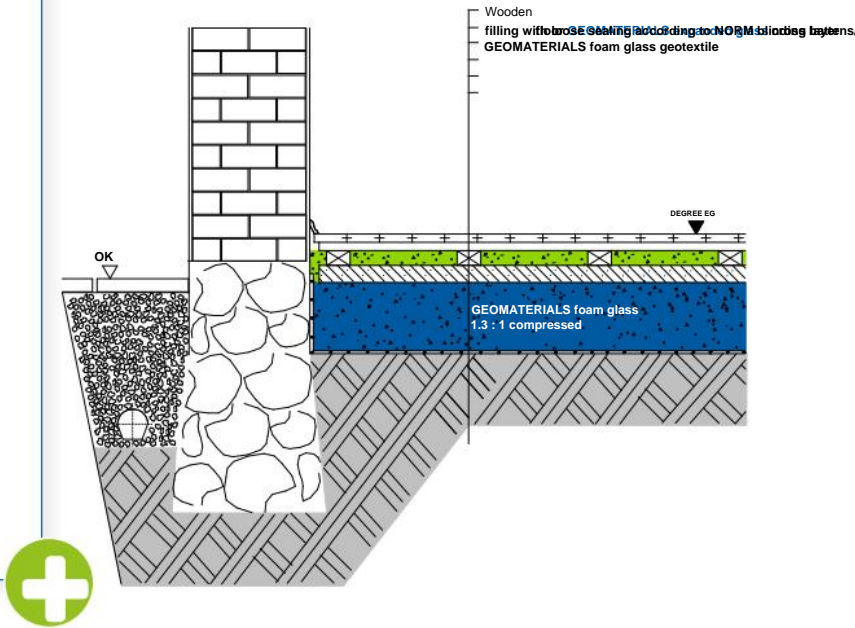
ADVANTAGES

• **Light:** **GEOMATERIALS expanded glass** is as light as a feather and thus saves on the dimensioning of the substructure

• **Resilient and permanently stable:** **GEOMATERIALS expanded glass** stays in shape - no adjustments!

• **Moisture resistant:** made of 100% **GEO MATERIALS** Almost no expanded glass water and dries up quickly

• **Non-combustible Class A1**

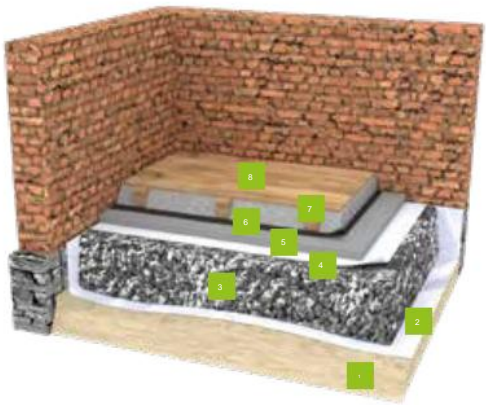


Floor construction with screed



- 1 Top covering (carpet, parquet, ...)
- 2 laid dry screed elements Impact sound
- 3 insulation **board GEOMATERIALS**
- 4 loose expanded glass, trickle protection
- 5 if necessary (foil, glass fleece, etc.)
- 6 Wooden
- 7 ceiling suspension

Floor construction without screed



- 1 Subgrade/old stock
- 2 Geotextile as required
- 3 **GEOMATERIALS foam glass** PE
- 4 film blinding layer* /**GEOMATERIALS**
- 5 **expanded glass** sealing according to DIN/ÖNORM*
- 6 upholstery wood possibly backfilling **GEOMATERIALS**
- 7 **expanded glass** floor
- 8 can be omitted

SCOPE OF APPLICATION
NEW CONSTRUCTION/REFURBISHMENT

Bonded
leveling fill

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

with **GEOMATERIALS expanded glass**



Photos: Promenade Galleries
© architekturbüro HALLE 1, renderwerk.at, terrazzo industrial floors screeds: Hlawna GmbH., Salzburg, J. Wimmer GmbH & GEOMATERIALS

The bound **GEOMATERIALS expanded glass fill** can be used wherever a light and thermally insulating floor leveling is required. The mineral-bound, pressure-resistant fill is used to level floors as leveling fill over cables and pipelines. The healthy living material guarantees first-class insulation with maximum fire safety and fast construction progress. Due to the low moisture content, it can be walked on after just one day without any problems.

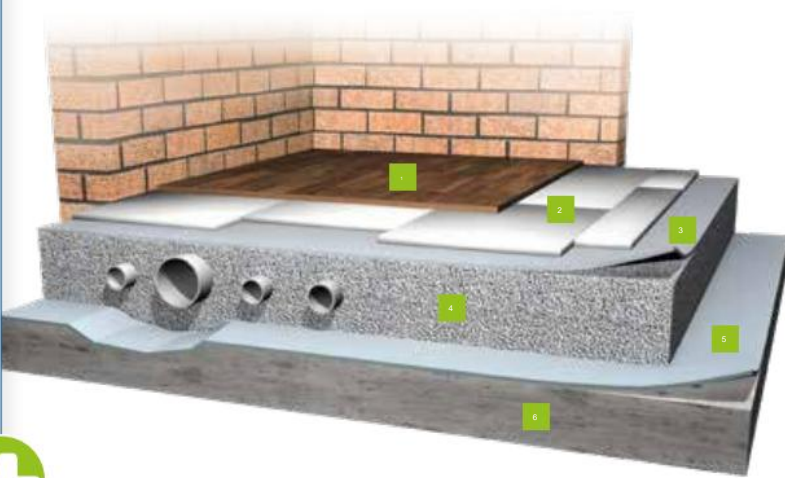
Static considerations play an important role when using **GEOMATERIALS expanded glass** for balconies and terraces. Balconies and roof terraces can only be loaded to a limited extent. Since **GEOMATERIALS expanded glass** is a significantly lighter material than other drainage materials - such as gravel fill - weight can be significantly reduced when insulating roof structures.

GEOMATERIALS

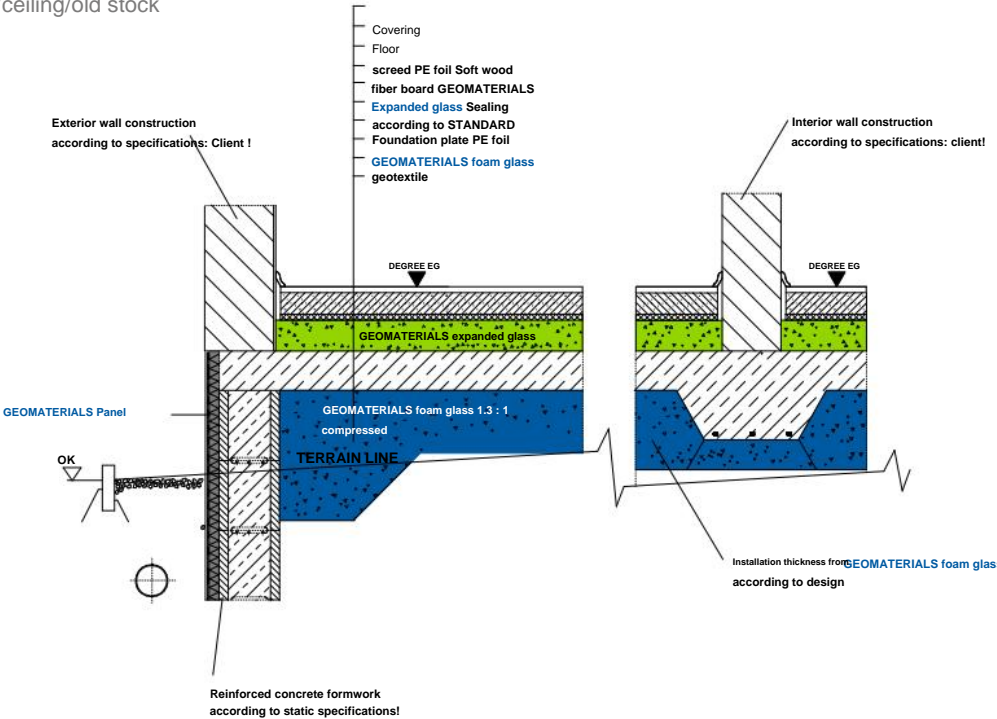
expanded glass

ADVANTAGES

- **Light:** in mineral bound
GEOMATERIALS expanded glass is light as a feather and thus saves on the Dimensioning of the substructure
- **Highly thermally insulating:** even when bound, **GEOMATERIALS expanded glass** still insulates in small structural thicknesses
- **Resilient and permanently stable:**
GEOMATERIALS expanded glass stays in shape - no adjustments!
- **Feuchteresistent:** **GEOMATERIALS Expanded glass** absorbs almost no water and dries out again quickly
- **Incombustible class A1**



- 1 Top covering (e.g. parquet)
- 2 Dry screed elements Impact
- 3 sound insulation board
- 4 **GEOMATERIALS expanded glass** or **GEOMATERIALS foam glass**
- 5 requirements Mineral-bound/ cement-bound Separating layer (PE film)
- 6 floor slab/ceiling/old stock

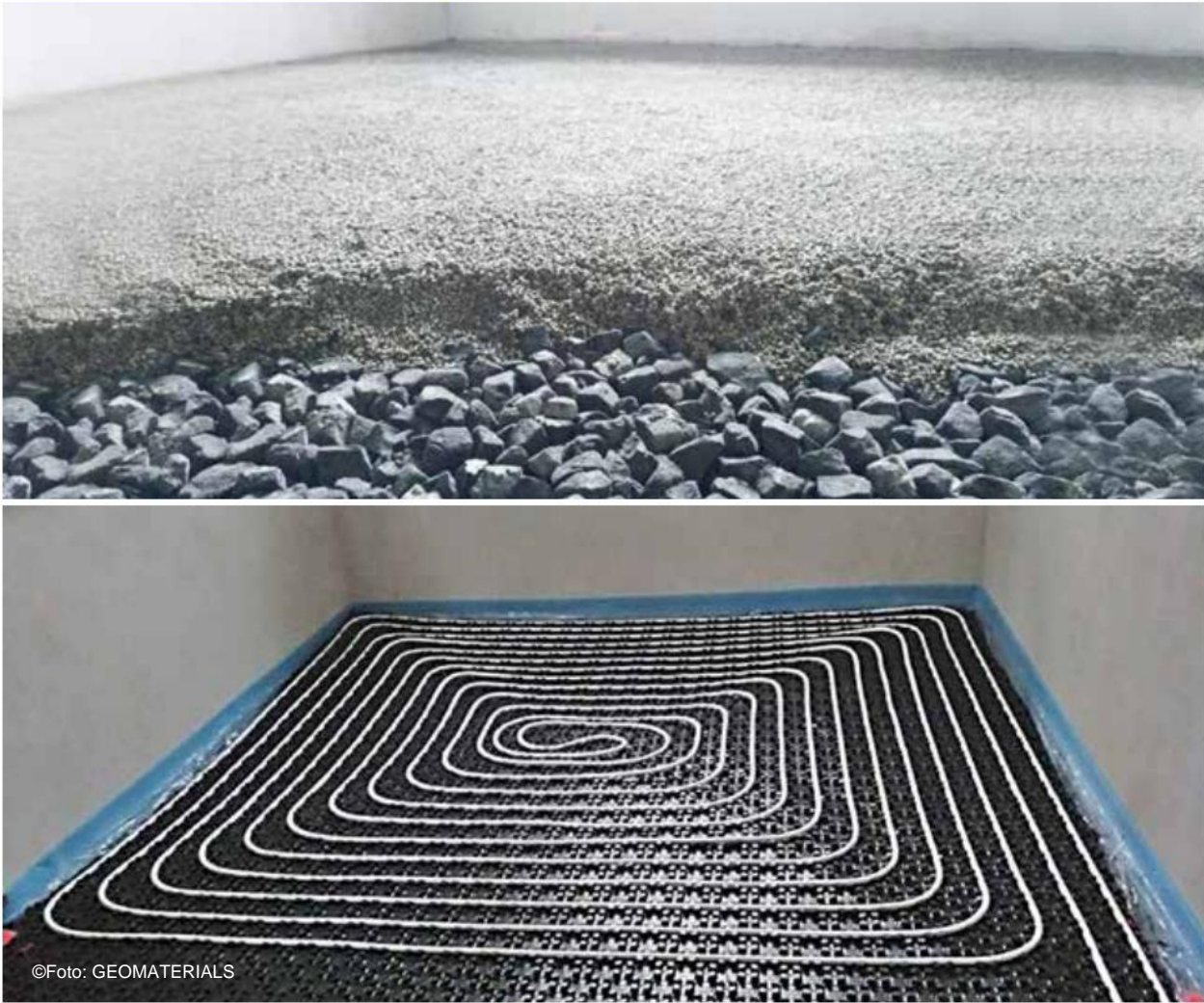


SCOPE OF APPLICATION
REFURBISHMENT

Floor renovation

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

Combination of **GEOMATERIALS foam glass** & **GEOMATERIALS expanded glass**



The bound **GEOMATERIALS expanded glass fill** can be used wherever a light and thermally insulating floor leveling is required. The mineral-bound, pressure-resistant fill is used to level floors and as leveling fill over cables and pipelines. The healthy living material guarantees first-class insulation with maximum fire safety and fast construction progress. Due to the low moisture content, it can be walked on after just one day without any problems.

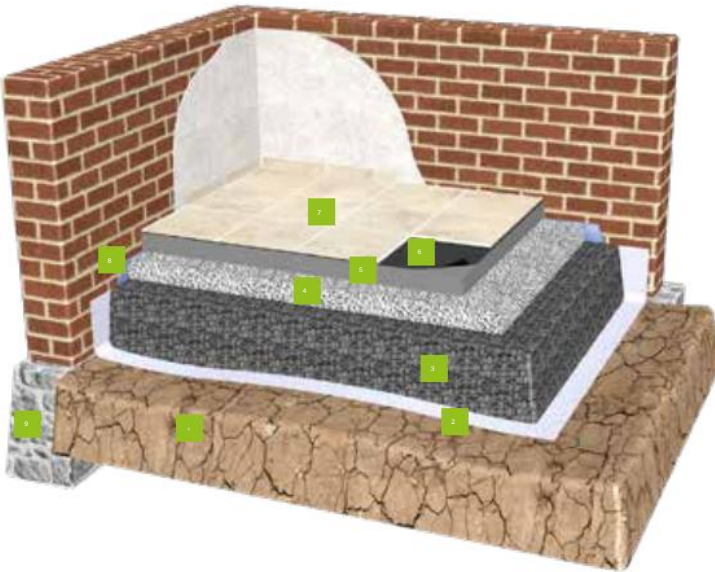
In combination with **GEOMATERIALS foam glass**, which is used for rough levelling, this is a simple, dry, moisture-resistant and non-flammable solution for rebuilding floors.

GEOMATERIALS

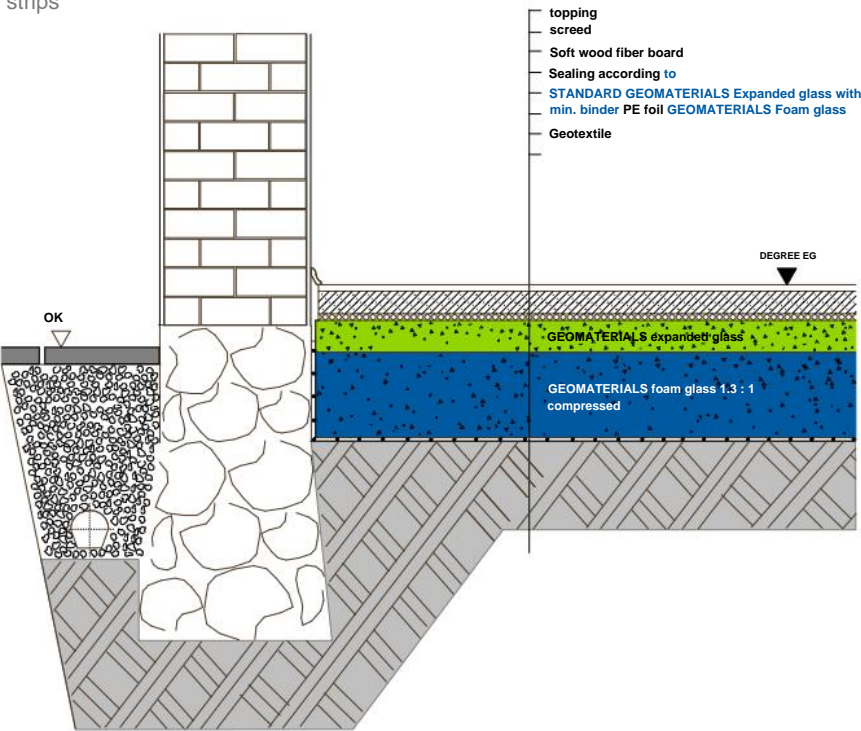
expanded glass

ADVANTAGES

- Suitable for the **renovation** of old buildings
- Optimal floor construction in Combination with a screed layer
- **Significantly lower assembly height**
- **Can be walked on** in 24 hours • **Ecologically harmless**, therefore ideally suited for living spaces
- **Light:** in mineral bound **GEOMATERIALS expanded glass** is light as a feather and thus saves on the Dimensioning of the substructure



- 1 Subgrade/old stock
 - 2 Geotextile **GEOMATERIALS**
 - 3 **foam glass**, possibly fleece or PE film blinding layer*/
 - 4 **GEOMATERIALS expanded glass** mineral-bound / cement-bound Screed or dry screed elements
 - 5 Sealing according to DIN/ÖNORM*
 - 6 ceramic covering
 - 7 edge insulation strips
 - 8 Foundation
- *can be omitted



SCOPE OF APPLICATION
REFURBISHMENT

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

vault
insulation

with **GEOMATERIALS expanded glass** and/or foam glass



Villa in Braunschweig, © Cetin Sönmezocak & GEOMATERIALS



Villa in Braunschweig, © Cetin Sönmezocak & GEOMATERIALS



Födermayr Hargelsberg/Upper Austria, © GEOMATERIALS



Födermayr Hargelsberg/Upper Austria, © GEOMATERIALS

Lightweight and moisture resistant:
GEOMATERIALS expanded glass relieves old vaults

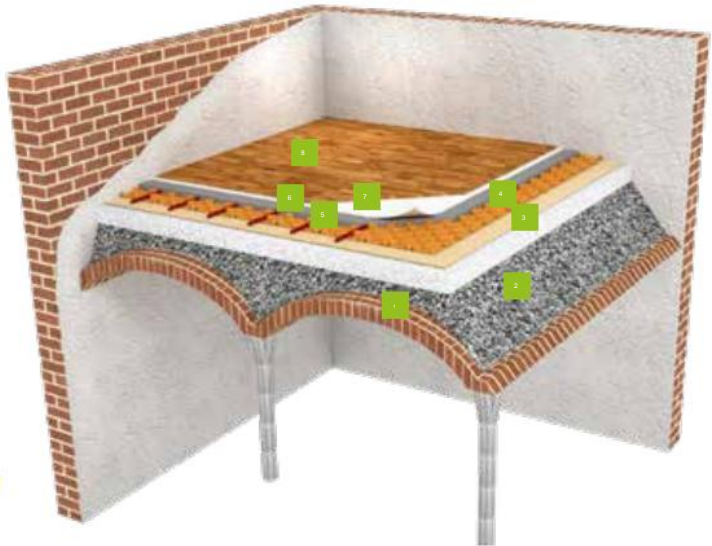
Low weight load and a slim floor structure are the main features when over-insulating old vaults. Bringing in as little additional moisture as possible is also desirable. **GEOMATERIALS expanded glass** is extremely light and enables dry and quick processing. In combination with a finished system for underfloor heating, **GEOMATERIALS expanded glass** enables an extremely low floor structure with the highest ecological living quality.

GEOMATERIALS

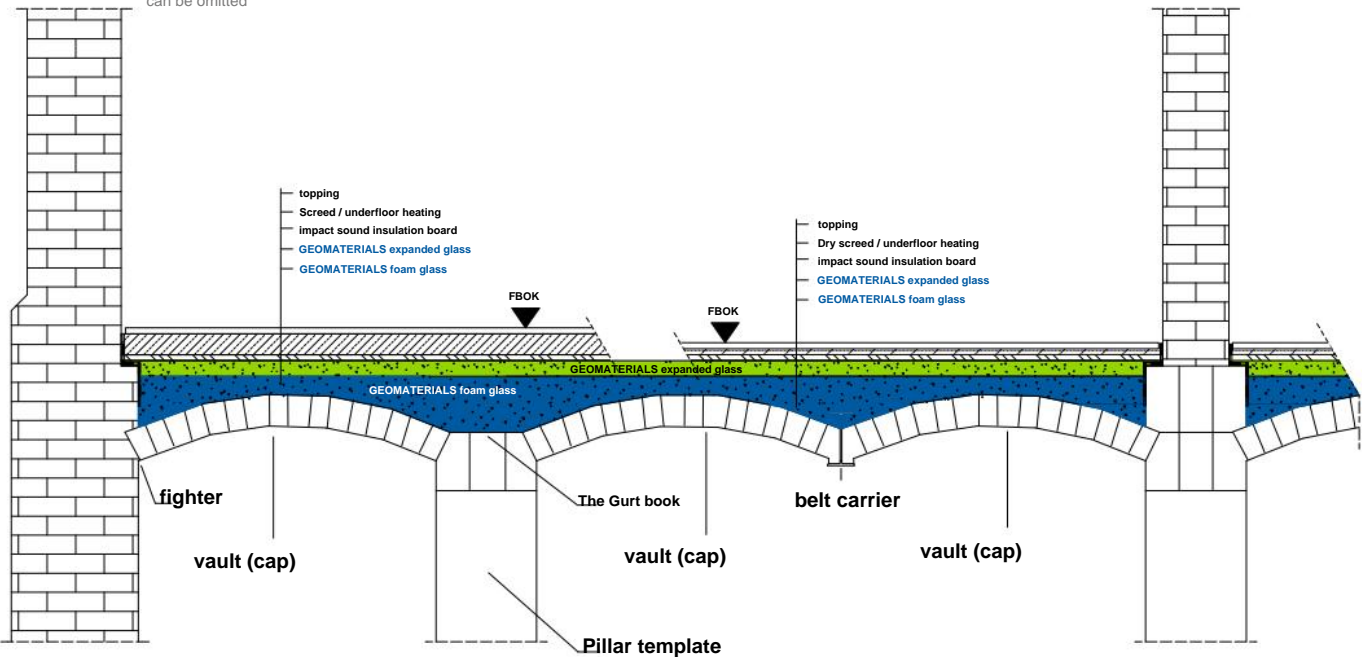
expanded glass

ADVANTAGES

- Suitable for over -insulating old buildings
- **Light:** in mineral bound shape, **GEOMATERIALS expanded glass** is as light as a feather and weighs down old hardly any constructions
- **Extremely low floor structure** with the highest ecological living quality
- **Moisture resistant:** **GEOMATERIALS Expanded glass** absorbs almost no water and dries out again quickly



- Vault
 - **GEOMATERIALS foam glass** manually compacted
 - **GEOMATERIALS expanded glass** mineral-bound/ cement-bound PE film* impact sound insulation underfloor heating (e.g. Schlüter, ...)
 - Screed
 - laying fleece (impact sound insulation)
 - topping
- *can be omitted



SCOPE OF APPLICATION
NEW CONSTRUCTION & RENOVATION

gradient
insulation

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

with **GEOMATERIALS expanded glass**



Photos: © Gründach, © Optigrün International AG & GEOMATERIALS



Unproblematic integration of
roof penetrations

Lying under the seal, **GEO MATERIALS expanded glass** takes on two functions at the same time.

As a light, non-combustible insulating fill, the material helps to improve the heat transfer value and relieves the ceiling construction. in the

GEOMATERIALS expanded glass forms the correct gradient without cutting to size.

Penetrations such as processes can be integrated to save time.

The environmentally friendly, heavy-duty leveling compound does not burn, is moisture-resistant and stays in shape.

GEOMATERIALS

expanded glass

ADVANTAGES

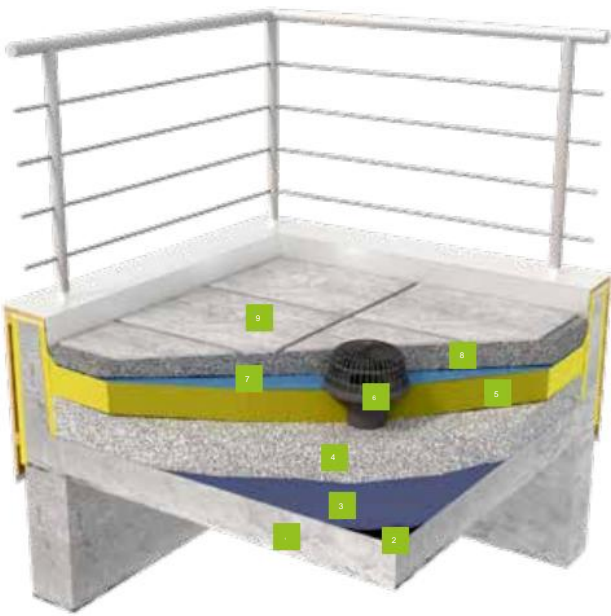
• Incombustible class A1

• Time-saving: **GEOMATERIALS expanded glass** is drawn off at a gradient. No cutting, optimal integration of penetrations and drains

• Light: **GEOMATERIALS expanded glass** is as light as a feather , even in a mineral-bound form

• Resilient and permanently stable: **GEOMATERIALS expanded glass** stays in shape - no adjustments!

• Moisture-resistant: produced from 100% waste glass, **GEOMATERIALS Expanded glass absorbs** almost no water and dries out again quickly



- 1 Concrete
- 2 ceiling primer
- 3 vapor barrier
- 4 **GEOMATERIALS expanded glass gradient insulation** (mineral-bound)
- 5 Insulation panels (e.g. GEOMATERIALS panel)
- 6 drainage sealing
- 7 sheet grit leveling
- 8 slab covering
- 9



Photo: © Poraver

Special information for flat roofs After

curing, the surface must be protected against precipitation with a sealing layer in hot bitumen, or with a sealing layer (flamed) or with a plastic sheet (glued on).

When temporarily covering with a covering film or tarpaulin, make sure that the material can air out sufficiently to prevent condensation from entering.

SCOPE OF APPLICATION
REFURBISHMENT

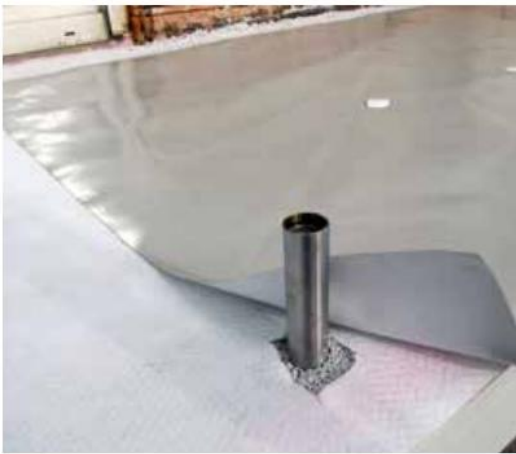
thermal
sanitation of
The balcony

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

with **GEOMATERIALS** expanded glass



Photos: © Fränzesko Stein mit System GmbH, Pram, GEOMATERIALS



Optimal integration of processes and
Pipe penetrations without cutting

The bound **GEOMATERIALS expanded glass filling** is easy to process and can be pulled off on a slope.

Integrating pipe penetrations, drains and recesses is easy. Extremely time-saving compared to cutting and laying insulation panels.

The eco-friendly, heavy-duty **GEO MATERIALS Expanded glass** insulation fill does not burn, is moisture resistant and dries out quickly. It can already after a short time with the other Layer build-up to be continued.

GEOMATERIALS

expanded glass

ADVANTAGES

- **Rapid processing:** distinct Time savings compared to cutting and laying insulation boards
- **Incombustible class A1:** all raw materials are of mineral origin, no toxic gases or smoke development in building fires
- **Pulling off at an incline**
- **Easy to walk on**
- **Moisture-resistant:** produced from 100% waste glass, **GEOMATERIALS Expanded glass absorbs** almost no water and dries out again quickly
- **Resilient and permanently stable:** **GEOMATERIALS expanded glass** stays in shape - no adjustments!



- 1 masonry
- 2 Concrete slabs (Balcony)
- 3 seal
- 4 **GEOMATERIALS Expanded glass** (bound mineral) drawn off at a gradient
- 5 fleece
- 6 Sealing
- 7 ceramic covering
- 8 Pipe penetration (railing bracket)
- 9 Insulation board (XPS)
- 10 infatuation



Photos: © Fränzesko Stein mit System GmbH, Pram, GEOMATERIALS



SCOPE OF APPLICATION
REFURBISHMENT

subsequent
Core insulation

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

from double-leaf masonry with
GEOMATERIALS expanded glass



A double-leaf masonry usually consists of a non-load-bearing front wall shell, which serves as weather protection and for facade design, and a load-bearing back wall shell, which serves as load transfer and heat storage. Core insulation is the full insulation between the two masonry walls, i.e. the entire cavity between the two walls is filled with **GEOMATERIALS expanded glass** . Despite a comparatively thick wall cross-section, this uninsulated construction ensures uncomfortable surface temperatures on the inside of the wall.

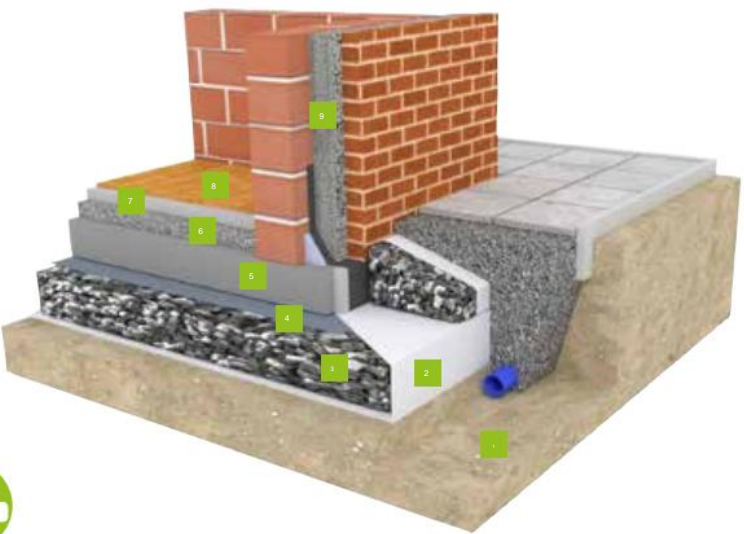
In the base area in particular, the use of moisture-resistant, non-settlement insulating materials is essential. Many existing properties can be significantly renovated in terms of energy with relatively little effort by blowing in **GEOMATERIALS expanded glass** .

GEOMATERIALS

expanded glass

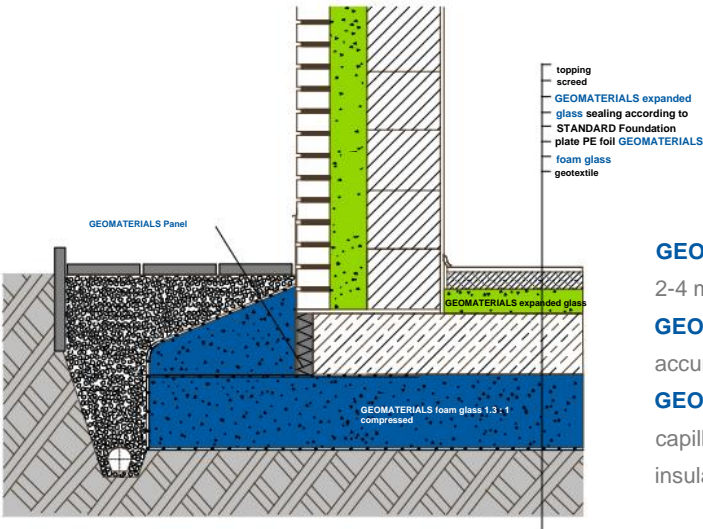
ADVANTAGES

- **Ease of processing:**GEOMATERIALS Expanded glass is blown loose
- **Moisture-resistant and open to diffusion**, produced from 100% waste glass, **GEOMATERIALS expanded glass** absorbs almost no water and dries out again quickly
- **Environmentally friendly and energy efficient**
- **Dimensionally stable:** No long-term settlement
- **Incombustible class A1**
- **Resistant to aging**, rot and rodents



- 1 Erdplanum/Altbestand
- 2 Geotextile as required
- 3 **GEOMATERIALS foam glass**
- 4 Fleece or PE film
- 5 Base plate, sealing according to DIN/ÖNORM *
- 6 Leveling fill with **GEOMATERIALS expanded glass** (bound), PE film
- 7 Screed or dry screed elements
- 8 flooring
- 9 **GEOMATERIALS expanded glass** (loose)

*can be omitted



GEOMATERIALS expanded glass granulate with a grain size of 2-4 mm is recommended for the base area .

GEOMATERIALS expanded glass protects against water accumulation in the air layer in the base area.

GEOMATERIALS expanded glass is moisture-resistant and capillary-breaking and thus protects against rising damp. The upper insulation remains dry, moisture damage cannot occur.

SCOPE OF APPLICATION
CIVIL ENGINEERING

Thermofuss –
Brick
backfill

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

Filling of hollow brick with
GEOMATERIALS expanded glass



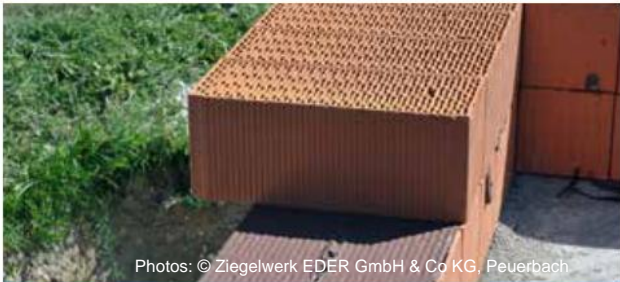
The granules are filled into the cavities of the brick!



Filling is effortless using a granulate slide that is pushed over the bricks.



Completely filled hollow brick



Photos: © Ziegelwerk EDER GmbH & Co KG, Peuerbach

The ceiling mortar can be applied as usual after the bricks have been swept clear.

Filling consumption for one row of bricks

Ederplan XP 50 TRIONIC	that. 52.50 l/m	Height 20cm
Ederplan XP 50 plusr	that. 62.50 l/m	Height 25cm
Ederplan XP 38 System 20	that. 37.50 l/m	Height 20cm
Ederplan XP 38	that. 45.00 l/m	Height 25cm
Poroplan 38 VZ	that. 50.00 l/m	Height 25cm
Ederplan 205	that. 22.40 l/m	Height 20cm
HLZ-Plan 25/38 VZ	that. 27.60 l/m	Height 25cm

Thermal separation between floor slab/intermediate ceiling and outer wall: In energy-efficient buildings, the base detail (first row of bricks on the floor slab or basement ceiling) has become increasingly important, along with other connection details. A simple and effective method for thermal separation between the floor slab and the outer wall, as well as between the false ceiling and the outer wall, is to fill and insulate the first row of bricks with **GEOMATERIALS expanded glass** (2-4 mm). This "thermo foot" solution significantly reduces the vertical thermal conductivity of the vertically perforated brick.

Processing: To avoid thermal bridges, depending on the situation and general conditions, individual rows of bricks can be filled with **GEOMATERIALS expanded glass** . It reduces the heat flow in all directions and thus helps in the construction of connections free of thermal bridges.

GEOMATERIALS
expanded glass

Different grits



GEOMATERIALS expanded glass 2-4 mm

Packed in sacks or big bags
Preferred area of application: loose fill, bound leveling fill, filling up
cavities and bricks

**GEOMATERIALS
Mineral binder Binding**

agent for expanded glass granules 14.5
kg sack 1 pallet = 78 sacks
= 1,131 kg (dimensions: 1.20 x 0.80 x
1.60 m)



GEOMATERIALS Expanded Glass 4-8mm 3-8mm

Packed in sacks or big bags
Preferred area of application: bound leveling fill
on request

right binding



This **is what GEOMATERIALS** bound expanded glass should look like. **•** Cement **-bound •** Resin **-bound or •** Mineral-bound

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

highly stressful
leveling fill

with **GEOMATERIALS** expanded glass



Photo: Testbase - OFFICE AND LABORATORY CLUSTER OF THE CITY OF VIENNA © KUBa Karl und Bremhorst Architekten ZT GmbH / Granit Bau / GEOMATERIALS



Photo: PHI - Philips Haus, Vienna © Sans Souci Group, Josef Weichenberger architects + Partner & GEOMATERIALS



Photo: Scholjegerdes Hof, 26160 Bad Zwischenahn | Germany © Doyen-Waldecker, Verein für Heimatpflege & GEOMATERIALS



Photos: Promenade Galleries © architekturbüro HALLE 1, renderwerk.at, terrazzo industrial floors screeds: Hlawna GmbH., Salzburg, J. Wimmer GmbH & GEOMATERIALS

GEOMATERIALS

expanded glass

The right mix: GEOMATERIALS expanded glass

The specified mixture is suitable for the screed substructure. If an even higher compressive strength or a better grain bond is desired, the proportion of binder and water should be increased. In any case, a test field is required and an on-site suitability test is to be carried out.

Recipe example for high thermal insulation with GEOMATERIALS binder (mineral)	
mix volume	1 m³
GEOMATERIALS expanded glass	that. 1000 l
GEOMATERIALS Mineral binder	approx. 5 bags of 14.5 kg

Water (mix earth-moist, test field absolutely necessary!!!)



Water as needed (may vary depending on mixer performance vary) **GEOMATERIALS** expanded glass **GEOMATERIALS** mineral Binder

NOTE: The mixing time of at least 2 minutes for an optimal mixing result must be observed!

to watch video

Prepare the subsurface and installation area.
Clean and pre-treat the subsurface (possibly primer improver for flat roofs), if necessary attach edge insulation strips.

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

It couldn't be easier

GEOMATERIALS expanded glass
Installation step by step



1st step - rough installation
Completed installation work before thermal insulation



2nd step
GEOMATERIALS expanded glass covers all installation lines



Step 3 - Install insulation fill level and level down to the intended level



4th step - fully installed all installation lines are seamlessly encased and thus isolated



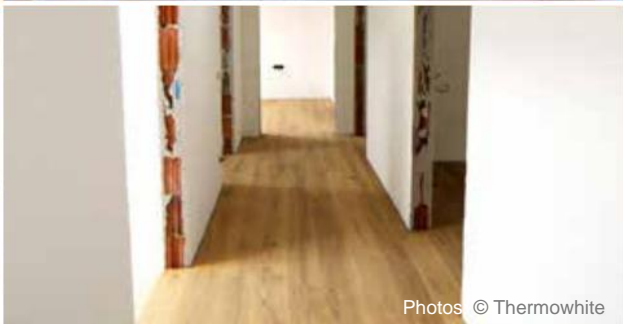
Step 5
Precise insertion saves time and money



Step 6 - Laying underfloor heating After the drying time of at least 48 hours



Step 7 - Screed is installed at the desired level according to the plan



Step 8 - Laying the floor
Finally, the desired floor is laid

Photos © Thermowhite

GEOMATERIALS

expanded glass

Recommended equipment for installing GEOMATERIALS expanded glass

The devices suggested below are just a selection of many working devices. A hand mixer and a mixing tub are ideal for very small areas.



All commercial ones
Screed pumps can be used for processing

Photo: © Thermowhite



Mobile
mixing plant

Application using a screed pump The finished mixture is pumped into the building with a delivery hose. The maximum distance to the installation site depends on the performance of the pump. **When mixed in, GEOMATERIALS expanded glass** can be carefully processed for up to 30 minutes. Then smooth the surface with a clean slat applying light pressure and remove. When applying several layers, always work "fresh on fresh".

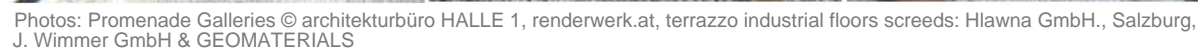


Photos: Philips House © Josef Weichenberger architects + Partner & GEOMATERIALS

Promote and contribute with the pump pump

Peel off evenly

CM measurement to determine the moisture content of screeds



This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Technical data and properties

The technical guidelines for the use and installation of GEOMATERIALS foam glass and expanded glass are based on previous experience and the current state of the art. They are not individual.

We therefore assume no liability for the completeness and suitability for a specific project.

Otherwise, our liability and responsibility are based exclusively on our general terms and conditions and are not extended by the statements in this folder or by the advice of our technical field service.




Saving Association. Housing subsidies support the use of ecological and non-mineral oil-based insulating materials in new construction and renovation! More information at: www.energiesparverband.at

A HIGH-QUALITY PRODUCT MADE FROM WASTE GLASS

outstanding
Characteristics

GEOMATERIALS expanded glass is a high-quality product made from waste glass and is 100% mineral. With its many positive properties, it meets the highest quality standards that no other product has in this variety.

GEOMATERIALS expanded glass - always in top form. Whether loose or bound - **GEOMATERIALS expanded glass** remains dimensionally stable and guarantees the best insulation performance with simultaneous fire and moisture resistance.

	<p>GOOD THERMAL INSULATION AND SOUND ABSORPTION</p> <p>• Air is a very good insulator. GEOMATERIALS expanded glass has numerous closed cavities and therefore very good thermal insulation properties.</p> <p>• GEOMATERIALS Expanded glass absorbs sound and increases the acoustic effectiveness of building materials.</p>
	<p>HEALTH FRIENDLY</p> <p>• GEOMATERIALS expanded glass is pure glass and therefore non-toxic, fibre-free, solvent-free, odorless, anti-allergenic and radiologically harmless.</p> <p>• GEOMATERIALS expanded glass can be recycled just like glass.</p> <p>• GEOMATERIALS expanded glass does not provide a breeding ground for rodents, insects and mold.</p>
	<p>HIGH RESISTANCE</p> <p>• GEOMATERIALS expanded glass is resistant to frost, heat, rot, aging, bacteria, moisture, acids and organic solvents.</p> <p>• GEOMATERIALS expanded glass is non-flammable and does not develop any harmful gases in a fire.</p>

Perhaps you are also interested in our other **GEOMATERIALS** products: Also online at: www.geomaterials.eu

<p>HIGH-QUALITY PRODUCTS MADE FROM WASTE GLASS.</p> <p>• Highly thermally insulating • Permanently stable •</p> <p>Load- bearing • Time / cost- saving Capillary breaking •</p> <p>Environmentally friendly and sustainable</p>	
	<p>GEOMATERIALS foam glass - The optimal load-bearing insulation under the floor slab.</p> <p>• Highly thermally insulating and ecological</p>
	<p>GEOMATERIALS expanded glass - The mineral alternative to conventional EPS fill under the screed!</p> <p>• Environmentally friendly and non-settlement</p>
	<p>GEOMATERIALS Panel - The foam glass panel that is used wherever cold and moisture need to be banished.</p> <p>• Ecological and waterproof</p>



SCHLÜSSELBAUER 
GEOMATERIALS

SCHLÜSSELBAUER Geomaterials GmbH
D-26188 Edewecht | Phone: +49 (0) 4405 917372
D-75438 Knittlingen | Tel.: +49 (0) 7043 9555950
kontakt@geomaterials.eu
www.geomaterials.eu

SCHLÜSSELBAUER Geomaterials GmbH
A-4673 Gaspoltschhofen Tel.: +43 (0)
7735 67 220 kontakt@geomaterials.eu
www.geomaterials.eu