Data Sheet

Mineral Lightweight Render G 3679

Smooth render made of standardized mineral bonding agents and mineral additives that can felt-board treated



Field of application

For achieving decorative, weather-resistant, mineral surfaces in the Brillux ETIC systems in conjunction with ETICS Powder Adhesive 3550, ETICS Adhesion and Reinforcement Mortar L 3500 or ETICS Lightweight Mortar XL 3532. Can also be used on even, mineral substrates, e.g. exterior plaster (compressive strength category CS II–CS III). Can be used as a smooth render as well as in system build-up with Creativ Versico 82 as a texturizable modeling render for individual design on limited interior and facade surfaces.

Properties

- For indoors and outdoors
- Dry mortar made of standardized mineral bonding agents, mineral additives and organic modifications
- Can be felt-board treated
- Freely texturable
- Very adhesive on mineral substrates
- Easy to apply at manually or mechanically
- Long open time
- Extremely water-vapor-permeable
- Certified as a top coat in the Brillux ETIC system in accordance with the specified system build-up

Material description

Color shades 0095 white

Additional color shades available upon request.

Base material Hydraulic binders with silicate additives

Bulk density Approx. 0.8–1.0 g/cm³

Layer thickness as smooth render: approx. 3.0–3.5 mm

as modeling render: approx. 3.0-5.0 mm

Packaging 25 kg sacks and 350 kg big bags



Added water

As smooth render: approx.10.0 liters per 25 kg sack.

For individual design on interior and facade surfaces, depending on the creative or facade technique, approx. 11.0 to 12.0 liters per 25 kg bag. Always add the same amount of water to each mixture or adjust to the

same consistency.

Tinting Do not tint.

Compatibility

Do not mix with other types of materials.

Mixing

Using a high-power agitator (min. 900 W) and a right handed spiral (plaster stirrer) or continuous flow mixer, mix Mineral Lightweight Render G 3679 and water until a clot-free, paste-like mortar is obtained. After allowing the mixture to mature for approx. 2 minutes, stir up the mortar again briefly.

Application

As a smooth render

Apply the mixed render by hand using a stainless steel trowel or a suitable screw conveyor, then comb through with a Notched Trowel 3749, notching 10 x 10 x 10 mm and smooth subsequently. Avoid level differences. After setting, treat with a suitable sponge float, e.g., Latex Sponge Float 3480 or Rubber Sponge Float 1098. Ensure an even layer thickness. Do not smooth back to zero. Apply the render wet in wet to avoid visible lap marks. For this purpose, we recommend using a sufficient number of workers particularly for larger areas. The smooth plaster is to be applied with a uniform film thickness, and to further minimize the risk of cracking, an additional top coat is generally required.

As a modeling render for individual design

Apply the mixed render as a base coat filler by hand using a stainless steel trowel or a suitable screw conveyor, then comb through with the Notched Trowel 3768, toothing 4 x 6 x 4 mm and smooth it. To design the surface, wait until the base filling coat has dried before applying and finishing the Mineral Lightweight Render G 3679 as a second coat in accordance with the "Application descriptions". For modeled textures, avoid large level differences to prevent shrinkage

In the case of large surfaces, the work should be carried out by several workers working together. The final modeling and texturing step should only be performed by one person alone because each worker has their own personal creative style.

Separate documents are available for the creative and facade techniques that describe the steps in detail (see "Application descriptions" under Notes).

Consumption

As a smooth render: approx.2.5 kg/m² at 3.0 mm layer thickness. As a modeling render for individual design:

for basic filling: approx. 2.0 kg/m².

For modeling and texturing: approx. 2.0-2.5 kg/m² depending on the structure and technique. The exact consumption depends on the chosen creative technique or facade technique. Consumption figures are described in the application descriptions of each technique. Determine the exact consumption by creating a sample or by means of a test application on the object to be coated.



Use

Application temperature

Do not apply if the air and object temperature is below +5°C or higher than +30°C. These temperature limits must be complied with even during the curing time. During application and drying, avoid draft, high temperatures and direct sunlight – forced drying increases the risk of cracking. Take systems affecting the room climate (e.g. air conditioning) and the respective conditions on site into consideration. Refer to notes.

Open time (at +20°C)

The prepared material remains open for processing for approx. 25 minutes, e.g. for modeling. Can be felt-board treated when the rendered surface looks matt, but still has sufficient residual moisture. The wait until it can be felt-board treated depends on the weather conditions and can be several hours at low temperatures and high humidity.

Tool cleaning

Clean tools with water immediately after use.

Drying (+20°C, 65% relative humidity)

The render must be homogeneous and uniformly light in appearance. Can be painted over outdoors after approx. 3 days once sufficiently dry. Can be reworked after approx. 2 days when used indoors. Allow longer drying times at lower temperatures and/or higher air humidity.

Storage

Store in a cool, dry location, protected against dampness. Use material within 12 months.

Declaration

Notes

Avoid contact with skin and eyes. Wear eye protection. In the event of contact with the eyes: carefully rinse with water for several minutes. If possible, remove contact lenses (where applicable). Keep rinsing and seek medical advice. Use closed work clothing and wear long trousers. Avoid prolonged skin contact with the render. Upon contact with skin (or hair): immediately remove all contaminated items of clothing. Shower or otherwise wash skin with water. The longer the fresh render remains in contact with the skin, the greater the risk of serious skin injuries. Wear suitable protective gloves made of nitrile rubber. Keep out of reach of children. Always observe the occupational health and safety instructions from the manufacturer during the application phase.

Product code

ZP1

Comply with the specifications in the current safety data sheet.



Substrate preparation

- The substrate must be level, solid, dry, clean, load-bearing, resistant to saponification and free from efflorescence, sintered layers and separating agents. Substrate moisture penetration, e.g. through joints or cracks, must be prevented.
- Check the suitability, load-bearing capacity and adhesive properties of existing coatings.
- Thoroughly remove defective and unsuitable coatings and dispose of them in accordance with the applicable regulations.
- Wash down intact coats of oil paints and enamels with an alkaline solution, sand well and clean.
- Mechanically remove non-load-bearing mineral coatings, e.g. lime and silicate paint coats.
- Completely remove any wall coverings that are not suitable for recoating; this includes any paste or wall-glue residue.
- Treat replastered areas with a fluorine primer.
- Fill larger holes and gaps with Briplast Planofill 1875; then fill with Briplast Silafill 1886 to obtain a level surface.
- Apply a prime and/or intermediate coat to the substrate as required.
- Partial old coatings as well as individual filled areas that have not been properly pretreated affect the absorbency and are visible in the finished surface.
- Ensure that the absorbency is even across the whole surface. Thin filler coats or filler coats using filler material that contains gypsum do not lead to a suitable result.
- Clean surfaces infested with fungi and algae thoroughly and then treat them with Universal Disinfectant 542*. (* Use biocide products with care. Always read the label and product information before use.).
- Coat reinforcement layers after the curing and drying time (at least 3 days at +20°C, 65% relative humidity).
- Level out substrate unevenness on the outside with mineral mortar, e.g. render from render mortar group PII.
- See also VOB Part C, DIN 18363, Section 3.

Requirement for smooth render surfaces

When creating smooth render surfaces in the Brillux ETIC systems, care must be taken to ensure a particularly even substrate. Special care is needed to ensure that the reinforcement layer is formed carefully and is sufficiently thick. Avoid lugs and filler burrs. We recommend the use of ETICS Adhesive and Reinforcement Mortar L 3500.

Filling, interior

To rework textured substrates indoors, e.g. coated fiberglass or organically bound decorative plaster, we recommend an undercoat with Multi Primer LF 3084 and pre-filling with Briplast Planofill 1875. In general, always completely cover the whole surface and smooth out more than just the texture. Always prime the filled surfaces with Lacryl Deep Penetrating Primer 595 before applying the additional coating build-up.

Substrates at risk of cracking, interior

Substrates at risk of cracking and highly absorbent substrates, e.g. gypsum plasterboard, gypsum fiberboard, should be additionally reinforced to prevent any cracks. A coating that covers hairline cracks can be created, for example, by applying CreaGlas Nonwoven VG 1000 or Rapid Nonwoven 1525 to the entire surface. Applying a nonwoven covering also reduces the absorbency long-term. Prime the nonwoven-covered surfaces with Adhesion Primer 3720 for further coating.

Creative technique

Follow the instructions under application descriptions for each creative technique or facade technique. For further information, see Notes.



Coating build-up

Render coating with Mineral Lightweight Render G 3679, exterior

Substrates 1)	Render coating	Final coating ²⁾	
Reinforcement layer with ETICS Adhesion and Reinforcement Mortar L 3500, ETICS Powder Adhesive 3550 or ETICS Lightweight Mortar XL 3532	Mineral Lightweight Render G 3679 as smooth render	Top coat with Extrasil 1911	
	Basic filling with Mineral Lightweight Render G 3679	Facade technique ³⁾ in system build-up with Mineral Lightweight Render G 3679, Extrasil 1911 and Creativ Versico 82	

- ¹⁾ When using Mineral Lightweight Render G 3679 on BaseTec 3540/3541 and load-bearing coatings, a prime coat with Silicate Brush-On Filler 3639 is to be applied. In all other cases, <u>no</u> primer is to be used on the reinforcement layer.
- ²⁾ For colored designs in the ETIC system, light reflective values equal to or above 20 are to be used. Two coats of Extrasil 1911 are required for the colored design of white renders. If required, Extrasil 1911 can be ordered in Protect quality a factory-applied film preservation against algal and fungal infestation.
- ³⁾ To implement the facade techniques, follow the instructions under "Application descriptions" (see notes).

Render coating with Mineral Lightweight Render G 3679, interior

Substrates	Prime coat ²⁾	Intermediate coat	Render coating	Top coat ³⁾
Interior plaster (compressive strength category CS I–CS IV) 1),				
Concrete		Silicate Brush-On Filler 3639	Base coat filling with Mineral Lightweight Render G 3679	Creative technique in system build-up with Mineral Lightweight Render G 3679, Profisil 1906 and Creativ Versico 82
Gypsum plaster (compressive strength category B1–B7)1), gypsum plasterboard, plasterboards	If necessary, Lacryl Deep Penetrating Primer 595			
Normally absorbent, intact matt emulsion paint coats				
Smooth, non-absorbent and glossy substrates, e.g. intact, gloss emulsion paint coats, oil and enamel paint coats				

¹⁾ Minimum compressive strength > 2.0 N/mm²

³⁾ To implement the creative techniques, follow the instructions under "Application descriptions".



²⁾ The substrate must be at least the surface quality category Q2 for gypsum plaster or gypsum plasterboard substrates. All other substrates must be prepared with at least the same surface quality in accordance with this quality level. Substrates at risk of cracking and highly absorbent substrates, e.g. gypsum plasterboard or fiberboard, should be additionally reinforced. See "Substrates at risk of cracking". For substrates with a strong texture, e.g. coated fiberglass fabric or organically bound decorative plaster, we recommend applying a prime coat of Multi Primer LF 3084 and filling the surface with Briplast Planofill 1875. Prime the filled surfaces with Lacryl Deep Penetrating Primer 595 before applying the intermediate coat.

Cover surfaces

Carefully mask surrounding surfaces that are to be coated, especially

glass, brick and natural stone.

Contiguous surfaces

Only use material from the same batch on a contiguous surface or mix

the required material quantity.

Colored coats in ETICS

Colored top coats in the ETIC System with a light reflective value of ≥ 20 can be created without restrictions. If color shades with a light reflective value < 20 are to be used, the color shades must be clarified with the

Brillux advisory service.

Risk of algae and fungal infestation

Mineral Lightweight Render G cannot be treated with a film preservative against algae and fungal infestation at the factory. If there is a risk of algae and fungal infestation, we recommend applying two equalizing

coats of Extrasil 1911 in Protect quality.

Air conditioning or similar equipment

Before applying creative techniques, air conditioners, room dehumidifiers, etc. must be set to the prescribed application temperatures. Otherwise, proper execution of the specific technique will be impossible.

Hairline-crack-bridging coating on gypsum plasterboard

Hairline-crack-bridging coating on, e.g., gypsum plasterboard, gypsum fiber boards or substrates, in accordance with VOB Part C, DIN 18363, para. 3.2.1.2, can be achieved with full-surface reinforcement with, e.g., nonwoven wall coverings based on cellulose and fiberglass.

Discolorations on gypsum plasterboard

An additional sealing coating must be applied if there is a risk of discolorations bleeding through the untreated gypsum plasterboard. Depending on the situation on site, use Aqualoma 202, Isolating Primer 924 or CreaGlas 2K-PU-Finish 3471. For an accurate assessment, sample coatings of various panel widths, including the joints and filled areas, have proved to be useful.

Moisture exposure, inside

Do not apply Mineral Lightweight Render G 3679 to damp substrates or in the event of sustained or direct exposure to moisture (splash water range). Heavy, even short term trapped moisture can allow moisture to penetrate the mineral coat. This can lead to discolorations and color shifts. Water vapor should always be removed through adequate ventilation.

Surface irregularities after drying

Depending on the weather conditions, mineral, hydraulically curing render can exhibit a cloudy shaded appearance when dry. These general characteristics corresponds to the state of the art, are not technical-functional defects and do not justify a complaint. To achieve a uniformly-colored surface, we recommend applying an additional equalizing coating; this is essential for colored render coatings.

Equalizing coat after drying

The equalizing coat is applied after the render coating has set after approx. 5 days (depending on weather conditions). Two coats of Extrasil 1911 are required for the colored design of white renders.

Smooth render surfaces

In smooth, mineral render coatings, in accordance with to DIN 55699, hair cracks cannot be fully ruled out and therefore are not a valid reason for a complaint.



Notes

Coating protection

During application, drying, and curing, the surfaces are to be protected from direct exposure to sunlight, strong wind, and moisture, e.g., with tarpaulins. Do not use below ground level, on base surfaces or basement entries without additional protective measures.

Horizontal surfaces

Do not use render coatings on horizontal surfaces. Projecting structural components, e.g. window sills, moldings, crests of walls must be covered properly to prevent dirt stains and moisture penetration.

Touch-ups

Touch-ups to part of a surface are always visible. The degree to which they stand out depends on the situation on site. According to BFS Leaflet no. 25, Section 4.2.2.1, Paragraph e, this is unavoidable.

Implementation of creative and facade techniques

The creative and facade techniques are intended for the design of limited, self-contained partial areas. For implementation on the facade, a concept must be drawn up in advance that takes into account the respective building situation, e.g. scaffolding positions, anchoring and structural conditions. It is not advisable to apply to entire facade areas without subdividing them into partial areas or interruptions if there is no precise knowledge of the procedure and execution across several scaffolding layers.

Application descriptions

For applying the various creative or facade techniques with Mineral Lightweight Render G 3679, there are separate application descriptions available with material and tools lists.

Creative techniques, indoors

8c01 – Bamboo design technique

8c02 - Canyon design technique

8c03 – Jura design technique

8c04 - Bark design technique

Facade techniques

1f01 - Smooth exposed concrete

1f02 - Roughly sawn concrete formwork

1f03 - Sprayed concrete

2f01 - Combed finish

2f02 - Broom finish

4f01 - Bamboo

4f02 - Canyon

4f03 - Jura

4f04 - Bark

4f05 - Bedrock

Further information

Follow the instructions in the data sheets of the products used.



This data sheet is based on extensive development work and years of practical experience. The translation corresponds to the current German version, in compliance with the German laws, regulations, standards and guidelines. Its content does not constitute a contractual legal relationship. The user/buyer is not released from the responsibility of checking our products to ensure they are suitable for the intended application. In addition, our general terms of business apply.

When a new version of this data sheet with updated information is published, the previous version no longer applies. The current version is available on our website.

Brillux Weseler Straße 401 48163 Münster GERMANY Phone +49 251 7188-0 Fax +49 251 7188-105 info@brillux.de www.brillux.com

