

MultiGips

Technical data sheet

Gypsum jointing compound **CasoFill® Super 50**



QUICK REFERENCE DATA

- Construction product** **For filling gypsum board joints** EN 13963 Type 3B/4B
Principle active binding component Calcium sulphate
Use Filling joints and surfaces in drywall construction
Characteristics With and without reinforcing strips
- Application** Manual application
Joint filling system One or more layers
Application thickness 0.1 – 4 mm
Wet mortar approx. 1,250 l/t
Consumption approx. 0.8 kg/m²/mm (as surface smoothing plaster)
Efficiency approx. 31 m²/25 kg bag (at 1 mm thickness as surface smoothing plaster)
- Documentation** **EN** multigips.com
EU ce.multigips.de
EPD ibu-epd.com
- Order information** **Material number 328** 25 kg bag (pallet with 40 bags, 1,000 kg)
Material number 327 5 kg bag (transport pallet with 120 bags, 600 kg)
- Validity** Technical data sheet only valid in conjunction with the recognised rules of construction technology and the technical documentation of VG-ORTH GmbH & Co. KG.

MAIN FEATURES

Construction product Gypsum jointing compound type 3B/4B for filling gypsum board joints according to EN 13936 in interiors. Pre-mixed using hydration phases of the natural material gypsum and additives (dry powder products). Certified to bear CE marking.

Application For filling joints and edges of gypsum panels for reinforcing drywall constructions. Suitable for EN 520 gypsum board products for further processing according to EN14190, wall construction boards with honeycomb cores EN 13915, composite gypsum boards for heat and sound insulation EN 13950, concave mouldings made from paper-covered gypsum EN14209 and fibre-reinforced gypsum boards EN 15283-1/-2.

For filling joints and edges of gypsum panels with reinforcing strips. Filling of rounded longitudinal edges **(RLE)**, rounded flattened longitudinal edges **(RFLE)** and chamfered cut edges **(CCE)**, including without reinforcing strips.

Surface filling of drywall constructions.

Surface coating and partial filling of suitable normal mineral building substrates, e.g. concrete or plaster.

For sealing precast concrete component joints, slots and holes.

Declared performance **Reaction to fire** Euroklasse A1 according to EN 13501-1.
Flexural strength No performance determined.
Hazardous substances No performance determined.

Product benefits Combined joint filler and surface smoothing plaster.
Creamy soft consistency.
High degree of filling, very good stability.
Very easy to sand.
Practical working time.
Rapid strength development after initial setting.
Low drying shrinkage.
High bonding strength for excellent joints.
Very high crack resistance.

TECHNICAL FEATURES

Dry density	approx. 975 kg/m ³
Wet mortar	approx. 1,250 l/t
Consumption	<p>As joint filler Quality level Q2 filling (without adjacent edge joints)</p> <p>Single planking, 12.5 mm (RFLE), approx. 0.3 kg/m² ceilings; 0.5 kg/m² walls; 0.25 kg/m² dry plaster</p> <p>Single planking, 20 mm (RFLE), approx. 0.6 kg/m² ceilings; 1.1 kg/m² walls; 0.55 kg/m² dry plaster</p> <p>Double planking 2 x 12.5 mm (RFLE), approx. 0.5 kg/m² ceilings; 0.8 kg/m² walls; 0.4 kg/m² dry plaster</p> <p>Double planking 2 x 20 mm (RFLE), approx. 1.0 kg/m² ceilings; 0.85 kg/m² dry plaster</p> <p>Triple planking 3 x 12.5 mm (RFLE), approx. 1.0 kg/m² walls</p> <p>Single planking 9.5 mm (RFLE), approx. Dry plaster 0.3 kg/m²</p> <p>Composite boards MW, approx. Dry plaster 0.4 kg/m²</p> <p>Composite boards EPS, approx. Dry plaster 0.3 kg/m²</p> <p>As joint filler Filling of edge joints (with interlayer) Depending on planking thickness, approx. 0.15 – 0.25 kg/m joint</p> <p>As surface smoothing plaster For application thickness 1 mm approx. 0.8 kg/m²/mm Efficiency approx. 31 m² (25 kg bag)</p>
Working time/initial setting	approx. 50 min until initial setting (20 ± 2 °C/50 ± 5% relative humidity)
Working temperature	+10 °C – +30 °C
Application thickness	0.1 – 4 mm
Compressive strength	≥ 8.0 N/mm ²
Bonding strength/cohesion	≥ 0.25 N/mm ²

VOC emissions **TVOC₂₈** < 1.0 mg/m³
SVOC₂₈ ≤ 0.1 mg/m³
Carcinogen₂₈ EU Cat. 1 and 2 ≤ 0.001 mg/m³

Storage Can be stored for approx. 9 months; store unopened in original packaging on pallets in a dry location. Protect against moisture absorption and frost. Packaging should be sealed airtight to prevent exposure to the air once opened and used without delay.

NOTE: The relevant technical values for the construction product were calculated in accordance with the testing standard. Consumption, volumes and times may deviate from test values under practical conditions.

CHARACTERISTICS

Technical **Type 3B**

Jointing compound for filling with reinforcing strips.
Fine / surface filler for single and multilayer coating of joints and board surfaces (finishing filler).

Type 4B

Jointing compound for filling without reinforcing strips for edge forms RLE, RFLE, CCE.

As jointing compound with especially high joint strength for drywall construction in wooden buildings with reinforcing strips.

Type 3B/4B

Gypsum-bonded, rapidly hardening jointing compounds made from fine grain gypsum with plastic additives as needed to satisfy requirements.

Appearance For drywall construction with and without requirements for surface quality.

Environmental Fulfils the requirements for use in interiors according to the Federal Environmental Agency in the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in the Federal Republic of Germany. Extremely low emissions.

Sustainability Environmental product declaration in accordance with the product category rules for factory-produced mineral mortar (EPD Environmental Product Declaration). Subject to independent external verification.

PLANNING PRINCIPLES

General structural pre-requirements for filler materials

Construction product for high-quality drywall construction systems, whose essential characteristics are only attained on drying or hardening on the substrate. Substrates must therefore be tested for suitability before filling, pre-treated if necessary and protected against the elements before filling.

In general, gypsum panels must be permanently installed on a clean and dry supporting substructure. To ensure the warranted bonding strengths, in particular the joints and edges to be filled must be free of dust. Dust should be removed before filling. Priming with MultiGips Grundiermittel (highly concentrated primer) or MultiGips Aufbrennsperre (concentrated primer) is recommended for cut edges or chamfered cut edges with open gypsum cores in order to bind construction site dust and unify absorbency.

The lowest recommended temperature for filled building elements and interiors must be above +10 °C, including at night. The jointing compound must be protected from frost until it has fully hardened. Filling must only be carried out when no large changes in length to the bonded panels are to be expected due to moisture and/or temperature changes. Therefore, drywall constructions should only be filled after the installation of poured asphalt, cement and floating screeds.

Planning and testing according to applicable standards as well as in combination with the installation instructions from the manufacturer of gypsum panels, in particular for the use of reinforcing strips for relevant edge forms, in combination with jointing compounds for gypsum board joints.

APPLICATION PRINCIPLES

General Powder form construction product which becomes soft and plastic after adding water, solidifies in accordance with requirements by absorbing water (> 50 minutes) and hardens so as to be similar to rock through evaporation of water (air drying). Because of this, in order to achieve the technical physical properties of the filling, different brands of jointing compound must not be mixed or additives added. Do not use material that is already hardening, moist, or has been stored for too long.

Use clean, tempered water for mixing.

For multi-layer planking, filling of the joints in the lower layers is essential - even though these are not visible - in order to achieve the warranted technical physical properties of drywall constructions.

Reinforcing strips are used to reinforce the filled joints. Paper-based reinforcing strips are available for very good crack resistance. These may crinkle due to later absorption of moisture, e.g. due to painting. For ultimate crack resistance, non crinkling joint covering strips on the basis of elastic special paper are recommended.

With the use of jointing compound, non-mixed RFLE joints can always be filled without reinforcing strips and under optimum construction site conditions, CCE joints can also be filled without reinforcing strips. Mixed joints, e.g. RFLE to CCE and other edge forms require the use of reinforcing strips - regardless of the brand of jointing compound.

Joint filling in drywall construction

Mixing Fill a clean bucket with mixing water. Slowly and evenly sprinkle in the dry material without lumps and allow to slake until the waterline has almost been reached (mixing ratio approx. 1.6 kg material to approx. 1 l water). After slaking, mix the jointing compound with a trowel or mixer until it has a stiff, creamy consistency.

NOTE: Mixture by machine with a large mixing paddle at low speed is recommended. Paddles that are too small and high speeds reduce the strength, accelerate the onset of hardening and thin the consistency of the jointing compound.

Working time After complete slaking, approx. 50 min. until initial setting (at 20 ± 2 °C / $50 \pm 5\%$ relative humidity).

NOTE: Material residues from already mixed and/or hardened jointing compound in buckets or on tools may act as cores for crystallisation and considerably accelerate the onset of hardening of freshly mixed jointing compound.

NOTE: Do not continue to use jointing compound that has begun to harden. The jointing compound cannot be made suitable for further processing by the addition of further water and/or further mixing.

Filling without reinforcing strips Completely fill the joints in one step with a smoothing trowel or screw-handled spatula. Copiously press in the jointing compound to both sides and smooth in the longitudinal direction. Coat with hardener. Remove hardening, protruding material. In the second filling stage, create a smooth transition to the board surface with a trowel or a wide spatula. Also coat with a smooth layer of hardener.

Joints with reinforcing strips As above, however, insert the reinforcing strips after the first filling stage according to the manufacturer's instructions.

NOTE: To prevent possible detachment of the reinforcing strips, e.g. during later painting, in particular for CE/CCE and mixed joints it is recommended that the strips are laid in a filler layer of at least 1 mm thickness on both board edges. After smoothing of the joint, this layer should still be at least 1 mm thick and must not be smoothed to zero; if possible, use a curved trowel.

Sanding After drying/hardening, remove filler burrs manually (120 grit sanding mesh) or with an electric long-neck sander, and create a smooth transition between the joint and the boards.

NOTE: Immediate sanding after drying is recommended. Fully-hardened jointing compound causes increased resistance to sanding.

Surface filling in drywall construction

Joint filling as above (without sanding of transitions). For surfaces with extra visual requirements, fill the board joints wider, smooth the entire surface with jointing compound until the pores are filled and sand off filler burrs. For surfaces with extreme visual requirements, cover the entire surface with jointing compound with a thickness of at least 1 mm and smooth.

Joint filling of precast concrete components

Press in the jointing compound perpendicular to the joint for good bonding on both flanks of the joint. At the onset of hardening, remove protruding material and smooth. If necessary, fill again in a second stage after complete drying. Priming of the previous layer is recommended.

Surface filling of mineral substrates

Checking and pre-treatment of the substrates is performed according to the recognised rules of construction engineering, e.g. as published in the regulations of the professional associations and their specialist committees.

Concrete The residual moisture of normal concrete should not be more than 3% from the surface to a depth of 3 cm. Pre-treat the entire surface with MultiGips Betonkontakt (concrete binding agent). Application thickness 2 – 4 mm. If several layers of filler are required, e.g. to compensate for uneven areas, the previous layer of filler must be completely dry/hardened. Priming of the previous layer is recommended. Only carry out further filling after the primer has fully dried (at least 24 h).

NOTE: Large concrete elements made from porous lightweight concrete normally have a dry density of < 2,000 kg/m³. Those building elements normally take longer to dry than is practical for construction purposes. In such cases, plastering with gypsum dry mortars cannot be recommended.

Block walls (aerated concrete, lime-sand bricks) Pre-treat the entire surface of highly-absorbent substrates or substrates with uneven absorption with MultiGips Grundiermittel (highly concentrated primer) or MultiGips Aufbrennsperre (concentrated primer) to reduce or homogenise absorption.

Rendering (cement/lime cement, gypsum/lime gypsum) Remove existing paint, coatings, cladding, coverings, loose topcoat plaster or sintered layers and check for firmness. Pre-treat the entire surface with MultiGips Grundiermittel (highly concentrated primer) or MultiGips Aufbrennsperre (concentrated primer).

NOTE: Always allow bonding agent (MultiGips Betonkontakt) and primers (MultiGips Grundiermittel or Aufbrennsperre) to dry completely!

Drying / hardening

The jointing compound achieves its strength through hydration (addition of water molecules as crystalline bound water) and air drying.

Further treatment

Suitable as a substrate for seals, coatings, claddings and coverings after complete drying/hardening as measures for further treatment of wall and ceiling surfaces in compliance with technical regulations. Drywall areas must be pre-treated with a suitable primer, e.g. MultiGips Grundiermittel.

SAFETY AND DISPOSAL

Hazard symbol	None.
Statements	Jointing compound is non-hazardous according to Regulation (EC) No.1272/2008.
Safety instructions	None.
Disposal	<p>Recommendation Disposal according to official regulations.</p> <p>European List of Waste 17 08 02 Gypsum-based construction materials other than those mentioned in 17 08 01. Disposal as landfill, landfill category 1 and 2 according the German ordinance on the list of waste.</p>
Safety data sheet	The information in the current safety data sheet at ce.multigips.de applies.

Technical data sheet for construction product based on harmonised standard. No guarantee of being exhaustive or generally valid; legal claims against VG-ORTH GmbH & Co. KG cannot be based thereon. Only valid in conjunction with the recognized rules of construction technology, as published in the regulations of the professional associations and their professional bodies, as well as in conjunction with the technical documentation of VG-ORTH GmbH & Co. KG. Does not apply to other specified construction products/types in conjunction with their installation. Provides technical information for professional users to improve their understanding and ensure that the construction product is used and applied as intended. Does not substitute compliance with the established rules of construction technology and professional use and design under practical conditions by professional users. Warranted performance by the manufacturer for the powdered form of pre-mixed construction product at time of market introduction. No commitment to a legally binding guarantee of certain properties or suitability for a particular application. Performance characteristics of the applied construction product dependent on substrate inspection and pre-treatment, professional application and requirement-oriented drying / hardening without guarantee. The relevant technical values for the construction product were calculated in accordance with the testing standard. Consumption, volumes and times may deviate from test values under practical conditions. To achieve the physical, structural and construction properties of MultiGips plaster systems, only MultiGips system components or products recommended by VG-ORTH GmbH & Co. KG may be used.

Note on English translation This is a translation of the technical data sheet valid in Germany. All stated details and properties are in compliance with the regulations of the EU and German standards and German building regulations. They are only applicable for the specified products, system components, application rules and construction details in connection with the specifications of the respective certificates and approvals. VG-ORTH GmbH & Co. KG denies any liability for applications outside of EU and Germany as this requires changes according to the respective national standards and building regulations.

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