

# MultiGips

## Technical data sheet

### FG 70 Füll- und Zargengips

EN 13279-1



## MAIN FEATURES

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|--|--|
| <b>Building material</b>                       | Filling plaster based on a pre-mixed gypsum dry mortar EN 13279-1 for filling of ceiling connection joints in building elements of gypsum blocks. Also for backfilling of doorframes in partitions of gypsum blocks.   |
| <b>Properties</b>                              | High-quality, naturally white filling plaster with special bonding additives (high adhesive strength)<br>Especially high adhesive pull strength (good tear resistance)<br>Especially high water retention capacity (prevents dust formation)<br>Practical working time of 70 minutes<br>Mineral<br>Reaction to fire A1 (no contribution to fire load, EN 13501-1)<br>EPD Environmental Product Declaration |
| <b>Performance as building element</b>         | Force-locked connection at elastic and rigid ceiling connections<br>Force-locked connection for the installation of steel doorframes (backfilling)<br>No change to the fire resistance of the building elements made from the gypsum blocks  |
| <b>Extended area of application (interior)</b> | For filling joints in wall openings with mounted parts<br>For mounting, repair and installation work (e.g. placement of beads, corner beads and stucco elements; repairing of edges and uneven surfaces; closing of cut-outs, slots and defects; inserting of sockets and fixing lines in place)   |
| <b>Special features</b>                        | Certified low level of hazardous substances for improved interior air quality helps eliminate health risks.<br>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.  |
| <b>Documentation</b>                           | <b>EN</b> <a href="http://multigips.com">multigips.com</a><br><b>EU</b> <a href="http://ce.multigips.de">ce.multigips.de</a>   |

## TECHNICAL FEATURES

Performance feature	Building material
<b>European standard</b>	EN 13279-1 (B4/20/2)
<b>Reaction to fire, Euroclass</b>	A1, no contribution to fire
<b>Insulation against air-borne sound</b>	No performance determined (NPD)
<b>Areal thermal resistance</b>	No performance determined (NPD)
<b>Hazardous substances</b>	No performance determined (NPD)
<b>Consumption as filling plaster</b>	approx. 2.0 kg/m <sup>2</sup> wall
<b>Consumption as doorframe filling plaster (for subsequent doorframe installation, wall thickness 100 mm)</b>	approx. 17 kg/doorframe
<b>Working time</b>	approx. 70 minutes
<b>Storage</b>	approx. 6 months, dry on Euro pallets
<b>Grain size</b>	max. 1.25 mm
<b>Flexural strength</b>	≥ 1.0 N/mm <sup>2</sup>
<b>Compressive strength</b>	≥ 2.0 N/mm <sup>2</sup>
<b>Dry density</b>	approx. 870 kg/m <sup>3</sup>
<b>Water vapour diffusion resistance coefficient <math>\mu</math></b>	approx. 10
<b>Thermal conductivity <math>\lambda</math></b>	0.28 W/mK

## ORDER INFORMATION

Performance feature	Building material
<b>Material number</b>	680
<b>Form of packaging</b>	Paper bag
<b>Contents</b>	25 kg
<b>Packaging unit</b>	40

## ENVIRONMENTAL DATA

Performance feature	Building material, building element
<b>Composition</b>	Calcium sulphate of various stages of hydration with additives (lime hydrate, mineral lightweight aggregate, tensides, cellulose ether, natural hydroxy acids)
<b>Hazardous constituents</b>	Calcium hydroxide Ca (OH) <sub>2</sub> The calcium hydroxide causes irritation when swallowed, after skin contact, respiration or eye contact. The product is classified and labelled according to EC directives/GefStoffV (German Ordinance on Hazardous Substances). Observe the safety data sheet!
	<b>Performance</b>
<b>Emissions of volatile organic compounds (mg/m<sup>3</sup> TVOC after 3 days)</b>	0.019 <sup>1)</sup>
<b>Carcinogenic substances (mg/m<sup>3</sup> after 3 days)</b>	0.001 <sup>1)</sup>
<b>Natural radioactivity (mSv/a)</b>	≤ 0.02 <sup>1)</sup>
<b>Persistence, bio-accumulation potential, toxicity</b>	No PBT characteristics
<b>Toxicity</b>	Non-toxic
<b>Bio-accumulation potential</b>	No potential (inorganic, mineral)
<b>For other environmental information, see also</b>	Safety data sheet according to Regulation (EC) 1907/2006 (REACH) Environmental product declarations for gypsum products of the Bundesverband der Gipsindustrie e.V.

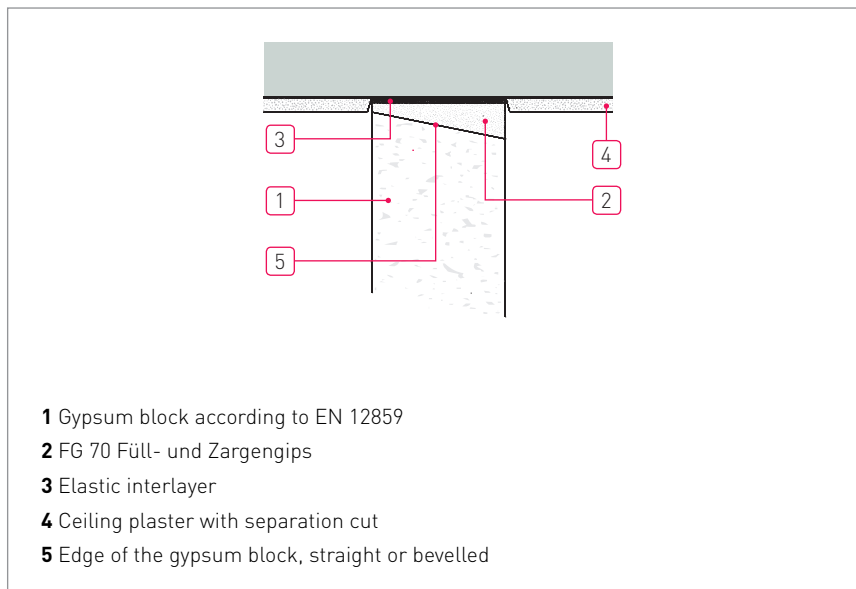
1) Fraunhofer Institute for Building Physics, 10.2010

## APPLICATION PRINCIPLES

- Site prerequisites** Only work with filling plaster when the air and building element temperature will not fall below +5 °C and no night frost is expected until complete drying of the gypsum. If possible, the top floor ceiling should be sealed in order to greatly reduce the effects of moisture during the construction phase.
- Use as filling plaster** Gypsum blocks must be dry and free of dust and frost. Surfaces to be bonded must be thoroughly cleaned of gypsum dust, especially the surfaces of gypsum blocks that have been cut.
- Use in extended area of application (interior)** Metal parts mounted in gypsum blocks, such as lintel reinforcement, metal doorframes, distribution boxes, pipelines, etc. must be protected against corrosion before closing of the wall.
- Filling of ceiling connection joints for elastic connections (filling plaster)** Sprinkle 1.4 parts MultiGips FG 70 Füll- und Zargengips (filling plaster) into 1 part water, allow to slake and stir until homogeneous. Do not mix with foreign materials (the use of gypsum adhesive in custom recipes with gypsum dry mortars EN 13279-1, e.g. gypsum bonding plasters, is not permitted for filling ceiling connection joints). Clean containers and tools with water immediately after use.
- The elastic connection is created in a structural unit between elastic interlayer and filling plaster:
- Use MultiGips Randanschlussstreifen (elastic interlayer). (Unsuitable materials include, for example, PE strips of < 60 kg/m<sup>2</sup> and roofing felt!).
  - Install the elastic interlayer with tight joints and free of cavities.
  - The edges of the top blocks can be either horizontal or bevelled. Bevelled edges increase the bonding area for the filling plaster.
  - Dust must be removed from the cut edges, and the edges must be moistened before filling the ceiling joint.
  - Ceiling joints must be completely filled in accordance with the intended sound insulation, fire protection and structural engineering requirements.
  - Do not plaster over the elastic interlayer; otherwise, create a separation cut immediately below the ceiling.
- Filling of ceiling connection joints for rigid connections (filling plaster)** The ceiling connection is created by completely filling the ceiling connection joint without elastic interlayer. Rigid floor and wall connections are created with gypsum-based adhesive.
- NOTE: The rigid connection is used only in exceptional cases and only for building elements or rooms of lesser importance if no or only extremely small structural deformations are expected and no sound insulation requirements must be met.

**Backfilling of steel doorframes  
(doorframe plaster)**

In partition walls of gypsum blocks, subsequent installation of solid wall doorframes (steel U-shaped frames) is recommended. Bevel, roughen, remove dust and pre-wet the reveals for backfilling of the doorframe. Label the recesses for the doorframe anchors and cut them out (do not chisel!); also remove dust and pre-wet. Tape off hinge pockets and lock cases, if necessary. Insert the doorframe plumb and level, and use suitable bolsting to align the reference markings of the doorframe and the wall. Then fasten the doorframe and place and reinforce it. Completely fill the cavities between the wall and the doorframe as well as the recesses.



Only complete filling of the ceiling connection joint ensures the structural properties as well as the sound insulation and fire protection properties of the gypsum block building element.

## SAFETY AND DISPOSAL

**Possible risks** The material is categorised as non-hazardous according to Regulation (EC) No. 1272/2008

**Disposal Recommendation** Disposal according to official regulations.

**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.

**Packaging** Bags or other packaging material must be optimally emptied and can be recycled after appropriate cleaning.

**Transport** Non-hazardous within the sense of national and international transport regulations.

**Safety data sheet** The information in the current safety data sheet at [ce.multigips.de](http://ce.multigips.de) applies.

### Safety labelling



Hazard Symbol: Etching effect.

Hazard Statements:

H318 Causes serious eye damage.

Precautionary Statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center or doctor/physician.

## CALCULATION AND DELIVERY INFORMATION

On the basis of practical experience. Deviations due to changes to general conditions such as wall dimensions, room layout, type of construction, transport routes, etc. must be taken into account.

<b>System components</b>	<b>Unit</b>	<b>Material requirement</b>	<b>Delivery units</b> Form of packaging	<b>Packaging unit</b>
<b>Gypsum blocks</b> e.g. MultiGips M100	m <sup>2</sup> /m <sup>2</sup>	1	4.0 m <sup>2</sup> /package (= 12 pcs.) 8.0 m <sup>2</sup> /pallet (= 24 pcs.)	1 pallet (2 packages/ pallet)
<b>Elastic interlayer</b> AkustikPro 120-3/120-3 sk AkustikBit 1000	m/m <sup>2</sup>	1.3	25 m roll 1 m strips	4x 25 m rolls 50 m/package
<b>Gypsum-based adhesive for gypsum blocks</b> Adhesive ClassicWeiss 90 Adhesive SuperWeiss 120/SuperWeiss 200 Adhesive Hydro 90	kg/m <sup>2</sup>	approx. 1.0 – 1.5	25 kg bag	40 pcs./pallet
<b>Fill ceiling joint, close electrical slots</b> FG 70 Füll- und Zargengips FG 700 Füllgips Spezial	kg/m <sup>2</sup>	approx. 2 – 3	25 kg bag 30 kg bag	40 pcs./pallet
<b>Gypsum filler (backfilling doorframes)</b> FG 70 Füll- und Zargengips FG 700 Füllgips Spezial	kg/doorframe	approx. 17	25 kg bag 30 kg bag	40 pcs./pallet
<b>Surface smoothing plaster</b> SG 90 Uni	kg/mm/m <sup>2</sup>	approx. 0.8	25 kg bag	42 pcs./pallet

## LITERATURE

EN 12859 (2011-05) Gypsum blocks – Definitions, requirements and test methods

EN 12860 (2002-07) Gypsum based adhesives for gypsum blocks – Definitions, requirements and test methods

DIN 4103-2 (2017-09) Internal non-load bearing partitions – Part 2: Partitions made of gypsum blocks

EN 15318 (2008-01) Design and application of gypsum blocks

NOTE: In Germany gypsum blocks according to EN 12859 are used for non-load bearing partitions on the basis of German standard DIN 4103-2. The European standard EN 15318 for design and application of gypsum blocks is not applicable in Germany as it contradicts national building authority requirements.

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 construction product at time of market introduction. No commitment to a legally binding guarantee of certain properties or suitability for a particular application. No guarantee concerning performance characteristics of product as used, which depend on proper use. The relevant technical values for the construction product were calculated in accordance with the testing standard. To achieve the physical, structural and construction properties of MultiGips gypsum blocks, 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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