

MultiGips

Technical data sheet

Gypsum-based adhesive **SuperWeiss 120**

EN 12860



MAIN FEATURES

- Building material** Gypsum-based adhesive for joining gypsum blocks according to EN 12859 to create non-load bearing interior partitions and other gypsum building elements and to create their connections with adjacent building elements.
- Properties** Especially high-quality, white gypsum-based adhesive with high adhesive strength
Practical extended working time of 120 minutes
Mineral
Reaction to fire A1 (no contribution to fire load, EN 13501-1)
EPD Environmental Product Declaration
- Performance as building element** Force-locked connection of gypsum blocks
Force-locked connection to adjacent building element
No change to the fire resistance of the building elements made from the gypsum blocks
- Extended area of application (interior)** For fastening elastic interlayer for elastic connections
For fastening of mineral wool insulating boards in cavity wall installations
For full-surface smoothing of building elements of gypsum blocks
For filling joints in wall openings with mounted parts
For full-surface smoothing of levelled, smoothed, rubbed or felted plaster surfaces of gypsum, gypsum-lime, lime-gypsum, lime or lime-cement plaster (after pre-treatment, if necessary)
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)
- Special features** Certified low level of hazardous substances for improved interior air quality helps eliminate health risks.
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.

TECHNICAL FEATURES

Performance feature	Building material
European standard	EN 12860
Reaction to fire, Euroclass	A1, no contribution to fire
Insulation against air-borne sound	No performance determined (NPD)
Areal thermal resistance	No performance determined (NPD)
Hazardous substances	No performance determined (NPD)
Application thickness	0 – 3 mm
Consumption	1.0 – 1.5 kg/m ² wall
Working time	approx. 120 minutes
Storage	approx. 6 months, dry on Euro pallets
Grain size	max. 0.20 mm
Flexural strength	≥ 2.0 N/mm ²
Compressive strength	≥ 4.0 N/mm ²
Dry density	approx. 980 kg/m ³
Water vapour diffusion resistance coefficient μ	approx. 10
Thermal conductivity λ	0.34 W/mK

ORDER INFORMATION

Performance feature	Building material
Material number	320
Form of packaging	Paper bag
Contents	25 kg
Packaging unit	40

ENVIRONMENTAL DATA

Performance feature	Building material, building element
Composition	Gypsum-based adhesive of calcium sulphate hemihydrate ($\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$)
Hazardous constituents	None
Performance	
Emissions of volatile organic compounds (mg/m³ TVOC after 3 days)	0.010 ¹⁾
Carcinogenic substances (mg/m³ after 3 days)	0.001 ¹⁾
Natural radioactivity (mSv/a)	≤ 0.02 ¹⁾
Persistence, bio-accumulation potential, toxicity	No PBT characteristics
Toxicity	Non-toxic
Carcinogenicity, mutagenicity and toxicity to reproduction	No CMR properties
Bio-accumulation potential	No potential (inorganic, mineral)
Ecology	Safe in air, water and soil
For other environmental information, see also	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 gypsum-based adhesive for gypsum blocks 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-based adhesive. If possible, the top floor ceiling should be sealed in order to greatly reduce the effects of moisture during the construction phase. Construction can be carried out regardless of the effects of weather through the use of hydrophobic gypsum blocks at the base of the partition ¹⁾ and/or MultiGips Hydro-Sockel (damp course) to prevent rising dampness. If screed is to be subsequently installed, the covering of the insulation layer must be properly continued up the walls. In particular with poured asphalt screed, adequate cross-ventilation must be ensured.

1) The product selection also includes the hydrophobic gypsum-based adhesive MultiGips Hydro 90 (optional).

Use as gypsum-based adhesive 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 as surface smoothing plaster Surfaces of gypsum blocks that are to be completely smoothed must be sound and free of dust and frost. Remove any sinter layers, residues and contaminations of any kind before smoothing. To prevent dehydration in the gypsum-based adhesive and associated loss of strength, appropriate measures must be taken at high temperatures (e.g. prevent draughts, moisten plaster surfaces).

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.

Creation of partitions (as gypsum-based adhesive) Sprinkle 1.6 parts MultiGips SuperWeiss 120 into 1 part water, allow to slake and stir until homogeneous. Do not mix with foreign materials (the use of gypsum-based adhesive in custom recipes with gypsum dry mortars EN 13279, e.g. gypsum bonding plasters, is not permitted for the connection of gypsum blocks). Apply the gypsum-based adhesive thoroughly to butt joints and horizontal joints (fill entire joint with adhesive).

Join gypsum blocks with tight joints in a staggered pattern. Align the joined blocks vertically and horizontally within the working time of the gypsum-based adhesive (120 minutes). Remove the excess gypsum-based adhesive escaping from the joints after allowing it to harden slightly. Clean containers and tools with water immediately after use.

**Creation of surfaces
(as surface smoothing plaster)**

Building elements of gypsum blocks do not require a plaster coating either for aesthetic reasons or to satisfy sound insulation and fire protection requirements. They are either smoothed only partially in the joint area or over the entire surface.

Building elements of gypsum block must be thoroughly cleaned of construction dust that could reduce adhesion prior to application of the smoothing plaster. Especially in the case of extremely dry air and/or high air and building element temperatures, the added water may be drawn out of the gypsum-adhesive relatively quickly, which can significantly impair the hydration, in other words the proper growth of the gypsum crystals for the gripping of the substrate as is necessary for achieving the rated strength. Appropriate measures must therefore be taken, such as moistening the surfaces to be smoothed. The air and building element temperature may not be below +5 °C from the time of application until complete hardening of the gypsum-based adhesive.

The full-surface smoothing is generally performed in a single layer in thicknesses between 0 and 3 mm. If multiple smoothing layers are required, each layer must be allowed to harden and dry completely before application of the next layer. Prime the previous layer with MultiGips Aufbrennsperre (concentrated primer), and apply the next layer only after this has dried. Perform any sanding and subsequent painting and adhesive work only after complete drying. After completion of the smoothing work, sufficient cross-ventilation is required.

Coatings of wallpaper, paints and non-woven liner as well as dispersion, latex, oil or varnish paint may be applied to smoothed building elements of gypsum block. Do not use any lime or silicate water paints!

Before any subsequent work, it may be necessary to apply a primer appropriate to the substrate and the subsequent coating/wall cladding. Exclusively pastes based on pure methyl cellulose may be used for wallpapering work. Rapid, proper and draught-free drying must be ensured especially after application of paper and fibreglass wallpapers but also after application of synthetic resin and cellulose plasters.

NOTE: If ceramic claddings, such as tile or natural stone, are to be applied over the full surface or part of the surface, building elements of gypsum blocks may not receive smoothing plaster in the relevant areas. The gypsum-based adhesive that escapes from the joints must be removed or cut off flush to the surface after hardening.

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 international transport regulations.
- Safety data sheet** The information in the current safety data sheet at ce.multigips.de applies.

DOCUMENTATION

- EN** multigips.com
- EU** ce.multigips.de

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.

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

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VG-ORTH GmbH & Co. KG

Holeburgweg 24 | 37627 Stadtoldendorf

Telephone +49 5532 505-0

Fax +49 5532 505-560

info@multigips.com

www.multigips.com

