



Baunit HM 50

Multi-purpose contact mortar

Product	Factory prepared dry powder mortar in accordance with DIN 18557 and DIN EN 998-1. Contact mortar for thin coat façade remediation and bonding coat on to concrete, for manual and machine application.	
Intended use	Multi-purpose contact mortar for use on internal and external walls, ceilings, pillars, and plinths with gravel or shingle drainage. Primarily as a bonding coat to prepare smooth concrete substrates to receive standard basecoat and topcoat renders (CS II, CS III and CS IV). Also suitable as a remediation coating over sound mineral substrates (CS III and CS IV), concrete, synthetic renders and stable paint layers and as a reinforcement layer with textile mesh over basecoats and insulation boards, for example XPS (rough, scratched surface) and multi-layered boards. Not for use with certificated EWI systems.	
Composition	Sand, cement, white lime and additives to improve workability, adhesion and strength (textile fibres).	
Properties	Mineral, highly modified and easy to use contact mortar with very good adhesion onto most backgrounds. Once cured, the product is water vapour permeable and resistant to weathering, water ingress and frost penetration. Baunit HM 50 creates an ideal background for mineral and synthetic render topcoats.	
Technical data	Aggregate size:	0–1.2 mm
	Compression strength:	≥ 6 N/mm ²
	Bond strength:	≥ 0.08 N/mm ²
	Water vapour diffusion resistance μ:	≤ 25
	Thermal conductivity λ _{10,dry,mat} :	≤ 0.82 W/mK (P = 50 %)
	(tabulated EN 1745)	≤ 0.89 W/mK (P = 90 %)
	Water requirement:	5.5 – 6.5 l/sack = 220 – 260 l/t
	Consumption:	ca. 5 - 6 kg/m ² (nominal 3 mm layer)
	Yield:	ca. 21 l/sack = ca. 840 l/t
	Capillary water absorption:	W 2 (EN 998-1)
	Reaction to fire:	A2- s1 d0
	TVOC 3d:	< 300 μg/m ³
	Formaldehyde 3d:	< 24 μg/m ³
Health and safety	Hazard label:	Xi irritant
	R-phrases:	R 36/38 Irritates the eyes and skin R 41 Risk of serious eye damage R 43 Contact with skin can cause sensitisation
	S-phrases:	S 2 Keep away from children S 24/25 Avoid contact with skin and eyes S 26 In case of eye contact, rinse with plenty of water and see medical assistance S 37/39 Wear suitable protective clothing and safety goggles
	Low Chromate content according to TRGS 613	
Quality assurance	Continual monitoring and inspection of the quality of all raw materials upon reception. The manufacturer has a TÜV tested and certified Quality Management System in accordance with the international standard EN ISO 9001 and a TÜV tested and certified Environmental Management System in accordance with the international standard EN ISO 14001.	
Packaging	Paper sacks, 25 kg. 1 pallet = 42 sacks = 1050 kg	
Storage	Store in dry conditions and protected on pallets for up to 6 months.	
Substrate	Suitable substrates include concrete, masonry and lime/lime-cement render. Substrates must be sound, clean, dry, free from frost, dust and efflorescence.	

Basecoat renders should be fully cured. Existing mineral and organic based coatings and paints must be sound and well bonded to the substrate (pull off test and/or cross cut test). Peeling paint, lime wash, latex paint, oil and grease stains (from shuttering), must be removed. Any cracks are to be scraped open with a pointed tool to form a "V" groove. Do not use on gypsum backgrounds. Dampen high suction substrates with water. Smooth surfaces such as XPS should be roughened and the dust brushed off. Friable basecoats are to be pretreated with a stabiliser such as Baunit PutzFestiger or Baunit TiefenGrund or Baunit Hydrosol. Algae and mould growth must be removed with a fungicidal wash such as Baunit FungizidLösung. Greater areas of insulation boards should be mechanically fixed according to the manufacturers recommendations.

Application

Mixing:

Baunit HM 50 is mixed with clean water in a tub to a lump free, creamy consistency with an electric hand mixer. Material which has started setting must not be remixed with water. Mixing with other products (e.g. anti-frost agents or accelerating agents) is not permitted. Automated continuous horizontal mixers may also be used. For small areas the contact mortar can be manually applied. For larger areas the freshly mixed mortar can be fed into a mortar pump for spray application. Alternatively, a mortar mixing pump will provide an all-in-one mixing and spraying solution.

Topcoat or bonding/keying coat for concrete surfaces:

Baunit HM 50 is applied onto concrete to a nominal thickness of 5 mm and finished with a fine sponge float or the surface keyed with a stiff brush while still wet. A subsequent basecoat render may be applied on to the fresh bonding layer to a thickness not exceeding 8-10 mm.

Reinforcement layer and remediating existing render coatings:

Baunit HM 50 is applied to a thickness of 3–5 mm, max. 8-10 mm in a single layer (with embedded Baunit StarTex Grob alkaline resistant reinforcing mesh where necessary). Curing times of 1 day per mm thickness of render should be observed before applying further coatings.

Bonding insulation boards to substrates:

Baunit HM 50 is applied to the insulation board with a stainless steel notched trowel (10 mm notches) to a medium layer thickness.

Baunit ETICS are available for larger areas of facade insulation.

Further information

Protect the facade from direct sunlight, rain and strong winds (i.e. with scaffold nets) until fully cured. In hot and/or windy weather dampen the finished work at regular intervals with a water mist sprayer to aid hydration. High air humidity and low temperatures can prolong drying times considerably.

Observe the minimum standing time of 1 mm render thickness per day before applying further coatings and finishes. Ensure that the mesh in reinforcement layers is not damaged or exposed. Apply secondary reinforcement layers after at least 1 day. Clean tools immediately with water after use.

As a topcoat finish Baunit HM 50 must receive 2 coats of a suitable water resistant paint. Protect other materials such as glass, ceramics or metal etc from contamination with appropriate coverings.

Testing for **TVOC and Formaldehyde emissions** is carried out by eco-Institut

The air, material and background temperature must be above +5° C during application and curing. Observe the guidelines stated in DIN EN 998-1, DIN V 18550 and DIN 18350 (VOB, Part C).

This Product Data Sheet has been issued by:

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