

Bonding Mortar DC56

Product	Factory prepared dry powder mortar in accordance with DIN 18557 and DIN EN 998-1, mineral mortar for bonding and render base coat for manual and machine application.	
Suitable Uses	Dual purpose mortar to be used as an adhesive for bonding standard insulation boards (EPS, XPS, mineral wool) to substrates and as a base coat (with reinforcing mesh). A component of the Baumit External Thermal Insulation Composite System (ETICS).	
Composition	Sand, cement, white lime and additives to improve workability and adhesion.	
Performance	Mineral, enriched and workable bonding mortar with good adhesion onto most backgrounds. After hardening it is water vapour permeable, frost and weather resistant and has high impact resistance. Ideal background for mineral and synthetic render finishes. Bonding Mortar DC56 can also be used as a plain finish coat for small areas such as window reveals.	
Technical Data	Mortar group:	CS III acc.to DIN EN 998-1 (P II acc.to DIN 18550)
	Grain size:	0 – 1.2 mm
	Compression strength:	3.5 – 7.5 N/mm ²
	μ-value:	approx. 10
	Water requirement::	7-8 l/sack = 280 - 320 l/t
	Yield:	approx. 20 l/sack = ca. 800 l/t
	Coverage:	approx. 4 – 5 kg/m ² (<i>as an adhesive</i>)
	Base coat render thickness 3mm min.	approx. 5 – 6 kg/m ² (<i>ETA Approval, thin coat</i>)
	Base coat render thickness 8mm min.	approx. 7 – 10 kg/m ² (<i>IAB Approval, medium coat</i>)
Packaging	Paper sacks, sack content 25kg, (42 Sack per pallet = 1050 kg)	
Storage	Dry and protected, do not store for longer than 6 months.	
Quality Assurance	The product undergoes third party and in-house monitoring, using a quality management system which conforms to the current international standard DIN EN ISO 9001 and the environmental standard ISO 14001, certified by TUV.	
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	
Background	Suitable for mineral backgrounds such as concrete, masonry and lime/cement render backgrounds. The background should be dry, stable, dirt and dust free, and able to receive a coating. Render base coats should be fully cured. Remove any peeling paint, lime wash, grease stains (from shuttering), other contaminants and film forming layers. Consult the Technical Dept. for guidance concerning non-mineral background surfaces. The background surface tear-off resistance strength must be at least 0.08 N/mm ² for bonded ETICS without fixings. The long term compatibility of the bonding mortar with the background should be checked. Protect other materials such as glass, ceramics or metal etc from contamination with appropriate coverings.	

Application

Use approximately 7-8 litres of clean water per sack for mixing. Do not use admixtures or mix with other materials. Mix with a slow speed electric hand mixer or a continuous horizontal mixer. Do not use a drum mixer. Larger areas are best tackled using standard mortar spraying pumps with half or full performance rotor and stators for base coat application. A pump pistol attachment can speedily apply the mortar as an adhesive on to the insulation board. Regularly tap the machine filtering hoods to keep them clear from blockages.

Applying the adhesive:

EXPANDED POLYSTYRENE & MINERAL FIBRE -LAMELLE (pre coated):

Flat level background surfaces, do one of the following:

- Apply a coat of **Bonding Mortar** on to the background surface, smooth out and comb through with a notched trowel (10 mm tooth depth). Ensure surface coverage of 100%
- Apply a coat of **Bonding Mortar** on to the insulation board surface, smooth out and comb through with notched trowel (10 mm tooth depth). Ensure surface coverage of 100%

Uneven background surfaces, do one of the following:

- Apply a strip of **Bonding Mortar** around the surface perimeter of the insulation board and 3 equally spaced mortar dabs in a line through the centre. Ensure surface coverage of at least 40%.
- Apply strips of **Bonding Mortar** (pump pistol attachment) on to the background surface (10 cm apart). Ensure surface coverage of at least 60%.

MINERAL FIBRE BOARDS:

- Prime the whole board surface with a 1-2mm coat of BondingMortar DC56 and work it well into the surface with the trowel. Immediately after priming the board do one of the following;

Flat level background surfaces

- Apply a coat of **Bonding Mortar** onto the insulation board surface, smooth out and comb through with notched trowel (10 mm tooth depth). Ensure surface coverage of 100%

Uneven background surfaces

- Apply a strip of **Bonding Mortar** around the surface perimeter of the insulation board and 3 equally spaced mortar dabs in a line through the centre. Ensure surface coverage of at least 40%.

Bonding the insulation boards on to the substrate:

Install the board within 10 minutes before the adhesive application starts to "skin". Press and wiggle the insulation board into position on the background. Avoid tapping the board. The adhesive coat thickness after installation should not be less than 5mm thick.

Leave to stand for at least 3 day before mechanically fixing the boards or applying the base coat.

Applying the base coat with Reinforcing Mesh on to the insulation boards:

Embed 300x500mm cm strips of **Reinforcing Mesh** into a tight coat of **Bonding Mortar** applied diagonally over the corners of all openings. Apply a coat of **Bonding Mortar** to a thickness of 2-3mm (thin coat) or 4-5mm (medium coat) on to the insulation boards and comb through with a notched trowel (10-12 mm tooth depth). Bed the **Reinforcing Mesh** over the base coat, flat and free of creases with a trowel. Overlap adjoining sheets by a minimum of 100mm. Apply a further 1-2mm of **Bonding Mortar** over the **Reinforcing Mesh** and trowel it smooth. The **Reinforcing Mesh** must lie in the top third of the base coat. Lightly scrape over the base coat surface with the trowel edge as it hardens.

A secondary reinforced base coat (where required) can be applied after at least 24 hours.

Leave to stand for at least 1 day per mm thickness of render before applying subsequent finish coats.

Tips

Do not apply onto UV damaged insulation boards. (Sand down and remove dust)
 Do not apply in direct sunlight, rain or wind and protect the finished work. (Scaffold nets).
 High humidity and low temperatures can delay drying times considerably.
 Ensure that the reinforcing mesh for base coats is not damaged or exposed.
BondingMortar DC56 as a finish coat requires a subsequent waterproof paint application.

Do not apply in air or wall temperatures below +5°C and falling or above + 30 °C.
Observe the guidelines stated in DIN EN 998-1, DIN 18550 and DIN 18350 (VOB, Part C)
and the special conditions in the "General Building Approval".