

Udi FOUNDATION COAT®



Product

A factory dried mortar as per DIN 18557 and DIN EN 998-1. A mineral adhesive-, filler- and reinforcing mortar for **Udi UNGER-DIFFUTHERM®** wood-fibre thermal insulation composite systems. It has been optimised to provide superior bonding, moisture storage capacity and stability properties. Suitable for manual and machine mixing/ working.

Application

Designed for use as a filler, reinforcement and adhesive mortar for **Udi UNGER-DIFFUTHERM®** wood-fibre insulation boards. This product is part of the **Udi FRONT®**, **Udi SPEED®**, **Udi RECO®**, **Udi CLIMATE®** and **Udi IN®** thermal insulation composite systems. Its components are sand, cement, white lime and additives to improve the working and bonding characteristics.

Components

- Binding agents as per DIN 1164
- Quartz sand 0 – 0.4 mm as per DIN 4226
- Mortar additives
- Alkali-resistant fibres

Properties

A very efficient, high-performance mineral adhesive-, filler- and reinforcing mortar which provides optimal bonding to wood-fibre insulation boards and other substrates. Easy to mix and apply. When dry it is highly vapour-permeable, water-repellent and weather and frost resistant. The ideal base for all **UNGER-DIFFUTHERM® Udi Fine Quality Renders**. Its uniform composition makes it easy to smooth or structure which also means it is suitable for use as a finishing render for smaller areas e.g. window surrounds/ reveals.

Technical Data

Mortar group: CS III as per DIN EN 998-1, P II as per DIN 18550
Granularity: 0 – 0.4 mm
Compressive strength: 3.5 – 7.5 N/mm²
μ-Value: ca. 20
Water requirement: 4.0 – 5.0 l / Sack = 160 – 180 l/t
Coverage: ca. 3.2 – 3.8 m²/ Sack at a layer thickness of 5mm
Material consumption:
Bonding of the first row of boards on a mineral substrate: ca. 4.5 - 5.5 kg/m²
Reinforcement: ca. 6.5 kg/m²
Reinforcement layer thickness: minimum 5mm

Delivery form

25 kg paper sacks. (42 sacks per pallet = 1,050 kg).

Storage

Dry, frost free, Maximum storage period 6 Months

Quality Assurance

Permanent quality control and monitoring including intake inspections of all raw materials.

Classification according to chemical regulations

Hazard symbol: Xi irritant R-phrases: R 36/38: Irritating to eyes/Irritating to skin
R 41: Risk of serious damage to eyes S-phrases: S 2: Keep out of reach of children
S 24/25: Avoid contact with eyes and skin
S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39: Wear suitable protective gloves/clothing and eye/face protection.
S 46: If swallowed, seek medical advice immediately and show the container or label.
Low in chromates as per TRGS 613 (German regulations for hazardous substances).

The technical information provided in this document reflects our current state of knowledge and experience. Due to the wide range of influences possible during the installation and working of the products, this information does not release the installer from their responsibility to carry out their own trials and examinations. This also excludes the implication of a legally binding assurance of particular properties or the suitability for a concrete application. The generally accepted structural rules for construction must be complied with. We reserve the right to make any changes we deem necessary to improve the product or its application and installation. The information contained within this document supersedes all previously dated documents and the information contained within them is herewith invalid. Information relating to current developments is available on our website.

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Substrate

In addition to the **UdiFRONT®**, **UdiSPEED®**, **UdiRECO®**, **UdiCLIMATE®** and **UdiIN®** thermal insulation composite systems, mineral-based or absorbent substrates are also suitable for the application of this product. The surface must be clean, free of frost and sound enough for the application. Suitable substrates include mineral-based surfaces such as concrete, masonry, lime plaster, lime cement plaster and old renders within the render/mortar groups P 1 c, P II and P III as well as dispersion coatings as long as these are clean, dry, solid and capable of bearing the weight of the render layer. Hollow areas must be filled and loose material, old and/or loose paint layers, sinter layers, distempers and oil and grease must be removed. Adjacent/endangered areas (glass, ceramics, metal etc.) should be covered in order to protect them from splashes. Sandy surfaces should, if necessary, be stabilised using **UdiBASE® LF** Solvent-Free Stabiliser.

Application instructions

The contents of a 25kg sack of **UdiFOUNDATION COAT®** should be mixed with 4 - 5 l of clean, cold water and worked to a stiff, lump-free consistency. To ensure consistent results always use the correct quantity of water and adhere to the recommended mixing times. When using an electric hand mixer or mechanical mixer please take into consideration the expansion characteristics of **UdiFOUNDATION COAT®**. **UdiFOUNDATION COAT®** should be applied to the whole surface using a stainless steel trowel with 10x20 mm teeth. While still wet, the **UdiREINFORCEMENT®** Strengthening Mesh should be bedded into the upper third of the coating nearest the surface and smoothed with a stainless steel trowel. Allow a 10cm overlap of the **UdiREINFORCEMENT®** Strengthening Mesh around all edges. The final coating thickness MUST BE AT LEAST 5mm. If required, apply an additional covering layer of approximately 1mm. When covering adjacent areas it is important that the edges should not be allowed to dry out in order to avoid cracks and unsightly joins. If using a mechanical mixer, the output speed should be adjustable. Allow a drying period of one day per millimetre thickness of the **UdiFOUNDATION COAT®** before applying the render primer or finishing render. In the area of the first row of boards or adjacent areas, the **UdiFOUNDATION COAT®** should be combed on using a toothed trowel and spread evenly using a floating-buttering method. If the surface of the substrate is uneven it will be necessary to apply additional amounts of the foundation coat in order to provide a uniform thickness and ensure that at least 80% of the board's surface is bonded to the substrate. The boards must be installed in the prepared areas before a skin has formed on the surface of the **UdiFOUNDATION COAT®** and they must remain undisturbed (not moved or secured with fixings) for at least one day. If the surface is to be cladded with facing tiles, it will be necessary to install a second layer of reinforcement mesh. This should be bedded in (see instructions above) to an additional layer of **UdiFOUNDATION COAT®** applied directly to the primary layer. This second coat should be approximately 3mm thick (ca. 4.0 – 4.5 kg/ m²). Further fixings (4 pieces/ m²) should then be installed in the wet **Udi®** Foundation Coat and driven in flat with the surface. In timber constructions, these additional fixings must be secured in the timber studs. The surface of the **UdiFOUNDATION COAT®** should then be drawn level and roughened to provide a key.

Please note:

The mixing of foreign additives to the **UdiFOUNDATION COAT®** is not permitted! The fresh mortar is alkaline – take suitable precautions to protect both skin and eyes! Protect from direct sunlight. To avoid the premature drying of the **UdiFOUNDATION COAT®** due to the effects of wind and the sun it may be necessary to moisten the mortar one or more times or protect the façade using a scaffold net until the **UdiFOUNDATION COAT®** has hardened fully. Low temperatures and high humidity can markedly extend the drying/curing time. The mortar layer must have completely dried and hardened before applying any further coatings. It is important to ensure that the **UdiREINFORCEMENT®** Strengthening Mesh is not damaged or exposed. Where a further layer of reinforcement mesh is required, the second coat of **UdiFOUNDATION COAT®** should not be applied for at least 24 hours (minimum). All tools should be cleaned immediately after use in clean, cold water. If **UdiFOUNDATION COAT®** is to be used as a reveal render it should be treated with **UdiMIRALO®** Equalisation Paint. Do not apply or allow to dry at substrate and air temperatures below +8° C or above +30° C. Please comply with the requirements of DIN 18558 and DIN 18350 (VOB Part 3) as well as those of the 'General Building Inspectorate Approval' for timber constructions and monolithic substrates (masonry).

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