



System Information Ecomin 400-Acrylic & Clay

alsecco Ecomin 400 - Acrylic

M21 EXTERNAL INSULATED RENDER SYSTEM

To be read with Preliminaries/General conditions.

TYPE(S) OF COATING	Alsecco Systems:	Alsecco External Wall Insulation System – adhesive and mechanical fix. Must be applied in strict accordance with the manufacturer's written recommendations by a contracting partner from Alsecco UK Ltd's current list
	Proprietary Render:	Alsecco 'Ecomin 400' EWI System - Mechanical and adhesive fixed

Manufacturer and reference: Alsecco Systems are manufactured by Alsecco GmbH & Co. KG, Wildeck, Richelsdorf, D36208, Germany.
UK Office: Alsecco (UK) Ltd, Whitebridge Way, Stone, Staffs, ST15 8GH Tel: 01785 818998 Fax: 01785 818144 www.alsecco.co.uk

System Materials & Components	Location: Substrate:	In all cases, substrate should be deemed fit for purpose prior to the application of Alsecco External Wall Insulation Example Masonry
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1.1 System Components:	Sub Primer: Adhesive: Insulation Type: Thickness: 'U'-Value: Basecoat: Top Primer: Topcoat: Paint Finish: Deco Profiles: Brick Slip/Flex: Ashlar Detail Mesh	Sub Primer HT/P if required Armatop MP DD Mineral Wool 100mm TBC W/m2k Armatop A & Mesh 32 N/A Not Required Not Required No Brick Flex With Bonding Mortar AF Adhesive N/A
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1.2 Accessories:	Base Rail: Stop Beads: Corner Beads: Mechanical fixings: Dammflex: Sealing Strip 13/2: APU Bead: PU Foam: PU Flex: Disbon Primer: Balcony Drip Bead: Expansion Joints: Alsecco Cill:	A105 with clip on extension profile W105 3707 PVC with Mesh CFIX 135 & **FF DMH 8/35 x 170 E Yes Yes No Cannot be used with an Ecomin System No Where exposed steel is present No Required Only Where Present in Substrate No	*** (See notes below)
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Notes:

-Preparation of existing surfaces: Ensure existing substrate is clean, sound and free from all adhesive reducing residue/surface contaminants. Refer to recommendations of BSEN13914-1:2005 including annex B. Bond tests/Sample area recommended prior to complete application.

-Ensure existing rendered substrates are sound and suitable to receive additional weight of new render, existing render should be hammer tested before installation of new system to identify any loose, de-bonded or otherwise defective render and where required, repaired by others, prior to the system being installed.

-Sub Primer P is to be used on existing painted substrates, Sub Primer HT is to be used on all exposed masonry

*All Fixings must be applied through the system mesh where the external finish is a clay brick slip.

**FF (Fire Fixing) must be applied at a rate of 1 per m2, pinned through the system mesh, above the second storey please apply in addition to the instructions found in section 2.8

***All fixings subject to pull out testing & Wind load calculations



Material & Component Description	1.3 Base Rail:	Aluminium horizontal base rail 2m long. (For Reference, see Section 1.2.) Base rails shall be fixed to substrates with zinc coated carbon steel hammer-drive fixings (minimum 6mm diameter, shank 60 - 80mm long) and to wooden substrates with pan-head or washer-head stainless steel wood screws (minimum 32mm long). Spacing of fixings to be maximum 300mm centers. Contractor to ensure that system complies with CP3: Chapter V: Part 2: 1972 in relation to its structural stability. 1.4 Substrate Primer:
	1.4 Substrate Primer:	In accordance with Section 1.1
	1.5 Adhesive:	In accordance with Section 1.1: Mixed with Clean Water Only
	1.6 Insulation Board:	i: Mineral Wool HD Board, nominal density 140kg/m ³ . To BS 3837 Part 1 1986. Thermal Conductivity 0.036W/mK; Class 0 Fire Rating ii: Thickness shall be as indicated under Section 1.1. iii: Maximum size of HD Board shall not exceed 1200 x 600mm.
	1.7 Fire Barriers:	Fire Barriers are not required for the Ecomin Systems
	1.8 Beading:	Provide beads and stops at all external angles and stop ends except where detailed otherwise. See section 1.2 for Reference.
	1.9 Reinforcing Coat:	In accordance with Section 1.1 mixed with Clean Water Only.
	1.10 Reinforcement:	Reinforcement shall be Specified Alsecco Reinforcing Mesh as per Section 1.1 & Clause 1.9 with symmetrical interlaced glass fibre made from twisted multi-end strands, coated to provide a high resistance to alkali attack and is manufactured so as to prevent laminar movement and deformation. In accordance with the appropriate details, Panzer mesh or Armatop Nova with Nova mesh can be used in areas at risk of impact damage.
	1.11 Topcoat Primer:	In accordance with Section 1.1
	1.12 Topcoat:	In accordance with Section 1.1
	2.1	All installation of Alsecco materials in the UK shall be performed by Alsecco Contracting Partners. Under no circumstances shall any of the Alsecco products be altered with any additives, except for small amounts of clean water as directed on the label.
	2.2	If required, apply Alsecco Sub primer to substrate. (See section 1.1 for reference.) All substrate must be free of loose particles, dusting, grease and oils.
Execution	2.3	If required, a fungicidal wash must be applied.
	2.4	All exposed metal work that is to be covered by Alsecco EWI Systems to be coated with an appropriate primer e.g. Disbon or similar and left to dry prior to EWI application.
	2.5	If substrate is of poor alignment and levelling is required, use Alsecco TZ1 basecoat (without reinforcing mesh). Not suitable for lightweight or AAC Blockwork.

Execution	2.6	Align base rail and fix with Alsecco anchors spaced at a maximum of 500mm apart - ensure that the base rail is not distorted. Insert base rail connectors at all rail joints. Corners should be made with mitred cuts, or an Alsecco pre-formed corner section. Level and line can be adjusted using Alsecco spacers available in a range of sizes.
	2.6.1	Align the horizontal rails and fix with Alsecco anchors at a maximum of 300mm apart – ensure that the rail is not distorted. Alsecco Packers should be used to achieve correct alignment of the horizontal rails
	2.7	Mix Alsecco adhesive mortar and apply to back of Insulation board using spot and continuous dab method. The adhesive mortar must cover at least 50% of the board / substrate unless detailed otherwise. (Typically dab and 3No. Spots per board). On flat and even substrate, the tooth bed method of application can be used. 100% of board / substrate must be covered when using the tooth bed method of application with Insulation board. On substrates where mechanical fixings are not required, the tooth bed method must be used.
	2.8	Lamella Fire Barriers are not required for any of the Ecomin Systems
	2.9	Ensure that all insulation board edges are clean and free of adhesive mortar. All joints must be staggered, min 200mm (see Fixing Layout Detail); additional cutting may be required around doors and windows to ensure that board joints do not correspond with corners of openings. Fit the insulation boards tightly and bed well. Any open joints between insulation boards up to a max width of 10mm must be closed with a strip of insulation board - NOT adhesive mortar or render.
	2.10	Allow approx. 12 to 72 hours drying time for Alsecco adhesive mortar, depending on type of adhesive mortar and weather conditions. Subsequent rendering, mechanical anchoring or finishing work on insulation boards must not be carried out until adhesive mortar has set and not before 24hrs.
	2.11	Mechanical fixings (if required) as specified in Section 1.2 are specified according to board thickness and substrate. Anchors should be fixed in accordance with the manufacturer's instructions and Alsecco fixing requirements. (See Fixing Layout Detail)
	2.12	Rasping of the Mineral Wool HD must not take place, as the process will damage the properties of the insulation board. Misalignment must be rectified within the adhesive and basecoat layers.
	2.13	Install Propriety Alsecco Sealant in conjunction with detail drawings. (See Section 1.2)
	2.14	Corner bead and any additional beading as specified in Section 1.2 to be secured to insulation boards with Alsecco Basecoat render at corners and align until plumb.
	2.15	All beads should be cut neatly, mitres formed at return angles and sharp edges, swarf and other potentially dangerous projections removed. Fix securely, using the longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with background. After coatings have been applied, remove coating material while still wet from surfaces of beads/stops, which are to be exposed to view.

Execution	2.16	Apply Alsecco Basecoat render (as specified in Section 1.1) to the fixed insulation boards using a stainless steel trowel. Level out using a plasterer's straight edge or by combing through with a 10x10 tooth trowel. Float specified reinforcing mesh (see section 1.1) into the top of the basecoat render, ensuring a minimum horizontal and vertical overlap of 100mm for the glass mesh. All corners at openings must be additionally reinforced with 250 x 250mm mesh strips embedded diagonally into the wet basecoat render. Immediately trowel the mesh into the basecoat while still wet and smooth off to finished thickness using a stainless steel trowel. For optimum strength, the mesh must sit in the top one third of the basecoat. Leave basecoat render to set for at least 2 to 3 days before applying Alsecco topcoat renders. Adjoining areas of EPS insulation and Extruded Insulation must have an additional strip of reinforcing mesh applied within the basecoat with a minimum 200mm overlap.
	2.17	Not applicable with Alsecco Basic 4. See Below
	2.18	Prior to the application of topcoat, all scaffolding boards should be cleaned to ensure minimum dirt being transferred onto the finished topcoat. The topcoat is a finishing trade, work sequencing should ensure that no or very minimum work is carried out onto the render after application of topcoat. Where Scaffold plugs are to be retained, appropriate Scaffold Ties to be used in accordance with system details.
	2.19	Not applicable for Ecomin 400 with brick finish. See appropriate clause below (2.22 - 2.24) in conjunction with Section 1.1
	2.20	The topcoat render, is applied in accordance with the following general rules: - a Using a clean, rust-free low speed mixer, thoroughly stir the Alsecco finish to a uniform consistency. - b Finish shall be applied in a continuous application always working to a wet edge. Care should be taken to avoid texture changes at different levels. To prevent staining of the finish coating, always ensure that the scaffold boards are free from dust before commencing application of the final coat. - If possible, entire sections or elevations should be coated in a single operation to avoid joint marks in the finish. Often this can be achieved by working to natural breaks in the building or changes in colour or texture. Where day-joints are unavoidable these should be made to coincide with natural features such as a line of window cills. Apply a masking tape at the desired position of the joint and apply the finish overlapping the edge of the tape. Carefully remove the tape while the finish is still wet to leave a fair edge. Once the finish material has set subsequent applications may be applied by masking the previously completed section with tape and carefully applying the new finish to achieve a barely visible joint. - c Only in situations where mineral renders (Miratect & Alsilite) are to be used, irregular shading and patching due to uneven drying cannot always be avoided. Evenness of colour can be achieved by applying ALSECCO Equalising finish. d. Weather conditions will be a factor in the application of the finish as well as the drying time. e. An option for areas of high salt-water attack, a final coat of Alsecco Alsicolor Quatro can be applied.

2.22 Brick Slips	(In conjunction with Section 1.1) Incorporate vertical expansion joints in the brickwork and tile coursing by introducing a flexible joint compound in place of the pointing or grouting mortar. Vertical joints to brickwork should follow the brick bond line. Joints should correspond with window or door opening or approx. every 3m vertically for dark coloured finishes or 6m vertically for light coloured finishes. In accordance with BS5628 : part 3 1985 Use of masonry.
2.23 Brick Slip Flex	(In conjunction with Section 1.1) Use a trowel to apply the Bonding Mortar AF to the basecoat and a notched trowel (4 x 6 or 5 x 5mm) to comb through the adhesive in a horizontal direction to create a ridged bed. Place the brick slip flex on top of the open adhesive, leaving a joint width in between and press into position. Use a damp brush to smooth the adhesive over in the area of the joint before the adhesive has set. Ensure a close connection between the adhesive compound and the brick slip flex Only apply as much adhesive as can be covered with brick slip flex before a skin is formed.
2.24 Render Brick	(In conjunction with Section 1.1) After the basecoat has had a minimum 24 hours drying time, apply an additional Intermediate Mortar Coat layer, 2mm thick. (Intermediate Mortar Coat consists of Spardash DLX. Colour to match Basecoat.) This is used to form the Mortar Joint. Immediately apply, wet on wet, a 2-3mm thick layer of decorative render brick topcoat. (Consisting of Spardash DLX - Colour as requested.) Give these layers 8-16 hours drying time. Using a straight edge with a joint cutting tool, scrape out the brick profiles, cutting through the topcoat & intermediate coat, back to the hard basecoat to form the mortar joint. NOTE: If top layer of render brick is of dark colouring, lime bloom will occur. To prevent this, a wash of Alsecco Hydrophobic MI agent must be applied once all coats are dry. (Technical Data Sheet available upon request.)
2.25 Deco Profiles	(In conjunction with Section 1.1) a. On External Wall Insulation Systems, the decorative Profiles must always be applied to finished reinforcement layers with the appropriate reinforcing mesh. The profiles to be applied to the façade must be measured out and marked according to the installation plan. For window cill profiles alignment is made with the centreline of the window/window sill profile. b. Profiles are cut to size using a hacksaw with a carbide blade and a mitre block. c. Profile adhesive applied to both substrate and back of the profile. Profiled applied in accordance with details. Profile is firmly pressed onto substrate using a straight edge and can be propped to prevent slipping. d. Smooth off all excess profile adhesive, once all joints are fully sealed. e. All profiles, which are not tightly butt-jointed, must be installed with 10mm spacing. Allow 24 hours for adhesion before filling the joints with Alsecco Polyurethane Foam. Once hardened, Polyurethane foam scraped out to a depth of 10mm and void filled with Alsecco Dammflex Sealant. f. Apply profile adhesive with a specific trowel to smooth out window reveals. Any trowel marks to be ground down. Accurate edges achieved by installing the Deco Profiles 2mm above the window level of the window reveal towards the centre of the window. Protruding profile edges allow for sharp edged reveals. g. Window cill reveals must be insulated to accept window sill profiles. Care must be taken to ensure that the inclination of the window cill is in line with that of the window sill profile. This connection with the window frame must be sealed with an Alsecco sealing system. Once the window sill profiles have been installed, apply profile adhesive to the horizontal surface, apply Alsecco glass fibre mesh 32 and trowel over with sufficient mortar to cover the mesh. Profiles coated with two coats of Alsicolor, Si façade or Hydro Equalising finish in the desired colour

Protection and Cleaning	3.1	All installation of Alsecco materials in the UK shall be performed by Alsecco Contracting Partners. Under no circumstances shall any of the Alsecco products be altered with any additives, except for small amounts of clean water as directed on the label.
	3.2	All plasters described should never be applied if ambient and surface temperatures cannot be kept above +3°C for mineral products, +5°C for acrylic and silicon products and +1°C for ice products during application and drying period. Prior to installation, the wall shall be free of residual moisture. The stored material should be protected from frost and strong sunlight.
	3.3	Although it is preferable when working with highly pigmented renders to mask or protect other building elements such as windows, sills, etc., spilled or dropped materials may be removed easily from most surfaces with a wet sponge or cloth before the material has dried out. Renders which have been allowed to partially dry may be removed by using a soap solution to soften the render and warm water to clean the surface. Absorbent surfaces such as concrete, brick, etc. maybe affected by the pigments of the render and where spillage is likely then these surfaces should be protected with appropriate covering material.
General Comments	4.1	Remove efflorescence, dust and other loose material by thoroughly dry brushing. Remove all traces of paint, grease, dirt and other materials incompatible with coating by scrubbing with water containing detergent and washing off with plenty of clean water. Allow to dry before applying coatings unless specified otherwise.
	4.2 (515) KEYING/ BONDING:	Prepare backgrounds as specified for the type of coating to be applied. Methods other than those specified may be submitted for approval.
	4.3 (573) TREATMENT OF ORGANIC GROWTHS:	Biocides must be approved and registered by the Health and Safety Executive (HSE) and listed in the current 'Reference Book 500', as surface biocides.
	4.4 (810) APPLICATION GENERALLY:	Apply each coating firmly to achieve good adhesion and in one continuous operation between angles and joints. All coatings to be not less than the thickness specified firmly bonded, of even and consistent appearance, free from rippling, hollows and ridges. Finish surfaces to a true plane, to correct line and level, with all angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square. Prevent excessively rapid or localised drying out. The standard of finish shall meet the requirements of BSEN 13914-1: 2005 NA.15 assessment of external rendered finishes Alsecco would recommend where possible that the variation in gap under a 1.8m straight edge (with feet) placed anywhere on the surface to be not more than 3mm.
	4.5 (880) DRYING:	Work in the shade and out of drying winds whenever possible. Allow each coat to dry out thoroughly to ensure that drying shrinkage is substantially complete before applying next coat.
	4.6 (890) PROTECTION:	Adequately protect newly applied external coatings against frost and rain for the first 48 hours using polyethylene sheet / Debris netting hung clear of the face, or other approved method.

Haftgrund P - (Sub Primer P)

Pigmented resin-bonded primer for decorative renders.



AREAS OF APPLICATION

Primer to even out colour variations and improve adhesion before applying final coat with resin renders and mineral renders.

For indoor and outdoor use.

PRODUCT PROPERTIES

- Absorbency regulating
- Water-vapour permeable
- Water-repellent
- Promotes adhesion
- Improves adhesion
- Improves the ability to texture subsequent decorative renders
- Non-slip surface because quartz filled
- Provokes ideal and economical application of the decorative render

TECHNICAL DATA

Binder base	Terpolymer resin dispersion
Specific gravity	approx. 1,7 g/cm ³
VOC value	EU limit value for the VOC content of this product (cat. A/h): 30 g/l (2010). This product contains < 10 g/l VOC.

APPLICATION INSTRUCTIONS

Substrate pre-treatment	All substrates must be stable, level, clean, dry and free of any residue, which can reduce adhesiveness. Prime substrates to be reinforced with Hydro penetrating primer.
Mixing	Ready to use Can be diluted with a max. of 20 % water.
Application	Can be applied using a brush, roller or spraying.

	Use short pile rolls for even application. It is recommended to use a primer in the colour of the subsequent textured render for unsealed textures.
Consumption	approx. 0,3 - 0,4 kg/m ² (approx. 200 - 250 ml/m ²) Determine the precise material requirements by means of a trial coating on the object.
Information about the weather	Temperatures below + 5 °C may not arise during application and drying.
Drying time	approx. 2 - 6 hours Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.
Application by machine	Please request special information regarding machine processing.

STORAGE

Shelf life in original sealed packaging of at least 1 year when kept cool and protected against frost.

PACKAGING INFORMATION

Colour	Natural white and pigmented in the colour of the subsequent render
Packaging unit	PP bucket approx. 20 kg net

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material
Giscode	M-DF02 latex paints

Hydro-Tiefgrund - (Sub Primer HT)

Solvent-free dispersible resin primer



AREAS OF APPLICATION

Hardening and regulation of absorbency of mineral and weathered indoor and outdoor resin-bound substrates, for walls and floors.

Suitable for brickwork, concrete, screed and mineral bound building boards.

Hardens gypsum and anhydrite bound boards, surfaces, renders/renders and screeds with an effective moisture barrier.

Also suitable for priming prior to follow-up work indoors, such as laying tiles and wallpapering as well as for all kinds of coatings.

Hardening of mealy, priming surfaces.

PRODUCT PROPERTIES

- High penetration depth because finely dispersed
- Very strengthening
- Water-vapour permeable
- Low-noise
- Absorbency regulating
- Improves the adhesion of subsequent layers

TECHNICAL DATA

Binder base	Acrylic resin dispersion
Specific gravity	approx. 1,0 g/cm ³
VOC value	EU limit value for the VOC content of this product (cat. A/h): 30 g/l (2010). This product contains < 1 g/l VOC.

APPLICATION INSTRUCTIONS

Substrate pre-treatment	All substrates must be free of oils, greases and loose particles.
Mixing	Ready to use Depending on the absorbency of the substrate, dilute the base material with

	water using a max. ratio of 1:2.
Application	Can be applied using a brush, roller or spraying.
Consumption	approx. 200-400 ml/m ² . Determine the precise material requirements by means of a trial coating on the object.
Information about the weather	Temperatures below + 5 °C may not arise during application and drying.
Drying time	approx. 2 - 4 hours Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.
Application by machine	Please request special information regarding machine processing.

STORAGE

Shelf life in original sealed packaging of at least 3 year when kept cool and protected against frost.

PACKAGING INFORMATION

Colour	Opaque blue and dries transparent.
Packaging unit	PP canister approx. 10 l

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material

Armatop MP

Adhesive and reinforcing compound for alsecco facade systems



PRODUCT PROPERTIES

- A material for insulation board bonding and reinforcement
- Weatherproof
- Water-repellent
- Highly water-vapour permeable
- Strong adhesive power on nearly all substrates
- Highly elastic
- Normal render mortar according to DIN EN 998-1

TECHNICAL DATA

Indicated fixed values represent average values, which can slightly vary from delivery to delivery due to the application of natural raw materials.

Binder base	Mineral binding agent according to DIN EN 197-1 and DIN EN 459-1 Resin dispersion powder
Apparent density of set mortar	approx. 1,4 g/cm ³ according to DIN EN 998-1
Adhesive pull strength	≥ 0,08 N/mm ² according to DIN EN 998-1
Adhesive pull strength on polystyrene	≥ 0,08 N/mm ²
Water vapour permeability μ	≤ 25 according to DIN EN 998-1
Water permeability	$w \leq 0,2 \text{ kg}/(\text{m}^2\text{h}^{1/2})$ according to DIN EN 1062
Fire behavior	A2-s1, d0 according to DIN EN 13501
Water absorption	Class W ₂ according to DIN EN 998-1
Compressive strength	Class CS IV according to DIN EN 998-1
Diffusion-equivalent air-layer thickness (3,0 mm)	$s_d < 0,1 \text{ m}$ according to DIN EN ISO 7783

APPLICATION INSTRUCTIONS

Preparation

Mask window sills and attachment parts.

Substrate pre-treatment

All substrates must be stable, dry, level (DIN 18202 or 18203), clean and free of any residue, which can reduce adhesiveness.

Pretreat substrates according to the following specifications:

Substrate	Treatment
Mineral substrates, structurally identical to new construction	Cleaning
Renders MG PII, PIII, stable, solid	None
Renders MG PII, PIII, sandy surface	Hydro penetrating primer
Stable old coats or coatings, non-chalking	Clean with high pressure water jet
Stable old coats or coatings, chalking	Clean with high pressure water jet, prime with Primer P
Unstable old coats or coatings	Remove coat/coating, Hydro penetrating primer
Mineral wool facade insulation boards	None
Polystyrene facade insulation boards, in mint condition	Remove thickness or height discrepancies by sanding, remove any accumulated dust
Polystyrene facade insulation boards, weathered	Sand down unstable area of the surface, remove any accumulated dust

Mixing

25 kg of material (one sack) in approx. 5,7 l of water.

Mix with electric mixer or compulsory mixer.

Do not mix more material than can be used within 2 h.

Application as adhesive

Prime mineral insulation boards before application of the Armatop MP in the adhesive area.

Bond according to bead-spot or buttering-floating method.

Minimum adhesive surface: 40%.

Do not apply any adhesive in the area of the joints on the insulation boards.

Never seal joints between insulation boards using adhesive but rather with

insulation strips or PU filling foam.

Install insulation boards in offset stretcher bond formation and butt together.

Bead-spot method

Apply circumferential beading bevelled to the edge of the board, to avoid adhesive being pressed into the butt and bed joints when attaching the boards.

Apply 3 - 6 adhesive dots for 0.5 m² insulation board surface.

Never fix insulation boards using spot bonding.

Buttering-floating method

Use only for level substrates.

Immediately after application of the adhesive, position insulation boards on the substrate and butt.

Mechanical adhesive application

Apply the material to the rear side of the insulation boards using a suitable mortar pump and adhesive applicator gun.

Apply the adhesive directly to the wall when using coated lamella insulation boards (Speed-Wall). Before installing the insulation boards, comb through using a notched trowel.

After application of the adhesive, position insulation boards on the substrate and butt.

Note

***ZEILENUMBRUCH*

Application as a reinforcing layer

Installing corner rails or mesh corner beads

Before reinforcing, place completely into Armatop MP and align.

Corner rail 9078, corner rail 1031, aluminium corner rail with mesh and corner rail KU with mesh are used.

Constructing the reinforcement

Apply material mechanically or manually with a layer thickness of 3 mm .

Combing through with a 10 mm notched trowel is recommended, to check the minimum layer thickness.

Place the fibreglass mesh³² into the open mortar bed overlapping 10 cm and level using a smoothing trowel.

Embed the reinforcement mesh so that it is positioned in the middle of the reinforcement layer.

Additionally embed diagonal reinforcement strips or mesh strips (25 x 25 cm) diagonally in the reinforcement in corner areas of building openings.

Consumption

Bonding:

approx. 4,5 - 6,0 kg/m²

Reinforcement:

	approx. 1,4 kg per mm layer thickness per m ² Determine the precise material requirements by means of a trial coating on the object.
Minimum layer thickness of reinforcement	approx. 3 mm
Information about the weather	Temperatures below 3 °C may not arise during application and drying. Do not apply in direct sunlight. In the case of wind, please observe shorter setting times.
Interval	Bonding Depending on the weather conditions, reworkable after 24 h at the earliest. Anchoring and reworking of the insulation boards only after that. Reinforcement Depending on the weather conditions, reworkable after 24 h at the earliest for reworking with mineral textured renders. Depending on the weather conditions, reworkable after 5 days at the earliest for reworking with resin or silicone resin renders.
Drying time	approx. 1 - 3 days. Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.
Application by machine	Please request special information regarding machine processing.

STORAGE

Dry, protected against moisture, cool, shelf life in original sealed packaging of at least 1 year.

PACKAGING INFORMATION

Colour	Grey
Packaging unit	Paper sack approx. 25 kg net Silo: Upon request

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material
Giscode	ZP1 cement-based products, low in chromate

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The above information is based on many years of experience and tests and is provided by us to the best of our knowledge. Such information applies in addition to our application guidelines. However, we cannot accept any responsibility for the correctness of our recommendations on account of wide variety of substrates and of on-site conditions and applications which are outside our control. Any recommendations provided by our employees and deviating from these documents must be given in writing. We reserve right to make any changes on account of technical progress or building regulations. Your technical advisor will be pleased to provide the relevant product data sheets.



Mineral Wool Insulation Boards HD, DD, Slab & Slab Plus

Mineral Wool Insulation Boards HD-M

Mineral wool insulation boards for alsecco exterior wall insulation systems

Areas of application

Mineral wool insulation boards used in alsecco's ecomin exterior wall insulation system.

Mineral Wool Insulation
Boards HD, DD, Slab &
Slab Plus

Insulation boards for fixing by bonding and plugging.

Mineral Wool Insulation
Boards HD-M

Insulation boards with grooves for mechanical fixing using the rail system.

Product properties

- MW - BS EN 13162 - T5 - DS(T+) - CS(10)40 - WL(P)
- Area of application in accordance with external wall insulation
- Non-flammable
- Quality-controlled to BS EN 13162
- Approved in accordance with the ordinance on hazardous substances (GefStoffV), ordinance on prohibited chemical substances (ChemVerbotsV) and EU directive 97/69 (noteQ)
- High tensile strength
- Ozone depletion potential - zero
- Global warming potential - zero

Technical data

Fire behavior

A1 in accordance with BS EN 13501

Thermal
conductivity $\lambda_{90/90}$

HD 30mm - 40mm	0.038 W/mK
≥ 40mm	0.039 W/mK
DD 50mm - 250mm Slab	0.036 W/mK
40mm - 260mm Slab	0.036 W/mK
Plus 40mm - 200mm	0.038 W/mK
HD-m 60mm - 180mm	0.040 W/mK

Dimensions

Up to 1200mm x 600mm

Melting point

≥ 1000 °C

Water vapour diffusion
resistance μ

approx. 1 in accordance with BS EN 12086

Tensile strength at right
angles to board

≥ 10kPa

Application instructions	Application	- The insulation board is not suitable for taking loads of Spiraldübel, Do Rondo and Zyrillo, which are fixed in the insulation material only. The fixing of attachments is only possible with suitable fixing- equipment in the thickness of insulation.
		Fixing Mineral Wool (HD, DD, Slab and Slab Plus) - Select the system´s appropriate adhesive mortar for the substrate and fix using or the spot-and-bead method a notched trowel or. - If the substrate is very even, the adhesive may be applied using a notched trowel. - Press the adhesive into the bevelled edges of the insulation boards. - The boards are installed with the vertical joints staggered by at least 10 cm. The insulation material must be dovetailed at the corners of the building. - Push the insulation boards so that they abut. - Keep the horizontal and vertical joints between the boards free from adhesive. - The butt joints of insulation boards must not be positioned above the areas where different components meet (e.g. ring beams, shutter boxes, structural joints). The insulating materials should extend at least 10 cm beyond such areas, without a joint, and be securely bonded to both sides. - Fix the mineral wool insulation boards with anchors in accordance with the building inspectorate approval. The usage of counter- sunk fixings is possible with insulation thickness from - 80 mm on HD, Slab and Slab Plus insulation board.
		Mechanical fixing with the rail system (HD-M) - Spots of adhesive must be applied to ensure a 20 % bond for system weights up to 30 kg, and a 40 % bond for system weights over 30 kg. - Fix the insulation boards to the substrate using Profile H rails. - Slide in Profile V connecting rails vertically for an additional flexible connection between the insulation boards. - Push the insulation boards so that they abut. - Fix the mineral wool insulation boards with anchors in accordance with the building inspectorate approval.
	Please note:	Unrendered insulation boards attached to the façade must be protected against moisture and coated with reinforced base-coat plaster as soon as possible. Damaged insulation boards must not be installed.

Packaging	Packaging unit	See current range of products
Other information	Transport	Not a hazardous product
	Storage	Dry, protected against moisture.

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The above information is based on many years of experience and tests and is provided by us to the best of our knowledge. Such information applies in addition to our application guidelines. However, we cannot accept any responsibility for the correctness of our recommendations on account of wide variety of substrates and of on-site conditions and applications which are outside our control. Any recommendations provided by our employees and deviating from these documents must be given in writing. We reserve right to make any changes on account of technical progress or building regulations. Your technical advisor will be pleased to provide the relevant product data sheets.

UK PD 0218/0713

Armatop A

Adhesive and reinforcing compound for alsecco facade systems



AREAS OF APPLICATION

Area of application

Bonding	Bonding of mineral wool, polystyrene and cork facade insulation boards
Reinforcement	Average layered reinforcement (4 - 7 mm for single layers, max. of 10 mm for two layers) for alsecco facade systems and on coated stable substrates

PRODUCT PROPERTIES

- A material for insulation board bonding and reinforcement
- Weatherproof
- Water-repellent
- Highly water-vapour permeable
- Easy to apply
- Good adhesion to all mineral substrates, PS rigid foam and mineral wool insulation boards
- Increased mechanical load
- Normal render mortar according to DIN EN 998-1

TECHNICAL DATA

Indicated fixed values represent average values, which can slightly vary from delivery to delivery due to the application of natural raw materials.

Binder base	Mineral binding agent according to DIN EN 197-1 and DIN EN 459-1 Resin dispersion powder
Apparent density of set mortar	approx. 1,4 g/cm ³ according to DIN EN 998-1
Adhesive pull strength	≥ 0,08 N/mm ² according to DIN EN 998-1

Adhesive pull strength on polystyrene	$\geq 0,08 \text{ N/mm}^2$
Water vapour permeability μ	≤ 25 according to DIN EN 998-1
Water permeability	$w \leq 0,15 \text{ kg/(m}^2\text{h}^{1/2})$ according to DIN EN 1062
Fire behavior	A2-s1, d0 according to DIN EN 13501
Water absorption	Class W ₂ according to DIN EN 998-1
Compressive strength	Class CS III according to DIN EN 998-1
Diffusion-equivalent air-layer thickness (4,0 mm)	$s_d < 0,1 \text{ m}$ according to DIN EN ISO 7783

APPLICATION INSTRUCTIONS

Preparation	Mask window sills and attachment parts. Diligently cover glass, ceramic, brick, natural stone, varnished, glazed and anodised surfaces.
Substrate pre-treatment	All substrates must be stable, dry, level (DIN 18202 or 18203), clean and free of any residue, which can reduce adhesiveness. Pretreat substrates according to the following specifications:

Treatment	
Mineral substrates, structurally identical to new	Cleaning
renders MG PII, PIII, stable, solid	Cleaning
renders MG PII, PIII, sandy surface	Hydro penetrating primer
Stable old coats or coatings, non-chalking	Clean with high pressure water jet, prime with Primer
Stable old coats or coatings, chalking	Clean with high pressure water jet, prime with Hydro penetrating primer, then apply Primer P
Unstable old coats or coatings	Remove coat/coating, Hydro penetrating primer
Mineral wool facade insulation boards	None
Polystyrene facade insulation boards, in mint condition	Remove thickness or height discrepancies by sanding, remove any accumulated dust
Polystyrene facade insulation boards, weathered	Sand down unstable area of the surface, remove any accumulated dust

Mixing	25 kg of material (one sack) in approx. 5,8 l of water. Mix with electric mixer or compulsory mixer. Do not mix more material than can be used within 2 h.
--------	--

Application as adhesive

Prime mineral insulation boards before application of the Armatop A in the adhesive area.

Bond according to bead-spot or buttering-floating method.

Minimum adhesive surface: 40%.

Do not apply any adhesive in the area of the joints on the insulation boards.

Never seal joints between insulation boards using adhesive but rather with insulation strips or PU filling foam.

Install insulation boards in offset stretcher bond formation and butt together.

Bead-spot method

Apply circumferential beading bevelled to the edge of the board, to avoid adhesive being pressed into the butt and bed joints when attaching the boards.

Apply 3-6 adhesive dots for 0.5 m² insulation board surface.

Never fix insulation boards using spot bonding.

Buttering-floating method

Use only for level substrates.

Immediately after application of the adhesive, position insulation boards on the substrate and butt.

Mechanical adhesive application

Apply the material to the rear side of the insulation boards using a suitable mortar pump and adhesive applicator gun.

After application of the adhesive, position insulation boards on the substrate and butt.

Note

Please observe the product data sheet for the respective insulation material when deviating from the normal bonding method!

Metals, e.g. titanium zinc, can corrode in the event of direct contact with alkaline mortars.

Application as a reinforcing layer**Installing corner rails or mesh corner beads**

Before reinforcing, place completely into Armatop A and align

Reinforcement layer 4-6 mm	Mesh corner bead 10/15 or 10/23 aluminium corner rail with mesh stainless steel corner rail with mesh KU corner rail with mesh
Reinforcement layer ≥ 7 mm	Corner rail 1023
Reinforcement layer 10 mm	Corner rail 1020

For render with scraped finish 1,5 mm Corner rail 1023 on reinforcement layer

For render with scraped finish 3,0 mm Corner rail 1020 on reinforcement layer

Constructing the reinforcement

Apply material mechanically or manually in the required coat thickness using a rustproof steel trowel, comb through with notched trowel R and level with rendering darby.

Two layers are required for layer thicknesses ≥ 7 mm. In the process, the thickness of the second layer must be smaller than the first.

Before applying the second coat, the first coat must have set but not be completely dry.

Place fibreglass mesh (32, universal - Aero, K) into the open mortar bed overlapping 10 cm and level using a smoothing trowel.

Embed the reinforcement mesh so that it is positioned in the middle for reinforcement layer thicknesses up to 4 mm, in the upper half for thicknesses exceeding 4 mm and in the upper third for thick-layered reinforcement.

Additionally embed diagonal reinforcement strips or mesh strips (25 x 25 cm) diagonally in the reinforcement in corner areas of building openings.

Constructing the reinforcement for render A with scraped finish as a final coat

Create reinforcement layer thickness of approx. 7 mm.

Use mesh corner bead or place the mesh around the corners because the corner rails are placed on the reinforcement layer.

Roughen reinforcement horizontally using notched trowel 5 x 5 mm.

Constructing the reinforcement for ceramic as a final coat

Please request more information about these system models!

Consumption

Bonding:

approx. 4,5 - 6,0 kg/m²

Reinforcement:

approx. 1,4 kg per mm layer thickness per m²

Determine the precise material requirements by means of a trial coating on the object.

Layer thickness of reinforcement

Layerthickness	
Minimum:	4 mm
Maximum single layer:	7 mm
Maximum double layer:	10 mm

Information about the weather

There cannot be temperatures below + 3 °C during application and drying.

Protect against premature drying, do not apply in direct sunlight.

In the case of wind, please observe the shorter setting time.

Interval

Bonding

Depending on the weather conditions, anchoring or reworking after 24 hours at

the earliest.

Reinforcement

Depending on the weather conditions, reworkable after 2 days for reworking with mineral textured renders.

Depending on the weather conditions, reworkable after 5 days at the earliest for reworking with resin or silicone resin renders.

Drying time

approx. 3 - 5 days

Dependent on temperature, layer thickness and relative humidity.

Cleaning of tools

In a fresh state with water.

Application by machine

Please request special information regarding machine processing.

STORAGE

Dry, protected against moisture, cool, shelf life in original sealed packaging of at least 1 year.

PACKAGING INFORMATION

Colour

Grey

Packaging unit

Paper sack approx. 25 kg net

Silo: Upon request

OTHER INFORMATION

Information on safety

The information provided in the current safety data sheet applies.

Transportation

Not a hazardous material

Giscode

ZP1 cement-based products, low in chromate

Mesh

Detail mesh for alsecco external wall systems

Areas of application

Detail mesh in base coat plasters.

Alsitex Nova	Non-slip and alkali-resistant for embedding in layer of render made from: Armatop Nova
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Alsitex Carbon	Non-slip and alkali-resistant for embedding in layer of render made from: Armatop Carbon Armatop Solid Carbon
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Mesh Quattro	Non-slip for embedding in layer of render made from: Armatop Quattro
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Mesh universal - Aero	Non-slip and alkali-resistant for embedding in layer of render made from: Litewall ANB Litewall ANB F Alsitop Alsitop F Base Coat W Armatop A Armatop L - Aero Armatop Solid Carbon
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Mesh 32	Non-slip and alkali-resistant for embedding in layer of render made from: Armatop MP Armatop MP white Armatop Base Armatop A Armatop AKS Armatop por Two in One Armatop Quattro Armatop Carbon Armatop Solid Carbon
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Mesh K	Non-slip and alkali-resistant for embedding in layer of render made from: Armatop L - Aero Armatop A For use when ceramics are used for the surface design.
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Panzer Mesh	Mesh used to prepare highly impact-resistant reinforcing layers. Used in conjunction with Mesh 32 or universal - Aero.
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Technical data	Weight per unit area	Alsitex Nova:	approx. 160 g/m ²	
		Alsitex Carbon:	approx. 160 g/m ²	
		Mesh Quattro:	approx. 105 g/m ²	
		Mesh universal - Aero:	approx. 160 g/m ²	
		Mesh 32:	approx. 160 g/m ²	
		Mesh K:	approx. 160 g/m ²	
		Panzer mesh:	approx. 330 g/m ²	
Mesh size		Alsitex Nova:	approx. 4 x 4 mm ²	
		Alsitex Carbon:	approx. 4 x 4 mm ²	
		Mesh Quattro:	approx. 4 x 4 mm ²	
		Mesh universal - Aero:	approx. 6 x 6 mm ²	
		Mesh 32:	approx. 4 x 4 mm ²	
		Mesh K:	approx. 3.5 x 3.5 mm ²	
		Panzer Mesh:	approx. 6 x 6 mm ²	
Tensile strength	Alsitex Nova	warp:	≥ 2000 N/5 cm	
		weft:	≥ 2000 N/5 cm	
	Alsitex Carbon	warp:	≥ 2000 N/5 cm	
		weft:	≥ 2000 N/5 cm	
	Mesh Quattro	warp:	≥ 1820 N/5 cm	
		weft:	≥ 1430 N/5 cm	
	Mesh universal - Aero	warp:	≥ 2000 N/5 cm	
		weft:	≥ 2000 N/5 cm	
	Mesh 32	warp:	≥ 2000 N/5 cm	
		weft:	≥ 2000 N/5 cm	
	Mesh K	warp:	≥ 2000 N/5 cm	
		weft:	≥ 2000 N/5 cm	
	Panzer mesh	warp:	≥ 3200 N/5 cm	
		weft:	≥ 3500 N/5 cm	

Application instructions	Application	Alsitex Nova, Carbon, Mesh Quattro, universal - Aero, 32, K - Embed mesh in the wet reinforcing compounds horizontally or vertically and smooth over. The length of mesh should overlap by at least 10 cm at the ends. - Embed the mesh in the upper third of the reinforcing compound or the plaster and cover completely with reinforcing compound.	
		Panzer Mesh - Place the mesh horizontally or vertically in the open reinforcing compound pushed close together and smooth over with a trowel. - Cover with the system-specific mesh. - Embed the mesh in the upper third of the reinforcing compound or the plaster and cover completely with reinforcing compound.	
	Consumption	Alsitex Nova, Carbon, Mesh Quattro, universal - Aero, 32, K:	approx. 1,1 m ² /m ²
		Panzer Mesh:	approx. 1.0 m ² /m ²
Packaging	Packaging unit	Alsitex Nova, Carbon, Mesh universal - Aero, 32, K:	Rolls 1,10 m wide , 50 m long
		Mesh Quattro:	Rolls 1,10 m wide , 75 m long
		Panzer Mesh:	Rolls 1 m wide, 25 m long
	Colour	White (Mesh Quattro, universal - Aero, 32, K, Panzer Mesh) Grey (Alsitex Carbon) Red (Alsitex Nova)	

Klebspachtel AF - (Bedding Mortar AF)

Adhesive and joint filler for flat facing bricks



AREAS OF APPLICATION

Organic adhesive and joint render for the bonding and pointing of flat facing bricks. Application of flat facing bricks with organic external render according to DIN EN 15824.

PRODUCT PROPERTIES

- Strong adhesive power
- Highly elastic
- Water-repellent
- Water-vapour permeable
- A2-s1, d0 (Fireproof) according to DIN EN 130501 in connection with flat facing bricks

TECHNICAL DATA

Specific gravity	approx. 1,74 g/cm ³
Diffusion-equivalent air-layer thickness	s _d : approx. 0,33 m according to DIN EN ISO 7783
Water permeability	w: approx. 0,04 kg/(m ² h ^{1/2}) according to DIN EN 1062-3
Fire behavior	A2-s1, d0 according to DIN EN 13501-1

APPLICATION INSTRUCTIONS

Preparation	Evenly divide the surfaces to be laid with continuous height markings (chalk line), to define work steps. For a normal format (NF), a work step has a height of approx. 33 cm (4 veneer layers each 71 mm and 4 bed joints each 12 mm). For thin size (DF), a work step has a height of approx. 32 cm (5 veneer layers each 52 mm and 5 bed joints each 12 mm). Observe fixed lines when calibrating (e.g. windows, doors, brick-on-end courses, etc.)
Substrate pre-treatment	All substrates must be stable, level, clean, dry and free of any residue, which can

	reduce adhesiveness.
Mixing	Ready to use Stir using an electric mixer or if applicable, with a small amount of water, to obtain a workable consistency.
Application	Apply adhesive filler AF to the completed, hardened reinforcement layer in strips within the created height markings using a trowel and horizontally comb through with a notched trowel (notch size 4 x 6 mm). Only apply as much adhesive filler AF as can be faced with flat facing bricks before skin formation. Press alsecco flat facing bricks into the still open adhesive filler AF with thrusting movements and with the respective distance between the joints, so that no cavities form. In the process, it is recommended to work from top to bottom and to start with the corner facing bricks. Evenly coat the still open adhesive in the joint area with a wet 10 mm flat brush and fit the sides of the bricks in a manner, which ensures a compact connection between adhesive filler and the flat facing bricks. Then, brush off the surface using a hand brush or the like, to remove loose particles of mortar.
Consumption	ca. 2,5 - 3,0 kg/m ² Determine the precise material requirements by means of a trial coating on the object.
Information about the weather	There cannot be temperatures below + 5 °C during application and drying. Do now work on surfaces, which have heated up due to sunlight, or during rain and severe winds.
Drying time	approx. 24 - 72 hours Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.

STORAGE

Shelf life in original sealed packaging of at least 1 year when kept cool and protected against frost.

PACKAGING INFORMATION

Packaging unit PP bucket approx. 25 kg net

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material
Giscode	D2 low solvent dispersion installation products, free of aromatic compounds

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ORIGINAL MELDORFER®

Decorative brick effect finish and individual designs for
alsecco façade systems

AREAS OF APPLICATION

Can be installed on ETIC systems, curtain façades and on exterior and interior mineral plaster and render.

PRODUCT PROPERTIES

- Wide range of design options, from traditional brick effect to individual artistic concepts
- Handmade from high quality raw materials
- Superior resistance and durability
- Slim build-up (approx. 8 mm incl. adhesive)
- Low weight
- A2-s1, d0 (fireproof) according to DIN EN 13501-1

TECHNICAL DATA

Diffusion-equivalent air-layer thickness	< 1,4 according to DIN EN ISO 7783
Resistance against the diffusion of water vapour	$s_d < 1,4$ m Klasse V ₂ according to DIN EN 15824
Water permeability	$w: \leq 0,1 \text{ kg}/(\text{m}^2\text{h}^{1/2})$ according to DIN EN 1062-3 Klasse W ₃ (low) according to DIN EN 15824
Weight	approx. 5 kg/m ²

APPLICATION INSTRUCTIONS

Preparation

Since there are slight variations in the colour effect and dimensional tolerances of Original Meldorf brick slips, they should be randomly mixed when taken from the packaging rather than installed one layer at a time.

The areas where the brick slips are to be applied must be divided evenly by marking the appropriate height with a continuous chalk line to define the individual steps.

The standard format (Normalformat = NF) has a working section of 32 cm in height

(4 layers of slips at 71 mm each and 4 horizontal joints at 12 mm each).

The thin format (Dünnformat = DF) has a working section of 30.8 cm in height (5 layers of slips at 52 mm each and 5 horizontal joints at 12 mm each).

The long format (Langformat = LF) has a working section of 30 cm in height



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(6 layers of slips at 40 mm each and 5 horizontal joints at 12 mm each).

The extra-long format (XL-Longformat = XLF) has a working section of 30.8 cm in height

(5 layers of slips at 52 mm each and 4 horizontal joints of 12 mm each).

The large format (Grossformat = GF) has a working section of 31.2 cm

(1 layer of slips at 300 mm and 1 horizontal joint at 12 mm).

A notched trowel with 6 x 6 mm notches should be used for this format.

The sandstone multi-format (Multiformat = MF) has a working section of 29.4 cm (when installing three different sizes of slips in three courses and three horizontal joints at 12 mm each).

When dividing up the sections, fixed lines (e.g. windows, doors, edge courses etc.) must be taken into account for the measurements.

Substrate pre-treatment

All substrates must be stable, level and free of any residue, which can reduce adhesiveness.

Application

Ribbons of Bonding Mortar AF are trowel-applied to the finished and hardened reinforcement coat within the height markings. These ribbons are then combed through with a notched trowel (notch size 4 x 6 mm) in the direction of installation. A trowel with notch size 6 x 6 mm should be used for installing large-format Meldorfer brick slips.

Only ever apply as much Bonding Mortar AF as can be covered with Original Meldorfer brick slips before a skin is formed.

Original Meldorfer brick slips must be floated into the Bonding Mortar AF within the mortar's pot life, keeping to the appropriate joint widths and making sure that there are no cavities underneath. The best option is to work from the top down, starting with the corner slips.

Use a wet and flat 10 mm brush to smooth over the mortar in the joints during its pot life, bringing it right up to the edges of the slips to ensure a waterproof bond between the mortar and the Original Meldorfer brick slips.

Finally clean the surface with a hand brush or similar to remove loose remnants of mortar.

Consumption

Format		Consumption units/m	Consumption of corner slips units/m
Thin format	DF	64	16
Standard format	NF	48	12
Long format	LF	47	20
Extra-long format XL	XLF	20	
Large format	GF	6	
Sandstone multi-format	MF	Order-specific, depending on the combination of the three formats	

Information about the weather

There cannot be temperatures below + 5 °C during application and drying.

Do now work on surfaces, which have heated up due to sunlight, or during rain and severe winds.

Drying time approx. 24 - 72 hours

Dependent on temperature and relative humidity.

Information If the substrate is dense and cool or if the drying process is delayed due to adverse weather conditions, the effect of moisture (rain, dew, mist) can cause additives to rise to the surface of the coating. The effect is dependent on the intensity of the colour. These additives are water-soluble and are automatically removed with sufficient water, e. g. in the course of further weather. This does not impair the quality of the dried coating.

STORAGE

Dry, protected against moisture and sunlight.

PACKAGING INFORMATION

Colour

- Altweiß (NF, DF)
- Antik (NF, DF)
- Brandenburg (NF, DF)
- Dithmarschen (NF, DF)
- Friesland (NF, DF)
- Juist (NF, DF)
- Mecklenburg (NF, DF)
- Oldenburg (NF, DF)
- Rotbunt (NF, DF)
- Sandstein (MF)
- Sylt (NF, DF)
- Westerwald (NF)
- Hamburg (NF, DF)
- Oslo (LF)
- Stockholm (LF)
- Kopenhagen (LF)

ORIGINAL MELDORFER® brick slips are hand-crafted and manufactured individually. Please be aware of colour variations and dimensional tolerances.

Formats

Formats		Deminsions (L x H) mm	Corner slips 3/4 mm Corner with half bat and 3/4 stretcher	Corner slips 4/4 mm Corner with half bat and full stretcher
Thin format	DF	240x52	175x115x52	240x115x52
Standard format	NF	240x71	175x115x71	240x115x71
Long format	LF	400x40		240x105x40



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Extra-long format XL	XLF	740x52	
Large format	GF	600x300	
Sandstone multi-format	MF	300x52	240x115x52
		300x71	240x115x71
		300x135	240x115x135

OTHER INFORMATION

Transportation

Not a hazardous material

Waste code

Type	Waste code
New products:	20 03 01: mixed municipal waste
Used products:	17 09 04: mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

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alsecco Ecomin 400 - Clay

M21 EXTERNAL INSULATED RENDER SYSTEM

To be read with Preliminaries/General conditions.

TYPE(S) OF COATING	Alsecco Systems:	Alsecco External Wall Insulation System – adhesive and mechanical fix. Must be applied in strict accordance with the manufacturer's written recommendations by a contracting partner from Alsecco UK Ltd's current list
	Proprietary Render:	Alsecco 'Ecomin 400' EWI System - Mechanical and adhesive fixed

Manufacturer and reference: Alsecco Systems are manufactured by Alsecco GmbH & Co. KG, Wildeck, Richelsdorf, D36208, Germany.
UK Office: Alsecco (UK) Ltd, Whitebridge Way, Stone, Staffs, ST15 8GH Tel: 01785 818998 Fax: 01785 818144 www.alsecco.co.uk

System Materials & Components	Location: Substrate:	In all cases, substrate should be deemed fit for purpose prior to the application of Alsecco External Wall Insulation Example Masonry
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1.1 System Components:	Sub Primer: Adhesive: Insulation Type: Thickness: 'U'-Value: Basecoat: Top Primer: Topcoat: Paint Finish: Deco Profiles: Brick Slip/Flex: Ashlar Detail Mesh	Sub Primer HT/P if required Armatop MP HD Mineral Wool 100mm TBC W/m2k Armatop A & Mesh K N/A Not Required Not Required No Brick Slips With Bedding Mortar A New and Grout Joint Mortar A N/A
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1.2 Accessories:	Base Rail: Stop Beads: Corner Beads: Mechanical fixings: Dammflex: Sealing Strip 13/2: APU Bead: PU Foam: PU Flex: Disbon Primer: Balcony Drip Bead: Expansion Joints: Alsecco Cill:	A105 with clip on extension profile W105 3707 PVC with Mesh CFIX 135 & **FF DMH 8/35 x 170 E Yes Yes No Cannot be used with an Ecomin System No Where exposed steel is present No Required Only Where Present in Substrate No	*** (See notes below)
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Notes:

-Preparation of existing surfaces: Ensure existing substrate is clean, sound and free from all adhesive reducing residue/surface contaminants. Refer to recommendations of BSEN13914-1:2005 including annex B. Bond tests/Sample area recommended prior to complete application.

-Ensure existing rendered substrates are sound and suitable to receive additional weight of new render, existing render should be hammer tested before installation of new system to identify any loose, de-bonded or otherwise defective render and where required, repaired by others, prior to the system being installed.

-Sub Primer P is to be used on existing painted substrates, Sub Primer HT is to be used on all exposed masonry

*All Fixings must be applied through the system mesh where the external finish is a clay brick slip.

**FF (Fire Fixing) must be applied at a rate of 1 per m2, pinned through the system mesh, above the second storey please apply in addition to the instructions found in section 2.8

***All fixings subject to pull out testing & Wind load calculations



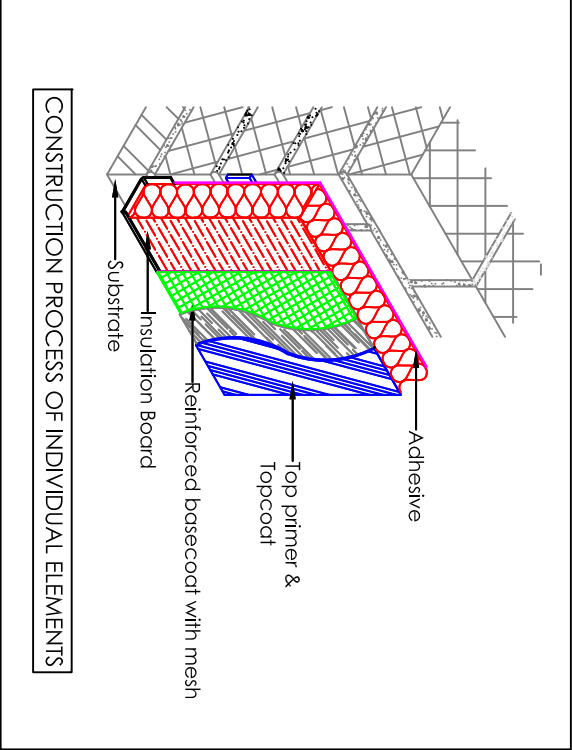
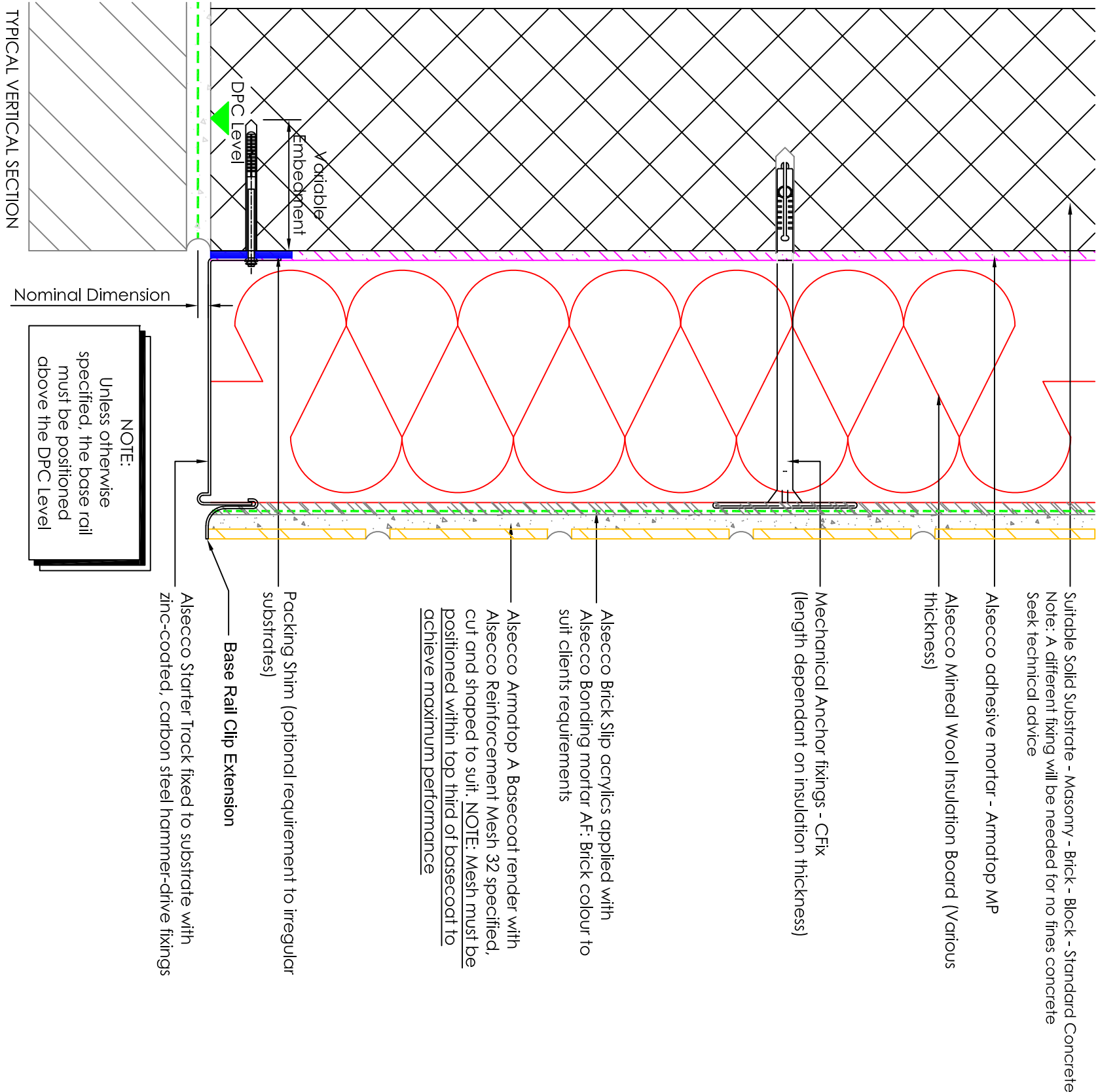
Material & Component Description	1.3 Base Rail:	Aluminium horizontal base rail 2m long. (For Reference, see Section 1.2.) Base rails shall be fixed to substrates with zinc coated carbon steel hammer-drive fixings (minimum 6mm diameter, shank 60 - 80mm long) and to wooden substrates with pan-head or washer-head stainless steel wood screws (minimum 32mm long). Spacing of fixings to be maximum 300mm centers. Contractor to ensure that system complies with CP3: Chapter V: Part 2: 1972 in relation to its structural stability. 1.4 Substrate Primer:
	1.4 Substrate Primer:	In accordance with Section 1.1
	1.5 Adhesive:	In accordance with Section 1.1: Mixed with Clean Water Only
	1.6 Insulation Board:	i: Mineral Wool HD Board, nominal density 140kg/m ³ . To BS 3837 Part 1 1986. Thermal Conductivity 0.036W/mK; Class 0 Fire Rating ii: Thickness shall be as indicated under Section 1.1. iii: Maximum size of HD Board shall not exceed 1200 x 600mm.
	1.7 Fire Barriers:	Fire Barriers are not required for the Ecomin Systems
	1.8 Beading:	Provide beads and stops at all external angles and stop ends except where detailed otherwise. See section 1.2 for Reference.
	1.9 Reinforcing Coat:	In accordance with Section 1.1 mixed with Clean Water Only.
	1.10 Reinforcement:	Reinforcement shall be Specified Alsecco Reinforcing Mesh as per Section 1.1 & Clause 1.9 with symmetrical interlaced glass fibre made from twisted multi-end strands, coated to provide a high resistance to alkali attack and is manufactured so as to prevent laminar movement and deformation. In accordance with the appropriate details, Panzer mesh or Armatop Nova with Nova mesh can be used in areas at risk of impact damage.
	1.11 Topcoat Primer:	In accordance with Section 1.1
	1.12 Topcoat:	In accordance with Section 1.1
	2.1	All installation of Alsecco materials in the UK shall be performed by Alsecco Contracting Partners. Under no circumstances shall any of the Alsecco products be altered with any additives, except for small amounts of clean water as directed on the label.
Execution	2.2	If required, apply Alsecco Sub primer to substrate. (See section 1.1 for reference.) All substrate must be free of loose particles, dusting, grease and oils.
	2.3	If required, a fungicidal wash must be applied.
	2.4	All exposed metal work that is to be covered by Alsecco EWI Systems to be coated with an appropriate primer e.g. Disbon or similar and left to dry prior to EWI application.
	2.5	If substrate is of poor alignment and levelling is required, use Alsecco TZ1 basecoat (without reinforcing mesh). Not suitable for lightweight or AAC Blockwork.

Execution	2.6	Align base rail and fix with Alsecco anchors spaced at a maximum of 500mm apart - ensure that the base rail is not distorted. Insert base rail connectors at all rail joints. Corners should be made with mitred cuts, or an Alsecco pre-formed corner section. Level and line can be adjusted using Alsecco spacers available in a range of sizes.
	2.6.1	Align the horizontal rails and fix with Alsecco anchors at a maximum of 300mm apart – ensure that the rail is not distorted. Alsecco Packers should be used to achieve correct alignment of the horizontal rails
	2.7	Mix Alsecco adhesive mortar and apply to back of Insulation board using spot and continuous dab method. The adhesive mortar must cover at least 50% of the board / substrate unless detailed otherwise. (Typically dab and 3No. Spots per board). On flat and even substrate, the tooth bed method of application can be used. 100% of board / substrate must be covered when using the tooth bed method of application with Insulation board. On substrates where mechanical fixings are not required, the tooth bed method must be used.
	2.8	Lamella Fire Barriers are not required for any of the Ecomin Systems
	2.9	Ensure that all insulation board edges are clean and free of adhesive mortar. All joints must be staggered, min 200mm (see Fixing Layout Detail); additional cutting may be required around doors and windows to ensure that board joints do not correspond with corners of openings. Fit the insulation boards tightly and bed well. Any open joints between insulation boards up to a max width of 10mm must be closed with a strip of insulation board - NOT adhesive mortar or render.
	2.10	Allow approx. 12 to 72 hours drying time for Alsecco adhesive mortar, depending on type of adhesive mortar and weather conditions. Subsequent rendering, mechanical anchoring or finishing work on insulation boards must not be carried out until adhesive mortar has set and not before 24hrs.
	2.11	Mechanical fixings (if required) as specified in Section 1.2 are specified according to board thickness and substrate. Anchors should be fixed in accordance with the manufacturer's instructions and Alsecco fixing requirements. (See Fixing Layout Detail)
	2.12	Rasping of the Mineral Wool HD must not take place, as the process will damage the properties of the insulation board. Misalignment must be rectified within the adhesive and basecoat layers.
	2.13	Install Propriety Alsecco Sealant in conjunction with detail drawings. (See Section 1.2)
	2.14	Corner bead and any additional beading as specified in Section 1.2 to be secured to insulation boards with Alsecco Basecoat render at corners and align until plumb.
	2.15	All beads should be cut neatly, mitres formed at return angles and sharp edges, swarf and other potentially dangerous projections removed. Fix securely, using the longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with background. After coatings have been applied, remove coating material while still wet from surfaces of beads/stops, which are to be exposed to view.

Execution	2.16	Apply Alsecco Basecoat render (as specified in Section 1.1) to the fixed insulation boards using a stainless steel trowel. Level out using a plasterer's straight edge or by combing through with a 10x10 tooth trowel. Float specified reinforcing mesh (see section 1.1) into the top of the basecoat render, ensuring a minimum horizontal and vertical overlap of 100mm for the glass mesh. All corners at openings must be additionally reinforced with 250 x 250mm mesh strips embedded diagonally into the wet basecoat render. Immediately trowel the mesh into the basecoat while still wet and smooth off to finished thickness using a stainless steel trowel. For optimum strength, the mesh must sit in the top one third of the basecoat. Leave basecoat render to set for at least 2 to 3 days before applying Alsecco topcoat renders. Adjoining areas of EPS insulation and Extruded Insulation must have an additional strip of reinforcing mesh applied within the basecoat with a minimum 200mm overlap.
	2.17	Not applicable with Alsecco Basic 4. See Below
	2.18	Prior to the application of topcoat, all scaffolding boards should be cleaned to ensure minimum dirt being transferred onto the finished topcoat. The topcoat is a finishing trade, work sequencing should ensure that no or very minimum work is carried out onto the render after application of topcoat. Where Scaffold plugs are to be retained, appropriate Scaffold Ties to be used in accordance with system details.
	2.19	Not applicable for Ecomin 400 with brick finish. See appropriate clause below (2.22 - 2.24) in conjunction with Section 1.1
	2.20	The topcoat render, is applied in accordance with the following general rules: - a Using a clean, rust-free low speed mixer, thoroughly stir the Alsecco finish to a uniform consistency. - b Finish shall be applied in a continuous application always working to a wet edge. Care should be taken to avoid texture changes at different levels. To prevent staining of the finish coating, always ensure that the scaffold boards are free from dust before commencing application of the final coat. - If possible, entire sections or elevations should be coated in a single operation to avoid joint marks in the finish. Often this can be achieved by working to natural breaks in the building or changes in colour or texture. Where day-joints are unavoidable these should be made to coincide with natural features such as a line of window cills. Apply a masking tape at the desired position of the joint and apply the finish overlapping the edge of the tape. Carefully remove the tape while the finish is still wet to leave a fair edge. Once the finish material has set subsequent applications may be applied by masking the previously completed section with tape and carefully applying the new finish to achieve a barely visible joint. - c Only in situations where mineral renders (Miratect & Alsilite) are to be used, irregular shading and patching due to uneven drying cannot always be avoided. Evenness of colour can be achieved by applying ALSECCO Equalising finish. d. Weather conditions will be a factor in the application of the finish as well as the drying time. e. An option for areas of high salt-water attack, a final coat of Alsecco Alsicolor Quatro can be applied.

	2.22 Brick Slips	(In conjunction with Section 1.1) Incorporate vertical expansion joints in the brickwork and tile coursing by introducing a flexible joint compound in place of the pointing or grouting mortar. Vertical joints to brickwork should follow the brick bond line. Joints should correspond with window or door opening or approx. every 3m vertically for dark coloured finishes or 6m vertically for light coloured finishes. In accordance with BS5628 : part 3 1985 Use of masonry.
	2.23 Brick Slip Flex	(In conjunction with Section 1.1) Use a trowel to apply the Bonding Mortar AF to the basecoat and a notched trowel (4 x 6 or 5 x 5mm) to comb through the adhesive in a horizontal direction to create a ridged bed. Place the brick slip flex on top of the open adhesive, leaving a joint width in between and press into position. Use a damp brush to smooth the adhesive over in the area of the joint before the adhesive has set. Ensure a close connection between the adhesive compound and the brick slip flex Only apply as much adhesive as can be covered with brick slip flex before a skin is formed.
	2.24 Render Brick	(In conjunction with Section 1.1) After the basecoat has had a minimum 24 hours drying time, apply an additional Intermediate Mortar Coat layer, 2mm thick. (Intermediate Mortar Coat consists of Spardash DLX. Colour to match Basecoat.) This is used to form the Mortar Joint. Immediately apply, wet on wet, a 2-3mm thick layer of decorative render brick topcoat. (Consisting of Spardash DLX - Colour as requested.) Give these layers 8-16 hours drying time. Using a straight edge with a joint cutting tool, scrape out the brick profiles, cutting through the topcoat & intermediate coat, back to the hard basecoat to form the mortar joint. NOTE: If top layer of render brick is of dark colouring, lime bloom will occur. To prevent this, a wash of Alsecco Hydrophobic MI agent must be applied once all coats are dry. (Technical Data Sheet available upon request.)
	2.25 Deco Profiles	(In conjunction with Section 1.1) a. On External Wall Insulation Systems, the decorative Profiles must always be applied to finished reinforcement layers with the appropriate reinforcing mesh. The profiles to be applied to the façade must be measured out and marked according to the installation plan. For window cill profiles alignment is made with the centreline of the window/window sill profile. b. Profiles are cut to size using a hacksaw with a carbide blade and a mitre block. c. Profile adhesive applied to both substrate and back of the profile. Profiled applied in accordance with details. Profile is firmly pressed onto substrate using a straight edge and can be propped to prevent slipping. d. Smooth off all excess profile adhesive, once all joints are fully sealed. e. All profiles, which are not tightly butt-jointed, must be installed with 10mm spacing. Allow 24 hours for adhesion before filling the joints with Alsecco Polyurethane Foam. Once hardened, Polyurethane foam scraped out to a depth of 10mm and void filled with Alsecco Dammflex Sealant. f. Apply profile adhesive with a specific trowel to smooth out window reveals. Any trowel marks to be ground down. Accurate edges achieved by installing the Deco Profiles 2mm above the window level of the window reveal towards the centre of the window. Protruding profile edges allow for sharp edged reveals. g. Window cill reveals must be insulated to accept window sill profiles. Care must be taken to ensure that the inclination of the window cill is in line with that of the window sill profile. This connection with the window frame must be sealed with an Alsecco sealing system. Once the window sill profiles have been installed, apply profile adhesive to the horizontal surface, apply Alsecco glass fibre mesh 32 and trowel over with sufficient mortar to cover the mesh. Profiles coated with two coats of Alsicolor, Si façade or Hydro Equalising finish in the desired colour

Protection and Cleaning	3.1	All installation of Alsecco materials in the UK shall be performed by Alsecco Contracting Partners. Under no circumstances shall any of the Alsecco products be altered with any additives, except for small amounts of clean water as directed on the label.
	3.2	All plasters described should never be applied if ambient and surface temperatures cannot be kept above +3°C for mineral products, +5°C for acrylic and silicon products and +1°C for ice products during application and drying period. Prior to installation, the wall shall be free of residual moisture. The stored material should be protected from frost and strong sunlight.
	3.3	Although it is preferable when working with highly pigmented renders to mask or protect other building elements such as windows, sills, etc., spilled or dropped materials may be removed easily from most surfaces with a wet sponge or cloth before the material has dried out. Renders which have been allowed to partially dry may be removed by using a soap solution to soften the render and warm water to clean the surface. Absorbent surfaces such as concrete, brick, etc. maybe affected by the pigments of the render and where spillage is likely then these surfaces should be protected with appropriate covering material.
General Comments	4.1	Remove efflorescence, dust and other loose material by thoroughly dry brushing. Remove all traces of paint, grease, dirt and other materials incompatible with coating by scrubbing with water containing detergent and washing off with plenty of clean water. Allow to dry before applying coatings unless specified otherwise.
	4.2 (515) KEYING/ BONDING:	Prepare backgrounds as specified for the type of coating to be applied. Methods other than those specified may be submitted for approval.
	4.3 (573) TREATMENT OF ORGANIC GROWTHS:	Biocides must be approved and registered by the Health and Safety Executive (HSE) and listed in the current 'Reference Book 500', as surface biocides.
	4.4 (810) APPLICATION GENERALLY:	Apply each coating firmly to achieve good adhesion and in one continuous operation between angles and joints. All coatings to be not less than the thickness specified firmly bonded, of even and consistent appearance, free from rippling, hollows and ridges. Finish surfaces to a true plane, to correct line and level, with all angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square. Prevent excessively rapid or localised drying out. The standard of finish shall meet the requirements of BSEN 13914-1: 2005 NA.15 assessment of external rendered finishes Alsecco would recommend where possible that the variation in gap under a 1.8m straight edge (with feet) placed anywhere on the surface to be not more than 3mm.
	4.5 (880) DRYING:	Work in the shade and out of drying winds whenever possible. Allow each coat to dry out thoroughly to ensure that drying shrinkage is substantially complete before applying next coat.
	4.6 (890) PROTECTION:	Adequately protect newly applied external coatings against frost and rain for the first 48 hours using polyethylene sheet / Debris netting hung clear of the face, or other approved method.



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The Contractor is to check and verify all building and site dimensions, before work commences.

The Contractor is to comply in all respects with current Building Legislation, British Standards, Building Regulations etc, whether or not specifically stated on this drawing.

This drawing is not intended to show details of foundations, ground conditions or ground contaminants.

Notes

- Detail with a red light attributed present areas that are not fully insulated and as such can lead to a thermal bridge. In some cases these thermal bridges are caused by pipe outlets or existing penetrations such as bodcones that are unavoidable. The detail should be considered in the context of the property and current ventilation by the EEM Designer

- In all cases, the basecoat must not be applied below the DPC line. In areas where the DPC line falls below 150mm from the surrounding finished ground level it is recommended that the system basecoat is applied approximately 150mm above the finished ground level to reduce the risk of rainwater splash back staining to the and other associated risks that water capillary action may pose to the integrity of the EWI system.

Revisions

Revisions	Date	Amendment	Name
1:20 - 0	200mm	400mm	600mm
1:100 - 0	20mm	40mm	60mm
1:50 - 0	2mm	4mm	6mm



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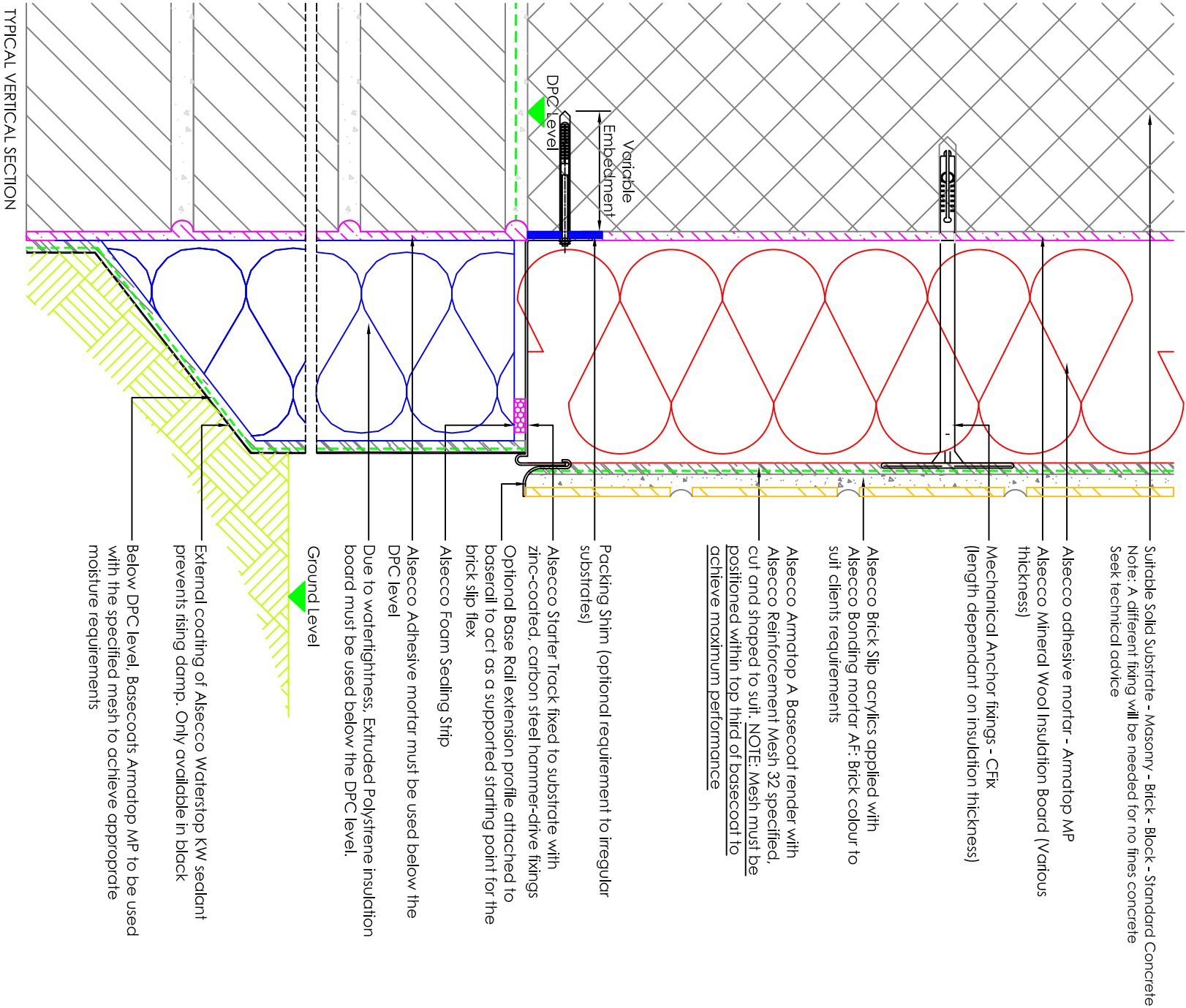
Client: STANDARD DETAILS

Project: STANDARD DETAILS

Title: BASE RAIL DETAIL

Status: Construction
Drawn: SJB
Date: 13/06/2018
Checked: MPR
Scale: 1:2 @A3

Job No: 0000000 Dwg No: LR-EC400A-SOL-001 Rev:



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Notes

-  - Details with a green light attributed fully inside the thermal path through the external wall construction and provide a high level of confidence that condensation will not occur at this detail junction as a result of the application of the EWM system - the detail should still be considered in the context of the property and current ventilation by the EEM Designer.

Revisions

Date	Amendment	Name
1:20 - 0	For guidance only. Do not scale off this drawing	
1:100 - 0	200mm 400mm 600mm 800mm 1000 1200 1400 1600 1800 2000	
1:20 - 0	1m 2m 3m 4m 5m 6m 7m 8m 9m 10m	
1:50 - 0	100mm 200mm 300mm 400mm 500mm 600mm 700mm 800mm 900mm 1000mm	

16/08/2018 Update to Alsecco UK Ltd DTA 1.0

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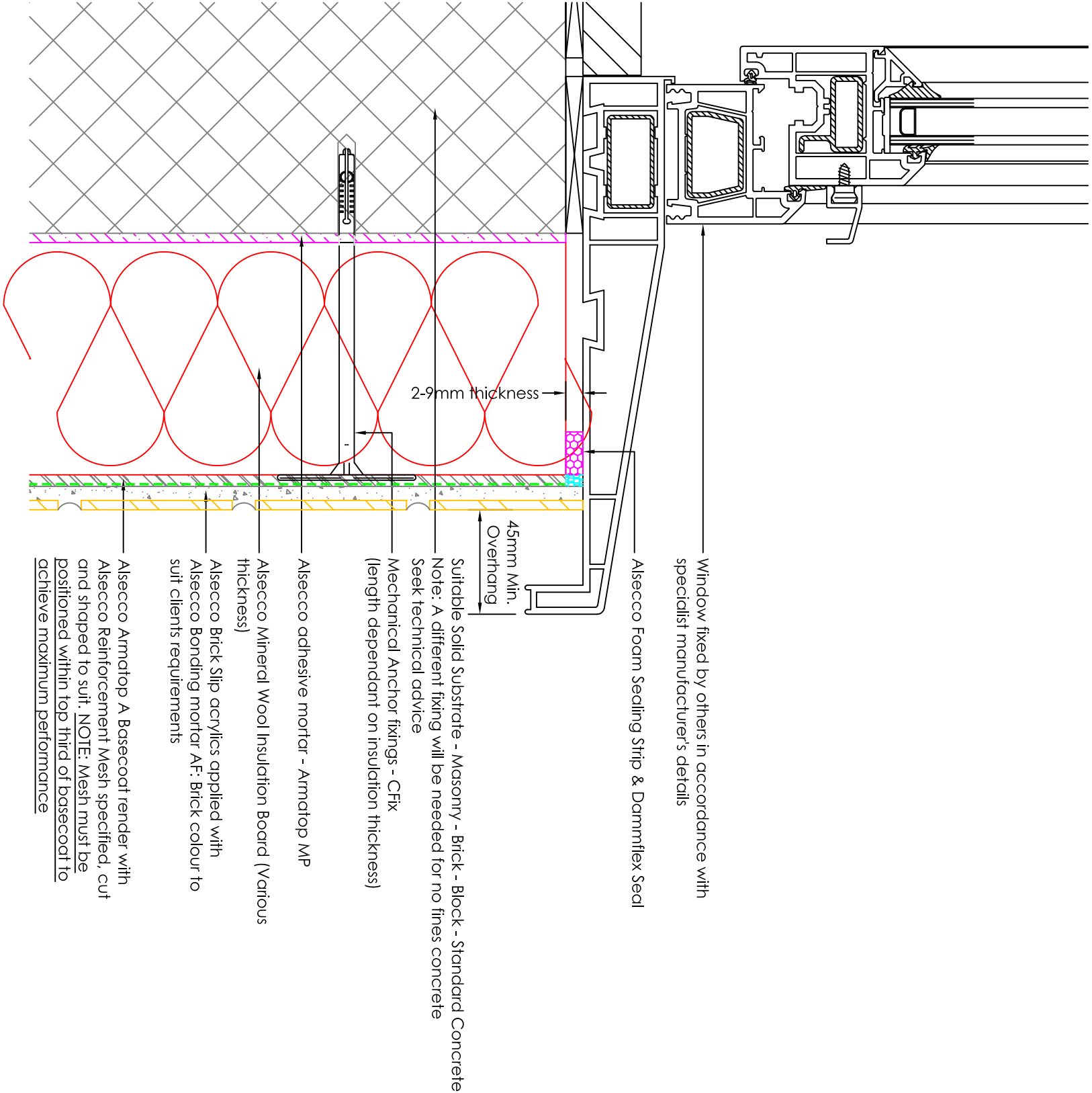
Client: STANDARD DETAILS

Project: STANDARD DETAILS

Title: BELOW DPC DETAIL

Status: Construction Checked: MPR
Drawn: SJB Date: 13/06/2018 Scale: 1:2 @ A3

Job No: 0000000 Dwg No: LR-EC400A-SOL-002 Rev:



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The Contractor is to check and verify all building and site dimensions, before work commences.

The Contractor is to comply in all respects with current Building Legislation, British Standards, Building Regulations etc, whether or not specifically stated on this drawing.

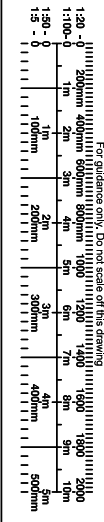
This drawing is not intended to show details of foundations, ground conditions or ground contaminants.

Notes

-  Detail with a red light attributed present areas that are not fully insulated and as such can lead to a thermal bridge. In some cases these thermal bridges are caused by pipe outlets or existing penetrations such as balconies that are unavoidable. The detail should be considered in the context of the property and current ventilation by the EEM Designer

- In all cases, the basecoat must not be applied below the DPC line. In areas where the DPC line falls below 150mm from the surrounding finished ground level it is recommended that the system basecoat is applied approximately 150mm above the finished ground level to reduce the risk of rainwater splash back staining to the and other associated risks that water capillary action may pose to the integrity of the EWI system.

Revisions Date Amendment Name



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Client: STANDARD DETAILS

Project: STANDARD DETAILS

Title: WINDOW CILL DETAIL

Status: Construction Checked: MPR
Drawn: SJB Date: 13/06/2018 Scale: 1:2 @A3

Job No: 00000000 Drg No: LR-EC400A-SOL-003 Rev:

Haftgrund P - (Sub Primer P)

Pigmented resin-bonded primer for decorative renders.



AREAS OF APPLICATION

Primer to even out colour variations and improve adhesion before applying final coat with resin renders and mineral renders.

For indoor and outdoor use.

PRODUCT PROPERTIES

- Absorbency regulating
- Water-vapour permeable
- Water-repellent
- Promotes adhesion
- Improves adhesion
- Improves the ability to texture subsequent decorative renders
- Non-slip surface because quartz filled
- Provokes ideal and economical application of the decorative render

TECHNICAL DATA

Binder base	Terpolymer resin dispersion
Specific gravity	approx. 1,7 g/cm ³
VOC value	EU limit value for the VOC content of this product (cat. A/h): 30 g/l (2010). This product contains < 10 g/l VOC.

APPLICATION INSTRUCTIONS

Substrate pre-treatment	All substrates must be stable, level, clean, dry and free of any residue, which can reduce adhesiveness. Prime substrates to be reinforced with Hydro penetrating primer.
Mixing	Ready to use Can be diluted with a max. of 20 % water.
Application	Can be applied using a brush, roller or spraying.

	Use short pile rolls for even application. It is recommended to use a primer in the colour of the subsequent textured render for unsealed textures.
Consumption	approx. 0,3 - 0,4 kg/m ² (approx. 200 - 250 ml/m ²) Determine the precise material requirements by means of a trial coating on the object.
Information about the weather	Temperatures below + 5 °C may not arise during application and drying.
Drying time	approx. 2 - 6 hours Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.
Application by machine	Please request special information regarding machine processing.

STORAGE

Shelf life in original sealed packaging of at least 1 year when kept cool and protected against frost.

PACKAGING INFORMATION

Colour	Natural white and pigmented in the colour of the subsequent render
Packaging unit	PP bucket approx. 20 kg net

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material
Giscode	M-DF02 latex paints

Hydro-Tiefgrund - (Sub Primer HT)

Solvent-free dispersible resin primer



AREAS OF APPLICATION

Hardening and regulation of absorbency of mineral and weathered indoor and outdoor resin-bound substrates, for walls and floors.

Suitable for brickwork, concrete, screed and mineral bound building boards.

Hardens gypsum and anhydrite bound boards, surfaces, renders/renders and screeds with an effective moisture barrier.

Also suitable for priming prior to follow-up work indoors, such as laying tiles and wallpapering as well as for all kinds of coatings.

Hardening of mealy, priming surfaces.

PRODUCT PROPERTIES

- High penetration depth because finely dispersed
- Very strengthening
- Water-vapour permeable
- Low-noise
- Absorbency regulating
- Improves the adhesion of subsequent layers

TECHNICAL DATA

Binder base	Acrylic resin dispersion
Specific gravity	approx. 1,0 g/cm ³
VOC value	EU limit value for the VOC content of this product (cat. A/h): 30 g/l (2010). This product contains < 1 g/l VOC.

APPLICATION INSTRUCTIONS

Substrate pre-treatment	All substrates must be free of oils, greases and loose particles.
Mixing	Ready to use Depending on the absorbency of the substrate, dilute the base material with

	water using a max. ratio of 1:2.
Application	Can be applied using a brush, roller or spraying.
Consumption	approx. 200-400 ml/m ² . Determine the precise material requirements by means of a trial coating on the object.
Information about the weather	Temperatures below + 5 °C may not arise during application and drying.
Drying time	approx. 2 - 4 hours Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.
Application by machine	Please request special information regarding machine processing.

STORAGE

Shelf life in original sealed packaging of at least 3 year when kept cool and protected against frost.

PACKAGING INFORMATION

Colour	Opaque blue and dries transparent.
Packaging unit	PP canister approx. 10 l

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material

Armatop MP

Adhesive and reinforcing compound for alsecco facade systems



PRODUCT PROPERTIES

- A material for insulation board bonding and reinforcement
- Weatherproof
- Water-repellent
- Highly water-vapour permeable
- Strong adhesive power on nearly all substrates
- Highly elastic
- Normal render mortar according to DIN EN 998-1

TECHNICAL DATA

Indicated fixed values represent average values, which can slightly vary from delivery to delivery due to the application of natural raw materials.

Binder base	Mineral binding agent according to DIN EN 197-1 and DIN EN 459-1 Resin dispersion powder
Apparent density of set mortar	approx. 1,4 g/cm ³ according to DIN EN 998-1
Adhesive pull strength	≥ 0,08 N/mm ² according to DIN EN 998-1
Adhesive pull strength on polystyrene	≥ 0,08 N/mm ²
Water vapour permeability μ	≤ 25 according to DIN EN 998-1
Water permeability	w ≤ 0,2 kg/(m ² h ^{1/2}) according to DIN EN 1062
Fire behavior	A2-s1, d0 according to DIN EN 13501
Water absorption	Class W ₂ according to DIN EN 998-1
Compressive strength	Class CS IV according to DIN EN 998-1
Diffusion-equivalent air-layer thickness (3,0 mm)	s _d < 0,1 m according to DIN EN ISO 7783

APPLICATION INSTRUCTIONS

Preparation

Mask window sills and attachment parts.

Substrate pre-treatment

All substrates must be stable, dry, level (DIN 18202 or 18203), clean and free of any residue, which can reduce adhesiveness.

Pretreat substrates according to the following specifications:

Substrate	Treatment
Mineral substrates, structurally identical to new construction	Cleaning
Renders MG PII, PIII, stable, solid	None
Renders MG PII, PIII, sandy surface	Hydro penetrating primer
Stable old coats or coatings, non-chalking	Clean with high pressure water jet
Stable old coats or coatings, chalking	Clean with high pressure water jet, prime with Primer P
Unstable old coats or coatings	Remove coat/coating, Hydro penetrating primer
Mineral wool facade insulation boards	None
Polystyrene facade insulation boards, in mint condition	Remove thickness or height discrepancies by sanding, remove any accumulated dust
Polystyrene facade insulation boards, weathered	Sand down unstable area of the surface, remove any accumulated dust

Mixing

25 kg of material (one sack) in approx. 5,7 l of water.

Mix with electric mixer or compulsory mixer.

Do not mix more material than can be used within 2 h.

Application as adhesive

Prime mineral insulation boards before application of the Armatop MP in the adhesive area.

Bond according to bead-spot or buttering-floating method.

Minimum adhesive surface: 40%.

Do not apply any adhesive in the area of the joints on the insulation boards.

Never seal joints between insulation boards using adhesive but rather with

insulation strips or PU filling foam.

Install insulation boards in offset stretcher bond formation and butt together.

Bead-spot method

Apply circumferential beading bevelled to the edge of the board, to avoid adhesive being pressed into the butt and bed joints when attaching the boards.

Apply 3 - 6 adhesive dots for 0.5 m² insulation board surface.

Never fix insulation boards using spot bonding.

Buttering-floating method

Use only for level substrates.

Immediately after application of the adhesive, position insulation boards on the substrate and butt.

Mechanical adhesive application

Apply the material to the rear side of the insulation boards using a suitable mortar pump and adhesive applicator gun.

Apply the adhesive directly to the wall when using coated lamella insulation boards (Speed-Wall). Before installing the insulation boards, comb through using a notched trowel.

After application of the adhesive, position insulation boards on the substrate and butt.

Note

***ZEILENUMBRUCH*

Application as a reinforcing layer

Installing corner rails or mesh corner beads

Before reinforcing, place completely into Armatop MP and align.

Corner rail 9078, corner rail 1031, aluminium corner rail with mesh and corner rail KU with mesh are used.

Constructing the reinforcement

Apply material mechanically or manually with a layer thickness of 3 mm .

Combing through with a 10 mm notched trowel is recommended, to check the minimum layer thickness.

Place the fibreglass mesh³² into the open mortar bed overlapping 10 cm and level using a smoothing trowel.

Embed the reinforcement mesh so that it is positioned in the middle of the reinforcement layer.

Additionally embed diagonal reinforcement strips or mesh strips (25 x 25 cm) diagonally in the reinforcement in corner areas of building openings.

Consumption

Bonding:

approx. 4,5 - 6,0 kg/m²

Reinforcement:

	approx. 1,4 kg per mm layer thickness per m ² Determine the precise material requirements by means of a trial coating on the object.
Minimum layer thickness of reinforcement	approx. 3 mm
Information about the weather	Temperatures below 3 °C may not arise during application and drying. Do not apply in direct sunlight. In the case of wind, please observe shorter setting times.
Interval	Bonding Depending on the weather conditions, reworkable after 24 h at the earliest. Anchoring and reworking of the insulation boards only after that. Reinforcement Depending on the weather conditions, reworkable after 24 h at the earliest for reworking with mineral textured renders. Depending on the weather conditions, reworkable after 5 days at the earliest for reworking with resin or silicone resin renders.
Drying time	approx. 1 - 3 days. Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.
Application by machine	Please request special information regarding machine processing.

STORAGE

Dry, protected against moisture, cool, shelf life in original sealed packaging of at least 1 year.

PACKAGING INFORMATION

Colour	Grey
Packaging unit	Paper sack approx. 25 kg net Silo: Upon request

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material
Giscode	ZP1 cement-based products, low in chromate

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The above information is based on many years of experience and tests and is provided by us to the best of our knowledge. Such information applies in addition to our application guidelines. However, we cannot accept any responsibility for the correctness of our recommendations on account of wide variety of substrates and of on-site conditions and applications which are outside our control. Any recommendations provided by our employees and deviating from these documents must be given in writing. We reserve right to make any changes on account of technical progress or building regulations. Your technical advisor will be pleased to provide the relevant product data sheets.



Mineral Wool Insulation Boards HD, DD, Slab & Slab Plus

Mineral Wool Insulation Boards HD-M

Mineral wool insulation boards for alsecco exterior wall insulation systems

Areas of application

Mineral wool insulation boards used in alsecco's ecomin exterior wall insulation system.

Mineral Wool Insulation
Boards HD, DD, Slab &
Slab Plus

Insulation boards for fixing by bonding and plugging.

Mineral Wool Insulation
Boards HD-M

Insulation boards with grooves for mechanical fixing using the rail system.

Product properties

- MW - BS EN 13162 - T5 - DS(T+) - CS(10)40 - WL(P)
- Area of application in accordance with external wall insulation
- Non-flammable
- Quality-controlled to BS EN 13162
- Approved in accordance with the ordinance on hazardous substances (GefStoffV), ordinance on prohibited chemical substances (ChemVerbotsV) and EU directive 97/69 (noteQ)
- High tensile strength
- Ozone depletion potential - zero
- Global warming potential - zero

Technical data

Fire behavior

A1 in accordance with BS EN 13501

Thermal
conductivity $\lambda_{90/90}$

HD 30mm - 40mm	0.038 W/mK
≥ 40mm	0.039 W/mK
DD 50mm - 250mm Slab	0.036 W/mK
40mm - 260mm Slab	0.036 W/mK
Plus 40mm - 200mm	0.038 W/mK
HD-m 60mm - 180mm	0.040 W/mK

Dimensions

Up to 1200mm x 600mm

Melting point

≥ 1000 °C

Water vapour diffusion
resistance μ

approx. 1 in accordance with BS EN 12086

Tensile strength at right
angles to board

≥ 10kPa

Application instructions	Application	- The insulation board is not suitable for taking loads of Spiraldübel, Do Rondo and Zyrillo, which are fixed in the insulation material only. The fixing of attachments is only possible with suitable fixing- equipment in the thickness of insulation.
		Fixing Mineral Wool (HD, DD, Slab and Slab Plus) - Select the system´s appropriate adhesive mortar for the substrate and fix using or the spot-and-bead method a notched trowel or. - If the substrate is very even, the adhesive may be applied using a notched trowel. - Press the adhesive into the bevelled edges of the insulation boards. - The boards are installed with the vertical joints staggered by at least 10 cm. The insulation material must be dovetailed at the corners of the building. - Push the insulation boards so that they abut. - Keep the horizontal and vertical joints between the boards free from adhesive. - The butt joints of insulation boards must not be positioned above the areas where different components meet (e.g. ring beams, shutter boxes, structural joints). The insulating materials should extend at least 10 cm beyond such areas, without a joint, and be securely bonded to both sides. - Fix the mineral wool insulation boards with anchors in accordance with the building inspectorate approval. The usage of counter- sunk fixings is possible with insulation thickness from - 80 mm on HD, Slab and Slab Plus insulation board.
		Mechanical fixing with the rail system (HD-M) - Spots of adhesive must be applied to ensure a 20 % bond for system weights up to 30 kg, and a 40 % bond for system weights over 30 kg. - Fix the insulation boards to the substrate using Profile H rails. - Slide in Profile V connecting rails vertically for an additional flexible connection between the insulation boards. - Push the insulation boards so that they abut. - Fix the mineral wool insulation boards with anchors in accordance with the building inspectorate approval.
	Please note:	Unrendered insulation boards attached to the façade must be protected against moisture and coated with reinforced base-coat plaster as soon as possible. Damaged insulation boards must not be installed.

Packaging	Packaging unit	See current range of products
Other information	Transport	Not a hazardous product
	Storage	Dry, protected against moisture.

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The above information is based on many years of experience and tests and is provided by us to the best of our knowledge. Such information applies in addition to our application guidelines. However, we cannot accept any responsibility for the correctness of our recommendations on account of wide variety of substrates and of on-site conditions and applications which are outside our control. Any recommendations provided by our employees and deviating from these documents must be given in writing. We reserve right to make any changes on account of technical progress or building regulations. Your technical advisor will be pleased to provide the relevant product data sheets.

UK PD 0218/0713

Armatop A

Adhesive and reinforcing compound for alsecco facade systems



AREAS OF APPLICATION

Area of application

Bonding	Bonding of mineral wool, polystyrene and cork facade insulation boards
Reinforcement	Average layered reinforcement (4 - 7 mm for single layers, max. of 10 mm for two layers) for alsecco facade systems and on coated stable substrates

PRODUCT PROPERTIES

- A material for insulation board bonding and reinforcement
- Weatherproof
- Water-repellent
- Highly water-vapour permeable
- Easy to apply
- Good adhesion to all mineral substrates, PS rigid foam and mineral wool insulation boards
- Increased mechanical load
- Normal render mortar according to DIN EN 998-1

TECHNICAL DATA

Indicated fixed values represent average values, which can slightly vary from delivery to delivery due to the application of natural raw materials.

Binder base	Mineral binding agent according to DIN EN 197-1 and DIN EN 459-1 Resin dispersion powder
Apparent density of set mortar	approx. 1,4 g/cm ³ according to DIN EN 998-1
Adhesive pull strength	≥ 0,08 N/mm ² according to DIN EN 998-1

Adhesive pull strength on polystyrene	$\geq 0,08 \text{ N/mm}^2$
Water vapour permeability μ	≤ 25 according to DIN EN 998-1
Water permeability	$w \leq 0,15 \text{ kg/(m}^2\text{h}^{1/2})$ according to DIN EN 1062
Fire behavior	A2-s1, d0 according to DIN EN 13501
Water absorption	Class W ₂ according to DIN EN 998-1
Compressive strength	Class CS III according to DIN EN 998-1
Diffusion-equivalent air-layer thickness (4,0 mm)	$s_d < 0,1 \text{ m}$ according to DIN EN ISO 7783

APPLICATION INSTRUCTIONS

Preparation	Mask window sills and attachment parts. Diligently cover glass, ceramic, brick, natural stone, varnished, glazed and anodised surfaces.
Substrate pre-treatment	All substrates must be stable, dry, level (DIN 18202 or 18203), clean and free of any residue, which can reduce adhesiveness. Pretreat substrates according to the following specifications:

Treatment	
Mineral substrates, structurally identical to new	Cleaning
renders MG PII, PIII, stable, solid	Cleaning
renders MG PII, PIII, sandy surface	Hydro penetrating primer
Stable old coats or coatings, non-chalking	Clean with high pressure water jet, prime with Primer
Stable old coats or coatings, chalking	Clean with high pressure water jet, prime with Hydro penetrating primer, then apply Primer P
Unstable old coats or coatings	Remove coat/coating, Hydro penetrating primer
Mineral wool facade insulation boards	None
Polystyrene facade insulation boards, in mint condition	Remove thickness or height discrepancies by sanding, remove any accumulated dust
Polystyrene facade insulation boards, weathered	Sand down unstable area of the surface, remove any accumulated dust

Mixing	25 kg of material (one sack) in approx. 5,8 l of water. Mix with electric mixer or compulsory mixer. Do not mix more material than can be used within 2 h.
--------	--

Application as adhesive

Prime mineral insulation boards before application of the Armatop A in the adhesive area.

Bond according to bead-spot or buttering-floating method.

Minimum adhesive surface: 40%.

Do not apply any adhesive in the area of the joints on the insulation boards.

Never seal joints between insulation boards using adhesive but rather with insulation strips or PU filling foam.

Install insulation boards in offset stretcher bond formation and butt together.

Bead-spot method

Apply circumferential beading bevelled to the edge of the board, to avoid adhesive being pressed into the butt and bed joints when attaching the boards.

Apply 3-6 adhesive dots for 0.5 m² insulation board surface.

Never fix insulation boards using spot bonding.

Buttering-floating method

Use only for level substrates.

Immediately after application of the adhesive, position insulation boards on the substrate and butt.

Mechanical adhesive application

Apply the material to the rear side of the insulation boards using a suitable mortar pump and adhesive applicator gun.

After application of the adhesive, position insulation boards on the substrate and butt.

Note

Please observe the product data sheet for the respective insulation material when deviating from the normal bonding method!

Metals, e.g. titanium zinc, can corrode in the event of direct contact with alkaline mortars.

Application as a reinforcing layer**Installing corner rails or mesh corner beads**

Before reinforcing, place completely into Armatop A and align

Reinforcement layer 4-6 mm	Mesh corner bead 10/15 or 10/23 aluminium corner rail with mesh stainless steel corner rail with mesh KU corner rail with mesh
Reinforcement layer ≥ 7 mm	Corner rail 1023
Reinforcement layer 10 mm	Corner rail 1020

For render with scraped finish 1,5 mm Corner rail 1023 on reinforcement layer

For render with scraped finish 3,0 mm Corner rail 1020 on reinforcement layer

Constructing the reinforcement

Apply material mechanically or manually in the required coat thickness using a rustproof steel trowel, comb through with notched trowel R and level with rendering darby.

Two layers are required for layer thicknesses ≥ 7 mm. In the process, the thickness of the second layer must be smaller than the first.

Before applying the second coat, the first coat must have set but not be completely dry.

Place fibreglass mesh (32, universal - Aero, K) into the open mortar bed overlapping 10 cm and level using a smoothing trowel.

Embed the reinforcement mesh so that it is positioned in the middle for reinforcement layer thicknesses up to 4 mm, in the upper half for thicknesses exceeding 4 mm and in the upper third for thick-layered reinforcement.

Additionally embed diagonal reinforcement strips or mesh strips (25 x 25 cm) diagonally in the reinforcement in corner areas of building openings.

Constructing the reinforcement for render A with scraped finish as a final coat

Create reinforcement layer thickness of approx. 7 mm.

Use mesh corner bead or place the mesh around the corners because the corner rails are placed on the reinforcement layer.

Roughen reinforcement horizontally using notched trowel 5 x 5 mm.

Constructing the reinforcement for ceramic as a final coat

Please request more information about these system models!

Consumption

Bonding:

approx. 4,5 - 6,0 kg/m²

Reinforcement:

approx. 1,4 kg per mm layer thickness per m²

Determine the precise material requirements by means of a trial coating on the object.

Layer thickness of reinforcement

Layerthickness	
Minimum:	4 mm
Maximum single layer:	7 mm
Maximum double layer:	10 mm

Information about the weather

There cannot be temperatures below + 3 °C during application and drying.

Protect against premature drying, do not apply in direct sunlight.

In the case of wind, please observe the shorter setting time.

Interval

Bonding

Depending on the weather conditions, anchoring or reworking after 24 hours at

the earliest.

Reinforcement

Depending on the weather conditions, reworkable after 2 days for reworking with mineral textured renders.

Depending on the weather conditions, reworkable after 5 days at the earliest for reworking with resin or silicone resin renders.

Drying time

approx. 3 - 5 days

Dependent on temperature, layer thickness and relative humidity.

Cleaning of tools

In a fresh state with water.

Application by machine

Please request special information regarding machine processing.

STORAGE

Dry, protected against moisture, cool, shelf life in original sealed packaging of at least 1 year.

PACKAGING INFORMATION

Colour

Grey

Packaging unit

Paper sack approx. 25 kg net

Silo: Upon request

OTHER INFORMATION

Information on safety

The information provided in the current safety data sheet applies.

Transportation

Not a hazardous material

Giscode

ZP1 cement-based products, low in chromate

Glasfasergewebe K - (Mesh K)

Reinforcement mesh for alsecco facade systems



AREAS OF APPLICATION

Reinforcement mesh in undercoat renders, non-slip and alkali-resistant for embedding in render layers consisting of: Armatop A. To be applied when the surfaced is finished with a hard decorative finish

PRODUCT PROPERTIES

- Alkali-resistant
- Great tensile strength
- Non-slip
- Softener free

TECHNICAL DATA

Weight per unit area	approx. 160 g/m ²
Mesh size	approx. 3,5 x 3,5 mm ²
Tensile strength	Warp: ≥ 2000 N/5 cm Weft: ≥ 2000 N/5 cm

APPLICATION INSTRUCTIONS

Application	Insert the mesh horizontally or vertically into the open reinforcing compound and level using a smoothing trowel. The ends of the mesh strips must always overlap by at least 10 cm. Embed mesh in the upper third of the reinforcing compound or render layer, full-surface covering with reinforcing compound.
Consumption	approx. 1,1 m ² /m ²

PACKAGING INFORMATION

Colour	White with "K" marking
Packaging unit	Roll 55 m ² , pallet 1.650 m ²

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Verlegemörtel A - (Bedding Mortar A)

Mineral thin-bed adhesive for installing split face tiles and ceramic tiles, C 2 S 1 according to EN 12004



AREAS OF APPLICATION

Bonding of split face tiles and ceramic tiles in the alsecco facade systems.
Bonding of ceramic surfaces on other suitable substrates.

PRODUCT PROPERTIES

- Water-repellent
- Water-vapour permeable
- Strong adhesive power
- Particularly suitable for application in alsecco facade systems
- Deformable cement-based mortar for higher requirements

TECHNICAL DATA

Binder base	Mineral binding agent according to DIN EN 197-1 Resin dispersion powder
Apparent density of set mortar	approx. 1,55 g/cm ³
Adhesive pull on concrete	≥ 1,0 N/mm ²

APPLICATION INSTRUCTIONS

Substrate pre-treatment	All substrates must be stable, level, clean, dry and free of any residue, which can reduce adhesiveness.
Mixing	25 kg of material (one sack) in approx. 6,0 - 6,5 l of water. Mix with electric mixer or compulsory mixer.
Application	• Using a trowel, apply mortar to the substrate as well as to the split face tiles or ceramic tiles and comb through with a notched trowel (buttering-floating method). • Ceramic: notch size 8 mm • Split face tiles: notch size 10 mm

	• Only apply as much adhesive as can be faced with split face tiles or ceramic tiles before skin formation.
Consumption	approx. 5,0kg/m ² depending on the notch size of the selected notched trowel Determine the precise material requirements by means of a trial coating on the object.
Information about the weather	There cannot be temperatures below + 3 °C during application and drying. Protect against premature drying, do not apply in direct sunlight. In the case of wind, please observe the shorter setting time.
Drying time	approx. 2 - 3 days. Dependent on temperature and relative humidity.
Cleaning of tools	In a fresh state with water.

STORAGE

Dry, protected against moisture, cool, shelf life in original sealed packaging of at least 1 year.

PACKAGING INFORMATION

Colour	Grey
--------	------

OTHER INFORMATION

Information on safety	The information provided in the current safety data sheet applies.
Transportation	Not a hazardous material
Giscode	ZP1 cement-based products, low in chromate

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Klinkerriemchen

Ceramic brick slips for a decorative surface design for application in external thermal insulation cladding systems.



AREAS OF APPLICATION

Brick strips as facing in the alsecco facade insulation systems

PRODUCT PROPERTIES

- Frost-resistant according to DIN EN ISO 10545-12
- Fireproof
- Colourfast and light-resistant
- Extensive variety of designs

TECHNICAL DATA

Water absorption

Refer to delivery sheet.

≤ 6 % according to DIN EN ISO 10545-3 for application in flame-retardant system models based on EPS insulating materials.

≤ 3 % according to DIN EN ISO 10545-3 for application in fireproof system models based on mineral wool insulating materials.

Formats

	Normal size (NF)	thin size (DF)
Brick slips	240 x 71 mm	240 x 52 mm
Corner bricks	240 x 71 x 115 mm	240 x 52 x 115 mm

Other sizes upon request.

Thickness

6 - 15 mm

Pore volume

≥ 20 mm³/g according to DIN 66133

Maximum pore radii > 0,2 µm according to DIN 66133

APPLICATION INSTRUCTIONS

Substrate pre-treatment All substrates must be stable, level and free of any residue, which can reduce adhesiveness.

Application The provisions of approval Z-33.46-419 must be observed

Bonding brick slips

Brick slips are bonded with mortar A using the buttering-floating method (combined method according to DIN EN 18515-1) after sufficiently hardening. In the process, comb through the mortar applied to the substrate using a notched trowel 10 x 10 mm. Before applying the ceramic finish to the prepared adhesive bed, also coat the rear side of the brick slip or the tile with mortar. Float the ceramic finish into the mortar bed by gently pushing forward. Please avoid cavities behind the finish as far as possible.

Only apply as much mortar within the set up height markings as can be laid within the pot life of the adhesive mortar.

When laying the product, make sure that the layer thickness of the adhesive mortar is at least 3 mm after setting. The joints should be evenly scraped out and freed of mortar after the coat has set.

It is recommended to lay the brick slips from bottom to top by laying the corner bricks in the corners first.

Joint formation

The bricks are pointed with mineral mortar after a minimum waiting period of four days.

Depending on the surface of the brick slip or the selected type of joint, mortar A (pointing with brick jointer) or mortar AS (slurry grouting) is used.

The workability of these products is described in the product data sheet for mortars.

Creating elastic joints:

Due to the to be expected hygrothermal expansion, elastic joints must also be created as intermediate joints in addition to the expansion joints and connection joints required for the system.

Intermediate joints are led up to the insulation through the reinforcement layer. The joint is sealed with elastic joint sealant. The basis of joint planning and joint configuration is DIN 18515. Backfilling cord and joint sealer MS are used.

The arrangement of the intermediate joints largely depends on the geometry of the facade.

Intermediate joints are normally arranged:

with a vertical continuous joint on all outer and inner corners of the building. This joint is not created directly on the external corner but depending on the situation,

- offset in the surface by one or two bricks, for severely heterogeneous surfaces, on which notch stress can result,
- at material changeovers in the final coat, e.g. in the transition to render surfaces.

When doing without required joints or too small joint sizes in the case of

expansion joints, cracks in the coating or on the joint flanks must be expected. Joints are subject to routine inspections. Therefore, facade surfaces and joints should be routinely subjected to visual inspections and if necessary, repaired.

Consumption

	Brick slips	Corner bricks
Normal size (NF)	approx. 48 Stück / m ²	approx. 12 Stück / m
Thin size (DF)	approx. 64 Stück / m ²	approx. 16 Stück / m

Preparations for installing brick slips

The precise consumption depends on the joint width and the type of bond.

Evenly divide the surfaces to be laid with continuous height markings (chalk line), to define work steps.

For a normal format (NF), a work step has a height of approx. 33 cm (4 veneer layers each 71 mm and 4 bed joints each 12 mm).

For thin size (DF), a work step has a height of approx. 32 cm (5 veneer layers each 52 mm and 5 bed joints each 12 mm).

Observe fixed lines when calibrating (e.g. windows, doors, brick-on-end courses, etc.)

STORAGE

Dry

PACKAGING INFORMATION

Description	Size mm	Water absorption %	Description	Size mm	Water absorption %
KR-Design 01	240 x 71 x 10	< 3,0	KR-Design 25	240 x 71 x 14	< 3,0
KR-Design 02	250 x 52 x 15	< 6,0	KR-Design 26	240 x 71 x 15	< 3,0
KR-Design 03	240 x 71 x 14	< 3,0	KR-Design 27	240 x 71 x 10	< 6,0
KR-Design 04	240 x 71 x 14	< 6,0	KR-Design 28	240 x 71 x 10	< 3,0
KR-Design 05	240 x 52 x 15	< 3,0	KR-Design 29	240 x 71 x 10	< 3,0
KR-Design 06	240 x 52 x 14	< 6,0	KR-Design 31	240 x 71 x 10	< 3,0
KR-Design 07	240 x 71 x 14	< 6,0	KR-Design 32	240 x 71 x 10	< 3,0
KR-Design 08	240 x 52 x 15	< 6,0	KR-Design 33	240 x 71 x 14	< 6,0
KR-Design 09	240 x 71 x 14	< 6,0	KR-Design 34	240 x 71 x 14	< 3,0
KR-Design 10	240 x 71 x 15	< 6,0	KR-Design 35	240 x 71 x 14	< 3,0
KR-Design 11	240 x 71 x 14	< 6,0	KR-Design 36	240 x 52 x 15	< 3,0
KR-Design 12	240 x 71 x 9	< 6,0	KR-Design 37	240 x 71 x 10	< 6,0
KR-Design 13	240 x 71 x 10	< 6,0	KR-Design 38	240 x 71 x 9	< 3,0
KR-Design 14	240 x 71 x 10	< 6,0	KR-Design 39	240 x 71 x 14	< 3,0
KR-Design 15	240 x 71 x 14	< 6,0	KR-Design 40	240 x 71 x 14	< 3,0
KR-Design 16	240 x 71 x 14	< 3,0	KR-Design 41	240 x 52 x 15	< 6,0
KR-Design 17	240 x 52 x 15	< 6,0	KR-Design 42	240 x 71 x 10	< 6,0
KR-Design 18	240 x 71 x 10	< 3,0	KR-Design 43	240 x 71 x 10	< 6,0
KR-Design 20	240 x 71 x 15	< 6,0	KR-Design 44	240 x 71 x 15	< 3,0
KR-Design 21	240 x 71 x 15	< 3,0	KR-Design 45	240 x 71 x 15	< 3,0
KR-Design 22	240 x 71 x 14	< 6,0	KR-Design 46	240 x 52 x 15	< 6,0
KR-Design 23	240 x 71 x 14	< 3,0	KR-Design 47	240 x 52 x 15	< 6,0
KR-Design 24	240 x 52 x 15	< 3,0	KR-Design 48	240 x 71 x 14	< 6,0

Packaging unit

Box

OTHER INFORMATION

Transportation	Not a hazardous material
Order	To avoid variations in batches, the total amount of brick slips needed for a construction project should be ordered at the same time. Subsequent deliveries can vary in shape and colour.
General information	Laying brick slips on lightweight undercoat renders is usually not permitted. Insulation boards in ETICS with brick slips must have at least 60% of an adhesive surface to the adhesive base according to the approval. The anchoring of the insulation boards is usually carried out through the reinforcement mesh (observe approval). All individual layers must be sufficiently dry before conducting the next work step. The brick slips must be taken from different packages when installing them.

Fugenmörtel A - (Joint Mortar A)

Mineral mortar according to DIN EN 998-2 for ceramic surfaces in the alsecco facade systems



AREAS OF APPLICATION

Grouting of ceramic finishes using a joint trowel.

PRODUCT PROPERTIES

- Weatherproof
- Resistance to frost and deicing salts
- Resistant to water penetration under driving rain.
- Water-repellent
- Minimal shrinkage deformation
- Permeable
- Particularly suitable for use in ETICS

TECHNICAL DATA

Binder base	Mineral binding agent according to DIN EN 197-1 with special additives
Apparent density of green mortar	approx. 2,0 g/cm ³
Compressive strength	Category M 10 according to DIN EN 998-2

APPLICATION INSTRUCTIONS

Preparation	Joint flanks must be free of any residue, which can reduce adhesiveness. Establish an even joint depth of at least 6 - 20 mm.
Substrate pre-treatment	Generously pre-wet the surfaces, remove standing water before pointing.
Mixing	Mix 25 kg of material (one sack) with approx. 2,5 l of water until earth-moist. Mix using a slow running mixer or compulsory mixer. Always use the same amount of water in relation to the amount of powder, to avoid deviations in colour. The mixed mortar has an appropriate consistency if the mortar does not fall apart but is also not particularly sticky after having been pressed together in your hand and then rolled back and forth in the open palm of your hand. Do not mix more material than can be used within 1 hour.

Application	Fill the joint with mortar and compact with a tuck pointer for a flush finish. First fill the vertical joints, and then the horizontal joints. Carefully sweep the excess jointing mortar from the ceramic cladding. Remove any contamination, hazing and residue on the ceramic surface with a suitable cleaning agent (please ask for technical advice if needed). The Newton's rings effect (slightly iridescent surface discolorations) may occur on engobed and especially on dark ceramic claddings. This effect can be removed with suitable cleaning agents (please contact us for a recommended product). Haze removers or other cleaning agents may affect the colour of the joint. These products should therefore be tested first on inconspicuous sections. Please contact us for technical advice.
Consumption	Normal size: approx. 3 - 6.5 kg/m² Thin size: approx. 4.5 - 8 kg/m² Other sizes: depending on number of joints and joint depth
Information about the weather	The material, substrate and air temperatures cannot fall below +5 °C or exceed +30°C during application and drying. Do not apply in direct sunlight or to heated surfaces. Protect against quick drying.
Cleaning of tools	In a fresh state with water.

STORAGE

Minimum storage life of 12 months if kept dry, protected against moisture, cool and in original sealed packaging.

PACKAGING INFORMATION

Colour	Use material from one batch number for contiguous surfaces. Natural colour shifts and colour variations are possible when mixing batches and under different drying conditions.
--------	---

Colour:

Grey (1.5)	Cream (2.5)	White (3.5)
Antracit (4.5)	Black (5.5)	Cream-white (6.5)
Light grey (7.5)	Medium grey (8.5)	Red (9.5)
brown (10.5)	Sulfex (12.5)	Historic (37.5)
Alt-Stuhr (13.5)	DGB (14.5)	Architect (15.5)
Schwerin (16.5)	Dömitz (17.5)	Varel (18.5)
Lastrup (20.5)	Aprikot (21.5)	Venezianisch (22.5)
Old-white(23.5)	Yellow (24.5)	Paris (25.5)

Norderney (26.5)	Alt-Stadt (27.5)	Stuhr-hell (28.5)
Südsee (29.5)	Evening-red (30.5)	Strand (31.5)
Nature (32.5)	Teneriffa (33.5)	Afrika (34.5)
Loam (35.5)		

Packaging unit Paper sack approx. 25 kg net

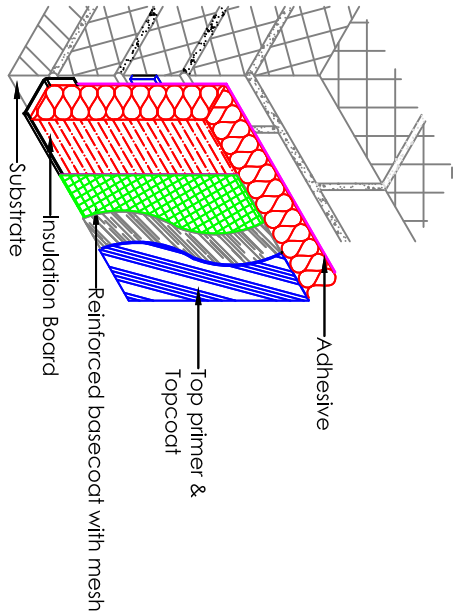
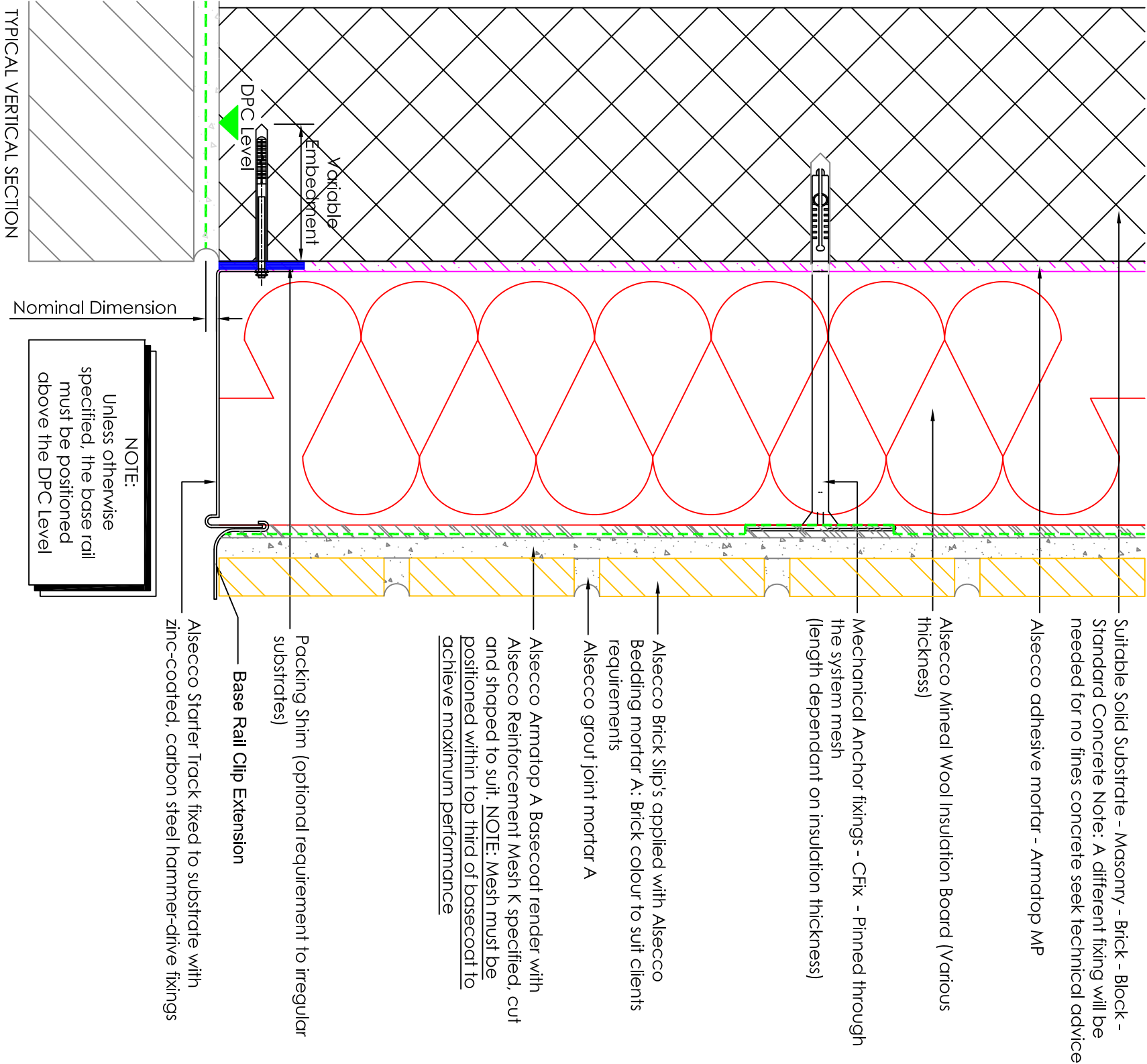
OTHER INFORMATION

Information on safety The information provided in the current safety data sheet applies.
Transportation Not a hazardous material
Giscode ZP1 cement-based products, low in chromate

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The Contractor is to comply in all respects with current Building Legislation, British Standards, Building Regulations etc, whether or not specifically stated on this drawing.

This drawing is not intended to show details of foundations, ground conditions or ground contaminants.

Notes

- Details with a red light attributed present areas that are not fully insulated and as such can lead to a thermal bridge. In some cases these thermal bridges are caused by pipe outlets or existing penetrations such as balconies that are unavoidable. The detail should be considered in the context of the property and current ventilation by the EEM Designer



Revisions	Date	Amendment	Name
1220	12/06/2018	200mm 400mm 600mm 800mm 1000 1200 1400 1600 1800 2000	
1100	12/06/2018	100mm 200mm 300mm 400mm 500mm 600mm 700mm 800mm 900mm 1000mm 1100mm 1200mm 1300mm 1400mm 1500mm 1600mm 1700mm 1800mm 1900mm 2000mm	
100	12/06/2018	100mm 200mm 300mm 400mm 500mm 600mm 700mm 800mm 900mm 1000mm 1100mm 1200mm 1300mm 1400mm 1500mm 1600mm 1700mm 1800mm 1900mm 2000mm	



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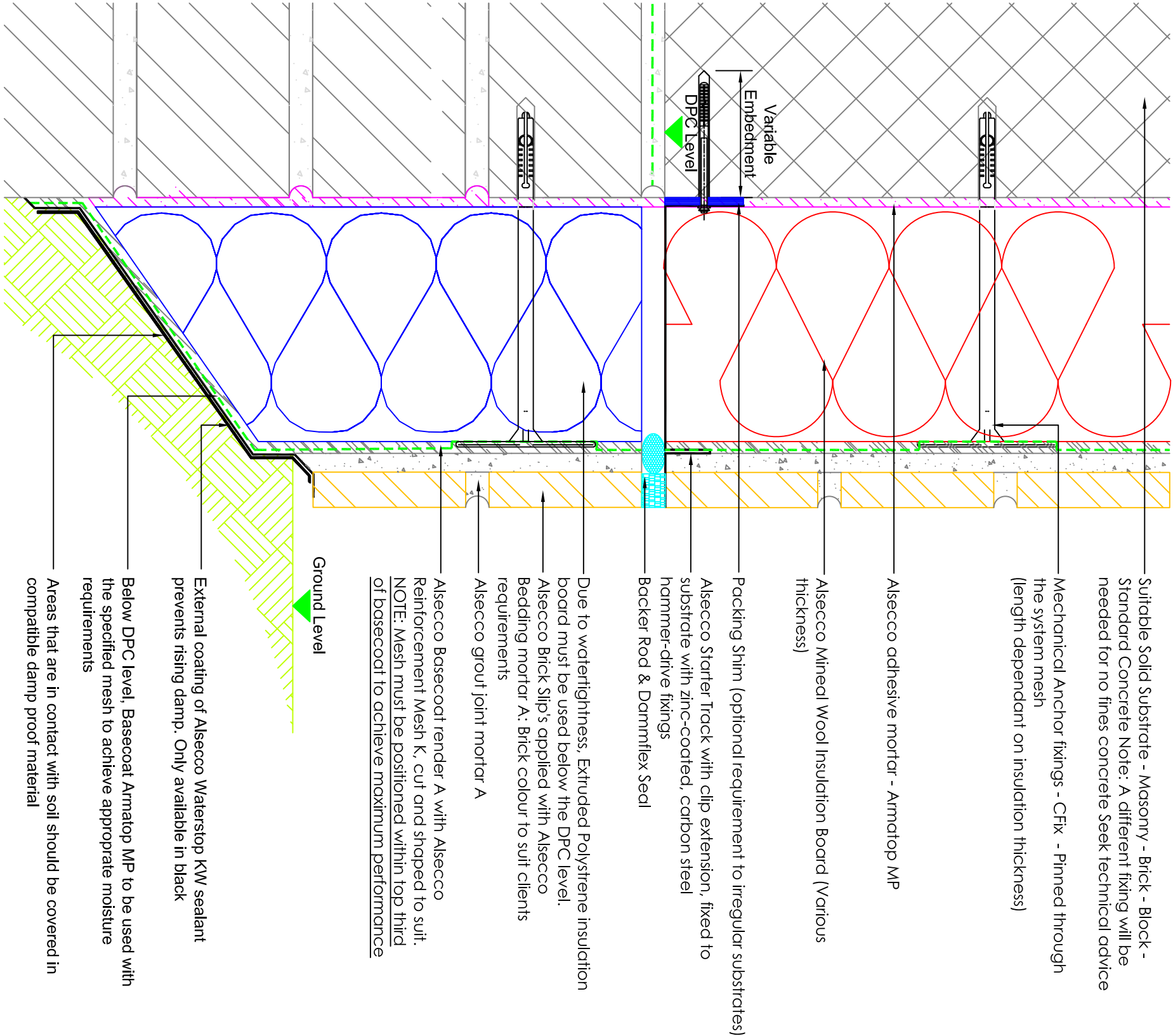
Client: STANDARD DETAILS

Project: STANDARD DETAILS

Title: BASE RAIL DETAIL

Status: Construction
Drawn: SJB
Date: 13/06/2018
Checked: MPR
Scale: 1:2 @A3

Job No: 0000000 Dwg No: LR-EC400C-SOL-001 Rev:



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Notes

-  - Detail with a green light attributed fully inside the thermal path through the external wall construction and provide a high level of confidence that condensation will not occur at this detail junction as a result of the application of the EWM system - the detail should still be considered in the context of the property and current ventilation by the EEM Designer.

Revisions

Name	Amendment	Date
For guidance only. Do not scale off this drawing		
1:20 - 0'	200mm 400mm 600mm 800mm 1000	1200 1400 1600 1800 2000
1:100 - 0'	1m 2m 3m 4m 5m 6m 7m 8m 9m 10m	
1:250 - 0'	1m 2m 3m 4m 5m 6m 7m 8m 9m 10m	
1:5 - 0'	100mm 200mm 300mm 400mm 500mm 600mm 700mm 800mm 900mm 1000mm	



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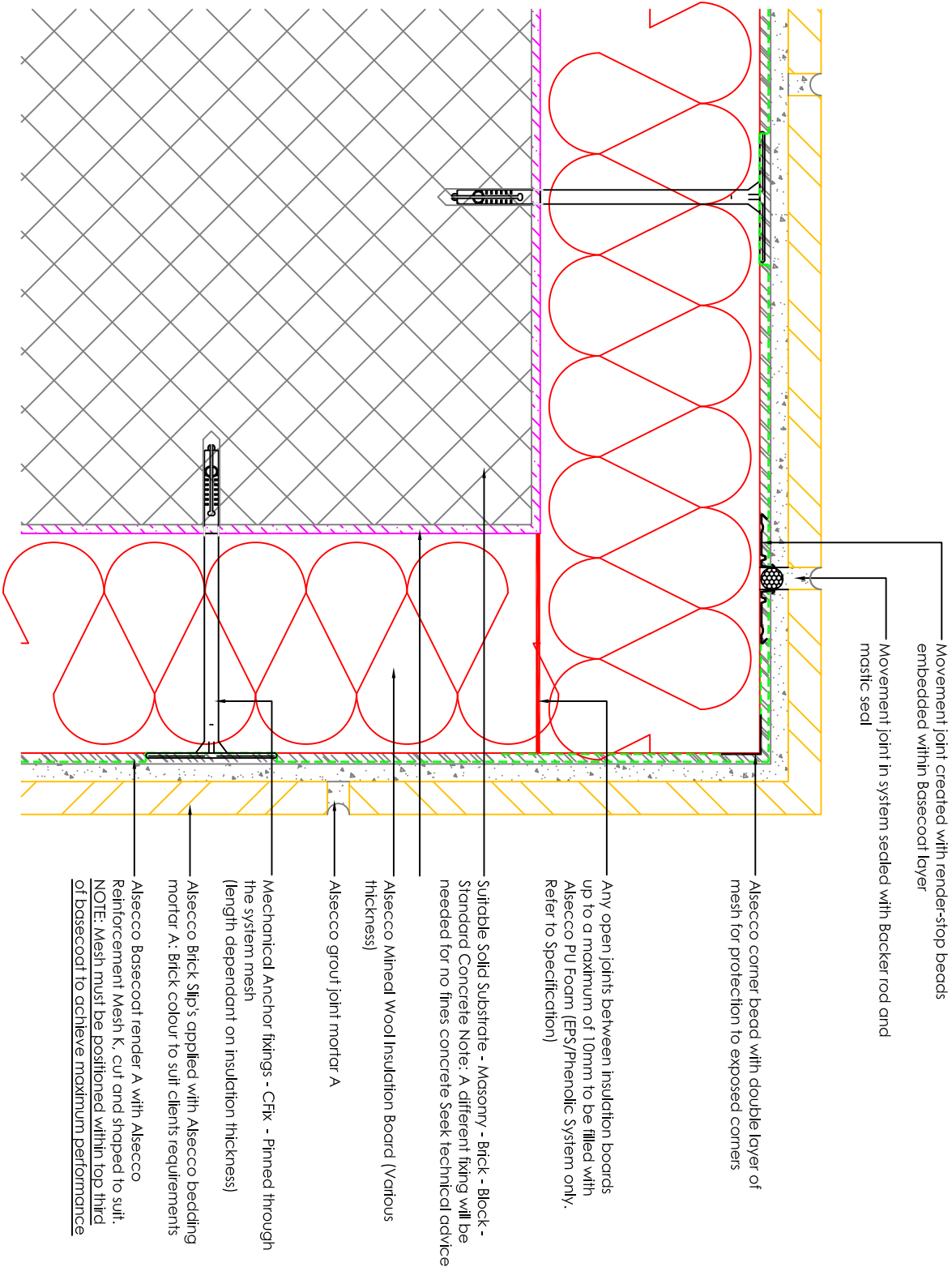
Client: STANDARD DETAILS

Project: STANDARD DETAILS

Title: BELOW DPC DETAIL

Status: Construction
Drawn: SJB
Checked: MPR
Date: 13/06/2018
Scale: 1:2 @A3

Job No: 0000000 Dwg No: LR-EC400C-SOL-002 Rev:



Standard details are indicative only and must be read in conjunction with the specification, 88A certification and other relevant approvals and standards

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The Contractor is to check and verify all building and site dimensions, before work commences.

The Contractor is to comply in all respects with current Building Legislation, British Standards, Building Regulations etc, whether or not specifically stated on this drawing.

This drawing is not intended to show details of foundations, ground conditions or ground contaminants.

Notes



- Detail with a green light attributed fully inside the thermal path through the external wall construction and provide a high level of confidence that condensation will not occur at this detail junction as a result of the application of the EWM system - the detail should still be considered in the context of the property and current ventilation by the EEM Designer.

Revisions Date Amendment

Name



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Client: STANDARD DETAILS

Project: STANDARD DETAILS

Title: EXTERNAL CORNER DETAIL

Status: Construction Checked: MPR
Drawn: SJB Date: 13/06/2018 Scale: 1:2 @A3

Job No: 0000000 Dwg No: LR-EC400C-SOL-003 Rev: