



System Information Basic 5

Glass Chippings also available seek technical advice

alsecco Basic 5

M21 EXTERNAL INSULATED RENDER SYSTEM To be read with Preliminaries/General conditions.
To be read in conjunction with Approval Certificate, Technical Data Sheets and Application Guidelines

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 'Basic 5' EWI System - Adhesive and mechanical 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		In all cases, substrate should be deemed fit for purpose prior to the application of Alsecco External Wall Insulation
	Location:	Example
	Substrate:	Masonry

1.1 System Components:	Sub Primer:	Sub Primer HT/P where required
	Adhesive:	Armatop MP
	Insulation Type:	Expanded Polystyrene (Graphite Enhanced)
	Thickness:	100mm
	'U'-Value:	TBC W/m ² K
	Basecoat:	Spardash DLX (5-8mm) & Reinforcing Mesh 32
	Top Primer:	Not Required
	Topcoat:	Dash Receiver & Coloured Chippings
	Paint Finish:	Not Required
	Deco Profiles:	No
	Brick Rend/Slip/Flex:	No
	Ashlar Detail Mesh:	No

1.2 Accessories:	Base Rail:	A105	with clip extension profile
	Stop Beads:	W105	
	Corner Beads:	CB14	
	Mechanical fixings:	CFIX 135 & *FF DMH 8/35 x 170 E	** (See notes below)
	Dammflex:	Yes	
	Sealing Strip 13/2:	Yes	
	APU Bead:	Optional	
	PU Foam:	Yes	
	PU Flex:	Yes	
	Disbon Primer:	Only where exposed steel is present	
	Balcony Drip Bead:	No	
	Expansion Joints:	Required Only Where Present in Substrate	
	Alsecco Cill:	No	

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.

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

-Lam100 - Lamella Fire Breaks required to be installed in line with section 2.8

* FF - Fire Fixing must be applied through the system mesh at a rate of 1 per m² above the second storey. (Please

**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:	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: Expanded Polystyrene (EPS) Board. To BS3837 Part 1 2004. Thermal Conductivity: 0.032 W/mK; Flame Retardant Class P to BS476 Part 5. ii: Thickness shall be as indicated under Section 1.1. iii: EPS Board shall be aged, prior to cutting, by air drying for 6 weeks or equivalent kiln drying. iv: Maximum size of EPS Boards shall not exceed 1200 x 600mm v: EPS Boards shall exhibit minimum 80% bead fusion and physical properties according to BS3837 Part 1 2004.	
	1.7 Fire Barriers:	To comply with the recommendations of the BRE, horizontal Fire Barriers require to be placed at every floor level above 2 stories. (Ground Floor do not require these barriers). These barriers comprise of 1000 x 200mm Rock fibre Lamella Panels, applied in a continuous strip around the building. All fire barriers must be double meshed with an overlap of 200mm above and below the barrier (where applicable.)	
	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 Carbon Fibre with Carbon mesh can be used in areas at risk of impact damage.	
	1.11 Topcoat Primer:	In accordance with Section 1.1	
	1.12 Topcoat:	Alsecco through coloured Topcoat, in accordance with Section 1.1	
	Execution	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 substrata must be free of loose particles, dust, grease and oils, or any adhesion reducing substance.
	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.	

Execution	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.
	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.
	2.7	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	The Lamella Mineral Wool Fire Barriers are fixed at the desired position and are applied with 100% adhesive mortar. This is then fixed with stainless steel mechanical fixings at a maximum of 400mm centres. The reinforced basecoat must have additional reinforced mesh applied, above and below the Firebreak barrier, overlapping by 200mm.
	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 or PU foam - 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 EPS Board surface must be carried out over the whole surface to achieve a smooth, even finish, prior to application of a reinforcing coat. For curved wall applications, rasping must achieve a smoothly curved surface with no visible faceting or unevenness.
	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 Spardash DLX Basecoat render to the fixed insulation boards approximately 5mm minimum using a stainless steel trowel. Then trowel over with a 10mm toothed 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 apply additional layer of 1-2mm of basecoat render while still wet and smooth off to finished thickness using a stainless steel trowel. 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	2.17 Topcoat Primer not required with Basic 5
	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	Apply specified topcoat render (see section 1.1) using a stainless steel trowel and immediately create the desired effect using a plastic finishing trowel. Drying time of topcoat render is approximately 1 to 2 days (weather dependant).
	2.20 Deco Profiles	<p>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.</p> <p>b. Profiles are cut to size using a hacksaw with a carbide blade and a mitre block.</p> <p>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.</p> <p>d. Smooth off all excess profile adhesive, once all joints are fully sealed.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Profiles coated with two coats of Alsicolor, Si façade or Hydro Equalising finish in the desired colour</p>

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, including insulation boards, 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 at finish 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

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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

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FASSADENKOMPETENZ

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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FASSADENKOMPETENZ

Polystyrene Insulation Boards

Polystyrene insulation boards for alsecco external wall insulation systems in accordance with BS EN 13163

Areas of application	
	Insulation boards for the alsecco external wall insulation systems basic and Alprotect.
PS 15 SE, EPS 70 Facade insulation board (White, Graphite Enhanced)	Insulation boards with square edges for fixing by bonding or bonding and anchoring.
PS 15 SE M facade insulation board, (white, graphite enhanced)	Insulation boards with grooves for mechanical rail-system fixing.

Product properties	
	<ul style="list-style-type: none"> ■ EPS - BS EN 13163 - T2 - L2 - W2 - S2 - P4 ■ Tensile strength - see technical data below ■ Flameretardant Euro Class E ■ Quality controlled according to BS EN 13163 ■ Dimensionally stable ■ CFC-free, HCFC-free ■ Ozone depletion potential - Zero ■ GWP - <5

Technical data	Fire Class	BS EN 13501 Euro Class E
Thermal conductivity $\lambda_{90/90}$		
	PS 15 SE EPS 70 - White	0.037 - 0.038 W/(mK)
	PS 15 SE EPS 70 - Graphite enhanced	0.030-0.032 W/(mK)
	PS 15 SE M EPS 70 - White	0.037 - 0.038 W/(mK)
	PS 15 SE M EPS 70 - Graphite enhanced	0.030-0.032 W/(mK)
Dimensions	PS 15 - White	Upto 1200mm x 600 mm
	PS 15 - Graphite enhanced	Upto 1200mm x 600mm
	PS 15 SE M EPS 70 - White	500mm x 500mm
	PS 15 SE M EPS 70 - Graphite enhanced	500mm x 500mm

Technical data	Tensile strength at right angles to board (to BS EN 13163)	PS 15 white	≥ 100 kPa
		PS 15 graphite enhanced	≥ 100 kPa
		PS 15 M white	≥ 150 kPa
		PS 15 M graphite enhanced	≥ 150 kPa
	Water vapour diffusion resistance μ	20/40 in accordance with DIN EN 13163	

Application instructions	Preparation	The PS 15, graphite enhanced facade insulation boards have to be protected against strong sunlight during storage and installation. (Do not leave them out in the sun, take suitable measures to shade the applied insulation boards and do not leave them exposed for longer than necessary without a covering reinforcing layer.)
	Substrate pre-treatment	Pre-treat substrates in accordance with the application guidelines for the adhesives.
	Application	<p>Fixing in bonded or bonded and mechanically fixed systems:</p> <ul style="list-style-type: none"> - Select the system's appropriate adhesive mortar for the substrate and fix using the spot-and-bead method. The adhesive must cover at least 50 % of the area. - If the substrate is even, the adhesive may be applied using a notched trowel. - Push the insulation boards so that they abut. - Keep the horizontal and vertical joints between the boards free from adhesive. - 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.

Application instructions	Application	
	<ul style="list-style-type: none"> - 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. - Open joints between insulation boards measuring < 0.5 cm should be sealed with Filling Foam B1, while large joints should be sealed with strips of insulating material. - If the substrates are suitable for adhesive, additional structural anchors may be inserted as required. - If the substrates are not suitable for adhesive, anchors must be inserted in accordance with the general building inspectorate approval for exterior wall insulation systems. <p>Mechanical fixing using the rail system</p> <ul style="list-style-type: none"> - Apply spots of adhesive to achieve a 20 % bond. - Fix the insulation boards to the substrate using Profile H rails. - Slide the Profile V in vertically to provide an additional connection between the insulation boards. - Push the insulation boards so that they abut. - Open joints between insulation boards measuring < 0.5 cm should be sealed with PU Foam Filler, while large joints should be sealed with strips of insulating material. - If required insert additional anchors to fix the insulation boards in accordance with the general building inspectorate approval for exterior wall insulation systems. <p>Subsequent work</p> <ul style="list-style-type: none"> - Sand down any unevenness and remove the dust generated (see brochure on application of exterior wall insulation systems). 	
	Please note:	<p>Unrendered insulation boards attached to the façade must be protected against moisture and coated with reinforced base-coat plaster as soon as possible.</p> <p>Damaged insulation boards must not be installed.</p>
Packaging	Packaging unit	See current range of products
Other information	Transport	Not a hazardous product
	Storage	Dry, protected against moisture and sunlight.

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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.

PD 0219/0713

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.
-------------	---

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
		<hr/>	
	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
		<hr/>	
	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	
		<ul style="list-style-type: none"> - 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	
		<ul style="list-style-type: none"> - 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)	

Spar Dash Receiver min - (Spar Dash DLX)

Mineral reinforcing compound and base for spar dash chippings



AREAS OF APPLICATION

Material for reinforcement and finishing coat (Spar Dash Receiver min) for integration of fine to coarse graining (Spar Dash Chippings).

For alsecco external thermal insulation cladding systems ecomin and basic on surfaces with a high degree of mechanical stress.

PRODUCT PROPERTIES

- Classified in the highest stress group according to EOTA
- Increased mechanical load
- Good adhesion to all mineral substrates and PS rigid foam
- Highly water-vapour permeable
- Normal render mortar according to DIN EN 998-1
- Water-repellent
- Weatherproof

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 Resin dispersion powder
Apparent density of set mortar	approx. 1,5 g/cm ³ according to DIN EN 998-1
Adhesive pull strength	≥ 0,08 N/mm ² according to DIN EN 998-1
Water vapour permeability μ	≤ 25 according to DIN EN 998-1
Water permeability	w ≤ 0,15 kg/(m ² h ^{1/2}) according to DIN EN 1062 Class W 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

APPLICATION INSTRUCTIONS

Preparation Mask window sills and attachment parts.
Diligently cover glass, ceramic, brick, natural stone, varnished, glazed and anodised surfaces.
Use suitable measures to protect building openings (e.g. windows) against rockfall.

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

Mixing 25 kg of material (one sack) in approx. 4,5 l of water.
Mix with electric mixer or compulsory mixer.

Application as a reinforcing layer

Installing corner rails

Layer thickness \geq 8 mm	Corner rail 1023
Layer thickness \geq 10 mm	Corner rail 1020
Layer thickness \geq 14 mm	Corner rail 1013

Place the corner rails completely into the reinforcing compound and align.

Constructing the reinforcement

Apply material mechanically or manually using a bucket trowel and rustproof steel trowel and level with a rendering darby.

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

Embed the mesh in the upper third 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.

Application as a texture layer After the reinforcement layer has dried, apply the Spar Dash Receiver again.
Depending on the grain size of the graining to be added, the finishing coat is applied with Spar Dash Receiver and swiped smooth and levelled.

The layer thickness for coarse graining (max. of 11 mm) should correspond to approx. half the largest grain diameter.

Only apply as much Spar Dash Receiver as can be covered with Spar Dash Chippings before skin formation.

Toss or blow Spar Dash Chipping into the open textured coating and pat down gently.

Consumption Spar Dash Receiver: approx. 1.4 kg per mm layer thickness per m²
Spar Dash Chippings: approx. 12-15 kg/m², depending on grain size and type of application
Determine the precise material requirements by means of a trial coating on the



object.

Layer thickness	Minimum coat thickness		Maximum coat thickness	
	Reinforcement layer	5 mm		9 mm
Textured coating	4 mm		6 mm	

Information about the weather	There cannot be temperatures below + 3 °C during application and drying. Do not apply in direct sunlight. In the case of wind, please observe the shorter setting time. Protect fresh render against rain and premature drying.
Interval	Reinforcement layer can be reworked after at least 48 hours. At the same time, the substrate must be evenly dry.
Drying time	approx. 2 - 3 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	These are natural products and mineral mortar. Natural colour shifts and colour variations are possible when mixing batches and under different drying conditions. Mortar, which accumulates on the grain, can lead to changes in the colour picture on the facade.
Packaging unit	Paper sack approx. 25 kg net

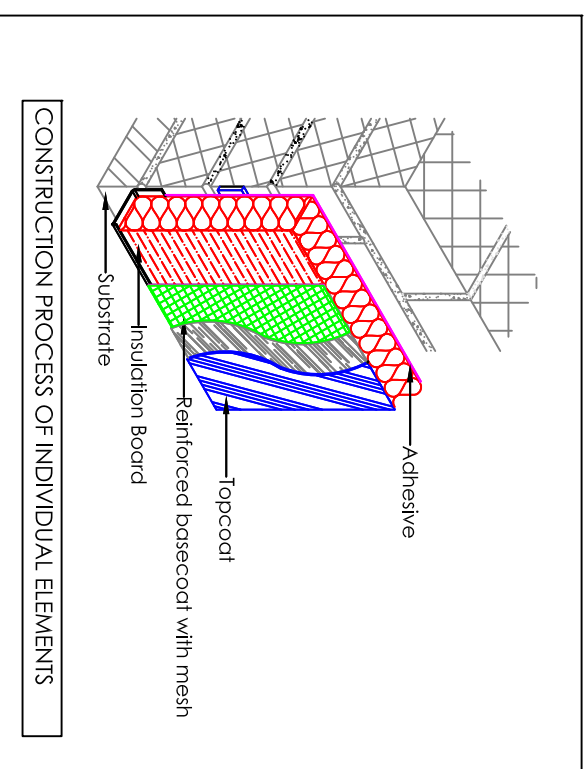
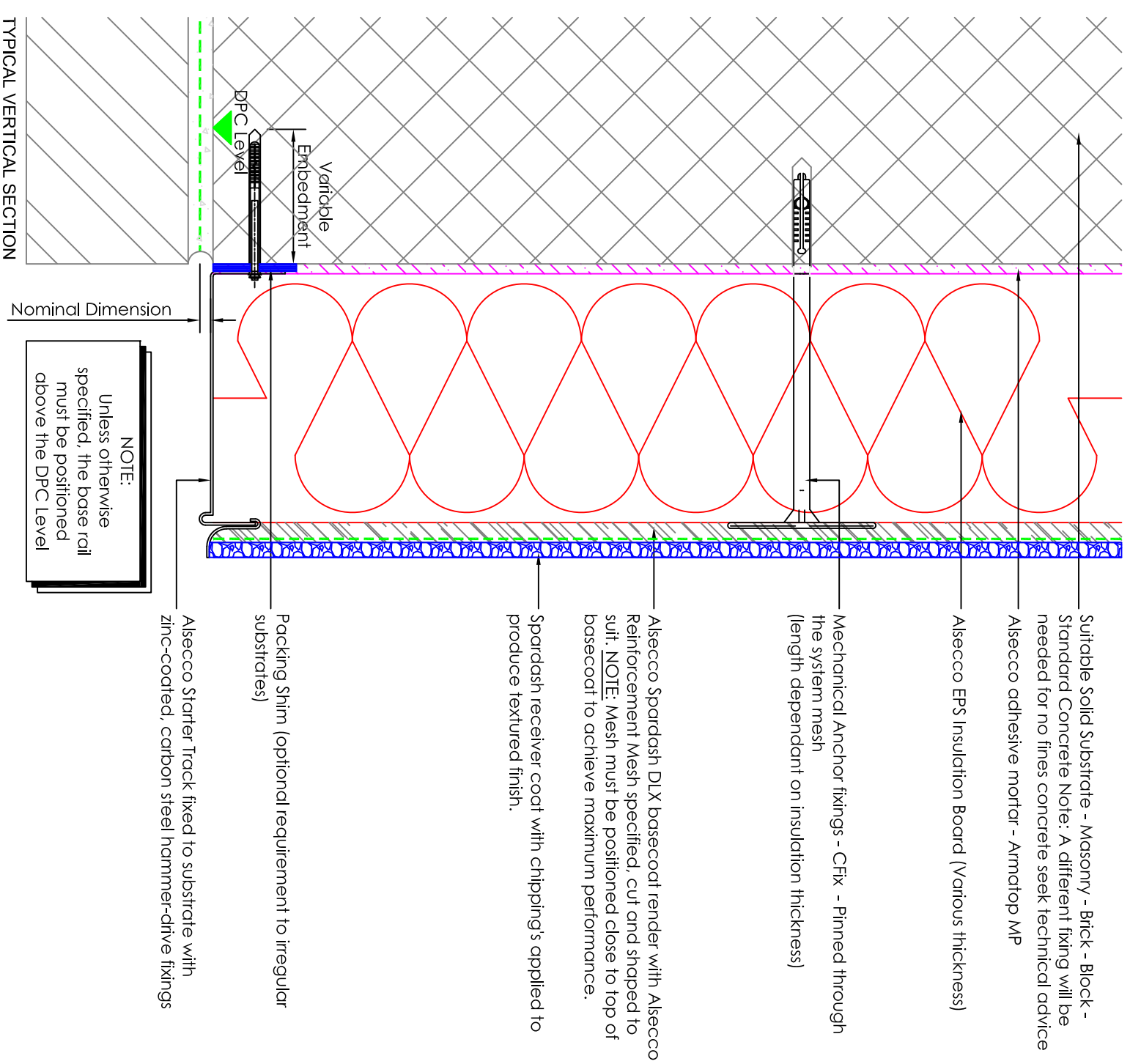
OTHER INFORMATION

Transportation	Not a hazardous material
Giscode	ZP1 cement-based products, low in chromate

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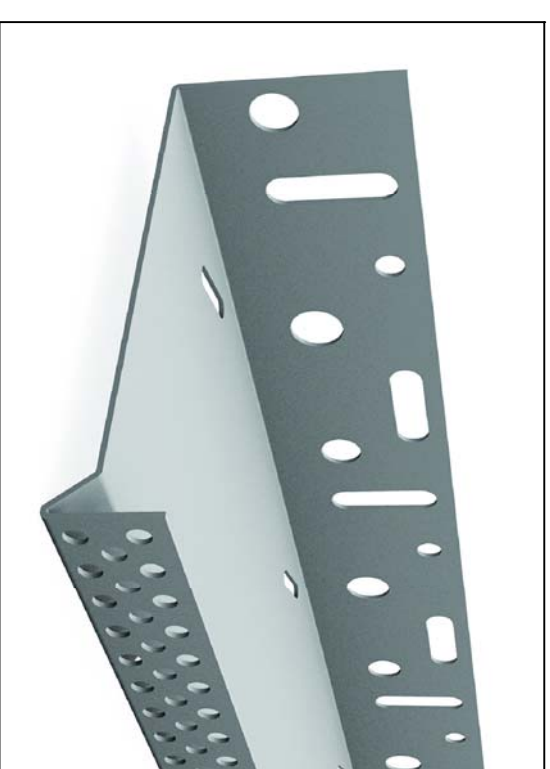
The Contractor is to check and verify all building and site dimensions, before work commences.

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

- 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

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Client: STANDARD DETAILS

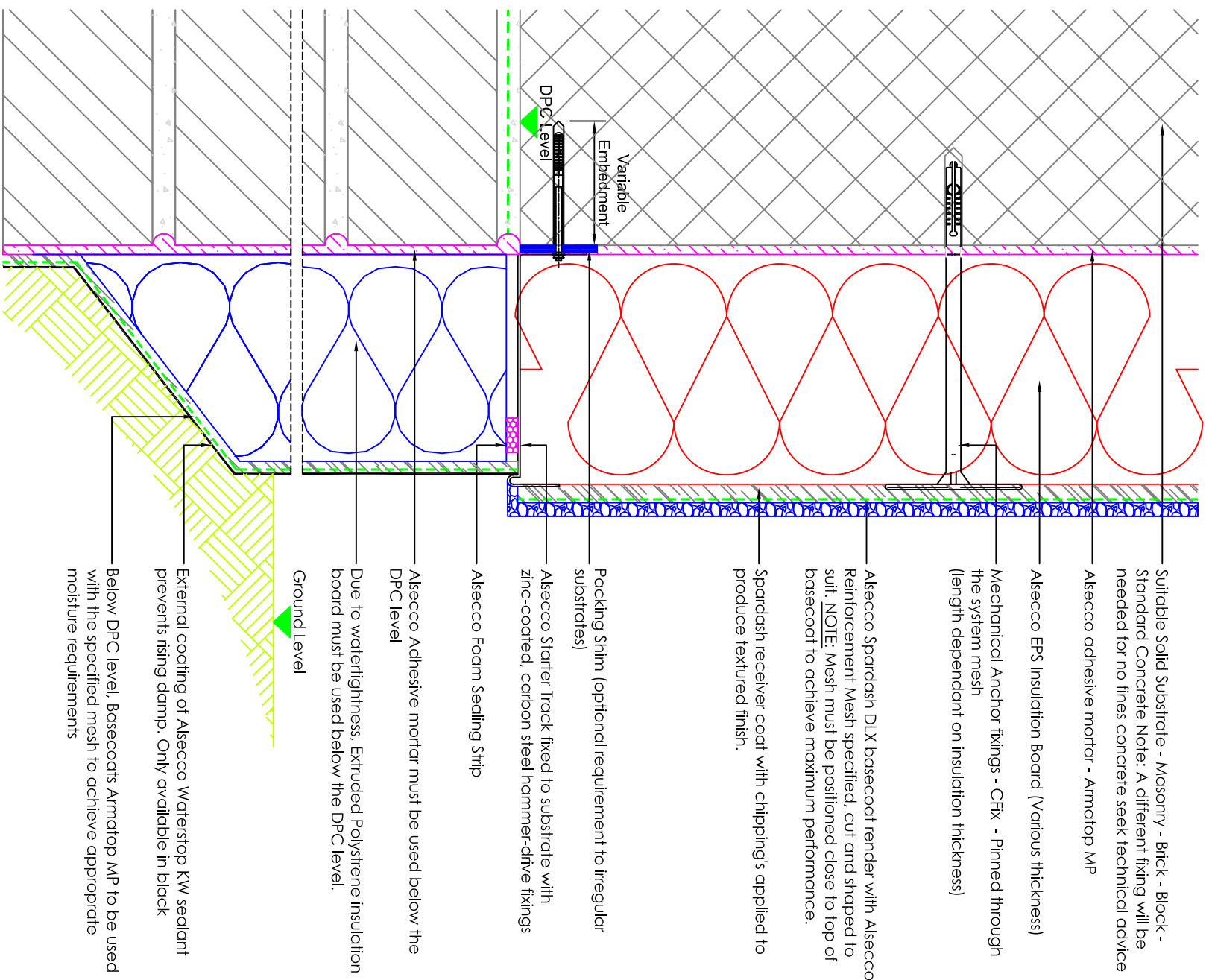
Project: STANDARD DETAILS

Title: BASE RAIL DETAIL

Status: Construction Checked: MPR

Drawn: SJB Date: 13/06/2018 Scale: 1:2 @A3

Job No: 0000000 **Dwg No:** LR-BASS-SOL-001 **Rev:**



- Suitable Solid Substrate - Brick - Block - Standard Concrete Note: A different fixing will be needed for no fines concrete seek technical advice
- Asecco adhesive mortar - Armatop MP
- Asecco EPS Insulation Board (Various thickness)
- Mechanical Anchor fixings - Cfx - Pinned through the system mesh (length dependant on insulation thickness)
- Asecco Spardash DLX basecoat render with Asecco Reinforcement Mesh specified, cut and shaped to suit. NOTE: Mesh must be positioned close to top of basecoat to achieve maximum performance.
- Spardash receiver coat with chipping's applied to produce textured finish.
- Packing Shim (optional requirement to irregular substrates)
- Asecco Starter Track fixed to substrate with zinc-coated, carbon steel hammer-drive fixings
- Asecco Foam Sealing Strip
- Asecco Adhesive mortar must be used below the DPC level
- Due to watertightness, Extruded Polystyrene insulation board must be used below the DPC level.
- Ground Level
- External coating of Asecco Waterstop KW sealant prevents rising damp. Only available in black
- Below DPC level, Basecoats Armatop MP to be used with the specified mesh to achieve appropriate moisture requirements

TYPICAL VERTICAL SECTION

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Notes



- Details with a green light attributed fully insulate 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 EMI system - The detail should still be considered in the context of the property and current ventilation by the EMI Designer.

Revisions	Date	Amendment	Name



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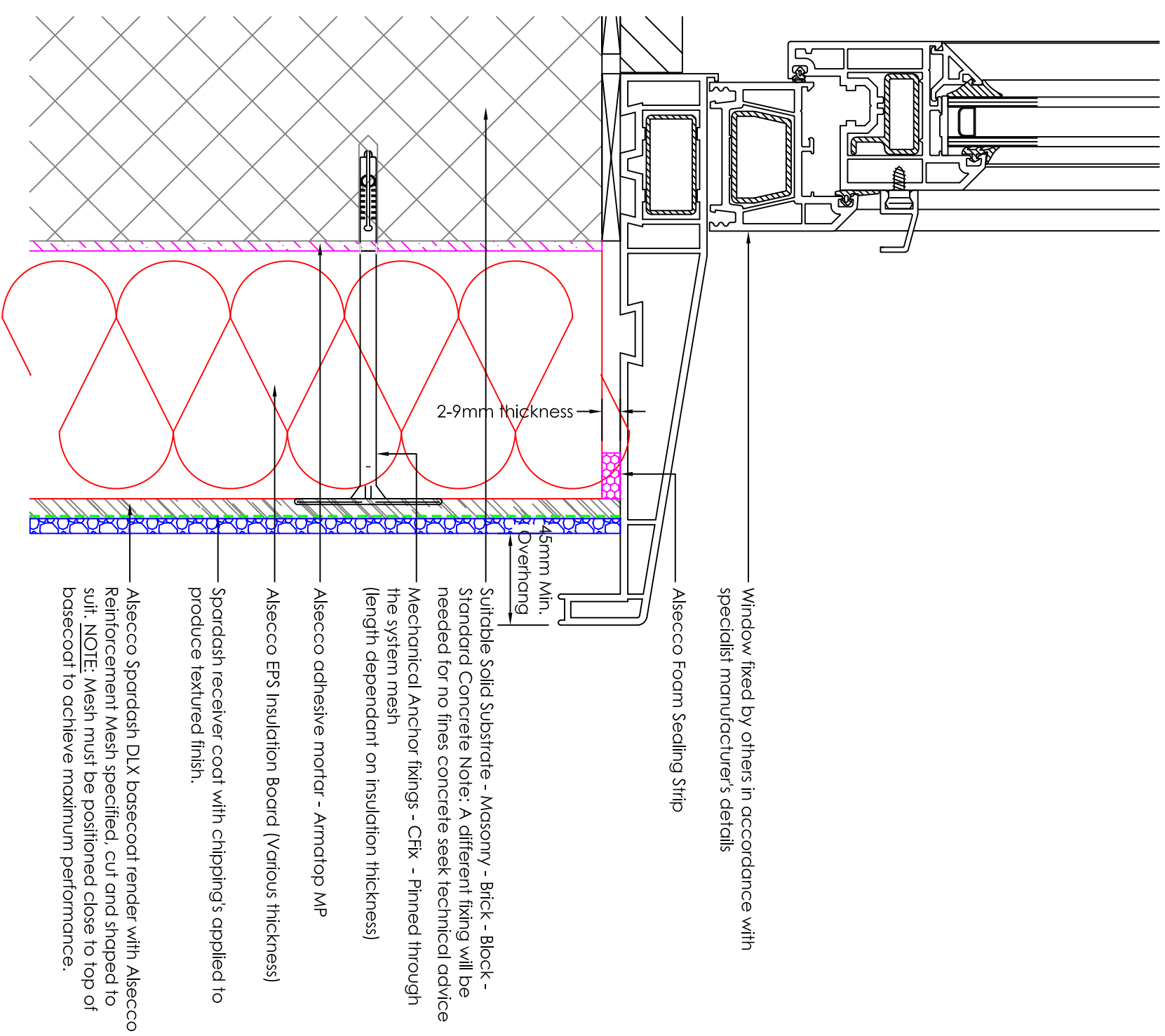
Client: STANDARD DETAILS

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-BASS-SOL-002 Rev:



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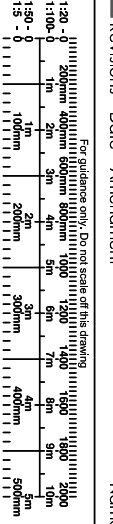
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Notes

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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: 0000000 **Dwg No: LR-BASS-SOL-003** Rev: