



Uni-Base Board lightweight external cladding system

Unitex® has a range of External Insulation Finishing Systems (EIFS) available to suit your particular building project. In most cases the Builder may consider the frame and substrate suitable for a Unitex approved low build base render on the Uni-Base Board™ system as detailed in this manual. Alternatively, with less than level substrates, Builders will prefer to use the Unitex approved high build base render on Uni-TWS® (Thermal Wall System†).

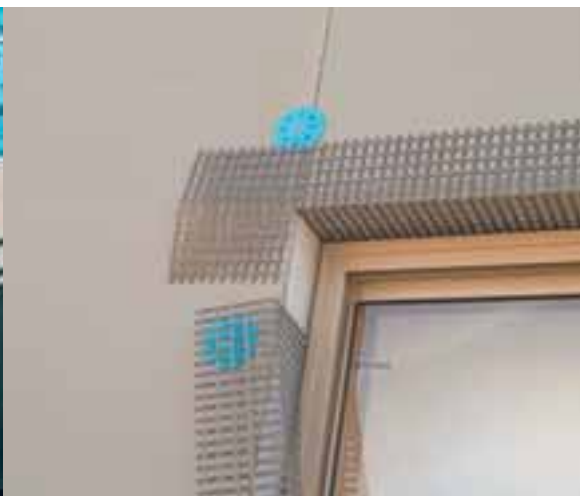
The Uni-Base Board system

Uni-Base Board is made locally at the Unitex manufacturing facility by applying a specially formulated polymer render coating and reinforced AR/FG Mesh to EPS insulation panels. Uni-Base Board is available in a standard size of 1200 x 2400 mm at the required thickness for the thermal comfort specified for the project (generally 50 mm, 75 mm or 100 mm). The only approved method of installing Uni-Base Board on-site is by using and applying the specified components as detailed in this manual.

Changing methods of building

Traditional building using fired bricks and concrete blocks, in the age of government mandated energy rating systems, is shown to be inefficient, especially when considering a building's R-value and energy saving over time. In addition, recent legislation concerning 'safe working heights' and scaffold load requirements for heavy brick/blockwork will mean these traditional systems are inefficient, particularly above the ground floor.

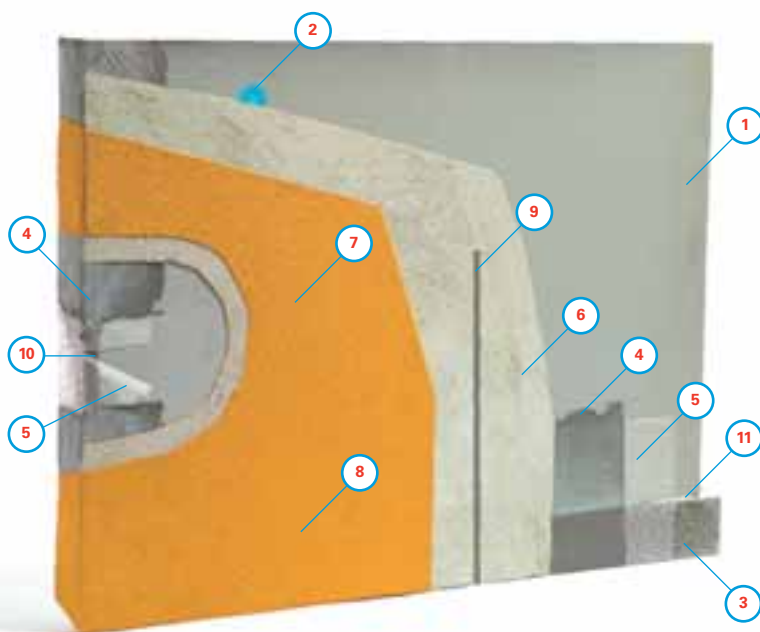
This is where the Uni-EIFS systems by Unitex come into their own. Used in the construction industry to insulate, protect and decorate the exterior of a building structure, Uni-TWS and Uni-Base Board are the most technologically advanced methods of insulating your project. Regardless of the building's age or wall composition, almost any type of structure can be insulated without losing interior floor space. The Uni-EIFS range is lightweight, rainproof and yet water vapour permeable to prevent condensation problems. They are highly energy efficient and provide a virtually maintenance-free exterior when installed correctly.



Uni-Base Board Low Build (EIFS)

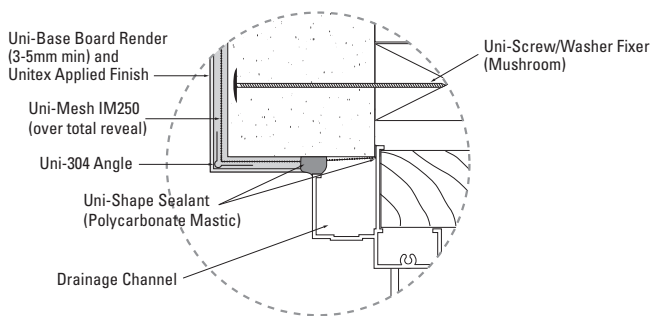


- Uni-Base Board** is a pre-coated and reinforced EPS sheet supplied on-site in a standard size of 1200 mm x 2400 mm x 75 mm ± 2 mm (also available in 50 mm and 100 mm). Used in conjunction with approved Unitex Renders and Finishes, Uni-Base Board conforms to the standard Unitex Specifier's Clause and Warranty Details as detailed in the 'Uni-TWS Manual'.
- Uni-Screw/Washer Fixers (Mushrooms)** are provided with the above at the rate of 8 units (washer/screw) per square metre of Uni-Base Board and are used to fix Uni-Base Board to the timber/steel frame. The Class 3 coated screws supplied by Unitex, will always be a minimum of 25 mm longer than the thickness of the Uni-Base Board used on your project i.e. for 75 mm Uni-Base Board the supplied Uni-Screws will be 100 mm long.
- Unitex Levelling Base Block** is a starter support to provide a sealed and level edging so that the Uni-Base Board is not exposed to the elements and to prevent moisture ingress near ground level.
- Unitex Polymer Render (Fibro Render)** is used on-site with 5% - 10% cement mixed in homogenously (prior to use). Unitex Polymer Render is our strongest adhesive render with flexibility and is used to embed the Uni-Mesh IM250 reinforcing mesh when 'stopping' Uni-Base Board joints and internal and external corners/edgings.
- Uni-Mesh IM250** is used as reinforcing mesh embedded in Unitex Polymer Render to all Uni-Base Board junctions and edgings/corners. No less than 250 mm wide Uni-Mesh is to be used in this application.
- Uni-Base Board Render (BB Render)** is a specially formulated low build coat render designed to provide strong adherence to the pre-coated Uni-Base Board and also to level the surface with 4 - 5 mm of render, prior to application of the selected Unitex Finish.
- Uni-Trowel Décor™** is an easy to apply textured and pigmented surface applied finish. There are five grades available from sandy effect to rough-cast. Similarly, Uni-Cote™ (Dry Powders) range of textured applied finishes can be used. Note: these must be over-coated with Uni-Flex Membrane or Uni-PTC pigmented sealers – refer Unitex Renders and Finishes booklet.
- Uni-Flex Membrane™ / Uni-PTC™** highly flexible protective topcoats are recommended in many cases to provide a pigmented sealer. They provide ease of cleaning, and protection against salty and polluted atmospheres and certain climatic conditions. For more information refer to the booklet 'Unitex Renders & Finishes'.
- Uni-Shape® Sealant** is used to provide a flexible waterproof seal at expansion and control joints in the Uni-Base Board low build EIFS. It can also be painted over with the Uni-Flex Membrane/Uni-PTC coating for surface colour uniformity.
- Uni-304 Angle™** is the only grade of stainless steel product approved in this system as render angles (available from Unitex). Prior to render, all corners are reinforced with Uni-Mesh IM 250 embedded in Polymer Render. The Uni-304 Angle is then adhesively fitted into place also with Polymer Render (plus 5% - 10% cement).
- Approved Adhesive Foam & Applicator** applied between Uni-Base Board sheet to sheet junctions.



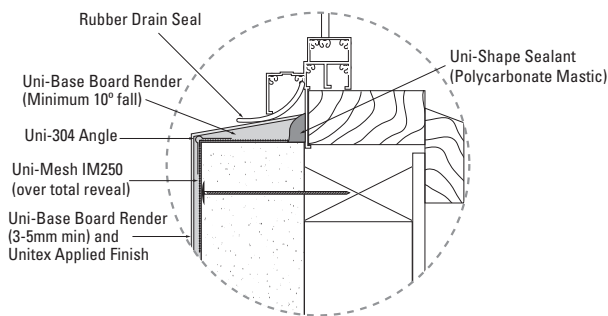
1A

Uni-Base Board: Cross Section of Window Head Edge Reveal - Detail



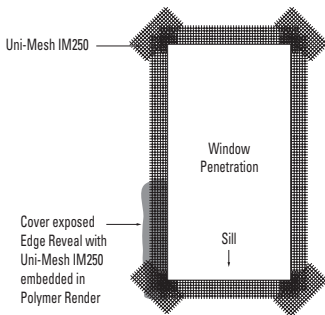
1B

Uni-Base Board: Cross Section View of Window Sill Reveal - Detail

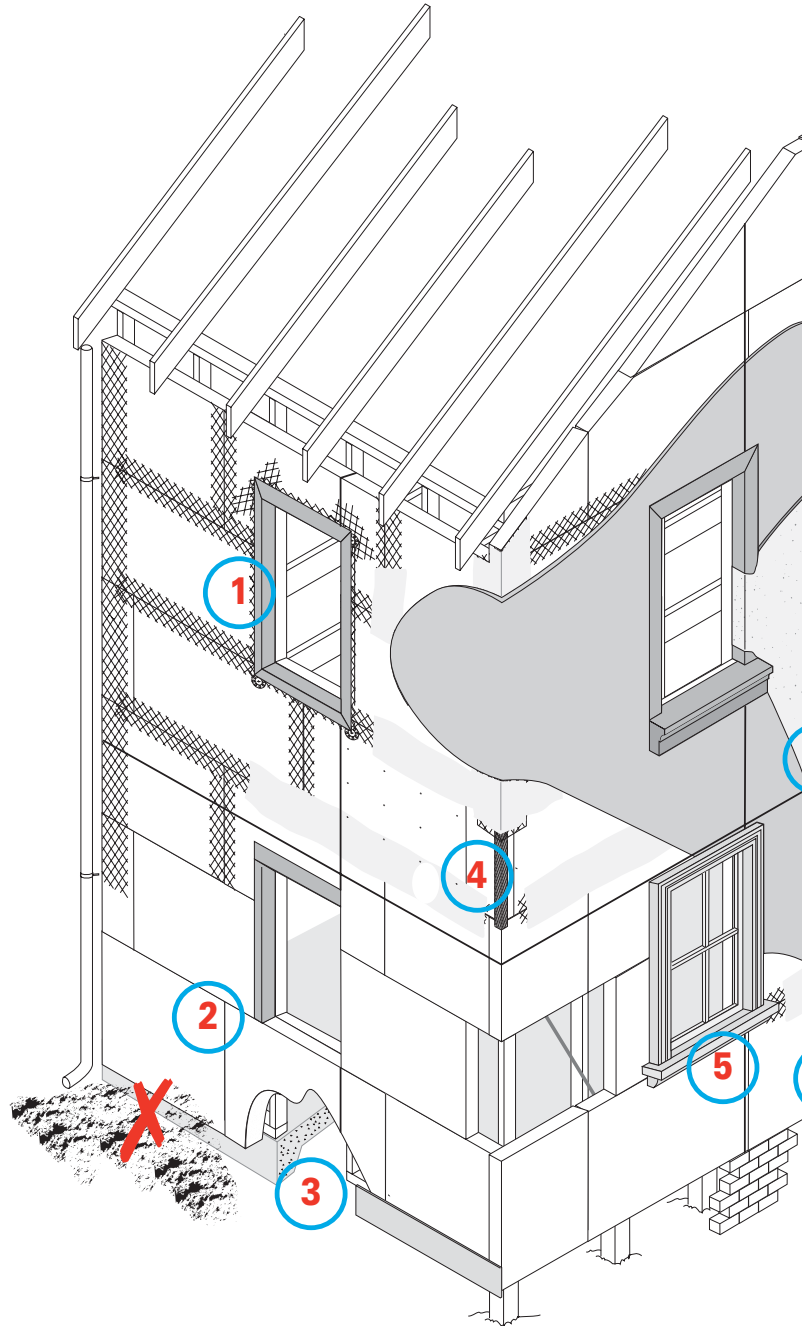


1C

Uni-Base Board: Window Edge Reveal - Detail

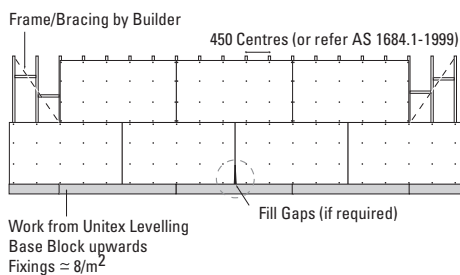


NOTES:
 1. Extra Uni-Mesh IM250 reinforcing to all corners doors/windows
 2. Control joints always advised to window/door at stress points



2A

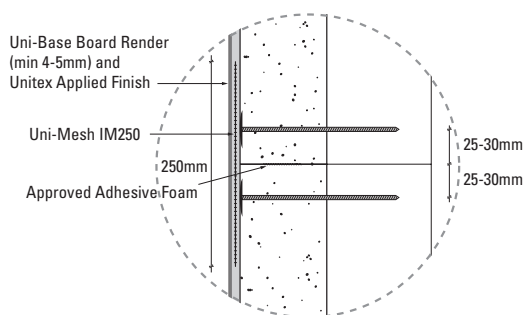
Uni-Base Board Fixing to frame - Side Elevation



NOTES:
 1. Uni-Base Boards to be fixed horizontally with staggered joints (common brick pattern)
 2. Do not fix sheets vertically

2B

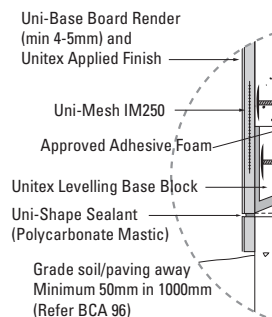
Uni-Base Board: Junction of Sheets Cross Section - Detail



NOTE:
 Uni-Mesh IM250 embedded in Polymer Render then overcoated with Uni-Base Board Render (4-5mm min.) and Unitex Applied Finish.

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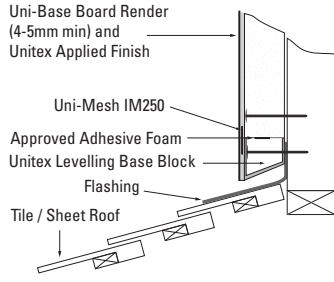
Uni-Base Board: Slab at Gro



NOTE:
 1. Unitex Applied Finish provides a clear
 2. Do not backfill over Uni-Base Board.
 3. Slab to conform to local regulations.

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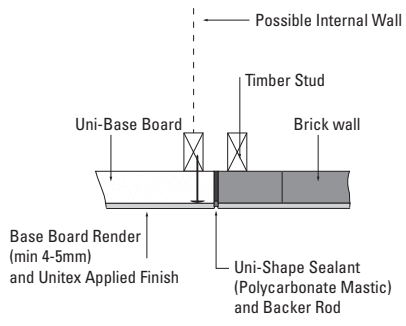
Uni-Base Board: Second Storey



NOTE:
Bottom edge of Uni-Base Board should never be left exposed to the weather.

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Uni-Base Board: Dissimilar Substrates Expansion Joints [vertical]



5/6

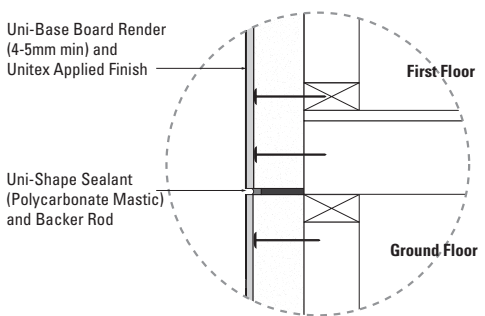
Uni-Base Board: Guide for Control / Expansion Joints - Front Elevation (use same principles for other elevations)



- NOTES:
1. Use this drawing if no other information available.
 2. Expansion/Control Joints are required for every elevation.
 3. At all dissimilar substrate material junctions expansion/control joints must be installed eg brick to Uni-Base Board, block to Uni-Base Board (refer to Detail 7).
 4. Vertical expansion joints are recommended every 6-8m minimum (refer Builder).

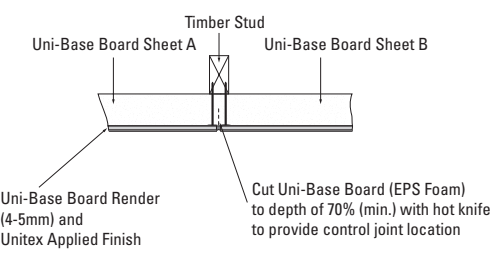
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Uni-Base Board: Expansion Joints [horizontal]



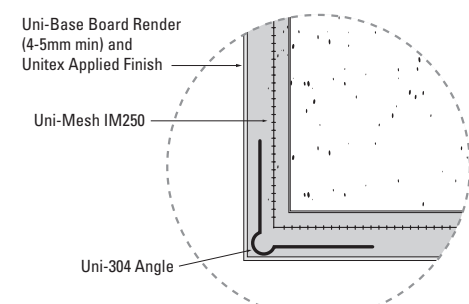
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Uni-Base Board: Control Joints [vertical] - Plan View

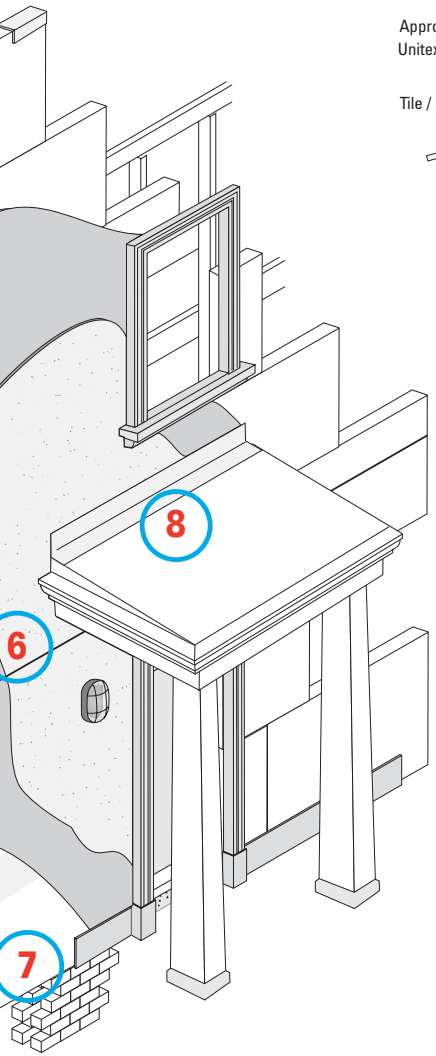


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Uni-Base Board: Corner Detail - Plan View

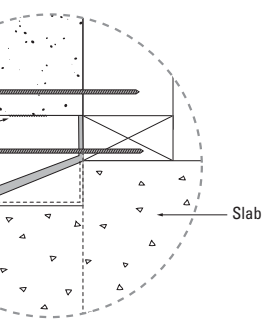


NOTE:
Uni-Mesh IM250 / 200 embedded in Uni-Base Board Render and either under (preferred) or over Uni-304 Angle



NOTE: If unsure about installation refer to the Uni-TWS Manual

und



on and durable surface.

STEP 1



Unitex Levelling Base Block

Start by levelling and mechanically fixing the Unitex Levelling Base Block to a suitable frame with building foil (min. studs 450 mm centres). Use Uni-Screw/Washer Fixers at least 25 mm longer than the thickness of the Uni-Base Board and fix to the base of the framing.

STEP 2



Seal windows and measure openings

Seal around windows with ducting tape and apply Uni-Shape Sealant mastic to drain joints. Where openings (windows and/or doors) penetrate the wall elevation, measure off wall and transfer these measurements to the Uni-Base Board.

STEP 3



Cut Uni-Base Board to size

It's always a good idea to measure twice and cut once. After measuring the wall and marking-up Uni-Base Board, saw cut to size. Cut either manually or with an electric saw. All waste pieces and sawing scrap should be bagged and binned or returned to Unitex for reprocessing.

STEP 4



Fixing Uni-Base Board

Uni-Base Board should be held securely to the studs of the framing. Install extra blocking and/or noggings if required so that the sheets are held firmly. Use eight (8) Uni-Screw/Washer Fixers per square metre. All sheet to sheet junctions are to fit snugly together with no open gaps.

STEP 5



Uni-Base Board to Uni-Base Board (return edges/sealing)

Once the first sheet has been fixed, apply Unitex Adhesive Foam from a gun to all edges of the Uni-Base Board that come in contact with the next installed sheet. Ensure that there are no gaps between the sheets and that sheets are level.

STEP 6



Laying out Uni-Base Board

Stagger all joints as per a common bond brick pattern. At the corners, stagger the sheets, overlap as shown above. Corners may require extra studs for added strength and rigidity. Use extra Uni-Screw/Washer Fixers (mushrooms) if required.

STEP 7



Sealing at windows

Apply Uni-Shape Sealant mastic to the rear of Uni-Base Board adjacent to the window frame around the window. Cut Uni-Base Board so that it is 5 mm clear of window frame and a minimum of 20 mm free of the frame at the window sill. Cut the window sill on an angle to allow for ~10° slope/fall. Surface mastic sealing (see Diagrams 1A, 1B & 1C).

STEP 8



Window and corner protection

All windows and corners are to be extra reinforced with Uni-Mesh IM250 (250 mm) patches overlapping into reveals. The fibreglass mesh should return and cover the reveal and can be installed under or over the Uni-304 Angle and into wall face for a minimum 125 mm. (In this case mesh is under the Uni-304 Angle).

STEP 9



Edge protection for Uni-Base Board

(refer 'Uni-TWS Manual' for variations) All Uni-Base Board edges are to be further protected with the Uni-304 Angle (stainless steel) embedded in Unitex Polymer Render (5% - 10% cement). They must be full lengths from corner to corner and also overlap at the corners.

STEP 10



10

Reinforcing mesh to junctions

Uni-Base Boards are supplied pre-meshed so all Uni-Base Board to Uni-Base Board junctions are to be like reinforced with Uni-Mesh IM 250 embedded in minimum 2-3 mm Polymer Render + (5% - 10% cement). The mesh should extend 125 mm on each sheet.

STEP 11



11

Mixing Uni-Base Board Render

(Apply 24 hours after Polymer Render) Uni-Base Board Render is supplied in 20 kg bags. Simply add approximately 4 litres of clean water to a clean 15 litre pail and slowly add Uni-Base Board Render powder while drill mixing to form an homogenous mix (free of lumps). The render viscosity should suit a 4 - 5 mm build coat.

STEP 12



12

Applying Uni-Base Board Render

(Use a plastic or foam float/trowel) Using a Hawk and Trowel or Render Spray Machine, apply Uni-Base Board Render evenly over the surface to the required depth (normally 4 - 5 mm). **Note:** Uni-Base Board is a Low Build System, for a thicker High Build System refer to Uni-TWS, also by Unitex.

STEP 13



13

Floating Uni-Base Board Render

As the Uni-Base Board Render surface sets, finish level with a plastic float to the exactness required to accept the next coat. Allow to set and cure for 72 hours (min.) before applying a Unitex Finish. There are five grades available from sandy effect to rough-cast.

STEP 14



14

Uni-Base Board window reveals

Window reveals to be coated to 5 mm depth (min). Sills should fall/slope ~10° to prevent water flowing back. Window sill rubber flap (supplied with window) needs to remain clean, firm and intact. **Note:** It is good practice to protect other surfaces (glass, frames, tiles, pavers etc) with plastic/paper before applying render and finishes.

STEP 15



15

Expansion and Control Joints

Uni-Base Board is a single skin construction method and is fitted to an existing frame or surface. Expansion and control joints are essential in all Uni-EIFS systems and are recommended every 6 - 8 metres and between floors (levels) – also refer Details contained in the Uni-TWS Manual. After internal fit-out extra movement joints may be required.

STEP 16



16

Unitex Finishes over Uni-Base Board

(Apply 72 hours min. after BB Render) Uni-Trowel Décor is an easy to apply textured and pigmented surface applied finish. There are five grades available from sandy effect to rough-cast. Similarly, the Uni-Cote range of textured applied finishes can be used. **Note:** these must be over-coated with Uni-Flex Membrane or Uni-PTC pigmented sealers – refer Unitex Renders and Finishes booklet.

STEP 17



17

Proven system – technical back-up

Freecall 1800 647 374 and a Unitex technical representative will collect your plans and supply a quote for materials or supply and install. We have a selection of approved carpenters and applicators who know the system. A Unitex technical representative is on call to visit your site and advise on correct installation, texture and colour.

STEP 18



18

Uni-Base Board for peace of mind

Uni-Base Board is quick and easy to install, but relies on a team effort:

- Quality Substrate (by Builder)
- Quality System (by Unitex)
- Experienced Tradespeople (to Finish)

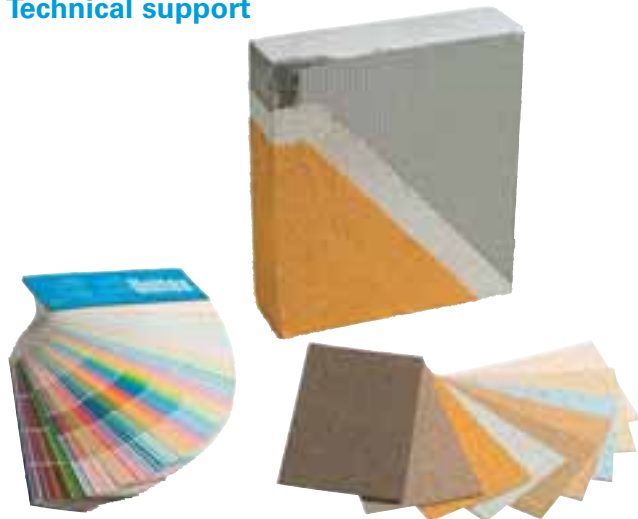
So when the job's done right, Unitex backs-up Uni-Base Board with a seven year warranty – see back page.

Confidence and trust

For your peace of mind the Uni-EIFS systems by Unitex have been supplied and installed in Australia since 1983 with excellent results. The Unitex team are proud of having over 20 years of experience and knowledge in EIFS projects without any guarantee claims.

Both Uni-Base Board and Uni-TWS are finished with our proven range of weatherproof protective coating systems. Over 5 million square metres of external wall in Australian homes and commercial projects have been protected from our harsh, seasonal weather conditions by Unitex.

Technical support



Our **experienced Unitex technical representatives** are on call to visit your site and advise on correct installation, texture and colour. And the all important technical site related issues.

Free Plan Collection and Quotation Service

Freecall 1800 647 374 and a Unitex technical representative will supply a quote. Unitex can quote supply only or arrange for a supply and install quote from an approved applicator.

Specifier's Clause:

The external facade (insulating lightweight cladding) shall be the Uni-Base Board™ System (Low Build) as detailed in the Uni-Base Board™ Manual (dated September 2006). It shall have the following characteristics:

1. Soft-body Impact Strength minimum of 20 joules.
2. Minimum coating thickness of the Uni-Base Board system is to be no less than 5 mm.
3. Edge and Sill Reveals protected with Uni-Mesh IM250 and Uni-304 Angle.
4. A 'complete wall' R-value tested result of 2.17 (based on 75 mm thick EPS foam fitted over typical stud framing).
5. Expansion Joints to be specified to allow for normal substrate movement.

It shall be supplied by Unitex Granular Marble Pty Ltd and shall be installed as per the Uni-Base Board™ Manual by skilled tradespeople. Contact details: E-mail sales@unitex.com.au / Telephone +61 3 9768 4900.

The information contained in this document is based on data available at the time of writing, which we believe is accurate and reliable. Unitex reserves the right to change the information without prior notice.

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Warranty Details

Unitex® Granular Marble Pty Ltd provides a seven-year warranty for defective product only (PRODUCT REPLACEMENT ONLY) against the Uni-Base Board™ complete system, providing the components are of the quality specified and are applied strictly according to the guidelines laid down in this manual. This manual must be read and understood before installing Uni-Base Board™. Unitex® Granular Marble Pty Ltd cannot be held responsible – and hence no warranty applies – if the Uni-Base Board™ and/or its components are not supplied and installed according to the guidelines.

The selection of an applicator – to install the Uni-Base Board™ – is the client's responsibility. Unitex® can recommend and arrange a quotation from approved applicators. Unitex® strongly recommends previous workmanship be inspected before contracting an applicator. A minimum of three recently completed jobs should be checked first-hand by the client. As advised above, insufficient or inadequate construction control joints could lead to cracking of the Uni-Base Board™. We reaffirm that, whilst we provide recommendations as to their locations and treatment in Uni-Base Board™ (refer drawings), this is not covered by the warranty. The placing of control joints is ultimately the responsibility of the Builder/Engineer/Specifier and not Unitex® Granular Marble Pty Ltd.

Warranty is null and void if product is not installed in accordance with the guidelines set out in this manual or if any non-approved Unitex product is used.



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