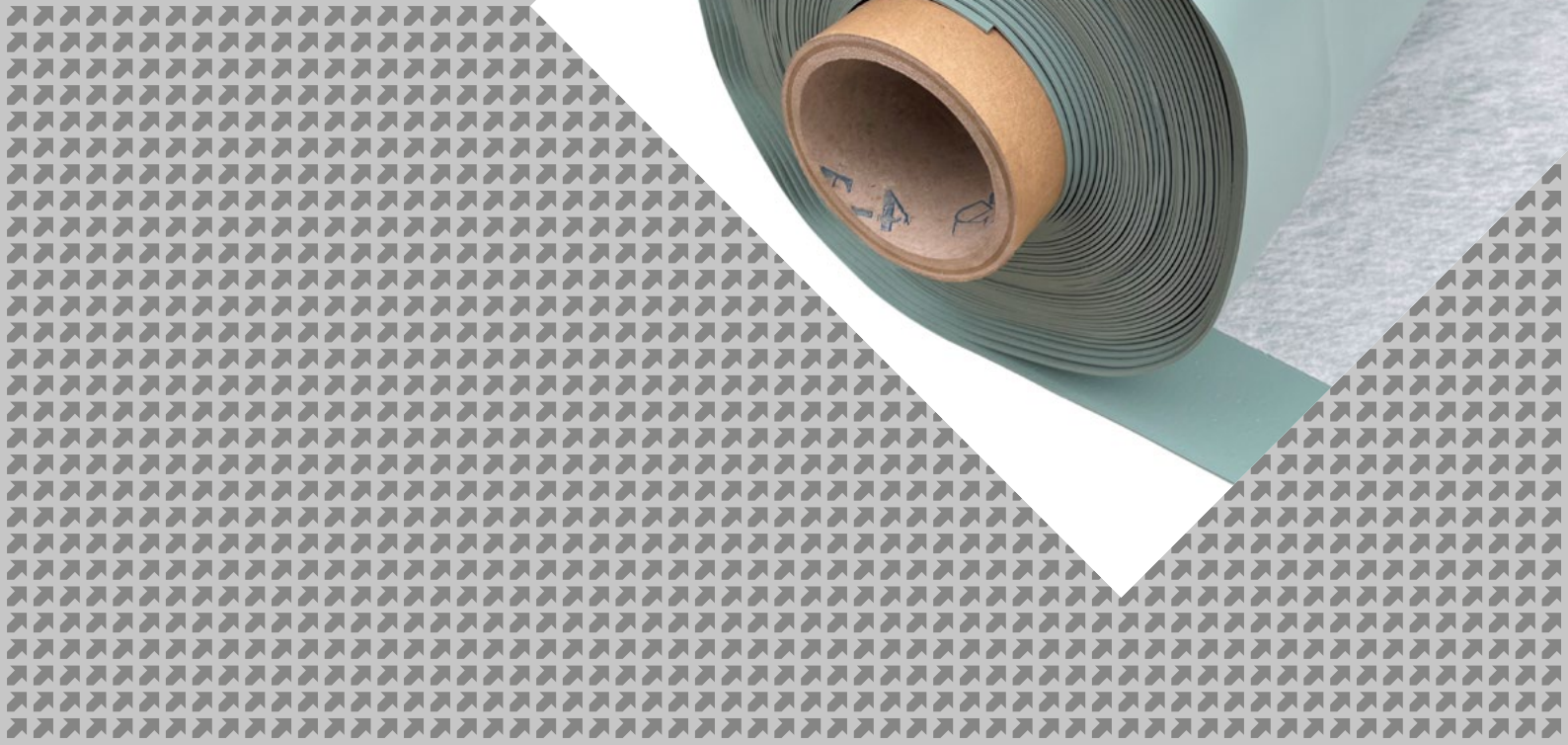


INSTALLATION GUIDE

Delta DualProof

www.deltamembranes.com



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Delta DualProof Overview

1.1 Delta DualProof

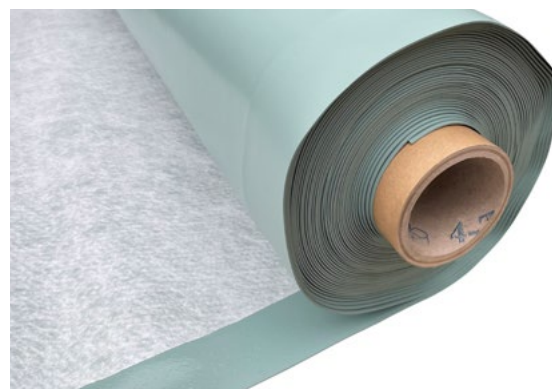
Delta DualProof is a fully and permanently bonded, Pre-Applied, Type A waterproofing membrane.

Delta DualProof is a continuous Type A waterproofing system for pre-application seals foundations, below ground surfaces of floors and walls and details of reinforced concrete earth retaining structures.

Delta DualProof is applied before steel reinforcement is fixed and concrete poured. The special non-woven PP-Fleece of DualProof is co-extruded with a highly flexible, water and gas resistant, transparent PVC layer. Freshly poured concrete forms a strong mechanical bond with the PP-Fleece, preventing water tracking between the membrane and the concrete once cured. DualProof can be installed without heat or open-flame, overlapped and sealed with butyl tape and special adhesive, CEM 805 for detailing. DualProof has excellent crack-bridging capabilities at locations where cracks occur within the concrete.

1.2 The benefits of Delta DualProof

- BDA Approved
- Full and permanent mechanical and chemical bond with concrete structures
- Type A, Pre-applied waterproofing protection
- No lateral water migration between concrete and membrane
- Fast and easy installation
- High flexibility and crack-bridging capabilities
- High watertightness
- Good resistance to aggressive conditions



1.3 Technical Data

Delta DualProof			
Intended Use	EN 13967 – Flexible membrane for waterproofing (Building) Type A Waterproofing membrane with moisture barrier and groundwater barrier		
Material	Soft PVC membrane + PP nonwoven		
Visible Defects	No visible defects	Passed	EN 1850-2
Straightness	≤ 75 mm / 10 m	Passed	EN 1848-2
Thickness	1.9mm		EN 1849-2
Watertightness Against Water	690 kPa 60 kPa / 24h; 500 kPa / 72h	Tight	ASTM D 5385 EN 1928 (B)
Durability Against Artificial Aging	12 weeks / 70 °C; 60 kPa	Tight	EN 1296 EN 1928 (B)
Durability Against Chemicals	28 d / +23 °C; 60 kPa / 24h	Tight	EN 1847 EN 1928 (B)
Compatibility With Bitumen	60 kPa / 24h	Tight	EN 1548 EN 1928 (B)
Watertightness in Case of Subsequent Cracks	DualProof mechanical bond with freshly poured concrete	Tight	ASTM D 5385
Tensile Strength MD / CMD	≥ 500 / 500		EN ISO 12311-2 (A)
Shear Resistance in the Overlapping	Collapse outside of the overlapping: ≥ 300	N/50mm	EN 12317-2
Resistance to Impact	≥ 350	mm	EN 12691 (A)
Tear Resistance MD / CMD	≥ 350 / 350	N (Nailshank)	EN 12310-1
Resistance to Static Load	≥ 20kg / 24h	Passed	EN 12730 (A) EN 12730 (B)
Crack Bridging Ability	≥ 3.2	mm	Passed ASTM D 5385
Reaction to Fire	Class E		EN ISO 11925-2 EN 13501-1

1.4 Typical fields of application

- DualProof may be used in all applications, where reinforced concrete structures require protection against groundwater and contaminants
- Used for water pressure-tight surface sealing of RC concrete structures
- External barrier, for the waterproofing and protection of floor slabs and exterior concrete wall surfaces against soil moisture
- Foundations
- Basements
- Tunnels
- Retaining Walls
- New build Residential/Commercial basements
- Foundations
- Car Parks
- Museums and Heritage
- Hospitals
- Schools
- Hotels
- Infrastructure Projects
- All other concrete constructions below ground



1.5 Surface Preparation and Application

Delta DualProof provides a seamless application process, eliminating the necessity for complex welding equipment. The product's installation is simple and straightforward with the aid of CEM 805 adhesive. Notably, DualProof's versatility allows for both horizontal and vertical application. It is particularly beneficial in various applications where structures necessitate protection against groundwater and seepage

DualProof membrane should be installed on a flat surface that is free from sharp objects. Voids that are greater than 12mm should be repaired. Lean-mix Concrete or compacted sands are suitable base substrates. Detailing of all critical 'points' (including up-stands, penetrations, ground anchors, pile caps, etc.), must be completed before installing the membrane.



SITE PREPARATION

2. Site Preparation

Delta DualProof Membranes and System Components should be installed in accordance with the recommendations of the relevant codes of practice and industry guidance, such as BS 8102:2022 Protection of below ground structures against water ingress. Code of practice. and CP 102:1973 Code of practice for protection of buildings against water from the ground.

Type A waterproofing is defined by BS 8102:2022 as 'barrier protection'. Providing protection against ground water ingress by applying a waterproof material to the external walls and floor slabs of a below ground structure forming a barrier between the structure and any groundwater present.

British Standard BS 8102:2022, Section 8, in particular, places emphasis on the design and specification of Type A "barrier protection", in particular the importance of continuity of the waterproofing protection.

Delta DualProof a pre applied, Type A waterproofing system.

Fully bonded systems, such as the Delta DualProof System can be distinguished according to their time of installation into pre- and post- applied. Pre-applied bonded systems are installed before the concrete works on a mud-slab, a soil retention system, or a formwork and later form a bond with the subsequently poured fresh concrete. They can be installed in horizontal formation, with the concrete structure being built directly on top. These systems require special care on site since no additional protection layers are applied. Further concrete works on pre-applied membranes can lead to soiling and punctual damage, eventually affecting the bond or the waterproofing system.

Post applied systems are installed onto existing hardened concrete structures.

Correct substrate preparation of concrete surfaces is essential in creating a full and durable bond to prevent any water migration or lateral water underflow between the concrete structure and the Delta DualProof System.

Surfaces that are to be waterproofed can be damp, and must not have any large protrusions, cavities or continuous water flows that could compromise the continuity and sealing process of membrane overlaps.

Surfaces must be prepared prior to application and be free from contamination such as adhesives, coatings, curing compounds, dust, grease, oils, and any other material that could compromise adhesion.

Any stagnant water should be removed prior to installation of the Delta DualProof membranes.

Installation checklist:

- Substrate surfaces are uniform
- Substrate surfaces are free from oil, grease, dust, curing compounds, adhesives, and coatings
- Voids, protrusions, and cavities must be filled before installation
- Substrates can be damp or slightly wet, no ponding water
- Substrate temperature has to be a minimum of +5°C

Sheets of Delta DualProof membrane can be folded and cut in any direction.

Detailing is an essential process for successful installation of the Delta Amphibia system and Type A waterproofing. All service penetrations should be fully sealed and included in the detailed planning. Delta Amphibia overlap joints and other detailing connections should be sealed with Delta Amphibia AKTI-VO 201, Delta Bi Mastic and Delta Amphibia Safety Tape.

Particular attention should be given to:

- Penetrations through the waterproofing system
- Fixings, where these are necessary
- Application over joints in the substrate
- Compatibility, durability, and buildability; and
- The need for membranes to be fully bonded to both prevent lateral migration (tested to BS EN 1928 Method A) and resist negative hydrostatic head (tested to DIN 1048/BS EN 1542).

The water tightness of a Type A System relies fundamentally on the effectiveness of the waterproofing system, site and design preparation, installation of the membrane system and the structure.

A risk assessment should be carried out to identify any possible long-term water pressures, the effects of surface water percolation, use of external drainage and the effects of party wall impaction on neighbouring structures.

Delta DualProof Membranes can be positioned in a variety of different situations as part of a combined system, for example:

- Externally to new formed concrete
- Between contiguous or secant piles and a concrete liner wall
- Externally in combination with a Type B Waterproof concrete system
- Beneath basement and ground bearing slabs
- In combination with an internal Type C Delta Cavity Drainage Membrane System
- As an effective external system for lift pits and service trenches

Delta DualProof membranes cannot be thermally joined.



APPLICATION

3.1 Installation on Horizontal Substrates



Formwork Stop-Ends

DualProof membrane should be placed onto the prepared substrate with the fleece facing towards where the concrete is to be poured. Install the first length of DualProof membrane flush with the top of the formwork stop-end. Secure the membrane using nail-fixings at 500mm centres along the top of the formwork stop-end.

Retaining Walls

Install the first length of DualProof membrane in order that one end extends up the retaining wall at least 200mm higher than ground level (consideration should be taken to the thickness of the ground floor slab). Secure the DualProof membrane to the retaining wall using nail-fixings at 500mm centres.

Detailing of Overlaps

Using a clean dry cloth, clean the face of the selvedge edge on the roll. Position the subsequent roll in order that the edge-selvedge on the previous roll will be overlapped by a minimum of 50mm. All overlaps must be detailed with either Delta Double-Sided Tape, Heat welded or DualProof Polymer Adhesive (CEM 805) and compressed using a wooden roller.

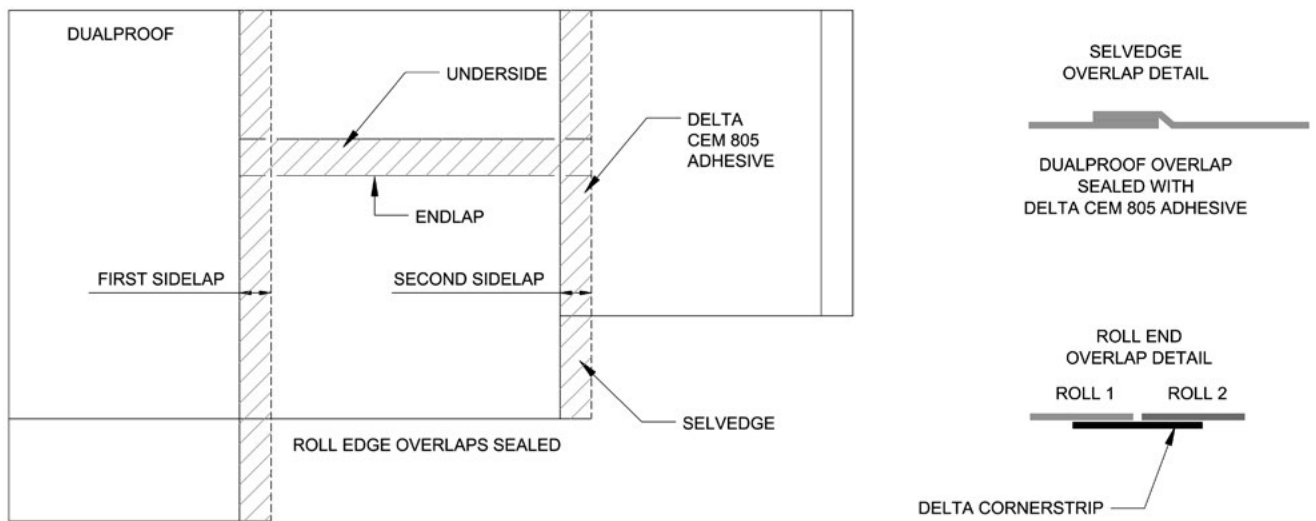
The ends of the DualProof membrane should be staggered by a minimum of 300mm, overlap the membrane by 50mm and detail using either Delta Sealing Tape, DualProof Polymer adhesive (CEM 805) or heat weld.

Reinforcing strips of DualProof membrane should be used at both internal and external corners, these reinforcing strips may be formed using a patch of DualProof membrane and bonded with Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805) using the same method used with overlaps.

Accurate folding of the DualProof membrane to create internal and external corners maybe required. Practicing first with a piece of paper or offcut is recommended.

Please refer to Delta's website Technical Drawings - DualProof (Pre-Applied Membranes) - Delta Membranes for Technical

APPLICATION



Placement of Reinforcement

Steel reinforcement should be placed as soon as possible after the DualProof membrane is installed.

- Inspect the installation of DualProof membrane before installation of steel reinforcement.
- Do not use reinforcement carriers which have sharp ends.
- Flat cement-based carriers should be used.
- Where possible place the carriers along the overlaps.

Delay in Placement of the Reinforcement/Concrete

Where there will be a delay in the placing of the reinforcement or the concrete, extend the DualProof membrane by at least 1m past the termination point of the reinforcement/concrete, fold-back the extended DualProof membrane and cover with plastic to ensure it is kept free from damage, clean and dry.



Cleaning DualProof Membrane

If required, the DualProof membrane may be brushed clean using clean cold water. Please Note: the surface of the installed DualProof membrane should be free from standing water before placement of concrete.

Damages

DualProof membrane should be inspected for damages prior to the placement of the concrete. In the unlikely event of damages being found, these must be repaired using an oversize patch of the DualProof membrane, which must be sealed with Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805) and compressed using a wooden roller. Note: repair patches should always extend beyond the damaged area.

APPLICATION

3.2 Installation on Vertical Substrates

Preparation

All substrates to which DualProof membrane is to be installed should be flat and free from sharp objects and voids that are greater than 12mm. All service penetrations (service ducts, pipe penetrations, etc.) must be detailed prior to the placement of the DualProof membrane.

DualProof membrane should be placed onto the properly prepared substrates with the fleece facing towards the concrete to be poured.

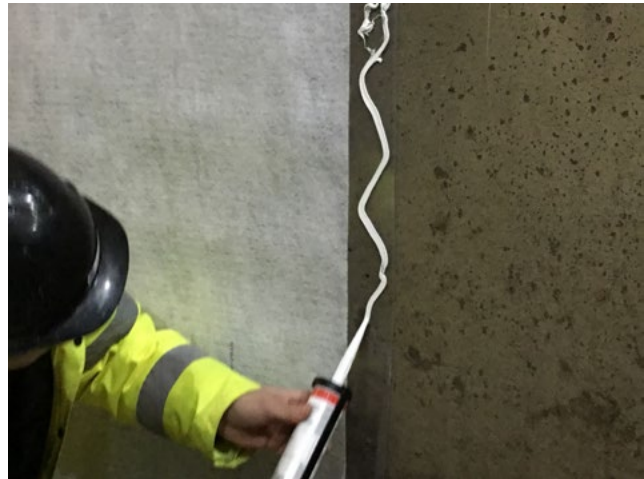
DualProof membrane should be installed on properly prepared vertical surfaces by cutting the membrane into the required lengths (when cutting DualProof membrane use a retractable craft knife or sharp shears, along with suitable safety wear), secure the DualProof membrane at the top using nail-fixings, and allowing the DualProof membrane to extend down over the previously installed under-slab membrane by at least 100mm.

If required additional nail-fixings may be used, placed at 500mm centres along the clear selvedge where they will be covered by subsequent rolls, should any nail-fixings be exposed these should be covered with DualProof Polymer Adhesive (CEM 805), or alternatively a patch of DualProof membrane, bonded with either Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805). Compress the patch area using a wooden roller to ensure complete adhesion.

Using a clean dry cloth, clean the face of the selvedge on the installed DualProof membrane. Position the subsequent DualProof membrane in order, the clean edge-selvedge on the installed membrane will be overlapped by a minimum of 50mm. All overlaps must be sealed using Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805).

Using a wooden roller, compress overlaps to ensure complete adhesion.

Please Note: DualProof must only be used as "pre-applied" waterproofing membrane.



APPLICATION

3.3 Application on Raft Foundation

Formwork should be free from voids or damages that are greater than 12mm. Please refer to Delta's Technical Team for advice and guidance on remedial approaches to voids.

Using a suitable retractable craft knife, sharp shears or cutting tool along with suitable safety wear, cut the DualProof membrane to a required length.

DualProof membrane should be placed against the formwork with the fleece facing towards you/towards the later placed fresh concrete.

Place the first strip of membrane against the formwork. Secure the DualProof membrane to the top of the formwork using nail-fixings, fixed at 300mm centres, additional nail-fixings placed at 500mm centres along the edge of the membrane may be used if required. Ensure the DualProof membrane is laid flat against the formwork.

Using a clean dry cloth wipe the face of the selvedge on the installed DualProof membrane. Position the subsequent length of DualProof membrane, ensuring the edge-selvedge on the previous installed DualProof membrane will be overlapped by a minimum of 50mm, the overlaps must be sealed using Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805) and compressed using a wooden roller.

The membrane should be inspected for damages prior to installing the formwork. In the unlikely event of damages being found these must be repaired using an oversized patch of DualProof membrane bonded with Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805) and compacted using a wooden roller.

The fresh concrete must achieve a minimum compressive strength of 10Kn/mm² before the formwork is removed. All tie-holes should be filled with Koster KB Flex 200 and Koster Repair Mortar Plus "non-shrink" mortar and covered with an oversized patch of DualProof membrane sealed with Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805) and compressed using a wooden roller.

Should the ends of any nail-fixings be protruding through the DualProof membrane, these should be cut off and the area covered with DualProof Polymer Adhesive (CEM 805), or alternatively using an oversized patch of DualProof membrane sealed with Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805). The patched area should be compressed using a wooden roller.

Note: repair patches should always extend beyond the damaged area.



APPLICATION

3.4 Backfilling

The walls should be inspected for damages prior to backfilling, should there be any damages, honeycombing, etc., these areas should be repaired and detailed with an oversize patch of DualProof membrane bonded with Delta Double-Sided Tape or DualProof Polymer Adhesive (CEM 805), and compressed using a wooden roller.

There is no requirement for the use of protection boards with DualProof membrane, provided care is taken when backfilling. Ensure backfill is clean filling and free from sharp objects or construction debris. Stones or filling that are larger than 50mm should not be used.

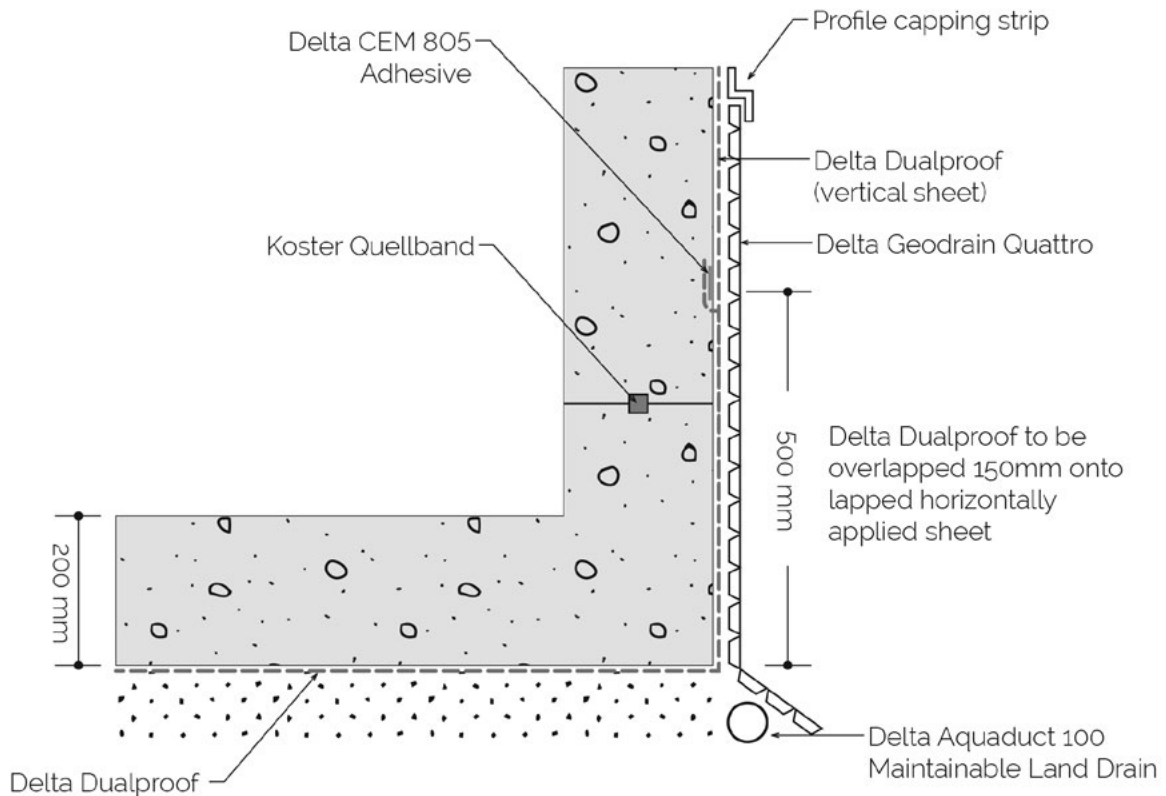
As a general guide, ensure backfill is compacted every 300mm as defined by ASTM 1557.

Care should be taken when backfilling to prevent damage to the DualProof waterproofing membrane.

Additional Information

Please refer to Delta's website for Technical Drawings
Technical Drawings - DualProof (Pre-Applied Membranes)
- Delta Membranes or for site specific assistance, please contact

Delta's Technical Team
01992 523 523 or email info@deltamembranes.com



APPLICATION

3.5 Joint Sealing

DualProof should only be installed to a suitably prepared substrate.

DualProof is not suitable for the following construction types:

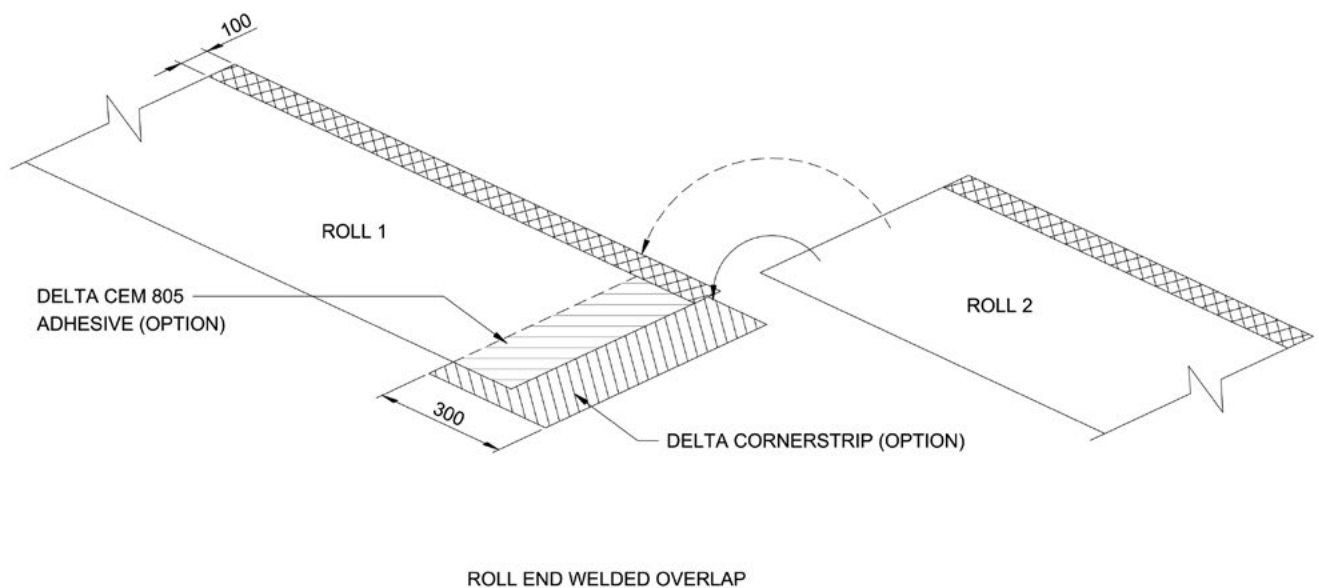
- Masonry Structures
- Concrete Filled Block - Stepoc Block Structures
- Pre-cast concrete elements
- Podium Decks or concrete soffits

Joint Sealing

DualProof is supplied with a 50mm non fleeced Sleeve edge. CEM Adhesive should be applied to the Sleeve Edge and the next layer of DualProof pressed into the adhesive.

Where an immediate fix is required, Delta Double Sided Tape can be used to provide this bond.

Where DualProof is used on the outside of vertical walls. The upper sheet of membrane should lap over the lower sheet.



APPLICATION

3.6 Securing/Corners/Delivery and Site Handling

Securing of Dualproof Membrane

DualProof should be securely fixed in place to prevent movement during the pouring of the concrete. This can be achieved by:

- Pinning the DualProof membrane above the line of the cast concrete.
- Securely fixing the DualProof to the substrate using Delta Tape or bonding agent.
- Using a mechanical clamp to secure the DualProof membrane.

Corners

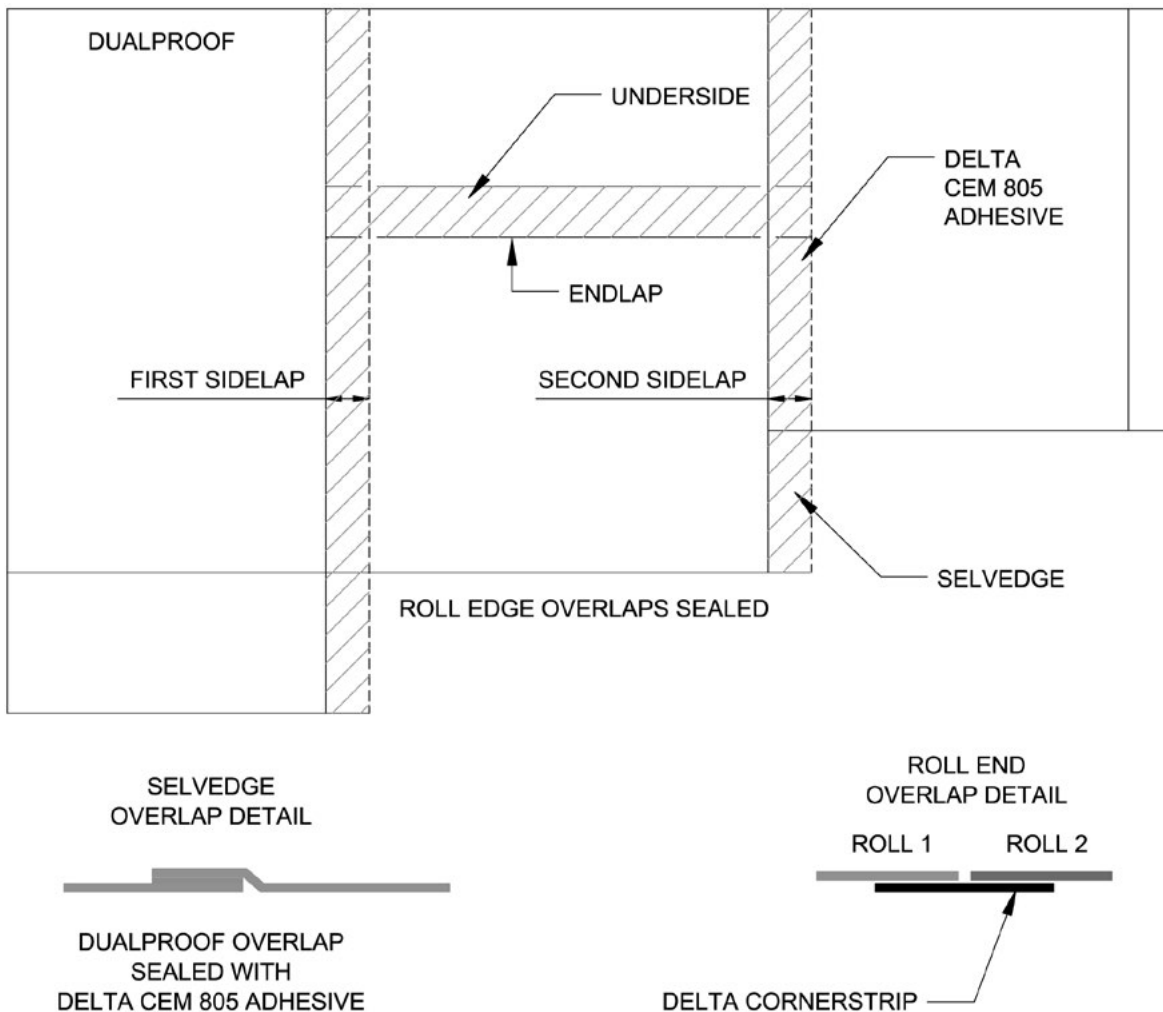
DualProof corner pieces can be easily cut to shape on site.
Detail 321-1 to be checked and relabelled.

Delivery and Site Handling

DualProof is available in two sizes and suitable manual handling procedures should be employed to safely receive delivery and move around a site. Due to the weight of the DualProof large roll, this is only available for palletised delivery.

Small - 1Mx20M Roll - Weight of roll - 34KG

Large 2Mx25M Roll- Weight of Roll - 68KG - Only available for palletised delivery.



APPLICATION

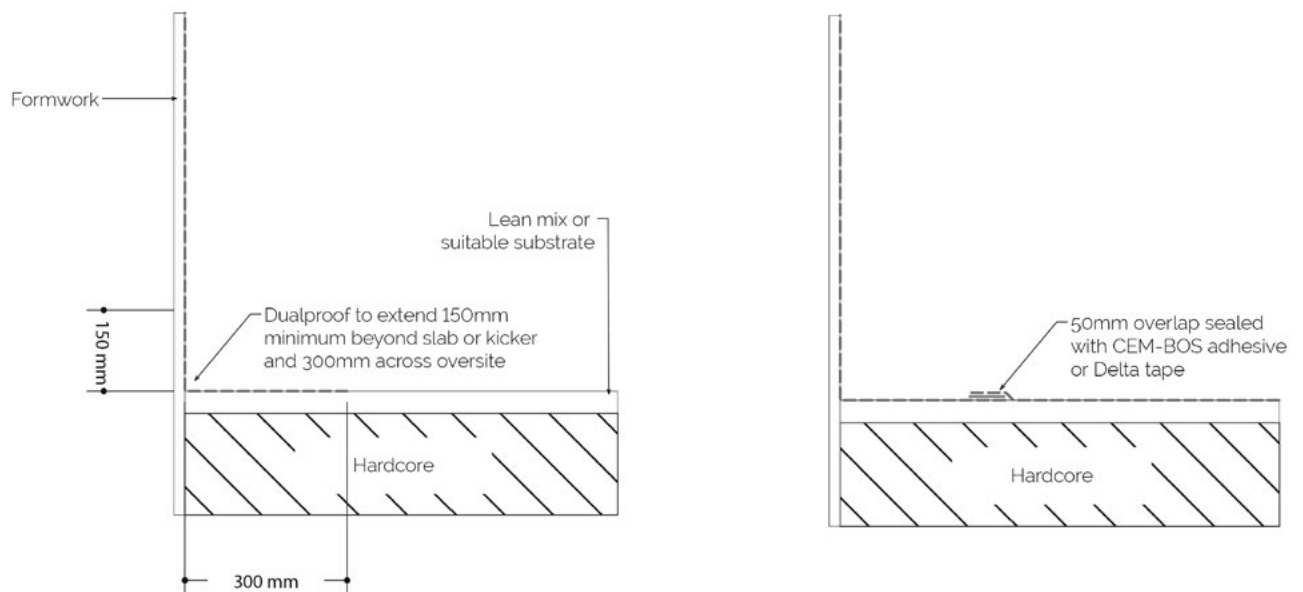
3.7 Under-Slab Installation

Before installing DualProof please read the installation manual in order to become familiar with the installation process. For site specific installation assistance, please contact Delta Membranes Technical Team.

1a) Substrate Preparation

The Delta DualProof membrane should be placed onto a properly prepared substrate that is free from sharp edges or damages, the surface should be without voids that are greater than 12mm. Suitable substrates include:

- Concrete blinding layers.
- Lean Mix.
- Well Compacted Sand.
- Closed Cell Insulation- suitable for external use.
- Anti Heave Systems.
- External Drainage and protection systems, such as Delta Geo Drain Quattro
- Delta MS Sub Base System.



1b) Under-slab installation

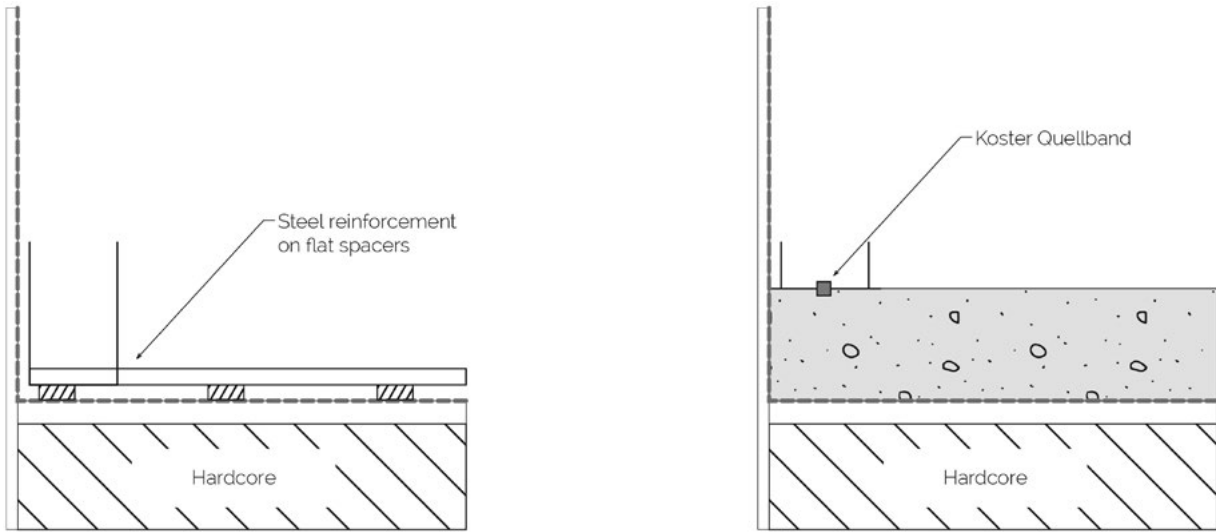
The fleece side of the Delta DualProof Membrane should face the concrete to be waterproofed.

- Detail any pipe penetrations using the methods provided in section 1d.
- Using a sharp blade cut the membrane into suitable lengths.
- Starting at a point that is 30cm in from the end of the Retaining Wall, with the fleece side facing the concrete to be poured, install the Delta DualProof Membrane so that one end extends up the Retaining Wall to 150mm above the finished height of the floor-slab or the level of the kicker joint and that the other end extends out onto the oversite at least 300mm.

When the slab is to be installed in sections, the DualProof membrane must extend a minimum of 300mm beyond the slab edge. This allows for a suitable overlap and joint seal detail to be formed.

APPLICATION

3.8 Pile Cap Detailing

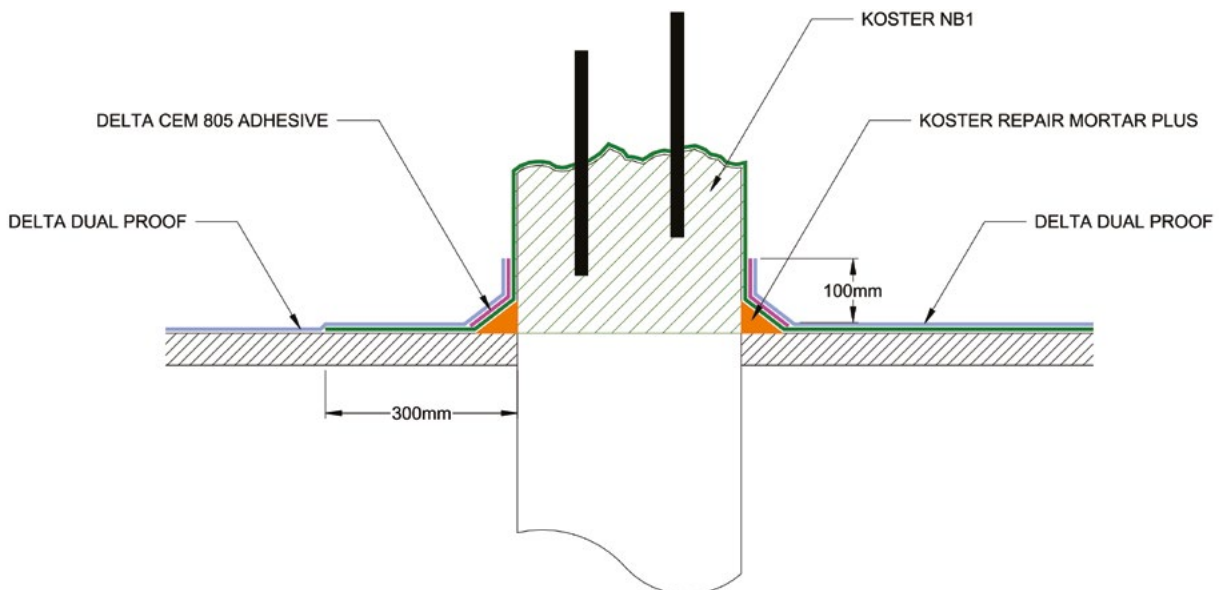


Koster Quellband should be included in the applicable slab construction joints.

1c) Pile cap detailing

The DualProof membrane should not normally be installed over the pile cap but instead, trimmed to fit accurately around the pile cap. Koster NB1 Grey is used to seal joint between the pile cap and the slab.

- Cut DualProof membrane to required size around pile cap.
- Apply Koster Repair Mortar Plus at junction between pile cap and DualProof Membrane to form a 40mm rounded fillet.
- Apply 2 coats of Koster NB1 Grey over pile cap, fillet and rebar.

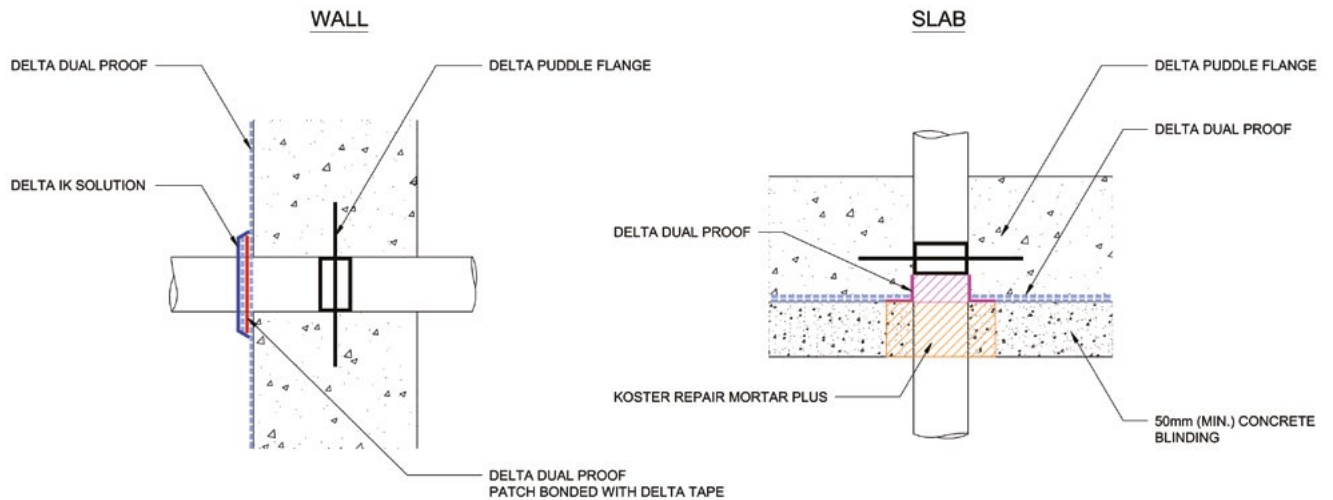


APPLICATION

3.9 Detailing

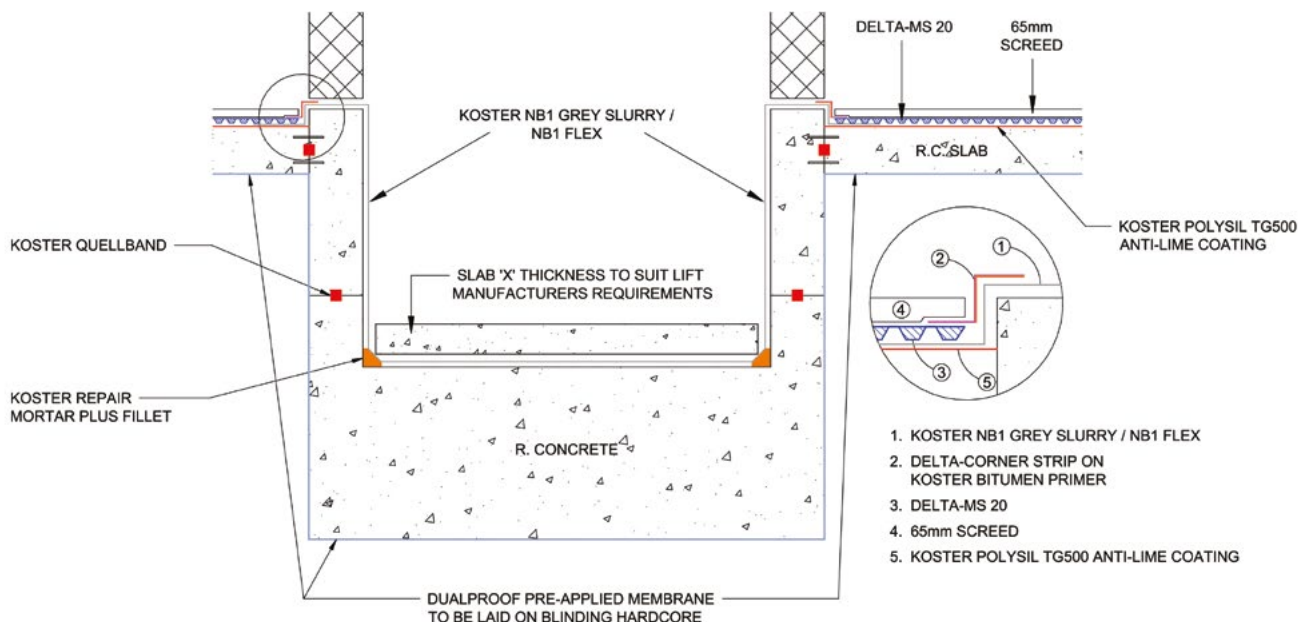
1d) Service Penetrations Through Slab

- Fill around penetration in oversite using Koster Repair Mortar Plus to create a level surface
- Cut DualProof membrane to required size around penetration pipe or sleeve.
- Form Sleeve around pipe using DualProof. Ensure that fleece side will face the new concrete.
- Install Delta Puddle Flange to penetration/pipe.



1e) Lift Pits

- DualProof should be installed to the vertical and horizontal surfaces of the substrate to form a continuous envelope around the lift pit
- Please contact Delta Membranes for site specific design and detailing around sumps and piston plungers in the slab.
- A 300mm overlap should be provided to allow for jointing to the DualProof below the slab.
- Koster Quellband should be included in the lift pit construction joints.

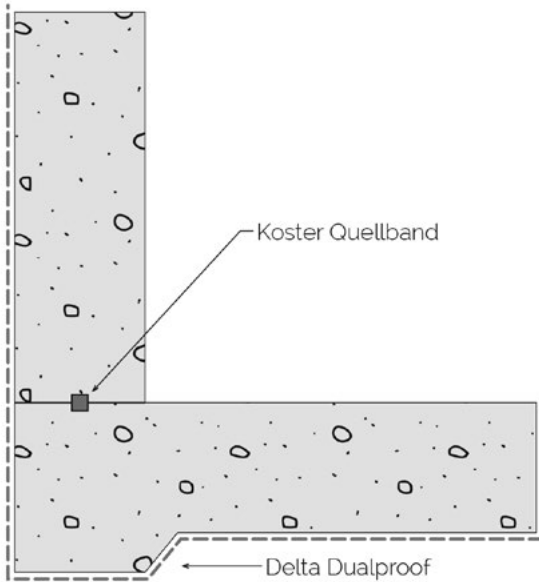


APPLICATION

3.9 Detailing

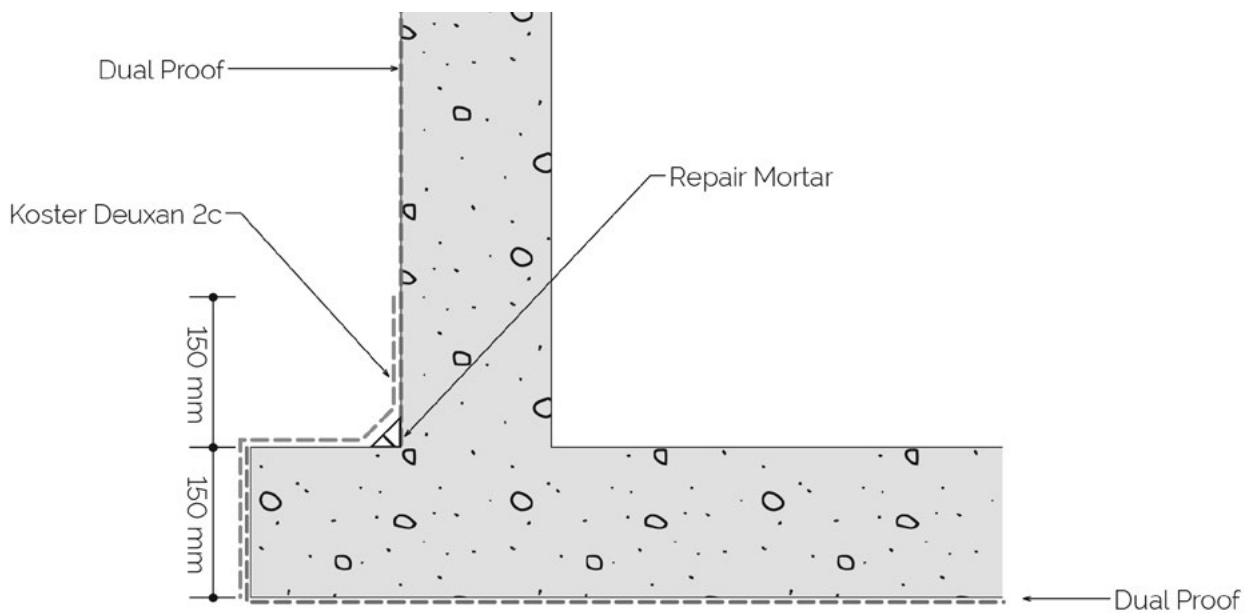
1f) Slab Edge Detailing

DualProof should be continued up the slab edge formwork to extend 150mm beyond the top of the slab or the height of the kicker joint.



1g) Toe of Slab Detailing

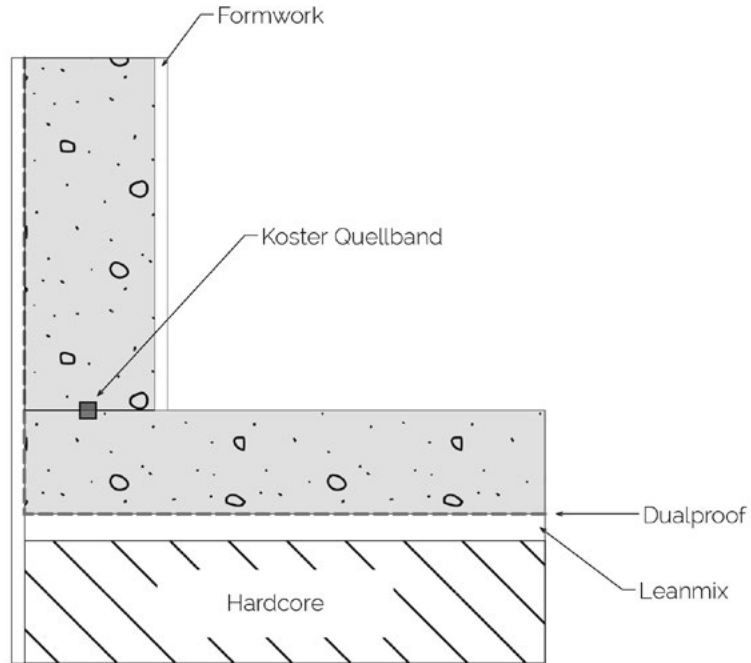
Koster Deuxan 2c should be used to seal the toe of the slab. Deuxan 2c is a post applied system that should be applied after the concrete formwork is removed.



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3.10 Vertical Installation

Before installing DualProof please read the installation manual in order to become familiar with the installation process. Some types of retaining wall systems, such as caisson retention, may require site specific detailing. Please contact Delta Membranes for technical support.

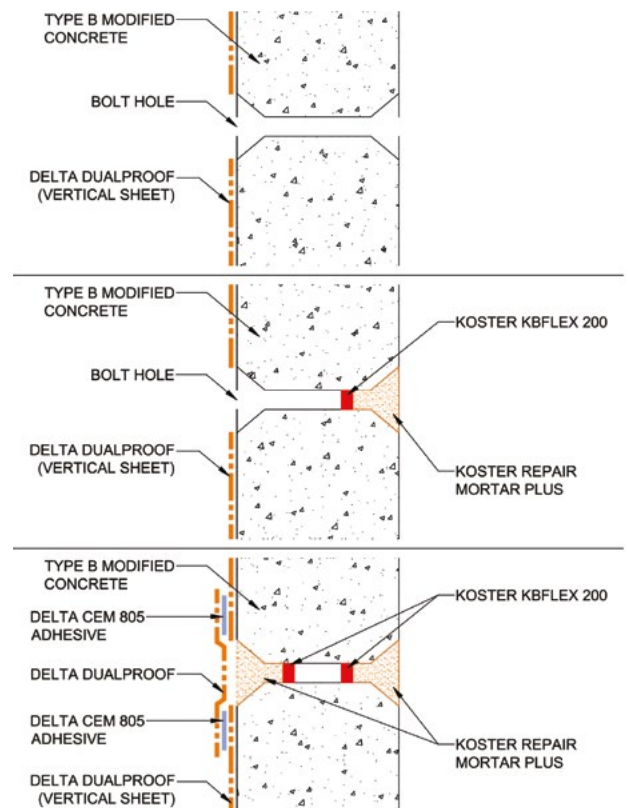


2a) Formwork Installation

Transition from slab edge to wall.

- A 150mm overlap of the under slab DualProof should be available to continue the installation. Please contact Delta Membranes if this is not present.
- DualProof can be pinned or stapled to the formwork to hold securely in place during the installation.
- Timber formwork used in front of an uneven surface (such as contiguous piles) should be supported from behind using sand or cementitious grout to prevent deflection.

Tie Bar holes should be filled using Koster Repair Mortar Plus and oversealed using the DualProof patch method.



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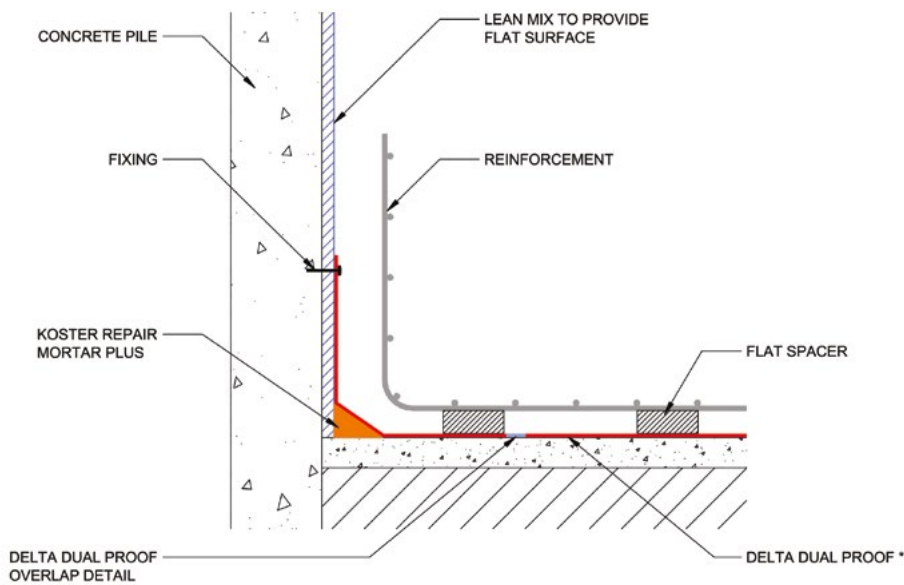
3.10 Vertical Installation

2b) Contiguous and Secant Piles

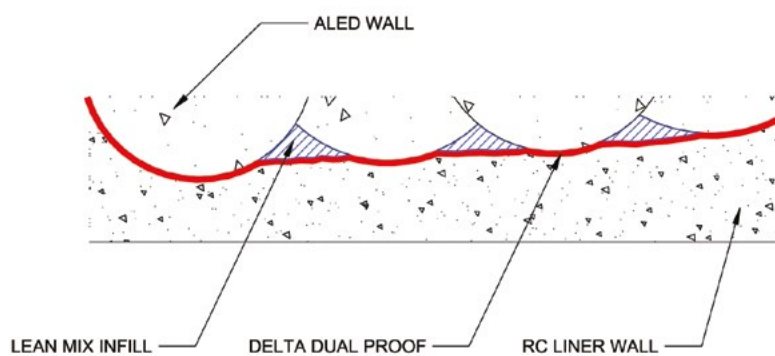
Contiguous Piles

- The cusps between the piles should be levelled using a cementitious grout or shotcrete system.
- DualProof can be installed, following the profile of the piles.

DELTA DUAL PROOF - PILED WALLS



PLAN VIEW



* THE UNDERSLAB DELTA DUAL PROOF SHOULD TERMINATE AT LEAST 150mm ABOVE THE TOP OF THE POURED SLAB



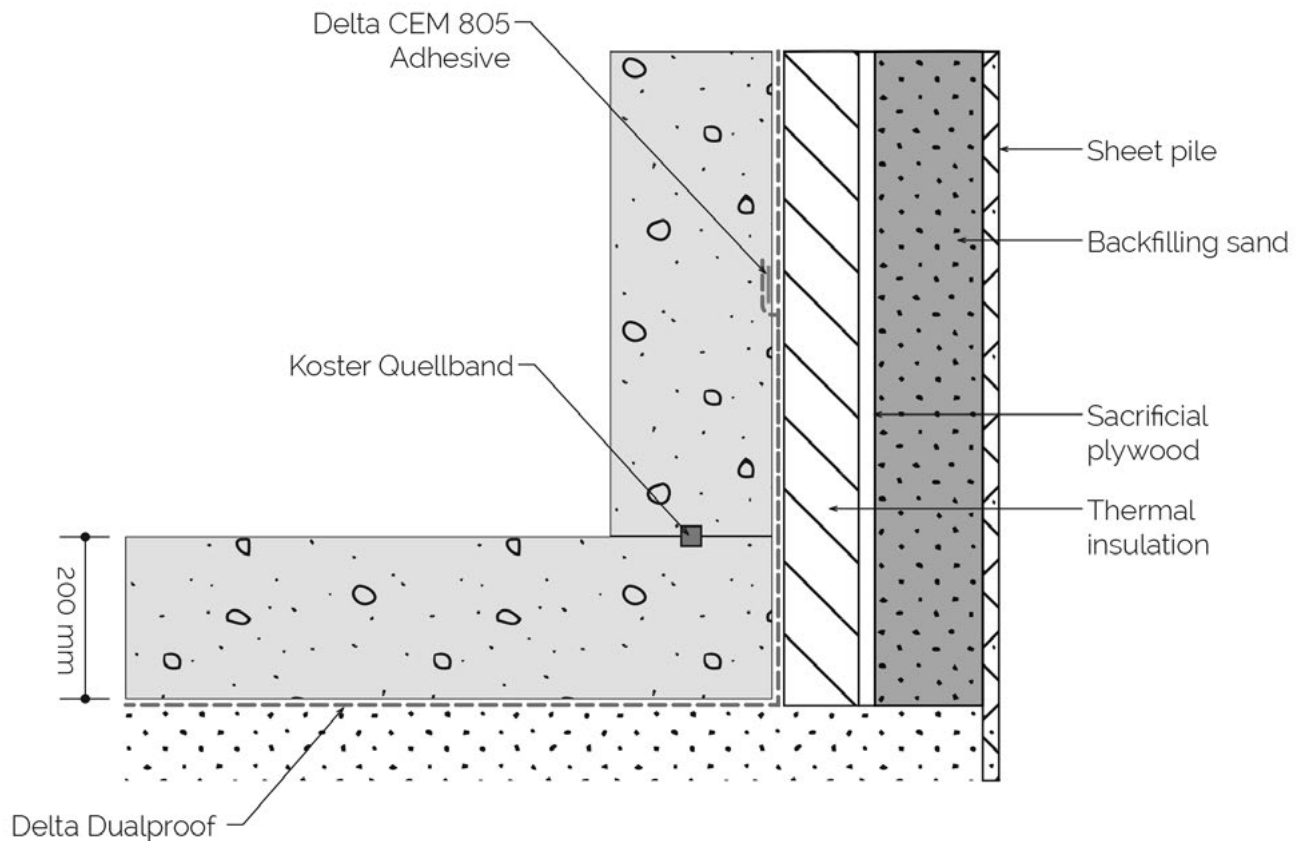
APPLICATION

3.10 Vertical Installation - Detailing

2c) Metal Sheet Pile Retaining Walls

Preparation:

- The clutches of the sheet piling are typically welded to reduce water ingress.
- DualProof sheet joints should not occur at unwelded junctions between the sheet piles.
- A level surface can be formed to the surface of the sheet piles using a layer of sacrificial plywood formwork.



2d) Shotcreted Earth Or Rock Retention

- Shotcrete should be applied to create a level surface with depressions of no more than 12mm.
- Where depression of more than 12mm are present, this should be flush filled using Koster Repair Mortar Plus.
- DualProof can be continued over any ground anchor heads if direct contact with the retaining wall concrete is not required. Where direct contact is required, the pile cap method, 1c, should be used.

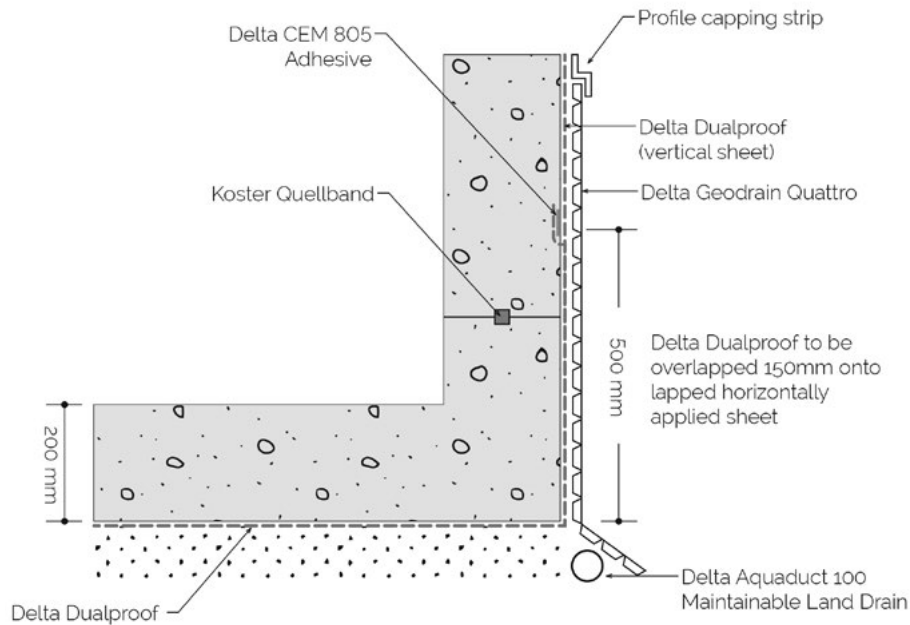


APPLICATION

3.10 Vertical Installation - Detailing

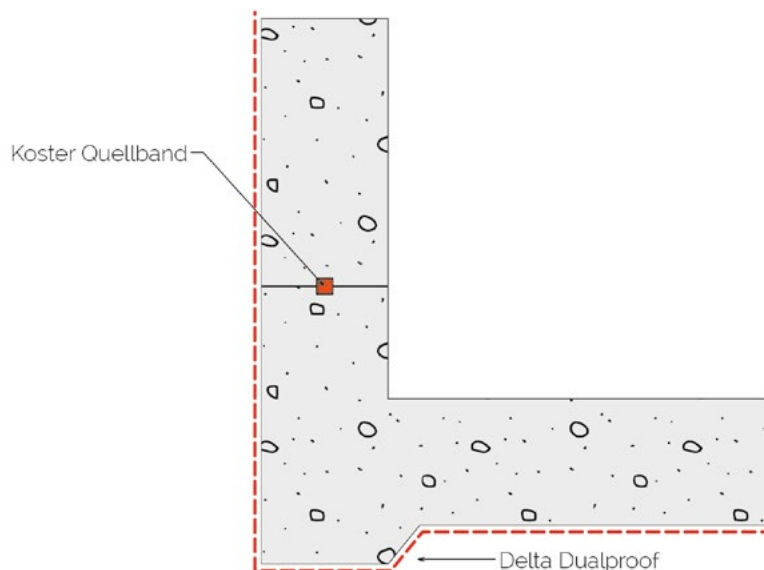
2e) Backfill Protection and Temporary Formwork

- Where temporary formwork is used, it may be necessary to use a backfill protection system.
- Delta Geo Drain Quattro should be installed vertically to protect the DualProof damage against damage during the backfilling process. Delta Geo Drain Quattro will also improve external surface water drainage.



2f) Position of Land Drain

- Delta Aquaduct 100 can be used as an external surface water drain and should be connected to a suitable drainage outlet. Typically, this land drain should be positioned below the height of the slab.
- Maintainable land drain not to be positioned closer than a line of 45° from the underside of the slab/blinding or with an invert above the upper surface of the floor slab. Please refer to chapter 6.4 and figure 3 of BS8102:2009 for further information on external sub surface drainage.

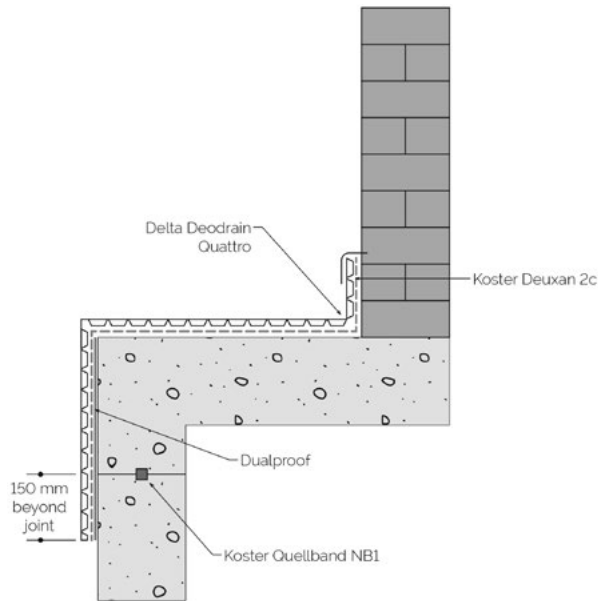


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3.10 Vertical Installation - Detailing

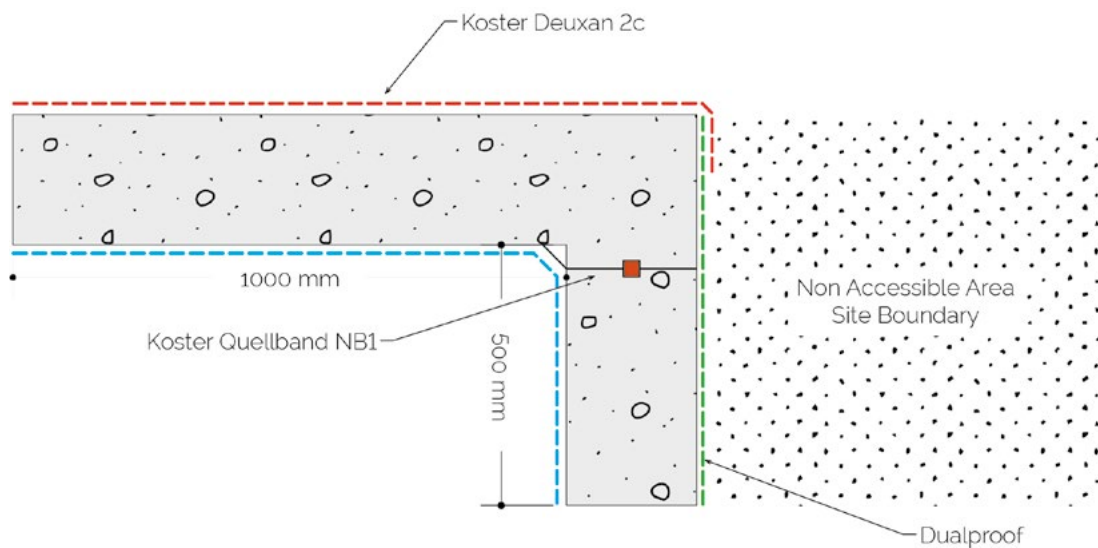
2g) Connection to External Buried Roof Detail

- DualProof is not suitable for use on buried roofs or podium decks over basement structures.
- Buried roofs should be formed from solid reinforced concrete. Rib deck or block and beam should not be used.
- Where possible the deck should be laid to falls away from the building.
- Koster Deuxan 2x should be applied in 2 coats to the outside of the deck. Koster Deuxan 2c should continue across the outside face of the deck and lap OVER the DualProof membrane. This overlap should extend 150mm past the DualProof membrane or past the uppermost construction joint between the deck and the retaining wall. Whichever is greater.



Site Restrictions

Where it is not possible to access the outside of the structure to adequately form this overlap an additional waterproofing layer will be required to the underside of the buried roof. Koster NB1 Grey should be applied to the negative side of the deck.



Test data and further product technical information can be found on the BDA Agrément® BAB 19-091-S-A-UK.



4. Maintenance

Type A waterproofing solutions, if applied correctly on first installation do not require ongoing or routine maintenance.

5. Patch Repair during installation

Where Delta DualProof is mechanically damaged then a simple patch repair can be carried out, cut a section of Delta DualProof so as there is a minimum 100mm overlap to the damaged area and seal patch on to existing Delta DualProof membrane using CEM 805.

6. Inspection/Quality Control

Delta DualProof should only be installed by a competent trained contractor.

We recommend the membrane installation contractors record all relevant details and facts in a written record to provide a reference for the installation.

See section 10 for Site Installation Log.

7. Health and Safety

7.1 For the installation of Delta DualProof, there is no special personal protection equipment (PPE) or safety equipment required. In order to minimise the risk of ill health or accidents when installing the Delta DualProof system workers must be fully trained, competent and follow health and safety guidelines.

PPE should be provided to workers who might be exposed to anything that could risk their health and safety while on site. As a minimum, most construction site will require some form of head protection, a high vis vest or jacket, and suitable footwear. Exact details will vary on each construction site and Coshh requirements.

7.2 The generation of waste should be avoided and/or minimised wherever possible. Any waste from the installation of Delta DualProof system should be disposed of in accordance with local regulations.

8. Warranty/Guarantees

Delta Membrane Systems Limited offer a 12-year Product Guarantee on membranes, seals, and fixings when the Delta DualProof waterproofing solution has been installed by a Delta Registered Installer.

A list of experienced Delta Registered Installers is available from Delta's offices.



9. Troubleshooting

Please contact Delta Membranes on 01992 523 523 between 8 am and 5 pm Monday to Friday or by email at: info@deltamembranes.com for more information.

10. Ancillaries



Delta Membrane Systems Ltd, Delta House, Merlin Way, North Weald, Epping, Essex, CM16 6HR.

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