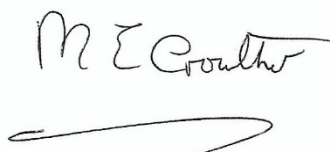


Number BAB-19-091-S-A-UK Replaces: -			Category Slabs, foundations and walls of earth retaining basements
Date August 2019	BDA Agrément® BAB-19-091-S-A-UK		Phase Assessment
Project number 2093			Subject Waterproofing systems
Validity www.kiwa.co.uk/bda			
System	Delta DualProof		
Agrément holder	Delta Membrane Systems Ltd. Delta House, Merlin Way, North Weald Epping, CM16 6HR		T: +44 (0)1992 523523 E: info@deltamembranes.com W: www.deltamembranes.com
Description	This Agrément relates to the Delta DualProof System (hereinafter the 'System'), a continuous type A waterproofing system. The 1.2 mm thick membrane for pre-application seals foundations, below ground surfaces of floors and walls and details of reinforced concrete earth retaining structures.		
Scope (use)	Continuous waterproofing System to be used for below ground structures in line with BS 8102. The System is suitable for use beneath floor slabs/rafts, both single and double-sided formwork for concrete walls and lift pits and uses ancillary items to seal pile caps, pipe penetrations and joints.		
Summary of Agrément	This Agrément covers the following: <ul style="list-style-type: none">• Conditions of use;• Sources, including relevant codes of practice and test reports;• Independently verified System characteristics and non-assessed ancillary items;• Quality control and continuous surveillance;• Points of attention for the specifier and examples of details;• Installation procedure;• Compliance with Building Regulations and non-Regulatory Standards.		
Major points of assessment	Moisture control (sections 8.1, 8.4 and 8.5) The membrane can resist water penetration if a slit or crack is present in the concrete. The pre-applied membrane show, in case of puncture, no lateral water flow (between the concrete and membrane). Fire performance (section 8.6) The System will not prejudice the fire performance of an earth covered waterproofing concrete structure and can contribute to meet the UK requirements. Durability (section 8.8) The expected life span of the building should be at least 60 years. The fully protected System will provide, under normal service conditions, a durable waterproof covering for the life of the building in which it is installed. CE-marking The manufacturer has taken the responsibility of CE marking the System in conformity with harmonised standards BS EN 13967 and BS EN 13491.		
Statement	It is the opinion of Kiwa Ltd. that the System is fit for its intended use, provided it is specified, installed and used in accordance with this Agrément.  Chris Vurley, CEng Technical Manager, Building Products  Mark Crowther, M.A. (Oxon) Technical Director		
Version 01	Kiwa Ltd. Unit 5 Prime Park Way, Prime Enterprise Park Derby, DE1 3QB, United Kingdom +44 (0)1332 383333 © 2019 Kiwa Ltd.		Page 1 of 10 pages

<p>1 Conditions of use</p>	<p>1 Application The System can be applied to the outside of slabs, foundations and walls that are constructed of cast in-situ reinforced concrete to achieve performance Grades 1 and 2; and Grade 3 when part of a combined waterproofing protection solution design as defined in BS 8102. The System shall not remain permanently exposed to the weather, especially sunlight and rain. The manufacturer's instructions must be observed.</p> <p>2 Assessment Kiwa BDA Testing^{^)} and Kiwa GmbH TBU^{^^)} have assessed the System according to BS 8102 and BS EN 13967; a summary of the test results is given in section 3 of this Agrément. Kiwa Ltd. has assessed all aspects related to the specifications, installation procedure and national Building Regulations in combination with the Declarations of Performance (DoP's) and Technical Assessment and site visits. Also, NHBC Standards have been taken into account. Factory Production Control has been assessed. ^{^)} CPR Notified Laboratory No. NB 1640; Testing Accreditation RvA L 447 (acknowledged by UKAS) ^{^^)} CPR Notified Laboratory No. NB 0799; Testing Accreditation DAKS (acknowledged by UKAS)</p> <p>3 Installation The System shall only be installed by contractors whose employees have been trained and approved by the Agrément holder. The System shall be installed strictly in accordance with the instructions of the Agrément holder and the requirements of this Agrément.</p> <p>4 Geographical scope The validity of this document is limited to England, Wales, Scotland, Northern Ireland and Ireland, with due regard to section 11 of this Agrément (national Building Regulations).</p> <p>5 Validity The purpose of this BDA Agrément® is to provide for well-founded confidence to apply the System in the described applications and according to approved specifications. According to the BDA Guideline – BDA Agrément® the validity of this document is therefore three years after the official date of issue, published on www.kiwa.co.uk/bda. After this the validity can be extended every three years following a positive review. This Agrément is not valid in those cases where Kiwa Ltd. identifies that the design of a waterproofing system does not comply with section 8.1 (Permitted constructions) of this Agrément.</p>
<p>2 Sources</p>	<ol style="list-style-type: none"> 1 BDA Guideline – BDA Agrément®, 2015-06-30. 2 BS ISO 11665-10. Measurement of radioactivity in the environment - Air: radon-222. Part 10: Determination of diffusion coefficient in waterproof materials using activity concentration measurement. 3 BS EN 1847:2009. Flexible sheets for waterproofing. Plastics and rubber sheets for roof waterproofing. Methods for exposure to liquid chemicals, including water. 4 BS EN 13501-1:2007+A1:2009. Fire classification of construction products and building elements. Classification using test data from reaction to fire tests. 5 BS EN 13967:2012+A1:2017. Flexible sheets for waterproofing. Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet. Definitions and characteristics 6 BS 8102:2009. Code of practice for protection of below ground structures against water from the ground. 7 NHBC Standards 2019. Chapter 2.1 The Standards and Technical Requirements and Chapters 5.1 Substructure and ground bearing floors and 5.4 Waterproofing of basements and other below ground structures. 8 Build-desk, Vapour resistances and μ-values (to BS 5250:2002 Annex E). 9 CIRIA report C735. Good practice on the testing and verification of protection systems for buildings against hazardous ground gases, issued 2014. 10 TÜV SÜD Management Service GmbH, ISO 9001:2015 certificate BPA GmbH, No. 12 100 36327 TMS, 2018-06-07. 11 Delta Membrane Systems, Material Safety Data Sheet for CEM 805 DualProof, version 1, issued 27.06.2019. 12 BPA, DoP EN 13967 DualProof (types T and S) 1.2 mm thick, 2018-02-06. 13 BPA, DoP EN 13491 - DualProof T/S 1.2 mm thick, 2019-03-14. 14 Delta Membrane Systems, DUALPROOF INSTALLATION & GUIDANCE DOCUMENT, March 2019. 15 Delta Membrane Systems, TDS for Delta CEM 805, adhesive/sealant, version DMSPD2019-V1.
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3 Independently assessed System characteristics of materials used for critical functions

An asterisk (*) indicates that the relevant data shown in this section are taken from the manufacturer's Declarations of Performance (DoP).

DualProof

A waterproofing membrane for pre-application only (before the pouring of concrete). This composite waterproofing membrane consists of a specially non-woven fleece co-extruded to a highly flexible PVC membrane. The DualProof fleece consists of 100 % PP-fibres with a mass of approximately 100 g/m². After pouring of the concrete the fibres of the fleece become embedded in the concrete and bond permanently.

Resistance to radon permeation, according to standard BS ISO 11665-10:

- radon diffusion coefficient (D): $D = 0.302 \cdot 10^{-12} \text{ m}^2 \cdot \text{s}^{-1}$;
- radon diffusion length (L): $L = 0.379 \text{ mm}$.

Characteristics

The characteristics for relevant properties of the 1.2 mm thick membrane are given in Table 3.

Common dimensions of rolls of DualProof are:

- width x length x thickness = 1.0 m x 20.0 m x 1.2 mm (34 kg)
- width x length x thickness = 1.2 m x 25.0 m x 1.2 mm (36 kg)
- width x length x thickness = 2.0 m x 25.0 m x 1.2 mm (68 kg)

Note: consult the Agrément holder when specific dimensions, other than the above, are required.

Table 3 – Characteristics of DualProof (1.2 mm thick)

Property	Test standard	Value	Unit
Max. tensile force MD / CMD	EN ISO 12311-2 (A)	1159 / 1159	N / 50 mm
Elongation at max. force MD / CMD	EN ISO 12311-2 (A)	80 / 80	%
Nailshank tear resistance MD / CMD	EN 12310-1	536 / 536	N
Resistance to impact	EN 12691 (A)	≤ 600	mm
Resistance to static load	EN 12730 (A + B) [24h / 20kg]	≤ 20	kg
Water vapour transmission	EN 1931	$S_d \approx 28.9$	m
		$\mu \approx 12,391$	-
		$\approx 145^\wedge$	MN·s·g ⁻¹
Shear resistance in the overlapping	EN 12317-2	924	N / 50 mm
Watertightness	EN 1928 (B)	pressure: 60 kPa, 24 h	watertight
		pressure: 500 kPa, 72 h	
Resistance to artificial ageing	EN 1296	method: 12 weeks / 70 °C	watertight
	EN 1928 (B)	pressure: 60 kPa	watertight
Resistance to chemicals	EN 1847	Ca(OH) ₂ / H ₂ SO ₃ / NaCl	watertight
	EN 1928 (B)	pressure: 60 kPa	
Compatibility with bitumen	EN 1548	method: 28 d / 70 °C	watertight
	EN 1928 (B)	pressure: 60 kPa	
Reaction to fire	EN ISO 11925-2 EN 13501-1	E	Euroclass
Visible defects	EN 1850-2	passed	pass

[^]calculated

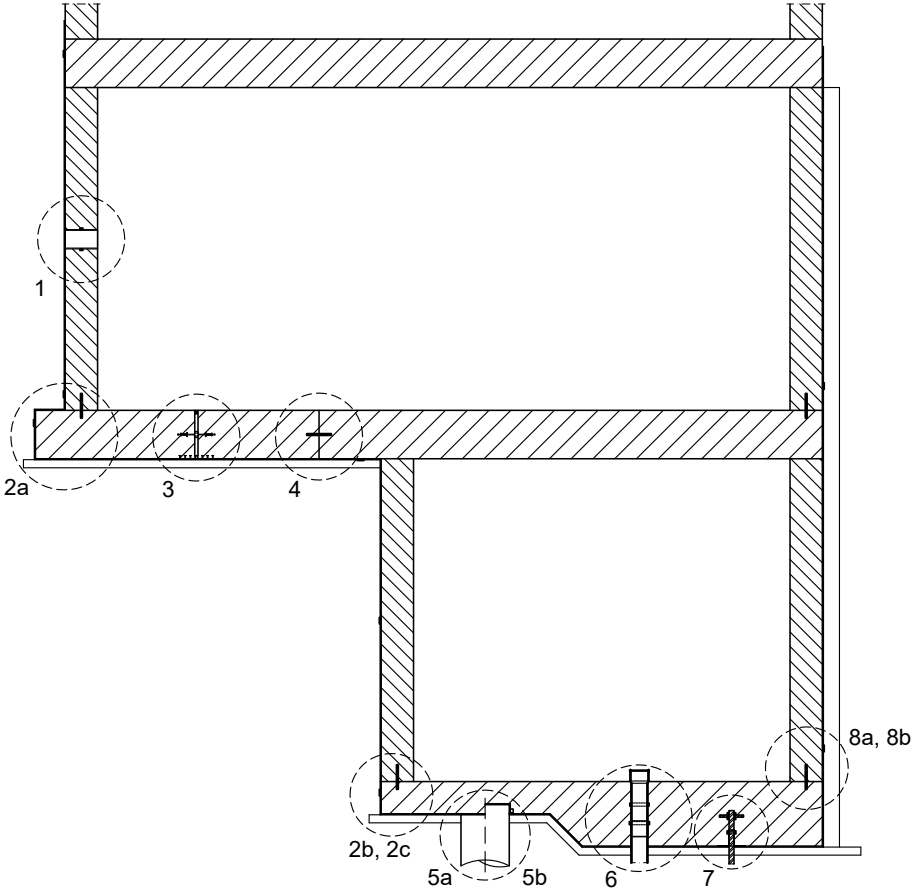
4 Non-Assessed ancillary items and associated products used for critical functions	<p>Several ancillary products as a complement to the System are available as follows:</p> <ul style="list-style-type: none"> • KOSTER NB1 SLURRY – a mineral coated waterproofing slurry to be used for waterproofing against ground moisture and for non-pressurized and pressurized water. Resistant against chlorides, sulphates and phosphates. • KOSTER DEUXAN 2C – a crack-bridging (2 component polymer) modified bitumen thick film sealant for waterproofing construction. Can be used internally and externally on concrete, brickwork, blockwork or masonry, or as a dampproof and waterproof membrane for solid floors and tanking. • DELTA PUDDLE FLANGES – a solution against water penetration around service pipes and available in various sizes from 32 mm up to 160 mm. • DELTA GEODRAIN QUATTRO – a drainage protection system/external waterproofing membrane made of a compact 4-layer membrane which can be used vertically and/or horizontally. • KOSTER QUELLBAND – a sodium-bentonite based water swellable joint tape that acts as waterstop for concrete construction joints. To be nailed onto an existing joint face before the consequent concrete pour. Any leakage through the joint activates the Quellband. • KOSTER REPAIR MORTAR PLUS – a watertight, fast setting, slightly expanding repair mortar. With the addition of Koster SB Bonding Emulsion, it can be used as a PCC (polymer-modified cement concrete) mortar. Can be applied to all mineral substrates, internally and externally, such as concrete, brickwork, blockwork or masonry. • CEM 805 ADHESIVE – a one-component polymer adhesive/sealant, odourless, elastic, resistant to weathering and suitable for many substrates. A primer may optimise sealant adhesion. Do not use a primer on glass and glazed surfaces. • CEMproof® PVC Waterstops – waterbars to seal expansion and construction joints.
5 Factory Production Control (FPC)	<p>In compliance with Regulation (EU) No 305/2011 (CPR), Kiwa GmbH TBU has issued Certificate of conformity No. 0799-CPR-146 for the factory production control.</p>
6 Quality Management System	<p>The manufacturer uses a Quality Management System for Design, Manufacturing and Sales of Structural Waterproofing and Refurbishment Systems for Civil Engineering according to ISO 9001:2015. For that certificate No. 12 100 36327 TMS has been issued by the Certification Body of TÜV SÜD Management Service GmbH.</p>
7 Continuous surveillance	<p>In order to demonstrate that the FPC is in conformity with the requirements of the technical specification described in this Agrément the continuous surveillance, assessment and approval of the FPC will be done in a frequency of not less than once per year by or on behalf of Kiwa Ltd.</p>
8 Points of attention for the specifier	<ol style="list-style-type: none"> 1 Permitted constructions <ul style="list-style-type: none"> - only applications according to the specifications as given in this Agrément are allowed; in each case the specifier will have to cooperate closely with the Agrément holder; - typical applications include backfilled concrete walls, (structural) slabs/rafts and property line constructions (e.g. secant and contiguous piling, skin wall, metal sheet piling, shotcrete and stabilised earth retaining walls); - the substrate beneath a below ground in situ cast concrete slab/raft shall be fit for application to prevent excessive deformation of the System, see section 8.3, and the concrete slabs/rafts or walls shall be designed by a Structural Engineer; - the System shall not remain permanently exposed to the weather, especially sunlight and rain; - install the System in accordance with section 10 of this Agrément, regarding the characteristics as reported in section 3. The manufacturer's instructions must be observed. 2 Waterproofing design <p>General recommendations and guidance about how to prevent water ingress into a structure below ground level can be found in standard BS 8102.</p> <ul style="list-style-type: none"> - the System acts as a vapour barrier and provides waterproofing protection of Type A or Types A and B (when combined with ancillary items, see section 4) for below ground structures to achieve performance Grades 1, 2 or 3 as defined in table 2 of BS 8102; - a waterproofing design specialist should be employed, who is a Certificated Surveyor in Structural Waterproofing (CSSW) according to a training provider like the Property Care Association (PCA); - issues to be taken into account for waterproofing barriers can include: <ul style="list-style-type: none"> o grade of waterproofing protection; o protection from damage, following application and curing, where the barrier is applied externally; o penetrations through the barrier; o fixings, where these are necessary; o application over joints in the concrete.
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8 Points of attention for the specifier (continued)	<p>3 Acceptable substrates</p> <p>The substrate in contact with the pre-applied membrane must be assessed by a specialist who is trained in earthworks, ground investigation, soil treatment or soil stabilisation. Examples of such substrates are:</p> <ul style="list-style-type: none">- blinding, clay heave boards, rigid insulation, removable formwork, compacted type 1 hardcore;- a shotcrete substrate or rough blinding must be covered by a non-woven geotextile or protective layer of e.g. PE foil. <p>Note: do not place a membrane directly on a coarse hardcore layer. Take note of sections 8.1, 10.4 and the diagrams in section 9 of this Agrément. Take into account the NHBC Standards, reference R3(a), (iv).</p> <p>4 Watertightness</p> <ul style="list-style-type: none">- when pre-applied the System will resist water vapour transmission from the ground (see table 3), the penetration of water and lateral water flow (flow between the concrete and the membrane) (see section 8.5);- overlaps of membranes shall be at least 50 mm wide; seal by hot-air welding or with bonding agent (CEM 805 Adhesive). The use of Delta tape (a double-sided butyl tape) is only suitable in certain applications;- damage to the membrane or penetrations (e.g. anchors, pipes, conduits, lightning protection etc.) can be repaired with CEM 805 Adhesive (as an adhesive patch);- the System remains watertight after exposure to the following chemicals: lime milk (Ca(OH)₂), sulfurous acid (H₂SO₃) and sodium chloride (NaCl) according to the requirements of BS EN 13967. See also table 3 in section 3. <p>5 Resistance to damage</p> <ul style="list-style-type: none">- no lateral water flow occurs if a membrane is punctured by a 20 mm diameter hole (tested to 5 bar = 500 kPa, based on standard EN 12390-8);- no water penetration occurs if a slit or crack of 3.2 mm were present in the concrete surface (tested to 6.9 bar = 690 kPa according to standard ASTM D5385(M)) and if the System is pre-applied;- the System is resistant to dynamic impacts (see table 3) occurring during normal site activities; however, to prevent damage from ongoing work, full protection should be temporarily provided to the installed membrane and removed prior to the installation of reinforcement. <p>6 Fire performance</p> <ul style="list-style-type: none">- the reaction to fire class of the membrane is E;- the System does not adversely affect the fire performance of a waterproofed earth retaining structure fully covered with earth;- the use of the System will not affect the fire rating obtained by concrete or block walls when evaluated by assessment to BS 476-3:2004. <p>7 Resistance to radon and ground gases</p> <ul style="list-style-type: none">- buildings at risk of elevated exposure to radon should be constructed in accordance with BRE report BR211: Radon: Guidance on protective measures for new buildings, 2015;- the System is a barrier to radon because the minimum thickness (d = 1.2 mm, the thickness of the PP-fleece is discarded) exceeds 3·L = 1.137 mm; take into consideration the provisions of BS 8485 Annex G for design and installation;- the resistance to ground gases including CO₂ and CH₄ is not determined. <p>8 Durability</p> <ul style="list-style-type: none">- under normal service conditions the fully protected System will provide a durable waterproof covering for the life of the building in which it is installed.- the System is not affected by organic contaminants.	
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9 Examples of details

The diagrams below are similar to those in the DUALPROOF INSTALLATION & GUIDANCE DOCUMENT.

Overview of diagrams - Typical Details



9 Examples of details
(continued)

Diagram 1- Typical Pipe Penetration

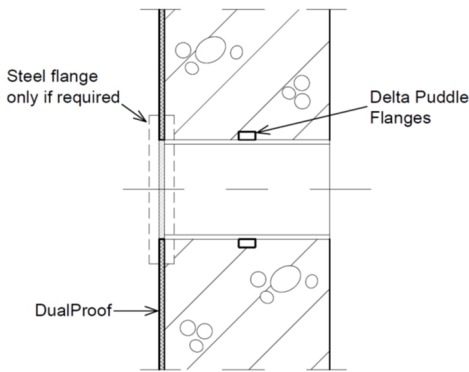


Diagram 2a - Typical Floor Slab/Wall Connection

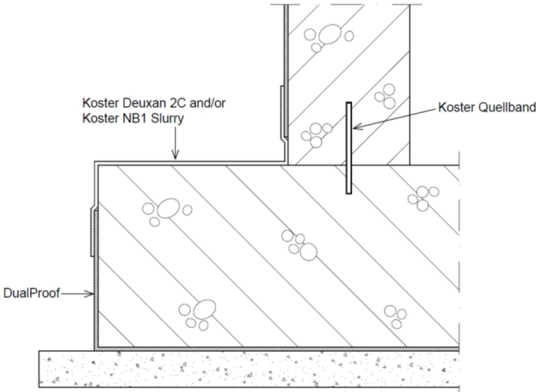


Diagram 2b - Typical Floor Slab/Wall Connection

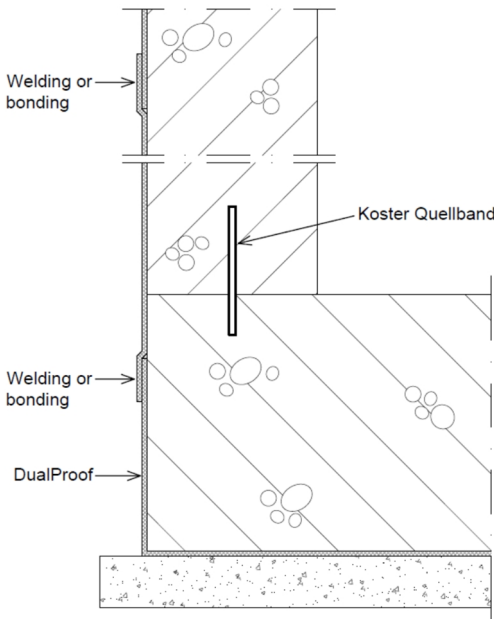


Diagram 2c - Typical Floor Slab/Wall Connection

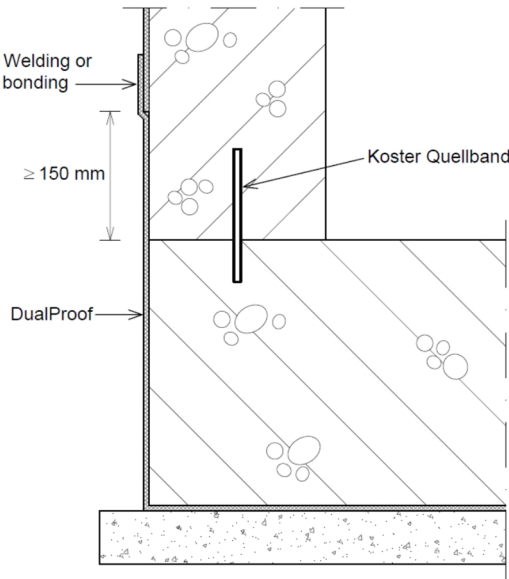


Diagram 3 - Typical Expansion Joint

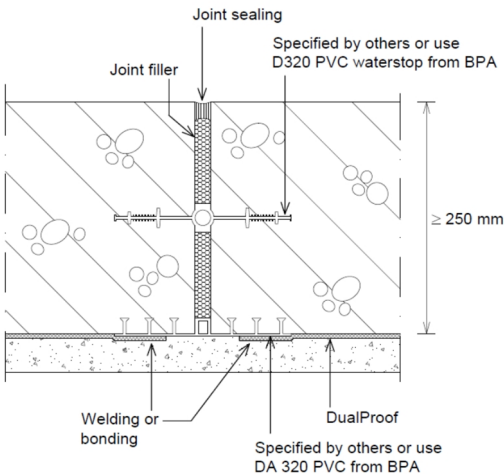


Diagram 4 - Typical Horizontal Construction Joint

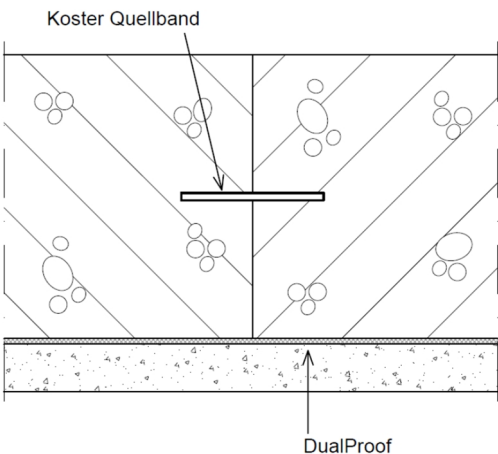


Diagram 5a - Typical Concrete Pile Connection

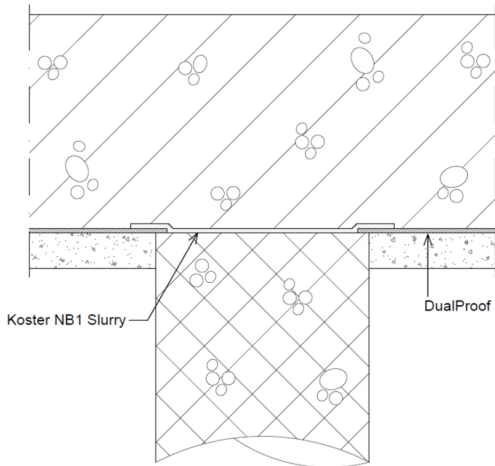


Diagram 5b - Typical Concrete Pile Connection

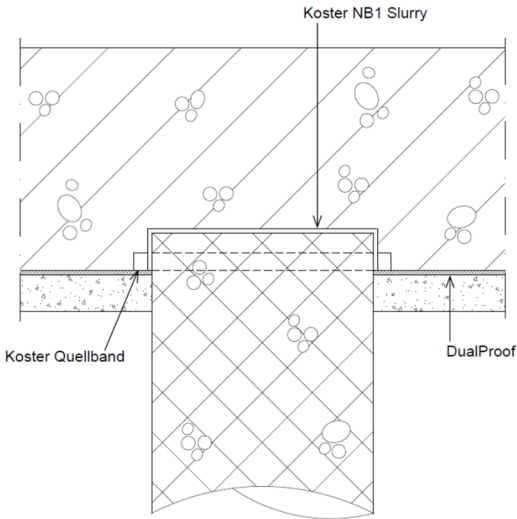


Diagram 6 - Typical Pipe Penetration Floor Slab

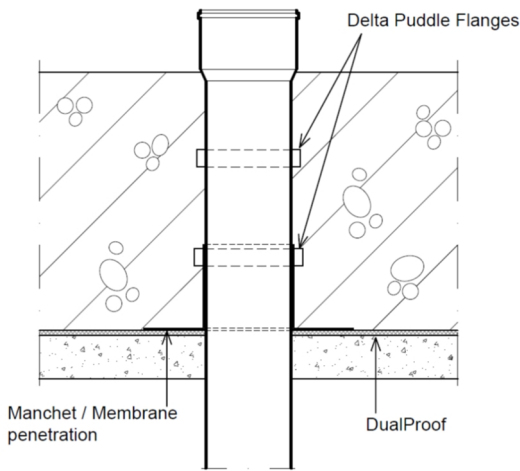


Diagram 7 - Typical Pipe Penetration Floor Slab

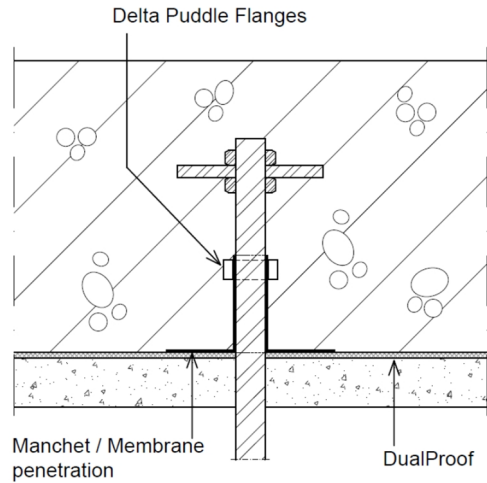


Diagram 8a - Typical Blind Side Waterproofing Concrete Pile

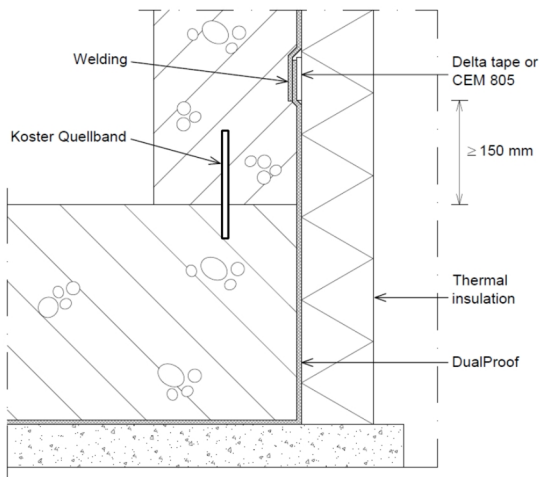
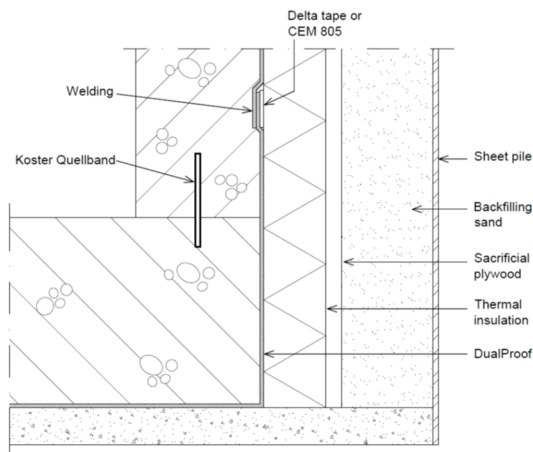


Diagram 8b - Typical Blind Side Waterproofing Sheet Pile



10 Installation aspects	<p>Remark 1: As part of the required technical consulting service (see paragraph 10.5) the Agrément holder can provide (CAD) details, for example on connections, protrusions and movement joints</p> <p>1 General</p> <ul style="list-style-type: none">- the System must be installed strictly in accordance with the instructions of the Agrément holder and the requirements of this Agrément and only by contractors whose employees have been trained and approved by the Agrément holder;- special attention must be given to the cleaning and preparing of all areas and connections involved before the System is installed, see sections 10.2 and 10.3;- read the DUALPROOF INSTALLATION & GUIDANCE DOCUMENT and Material Safety Data Sheets (MSDS) carefully prior to opening packaging containing the System components. <p>2 Delivery and site handling</p> <ul style="list-style-type: none">- the membrane is delivered to site in rolls; the label includes the Product name, suppliers name, health and safety information, weight and Agrément label displaying the number of this Agrément;- the membrane must be stored in dry conditions, under cover and away from direct heat;- the membrane must be protected from damage (puncture or crushing) and from premature contact with water;- the membranes must not be exposed to open flame or other ignition sources and must be stored away from flammable material such as paint and solvents;- to ensure maximum performance of the membrane when installed, on site precautions should be taken to provide protection from mud and dirt. <p>3 Limitations for the System</p> <ul style="list-style-type: none">- the System is designed to be used in confinement; the membrane should not be applied directly to masonry; the waterproofing application must be scheduled to allow prompt concrete pour or backfilling; carry out concrete pouring immediately after fixing and positioning the waterstops;- horizontal surfaces must be free from excessive standing water; if ground water contains strong acids or alkalis water samples must be submitted to the Agrément holder for testing;- installation in running water must be avoided – proper water management must be adopted before application of the System;- DualProof is designed for use under engineered structural concrete slabs with a minimum thickness of 150 mm;- before the installation of reinforcement steel, formwork and pouring of concrete the DualProof membrane must be cleaned, checked thoroughly and properly repaired where necessary according to the installation instructions of the Agrément holder. <p>4 Application under concrete slabs / rafts or to walls</p> <p>The membrane must be placed with the PP-fleece facing the concrete surface of the slab/raft or wall. In case of doubt about the fitness for purpose of a substrate, see section 8.3 of this Agrément, consult a specialist trained in earthworks, ground investigation, soil treatment or soil stabilisation.</p> <ul style="list-style-type: none">- ensure substrates and concrete surfaces of structures are free from gaps, cracks or sharp protrusions (e.g. coarse gravel or particles); use a suitable repair mortar to fill or smoothen irregularities in the substrate or concrete surface;- the structure (slab or wall) must have adequate strength and stiffness to support all expected loads, as determined by a Structural Engineer;- the membrane must not extend into foundation supports (e.g. pile caps, strips, pads), but must completely envelop them;- before any back filling protect the System with a non-woven geotextile with a mass of at least 500 g/m², or a protective layer such as DELTA GEODRAIN QUATTRO;- examples of details relating to joints, connections and penetrations are given in section 9 of this Agrément. <p>Note: in cases where the fitness for purpose has not been demonstrated, application of the System is not allowed within the framework of this Agrément.</p> <p>5 Maintenance</p> <ul style="list-style-type: none">- as the System is confined by concrete or protected by lost shuttering and earth or protected by specific measures (suitable boards or geodrains) and earth, maintenance is not required, provided that no part of the System remains permanently exposed;- the Agrément holder shall continue to provide a technical consulting service, such as, but not limited to, special (CAD) details.	
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<p>11 national Building Regulations</p>	<p>1 England - Requirements: The Building Regulations 2010 and subsequent amendments</p> <ul style="list-style-type: none"> - B4(1) External fire spread – an external wall can contribute to all provisions when covered with earth; - C2(a) Resistance to moisture - the System, including joints, will enable a below ground structure to satisfy this Requirement; - Regulation 7 Materials and workmanship – the System is manufactured from suitably safe and durable materials for their application and can be installed to give a satisfactory performance. <p>2 Wales - Requirements: The Building Regulations 2010 and subsequent amendments</p> <ul style="list-style-type: none"> - B4(1) External fire spread – an external wall can contribute to all provisions when covered with earth; - C2(a) Resistance to moisture - the System, including joints, will enable a below ground structure to satisfy this Requirement; - Regulation 7 Materials and workmanship – the System is manufactured from suitably safe and durable materials for their application and can be installed to give a satisfactory performance. <p>3 Scotland - Requirements: The Building (Scotland) Regulations 2004 and subsequent amendments</p> <p>3.1 Regulations 8 (1)(2): Fitness and Durability of materials and workmanship</p> <ul style="list-style-type: none"> - the System is manufactured from acceptable materials which are considered to be adequately resistant to deterioration and wear under normal service conditions, provided they are installed in accordance with the requirements of this Agrément; - maintenance or repair work will not be necessary unless (a part of) the external wall or deck or raft is damaged or is affected by structural modifications. <p>3.2 Regulation 9: Building Standards – Construction</p> <ul style="list-style-type: none"> - 2.7 Fire spread on external walls - the risk for ignition is (extremely) low and the earth retaining wall is assumed to have appropriate fire resistance from both sides; - 3.4 Moisture from the ground – the System will resist the passage of water and any other form of moisture or vapour infiltration from the ground. <p>3.3 Regulation 12: Building Standards – Conversions</p> <ul style="list-style-type: none"> - All comments given for the System under Regulation 9 also apply to this Regulation, with reference to clause 0.12 and Schedule 6 of this Standard. <p>4 Northern Ireland - Requirements: The Building Regulations (Northern Ireland) 2012 and subsequent amendments</p> <ul style="list-style-type: none"> - 23(a)(i)(iii) Fitness of materials and workmanship – the System is manufactured from materials which are considered to be suitably safe and acceptable for use as waterproofing; - 28(a)(b) Resistance to moisture and water – the System will resist the passage of water or water vapour from (a) the ground and (b) the weather; - 36(a) External fire spread - the System has combustible products which, when covered with earth, will not be exposed to fire thus will not ignite or contribute to the spread of fire. <p>5 Ireland - Requirements: Building Regulations 1997 and subsequent amendments</p> <p>In order to demonstrate compliance with Irish Building Regulations this Agrément certifies that the System complies with the requirements of a recognised document and indicates it is suitable for its intended purpose and use.</p> <ul style="list-style-type: none"> - B4/B9 External Fire spread – when fully covered with earth the fire spread to and from buildings in general (B4) and for dwellings (B9) is impossible; - C3/C4 Substances on or in ground and the passage of moisture – the System meets the requirements of TGD part C; - D1 Materials and workmanship – the System uses materials which are considered to be safe and acceptable but shall not remain exposed permanently; when installed in a workmanlike manner the System does not require/allow maintenance. <p>6 The Construction (Design and Management) Regulations 2015 and The Construction (Design and Management) Regulations (Northern Ireland) 2016</p> <p>Information in this Agrément may assist the client, Principal Designer/CDM coordinator, designer and contractors to address their obligations under these Regulations.</p>		
<p>12 NHBC Standards</p>	<p>In the opinion of Kiwa Ltd., the System, if installed, used and maintained in accordance with this Agrément, can satisfy or contribute to satisfying the relevant requirements in relation to NHBC Standards Chapters 5.1 Substructure and ground bearing floors and 5.4 Waterproofing of basements and other below ground structures.</p>		
<p>Version 01</p>	<table border="1"> <tr> <td data-bbox="316 2056 1289 2157"> <p>Kiwa Building Products © 2019 Kiwa Ltd.</p> </td><td data-bbox="1289 2056 1503 2157"> <p>Page 10 of 10 pages</p> </td></tr> </table>	<p>Kiwa Building Products © 2019 Kiwa Ltd.</p>	<p>Page 10 of 10 pages</p>
<p>Kiwa Building Products © 2019 Kiwa Ltd.</p>	<p>Page 10 of 10 pages</p>		