



Hydrotech MM6125

Hot-Melt Structural Waterproofing

The first choice for zero falls waterproofing on flat roofs, inverted green roofs, blue roofs and hard landscaped podium structures in new build applications.

With no product failures in over 50 years, and guaranteed waterproofing integrity for the lifetime of the structure, Hydrotech offers a total lifecycle solution for the building.



Hot-Melt Structural Waterproofing

Hydrotech MM6125

As the UK’s leading structural waterproofing system, Hydrotech Monolithic Membrane 6125 has been successfully used by architects and specifiers for over 50 years, ensuring some of the world’s most prestigious buildings and structures are kept watertight. Over 200 million square metres has been installed, principally on inverted roofs, podium decks, green roofs and blue roofs, in new build applications.

Hydrotech MM6125 is a hot-melt rubberised bitumen membrane which is heated and combined with a polyester reinforcement and protection sheet to form a weatherproof layer. It has a 100% bond to prepared concrete surfaces, so water cannot track beneath, is monolithic so there are no seals to fail, and is quick and easy to apply over complex roof details and around penetrations.

A unique formula combines refined asphalts, synthetic rubber and inert clay filler. The system is applied in two coats with a polyester reinforcement embedded between the layers. A range of protection sheets is available, including anti-root versions for use in green roof applications.

Hydrotech MM6125 is the original hot-melt system and as such has an unsurpassed performance history. Similar systems have emerged over the years, but the phrase “no known equal” still applies.

System Benefits

Zero Falls

Hydrotech MM6125 carries BBA approval and NHBC acceptance for use in zero falls applications of inverted or buried roof systems. This means the product can be applied directly to the structural concrete deck, without the need for a screed to falls, resulting in the associated time, weight and cost savings.

Specific provision is made in BS 6229: 2003 (Code of Practice for Flat Roofs with continuously supported coverings) for the use of products that are specifically designed, and independently accredited for use in zero falls applications.

Lifetime Performance

Hydrotech is the original hot-melt, rubberised bitumen membrane, designed to last for the lifetime of the building or structure to which it is applied, which means long-term waterproofing integrity and no future replacement costs.

Durability

Applied in a hot liquid state to the deck, and including a polyester reinforcement, the bond of Hydrotech MM6125 is 100% absolute. There is no risk whatsoever of water tracking below the membrane and, because it is monolithic, no possibility of lap failure.

Two-coat 6mm System

Hydrotech is a 6mm, two-coat, hot-melt system, comprising two applications of (nominal) 3mm each, plus integral reinforcement and protection sheet. This complies with the hot-melt membrane definition as per FRA Information Sheet No 31, 'Hot-Melt Rubberised Bitumen Waterproofing Systems – Code of Practice'.

Sequence of Installation

Being a seamless system, Hydrotech can be applied to upstands and details first, enabling other trades, such as cladding, to commence whilst the main deck is used as a working/storage area which is only waterproofed once clear. This can shorten the construction programme and eliminates the need for expensive, temporary protection of the membrane.

British Board of Agrément Approved

Hydrotech is approved by the British Board of Agrément (Certificate No. 90/2431), who state:

“...when fully protected and subjected to normal service conditions, Hydrotech will provide an effective barrier to the transmission of liquid water and water vapour for the design life of the structure/roof in which it is incorporated”.

European Technical Approval

Hydrotech is the only 6mm hot-melt rubberised bitumen waterproofing system to hold European Technical Approval, which confirms compliance with the EC's Construction Products Regulation.

Hydrotech Registered Installers

Hydrotech is only supplied to registered contractors, whose contracts managers and operatives must undergo a stringent training programme at Alumasc's head office, prior to obtaining registered status. The quality of workmanship is monitored on site on an ongoing basis to ensure compliance with the warranty.



Alumasc Warranty

Alumasc offer a number of warranty options, typically ranging from 20-35 years, covering product, design and installation.

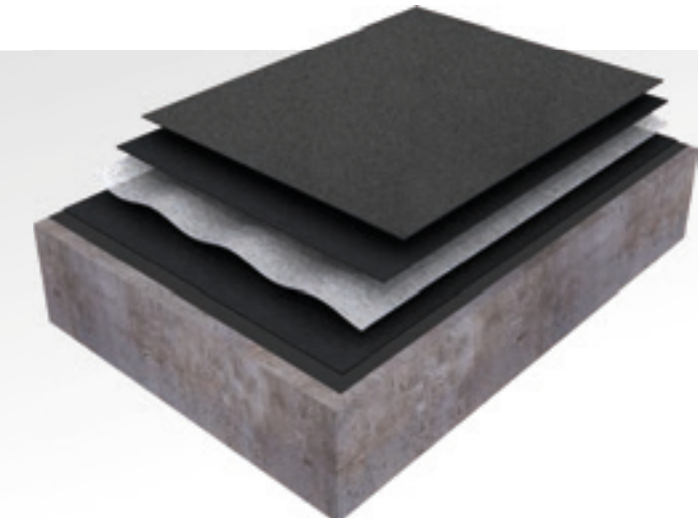
Alumasc warranties are supported by public and product liability insurances with a total indemnity limit of £50 million. Third party insurance backing giving cover against latent product defects is available via Prudential Regulation Authority (PRA) regulated insurance brokers subject to independent final inspection, documented compliance with an agreed maintenance schedule and pre-payment of the relevant premium.

On selected projects, Alumasc are able to offer an enhanced warranty package which includes additional site monitoring and reporting, in-house leak detection surveys, and five-yearly site inspections for the duration of the warranty to ensure continued peace of mind.

The warranty is issued following successful application of the Hydrotech system and subsequent leak testing.



Typical Hydrotech Waterproofing
System Build-up



Hydrogard Protection Layer
(with optional root resistance)

Hydrotech MM6125 Waterproofing
Nominal thickness 3mm – 2nd coat

Flex-Flash Reinforcement Layers
Main area – polyester fleece
Details – uncured neoprene

Hydrotech MM6125 Waterproofing
Nominal thickness 3mm – 1st coat

Alumasc Bitumen Primer
Surface conditioner

Structural Decking
Zero falls concrete or other approved substrate

Properties

Hydrotech MM6125 is self-sealing in the event of minor damage, highly resistant to fertilisers, building washes and acid rain and is completely solvent-free. The membrane has excellent low temperature flexibility and adhesion, and is not affected by rain, snow or frost immediately after its application.

Environment

Hydrotech MM6125 is manufactured utilising hydro-electric power as a primary energy source and contains up to 10% recycled content. Upstream production processes along with all aspects of packaging, transport and disposal comply with Alumasc’s ISO 14001: 2004 Environmental Management System.

Quality

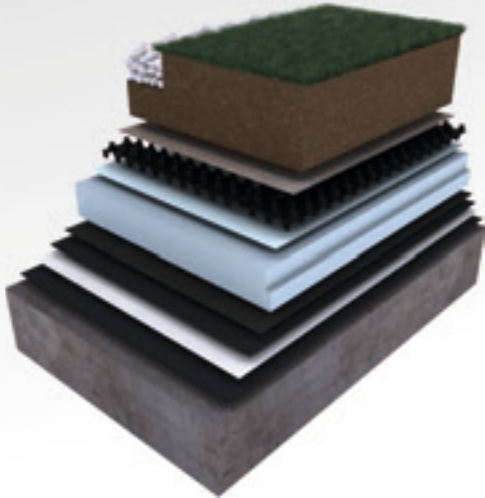
Manufacturing procedures are independently audited to the ISO 9001: 2008 Quality Management System.

The Hydrotech MM6125 waterproofing system offers lifetime waterproofing integrity for inverted roofs, green roofs and podiums.

Hydrotech has the additional benefit of being certificated for use at zero falls enabling it to be applied directly to the structural concrete deck, without the need for a screed to falls, resulting in the associated time, weight and cost savings.

Scores highly in BREEAM ratings (notably in Section MAT5 for responsible sourcing of materials) and contributes to a very good generic rating in the BRE’s Green Guide to Specification, capable of an ‘A+’ rating when installed on timber or metal decks (overlaid with carrier board).

Typical Applications



Green Roof

Vegetation – lawns, annual, biennial or perennial plants, shrubs, sedums etc.

Stone Vegetation Barrier – round washed stone and/or paving

Blackdown Substrate – lightweight growing medium

Blackdown Drainage Layer with Integral Filter Sheet

Alumasc Separator Sheet – polypropylene water management layer

Alumasc Inverted Insulation – extruded/expanded polystyrene

Hydrotech MM6125 Waterproofing System – incorporating root barrier/ protection sheet



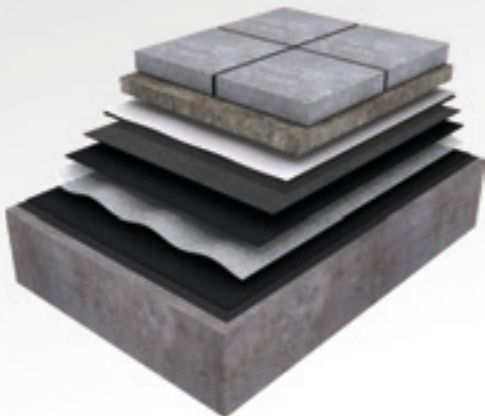
Inverted Roof

Ballast – round washed stone and/or paving

Alumasc Separator Sheet – polypropylene water management layer

Alumasc Inverted Insulation – extruded/expanded polystyrene

Hydrotech MM6125 Waterproofing System – incorporating protection sheet



Podium

Hard Landscaping – paving, brick setts etc

Bedding Layer – suitable compacted or cement bound granular sub-base

Hydrodrain FC6 Drainage Layer – with integral filter sheet

Hydrotech MM6125 Waterproofing System – incorporating protection sheet

Hydrotech System Selector

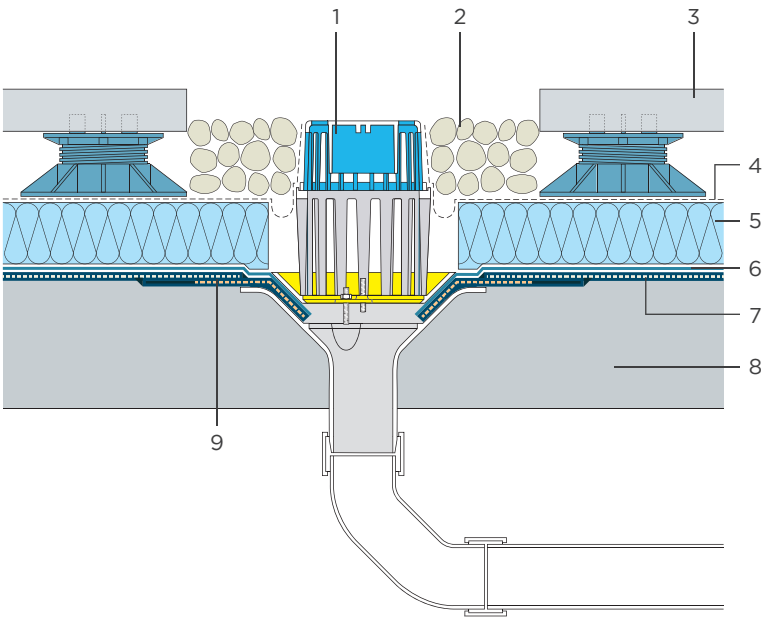
	Inverted Roof	Green Roof	Podium
Surfacing	Paviours on Harmer paving supports and/or round washed ballast	Blackdown intensive or extensive growing substrate and vegetation	Hard landscaping as specified
Drainage Layer	n/a	Blackdown intensive or extensive composite drainage board	Hydrodrain FC6
Separator/Water Management Sheet (To field area)	Alumasc Separator Sheet	Alumasc Separator Sheet	Alumasc Separator Sheet
Thermal Insulation (To field area)	Alumasc inverted extruded or expanded polystyrene board	Alumasc inverted extruded or expanded polystyrene board	Alumasc inverted extruded or expanded polystyrene board
Protection Sheet (To exposed uninsulated upstands)	Hydrogard 30	Hydrogard 30	Hydrogard 30
Protection Sheet (To field area and insulated, inverted upstands)	Hydrogard 20	Hydrogard 20 AR or Hydrogard 40 MN or Hydrogard 40 AR (FLL compliant)	Hydrogard 30
Membrane – 2nd Coat	Hydrotech MM6125 @ 3mm nominal thickness	Hydrotech MM6125 @ 3mm nominal thickness	Hydrotech MM6125 @ 3mm nominal thickness
Reinforcement	Flex-Flash F (Flex-Flash UN across substrate transitions)	Flex-Flash F (Flex-Flash UN across substrate transitions)	Flex-Flash F (Flex-Flash UN across substrate transitions)
Membrane – 1st Coat	Hydrotech MM6125 @ 3mm nominal thickness	Hydrotech MM6125 @ 3mm nominal thickness	Hydrotech MM6125 @ 3mm nominal thickness
Surface Conditioner	Alumasc Bitumen Primer	Alumasc Bitumen Primer	Alumasc Bitumen Primer
Structural Deck	Concrete or plywood deck to zero falls	Concrete or plywood deck to zero falls	Concrete or plywood deck to zero falls

Notes: The table assumes the inclusion of thermal insulation which may not be required in all cases.
See Product Data table for full product descriptions.

Upstand Treatment

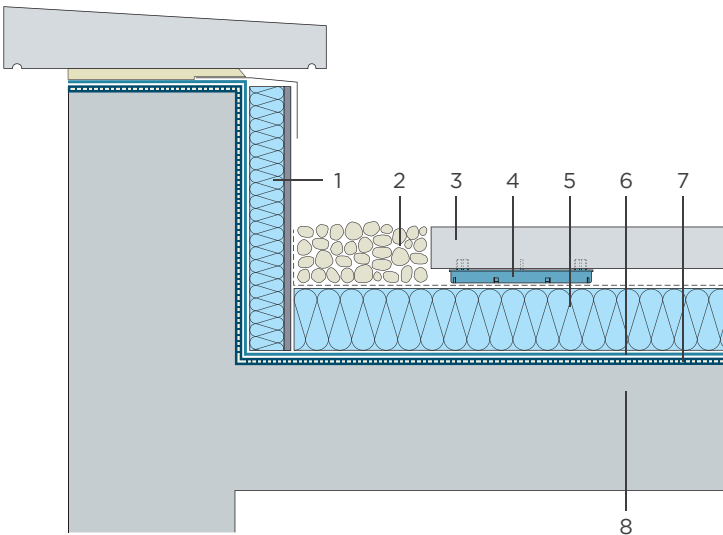
	Protection Sheet/Insulation
Uninsulated Upstand	Hydrogard 30 only
Insulated Inverted Upstand	Hydrogard 20* and self-faced EPS or XPS (*Hydrogard 20 AR, 40 MN or 40 AR for green roofs)
Warm Roof Style Upstand	Alumasc BGT PIR and Hydrogard 30* (*Hydrogard 20 AR, 40 MN or 40 AR for green roofs)

Application Details



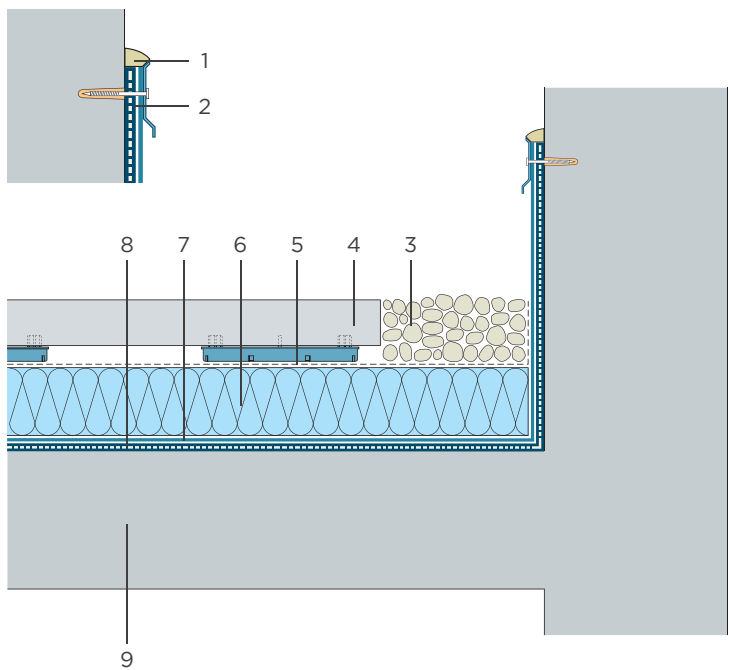
Rainwater Outlet

- | | |
|---|---|
| 1 | Harmer AV® outlet with domical grate |
| 2 | 20-40mm round washed ballast |
| 3 | Paviours on Harmer paving supports |
| 4 | Alumasc Separator Sheet |
| 5 | Alumasc inverted insulation |
| 6 | Hydrogard protection sheet |
| 7 | Hydrotech MM6125 incorporating Flex-Flash F reinforcement |
| 8 | Primed substrate |
| 9 | Flex-Flash UN reinforcement |



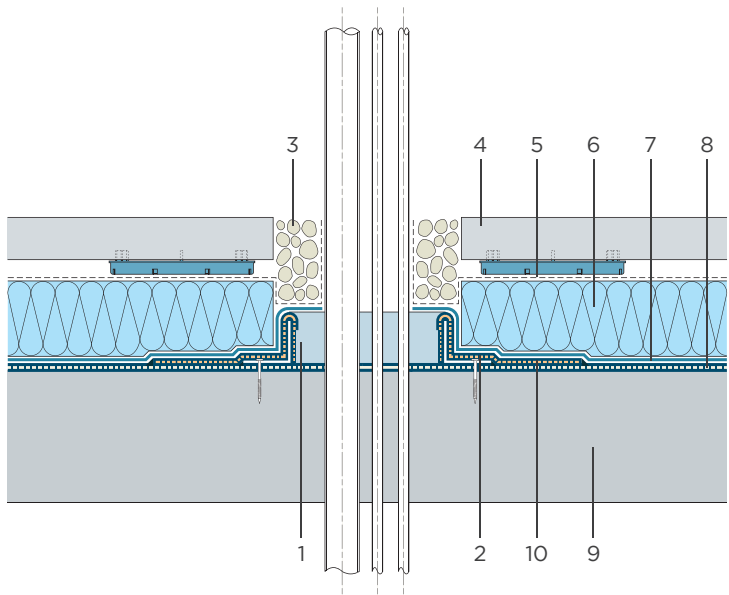
Insulated Upstand

- | | |
|---|---|
| 1 | Self-faced upstand board |
| 2 | 20-40mm round washed ballast |
| 3 | Paviours on Harmer paving supports |
| 4 | Alumasc Separator Sheet |
| 5 | Alumasc inverted insulation |
| 6 | Hydrogard protection sheet |
| 7 | Hydrotech MM6125 incorporating Flex-Flash F reinforcement |
| 8 | Primed substrate |



Uninsulated Ustand

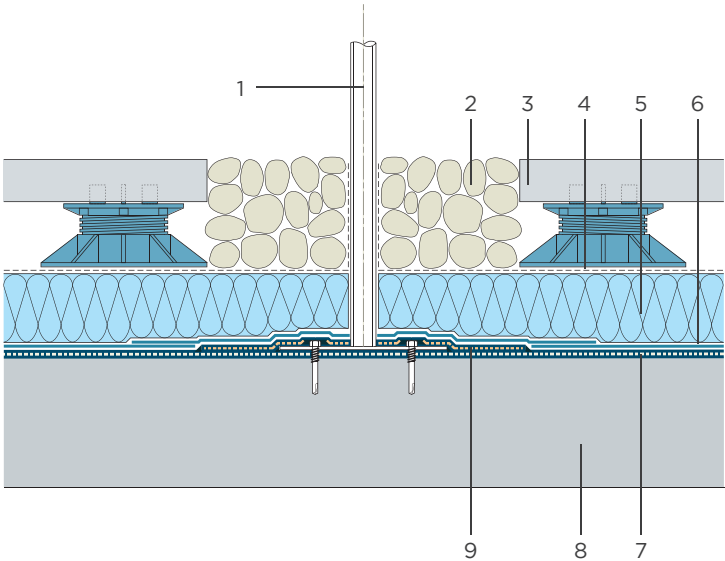
- | | |
|---|---|
| 1 | Compatible sealant |
| 2 | Alumasc termination Bar |
| 3 | 20-40mm round washed ballast |
| 4 | Paviments on Harmer paving supports |
| 5 | Alumasc Separator Sheet |
| 6 | Alumasc inverted insulation |
| 7 | Hydrogard protection sheet |
| 8 | Hydrotech MM6125 incorporating Flex-Flash F reinforcement |
| 9 | Primed substrate |



Pitch Pocket

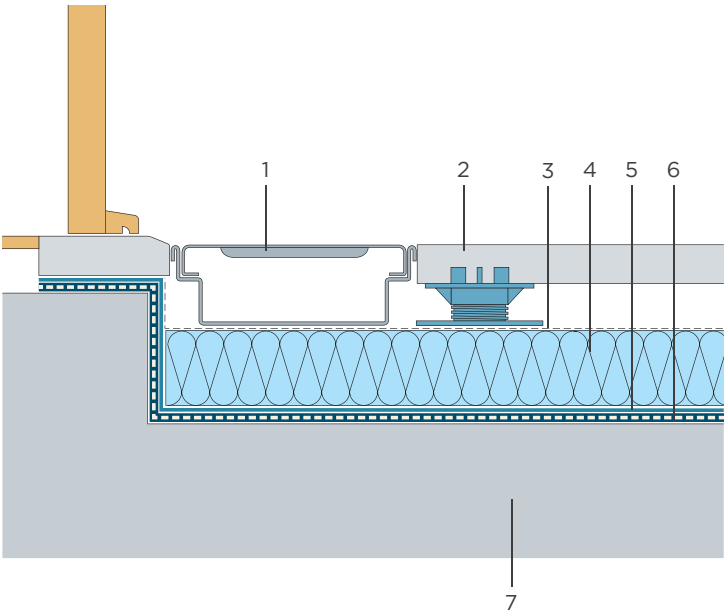
- | | |
|----|---|
| 1 | Hydrotech MM6125 in 10mm increments |
| 2 | Galvanised steel former |
| 3 | 20-40mm round washed ballast |
| 4 | Paviments on Harmer paving supports |
| 5 | Alumasc Separator Sheet |
| 6 | Alumasc inverted insulation |
| 7 | Hydrogard protection sheet |
| 8 | Hydrotech MM6125 incorporating Flex-Flash F reinforcement |
| 9 | Primed substrate |
| 10 | Flex-Flash UN reinforcement |

Application Details



Balustrade Post

- | | |
|---|---|
| 1 | Balustrade post |
| 2 | 20-40mm round washed ballast |
| 3 | Paviours on Harmer paving supports |
| 4 | Alumasc Separator Sheet |
| 5 | Alumasc inverted insulation |
| 6 | Hydrogard protection sheet |
| 7 | Hydrotech MM6125 incorporating Flex-Flash F reinforcement |
| 8 | Primed substrate |
| 9 | Flex-Flash UN reinforcement |



Low Door Threshold

- | | |
|---|---|
| 1 | Harmer Modulock channel drain |
| 2 | Paviours on Harmer paving supports |
| 3 | Alumasc Separator Sheet |
| 4 | Alumasc inverted insulation |
| 5 | Hydrogard protection sheet |
| 6 | Hydrotech MM6125 incorporating Flex-Flash F reinforcement |
| 7 | Primed substrate |

Product Data

Product	Characteristic	Description	Application Method	Size	Thickness and/or Weight
Drainage Layers					
Hydrodrain FC6	700 kPa HDPE/ geotextile filter layer	Sub-surface drainage layer	Loose laid with fabric selvedge overlap	1.0 x 100m	6mm
Hydrodrain 300	1200 kPa HDPE/ geotextile filter layer	Heavy duty sub-surface drainage layer	Loose laid with fabric selvedge overlap	1.21 x 22.86m	6mm
Extruded Polystyrene (XPS) Insulation					
Alumasc XPS upstand board	Cement particle faced board	Self-finished vertical board	PU adhered, butt jointed	1200 x 600mm	56mm (9.7 kg/bd)
Alumasc XPS Separator Sheet	Polypropylene	Rainwater management layer	Loose laid with 300mm overlaps	1.5 x 100m	0.5mm, 95 g/m ²
Alumasc XPS	Thermal insulation	Inverted insulation board	Loose laid, shiplap jointed	1250 x 600mm	70, 130, 160, 180, 200 & 220mm. 32 kg/m ³
Expanded Polystyrene (EPS) Insulation					
Alumasc EPS Upstand Board	Faced with impact resistant board	Self-finished vertical board	PU adhered, butt jointed	1200 x 600mm	60mm (7 kg/bd) 80mm (7.5 kg/bd) 90mm (7.7 kg/bd) 110mm (8.2 kg/bd)
Alumasc EPS Separator Sheet	Polypropylene	Rainwater management layer	Loose laid with 300mm overlaps	3.0 x 100m	0.45mm, 100 g/m ²
Alumasc EPS	Thermal insulation	Inverted insulation board	Loose laid, shiplap jointed	1200 x 1200mm	Single layer up to 240mm 30 kg/m ³ - 200 grade 40 kg/m ³ - 300 grade
Protection Sheets					
Hydrogard 50	250g/m ² reinforcement	Extra heavy duty	Laid into 2nd coat of Hydrotech MM6125	7.27 x 1.1m	4mm
Hydrogard 40 AR	Black surfaced	FLL approved root barrier	Laid into 2nd coat of Hydrotech MM6125 (torched laps)	10 x 1.1m	3mm
Hydrogard 40 MN	Mineral surfaced	Heavy duty root barrier	Laid into 2nd coat of Hydrotech MM6125 (torched laps)	8 x 1.0m	4mm
Hydrogard 30	Mineral surfaced	Heavy duty protection sheet	Laid into 2nd coat of Hydrotech MM6125	10 x 1.0m	4mm
Hydrogard 20 AR	Sanded surface	Root barrier	Laid into 2nd coat of Hydrotech MM6125 (torched laps)	10 x 1.0m	3mm
Hydrogard 20	Sanded surface	Protection sheet	Laid into 2nd coat of Hydrotech MM6125	20 x 1.0m	1.5mm
Membrane					
Hydrotech MM6125	Hot-melt rubberised bitumen	Waterproofing membrane	Hot-applied @ 180-190°C	18kg (nom) blocks	2 x 3mm = 6mm (nominal), 6.5 kg/m ²
Reinforcements					
Flex-Flash F	Non-woven polyester	Reinforcement layer	Laid into 1st coat of Hydrotech MM6125	1020mm x 200m	0.48mm, 50 g/m ²
Flex-Flash UN	Uncured neoprene	Reinforcement for details	Laid into 1st coat of Hydrotech MM6125	30.5m x 150mm, 300mm, 450mm & 600mm	1.5mm, 2.39 kg/m ²
Surface Conditioner					
Alumasc Bitumen Primer	Bitumen based	Surface conditioner	Roller or spray applied	25 litre	8-16 m ² /litre