

premium products • proven solutions

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April 2005

Hydrotech

# premium structural waterproofing

for lifetime performance





# the intelligent membrane for structural waterproofing

Even in the 21st century waterproofing of concrete structures is commonly perceived as synonymous with heavy, non flexible asphalt materials that are highly sensitive to upstand detailing, and only partially bonded to the substrate with consequent risk of water tracking. As a lightweight, yet tough and very flexible self healing monolithic membrane with guaranteed 100% bond to a correctly prepared concrete substrate, Hydrotech breaks this mould.

Hydrotech's unique formula of modified bitumen, synthetic rubbers and antioxidants, combined with reinforcement, guarantees lifetime performance whether it is used for protected roofs, plaza decks, green roofs, water features or access roadways.



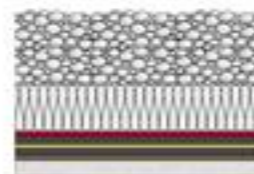
Hydrotech is the leading structural waterproofing system that has been extensively used by architects and specifiers on some of the most prestigious contemporary buildings and structures.





# from civil engineering to water features...

Using a common membrane specification applied without need for specialist equipment, and with variations only in the protective layer, Hydrotech provides a waterproof underlay ready to receive the surface build up to suit any trafficked decking situation.



### Protected roofs

For an inverted, ballasted roof, ballast, filter sheet and insulation are placed on **Hydrogard 10**.



### Plaza decks

**Hydrogard 20** provides the protective layer beneath plaza decks, followed by a drainage layer, and surfaced with paving slabs on sand/ cement bedding.



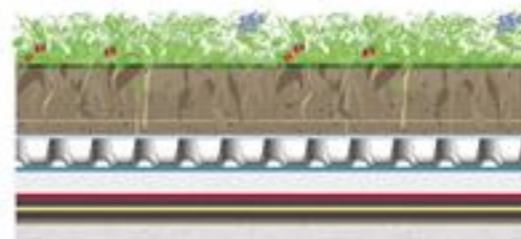
### Water features

**Hydrogard 20** also provides suitable protection beneath water features, with tiles on waterproof screed as the finishing surface.



### Access roadways

For an access road, the specification would generally be Macadam on sub-base, on **Hydrogard 30**.



### Green roofs

**Hydrotech** is the ideal waterproofing beneath an Alumasc ZinCo Green Roof on a concrete deck. **Hydrogard 40** acts as the root barrier, followed by the appropriate Green Roof build-up depending on whether it is to be an Extensive, Semi-Intensive or Intensive landscape.

## ...Hydrotech provides the answer

### Tate Modern, London

The Tate Modern was created from the refurbishment of a former power station on the banks of the Thames. Alumasc supplied 9000m<sup>2</sup> of Hydrotech 6125 and Topfoam extruded polystyrene insulation for the building. Hydrotech was selected as the optimum choice for the gallery's concrete roof decks.

### Royal Opera House, Covent Garden

The Royal Opera House was refurbished using approximately 3500m<sup>2</sup> of Hydrotech waterproofing, installed on a variety of flat roof areas and beneath covered walkways to the shops.





### Hydrotech System

The Hydrotech System consists of two coats of hot applied rubberised bitumen, with polyester fabric reinforcement in between. The membrane is laid on a bituminous spray applied surface conditioner, and is protected by reinforced sheets in alternative grades depending on the type and intensity of use of the completed deck.

### At the leading edge of waterproofing technology

- Fully bonded and monolithic: avoids any possibility of water tracking which is generally caused by failure at lap joints
- Self healing: minor damage to Hydrotech will self heal with the application of limited pressure, provided the surface is clean, dry and warm
- Hydrotech membrane contains a minimum 25% recycled content, meeting LEED guidelines
- Hydrotech is a one-part system requiring no mixing or on-site curing

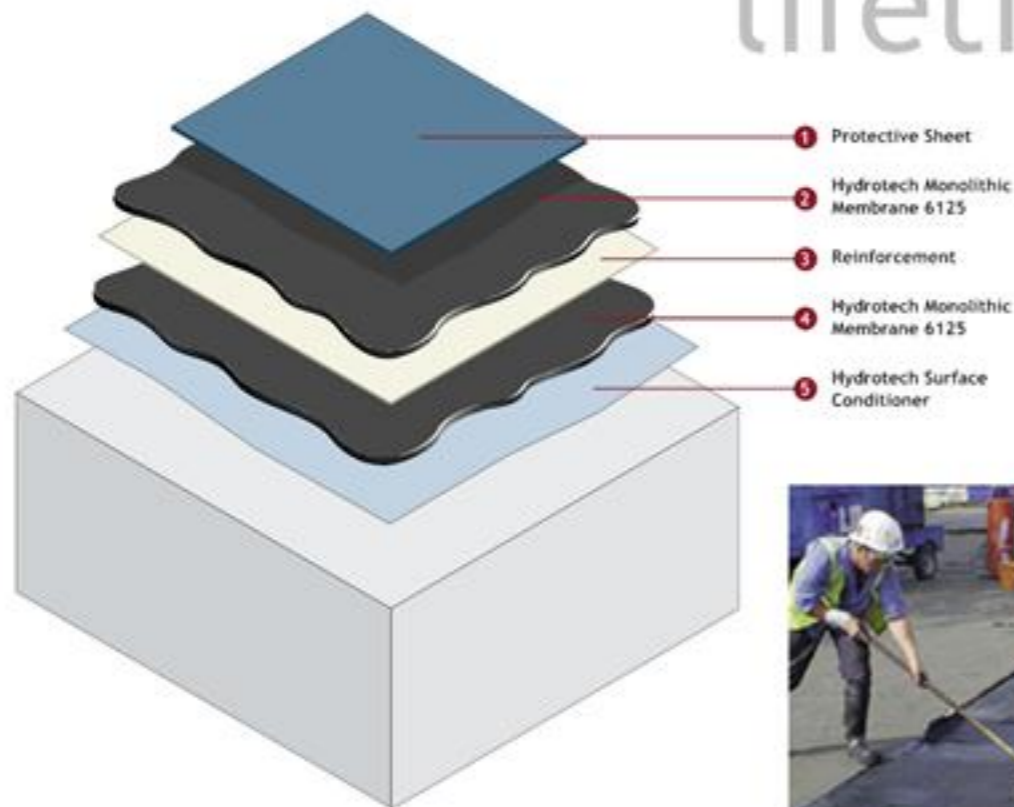
### Speed and economy of installation

- Lightweight by comparison with asphalt based systems
- Uprand details can be completed first, allowing other trades to continue, using the concrete deck as a working platform and in most cases without the need for expensive protection
- Low temperature flexibility: Hydrotech can be satisfactorily applied in temperatures down to -18°C on a clean, dry, frost free surface, and it is not affected by rain, snow or frost immediately after application

### Unbeatable economy over the lifecycle of the building or structure

- No falls required: as Hydrotech is unaffected by standing water, dilute acids and fertilisers and does not leach, it can be laid on a flat deck with consequent time and cost savings by the elimination of screed
- Lifetime performance means no replacement costs

# fully bonded seamless application for lifetime performance



### The design life of the structure or roof

“...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”.

BBA Certificates 90/2431 and 90/2432 ISO9000





# total support from Alumasc



Alumasc provides a fully comprehensive and seamless package of advice and hands on management backup, extending through site installation to warranties and maintenance schedules. Implementation is led by the Alumasc Hydrotech Manager appointed to the project.

## Technical support

- Thermal calculations
- Wind loading calculations
- Calculations of drainage requirements in terms of flow and falls
- Detailed written specification (to NBS format if required)
- Project specific CAD working drawings
- Material safety data sheets

## Alumasc partnering

Alumasc's long-standing service ethic is the ideal platform from which to develop partnering arrangements, providing total peace of mind to the client during a long term contract. Consistency of performance is ensured in terms of product and service.

## National network of Hydrotech specialist installers

Alumasc provide a network of carefully selected installation specialists, all of whom have received instruction in the installation techniques for Hydrotech systems and whose project performance is rigorously monitored in terms of:

- Compliance with project specifications
- Compliance with product system quality assurance requirements
- General compliance with good working practice on site



## Project monitoring

- Regular visits to site to provide technical support
- Conduct a final inspection of the work to ensure warranty compliance
- Provide maintenance recommendation schedules where necessary to fulfill particular client requirements



## Lifecycle support

Where specifically required by the client, the Alumasc Hydrotech Manager will liaise with the approved contractor for the project to ensure that:

- Agreed maintenance checks are carried out to schedule and to specification
- A response time of 48 hours for emergency repairs is achieved where possible

## Alumasc Hydrotech warranties

Alumasc offers a comprehensive choice of warranties covering both product and installation to suit the specified design life of the installed product. Alumasc backed warranties are available for 10, 15 or 20 years supported by public and product liability insurances with a total indemnity limit of £50 million on an annually renewable basis.

Alumasc can also arrange third party insurance backing giving up to 20 years cover subject to independent final inspection, documented compliance with an agreed maintenance schedule and pre-payment of the relevant premium.



## Alumasc quality assurance

Alumasc Exterior Building Products Ltd has a quality assurance management system which complies with BS EN ISO 9001:2000 and has also implemented an environmental management system.

## Complementary systems

With a range of waterproofing and roofing systems, Alumasc never have to compromise any one system's performance to meet the requirement of the project.

There is a choice of complementary products to meet specific requirements which include, Derbigum, ZinCo Green Roof and Armaseam.





# Hydrotech: Premium structural waterproofing from Alumasc

“it is difficult to imagine how we could have achieved a green roof of this magnitude without a product like Hydrotech”

Project: The Castle Mall Shopping Complex in Norwich

## Proven track record

- Channel 4 TV HQ, London
- Terminal 1 Extension, Heathrow Airport
- Oceanography Centre, Southampton
- Barclays Bank HQ, London
- Canary Wharf, London
- General Accident, Perth
- Imperial House, Windsor
- Edinburgh International Conference Centre
- Castle Mall, Norwich
- Victoria Gardens, Glasgow
- Rank Zerox, Micheldene
- Hotel Arts, Barcelona

## Premium solutions for the architect/specifier

- Hydrotech is a "second generation" system for waterproofing concrete structures - lightweight, flexible, capable of sustaining 100% bond - and, with appropriate protective layer, suitable for waterproofing the most intensively trafficked concrete decks

## For the building client

- A premium quality product backed up by a full range of aftercare services, and comprehensive insurance backed guarantees, provides long term peace of mind

## For the main contractor

- Hydrotech can be applied throughout the year on dry, frost-free surfaces. It requires no specialist equipment, and in the hands of the network of fully trained installers, fault free installation to tight programme requirements is ensured

## For the quantity surveyor

- Experience and knowledge in structural waterproofing projects ensuring cost effective use of materials and installation time
- Project design and installation guidance to ensure best value whilst retaining the specification requirements

# proven by track record



Jubilee Gardens/RT3, London ■ Lowry Centre, Manchester ■ Channel 4 TV HQ, London ■ Tower Place, London ■ Barclaycard HQ, Northampton ■ National Theatre, London ■ Terminal 1, Heathrow Airport ■ Tate Modern, London


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 Rainwater

 Drainage

 Waterproofing

 Metal Roofing

 Façades

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Product and technical literature hotline

**0808 100 2008**

A unique fusion of premium products,  
technical expertise and project support

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