



# MONOLITHIC MEMBRANE 6125

THE ORIGINAL RUBBERISED ASPHALT MEMBRANE

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# 50+ YEARS OF PROVEN PERFORMANCE IN THE FIELD.

Hydrotech's Monolithic Membrane 6125® (MM6125®), the original rubberised asphalt membrane, has been entrusted with keeping high profile structures across the country and around the globe watertight for over 50 years. With billions of square metres of MM6125® installed, Hydrotech is recognised as the leader in the waterproofing industry.

Hydrotech have developed a full range of thermal and moisture protection products, drainage systems, The Ultimate Assembly for podiums, decks and roof terraces, Garden Roof assembly for green roof applications, and most recently the Blue Roof assembly. Hydrotech MM6125® is available in New Zealand exclusively from Allco Waterproofing Solutions Ltd.



## MONOLITHIC MEMBRANE 6125®: BENEFITS AND FEATURES

### Thermoplastic material

One component, 100% solids, no solvents means no on-site cure failures, no two-part mixing and no VOC restrictions.

### Zero degree fall applications

Will withstand and perform submerged in water. CodeMark certified to be installed to zero degree falls. The perfect membrane for flat, zero slope substrates, water features, pools and green roofs.

### Monolithic membrane

Seamless, conforms to deck irregularities, and self-healing of minor construction damage. Since it is applied directly to the substrate, water is restricted from migrating laterally between the substrate and the membrane.

### Cold weather applications

Can be applied to -18°C and is unaffected by adverse weather conditions immediately after installation.

### Sustainability

MM6125® is formulated with inert filler made with up to 40% post-consumer recycled content such as recycled oil and tyres.

### Superior durability

Means excellent adhesion to substrate and cohesive strength. Also, superb elongation and low temperature flexibility ensure the membrane does not become brittle.

### Acid resistance

Highly resistant to fertilisers, building washes, acid rain and methane.

## RIGOROUS QUALITY CONTROL

MM6125® is manufactured with rigid quality control under an ISO 9001:2000 certified quality management system.

**EFVM:** MM6125® is compatible with EFVM testing during and after installation.

**CodeMark:** MM6125® roofing solution is CodeMark certified to meet all relevant requirements of the NZ Building Code.

**Allco Technical Advisors:** Allco has a team of Technical Advisors that are employed to assist in the field. Contact our Technical Advisors by email at: [TATeam@allco.co.nz](mailto:TATeam@allco.co.nz)



Hydrotech MM6125® system Installation in progress.

## MEMBRANE ASSEMBLY COMPONENTS

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### FLASHING/REINFORCEMENT

**Flex-Flash F:** A spun-bonded polyester fabric reinforcement for detailing conditions with MM6125® such as changes in plane, construction joints and cracks.

**Flex-Flash UN:** An uncured neoprene flashing used at exposed walls, curbs, penetrations, expansion joints and angle changes.

**HydroSeal Flashing:** HydroSeal Flashing Resin is combined with HydroSeal Catalyst and HydroSeal Fleece reinforcement to form a monolithic, self-flashing and self-adhering reinforced flashing membrane. HydroSeal Flashing is used in conjunction with MM6125® membrane and flashing accessories for a variety of conditions that do not allow for typical membrane flashing termination requirements.

### SEPARATION AND PROTECTION COURSES

**Casali Olympia Protection Sheet:** Plastomeric modified bitumen (APP) and copolymer based compound sheet reinforced with a polyester fabric. Excellent dimensional stability reducing the likelihood of damage and stress on the membrane.

**Casali Eradix (Root Barrier):** APP based compound sheet with spun-bond non-woven polyester reinforced with fiberglass thread. FFL certified root barrier protection layer, for protecting against the perforating action of roots. For use within Green Roof assemblies.

### DRAINAGE COMPONENTS

**Aquadrain:** A two-part prefabricated sheet drain consisting of a 3-dimensional polypropylene formed dimple core covered with a woven polypropylene filter fabric bonded to one side, allowing liquids to drain whilst restricting the passage of soil particles. The formed dimple core provides compressive strength, collecting water for flow to drainage discharge pipes.

### INSULATION

Allco approved XPS insulation board for roofs, walls and plazas. Available through and fully warranted by Allco.

- Excellent for exposed applications - moisture resistant and dimensionally stable
- High-compressive strength - 25, 40, 60 or 100 psi (to fit the use)
- Environmentally friendly - CFC-free and recyclable

## NEW CONSTRUCTION OR RENOVATION

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While an excellent choice for new construction, MM6125® is also ideal for renovation projects. If you own a building that has a roof and/or podiums in need of major repair, you are not alone. Deteriorating topping materials, serious leaks and loss of insulating value are some of the problems facing many owners and designers. These problems may be symptomatic of improper design, construction errors, inadequate material specifications or use of a product with an unknown track record... or waterproofing membranes that have exceeded their 'performance life'.

MM6125® is the ideal choice for renovation applications because it can easily handle:

- rough concrete/spalled concrete
- phased construction
- difficult detailing conditions
- little or no slope

## SUSTAINABILITY

Sustainability is a key priority, with Hydrotech MM6125® manufactured using a minimum 40% post-consumer recycled content, including inert filler, recycled tires and recycled oil. Through the manufacture of its products with post-consumer recycled content, Hydrotech contributes to the diversion of materials from landfills, and has been assessed for full life cycle impacts according to ISO 14040 and 14044 standards.

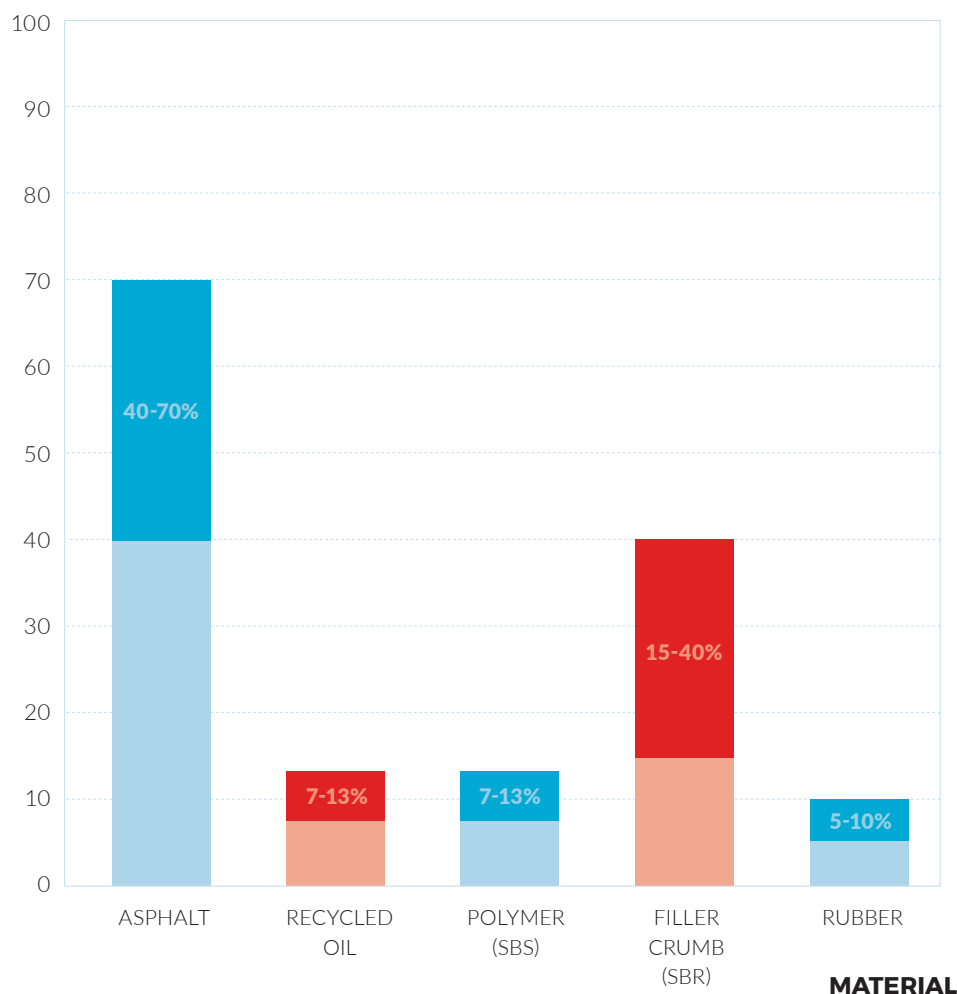
For a full copy of our Environmental Product Declaration, please visit our website [www.allco.co.nz](http://www.allco.co.nz)

## LIFE CYCLE BENEFIT

Research has shown that Hydrotech PMR roof systems perform better and for longer than many other popular low-slope roof systems. Costs that must be considered when assessing the life cycle cost of a system are; initial cost, maintenance, repair and replacement costs. If you would like more detailed information on life cycle costs please ask for a copy of the Roof Systems Economic Evaluation Report by SmithGroup (2009).

### HYDROTECH MM6125 RECYCLED MATERIAL CONTENT\* (% OF TOTAL PRODUCT MASS)

#### PERCENTAGE %



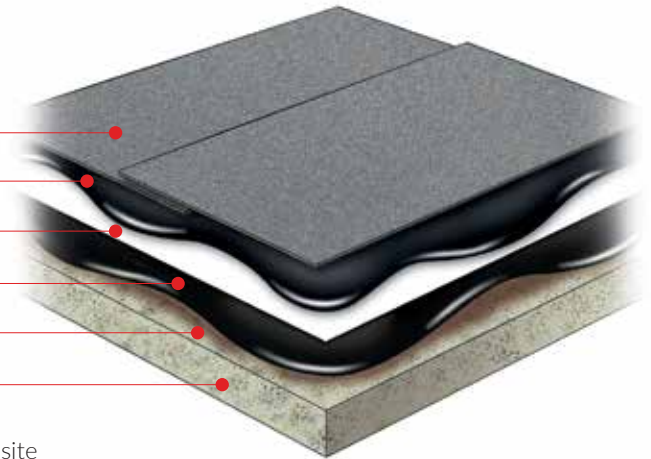
\* Ref: Lifecycle Assessment validated by Groupe AGEKO under the CSA Group 5064-6251 product category rule Water-resistive and Air Barriers v.1 (ASTM International 2017).

## TYPICAL WATERPROOFING APPLICATIONS

### FABRIC REINFORCED ASSEMBLY (215 MILS THICK - 5.5MM)

(typical components depicted)

- Casali Olympia
- Monolithic Membrane 6125® system (3mm)
- Flex-Flash F Reinforcement
- Monolithic Membrane 6125® system (2.5mm)
- Surface conditioner (where required)
- Approved substrate



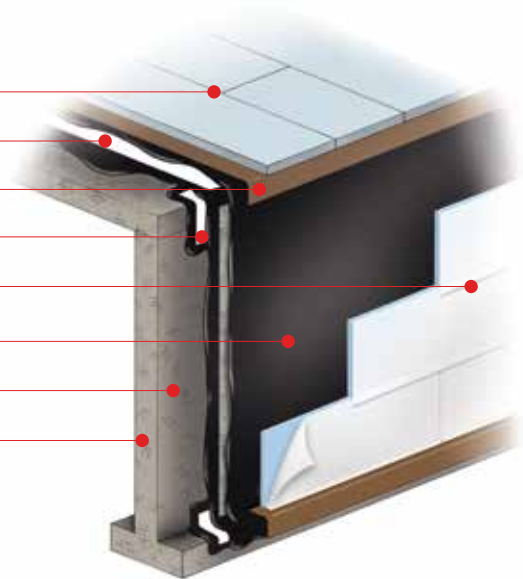
**Acceptable Substrate:** cast-in-place concrete, composite deck, precast concrete ('T', double 'T' or panel).

**Not acceptable:** lightweight insulating or cellular concrete.

### VERTICAL WATERPROOFING

(typical components depicted)

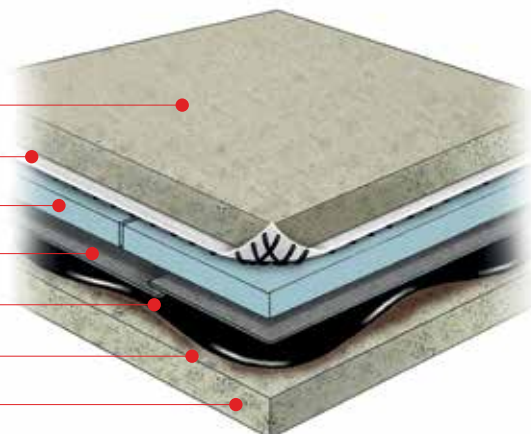
- Approved XPS insulation
- Monolithic Membrane 6125® system
- Casali Olympia
- Flex-Flash F
- Approved XPS insulation
- Monolithic Membrane 6125® system
- Surface conditioner
- Approved substrate



### SPLIT SLAB CONSTRUCTION

(typical components depicted)

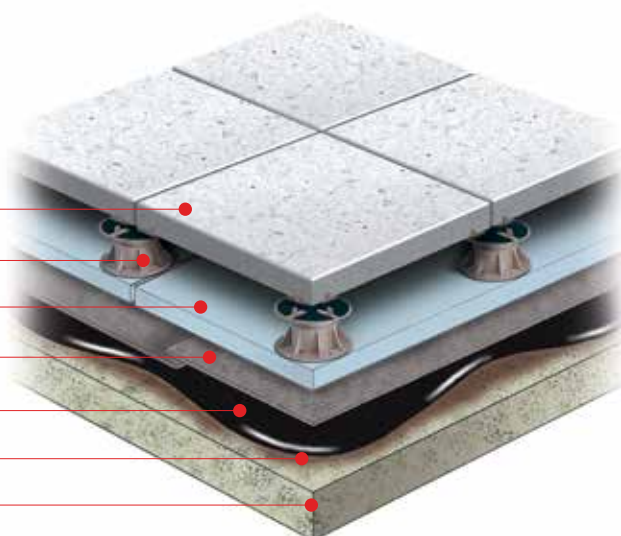
- Concrete topping slab
- Aquadrain
- Approved XPS insulation
- Casali Olympia
- Monolithic Membrane 6125® system
- Surface conditioner
- Approved substrate



## THE ULTIMATE ASSEMBLY®

(typical components depicted)

- Architectural paver
- Buzon Pedestal
- Approved XPS insulation
- Casali Olympia
- Monolithic Membrane 6125® system
- Surface conditioner
- Approved substrate

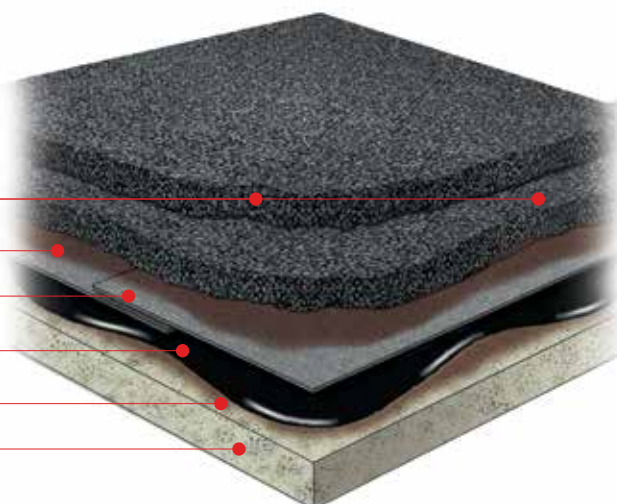


The Ultimate Assembly® is not intended for vehicular traffic.

## ASPHALT OVERLAY

(typical components depicted)

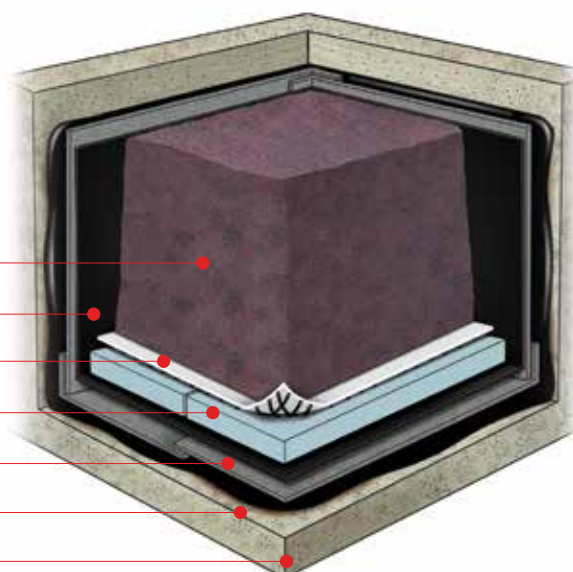
- Asphalt Paving lift #1 and #2
- Non-solvent tack coat
- Casali Olympia
- Monolithic Membrane 6125® system
- Surface conditioner
- Approved substrate



## PLANTER

(typical components depicted)

- Growing media
- Casali Eradix root barrier
- Aquadrain
- Approved XPS insulation
- Monolithic Membrane 6125® system
- Surface conditioner
- Approved substrate



For current details and specifications for all Hydrotech's assemblies contact Allco on email: [tech@allco.co.nz](mailto:tech@allco.co.nz)



## PROTECTED MEMBRANE ROOFING

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### CONVENTIONAL ROOFING DESIGN

With a conventional roof assembly the roof membrane is typically placed on top of an insulation layer and structural deck. In this configuration the roof membrane is doing double duty... protecting the contents of the building as well as the insulation below from moisture. When most insulation gets wet it loses its ability to perform as a thermal barrier. And, because the roof membrane is fully exposed to the environment in this assembly, it is subjected to extreme conditions and stresses.

A conventional roof arrangement can leave the roof membrane vulnerable to sudden temperature changes, high summer roof temperatures, low winter temperatures, ice, hail, ultraviolet rays, physical abuse from heavy foot traffic and routine maintenance. Exposure to all of these elements can weaken the integrity of the roof membrane and shorten its life expectancy.

## THERE IS A BETTER WAY... PROTECT THE MEMBRANE!

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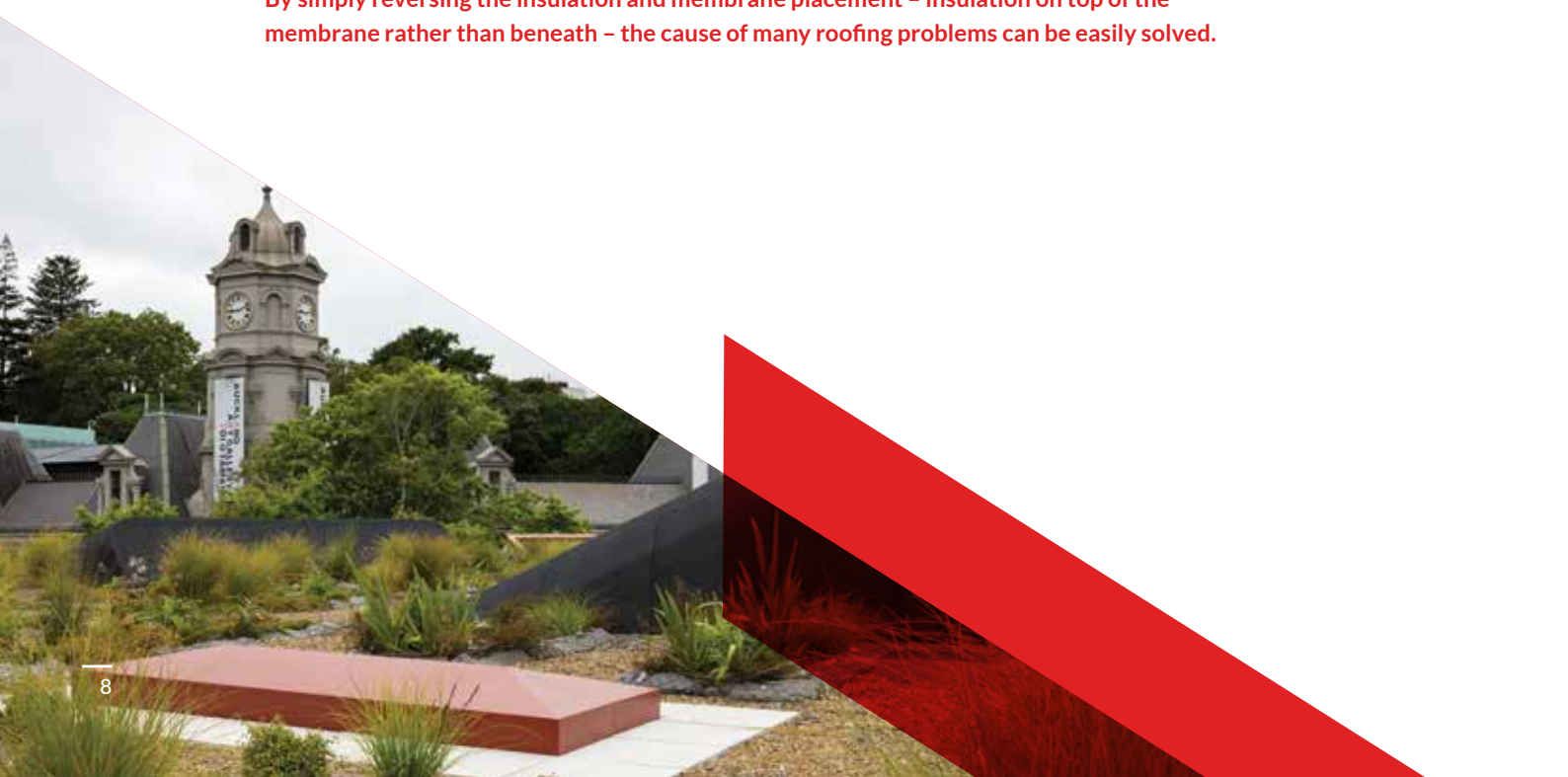
A better way is possible by including a closed cell extruded polystyrene (XPS) that can be placed in a wet environment. Placed on top of MM6125®, it offers protection from the harsh conditions up on a rooftop.

## UNCONVENTIONAL COMMON SENSE IN ROOFING

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This arrangement of roofing materials (roof deck/roof membrane/moisture resistant insulation) is referred to as a Protected Membrane Roof (PMR). With such roofs, the membrane's temperature range and rate of temperature change are drastically reduced. Neither mother nature nor physical abuse can easily affect it.

**By simply reversing the insulation and membrane placement - insulation on top of the membrane rather than beneath - the cause of many roofing problems can be easily solved.**





## PROTECTED MEMBRANE ROOFING (PMR) ASSEMBLY BENEFITS

### Proven performance

The PMR Assembly has been a proven, time tested roof assembly for more than 50 years, with thousands of successful installations around the world.

### Total roof life cost savings

While the initial cost might be slightly greater, the life cycle cost of a PMR assembly can be considerably less than that of a conventional roof, since it can last significantly longer ... 2-3 times longer!

### Lower maintenance costs

Roof maintenance is minimal throughout the service life of a PMR Assembly.

### Design flexibility

A wide choice of topping materials and finishes installed over the membrane and insulation is possible to meet the desired roof's function.

### No vapour barrier needed

With the membrane located below the insulation (on its warm side) the dew point condition occurs above it, therefore no additional vapour barrier is required in a PMR assembly.

### Future alterations

Since the insulation and other topping materials above the membrane are typically loose laid, the roof surface can be easily altered to suit a new roof function or aesthetic.

### Reuse/recycle option

A truly sustainable roof provides the best performance for the longest time possible. When it's finally time to replace the roof, the XPS insulation can be either reused or recycled.

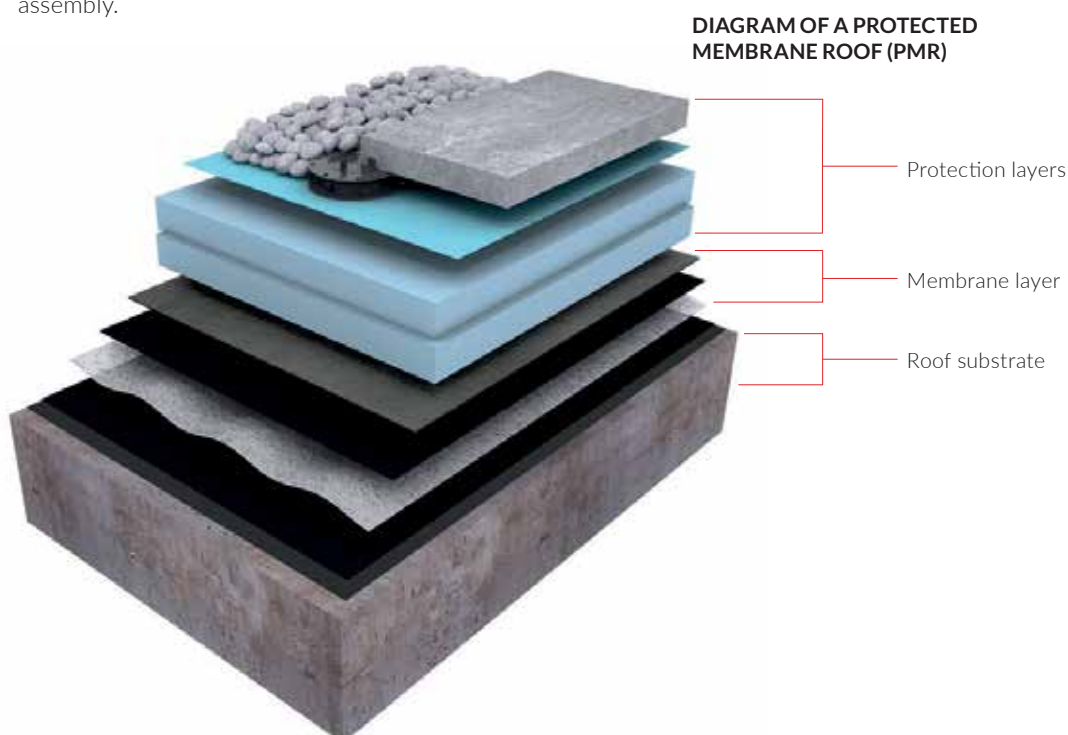
### Other work can proceed faster

Since the MM6125® membrane is installed first (followed by insulation and ballast), the interior buildout can begin immediately.

### Single source full assembly warranties

Warranties available typically cover the integrity of the membrane, thermal performance and wind resistance of the insulation.

For further information, see Hydrotech's Protected Membrane Roof (PMR) Planning Guide.

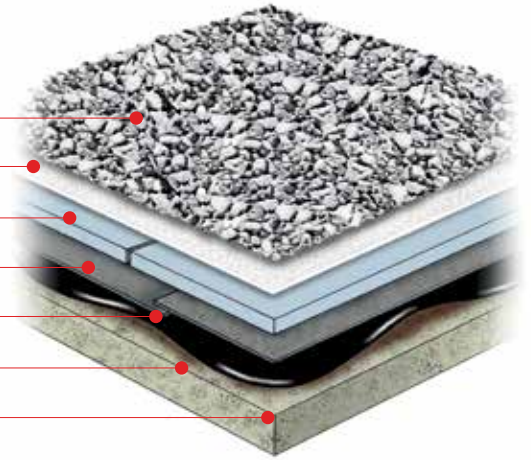


## TYPICAL APPLICATIONS

### PROTECTED MEMBRANE ROOF (PMR)

(typical components depicted)

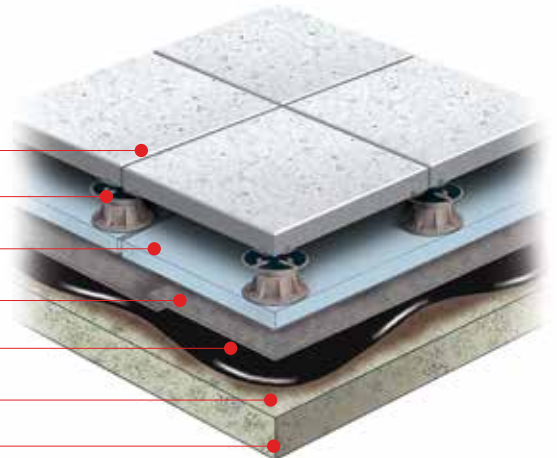
- Stone ballast
- Stone filter fabric
- Approved XPS insulation
- Casali Olympia
- Monolithic Membrane 6125® system
- Surface conditioner
- Approved substrate



### THE ULTIMATE ASSEMBLY®

(typical components depicted)

- Architectural paver
- Buzon Pedestal
- Approved XPS insulation
- Casali Olympia
- Monolithic Membrane 6125® system
- Surface conditioner
- Approved substrate

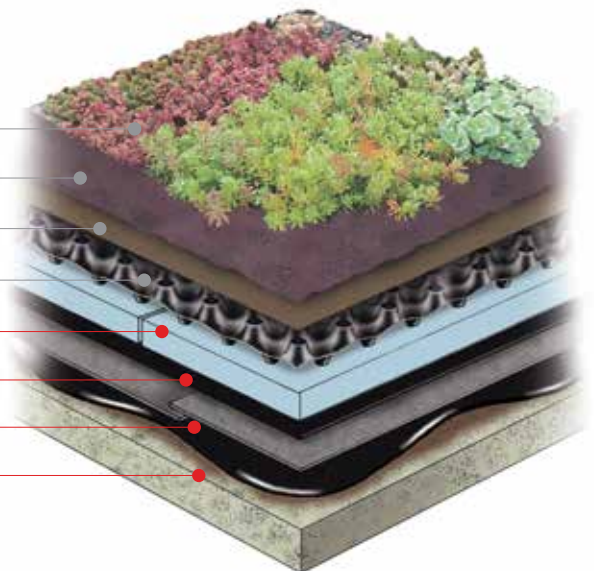


The Ultimate Assembly® is not intended for vehicular traffic.

### GARDEN ROOF® ASSEMBLY

(typical extensive assembly depicted)

- Vegetation\*
- Growing media\*
- System-filter\*
- Drainage mat\*
- Approved XPS insulation
- Casali Eradix root barrier
- Monolithic Membrane 6125® system
- Surface conditioner over approved substrate



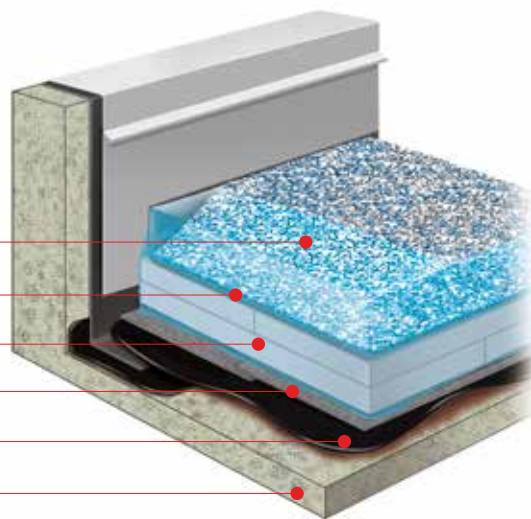
\*Supplied by landscaping specialist.



## BLUE ROOF ASSEMBLY

(typical stone ballasted blue roof depicted)

- Stone ballast
- Stone filter fabric
- Approved XPS insulation
- Casali Olympia
- Monolithic Membrane 6125® system
- Surface conditioner over approved substrate



If you would like to learn more or require assistance for design, specification or compliance, please speak with your Allco Account Manager today on (09) 448 1185 or email [tech@allco.co.nz](mailto:tech@allco.co.nz)







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09 448 1185 [www.allco.co.nz](http://www.allco.co.nz)

