

Radcrete – Radcon ® Formula # 7

Overview

Modified sodium silicate solution, spray applied to cured concrete, that penetrates and reacts with concrete to form a sub-surface barrier, waterproofing the pores, capillaries and large cracks against the ingress of water and contaminants.



Product Description

Radcon Formula #7[®] is a modified sodium silicate impregnation sealant used to make concrete watertight, sealing large cracks (up to 2.00mm) and pores. The Radcon Formula # 7[®] reacts with calcium ions in the concrete to form calcium silicate hydrate gel. The reaction will harden the surface of the concrete; penetrate the concrete up to 20mm preventing the ingress of water, salts and other contaminants. *Radcon Formula #7[®]* maintains an autogenous healing capability thus being able to re-seal hairline cracking should this occur at some future time. The product is backed by a 20 year guarantee.

Radcon Formula #7[®] is spray applied to cured concrete, followed by a 3 day watering process that allows the formula to penetrate the surface of the concrete. There are no maintenance requirements to provide continuous watertightness for the life of the concrete.

Applications include all structural concrete, car parks, rooftops, bridge decks, potable water holding vessels, and commercial and residential bathrooms. It is certified by various international standards safe for use with potable water vessels.

PRODUCT SPECIFICATIONS

Options	Available in 2, 5, 20 & 200 litre polypropylene containers
Colours	Clear
Warranty	20 years
Expected Life	Life of the concrete to which it is applied
Indicative Costs	Varies according to the country
Purchase Options	N/A
Constituents	Deionised Purified Water ~ 75% Sodium Silicates ~ 25% Proprietary Biochemicals ~ 0.5% Surfactants ~ Trace
Technical Specifications	Concrete Institute of Australia – Current Practice Note 28
National &	



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International Standards	<p>Singapore Institute of Standards and Industrial Research Potability</p> <p>Sydney Water Certificate of Approval – Products In Contact With Potable Water</p> <p>CSIRO Technical Assessment 193, Australia</p> <p>Hygiene Certificate, National Institute of Hygiene, Poland</p> <p>Ministry of Public Works Approval, Kuwait</p> <p>Certificate of Approval for Potability and Non Toxicity – Dept. of Health, Brazil</p> <p>Setsco Services, Singapore – approval for use with potable water ISO 9001</p>
Country of Origin	USA
Projects	<p>Yas Hotel, Formula 1 Track, Abu Dhabi – Rooftop – 5,000m² – 2009</p> <p>Bahrain City Centre - waterpark on top of shopping centre – 20,000m² – 2008</p> <p>Ferrara Plaza Shopping Centre, Portugal – 6,000m² – 2007</p> <p>Fiumicino Airport, Rome – car park – 35,000m² – 2005</p> <p>Rama VIII Bridge, Bangkok Thailand – Bridge deck and infills – 12,000m² – 2002</p> <p>Garden Island Fleet Base Wharf, Sydney – Wharf deck – 9,900m² – 2002</p> <p>Atlantic Park Aquarium, Norway – All concrete on the project – 3,000m² – 1999</p> <p>Palace of the Golden Horses, Mines City Hotel, Kuala Lumpur – Entrance podium, carpark roof slab – 30,000m² – 1998</p> <p>Hong Kong Freeway, K11a Prince Edward Road West, Hong Kong – Raised Freeway – 15,150m² – 1998</p> <p>Dover Parkview Apartments, Singapore – Rooftops, landscape areas, swimming pools, wet areas, tennis courts – 50,000 m² – 1997</p> <p>Mekong River Bridge between Laos & Thailand – Mid spans and construction joints – 1994</p>
Preparation	<p><i>Radcon</i> must be applied to fully cured, clean and very dry structural concrete, by an approved applicator at the rates specified. <i>Radcon</i> must be watered within 6 hours of application and 2 additional waterings over the next 2 days. Please see application manual available from manufacturer for more detailed application and preparation instructions.</p>



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ECOSPECIFIER LIFE-CYCLE ASSESSMENT

INTEGRATED DESIGN AND POLICY ISSUES

Radcon Formula #7® is a vapor barrier, allowing vapor to permeate through the walls, preventing the buildup of moisture between elements of the building envelope. It allows walls and roofs to breathe, thus preventing deterioration of materials from excessive moisture, rot and corrosion. Therefore not only does it increase durability of concrete itself, by reducing permeability of water and contaminants such as chlorides, but increase durability of other building elements and the structure as a whole.

Radcon Formula #7® is maintenance free, providing water-tightness for the life of the building, eliminating costs for repair or replacement of waterproofing membranes with inferior durability. The appearance of the concrete surface is unchanged, as Radcon is subsurface and therefore will not be affected by surface damage from sources such as vehicle traffic and other forms of abrasion.

HUMAN HEALTH

Health

Product does not adversely affect health in use. *RF#7* allows vapor to permeate through the walls and prevents the growth of toxic mould in enclosed spaces. Product is also safe to use with surfaces in contact with potable water as certified by various organizations and standards.

Comfort

Radcon Formula #7® is not a vapor barrier, but prevents the ingress of water therefore reducing humidity and eliminates dampness in building interiors, which can increase thermal comfort levels and controllability.

Indoor Environment Quality

Product is a water based solution and has no VOC content and has no impact on IEQ compared to other concrete waterproofing substances based on solvents, suspensions and polymers.

Electromagnetic Radiation

Not Applicable

Safety

Non-flammable, Non-toxic

Accessibility

Not Applicable



ECOLOGICAL QUALITY

Terrestrial

Emissions – Product may have limited emissions from sand and trona mining used in the production of sodium silicates. However, product increases the durability of concrete, thereby lowering the demand for new concrete and reducing emissions from the manufacturing of virgin materials.



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Physical – Product provides lifetime waterproofing and therefore reduces waste to landfills compared to assessment comparisons, such as latex membranes, which have limited lifetimes and often have to be removed and dumped in landfill before new membrane can be applied.

Aquatic

Emissions – No known emissions to aquatic ecosystems.

Physical – No known physical ecological impacts to aquatic environments.

Atmosphere

Greenhouse (GHG) – Product has low greenhouse gas emissions from manufacturing, efficient coverage properties (5m²/litre), and has the potential to indirectly reduce GHG by minimising maintenance requirements

Greenhouse intensity – The product has a Greenhouse intensity of 0.195 kgCO₂/litre (Figures provided by manufacturer)

Transport intensity – Product is manufactured in Minnisota, USA. GHG intensities for shipping product are shown below.

Product weight	Energy Intensity - Container Shipping	GHG Intensity - Container Shipping
6.5kg / per 5 Litres	0.000135 MJ / kg.km	0.000011 kgCO _{2e} / kg.km

Table below provides land transportation greenhouse intensity figures to help calculate the greenhouse gas intensity of land transportation from shipping port.

Light commercial vehicle	Rigid Truck	Articulated Truck
0.001451kgCO _{2e} / kg.km	0.000195kgCO _{2e} / kg.km	0.000069kgCO _{2e} / kg.km

Transport intensity figures sourced from Australian National Greenhouse Gas Inventory 1990, 1995 and 1999 and WWF International, Inland Navigations and Emissions, 2005.

Operational efficiency – Coverage of 5m²/litre, sealing cracks up to 2mm. The penetrated product remains reactive in the presence of water to provide increased autogenous healing capabilities to hairline cracking. Increases hardness of concrete surface, thus reduces surface wear. After correct application, no further maintenance is required to provide continuous water tightness.

Re-use Efficiency – Product remains in the concrete for life.

Toxics and Pollutants – There are no known toxic or pollutant impacts on the atmosphere.

Ozone Depletion – No



Urban Heat Island Effects – Research shows that abrasions to concrete hardscapes can reduce the solar reflectance of the concrete. *RF #7* increases the hardness of concrete from 6 to 8 on the Moh's Hardness scale, thus greatly reducing abrasions and maintaining the solar reflectance of concrete surfaces. Typical grey concrete with Portland cement has an SRI of 35, and weathered concrete typically has an SRI around 20. In order for a surface to reduce heat island effect it must have a minimum SRI of 29, and use of *RF#7* can assist in maintaining the solar reflectance of concrete surfaces above this level.

Noise – No

Biodiversity

Product has limited impact on biodiversity from sand and sodium carbonate mining used to make sodium silicates. However, product improves durability of concrete and structures, therefore reducing need for replacement of materials that have high biodiversity impacts. Spills released into surface water are potentially harmful to aquatic life due to high Ph (11.7), however product will rapidly depolymerise to molecular species indistinguishable from natural dissolved silica.

RESOURCE DEPLETION

Resource Efficiency

The raw materials of sodium silicates are sand and sodium carbonate, which are both abundant resources.

Embodied Fossil Fuel Energy

The product has an Embodied Energy of 2.6MJ/litre (Figures provided by manufacturer)

Embodied Water

Product is approximately 75% water, and water is used upon initial application, however no water is required for maintenance.

Durability

Radcon Formula #7® increases the durability of concrete by reducing the permeability of concrete and preventing the ingress of water and contaminants. This lowers the impact of the freeze thaw process that can break up concrete, as well as reduces the amount of corrosion to reinforcement. *RF#7* has very high durability itself, remaining impregnated for the life of the concrete, and continuously reducing permeability in the presence of water by autogenously healing cracks

Reusability

Once in the concrete, it is there for the life of the structure and there is no waste or product to be reused.

Repairability

The penetrated product remains reactive in the presence of water to provide autogenous healing capabilities to hairline cracking.



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Design for Dematerialisation

Yes, provides water tightness for the life of the concrete without maintenance or replacement, as is common with other concrete waterproofing methods.

Design for Disassembly

Not applicable

Recyclability

Product does not affect the ability of concrete to be recycled. Product itself has no need to be recycled, remaining in the concrete for the life of the concrete.

Maintenance

None required

Product Takeback Scheme

No

Extended Producer Responsibility (EPR)

No

CORPORATE AND SOCIAL SUSTAINABILITY

Audits and Environmental Reporting

No

Convictions

No

Environmental Policy

No

Social Enhancement Programs

No

Technology Transfer Programs

No

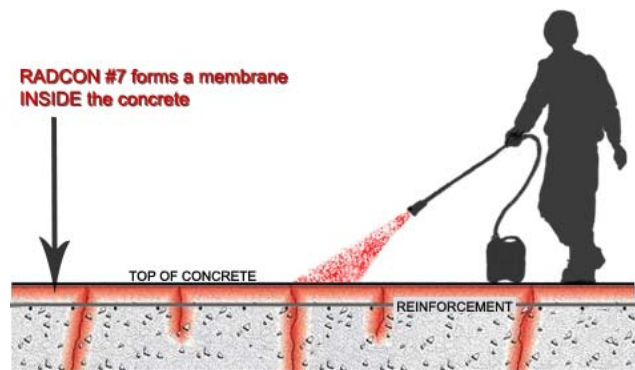
Environmental Management Systems (EMS)

No

ECOSPECIFIER ISSUES OF CONCERN / RED LIGHT

Issues of Concern

Sodium Silicates: Sodium Silicates have the following risk phrases: R22 harmful by ingestion, R37/38 irritating to respiratory and skin, and R41 risk of serious damage to eyes therefore care should be taken in application to prevent contact. Precautions for workers such as appropriate



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Personal Protective Equipment (PPE) will mitigate the risk of potential issues during application. This is not an issue once installed.

Proprietary Biochemicals: 0.5% of the constituents have not been identified by ecospecifier, however this percentage is small enough to allow a listing on ecospecifier.com

ECOSPECIFIER GREENRATE GREEN BUILDING SCHEME PRE-ASSESSMENT

The Pearls Design System for ESTIDAMA - New Buildings Rating Method

LIVEABLE BUILDINGS

<p>LBi-2.1: Material Emissions: Adhesives & Sealants</p> <p>Product may assist in a project obtaining credit point as an adhesive or sealant that meets the prescribed VOC limits in the South Coast Air Quality Management District Rule 1168.</p>	<p><i>Points Available</i> 1</p>
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PRECIOUS WATER

<p>PW-6 Note 1: Stormwater</p> <p>Product may assist in a project obtaining this credit by improving actual stormwater quality and/or reducing peak stormwater flows draining from the project site. Up to 4 credit points are achieved where the project design achieves the performance related to its stormwater determined in EPDS.</p> <p>Product may contribute as an individual component, in combination with other suitable components, in achieving the above credits that comply, in whole or in part, with the prescribed requirements.</p>	<p><i>Points Available</i> 4</p>
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RESOURCEFUL ENERGY

<p>RE-2: Cool Building Strategies</p> <p>Product may assist in a project obtaining this requirement by reducing external heat gain through the use of high solar reflective materials. Number of points awarded is determined by the percentage reduction in annual heat gain from the baseline. One point is awarded for the use of roofing materials with a Solar Reflectance Index (SRI) of at least 78.</p>	<p><i>Points Available</i> 6</p>
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STEWARDSHIP MATERIALS

<p>SM-1: Non-Polluting Materials</p> <p>Product may assist in a project obtaining this credit for non-polluting materials to eliminate long-term negative impacts on human health and pollution of natural systems. 1 Credit point is awarded when all thermal insulation materials and blowing agents used in manufacture have an ODP of zero and a GWP less than 5. 1 Credit point is awarded for replacing of chlorine-based materials including PVC, in accordance with the prescribed proportions. 1 Credit point is awarded for elimination of products containing the following R-Phrases: R20-29, R31-33, R36-39, R 41, R43, R45-46, R48-65.</p>	<p><i>Points Available</i> 3</p>
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<p>SM-6: Design for Durability</p> <p>Product may assist in a project obtaining this credit by minimising building impacts from condensation, water ingress, improper drainage and physically protecting vulnerable areas of the building envelope and surroundings. Credit point is awarded where a Building Durability Plan has been implemented to optimise the integrity of the building's internal and external envelope and can achieve the projected life with low maintenance.</p>	<p><i>Points Available</i></p> <p>1</p>
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LEED® for Commercial Interiors - Version 3 (see disclaimer below)

Product does not assist in the achievement of credit points in this rating tool.

LEED® for New Construction & Major Renovations - Version 3 (see disclaimer below)

SUSTAINABLE SITES

<p>SS Credit 5.2 Note 1: Site Development: Maximise Open Space</p> <p>Product may assist in a project obtaining this credit for reducing the development footprint. Projects earning SS Credit 2 and using a vegetated roof surface are eligible to contribute in gaining this credit.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, in creating a vegetated roof surface and assist a project in obtaining this credit via the use of a vegetated roof.</i></p>	<p><i>Points Available</i></p> <p>1</p>
<p>SS Credit 6.1 Note 1: Stormwater Design: Quantity Control</p> <p>Product is likely to assist in a project obtaining this credit, when appropriately implemented in the context of a site stormwater management plan, such that natural water hydrology disruption is limited through reducing impervious cover, increasing on-site filtration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants, in accordance with prescribed requirements.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components in contributing to vegetated roofs and stormwater harvesting for non potable uses and assist a project in obtaining this credit.</i></p>	<p><i>Points Available</i></p> <p>1</p>
<p>SS Credit 6.2 Note 1: Stormwater Design: Quality Control</p> <p>Product is likely to assist in a project obtaining this credit, when appropriately implemented in the context of site stormwater management plan, to limit disruption and pollution of natural water flows using Best Management Practices (BMP's) to address Total Suspended Solids (TSS) in accordance with the prescribed requirements.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components in contributing to vegetated roofs, pervious surfaces and stormwater harvesting for non potable uses and assist a project in obtaining this credit.</i></p>	<p><i>Points Available</i></p> <p>1</p>
<p>SS Credit 7.1 Note 1: Heat Island Effect: Non-Roof</p> <p>Product is likely to assist in a project obtaining this credit as it reduces heat island effects to minimize impacts on microclimates and human and wildlife habitats. Credit point is achieved when the requirements for one of the two following options are met;</p> <p><i>Option 1</i> Use a combination of the following (within 5 years of landscape installation) for 50% of hardscapes, provide shade from existing tree canopy, provide shade structures covered from solar panels, architectural devices or structures with a Solar Reflectance Index (SRI) of at least 29, hardscape materials with an SRI of at least 29, and an open-grid</p>	<p><i>Points Available</i></p> <p>1</p>



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<p>pavement system (at least 50% pervious) in accordance with prescribed requirements.</p> <p><i>Option 2 includes placing a minimum of 50% of parking spaces under cover (any roof used to shade or cover parking must have a SRI of at least 29 or be covered with solar panels).</i></p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in meeting the requirements of one of the credit pathway options for SS Credit 7.1</i></p>	
<p>SS Credit 7.2 Note 1: Heat Island Effect: Roof</p> <p>Product is likely to assist in a project obtaining this credit as it reduces heat island effects to minimize impacts on microclimates and human and wildlife habitats. Credit point is achieved when the requirements for one of the following options are met;</p> <p>Option 1: Includes using roofing materials with a high Solar Reflective Index (SRI), for 75% of the roof surface in accordance with prescribed values.</p> <p>Option 2: Includes installing a vegetated roof that covers at least 50% of the roof area, and</p> <p>Option 3: Includes installing high albedo and vegetated roof surfaces that complies with the prescribed criteria.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in creating a vegetated roof surface that is likely to assist a project in obtaining this credit via the use of a vegetated roof.</i></p>	<p style="text-align: center;"><i>Points Available</i> 1</p>

MATERIALS AND RESOURCES

<p>MR Credit 1.1 Note 2: Building Reuse – Maintain Existing Walls, Floors and Roof</p> <p>To obtain this credit the project must maintain the existing building structure (including structural floor and roof decking) and envelope (the exterior skin) and framing, excluding window assemblies and non-structural roofing material). Credit points are achieved by the percentage of building reuse.</p> <p><i>Product may assist in a project obtaining credit points as it increase the durability of structural elements, thereby increasing the potential for building structure to be reused in future renovations and building projects.</i></p>	<p style="text-align: center;"><i>Points Available</i> 3</p>
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INDOOR ENVIRONMENT QUALITY

<p>IEQ Credit 4.1: Low-Emitting Materials: Adhesives and Sealants</p> <p>Product is likely to assist in a project obtaining this credit as it meets the prescribed standards for the relevant adhesive/s and/or sealant/s.</p>	<p style="text-align: center;"><i>Points Available</i> 1</p>
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WATER EFFICIENCY

<p>WE Credit 1 Note 1: Water Efficient Landscaping:</p> <p>Product is likely to assist in a project obtaining this credit, when appropriately incorporated in combination with other relevant systems in reducing the use of potable</p>	<p style="text-align: center;"><i>Points Available</i> 4</p>
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<p>water or other natural surface or subsurface resources available for landscape irrigation, through one of the two following options.</p> <p>Option 1: Reduce by 50%: reduce water consumption for irrigation by 50% in accordance with the prescribed requirements through one of the following – plant species, density and microclimate factor, use of captured rainwater, use of recycled wastewater, use of water treated and conveyed by a public agency specifically for non potable uses.</p> <p>Option 2: No Potable Water Use for Irrigation: meet the requirements of option 1 and either Use only captured rainwater, recycled wastewater, recycled greywater or water treated and conveyed by a public agency specifically for non-potable uses for irrigation or Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within 1 year of installation.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, in reducing the use of potable water or other natural surface or subsurface resources available for landscape irrigation. The product may assist a project in obtaining this credit via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	
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BREEAM Issue 3 (see disclaimer below)

MATERIALS

<p>Mat-4 Note 1 – Reuse of Building Structure</p> <p>Product is likely to assist in a project obtaining this credit as it contributes to the reuse of the building structure. Credit point is achieved where either 50% (by area) of facade is reused in situ or 80% (by mass) is reused in situ.</p> <p><i>Product may assist in a project obtaining credit point as it increase the durability of structural elements, thereby increasing the potential for building structure to be reused in future renovations and building projects.</i></p>	<p><i>Points Available</i></p> <p>1</p>
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WATER EFFICIENCY

<p>Wat 5 Note 1 – Water recycling</p> <p>Product is likely to assist in a project obtaining credits by contributing to the collection, store, and where necessary treatment of rainwater and waste water for WC and urinal flushing.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving recycling credits above as either an efficient process system, or reuse/treatment system for WC and urinal flushing.</i></p>	<p><i>Points Available</i></p> <p>3</p>
<p>Wat 6 Note 1 – Irrigation systems</p> <p>Product is likely to assist in a project obtaining this credit as it provides any of the following:</p> <p>a drip feed subsurface irrigation that incorporates soil moisture sensors and</p>	<p><i>Points Available</i></p> <p>1</p>



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<p>control of watering times;</p> <p>reclaimed water from a rainwater or greywater system;</p> <p>the only planting specified is restricted to species that thrive in hot and dry conditions.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving irrigation systems credits above via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	
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BCA Green Mark Landed Houses v1 (see disclaimer below)

ENERGY EFFICIENCY

<p>1-10 Note 1: Cool / Green Roof</p> <p>Product is likely to assist in a project obtaining credit points by reducing local heat island effect as a material/finish with a SRI value of more than 40 or by facilitating the use of green roofs.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, in creating a vegetated roof surface and assist a project in obtaining this credit via the use of a vegetated roof.</i></p>	<p><i>Points Available</i></p> <p>3</p>
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WATER EFFICIENCY

<p>2-2 Note 1: Water Efficient Landscaping</p> <p>Product is likely to assist in a project obtaining this credit as it provides a water efficient irrigation system and facilitates the use of rainwater or recycled water to reduce potable water consumption.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, providing water efficient irrigation systems and facilitation of rainwater or recycled water to reduce water consumption. The product may assist a project in obtaining this credit via providing efficient process system, reuse/treatment system component or efficient appliance</i></p>	<p><i>Points Available</i></p> <p>5</p>
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BCA Greenmark Non-Residential Buildings v3 (see disclaimer below)

WATER EFFICIENCY

<p>2-3 Note 1: Irrigation System</p> <p>Product is likely to assist in a project obtaining this credit as it provides a water efficient irrigation system and facilitates the use of rainwater or recycled water to reduce potable water consumption.</p>	<p><i>Points Available</i></p> <p>2</p>
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<i>Product will contribute as an individual component, in combination with other suitable components, in achieving irrigation systems credits above via providing efficient process system, reuse/treatment system component or efficient appliance.</i>	
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BCA Greenmark Office Interior v1 (see disclaimer below)

SUSTAINABLE MANAGEMENT & OPERATION

<p>3-6 Note 1: Greenery Product may assist in a project obtaining credit points by facilitating the use of greenery, including sky garden, roof gardens, vegetated roofs, common recreation areas with greenery, and planters or potted plants.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, in creating a vegetated roof surface and assist a project in obtaining this credit via the use of a vegetated roof and other greenery.</i></p>	<p><i>Points Available</i></p> <p>2</p>
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BCA Greenmark Infrastructure v1 (see disclaimer below)

WATER

<p>3-1 Note 1: Rainwater Harvesting and Grey Water Recycling Product is likely to assist in a project obtaining credit points through the collection and use of rainwater or grey water for irrigation.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving irrigation systems credits above via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>4</p>
<p>3-3 Note 1: Active, Beautiful, Clean Waters Design Product is likely to assist in a project obtaining credit points by contributing to formation of water features that mitigate the impact of urban stormwater run-off.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving credits above via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>3</p>

BCA Greenmark Residential Buildings v3 (see disclaimer below)

WATER EFFICIENCY

<p>2-3 Note 1: Irrigation System Product is likely to assist in a project obtaining this credit as it provides a water efficient irrigation system and facilitates the use of rainwater or recycled water to reduce potable water consumption.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving irrigation systems credits above via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>2</p>
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BCA Greenmark Non-Residential Existing Buildings v2 (see disclaimer below)

WATER EFFICIENCY

<p>2-3 Note 1: Alternative Water Sources Product is likely to assist in a project obtaining this credit as it facilitates the use of alternative water sources for non-potable water uses.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving recycling credits above as either an efficient process system, or reuse/treatment system for non-potable water uses</i></p>	<p><i>Points Available</i></p> <p>2</p>
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SUSTAINABLE MANAGEMENT & OPERATION

<p>3-4 Note 1: Greenery Product may assist in a project obtaining credit points by facilitating the use of greenery, including sky garden, roof gardens, vegetated roofs, common recreation areas with greenery, and planters or potted plants.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, in creating a vegetated roof surface and assist a project in obtaining this credit via the use of a vegetated roof and other greenery.</i></p>	<p><i>Points Available</i></p> <p>2</p>
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Green Building Index Non-Residential New Construction Version 1 (see disclaimer below)

SUSTAINABLE SITE PLANNING AND MANAGEMENT

<p>SM11 Note 1: Stormwater Design Product is likely to assist in a project obtaining credit point by contributing to a storm water management plan, resulting in reduced impervious cover, increasing infiltration and managing storm water runoff.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components in contributing to pervious surfaces and stormwater harvesting for non potable uses and assist a project in obtaining this credit.</i></p>	<p><i>Points Available</i></p> <p>1</p>
<p>SM12 Note 1: Greenery & Roof: Hardscape and Greenery Application Product is likely to assist in a project obtaining credit point by providing shade, a paving material with SRI of at least 29, or open grid pavement.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving greenery & roof credits above via providing efficient process system or roofing system component.</i></p>	<p><i>Points Available</i></p> <p>1</p>



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WATER EFFICIENCY

<p>WE1 Note 1: Rainwater Harvesting Product may assist in a project obtaining credit points as it contributes to the reduction of potable water consumption through the use of rainwater harvesting. Number of points awarded is determined by the percentage reduction in potable water consumption resulting from use of rainwater.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, in reducing the use of potable consumption through the use of rainwater harvesting. The product may assist a project in obtaining this credit via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>2</p>
<p>WE 2 Note 1: Water Recycling Product is likely to assist in a project obtaining credit points as it contributes to the projects use of recycled water to reduce potable water. Number of points awarded is determined by the percentage reduction in potable water consumption resulting from use of reclaimed wastewater.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving water recycling credits above via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>2</p>
<p>WE3 Water Efficient Irrigation/Landscaping Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water consumption for landscape irrigation, or facilitates the use of rainwater or wastewater for irrigation/landscaping.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, providing water efficient irrigation systems and facilitation of rainwater or recycled water to reduce water consumption. The product may assist a project in obtaining this credit via providing efficient process system, reuse/treatment system component or efficient appliance</i></p>	<p><i>Points Available</i></p> <p>2</p>

Green Building Index Residential New Construction Version 1 (see disclaimer below)

SUSTAINABLE SITE PLANNING AND MANAGEMENT

<p>SM4 Note 1: Open Spaces, Landscaping and Heat Island Effect Product is likely to assist in a project obtaining credit points by facilitating the provision of landscaping to reduce the effects of heat islands. Number of points determined by the percentage of landscaping over the total development area.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving open spaces, landscaping and heat island effect credits above via providing efficient process system or system component.</i></p>	<p><i>Points Available</i></p> <p>4</p>
<p>SM6 Note 1: Storm Water Management Product is likely to assist in a project obtaining credit points by contributing to the management of surface water in compliance with the prescribed standard.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, providing storm water management. The product may assist a project in obtaining this credit via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>3</p>



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WATER EFFICIENCY

<p>WE1 Note 1: Rainwater Harvesting Product may assist in a project obtaining credit points as it contributes to the reduction of potable water consumption through the use of rainwater harvesting. Number of points awarded is determined by the percentage reduction in potable water consumption resulting from use of rainwater.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, in reducing the use of potable consumption through the use of rainwater harvesting. The product may assist a project in obtaining this credit via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>4</p>
<p>WE2 Note 1: Water Recycling Product is likely to assist in a project obtaining credit points as it contributes to the projects use of recycled water to reduce potable water. Number of points awarded is determined by the percentage reduction in potable water consumption resulting from use of reclaimed wastewater.</p> <p><i>Product will contribute as an individual component, in combination with other suitable components, in achieving water recycling credits above via providing efficient process system, reuse/treatment system component or efficient appliance.</i></p>	<p><i>Points Available</i></p> <p>2</p>
<p>WE3 Note 1: Water Efficient Landscaping Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water consumption for landscape irrigation, or facilitates the use of rainwater or wastewater for irrigation/landscaping.</p> <p><i>Product is likely to contribute as an individual component, in combination with other suitable components, providing water efficient irrigation systems and facilitation of rainwater or recycled water to reduce water consumption. The product may assist a project in obtaining this credit via providing efficient process system, reuse/treatment system component or efficient appliance</i></p>	<p><i>Points Available</i></p> <p>2</p>

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National Australian Built Environment Rating System (NABERS) Compatibility

Product does not assist in the achievement of credit points in this rating tool.

BASIX Building Sustainability Compatibility

Product does not assist in the achievement of credit points in this rating tool.



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Green Star™ Office Interiors Version 1.1 Compatibility (see disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p>EQ-11: Volatile Organic Compounds: Adhesives and Sealants Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for adhesives and sealants. To achieve credit points all adhesives and sealants used in the project must be in accordance with the prescribed standards.</p>	<p>Points Available 2</p>
<p>IEQ-13 Note 1: Volatile Organic Compounds: Adhesives and Sealants Product is likely to assist in a project obtaining a credit point as it meets the prescribed Volatile Organic Compound (VOC) content standard for adhesives and sealants. To achieve the credit point 95% adhesives and sealants used in the project must be in accordance with the prescribed standards.</p>	<p>Points Available 1</p>

Green Star™ Office Design Version 2 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credit points by facilitating the use of greenery, including sky garden, roof gardens, vegetated roofs, common recreation areas with greenery, and planters or potted plants. <i>Product is likely to contribute as an individual component, in combination with other suitable components, in creating a vegetated roof surface and assist a project in obtaining this credit via the use of a vegetated roof and other greenery.</i></p>	<p><i>Points Available</i> 1</p>
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EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water run off from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements. <i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 2</p>
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Green Star™ Office Design Version 3 Compatibility (see disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p>IEQ-13: Volatile Organic Compounds: Adhesives and Sealants Product is likely to assist in a project obtaining a credit point as it meets the prescribed Volatile Organic Compound (VOC) content standard for adhesives and sealants. To achieve the credit point 95% of adhesives and sealants used in the project must be in accordance with the prescribed standards.</p>	<p><i>Points Available</i> 1</p>
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WATER

<p>Wat-3 Note 1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credits where design of systems reduce consumption of potable water used for landscape irrigation. One credit point is awarded where potable water consumption used for landscape irrigation is reduced by 90% or one credit point is awarded where a xeriscape garden has been installed, in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of potable water used for landscape irrigation that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 1</p>
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EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water run off from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 2</p>
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Green Star™ Retail Centre Version 1 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credits where design of systems reduces consumption of potable water used for landscape irrigation. One credit point is awarded where potable water consumption used for landscape irrigation is reduced by 90% or one credit point is awarded where a xeriscape garden has been installed, in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of potable water used for landscape irrigation that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 1</p>
<p>Wat-5 Note 1: Fire System Water Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water for the buildings fire protection and essential water storage systems. Credit points are achieved when sufficient temporary storage for a minimum of 80% of routine fire protection system test water and maintenance drain-downs for re-use on site are utilised and each floor is fitted with a sprinkler system.</p> <p>Or where the fire protection system does not expel water for testing.</p> <p><i>Product may assist individually or in combination with other products/systems in providing temporary storage systems, re-use systems or sprinkler systems to be used for purposes explained above.</i></p>	<p><i>Points Available</i> 1</p>



EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water run off from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 2</p>
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Green Star™ Education Version 1 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Product may assist in a project obtaining credits by reducing potable water consumption for landscape irrigation. Credit points are awarded where either potable water consumption used for landscape irrigation is reduced by 90%, or a xeriscape has been installed, in accordance with the prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Wat-3: Landscape Irrigation.</i></p>	<p><i>Points Available</i> 3</p>
<p>Wat-5 Note 1: Fire System Water Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water for the buildings fire protection and essential water storage systems. Credit points are achieved when sufficient temporary storage for a minimum of 80% of routine fire protection system test water and maintenance drain-downs for re-use on site are utilised and each floor is fitted with a sprinkler system.</p> <p>Or where the fire protection system does not expel water for testing.</p> <p><i>Product may assist individually or in combination with other products/systems in providing temporary storage systems, re-use systems or sprinkler systems to be used for purposes explained above.</i></p>	<p><i>Points Available</i> 1</p>

EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water run off from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Emi-5: Watercourse Pollution.</i></p>	<p><i>Points Available</i> 3</p>
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Green Star™ Industrial Version 1 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credits by reducing potable water consumption for landscape irrigation. Credit point is awarded where either potable water used for landscape irrigation is sourced from non potable water, or a water efficient sub soil drip system with timers and/or soil moisture sensor control is installed or where a xeriscape garden has been installed.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Wat-3: Landscape Irrigation Water Efficiency.</i></p>	<p><i>Points Available</i> 1</p>
<p>Wat-5 Note 1: Fire System Water Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water for the buildings fire protection and essential water storage systems. Credit points are achieved when sufficient temporary storage for a minimum of 80% of routine fire protection system test water and maintenance drain-downs for re-use on site are utilised and each floor is fitted with a sprinkler system.</p> <p>Or where the fire protection system does not expel water for testing.</p> <p><i>Product may assist individually or in combination with other products/systems in providing temporary storage systems, re-use systems or sprinkler systems to be used for purposes above.</i></p>	<p><i>Points Available</i> 2</p>

EMISSIONS

<p>Emi-5 Note 1: Stormwater Product is likely to assist in part or in combination with other products to a project obtaining credits by minimising stormwater run-off to, and the pollution of natural watercourses by implementing the principles of Water Sensitive Urban Design (WSUD).</p> <p>1, 2 or 3 points are awarded based on the level of stormwater used on site and/or level of pollutants removed from discharge.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in minimising stormwater run-off to and the pollution of natural water courses.</i></p>	<p><i>Points Available</i> 3</p>
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Green Star™ Multi Unit Residential Version 1 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note-1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credits by reducing potable water consumption for landscape irrigation. Credit point is awarded where either potable water used for landscape irrigation has been reduced by 90%, or a xeriscape garden has been installed.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Wat-4: Landscape Irrigation Water Efficiency.</i></p>	<p><i>Points Available</i> 1</p>
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<p>Wat-5 Note 1: Fire System Water Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water for the buildings fire protection and essential water storage systems. Credit points are achieved when sufficient temporary storage for a minimum of 80% of routine fire protection system test water and maintenance drain-downs for re-use on site are utilised and each floor is fitted with a sprinkler system.</p> <p>Or where the fire protection system does not expel water for testing.</p> <p><i>Product may assist individually or in combination with other products/systems in providing temporary storage systems, re-use systems or sprinkler systems to be used for purposes explained above.</i></p>	<i>Points Available</i> 1
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EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water run off from buildings and hard surfaces to natural water courses. Two points are available for reduction in peak stormwater flows and treatment and filtration in accordance with prescribed requirements, and an additional point is awarded for the installation of a riparian buffer zone in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Emi-5: Watercourse Pollution.</i></p>	<i>Points Available</i> 3
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Green Star™ Healthcare Version 1 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note-1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credit points by reducing potable water consumption for landscape irrigation. Credit points are awarded where potable water consumption used for landscape irrigation is reduced by 90% or xeriscape garden has been installed.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Wat-3: Landscape Irrigation Water Efficiency.</i></p>	<i>Points Available</i> 2
<p>Wat-5 Note 1: Fire System Water Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water for the buildings fire protection and essential water storage systems. Credit points are achieved when sufficient temporary storage for a minimum of 80% of routine fire protection system test water and maintenance drain-downs for re-use on site are utilised and each floor is fitted with a sprinkler system.</p> <p>Or where the fire protection system does not expel water for testing.</p> <p><i>Product may assist individually or in combination with other products/systems in providing temporary storage systems, re-use systems or sprinkler systems to be used for purposes explained above.</i></p>	<i>Points Available</i> 1



EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product is likely to assist in part or in combination with other products/technologies/systems of a project obtaining credits by minimising stormwater runoff and pollution of natural watercourses. Two points are achieved where development does not increase peak stormwater runoff and stormwater is treated and filtered in accordance with prescribed requirements. An additional point is also awarded where the above criteria are met and a Riparian Buffer zone is completed in accordance with the prescriber requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 2</p>
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Green Star SA™ Office Version 1 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credits where design of systems reduces consumption of potable water used for landscape irrigation. One credit point is awarded where potable water consumption used for landscape irrigation is reduced by 50%, two credit points are awarded where potable water consumption used for landscape irrigation is reduced by 90% or where a xeriscape garden has been installed, in accordance with prescribed requirements. An additional point is available where 30% or more of the site is landscaped and the criteria for 90% or above reduction has been met.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of potable water used for landscape irrigation that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 3</p>
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EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water runoff from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i> 3</p>
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Green Star SA™ Retail Centre Version 1 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Product may assist in a project obtaining credits by reducing potable water consumption for landscape irrigation. One credit point is awarded where either potable water used for landscape irrigation is reduced by 50%, two points are awarded for a 90% reduction or where a xeriscape garden has been installed. An additional point is awarded where 30% or more of the site is landscaped and the consumption of potable water for irrigation is reduced by 90%.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of potable water used for landscape irrigation that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i></p> <p>3</p>
<p>Wat-5 Note 1: Fire System Water Product is likely to assist in a project obtaining credit points as it contributes to the reduction of potable water for the buildings fire protection and essential water storage systems. Credit points are achieved when sufficient temporary storage for a minimum of 80% of routine fire protection system test water and maintenance drain-downs for re-use on site are utilised and each floor is fitted with a sprinkler system.</p> <p>Or where the fire protection system does not expel water for testing.</p> <p><i>Product may assist individually or in combination with other products/systems in providing temporary storage systems, re-use systems or sprinkler systems to be used for purposes above.</i></p>	<p><i>Points Available</i></p> <p>1</p>

EMISSIONS

<p>Emi-5 Note 1: Watercourse Pollution Product is likely to assist in part or in combination with other products to a project obtaining credits by minimising stormwater run-off to, and the pollution of natural watercourses, in accordance with the prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i></p> <p>3</p>
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Green Star NZ™ Office 2009 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Water Efficiency Product may assist in a project obtaining credits where design of systems reduces consumption of potable water used for landscape irrigation. One credit point is awarded where potable water consumption used for landscape irrigation is reduced by 50%, two credit points are awarded where potable water consumption used for landscape irrigation is reduced by 90% or where a xeriscape garden has been installed, in accordance with prescribed requirements. An additional point is available where 30% or more of the site is landscaped and the criteria for 90% or above reduction has been met.</p>	<p><i>Points Available</i></p> <p>3</p>
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Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of potable water used for landscape irrigation that complies, in whole or in part, with the prescribed requirements.

EMISSIONS

Emi-5 Note 1: Watercourse Pollution

Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water runoff from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements.

Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.

Points Available

3

Green Star NZ™ Office Interiors 2009 Compatibility (see disclaimer below)

Product does not assist in the achievement of credit points in this rating tool.

Green Star NZ™ Education 2009 Compatibility (see disclaimer below)

WATER

Wat-3 Note 1: Landscape Irrigation Water Efficiency

Product may assist in a project obtaining credits by reducing potable water consumption for landscape irrigation. Credit point is awarded where either potable water used for landscape irrigation is sourced from non potable water, or a water efficient sub soil drip system with timers and/or soil moisture sensor control is installed or where a xeriscape garden has been installed.

Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Wat-3: Landscape Irrigation Water Efficiency.

Points Available

2

EMISSIONS

Emi-4 Note 1: Watercourse Pollution

Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water run off from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements.

Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.

Points Available

3



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Green Star NZ™ Industrial 2009 Compatibility (see disclaimer below)

WATER

<p>Wat-3 Note 1: Landscape Irrigation Water Efficiency</p> <p>Product may assist in a project obtaining credits by reducing potable water consumption for landscape irrigation. Credit point is awarded where either potable water used for landscape irrigation is sourced from non potable water, or a water efficient sub soil drip system with timers and/or soil moisture sensor control is installed or where a xeriscape garden has been installed.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Wat-3: Landscape Irrigation Water Efficiency.</i></p>	<p><i>Points Available</i></p> <p>1</p>
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EMISSIONS

<p>Emi-4 Note 1: Watercourse Pollution</p> <p>Product may assist a project obtaining credits, when used in combination with other appropriate materials and/or technologies and/or systems, by reducing potential pollution in storm water run off from buildings and hard surfaces to natural water courses, in accordance with prescribed requirements.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving reduction of watercourse pollution that complies, in whole or in part, with the prescribed requirements.</i></p>	<p><i>Points Available</i></p> <p>3</p>
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ASSESSMENT COMPARISON

RELATED TOPICS

Waterproofing membranes, Durability

CSI CATEGORY & NUMBER

07 16 00 Cementitious and Reactive Waterproofing

NATSPEC CATEGORY AND NUMBER

00 Planning and Design

0074 Stormwater Drainage (design)

02 Site, Urban and Open Spaces

0243 Landscape – water features

03 Concrete

0310 Concrete – combined

04 Enclosure

0411 Waterproofing – external and tanking



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NBS CATEGORY AND NUMBER

Building and Residential Services

C42 Repairing/ Renovating/ Conserving concrete

J10 Cementitious mortar tanking/ damp proofing

J30 Liquid applied tanking and damp-proofing

J31 Liquid applied waterproof roof coatings

Landscaping

J10 Cementitious mortar tanking/ damp proofing

J30 Liquid applied tanking and damp-proofing

J31 Liquid applied waterproof roof coatings

Q10 Stone/ concrete/ brick kerbs/ edgings/ channels

Q21 In situ concrete roads/ pavings/ bases

ASSESSMENT CRITERIA SATISFIED

WORKPLACE OH&S, OCCUPANT HEALTH, HUMAN WELL-BEING	
x	Low/Reduced offgassing
x	Reduced, or no toxicity/ carcinogens/mutagens/teratogens or ionizing agents through life cycle
HABITAT & BIODIVERSITY CONSERVATION	
x	Reduced terrestrial impacts
x	Reduced aquatic impacts
AIR POLLUTION	
x	Reduced smog-forming potential
x	Reduced urban heat island potential
RESOURCE DEPLETION	
x	Durability
OTHER VITAL SIGNS	
x	Material Safety Data Sheet (MSDS)
x	Quality Management System
x	Documented manufacturer claims
x	Expert Assessment



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MANUFACTURER DETAILS

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Chartered Architect, FAIA, ABSA, Green Star AP, LEED AP, MRoySocAS



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