

Herculan – SR Indoor and Outdoor Sports Floors

Overview

Very Low VOC multi-purpose sports flooring systems suitable for interior and exterior commercial applications.

Product Description

The Herculan range of *SR Sports Floors* are a seamless, spike resistant, cushioned flooring system with point-elastic properties. The flooring system is suitable for interior and exterior commercial sporting facilities, children's play areas and large-scale commercial interior flooring applications, such as exhibition centres. The system consists of a polyurethane layer bonded on a rubber granulate sub-base layer. The rubber cushion base contains approximately 85-90% post-consumer recycled content (car tyres).

The system has a highly durable, resilient and non-porous polyurethane surface providing good hygienic qualities with low maintenance requirements. Additionally, the product has very low volatile organic compound (VOC) and formaldehyde emissions. The self-levelling layers are solvent free and no mercury is utilised in manufacturing the product.



PRODUCT SPECIFICATIONS

Options	<i>Herculan SR range includes:</i> <ul style="list-style-type: none">• <i>Herculan SR indoor 4 + 4</i>• <i>Herculan SR indoor 10 + 4</i>• <i>Herculan SR Safescape Field</i>• <i>Herculan SR Safescape Play</i>• <i>Herculan SR National</i>• <i>Herculan SR Sprint</i>• <i>Herculan SR Sprint Encapsulated</i>• <i>Herculan SR Olympic</i>• <i>Herculan SR Olympic Encapsulated</i>• <i>Herculan MF-OD / Herculan Court TC Pro</i>
Colours	A range of colours are available, contact supplier
Warranty	7 years
Expected Life	15 – 20 years before recoating required
Indicative Costs	Contact supplier



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Purchase Options	Contact supplier
Constituents	Polyurethane Binders, adhesives and coatings with recycled rubber or EPDM cushion base.
National & International Standards	M1 Emission Class for Building Materials CE Mark Certified flooring by the International Association of Athletics Association (IAAF) and the Badminton World Federation (BWF) Approved sports surface by ISA Sport, the Netherlands Olympic Committee, ITS Switzerland and the Netherlands Sports Federation
Country of Origin	Rubber base is manufactured in Queensland, Australia. Polyurethane coating is manufactured in The Netherlands.
Projects	Khalifa A, Abu Dhabi, UAE Taif King Abdulah Air Defense System, Saudi Arabia Katameya Residence Sporting Club, Cairo, Egypt Schools at Al Qurain, Kuwait
Preparation	Contact supplier

ECOSPECIFIER LIFE-CYCLE ASSESSMENT

INTEGRATED DESIGN AND POLICY ISSUES

The flooring system is a completely in-situ product and requires a suitable subfloor such as concrete, asphalt or timber flooring.

The system uses a range of liquid polyurethane products that require drying time and adequate ventilation during and after installation prior to occupation. Air handling systems in a building must not be used to vent space as the emissions of polyurethane VOC components can condense within air ducts, and be re-emitted during use phase.

HUMAN HEALTH

Health

Manufacturing Site OH&S Issues

Coating contains a small volume of substances that may present danger of serious damage to health by prolonged exposure (R48). Precautions for workers such as reducing skin contact, inhalation of vapours and using appropriate Personal Protective Equipment (PPE) mitigate potential issues to *low* risk in accordance with an **ecospecifier** Risk Assessment.



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Comfort

Flooring system has point-elastic properties providing surface elasticity, reducing strain and impact related discomfort.

Indoor Environment Quality

The flooring system has very low VOC (TVOC 0.230mg/m²/hr) and formaldehyde (0.012 mg/m²/hr) emissions and meets the Finnish M1 Emissions Class for Building Materials.

Pearls VOC Content Limits

Material Emissions: Paints & Coatings

Product	VOC Value (g/L)	Product Type	Limit (g/L)	Accept or reject
Herculan EG120	1	Coating/ Indoor & outdoor	100	Accept
Herculan PU 100W	75	Coating/ indoor	100	Accept
Herculan EG130	1	Coating/ Outdoor	100	

Material Emissions: Adhesives & Sealants

Product	VOC Value (g/L)	Product Type	Limit (g/L)	Accept or reject
Herculan UN700	0	Glue/ indoor & outdoor	60	Accept
Herculan RB-N	0	Glue/ outdoor	60	

Electromagnetic Radiation

Not applicable.

Safety

Product has friction, slide and shock absorption qualities to minimise sporting injuries.

Accessibility

Product facilitates universal access.



ECOLOGICAL QUALITY

Terrestrial Pollution

Emissions – There are generally limited toxics emitted to land in the production of the raw materials.

Physical – Product contains a high level of post-consumer rubber recycled content used in the rubber base. The rubber is sourced from used car tyres that would otherwise end up in landfill or be incinerated.

The remainder of the product is a combination of polyurethane coatings and binders which are petrochemical based and will disrupt local landscapes and alter local ecosystems, and in the event of an oil-spill, while rare, significant localised biodiversity impacts can result.



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Aquatic Pollution

Emissions – Finished flooring system is inert. There are generally limited toxics emitted in the production of the raw materials that will impact aquatic and marine ecosystems.

Physical – Petrochemical extraction can cause localised aquatic disturbance around oil fields via mining infrastructure and dredging of the seabed. Petroleum extraction can also contribute to oil spills at sea.

Atmosphere Pollution

Greenhouse (GHG) – The product contains polyurethane and rubber components which have high energy requirements and GHG emissions in manufacture (comparable to other resilient flooring systems), in comparison to alternative non resilient flooring finishes, such as sealed timber or sealed concrete. Product contains recycled content in rubber base which will reduce GHG impacts in comparison to similar products made from virgin materials.

Greenhouse intensity –

Herculan SR Indoor System – 28kgCO_{2e} / m^{2*}

Herculan SR Safescape Field - 45kgCO_{2e} / m^{2*}

Herculan SR Safescape Play - 45kgCO_{2e} / m^{2*}

Herculan SR National - 35kgCO_{2e} / m^{2*}

Herculan SR Sprint – 46kgCO_{2e} / m^{2*}

Herculan SR Sprint Encapsulated- 27.67kgCO_{2e} / m^{2*}

Herculan SR Olympic – 48kgCO_{2e} / m^{2*}

Herculan SR Olympic Encapsualted- 48kgCO_{2e} / m^{2*}

Herculan MF-OD / Herculan Court TC Pro - 32kgCO_{2e} / m^{2*}

*Based on average coverage of approximately 13.35 and 5kg / m². Intensity figures used in calculation are for virgin materials and sourced from Bath University United Kingdom. Products contain approximately 90% recycled content which may reduce *Herculan SR Indoor* figure above by up to 20kgCO_{2e} / m² and *Herculan MF-OD / Herculan Court TC Pro* up to 2 kgCO_{2e} / m².

Transport intensity – Polyurethane components of flooring system are manufactured in Meerkerk, The Netherlands. Energy and GHG figures for shipping of polyurethane components are show below. Shipping port from country of origin is Rotterdam, The Netherlands.

Product Weight	Energy Intensity – Container Shipping	GHG Intensity – Container Shipping
4.8kg / m ² (total system) or 4.15kg / m ² (polyurethane components only)	0.000135MJ / 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.



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Light commercial vehicle	Rigid Truck	Articulated Truck
0.001451kgCO _{2e} / kg.km	0.000195kgCO _{2e} / kg.km	0.000169kgCO _{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 – The flooring surface is a polyurethane non-porous surface which has low maintenance requirements in comparison to alternative flooring surfaces.

Re-use Efficiency – This product is not able to be reused.

Toxics and Pollutants – Product emits limited VOC's into the air. VOC can combine with other air pollutants to form photochemical smog. See also

Ozone Depletion – Product does not contain any ozone depleting (ODP) substances.

Urban Heat Island Effects – Not applicable

Noise – Not applicable.



Biodiversity

Product generates biodiversity impacts through the atmospheric emissions generated during its manufacturing. These have not been quantified in terms of impacts on biological systems, except in the case of oil-spill impacts which, while rare, can have significant localised impacts.

The use of recycled rubber content minimises land clearing required for landfills.

RESOURCE DEPLETION

Resource Efficiency

Rubber base flooring system (except Olympic models) contains 85 - 90% post consumer recycle content (car tyres) which is an abundant resource.

Petroleum used in synthetic polymer based constituents is principally based on polymers derived from petroleum a finite and limited resource.



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Embodied Fossil Fuel Energy

Herculan SR Indoor System – 824MJ / m² *

Herculan SR Safescape Field – 1386MJ / m² *

Herculan SR Safescape Play – 1323MJ / m² *

Herculan SR National – 1018MJ / m² *

Herculan SR Sprint – 1282MJ / m² *

Herculan SR Sprint Encapsulated - 1282MJ / m² *

Herculan SR Olympic – 1369MJ / m² *

Herculan SR Olympic Encapsulated – 1369MJ / m² *

Herculan MF-OD / Herculan Court TC Pro – 964MJ / m² *

*Based on average coverage of approximately 13.35 and 5kg / m². Intensity figures used in calculation are for virgin materials and sourced from Bath University United Kingdom. Product contains approximately 90% recycled rubber which may reduce Herculan SR Indoor figure above by up to 5300MJ / m² and *Herculan MF – OD / Herculan Court TC Pro* by up to 53MJH / m².

Transport intensity – Polyurethane components of flooring system are manufactured in Meerkerk, The Netherlands. Shipping port from country of origin is Rotterdam, The Netherlands.

Embodied Water

Information not available

Durability

Product has a highly durable and resilient surface with a long expected life.

Reusability

Product is not reuseable.

Repairability

Product can be easily repaired with liquid polyurethane product. Product can be re-surfaced.

Design for Dematerialisation

Product is not designed for dematerialisation.

Design for Disassembly

Product is not designed for disassembly.

Recyclability

Herculan systems are recyclable. If the floor is taken out, it can be milled (after cooling it in liquid Nitrogen) and be used as an ingredient in a new floor.



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Maintenance

Surface should be dry mopped daily to remove surface dust and dirt, and wet scrubbed weekly with mild detergent. See supplier for more detailed maintenance information.

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 LIGHTS

None



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ECOSPECIFIER GREENRATE GREEN BUILDING SCHEME PRE-ASSESSMENT

LEED® for Commercial Interiors - Version 3.0 (see LEED® disclaimer below)

MATERIALS AND RESOURCES

MR Credit 4: Recycled Content	<i>Points Available</i>
Product is likely to assist in a project obtaining this credit. The project must incorporate post-consumer and pre-consumer recycled content of at least 10% or 20% based on the total value (cost) of materials used in the project, in accordance with the prescribed requirements	2

INDOOR ENVIRONMENTAL QUALITY

IEQ Credit 4.1: Low-Emitting Materials, Adhesives and Sealants	<i>Points Available</i>
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.	1
IEQ Credit 4.3: Low Emitting Materials, Flooring Systems	<i>Points Available</i>
Product is likely to assist in a project obtaining this credit as it meets the prescribed standards for the relevant paint/s and or coating/s.	1

LEED® for New Construction & Major Renovations - Version 2.2 (see LEED® disclaimer below)

MATERIALS AND RESOURCES

MR Credit 4.1: Recycled Content	<i>Points Available</i>
Product is likely to assist in a project obtaining this credit. The project must incorporate materials with recycled content such that the sum of postconsumer recycled content plus 1/2 of the preconsumer content constitutes recycled content of at least 10% or 20% based on the total value (cost) of materials used in the project.	2



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INDOOR ENVIRONMENTAL QUALITY

IEQ Credit 4.1: Low-Emitting Materials: Adhesives and Sealants 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.	<i>Points Available</i> 1
IEQ Credit 4.3: Low Emitting Materials: Flooring Systems Product is likely to assist in a project obtaining this credit as it meets the prescribed standard/s of option 1 for all flooring applicable to the project scope and prescribed standard for option 2 for all flooring elements installed in the building interior.	<i>Points Available</i> 1

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National Australian Built Environment Rating System (NABERS) Compatibility

Product assists in the achievement of IEQ credits 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 Green Star™ disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p><u>IEQ-11: Volatile Organic Compounds - Paints</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for paints. To achieve credit points 95% of all painted surfaces in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>2</p>
<p><u>IEQ-11: Volatile Organic Compounds - Adhesives and Sealants</u></p> <p>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 standard.</p>	<p><i>Points Available</i></p> <p>2</p>
<p><u>IEQ-11: Volatile Organic Compounds - Carpets and Flooring [1]</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for carpets and other flooring. To achieve credit points all carpets and flooring used in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>2</p>



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

INDOOR ENVIRONMENT QUALITY

<p><u>IEQ-11: Volatile Organic Compounds - Paints</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for paints. To achieve credit points 95% of all painted surfaces in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p><u>IEQ-11: Volatile Organic Compounds - Adhesives and Sealants</u></p> <p>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 standard.</p>	<p><i>Points Available</i></p> <p>1</p>

Green Star™ Office Design Version 3 Compatibility (see Green Star™ disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p><u>IEQ-11: Volatile Organic Compounds - Paints</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for paints. To achieve credit points 95% of all painted surfaces in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p><u>IEQ-11: Volatile Organic Compounds - Adhesives and Sealants</u></p> <p>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 standard.</p>	<p><i>Points Available</i></p> <p>1</p>



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Green Star™ Retail Version 1 Compatibility (see Green Star™ disclaimer below)

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

Green Star™ Education Version 1 Compatibility (see Green Star™ disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p><u>IEQ-11: Volatile Organic Compounds - Paints</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for paints. To achieve credit points 95% of all painted surfaces in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p><u>IEQ-11: Volatile Organic Compounds - Adhesives and Sealants</u></p> <p>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 standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p><u>IEQ-11: Volatile Organic Compounds - Carpets and Flooring [1]</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for carpets and other flooring. To achieve credit points all carpets and flooring used in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>

MATERIALS

<p><u>Mat-3: Recycled Content and Re-used Products and Materials</u></p> <p>Product is likely to assist in a project obtaining credits as it meets in whole (or in part) by contributing to 2% of the projects contact value for materials containing 20% post consumer recycled content, or reused products/materials, in accordance with prescribed requirements.</p>	<p><i>Points Available</i></p> <p>1</p>
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Green Star™ Industrial Compatibility (see Green Star™ disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p>IEQ-11: Volatile Organic Compounds</p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for paints. To achieve credit points 95% of all painted surfaces in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p>IEQ-11: Adhesives and Sealants</p> <p>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 standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p>IEQ-11: Carpets and Flooring [1]</p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for carpets and other flooring. To achieve credit points all carpets and flooring used in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>

MATERIALS

<p><u>Mat-3: Recycled Content and Re-used Products and Materials</u></p> <p>Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for materials containing recycled content, or reused products/materials. Products used for base building construction or integrated fit out must have at least 50% post consumer content. One point is achieved where 2% of the projects contract value represents reused products/materials. One point is achieved where recycled materials represent 1% of the project contract value and two points where recycled content represents 2% of the project contract value.</p>	<p><i>Points Available</i></p> <p>3</p>
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Green Star™ Multi Unit Residential Version 1 Compatibility (see Green Star™ disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p><u>IEQ-11: Volatile Organic Compounds - Paints</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for paints. To achieve credit points 95% of all painted surfaces in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p style="text-align: center;">1</p>
<p><u>IEQ-11 Note 1: Volatile Organic Compounds - Adhesives and Sealants</u></p> <p>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 standard.</p> <p><i>Product may eliminate the need for adhesives/sealants and assist a project in obtaining maximum IEQ-11 credits (adhesives/sealants) for using no adhesives or sealants.</i></p>	<p><i>Points Available</i></p> <p style="text-align: center;">1</p>
<p><u>IEQ-11: Volatile Organic Compounds - Carpets and Flooring [1]</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for carpets and other flooring. To achieve credit points all carpets and flooring used in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p style="text-align: center;">1</p>



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MATERIALS

<p><u>Mat-3: Recycled Content and Re-used Products and Materials</u></p> <p>Product is likely to assist in a project obtaining credit point as it contributes towards 1% of the project contract value being made up of reused products and materials or products/materials with post consumer recycled content of at least 20%.</p>	<p><i>Points Available</i></p> <p>1</p>
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Green Star™ Healthcare Version 1 Compatibility (see Green Star™ disclaimer below)

INDOOR ENVIRONMENT QUALITY

<p><u>IEQ-11: Volatile Organic Compounds - Paints</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for paints. To achieve credit points 95% of all painted surfaces in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p><u>IEQ-11: Volatile Organic Compounds - Adhesives and Sealants</u></p> <p>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 standard.</p>	<p><i>Points Available</i></p> <p>1</p>
<p><u>IEQ-11: Volatile Organic Compounds - Carpets and Flooring [1]</u></p> <p>Product is likely to assist in a project obtaining credits as it meets the prescribed Volatile Organic Compound (VOC) content standard for carpets and other flooring. To achieve credit points all carpets and flooring used in the project must be in accordance with the prescribed standard.</p>	<p><i>Points Available</i></p> <p>1</p>



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MATERIALS

<u>Mat-3: Recycled Content and Re-used Products and Materials</u>	<i>Points Available</i>
Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for materials containing recycled content, or reused products/materials. Products used for base building construction or integrated fit out must have at least 50% post consumer content. One point is achieved where recycled materials represent 1% of the project contract value and two points where recycled content represents 2% of the project contract value.	2

[1] Product has been tested to Finnish M1 Emission Class for Building Materials. Classification testes in accordance to the EN 13419 Building Products – Determination of the emission of volatile organic compounds testing protocol. Green Star™ does not currently recognise this testing protocol. Product may assist a project achieve credits where a Credit Interpretation ruling (CIR) on the testing protocol and emission test results is submitted with a client's project submission, or where re-testing is undertaken to Green Star™ compliant testing protocols.

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BREEAM Gulf Compatibility (see BREEAM disclaimer below)

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

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The Pearls Design System for ESTIDAMA

New Building Rating Method

LIVEABLE BUILDINGS

LBi-2.1: Material Emissions: Adhesives & Sealants 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.	<i>Points Available</i> 1
LBi-2.2: Materials Emissions: Paints & Coatings Product may assist in a project obtaining credit points as a paint or coating that meets the prescribed VOC limits and is fungal resistant.	<i>Points Available</i> 1

STEWARDING MATERIALS

SM-10: Recycled Materials: Other Materials Product may assist in a project obtaining credit points through the use of recycled materials with a minimum of 30% post-consumer recycled content, a minimum of 80% post industrial recycled content, or 50% agricultural waste by-product.	<i>Points Available</i> 1
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ASSESSMENT COMPARISON

Timber and vinyl sports flooring systems.

RELATED TOPICS

Adhesives, Tapes & Fasteners, Floors, Floor Coverings, Floor Systems, and Paints and Surface Treatments

CSI CATEGORY & NUMBER

09 65 66	Resilient Athletic Flooring
09620	Specialty Flooring
09629	Indoor Athletic Surfacing

NBS CATEGORY & NUMBER

M12	Resin Flooring
M50	Rubber / Plastics / Cork / Line / Carpet tiling / sheeting

Commercial Engineering & Services

0657 Seamless Floor Finishes



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ASSESSMENT CRITERIA SATISFIED

ENERGY/GREENHOUSE
<ul style="list-style-type: none">• Low energy in production
HABITAT & LAND
<ul style="list-style-type: none">• Reduced terrestrial impact
RESOURCE DEPLETION & EFFICIENCY
<ul style="list-style-type: none">• Abundant• Post Consumer Recycled Content• Reduced material use
HUMAN HEALTH
<ul style="list-style-type: none">• Low/reduced offgassing
POLLUTION TO ENVIRONMENT
<ul style="list-style-type: none">• Reduced Life Cycle Toxicity• Reduced Smog: Reduction
OTHER VITAL SIGNS
<ul style="list-style-type: none">• MSDS• Independent Verification• Documented Manufacturer Claim• National / International Standard



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