

Overview

Chemical resistant porcelain ceramic slab suitable for interior, exterior, facade, residential, countertops/bench tops, splash-backs, cladding, wet areas, light commercial floors and walls. The big dimensions available make the product unique.

Product Description

Kalesinterflex® is a porcelain ceramic slab with a thickness of 3 mm and dimensions of 1000 x 3000 mm.

The flexibility radius of a *Kalesinterflex® Fit* slab with dimensions of 1000 x 3000 x 3 mm is 5,5 m².

Kalesinterflex® is totally fire resistant and non-flammable (Category 0). It is also resistant to chemicals (acids and bases) thanks to its porcelain ceramic structure and glaze layer on its surface



It can be cut with standard glass and ceramic cutters, computer controlled automatic cutting machines in the required dimensions. And can be drilled with glass drills as well as with other known automatic drilling devices.

Kalesinterflex® has a smooth surface on which dirt does not accumulate. If required it can be cleaned with water and known cleaning agents.

Kalesinterflex® is produced using environment friendly technology.

Manufacturer claims, *Kalesinterflex®* is the largest polished porcelain tile in the world (660x3000mm)

PRODUCT SPECIFICATIONS

| | |
|----------------|---|
| Options | Dimensions available: 100 x 300 cm, 66x300cm, 100 x 100 cm, 50 x150 cm, 50 x 100 cm, 50 x 50 cm, 20 x 150 cm, 5 x 100 cm. Two surface alternatives as glazed and polished (largest polished size 66x300cm). |
| Colours | Tile/Slab Collections: Plain: 18 colours available in Matt and Polished: White - Black - Cement Grey - Dark Grey - Beige - Beige grey - Mocha - Coral - Ivory - Saffron - Orange - Olive green - Pistachio green - Pebble grey - Turquoise - Blue - Mega White - Mega Black Technowood: 4 Colours available in Matt: Wenge, Walnut, Oak, Maple Luxury Cement: 6 Colours available in Matt: Beige, Mink, Anthracite, Grey, |



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| | | | | |
|---|---|--|-------------------------|------------------------------------|
| | Sand, Ivory Oxido: 4 Colours available in Matt: Oil, Flame, Ice, Moss Decor Collections: Breeze Stripe / Helix Twist Bloom | | | |
| Warranty | Please contact manufacturer regarding warranty terms. | | | |
| Expected Life | Depending on usage. Maximum life up to 50 years | | | |
| Indicative Costs | Cost of supply | Cost of installation | | |
| | From \$90 m ² | Variable but approximately \$60 m ² | | |
| | Dependent on quantity. Price is for full container lots although there is no MOQ (minimum order quantity) | | | |
| Purchase Options | Please contact manufacturer for purchase options. | | | |
| Constituents | Constituent | Percentage (%) | | Mass unit area (g/m ²) |
| | Ceramic | 92.23 | Feldspar = 46.115% | 7000 |
| | | | Kaolin + Clay = 46.115% | |
| | E-Glass Fibre | 3.95% | 300 | |
| Epoxy Resin | 3.82% | 290 | | |
| Technical Specifications | TSE EN ISO 14411 ANNEX G GROUP Bia | | | |
| National & International Standards | <p>EN 13823:2002 – Reaction to fire tests for building products – Building products excluding floorings exposed to the thermal attack by a single burning item.</p> <p>EN ISO 1716:2002 – Determination of the heat combustion.</p> <p>EN 13501-1 Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests.</p> <p>EN ISO 14001:2004 Environmental Management System.</p> <p>EN ISO 10545</p> <p>EN 14411</p> <p>ASTM C627: Standard Method for Evaluating Ceramic Floor Tile Installation</p> | | | |



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| | |
|--------------------------|---|
| | <p>Systems Using the Robinson-Type Floor Tester.</p> <p>ASTM C485: Standard Test Method for Measuring Warpage of Ceramic Tile</p> <p>ASTM C499: Facial Dimensions and Thickness of Flat, Rectangular Ceramic Wall and Floor Tile</p> |
| Country of Origin | Product manufactured in Canakkale, Turkey. |
| Projects | <p>Sant Andreu Metro Station – Barcelona, Spain</p> <p>Darussafaka Metro Station – Istanbul, Turkey</p> <p>Cornivius University – Budapest, Hungary</p> <p>Hanmac Buildig – Seoul, S.Korea</p> <p>Bahçelievler Carrefour Shopping Center – Istanbul, Turkey</p> <p>Lutfi Kırdar Congress Center – Istanbul, Turkey</p> <p>Acibadem Hospital – Istanbul, Turkey</p> <p>Mercedes Head Quarter Moscow, Russia</p> <p>Novus Residence – Istanbul, Turkey</p> <p>Dunya Goz Hospital – Ankara, Turkey</p> |
| Preparation | <p>Product can be installed onto fibre cement sheets, concrete, brick, plaster, water proofing membrane.</p> <p>Floor surface must be level and can be achieved by using a self levelling compound.</p> <p>Can also be installed on a facade using either bonded or mechanical system – via a hidden clip system.</p> |

ECOSPECIFIER LIFE-CYCLE ASSESSMENT

INTEGRATED DESIGN AND POLICY ISSUES

Kalesinterflex® is produced by an environment friendly technology. Compared to the traditional ceramic production process.



HUMAN HEALTH

Health



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The product contains that contains risk phrases such as harmful by inhalation, may cause sensitization by skin contact, very toxic to aquatic organisms, possible risk of impaired fertility and possible risk of harm to the unborn child.

Precautions for workers such as appropriate Personal Protective Equipment (PPE) and adequate ventilation will mitigate the risk of potential issues noted. Please refer to MSDS and in accordance with an ecospecifier Risk Assessment noted in the Issue of Concerns \ Red Light Comments section below.

Comfort

Not applicable.

Indoor Environment Quality

When used inside, product contributes to keep a good Indoor Environment Quality as it has a relatively low Volatile Organic Compound content with the product.

Electromagnetic Radiation

Not applicable.

Safety

Not applicable.

Accessibility

Not applicable.



ECOLOGICAL QUALITY

Terrestrial

Emissions – The mining and processing of Feldspar and Kaolin can produce emissions to land from surface impoundments of liquids, solids, slurries and from storage facilities.

Physical – Extraction of Feldspar and Kaolin results in the removal and stockpiling of topsoil, sub-soil and sand, and from removing overburden and inter-burden, resulting in modified soil/sand profiles, topography and drainage.

Aquatic

Emissions – not known, but there is a recycling system of water in the polishing department.

Physical – Mineral extraction of silica, via sand mining, is common in marine environments such as lakes and coastal areas and will have localised disruptive impacts to ecosystems caused by mining processes.

Atmosphere

Greenhouse intensity – Approximately 7.63kgCO₂e/m²*

*Calculation is based on data sourced from Bath University:



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Transport intensity – Product is manufactured in Canakkale in Turkey. GHG intensities for shipping product are shown below. Shipping port from country of origin is Izmir. Destination port is Melbourne.

Greenhouse Intensity for Container Shipping of Kalesinterflex® – 1.30 kgCO_{2e} / m²

| Product weight | Distance to destination port | Energy Intensity - Container Shipping | GHG Intensity - Container Shipping |
|--------------------------|------------------------------|---------------------------------------|------------------------------------|
| 7.59kg / functional unit | 15584.58 km | 0.000135MJ / kg.km | 0.000011kgCO _{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 | 0.000169kgCO _{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 – Not applicable.

Re-use Efficiency – If product is mechanically fixed, it can be reused as long as not damaged during removal from previous application.

Toxics and Pollutants – Not known

Ozone Depletion – Not applicable.

Urban Heat Island Effects – Not applicable.

Noise – Not applicable.

Biodiversity

The process of extracting mineral based additives, particularly feldspar (constituent of ceramics), are sourced as a result of sand mining, a high biodiversity impact process.

RESOURCE DEPLETION

Resource Efficiency

Clay, Kaolin and Feldspar are non-renewable resources, but are abundant.

Embodied Fossil Fuel Energy

Electricity and natural gas are used in the production process



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The product has an embodied energy of 132.13MJ/m²*

*Calculation is based on data sourced from Bath University, UK.

Transport intensity – Product is manufactured in Canakkale in Turkey. GHG intensities for shipping product are shown below. Shipping port from country of origin is Izmir. Destination port is Melbourne.

Energy Intensity for Container Shipping of *Kalesinterflex®* – 15.97 MJ / m²

Embodied Water

Water consumption is approximately 70 m³/day including domestic use.

The polishing department includes a water recycling system.

There is no need to use excessive amounts of water over the product's life in maintenance and use.

Durability

Ceramic materials are abrasion and chemical resistant, durable and their life expectancy can be up to 50 years.

Reusability

It depends on usage. The product can be reused with countertops or mechanically fixed facades systems but not with the areas fixed with tiling glue such as a floor or wall application.

Repairability

No.

Design for Dematerialisation

No.

Design for Disassembly

Disassembly is possible on facade with mechanical fixing or when product used on bench tops.

Recyclability

Yes, only plain fired scraps are used in body preparation process for tile. Fired scraps are ground below 1mm and add to batch for 3-5%.

Maintenance

Warm water and neutral PH detergent can be used.

Product Takeback Scheme

No.

Extended Producer Responsibility (EPR)

No

CORPORATE AND SOCIAL SUSTAINABILITY

Audits and Environmental Reporting



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Environmental audits according to the ISO 14001 system. These audits are made by TSE (The Institute of Turkish Standards) and DQS (Germany). Some audits are also made by local authority and The Turkish Ministry of Environment.

Annual reports about solid waste, waste water, hazardous waste and emissions etc. are sent to The Turkish Ministry of Environment.

Convictions

No.

Environmental Policy

Yes

Social Enhancement Programs

No.

Technology Transfer Programs

No.

Environmental Management Systems (EMS)

Yes, ISO 14001. IQNet certified, expiring date.

ECOSPECIFIER ISSUES OF CONCERN / RED LIGHT

Issue of Concern

Kalesinterflex use an epoxy resin and epoxy hardner for facade applications (These chemicals are not used in the standard production.). The small volume of epoxy resin/epoxy hardener contain chemicals that are very toxic to marine environments (R50) and may cause long term adverse effects in the aquatic environment (R53), in liquid form.

This red light comment has been classified as low risk in accordance with an ecospecifier Risk Assessment and primarily relates to the cleaning of application tools. Tools must be cleaned in a contained system. Contaminated cleaning water, or primer in liquid form, must not be allowed to stormwater and bodies of water. The Environmental Management System must consist of monitoring the emissions of the epoxy resin and the hardener. This product must be disposed of in accordance to local regulations.

The product also contains substances that are possible risk of harm to an unborn child (R62) and possible risk of impairing fertility (R63). However, studies show that the dosage required for impacting fertility and unborn child is rather high and the exposure pathway through swallowing and skin for the labour workers and customers are rather low. However, it is strongly recommended that the workers during installation should wear protective equipments at all times to prevent risks of these substances.

ECOSPECIFIER GREENRATE GREEN BUILDING SCHEME PRE-ASSESSMENT

The Pearls Design System for ESTIDAMA

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



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LEED® for Commercial Interiors - Version 3 (see disclaimer below)

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

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

LEED® is a registered mark of the U.S Green Building Council (USGBC). The listing constitutes an **ecospecifier** Technical Opinion and is not endorsed by the USGBC or its agents. For detailed technical information about Credit requirements refer to the relevant LEED® Reference Guide. Rating Systems and Reference Guides are subject to change by the USGBC and any decision regarding the award of credits towards a LEED® rating is at the sole discretion of the USGBC.

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

BREEAM Issue 3 (see disclaimer below)

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MATERIALS

Mat-1: Materials Specification (Major Building Elements)

To recognise and encourage the use of construction materials with a low environmental impact over the full life cycle of the building.

Points Available

6

BCA Greenmark Landed Houses v1 (see disclaimer below)

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

BCA Greenmark Non-Residential Buildings v3 (see disclaimer below)

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

BCA Greenmark Office Interior v1 (see disclaimer below)



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

BCA Greenmark Infrastructure v1 (see disclaimer below)

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

BCA Greenmark Residential Buildings v3 (see disclaimer below)

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

BCA Greenmark Non-Residential Existing Buildings v2 (see disclaimer below)

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

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

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

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

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National Australian Built Environment Rating System (NABERS) Compatibility

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

BASIX Building Sustainability Compatibility

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

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

MATERIALS

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| <p>Mat-2: Flooring</p> <p>Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for flooring products. Credit points are achieved when a product has a reduced environmental impact as determined by the Mat-2 Flooring Calculator. See Calculator results under the <i>ecospecifier Greenrate Green Building Pre-Assessment</i> section in relevant product listing.</p> | <p><i>Points Available</i></p> <p>5</p> |
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Green Star™ Materials Calculator (Sub-Component Adaption*)

| Eco Preferred Content | Durability | Environment Management System (EMS) | EMS ISO 14001 Certified? | EMS – Waste Minimisation | EMS – Energy Consumption | EMS – Emissions | EMS – Materials Minimisation | Product Stewardship | Modular | Design for Disassembly |
|-----------------------|-----------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-----------------|------------------------------|---------------------|---------------|------------------------|
| Less than 5 % | Less than 7 yrs | Yes | Yes | Yes | Yes | Yes | Yes | No | Sub-component | |

* Modified by *ecospecifier* for presentation purposes. Source - *Green Star Office Interiors v1.1 Rating Tool*

Product may contribute as a sub-component, in combination with other suitable components, to the following materials: flooring.

| | |
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| <p>Mat-3: Walls and Partitions</p> <p>Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for wall and partitions. Credit points are achieved when a product has a reduced environmental impact as determined by the Mat-3 Walls and Partitions Calculator. See Calculator results under the <i>ecospecifier Greenrate Green Building Pre-Assessment</i> section in relevant product listing.</p> | <p><i>Points Available</i></p> <p>5</p> |
|---|--|

Green Star™ Materials Calculator (Sub-Component Adaption*)



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| | | | | | | | | | | |
|-----------------------|-----------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-----------------|------------------------------|---------------------|---------------|------------------------|
| Eco Preferred Content | Durability | Environment Management System (EMS) | EMS ISO 14001 Certified? | EMS – Waste Minimisation | EMS – Energy Consumption | EMS – Emissions | EMS – Materials Minimisation | Product Stewardship | Modular | Design for Disassembly |
| Less than 5 % | Less than 7 yrs | Yes | Yes | Yes | Yes | Yes | Yes | No | Sub-component | |

* Modified by ecospecifier for presentation purposes. Source - Green Star Office Interiors v1.1 Rating Tool

Product may contribute as a sub-component, in combination with other suitable components, to the following materials: Walls and Partitions.

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

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

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

MATERIALS

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| <p>Mat-2 Note 1: Building Re-use</p> <p>Product is likely to encourage and recognize the re-use of existing major structure and existing facades to reduce new material consumption. Credit points are achieved by the percentage re-use of gross building volume and percentage of exciting facade vertical area.</p> <p><i>This product may assist a project in obtaining this credit, as product may contribute in re-use a structure at the end of its life, in accordance with the prescribed requirements.</i></p> | <p>Points Available</p> <p>6</p> |
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| <p>Mat-9: Design for Disassembly</p> <p>Product is likely to assist in a project obtaining credits as it facilitates the disassembly of a projects structural framing, roofing or facade cladding system. Credit is point is achieved where 50% (by area) of the structural framing, roofing, and facade cladding systems are designed for disassembly, OR 95% of the total facade is designed for disassembly.</p> | <p>Points Available</p> <p>1</p> |
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Green Star™ Retail Centre Version 1 Compatibility (see disclaimer below)

MATERIALS



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Mat-8 Note 1: Design for Disassembly

Product is likely to assist in a project obtaining credit as it helps minimise the embodied energy and resources associated with demolition. Credit point is awarded where 50% (by area) of structural framing, roofing, facade and cladding systems are designed for disassembly or where 90% of total facade is designed for disassembly. If materials above represent less than 1% of the projects contract value this credit is not applicable.

This product may assist a project in obtaining this credit in combination with other products in achieving the percentage of required as a structural framing, roofing or facade product which is designed for disassembly.

Points Available

1

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

MATERIALS

Mat-8: Design for Disassembly

Product is likely to assist in a project obtaining credit as it helps minimise the embodied energy and resources associated with demolition. Credit point is awarded where 50% (by area) of structural framing, roofing, facade and cladding systems are designed for disassembly or where 95% of total facade is designed for disassembly. If materials above represent less than 1% of the projects contract value this credit is not applicable.

Points Available

1

Mat-11 Note 1: Flooring

Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for flooring products. Credit points are achieved when a product has a reduced environmental impact as determined by the Mat-11 Flooring Calculator. See Calculator results under the *ecospecifier Greenrate Green Building Pre-Assessment* section in product listing.

Product may contribute as an individual component, in combination with other suitable components, in achieving flooring which comply in whole (or in part) with the prescribed requirements.

Points Available

3

Green Star™ Materials Calculator (Sub-Component Adaption*)

| Eco Preferred Content | Durability | Environment Management System (EMS) | EMS ISO 14001 Certified? | EMS – Waste Minimisation | EMS – Energy Consumption | EMS – Emissions | EMS – Materials Minimisation | Product Stewardship | Modular | Design for Disassembly |
|-----------------------|-----------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-----------------|------------------------------|---------------------|---------------|------------------------|
| Less than 5 % | Less than 7 yrs | Yes | Yes | Yes | Yes | Yes | Yes | No | Sub-component | |



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* Modified by ecospecifier for presentation purposes. Source - Green Star Education Version 1 2008 Compatibility Rating Tool

Product may contribute as a sub-component, in combination with other suitable components, to the following materials: flooring.

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

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

Green Star™ Multi Unit Residential Version 1 Compatibility (see disclaimer below)

*This credit can be achieved if the product is used indoor.

MATERIALS

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| <p>Mat-8: Design for Disassembly Product is likely to assist in a project obtaining credit as it helps minimise the embodied energy and resources associated with demolition. Credit point is awarded where 50% (by area) of structural framing, roofing, facade and cladding systems are designed for disassembly or where 90% of total facade is designed for disassembly. If materials above represent less than 1% of the projects contract value this credit is not applicable.</p> | <p><i>Points Available</i> 1</p> |
|--|---|

| | |
|---|---|
| <p>Mat-11 Note-1: Flooring Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for flooring products. Credit points are achieved when a product has a reduced environmental impact relative to available alternatives as determined by the <i>Mat-11 Flooring Calculator</i>. See Calculator results under the <i>ecospecifier Greenrate Pre-Assessment</i> section in relevant product listing. <i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Mat-11: Flooring.</i></p> | <p><i>Points Available</i> 1</p> |
|---|---|

| | |
|--|---|
| <p>Mat-14 Note-1: Internal Walls Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for internal wall products. Credit points are achieved when a product has a reduced environmental impact relative to available alternatives as determined by the <i>Mat-14 Internal Walls Calculator</i>. See Calculator results under the <i>ecospecifier Greenrate Pre-Assessment</i> section in relevant product listing. <i>Product may contribute as an individual component, in combination with other suitable components, in meeting the requirements of Mat-14: Internal Walls.</i></p> | <p><i>Points Available</i> 2</p> |
|--|---|

Green Star™ Materials Calculator (Sub-Component Adaption*)

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|----------------|-------------|----------------------|---------------|----------------------|----------------------|------------------|--------------------------|----------------------|----------|---------------------|
| Eco Preferr ed | Durabil ity | Environ ment Managem | EMS ISO 14001 | EMS – Waste Minimisa | EMS – Energy Consump | EMS – Emissi ons | EMS – Materials Minimisa | Product Stewards hip | Modu lar | Design for Disassem |
|----------------|-------------|----------------------|---------------|----------------------|----------------------|------------------|--------------------------|----------------------|----------|---------------------|



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| Content | Less than 5 % | Less than 7 yrs | ent System (EMS) | Certified? | tion | tion | tion | tion | bly |
|---------|---------------|-----------------|------------------|------------|------|------|------|------|---------------|
| | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Sub-component |

* Modified by ecospecifier for presentation purposes. Source -Multi Unit Residential Version 1 2009 Compatibility Rating Tool

Product may contribute as a sub-component, in combination with other suitable components, to the following materials: Internal Walls.

LAND USE AND ECOLOGY

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|---|--|
| <p>Eco-5: Outdoor Communal Facilities</p> <p>Product is likely to assist in a project obtaining credits as it contributes towards outdoor communal facilities used for a broad range of activities. Credit points are achieved where 25% of total site area is developed for communal facilities, a maintenance manual is provided and a specified number of the following are achieved – composting facilities, garden plots, worm farms, in ground deep soil planting, playground areas, open landscaped areas, sun shaded areas, outdoor gyms, swimming pools, retained bushland, seating, outdoor dining and barbeque facilities in accordance with the prescribed requirements.</p> | <p><i>Points Available</i></p> <p>3</p> |
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Green Star™ Healthcare Version 1 Compatibility (see disclaimer below)

MATERIALS

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|--|--|
| <p>Mat-8: Design for Disassembly</p> <p>Product is likely to assist in a project obtaining credit as it helps minimise the embodied energy and resources associated with demolition. Credit point is awarded where 50% (by area) of structural framing, roofing, facade and cladding systems are designed for disassembly or where 95% of total facade is designed for disassembly. If materials above represent less than 1% of the projects contract value this credit is not applicable.</p> | <p><i>Points Available</i></p> <p>1</p> |
|--|--|

| | |
|---|--|
| <p>Mat-11: Flooring</p> <p>Product is likely to assist in a project obtaining credits as it meets in whole (or in part) the prescribed requirements for flooring products. Credit points are achieved when a product has a reduced environmental impact as determined by the Mat-2 Flooring Calculator. See Calculator results under the ecospecifier Greenrate Green Building Scheme Pre-Assessment section in relevant product listing.</p> | <p><i>Points available</i></p> <p>3</p> |
|---|--|

Green Star™ Materials Calculator (Sub-Component Adaption*)

| Eco Preferred | Durability | Environment Management | EMS ISO 14001 | EMS – Waste Minimisa | EMS – Energy Consump | EMS – Emissi ons | EMS – Materials Minimisa | Product Stewards hip | Modular | Design for Disassem |
|---------------|------------|------------------------|---------------|----------------------|----------------------|------------------|--------------------------|----------------------|---------|---------------------|
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| Content | Durability | Environment Management System (EMS) | Certified? | Waste Minimisation | Energy Consumption | Emissions | Materials Minimisation | Product Stewardship | Modular | Design for Disassembly |
|---------------|-----------------|-------------------------------------|------------|--------------------|--------------------|-----------|------------------------|---------------------|---------------|------------------------|
| Less than 5 % | Less than 7 yrs | Yes | Yes | Yes | Yes | Yes | Yes | No | Sub-component | |

* Modified by ecospecifier for presentation purposes. Source - Green Star Healthcare Version 1 2009 Compatibility Rating Tool

Product may contribute as a sub-component, in combination with other suitable components, to the following materials: flooring.

| | |
|--|---|
| <p>Mat-14 Note 1: Ceilings, Walls and Partitions</p> <p>Product is likely to assist in a project obtaining credit point as it meets the prescribed requirements for ceilings, walls and partitions products. Credit points are achieved when a product has a reduced environmental impact as determined by the Mat-14 Ceilings, Walls and Partitions Calculator. See Calculator results under the ecospecifier Greenrate Pre-Assessment section in relevant product listing.</p> <p><i>Product may contribute as an individual component, in combination with other suitable components, in achieving Ceilings, Walls and Partitions which comply in whole (or in part) with the prescribed requirements. See Mat-13 Loose Furniture Calculator (Sub-Component Adaption) under the ecospecifier Greenrate Pre-Assessment section in relevant product listing for clarification on the criteria the product meets</i></p> | <p>Points Available</p> <p>2</p> |
|--|---|

Green Star™ Materials Calculator (Sub-Component Adaption*)

| Eco Preferred Content | Durability | Environment Management System (EMS) | EMS ISO 14001 Certified? | EMS – Waste Minimisation | EMS – Energy Consumption | EMS – Emissions | EMS – Materials Minimisation | Product Stewardship | Modular | Design for Disassembly |
|-----------------------|-----------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-----------------|------------------------------|---------------------|---------------|------------------------|
| Less than 5 % | Less than 7 yrs | Yes | Yes | Yes | Yes | Yes | Yes | No | Sub-component | |

* Modified by ecospecifier for presentation purposes. Source - Green Star Healthcare Version 1 2009 Compatibility Rating Tool

Product may contribute as a sub-component, in combination with other suitable components, to the following materials: Ceilings, Walls and Partitions.

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Green Star SA™ Office Version 1 Compatibility (see disclaimer below)



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

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

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

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

| | |
|--|-------------------------------------|
| Mat-9: Flooring Coverings To encourage and recognize the selection of floor coverings that is independently verified to be environmentally preferable. | <i>Points available</i> 2 |
|--|-------------------------------------|

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

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

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

| | |
|--|-------------------------------------|
| Mat-9: Flooring Coverings To encourage and recognize the selection of floor coverings that is independently verified to be environmentally preferable. | <i>Points available</i> 2 |
|--|-------------------------------------|

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

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Mat-9: Flooring Coverings

To encourage and recognize the selection of floor coverings that is independently verified to be environmentally preferable.

Points available

2

ASSESSMENT COMPARISON

PVC Floorings, Timber Floorings and other floorings

RELATED TOPICS

None

CSI CATEGORY & NUMBER

06 83 13 Resin Composite Paneling

06 83 16 Fiberglass Reinforced Paneling

NATSPEC CATEGORY AND NUMBER

0427 Roofing – tiles

0431 Cladding - combined

0521 Partitions - demountable

NBS CATEGORY & NUMBER

Building and Residential Services

None

Landscaping

None

ASSESSMENT CRITERIA SATISFIED

| |
|--|
| REDUCES POLLUTION |
| <ul style="list-style-type: none"> • Potential less GHG / ODP down stream |
| RESOURCE DEPLETION & EFFICIENCY |
| <ul style="list-style-type: none"> • Abundant • Eco Packaging |
| POLLUTION TO ENVIRONMENT |



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- Reduced Life Cycle Toxicity
- Reduced Life Cycle Carcinogen

OTHER VITAL SIGNS

- National / International Standard
- MSDS
- ISO 14001 Certification
- Doc Manuf Claim
- Environmental Policy

MANUFACTURER DETAILS

Company Name: Kaleseramik

Company details: Turkish Ceramic Manufacturer

Büyükdere Caddesi Kaleseramik

Binas 34330 Levent,

İstanbul, Turkey

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



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