HONG KONG GREEN BUILDING COUNCIL

HKGBC GREEN PRODUCT ACCREDITATION AND STANDARDS

Pavement Block

Assessment Standard

(Version 1.0)
### Core Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Requirements</th>
<th>Verification</th>
<th>Points</th>
<th>Index</th>
</tr>
</thead>
</table>
| Product Information       | Applicant shall provide the following product information on the packaging of the product and/or company website for compliance:  
  - Basic product specifications  
  - The intended use of the product  
  - Instructions for correct use and storage to maximise the lifetime of the product  
  - Recommended maintenance instructions for the product  
  - Installation method  
  - Instructions for consumer product disposal  
  - Country of origin | Documentation including, but not limited to product label, product catalogue, MSDS, and written declaration with date-stamped photographs | 5      | 4.1.2 (page 3) |
| Heavy Metals              | All products shall undergo a standard leaching test for heavy metals listed as below: | Documentation including but not limited to product catalogue, MSDS and test reports | 20     | 4.2.1 (page 5) |

#### Heavy Metal

<table>
<thead>
<tr>
<th>Heavy Metal</th>
<th>Limit (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Barium</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Cadmium</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Chromium VI</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Lead</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Mercury</td>
<td>&lt;0.2</td>
</tr>
</tbody>
</table>
### Harmful Substances

All products shall undergo a standard leaching test, which tests for organic compounds of environmental concern as listed as below:

<table>
<thead>
<tr>
<th>Organic Compounds</th>
<th>Limit (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanide</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Organic phosphorus</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>&lt;0.3</td>
</tr>
<tr>
<td>Tetrachloroethylene</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Phenolic compounds</td>
<td>&lt;0.2</td>
</tr>
</tbody>
</table>

The following requirements are applicable to products using rubber as raw materials:

Concentration of phthalate in the product shall below 0.1% by weight of the product. The limited phthalates including the following types:

- Bis(2-ethylhexyl)phthalate (DEHP)
- Dibutyl phthalate (DBP)
- Benzylbutylphthalate (BBP)
- Diisononylphthalate (DINP)
- Diisodecylphthalate (DIDP)
- Di-n-octylphthalate (DNOP)

### Serviceability

All products shall be fit for the intended purpose and demonstrate the performance properties including but not limited to:

- quality
- durability splitting strength
- weathering resistance
- abrasion resistance and skid resistance
- water absorption

Documentation including but not limited to product catalogue, MSDS and test reports

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Documentation including but not limited to product catalogue, MSDS and test reports</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Raw Materials</td>
<td><strong>Option A</strong></td>
<td><strong>Option A</strong></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>For concrete blocks including but not limited to dense concrete, lightweight aggregate concrete and autoclaved aerated concrete, raw materials or components of product (by weight) are made from combinations of recycled materials, waste materials as stated in Appendix Table 4, the combination shall exceed the below value for awarding point:&lt;br&gt;• ≥ 65% (10 basic points)&lt;br&gt;• ≥ 80% (+5 bonus points)&lt;br&gt;OR</td>
<td>Documentation including but not limited to product catalogue, MSDS and self-declaration OR</td>
</tr>
<tr>
<td></td>
<td><strong>Option B</strong></td>
<td><strong>Option B</strong></td>
</tr>
<tr>
<td></td>
<td>For concrete blocks including but not limited to dense concrete, lightweight aggregate concrete and autoclaved aerated concrete, the density shall be less than the following level:&lt;br&gt;• 700 kg/m³ (10 basic points)&lt;br&gt;• 400 kg/m³ (+5 bonus points)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Option A</strong></td>
<td><strong>Option A</strong></td>
</tr>
<tr>
<td></td>
<td>Basic 10</td>
<td>Bonus +10</td>
</tr>
<tr>
<td></td>
<td>Basic 10</td>
<td>Bonus +10</td>
</tr>
</tbody>
</table>

**Subtotal:** 50 +10
### NON-CORE CRITERIA

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Requirements</th>
<th>Verification</th>
<th>Points +Bonus</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Management System</td>
<td>Manufacturer shall possess valid ISO 14001 certificates, EU Eco-Management and Audit Scheme (EMAS) or Cradle-to-Cradle.</td>
<td>A valid certificate issued by local or overseas accredited certification bodies</td>
<td>+10</td>
<td>4.1.1 (page 3)</td>
</tr>
</tbody>
</table>
| Dust Management           | Manufacturer shall implement effective dust management policies and procedures and / or a dust management programme for the manufacturing plant including but not limited to the following items:  
  - Initiatives taken for dust management covering all areas of the operation and associated activities  
  - Monitoring plan for controlling the particulate matters (PM 2.5 & PM 10) | Written declaration with date-stamped photographs and test reports | +5            | 4.3.1 (page 7) |
| Reuse and Recyclability   | Applicant shall provide information on recyclability of products including but not limited to the following items for compliance:  
  - Product shall not be impregnated, labelled or coated or treated in a manner preventing post-consumer recycling;  
  - Information related to the recyclability of products | Documentation including, but not limited to the information of recyclability and waste management of products | +5            | 4.4.3 (page 9) |
| Energy Management         | Manufacturer shall implement effective energy management policies and procedures and / or an energy management programme, including but not limited to the following items:  
  - Initiatives taken to reduce energy use and improve energy efficiency  
  - Initiatives or requirements for suppliers or contract manufacturers | Written declaration with date-stamped photographs and test reports | +5            | 4.3.2 (page 7) |
<table>
<thead>
<tr>
<th>Environmental Features</th>
<th><strong>Option A</strong></th>
<th><strong>Option B</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Products shall obtain a permeability rate of at least 0.01cm/s.</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td><strong>Option B</strong></td>
<td>Products shall obtain the sustainable features that could be integrated to the open-grid pavement system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solar Reflectance Index</td>
<td>All products shall obtain a solar reflectance index (SRI) of at least 29.</td>
<td>Documentation including but not limited to product catalogue, MSDS and test reports</td>
<td>+10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Documentation including but not limited to product catalogue, MSDS</td>
<td></td>
<td>+10</td>
</tr>
</tbody>
</table>

**Subtotal:** +40
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1. INTRODUCTION

1.1 PURPOSE

The HKGBC Green Product Accreditation and Standards (formerly known as HKGBC Green Building Product Labelling Scheme) (herein after referred as the “Scheme”) is an environmental labelling scheme implemented by the Hong Kong Green Building Council (HKGBC) which aims to help consumers, building professionals and policy makers identify environmentally preferable building materials and products. This Assessment Standard (hereafter referred as the “Standard”) sets out the assessment criteria and their benchmarks for pavement block to govern the application and award of a label under the Scheme. The Standard also defines the verification methods to determine which labelling grade should be awarded to the product according to the assessment criteria.

This Standard neither modifies nor supersedes laws and regulations. Compliance with this Standard is not a substitute for, and does not assure, compliance with any applicable laws or regulations. Compliance with all applicable laws and regulations is a prerequisite for the manufacturing and marketing of the product.

1.2 BACKGROUND

Pavement block can place a significant burden on the environment, from raw material extraction to potential health hazards in the use phase. With increasing environmental claims of pavement block in the market, a more comprehensive and systematic approach to assess the environmental impacts of the furniture products shall be developed. The aim of this Standard is to help designers and end-users choosing greener products by conserving resources, reducing the amount of waste disposal in landfills and reducing the impact to human health throughout the life cycle of the pavement block. The development of the assessment criteria in this Standard has made references to worldwide relevant eco-labelling schemes and some existing life cycle assessment (LCA) studies.

2. SCOPE

The scope of this Standard is applicable to pavement blocks including basic pavement block (block with recycled materials, permeable block, block for vegetation, tactile block, etc.) and interlocking pavement block (interlocking block with recycled materials, permeable interlocking block, interlocking block for vegetation, tactile interlocking block, etc.).

The types and ratio (formulation) of raw materials shall be specified clearly in each application. ONE application is only for ONE product series with same raw materials and ratio (formulation). Products under the same series with different sizes, thickness, colour and shapes could be included in ONE application.
Subsequent application is available for products under the same product series and manufactured with the same type of raw materials, but with different ratio (formulation). The range of ratio (formulation) of products in each application shall be ± 5 % and the information of the ratio (formulation) is required to be provided for the application. Maximum 5 (FIVE) subsequent applications shall be available and the subsequent application is only eligible for applying within the validity period of the label.

*Note:* Each application should specify the product code / serial number.

HKGBC or an appointed third party would conduct a random check of the labelled product during the validity period of the label. One of the laboratory tests listed below will be selected and performed to verify the compliance of the product with the criteria stated in the Assessment Standard. Applicant shall be responsible for the cost of the laboratory test.

### 3. DEFINITIONS

**Applicant:** Organisation which apply for the label under the Green Product Accreditation and Standards of the Hong Kong Green Building Council

**ASTM:** American Society for Testing and Materials

**BS:** British Standards

**CNAS:** China National Accreditation Service for Conformity Assessment

**HKAS:** Hong Kong Accreditation Service

**HKGBC:** The Hong Kong Green Building Council Limited

**HOKLAS:** The Hong Kong Laboratory Accreditation Scheme

**IARC:** International Agency for Research on Cancer

**ISO:** International Organisation for Standardisation

**MSDS:** Material safety data sheet. To qualify as suitable, MSDS and information therein must not be more than 5-years old

**US EPA:** United States Environmental Protection Agency
4. EVALUATION CRITERIA

A product to be assessed shall meet all the minimum requirements of the “Core Criteria” in order to be awarded a “Green” (i.e. a “pass” grade) Label under the Scheme. Bonus points may be awarded if the product meets the “Non-core Criteria” and a “Bronze”, “Silver”, “Gold” or “Platinum” Label will be awarded according to the total points accumulated (see Section 5 for details). All submissions and documentation shall be endorsed by the Chief Executive Officer or other authorised persons of the Applicant to demonstrate conformance to the assessment criteria. All certifications, laboratory reports and documentations must be valid during the assessment process and labelling period. All laboratory reports and documentation shall be within 5 years from the date of issue. The chemical tests should be conducted by either a third party or the manufacturer who has received the ISO17025 certification or relevant national accreditation systems, e.g. HOKLAS, CNAS, etc. HKGBC or an appointed third party would conduct a random check of the labelled product during the period of validity of the label, through laboratory test to verify the compliance with the criteria as stated in the Standard. Manufacturer shall bear the cost of the laboratory test.

4.1 GENERAL REQUIREMENTS

4.1.1 Environmental Management System
10 Points (Non-core Criterion)

Manufacturer shall possess valid ISO 14001 certificates, EU Eco-Management and Audit Scheme (EMAS) or Cradle-to-Cradle.

Note:
BS EN ISO 14001 is the international standard which provides an outline of how to meet the environmental policy and objectives for the business of the applicant.

Eco-Management and Audit Scheme (EMAS) is an environmental management tool which enables organisations to assess, manage and continuously improve their environmental performance

Cradle-to-Cradle design is a biomimetic approach to the design of products and systems. It models human industry on nature's processes viewing materials as nutrients circulating in healthy and safe metabolisms.

Verification
A valid certificate issued by local or overseas accredited certification bodies.
4.1.2 **Product Information**

5 Points (Core Criterion)

Applicant shall provide the following product information on the packaging of the product and/or company website for compliance:

- Basic product specifications
- The intended use of the product
- Instructions for correct use and storage to maximise the lifetime of the product
- Recommended maintenance instructions for the product
- Installation method
- Instructions for consumer product disposal
- Country of origin

**Verification**

Documentation including, but not limited to product label, product catalogue, MSDS, and written declaration with date-stamped photographs.

4.1.3 **Serviceability**

5 Points (Core Criterion)

All products must be fit for the intended purpose and demonstrate the performance properties including but not limited to quality, durability splitting strength, weathering resistance, abrasion resistance and skid resistance, and water absorption in accordance with Guidance notes on design and construction of pavements with paving units issued by the Highways Department of Hong Kong SAR Government, General Specification for Civil Engineering works and the following testing methods (or later version); other related testing methods are also acceptable with justification provided by the applicant.

**Requirement of block (if applicable)**

- BS EN 1338:2003
- BS EN 1339:2003

**Requirement of aggregate (if applicable)**

- BS EN 13055-1:2002

**Requirement of colour pigment (if applicable)**

- BS 1014:1975

**Note:**

BS EN 1338:2003 specifies materials, properties, requirements and test methods for unreinforced cement bound concrete paving blocks and complementary fittings. It is applicable to precast concrete paving blocks and complementary fittings for pedestrian use, vehicular use and roof coverings, e.g. footpaths, precincts, cycle tracks,
car parks, roads, highways, industrial areas (including docks and harbours), aircraft pavements, bus stations, petrol filling stations.

BS EN 1339:2003 specifies materials, properties, requirements and test methods for cement bound unreinforced concrete paving flags and complementary fittings. It is applicable to precast concrete paving flags and complementary fittings that are for use in trafficked paved areas and roof coverings.

BS EN 13055-1:2002 specifies the properties of lightweight aggregates and lightweight filler aggregates obtained by processing natural, manufactured or recycled materials and mixtures of these aggregates for use in concrete, mortar and grout in buildings, roads and civil engineering works.

BS EN 12620:2002+A1: 2008 specifies the properties of aggregates and filler aggregates obtained by processing natural, manufactured or recycled materials and mixtures of these aggregates for use in concrete.

BS 1014:1975 specifies the requirements for pigments for colouring Portland cement and Portland cement products.

Verification
Documentation including but not limited to product catalogue, MSDS and testing reports.

4.2 HUMAN TOXICITY

4.2.1 Heavy Metals
20 Points (Core Criterion)
All products shall undergo a standard leaching test, which tests for heavy metals listed in Table 2, according to US EPA 1311 Test Toxicity Characteristic Leaching Procedure; other related testing methods are also acceptable with justification provided by the applicant.

<table>
<thead>
<tr>
<th>Heavy Metal</th>
<th>Limit (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Barium</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Cadmium</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Chromium VI</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Lead</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Mercury</td>
<td>&lt;0.2</td>
</tr>
</tbody>
</table>
Note:
US EPA 1311 Test Toxicity Characteristic Leaching Test is designed to determine the
mobility of both organic and inorganic compounds present in liquid, solid as well as
multiphasic samples.

Verification
Documentation including but not limited to product catalogue, MSDS and testing
reports issued by third party or the manufacturer who has received the ISO17025
certification or relevant national accreditation systems, e.g. HOKLAS, CNAS, etc.

4.2.2 Harmful Substances
10 Points (Core Criterion)
All products shall undergo a standard leaching test, which tests for organic
compounds of environmental concern as listed in Table 3, according to US EPA 1311
Test Toxicity Characteristic Leaching Procedure; other related testing methods are
also acceptable with justification provided by the applicant.

Table 3

<table>
<thead>
<tr>
<th>Organic Compounds</th>
<th>Limit (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanide</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Organic phosphorus</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>&lt;0.3</td>
</tr>
<tr>
<td>Tetrachloroethylene</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Phenolic compounds</td>
<td>&lt;0.2</td>
</tr>
</tbody>
</table>

The following requirements are applicable to products using rubber as raw materials:
Concentration of phthalate in the product shall below 0.1% by weight of the product.
The limited phthalates including the following types:

- Bis(2-ethylhexyl)phthalate (DEHP)
- Dibutyl phthalate (DBP)
- benzylbutylphthalate (BBP)
- Diisononylphthalate (DINP)
- Diisodecylphthalate (DIDP)
- Di-n-octylphthalate (DNOP)

Product shall be tested in accordance with CPSC-CH-C1001-09.2 (or later version);
other related testing methods are also acceptable with justification provided by the
applicant.

Note:
US EPA 1311 Test Toxicity Characteristic Leaching Test is designed to determine the
mobility of both organic and inorganic compounds present in liquid, solid as well as multiphasic samples.

CPSC-CH-C1001-09.2 is a document which provide detailed information on test methods that will be used by the U.S. Consumer Product Safety Commission’s (CPSC) testing laboratory (LSC) for the analysis of phthalate content in children’s toys and child care articles covered by the standard set forth in the Consumer Product Safety Improvement Act Section 108.

Verification
Documentation including but not limited to product catalogue, MSDS and testing reports issued by third party or the manufacturer who has received the ISO17025 certification or relevant national accreditation systems, e.g. HOKLAS, CNAS, etc.

4.3 RESOURCE CONSUMPTION

4.3.1 Dust Management
5 Points (Non-core Criterion)
Manufacture shall implement effective dust management policies and procedures and / or a dust management programme for the manufacturing plant including but not limited to the following items:
- Initiatives taken for dust management covering all areas of the operation and associated activities;
- Monitoring plan for controlling the particulate matters (PM 2.5 & PM 10)

Verification
Written declaration with date-stamped photographs and testing reports issued by third party or the manufacturer who has received the ISO17025 certification or relevant national accreditation systems, e.g. HOKLAS, CNAS, etc.

4.3.2 Energy Management
5 Points (Non-core Criterion)
Manufacture shall implement effective energy management policies and procedures and / or an energy management programme, including but not limited to the following items:
- Initiatives taken to reduce energy use and improve energy efficiency;
- Initiatives or requirements for suppliers or contract manufacturers.

Verification
Written declaration with date-stamped photographs and testing reports issued by third party or the manufacturer who has received the ISO17025 certification or relevant national accreditation systems, e.g. HOKLAS, CNAS, etc.
4.3.3 Raw Materials
10 Basic Points + 10 Bonus Points (Core Criterion)

Option A
For concrete blocks including but not limited to dense concrete, lightweight aggregate concrete and autoclaved aerated concrete, raw materials or components of product (by weight) are made from combinations of recycled materials, waste materials as stated in Appendix: Table 4, the combination shall exceed the below value for awarding point:
- ≥ 65% (10 basic points)
- ≥ 80% (+10 bonus points)

or

Option B
For concrete blocks including but not limited to dense concrete, lightweight aggregate concrete and autoclaved aerated concrete, the density shall be less than the following level:
- 700 kg/m³ (10 basic points)
- 400 kg/m³ (+10 bonus points)

Verification
Option A

or

Option B
Documentation including but not limited to product catalogue and MSDS.

4.4 ECOSYSTEM IMPACT

4.4.1 Environmental Features
10 Bonus Points (Non-core Criterion)

Option A
Products shall obtain a permeability rate of at least 0.01cm/s in accordance with relevant national and international test methods (if applicable) including but not limited to the ASTM C1701/ C1701M-09 and ASTM C1781 / C1781M-14a; other related testing methods are also acceptable with justification provided by the applicant.
Note:
ASTM C1701/C1701M-09 specifies the determination of the field water infiltration rate of in place pervious concrete.

ASTM C1781/C1781M-14a specifies the determination of the field surface infiltration rate of in place permeable unit pavement systems surfaced with solid interlocking concrete paving units, concrete grid paving units, or clay paving brick.

or

**Option B**
Products shall obtain the sustainable features that could be integrated to the open-grid pavement system.

**Verification**

**Option A**
Documentation including but not limited to product catalogue, MSDS and testing reports.

or

**Option B**
Documentation including but not limited to product catalogue, MSDS.

**4.4.2 Solar Reflectance Index**

10 Bonus Points (Non-core Criterion)
All products shall obtain a solar reflectance index (SRI) of at least 29 in accordance with relevant ASTM testing method (if applicable) including but not limited to the ASTM E1980; other related testing methods are also acceptable with justification provided by the applicant.

**Note:**
ASTM E1980 specifies covers the calculation of the solar reflectance index (SRI) of horizontal and low-sloped opaque surfaces at standard conditions. The method is intended to calculate SRI for surfaces with emissivity greater than 0.1.

**Verification**
Documentation including but not limited to product catalogue, MSDS and testing reports.
4.4.3 Reuse and Recycling

5 Bonus Points (Non-core Criterion)
Applicant shall provide information on recyclability of products including but not limited to the following items for compliance:

- Product shall not be impregnated, labelled or coated or treated in a manner preventing post-consumer recycling;
- Information related to the recyclability of products.

Verification
Applicant shall provide information on reuse of products including but not limited to the information of reassembly of products for compliance.

Documentation including, but not limited to the information of recyclability and waste management of products.
5. SCORING AND GRADING

The points for meeting each criterion stated in Section 4 are summarised in Table 1.

Table 1: Points to be awarded under the assessment criteria of this Standard

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic</td>
</tr>
<tr>
<td>4.1.1 Environmental Management System</td>
<td>4.1.2</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>4.1.2 Product Information [CORE]</td>
<td>5</td>
</tr>
<tr>
<td>4.1.3 Serviceability [CORE]</td>
<td>5</td>
</tr>
<tr>
<td>4.2.1 Heavy Metals [CORE]</td>
<td>20</td>
</tr>
<tr>
<td>4.2.2 Harmful Substances [CORE]</td>
<td>10</td>
</tr>
<tr>
<td>4.3.1 Dust Management</td>
<td>+5</td>
</tr>
<tr>
<td>4.3.2 Energy Management</td>
<td>+5</td>
</tr>
<tr>
<td>4.3.3 Raw Materials [CORE]</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>+10</td>
</tr>
<tr>
<td>4.4.1 Environmental Features</td>
<td>+10</td>
</tr>
<tr>
<td>4.4.2 Solar Reflectance Index</td>
<td>+10</td>
</tr>
<tr>
<td>4.4.3 Reuse and Recycling</td>
<td>+5</td>
</tr>
</tbody>
</table>

Total: 100

The minimum requirement to be awarded a “Green” Label under this product category is to obtain 50 points by meeting all minimum requirements laid down in the “Core Criteria”.

Table 5: Benchmarks for grading

<table>
<thead>
<tr>
<th>Grade to be awarded</th>
<th>Points required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platinum</td>
<td>90 or above</td>
</tr>
<tr>
<td>Gold</td>
<td>80 – 89</td>
</tr>
<tr>
<td>Silver</td>
<td>70 – 79</td>
</tr>
<tr>
<td>Bronze</td>
<td>60 – 69</td>
</tr>
<tr>
<td>Green</td>
<td>50 – 59</td>
</tr>
<tr>
<td>No Label</td>
<td>Below 50</td>
</tr>
</tbody>
</table>
## Appendix

### Table 4

<table>
<thead>
<tr>
<th>Category</th>
<th>Recycled Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incinerated ashes</td>
<td>Incinerated ashes</td>
</tr>
<tr>
<td>Waste from metal industry</td>
<td>Copper slag, Steel slag, Ceramic material, Electric furnace slag, Ferronickel slag, Casting sand, Lime/plaster, Moulding sand, Lime powder</td>
</tr>
<tr>
<td>Inorganic sludge</td>
<td>Sewer sludge, Waterworks sludge, Sludge at bottom of lake</td>
</tr>
<tr>
<td>Sludge generated industrially</td>
<td>Paper manufacturing sludge, Aluminium sludge, Plating sludge, Polishing sand sludge</td>
</tr>
<tr>
<td>Other industrial waste</td>
<td>Coal ash, Disposed plastics, Shells, Disposed lumber from buildings, Glass cullet, Disposed rubber</td>
</tr>
<tr>
<td>Construction &amp; Demolition Waste</td>
<td>Concrete, Glass, Disposed lumber from buildings, Asphalt, Metals, Gypsum</td>
</tr>
<tr>
<td>Waste from mines and quarries</td>
<td>Waste sand from quarries and ceramics, Micro silica sand generated at separation of silica by water</td>
</tr>
</tbody>
</table>