**Master Format:** 12 32 16 Manufactured Laminate Casework

**Product Type:** Frameless Laminate Casework

**Product Name:** Rynone

## LEED Credit Data


### Materials and Resources

**MR Credit 4 – Recycled Content:**
New Construction, Schools, Core and Shell

#### Intent
To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

#### Requirements
Use materials with recycled content such that the sum of postconsumer recycled content plus 1/2 of the preconsumer content constitutes at least 10% or 20%, based on cost, of the total value of the materials in the project. The minimum percentage materials recycled for each point threshold is as follows:

- **Recycled Materials Points**
  - 10% - 1 Point
  - 20% - 2 Points

The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.

Mechanical, electrical and plumbing components and specialty items such as elevators cannot be included in this calculation. Include only materials permanently installed in the project. Furniture may be included if it is included consistently in MR Credit 3 – Material Reuse through MR Credit 7 – Certified Wood (MR Credit 6 in CS).

### Potential Technologies & Strategies

Establish a project goal for recycled content materials, and identify material suppliers that can achieve this goal. During construction, ensure that the specified recycled content materials are installed. Consider a range of environmental, economic and performance attributes when selecting products and materials.

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1 Recycled content is defined in accordance with the International Organization of Standards document, ISO 14021 — Environmental labels and declarations — Self-declared environmental claims (Type II environmental labeling).
2 Postconsumer material is defined as waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.
3 Preconsumer material is defined as material diverted from the waste stream during the manufacturing process. Reutilization of materials (i.e.,...
MR Credit 5: Regional Materials: 1–2 Points
New construction, Commercial Interiors, Core and Shell

Intent
To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

Requirements
Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% or 20%, based on cost, of the total materials value. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) can contribute to the regional value. The minimum percentage regional materials for each point threshold is as follows:

Regional Materials Points
10% 1
20% 2

Mechanical, electrical and plumbing components and specialty items such as elevators and equipment must not be included in this calculation. Include only materials permanently installed in the project. Furniture may be included if it is included consistently in MR Credit 3: Materials Reuse through MR Credit 7: Certified Wood.

Potential Technologies & Strategies
Establish a project goal for locally sourced materials, and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed, and quantify the total percentage of local materials installed. Consider a range of environmental, economic and performance attributes when selecting products and materials.

Indoor Environmental Quality (IEQ)
IEQ Credit 4.1 – Low-Emitting Materials – Adhesives and Sealants: 1 Point
New Construction, Core and Shell

Intent
To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Requirements
New Construction, Core and Shell CS
All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) must comply with the following requirements as applicable to the project scope.

Adhesives, Sealants and Sealant Primers must comply with South Coast Air Quality Management District (SCAQMD) Rule #1168. Volatile Organic Compound (VOC) limits correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005. Refer to LEED Reference Guide for table of VOC Limits.

Schools
All adhesives and sealants installed in the building interior (defined as inside the weatherproofing system and applied on-site) must meet the testing and product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.

Potential Technologies & Strategies
Specify low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives and cove base adhesives. Review product cut sheets, material safety data (MSD) sheets, signed attestations or other official literature from the manufacturer clearly identifying the VOC contents or compliance with referenced standards.

IEQ Credit 4.5 – Low-Emitting Materials – Furniture and Furnishings: 1 Point

Intent
To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Requirements
Schools Only
Classroom furniture including all student and teacher desks, tables and seats that were manufactured, refurbished or refinished within 1 year prior to occupancy must meet one of the required options below. Salvaged and used furniture that is more than 1 year old at the time of occupancy is excluded from the credit requirements.

Option 1 – Furniture and seating must be GREENGUARD Children and School certified.

Option 2 – Calculated indoor air concentrations that are less than or equal to those listed in Table 1 for furniture systems and seating determined by a procedure based on the EPA Environmental Technology Verification (ETV) Large Chamber Test Protocol for Measuring Emissions of VOC’s and Aldehydes (September 1999) testing protocol conducted in an independent air quality testing laboratory.

<table>
<thead>
<tr>
<th>Chemical Contaminant</th>
<th>Classroom Furniture</th>
<th>Seating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total VOC’s</td>
<td>0.5 mg/m³</td>
<td>0.25 mg/m³</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>50 parts per billion</td>
<td>25 parts per billion</td>
</tr>
<tr>
<td>Total aldehydes</td>
<td>100 parts per billion</td>
<td>50 parts per billion</td>
</tr>
<tr>
<td>4-Phenylcyclohexene (4-PCH)</td>
<td>0.0065 mg/m³</td>
<td>0.00325 mg/m³</td>
</tr>
</tbody>
</table>

Option 3 – Calculated indoor air concentrations that are less than or equal to those established in Table 1 for furniture systems and seating determined by a procedure based on ANSI/BIFMA M7.1 – 2007 and ANSI/BIFMA X7.1 – 2007 testing protocol conducted in an independent third-party air quality testing laboratory.

Potential Technologies & Strategies
Specify low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where furniture is addressed. Review product cut sheets, material safety data (MSD) sheets, signed attestations or other official literature from the manufacturer clearly identifying the VOC contents or compliance with referenced standards.