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Almeco is devoted to environmental protection. Our production mostly uses renewable energy and efficient systems with low use of primary energy. Our range, from luminaries to reflectors, optimizes the efficacy and durability of your final product. We provide you the highest levels in performance and energy saving, from the beginning of our production to your final use.

Almeco high reflective materials help users in saving costs and obtaining better light quality, while the environment benefits from lower energy/CO₂ emissions, moreover the business competitiveness is strengthened.

Evolutionary laminate solutions for efficient lighting

Combining the proven quality of the aluminium anodising processes with the most advanced technology of surface coating under vacuum, known as PVD (Physical Vapor Deposition), vega significantly improves the reflector optical performance and increases its efficacy up to 20% compared to the already high levels of anodised aluminium, thanks to its extraordinary reflectance.

The higher the total reflection, the higher the future efficiency. More internal reflections create greater differences.

<table>
<thead>
<tr>
<th>Product</th>
<th>Type</th>
<th>Reflectivity type</th>
<th>Total reflectance at 30° (ASTM E 1651)</th>
<th>Diffuse reflectance (ISO 2813 - ASTM D-523)</th>
<th>Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>V98100</td>
<td>V95</td>
<td>95%</td>
<td>95%</td>
<td>Not relevant</td>
<td>Perfect</td>
</tr>
<tr>
<td>V98100</td>
<td>V98</td>
<td>98%</td>
<td>98%</td>
<td>Not relevant</td>
<td>Perfect</td>
</tr>
<tr>
<td>V98100</td>
<td>V97</td>
<td>97%</td>
<td>97%</td>
<td>Not relevant</td>
<td>Very great</td>
</tr>
<tr>
<td>V98100</td>
<td>V94</td>
<td>94%</td>
<td>94%</td>
<td>Not relevant</td>
<td>Perfect</td>
</tr>
<tr>
<td>V98100</td>
<td>V92</td>
<td>92%</td>
<td>92%</td>
<td>Not relevant</td>
<td>Very great</td>
</tr>
<tr>
<td>V98100</td>
<td>V90</td>
<td>90%</td>
<td>90%</td>
<td>Not relevant</td>
<td>Perfect</td>
</tr>
<tr>
<td>V98100</td>
<td>V85</td>
<td>85%</td>
<td>85%</td>
<td>Not relevant</td>
<td>Very great</td>
</tr>
</tbody>
</table>

**Measured on the flat surface before patterning**

**Reflection layer**

**Microscopic measurement of oxide layer EN ISO 1463.**

**Test Standard for Anodic Oxidation**

**Performance of reflecting surfaces for luminaires according to above standards.**

**Total Reflectance at 30° (ASTM E 1651).**

**Diffuse Reflectance (ISO 2813 - ASTM D-523).**

**All materials listed above can be delivered in various sizes and shapes according to your demand.**

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<td>95%</td>
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</tr>
<tr>
<td>V98100</td>
<td>V98</td>
<td>98%</td>
<td>98%</td>
<td>Not relevant</td>
<td>Perfect</td>
</tr>
<tr>
<td>V98100</td>
<td>V97</td>
<td>97%</td>
<td>97%</td>
<td>Not relevant</td>
<td>Very great</td>
</tr>
<tr>
<td>V98100</td>
<td>V94</td>
<td>94%</td>
<td>94%</td>
<td>Not relevant</td>
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</tr>
<tr>
<td>V98100</td>
<td>V92</td>
<td>92%</td>
<td>92%</td>
<td>Not relevant</td>
<td>Very great</td>
</tr>
<tr>
<td>V98100</td>
<td>V90</td>
<td>90%</td>
<td>90%</td>
<td>Not relevant</td>
<td>Perfect</td>
</tr>
<tr>
<td>V98100</td>
<td>V85</td>
<td>85%</td>
<td>85%</td>
<td>Not relevant</td>
<td>Very great</td>
</tr>
</tbody>
</table>

**E 1651**

**ASTM**

**Reflectance [%]**

**Total reflectance**

**Diffuse reflectance**

**Application**

**Eucalyptus**

**Linear, lighting, spot lighting, daylighting**

**High bays, louvre, batwing, louvre, spot**

**Perfect diffuse**

**Not relevant, diffuse reflection**

**Spot areas, backlighting**

**Very great**

**White effect**

**Effective**

**Tensile strength**

**Yield strength**

**Min. [MPa]**

**Min. [%]**

**EN 16268**

**Class**

**Alloy** (hardness)

**Strength**

**Tensile**

**EN 485-2**

**EN 573-3**

**European Standards (EN) for aluminium alloys**

**Alloys**

**Alloy** (hardness)

**Strength**

**Tensile**

**Min. [MPa]**

**Min. [%]**

**EN 16268**

**Class**
Amisco is devoted to environmental protection. Our production mostly uses renewable energy and efficient systems with low use of primary energy. Our range, from laminates to reflectors, optimises the efficacy and durability of your final products. We provide you the highest levels in performance and energy saving, from the beginning of our production to your final use.

Evolving laminate solutions for efficient lighting

Amisco high reflective materials help users in saving costs and obtaining better light quality, while the environment benefits from lower energy CO2 emissions, moreover the business competitiveness is strengthened.

vega combines the proven quality of the aluminium anodising process with the most advanced technology of surface coating under vacuum, known as PVD (Physical Vapour Deposition). vega significantly improves the reflector optical performance and increases its efficiency up to 20% compared to the already high levels of anodised aluminium, thanks to its extraordinary reflectance.

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vega characteristics

<table>
<thead>
<tr>
<th>Laser</th>
<th>Code</th>
<th>Glare</th>
<th>Influence of shape</th>
<th>Application</th>
<th>Diffusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>V95100</td>
<td>Perfect</td>
<td>Optimal beam control</td>
<td>Very high</td>
<td>Linear lighting, spot lighting, out-of-hailing</td>
<td></td>
</tr>
<tr>
<td>V95210</td>
<td>Perfect</td>
<td>Widely spread</td>
<td>Minimal</td>
<td>Placing, and rendering, spot, horticultural</td>
<td></td>
</tr>
<tr>
<td>V95145</td>
<td>Perfect</td>
<td>Widely spread</td>
<td>Minimal</td>
<td>Placing, and rendering, spot, horticultural</td>
<td></td>
</tr>
<tr>
<td>V95185</td>
<td>Very great</td>
<td>Wide effect</td>
<td>Inverted</td>
<td>Inverted, reflective</td>
<td>Linear lighting, beam</td>
</tr>
</tbody>
</table>

vega technical data

<table>
<thead>
<tr>
<th>Product type</th>
<th>Reflectance [%]</th>
<th>Total Reflectance at 30° (ASTM E 1651)</th>
<th>Specular reflectance</th>
<th>Diffuse reflectance</th>
<th>Performance of reflecting surfaces for luminaire according to above Class efficiency (EN 16268:2013)</th>
<th>Exit port</th>
</tr>
</thead>
<tbody>
<tr>
<td>High specular</td>
<td>99.99%</td>
<td>105</td>
<td>≥ 70 - 80</td>
<td>≥ 50 - 60</td>
<td>≥ 60 - 70</td>
<td>High specular</td>
</tr>
<tr>
<td>Micro specular</td>
<td>99.99%</td>
<td>105</td>
<td>≥ 70 - 80</td>
<td>≥ 50 - 60</td>
<td>≥ 60 - 70</td>
<td>Micro specular</td>
</tr>
<tr>
<td>High diffuse</td>
<td>99.99%</td>
<td>105</td>
<td>≥ 70 - 80</td>
<td>≥ 50 - 60</td>
<td>≥ 60 - 70</td>
<td>High diffuse</td>
</tr>
<tr>
<td>Semi-specular</td>
<td>99.99%</td>
<td>105</td>
<td>≥ 70 - 80</td>
<td>≥ 50 - 60</td>
<td>≥ 60 - 70</td>
<td>Semi-specular</td>
</tr>
<tr>
<td>Hammered</td>
<td>99.99%</td>
<td>105</td>
<td>≥ 70 - 80</td>
<td>≥ 50 - 60</td>
<td>≥ 60 - 70</td>
<td>Hammered</td>
</tr>
<tr>
<td>V95100</td>
<td>85 - 92</td>
<td>≥ 2%</td>
<td>≥ 2%</td>
<td>≥ 2%</td>
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Evolving laminate solutions for efficient lighting

Our mission is to offer high reflective materials with a minimum of weight. We are devoted to reducing CO2 emissions and the consumption of primary energy. We are one of the leading companies in the field of high reflective materials, offering efficient solutions for lighting. We are committed to providing our customers with the highest levels of performance and energy saving, from the beginning of our production to your final use.

Example of applications

Have a look to our optimised product catalogues for specific applications like horticultural, daylighting, street lighting...

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