6.3 | EXTERIOR OPTIONS

**Exterior Laminates**
Cambridge · S-Series · OceanView

**Renolit® Exofol FX Laminate Features**
- Triple-layer construction for exceptional durability
- Heat-reflective technology for superior resistance to ultraviolet light and heat buildup
- Long-lasting color retention, dimensional stability and impact resistance
- Embossed finish for sustained scratch resistance
- More robust than paint: won’t chip, crack or fade
- Low surface tension to safeguard against dirt, environmental pollutants, and even graffiti
- Impervious to the damaging effects of moisture and salt; ideal for coastal regions
- Real-weather tested in all climates and conditions to ensure trouble-free, enduring performance
- Viwinco windows with exterior laminates include a 20-year warranty

**Viwinco windows with exterior laminates**
come standard with heavy-duty extruded full screens. Double-hung, single-hung, complementary and geometric styles, as well as patio doors, are available.

**Options Include:**
- Color-matched deluxe contoured grids
- Color-matched simulated divided lites
- Matching 2 ¼" brick mold or 3 ½" casing (picture frame or bull-nosed sill)
- Patented and exclusive Tilt-n-Lock hardware for easy one-handed operation—standard on Cambridge and OceanView; optional on S-Series

**VIWINCO COLORS**

Driftwood [A]
Hunter Green [B]
Bronze [C]
Cocoa Brown [D]

Exterior laminates available only with White interior

Our Cambridge, Viwinco S-Series & OceanView windows are also offered in traditional interior/exterior solid extrusions with any of the above options.

Actual colors may vary. Visit your local distributor for samples.
## 6.3 - Exterior Options

### Renolit Details

**PRODUCT - INFORMATION**

**TYPE OF FOIL**

RENOLIT EXOFOL FX embossed films, according to RAL GZ 716 / 1, for lamination onto profiles for outdoor use in vertical assembly. Primer on the back of the film.

**ARTICLE - NR.**

30.30.30 – RENOLIT EXOFOL FX plain
30.30.31 – RENOLIT EXOFOL FX printed
Embossing 083, 195 (Thickness 170 µm)
Embossing 167 (Thickness 180 µm)

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### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Standard Test Method</th>
<th>Unit</th>
<th>Values</th>
<th>Tolerances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness - 083, 195</td>
<td>µm</td>
<td>170</td>
<td>+ 20/-10</td>
</tr>
<tr>
<td>Thickness - 167</td>
<td>µm</td>
<td>180</td>
<td>± 15</td>
</tr>
<tr>
<td>Toplayer - thickness</td>
<td>µm</td>
<td>50</td>
<td>≥ 50</td>
</tr>
<tr>
<td>Tensile stress at break</td>
<td>MPa</td>
<td>15</td>
<td>≥ 15</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>%</td>
<td>60</td>
<td>≥ 60</td>
</tr>
<tr>
<td>Dimensional change</td>
<td>%</td>
<td>5</td>
<td>≤ 5</td>
</tr>
<tr>
<td>Gloss - 083</td>
<td>Measuring unit</td>
<td>7 - 11</td>
<td></td>
</tr>
<tr>
<td>Gloss - 167</td>
<td>Measuring unit</td>
<td>17 - 23</td>
<td></td>
</tr>
<tr>
<td>Gloss - 195</td>
<td>Measuring unit</td>
<td>11 - 15</td>
<td></td>
</tr>
</tbody>
</table>

7 Weatherability
EN 513 - method 1
Colour change ≤ grey - scale 3 after the samples have received 18 GJ / m², according to the 1.5-fold requirements of RAL GZ 716 / 1 part 7

8 Abrasion resistance
ISO 105 - X 12
Grade 5

9 Scratch resistance
Erichsentest 435
≥ 20 cN

10 Embossing stability
Internal test method
No change in embossing, colour and gloss

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DATE OF ISSUE 03/2010
Renolit Details

PRODUCT - INFORMATION

GENERAL PRODUCT INFORMATION
Profile processing: Welding of the laminated profiles according to technical rules is possible, without a negative influence on the quality of the film.

CHEMICAL RESISTANCE
Due to the excellent chemical resistance of PVDF, RENOLIT EXOFOL FX surfaces are resistant to most organic acids and bases, aliphatic and aromatic hydrocarbons, alcohols and halogenated solvents. With exception of fluorine, our film is also resistant to halogens (chlorine, bromine, iodine). Not resistant to high polar organic solvents (e.g. acetone, ethyl acetate, dimethylformamide,dimethylacetamide), fuming sulphuric acid, amines, and basic liquids pH ≥ 12. Please take into account, that the chemical compatibility is strongly dependent on time, temperature, concentration, chemical condition and state of aggregation of the substance. Please be careful in the area of cut edges of the film (e.g. welded corners), since the film is unprotected in the cross section. Side penetration of chemicals can never be excluded.

WHITENING
On bending the film, whitening cannot be avoided due to the nature of the acrylic overlay. A cold deformation of the film, e.g. during pressing of metal sheets at room temperature is not allowed.

MAINTENANCE
Appropriate cleaning with standard household cleansing-agents, excluding abrasive products. For persistence pollutions is the special cleaner 3M ‘Graffiti Remover System’ available. Further maintenance is not necessary.

This technical information sheet represents our latest state of knowledge and shall inform without obligation. The herein stated details do not release the manufacturer of our products from their own inspections and tests, which must correspond with the relevant national guidelines for its individual intended purpose. Especially it is the duty of the consumer to control if the purchased product is suitable for its intended purpose.
6.3 - Exterior Options

Frame and Accessory Options

**Accessory Options**

- 3/4” J-channel brick mold (5703)
- 1-1/4” J-channel brick mold
  - S-Series (5702)
- 1-1/4” J-channel brick mold
  - Patio Door (5701)

**Frame Options**

- J-Channel Pocket Filler (8373)
- J-Channel Extension (8287)
- Sill Extension (8379)
- 3.5” Picture Frame Trim Casing (8368)
- Trim Brick Mold (8367)
- Bull Nose Trim Casing (8366)