Clearline

fusion

solar never looked so good
As solar power moves beyond government subsidy to become a home improvement option, its kerb-appeal is becoming more and more important. Now, integrated solar has come of age. With Clearline Fusion, the highest quality and aesthetics now come at a price competitive with rack-mounted above-roof solar.

Why Roof Integration?

Roof integrated solar has always been the obvious choice when refurbishing or building a new roof. Clearline Fusion brings high quality roof integration within reach for retrofit applications. Now more people can benefit from the advantages of going in-roof.

- **Aesthetics**
  Roof integrated panels sit lower to the roofline without brackets and racking on show to look like an intended part of the roof.

- **Roof maintenance**
  The roof covering can be easily maintained or replaced without the cost of dismantling a solar installation.

- **Differentiation**
  Set yourself apart from identikit above roof systems.

Why Clearline Fusion?

- **Economical**
  Price is comparable with above-roof systems.

- **Rapid**
  Installation times of less than 1 hour per kilowatt-peak are easily attainable. Our patented connection method means that panels are simply pushed together to create a weather-tight and secure fixing.

- **Compact**
  Industry-leading panel spacing. The gap between rows is only 5mm. Columns are spaced by 30mm.

- **Sleek**
  Invisible clamps give an uncluttered aesthetic. Panel spacing is automatically set to give consistently accurate shut-lines.

- **Simple**
  Fusion achieves exceptional fire performance, wind resistance and weather tightness without extra roof battens, adhesive flashing rolls or fire proofing materials. Everything you need is right there in the kit.

- **Robust**
  Certified wind resistance is more than four times higher than competitor products.

- **Universal**
  Works with all commonly used tiles and slates including fixings for sarking.
Specification

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>69 mm</td>
</tr>
<tr>
<td>Static roof loading (distributed)</td>
<td>12.9 kg/m²</td>
</tr>
<tr>
<td>Characteristic Wind Resistance</td>
<td>5.32 kPa</td>
</tr>
<tr>
<td>Ultimate Design Load ¹</td>
<td>5.32 kPa</td>
</tr>
<tr>
<td>Fire Rating to BS 476-3</td>
<td>AA</td>
</tr>
<tr>
<td>Standards</td>
<td>MCS012</td>
</tr>
<tr>
<td>Roof pitch</td>
<td>20 - 60°</td>
</tr>
<tr>
<td>Compatible roof coverings</td>
<td>Plain tile, Interlocking tile, Natural and artificial slate</td>
</tr>
</tbody>
</table>

¹ Design resistance to ultimate loads includes a partial material safety factor of 1.0

Wind Loads

Wind uplift pressures are higher when solar is roof integrated and the wind resistance of some integration products is not high enough even for low-rise scenarios (see chart).

The certified wind resistance for Clearline Fusion is more than four times higher than competitor products and ready for even the most exposed locations.

Clearline Fusion

Extends to any number of columns and rows

Industry leading 5mm spacing

Clearline PV16

Works with all common tiles and slates including slates over sarking.

Aluminium push fit flashing for durability and high fire rating

Robust corrugated lead resists wind uplift

Hidden fixings for clean aesthetic
Viridian Solar also manufactures a range of matching, roof integrated solar heating and solar photovoltaic panels for side by side installation.

**Dimensions**

\[
x = 260 + (m \times 992) + ([m-1] \times 30)
\]

\[
y = 505 + (n \times 1640) + ([n-1] \times 5)
\]

available from

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