Promat Cafco FENDOLITE® MII is a single package factory controlled pre-mix based on vermiculite and Portland cement.

Promat UK Limited manufacture and supply the Cafco FENDOLITE® MII passive fire protection coating system for fire protection of steel and concrete structures in Construction and Road, Rail and Metro Tunnel Industries.

The Cafco FENDOLITE® MII product is only available to Promat CRA Contractors that have been trained in its correct mixing, application and use.

Of particular interest / importance is the calculation or estimation of material quantities required for a project, and the following guidance can be given.

NOTE: Coverage values provided by Promat are theoretical and given for guidance only.

Actual / practical coverage achieved on site by an Promat CRA Contractor may be more or less than the theoretical value provided by Promat who determined the stated value under laboratory conditions and who cannot therefore be held liable for a Promat CRA Contractor’s usage of the product on site.

Reasons that coverage may vary include (but are not limited to)

- Normal variation in applied density.
  The nominal density of Cafco FENDOLITE® MII is 775kg/m³ (+/- 15%) but water quantity, mixer type and mixing time, delivery hose length, nozzle size and air pressure during spraying all affect placed density.

- Has the correct thickness been applied? A small variation in applied thickness over a large area can also significantly affect apparent coverage rate.

- Was allowance made for “solid fill” application method on small sections?

- Was the area sprayed greater than originally contracted for?

- Was wastage estimated correctly and kept to a minimum on site?

Yield per tonne of product may be calculated on a volume basis - which experience has shown requires the addition of a waste factor (typically 15%) but it is more usual for Promat CRA Applicators to estimate material required for a project on a density basis.

This method relies entirely on Promat CRA Contractors using their own estimate of applied / installed Cafco FENDOLITE® MII density which as previously noted can vary by +/- 15% from Promat’s nominal published value of 775 kg/m³ and does not require the addition of a waste factor.

Experienced Promat CRA Contractors calculate their Cafco FENDOLITE® MII material requirements based on the following formula:

<table>
<thead>
<tr>
<th>OR</th>
<th>Area $(m^2)$ x Thickness $(m)$ x Density $(kg/m^3)$</th>
<th>= Tonnes of material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\frac{Area \times Thickness \times Density}{1000}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\frac{Area \times Thickness \times Density}{20}$</td>
<td>= Bags of material</td>
</tr>
</tbody>
</table>

**AUTHORITY: PROMAT RECOMMENDATION - BASED ON IN-HOUSE KNOWLEDGE AND TECHNICAL EXPERIENCE**