# **EVALAST PAINT GRADE**

Technical Datasheet V2 04-24





### **PRODUCT APPLICATIONS**

| BLOCK WIDTH /<br>Compressive<br>Strength | CAVITY WALLS<br>External leaf<br>Below DPC | CAVITY WALLS<br>External leaf<br>Above dpc | CAVITY WALLS<br>Inner Leaf<br>Below DPC | CAVITY WALLS<br>Inner Leaf<br>Above DPC | SOLID EXTERNAL<br>Walls<br>Below DPC | SOLID EXTERNAL<br>Walls<br>Above DPC | SEPARATING<br>WALLS | INTERNAL<br>Partitions | BEAM &<br>Block floors | SUITABLE<br>For Rendering |
|--|--|--|---|---|--------------------------------------|--------------------------------------|---------------------|------------------------|------------------------|---------------------------|
| 100mm / 10.4N 🛆                          | 1, 2, 3, 7                                 | ×  | 1, 2, 7                                 | ✓                                       | 1, 2, 3, 7                           | <b>√</b><br>4, 7                     | ✓<br>5              | ✓                      | <b>√</b><br>7          | ×                         |
| 140mm / 10.4N*🛆                          | 1, 2, 3, 7                                 | ×  | 1, 2, 7                                 | ✓                                       | <b>1</b> , 2, 3, 7                   | 4,7                                  | ✓<br>5              | ✓                      | ×                      | ×                         |

#### Notes:

- Products suitability in this application is subject to the block achieving the sites soil / groundwater DS classification requirements.
- Blocks must have either a minimum compressive strength of 7.3N or a minimum density of 1500 kg/m<sup>3</sup> when used below dpc level.
- 3. Blocks in the external leaf from dpc level to 150mm below ground level must not be left exposed, suitable products such as clay bricks of Class B Engineering properties or "F2" durability in accordance with BS EN 771-1 should be specified in this zone, alternatively blocks may be covered with a suitable protective finish.
- For all external leaf applications, the block requires a suitable impervious coating or finish applied, blocks must not be left exposed when used on the external leaf.
- Product suitability in this application is subject to the block achieving the walls specification requirements for sound reduction or those specification criteria set in the Robust Detail selected.
- For beam and block infill applications, aggregate blocks must have a minimum compressive strength of 7.3 N/mm<sup>2</sup>.

- The Paint Grade block is a premium product which is manufactured to produce a close face texture and technically can be used in this situation. Commercially, suitable background blocks may be a more suitable specification in this situation.
- 8. Estimated figure only, tested values are generally 1 3 dB lower.

Products should be designed and constructed in accordance with all relevant Legislation, Building Regulations, European & British Standards, Acts, Codes of Practice and manufacturers recommendations.

Please refer to Building Regulations, Approved Document A and the Project Structural Engineer for minimum wall thickness, block compressive strength and characteristic strength requirements - specification varies subject to numerous factors which include loading, block orientation, restraint, wall height and length.

Block weights based on gross density plus 10% @ 5% (Evalast products) or 15% (Fenlite products) moisture content (typical received), moisture equilibrium approximately 3% (protected) and 5% (exposed).

NPD No performance declaration - please contact Forterra for further information. \*Manufactured to special order only. CAUTION HEAVY ITEMS >20kg.

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### **PRODUCT TECHNICAL PROPERTIES**

Blocks are manufactured to BS EN 771-3.

| Material Properties  |   |                                       |  |  |  |
|--|---|---------------------------------------|--|--|--|
| Thickness (mm):  | 100 🛆   | 140*                                  |  |  |  |
| Face Sizes – L x H (mm):   | 440 :   | x 215                                 |  |  |  |
| Dimension Tolerance Classification:  | D   | 1                                     |  |  |  |
| Dimension Tolerance – Length:  | (+3mm   | ı -5mm)                               |  |  |  |
| Dimension Tolerance – Height:  | (+3mm   | ı -5mm)                               |  |  |  |
| Dimension Tolerance – Width:   | (+3mm -5mm)   |                                       |  |  |  |
| Unit Weight, Gross Density + 10% @ 5% Moisture (kg):   | 20.8  | 29.1                                  |  |  |  |
| Configuration:   | Group 1 (Solid)   |                                       |  |  |  |
| Category:  |   | I                                     |  |  |  |
| Mean Compressive Strength (N/mm <sup>2</sup> ):  | 10  | ).4                                   |  |  |  |
| Gross Dry Density (Kg/m³):   | 1900  |                                       |  |  |  |
| Thermal Conductivity - λ10, dry unit, S1 (W/m.K):  | 0.9   |                                       |  |  |  |
| Design Thermal Conductivity - Protected (3%) (W/m.K):  | 1.0   | 01                                    |  |  |  |
| Design Thermal Conductivity - Exposed (5%) (W/m.K):  | 1.  | .1                                    |  |  |  |
| Design Thermal Conductivity - Below Dpc Level (W/m.K):   | NPD   |                                       |  |  |  |
| Thermal Resistance - Protected (3%) (m <sup>2</sup> .K/W):   | 0.099   | 0.139                                 |  |  |  |
| Thermal Resistance - Exposed (5%) (m <sup>2</sup> .K/W):   | 0.091   | 0.127                                 |  |  |  |
| Sound Reduction – Un-finished (RW dB):   | 47.2 <sup>8</sup>   | 50.4 <sup>8</sup>                     |  |  |  |
| Fire Resistance (Hours) (NA to BS EN 1996-1-2) –   |   |                                       |  |  |  |
| Non-load Bearing Single Leaf walls (Criteria EI):  | 4   | 4                                     |  |  |  |
|  |   |                                       |  |  |  |
| Fire Resistance (Hours) (NA to BS EN 1996-1-2) –   |   |                                       |  |  |  |
| Load Bearing Single Leaf walls (Criteria REI) ≤ 1.0:<br>Load Bearing Single Leaf walls (Criteria REI) ≤ 0.6: | 2<br>3  | 3 4                                   |  |  |  |
|  |   | · · · · · · · · · · · · · · · · · · · |  |  |  |
| Reaction to Fire (BS EN 13501):  | A1  |                                       |  |  |  |
| Durability Against Freeze / Thaw:  | Not to be left exposed  |                                       |  |  |  |
| Water Vapor Permeability:  | 5/15  |                                       |  |  |  |
| Dimensional Stability - Moisture Movement (mm/m):  | < 0.50 mm/m   |                                       |  |  |  |
| Vapour Resistivity (MN.s/g.m):   | 75  |                                       |  |  |  |
| Soil or Groundwater DS Classification:   | DS1   |                                       |  |  |  |
| Shear Bond Strength (N/mm <sup>2</sup> ):  | 0.  | 15                                    |  |  |  |
| Movement Joint Detail  | Vertical movement joints at 9m centres and not<br>more than half that spacing from a corner |                                       |  |  |  |

### Notes

\*140mm block manufactured to special order only. A CAUTION HEAVY ITEMS >20kg Warning.

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