# EVALAST BACKGROUND COURSING UNITS

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 / 22.5N                            | <b>√</b><br>1, 2, 3                        | 4  | <b>√</b><br>1, 2                        | <b>✓</b>                                | <b>1</b> , 2, 3                      | <b>√</b><br>4                        | <b>√</b><br>5       | ✓                      | ×                      | ✓                         |
| 140mm / 22.5N                            | <b>√</b> 1, 2, 3                           | 4  | <b>√</b><br>1, 2                        | <b>✓</b>                                | <b>√</b> 1, 2, 3                     | 4                                    | <b>√</b><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/m³ 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/mm².

- 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 siutation.
- 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.



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# **PRODUCT TECHNICAL PROPERTIES**

Blocks are manufactured to BS EN 771-3.

| Thickness (mm):  | 100  | 140               |  |  |
|--|--|-------------------|--|--|
| Face Sizes - L x H (mm):                               | 215 x 65   |                   |  |  |
| Dimension Tolerance Classification:                    | D1   |                   |  |  |
| Dimension Tolerance - Length:                          | (+3mm -5mm)  |                   |  |  |
| Dimension Tolerance - Height:                          | (+3mm -5mm)  |                   |  |  |
| Dimension Tolerance - Width:                           | (+3mn  | (+3mm -5mm)       |  |  |
| Unit Weight, Gross Density + 10% @ 5% Moisture (kg):   | 3.2  | 4.5               |  |  |
| Configuration:   | Group 1 (Solid)  |                   |  |  |
| Category:  | II   |                   |  |  |
| Mean Compressive Strength (N/mm²):                     | 22.5   |                   |  |  |
| Gross Dry Density (Kg/m³):                             | 1990   |                   |  |  |
| Thermal Conductivity - λ10, dry unit, S1 (W/m.K):      | 0.99   |                   |  |  |
| Design Thermal Conductivity - Protected (3%) (W/m.K):  | 1.12   |                   |  |  |
| Design Thermal Conductivity - Exposed (5%) (W/m.K):    | 1.21   |                   |  |  |
| Design Thermal Conductivity - Below Dpc Level (W/m.K): | NPD  |                   |  |  |
| Thermal Resistance - Protected (3%) (m².K/W):          | 0.089  | 0.125             |  |  |
| Thermal Resistance - Exposed (5%) (m².K/W):            | 0.083  | 0.116             |  |  |
| Sound Reduction - Un-finished (RW dB):                 | 47.4 <sup>8</sup>  | 50.5 <sup>8</sup> |  |  |
| Fire Resistance (Hours) (NA to BS EN 1996-1-2) –       |  |                   |  |  |
| Non-load Bearing Single Leaf walls (Criteria EI):      | NPD  |                   |  |  |
| Fire Resistance (Hours) (NA to BS EN 1996-1-2) -       |  |                   |  |  |
| Load Bearing Single Leaf walls (Criteria REI) ≤ 1.0:   | NPD  |                   |  |  |
| Load Bearing Single Leaf walls (Criteria REI) ≤ 0.6:   | NPD  |                   |  |  |
| 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):      | < 0.55 mm/m  |                   |  |  |
| Vapour Resistivity (MN.s/g.m):                         | 75   |                   |  |  |
| Soil or Groundwater DS Classification:                 | DS1  |                   |  |  |
| Shear Bond Strength (N/mm²):                           | 0  | .15               |  |  |
| Movement Joint Detail                                  | Vertical movement joints at 9m centres and not more than half that spacing from a corner |                   |  |  |

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