

# Engineering Brick

cat 30/50 engineered (frogged) concrete brick with a smooth finish

## HEIGHT



**65**  
Millimetres

## FINISH

**SM**  
Smooth

215 x 65 x  
102.5 mm

## COLOURS

For 'Stock Information' on colours and finish availability - see page 3.



CAT 30 – LIGHT GREY



CAT 50 – DARK GREY



Frost  
Resistant



Very Low  
Water  
Absorption

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## STANDARDS + PERFORMANCE

Manufactured in  
accordance with hEN 771-3: 2011

Specification in  
accordance with hEN 771-3: 2011

## SUSTAINABILITY

**Energy Use** 100% renewable  
**Water Used** 90% rain water harvesting  
**Recyclable** 100% of this product can be recycled  
**Manufacturing** Produced in the UK from locally sourced materials

**Waste Wood**  
**+ Plastic:** 100% recycled  
**BREEAM** 'A' Rating – in accordance with the BRE Green Guide to Specification.

Information for a specific colour is available on request from our Technical Specification Department.

## ADVICE + GUIDANCE

For advice and guidance on ordering, installation, good site practice, etc. visit our website:  
[www.ag.uk.com/advice+guidance](http://www.ag.uk.com/advice+guidance)

For maintenance guidance and health and safety advice visit our website:  
[www.ag.uk.com/maintenance](http://www.ag.uk.com/maintenance)

## FEATURES + BENEFITS

- Can be used for building up manholes
- Can be used internally for generator rooms.
- Manufactured in a controlled environment.
- Features a frog to assist with shear key to the mortar.
- Very low occurrence of efflorescence.
- Dimensionally accurate.
- Low wastage levels.
- Frost resistant.

## AG RECOMMENDATIONS

### Frog

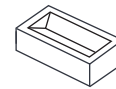
Engineering bricks should be laid with the frog facing upwards and completely filled with mortar.

### Mortar Ratio

Recommended ratio 6 : 1 or 5 : 1 (Sand : OPC).

## EDGES

**Engineered brick** is supplied with crisp, clean, sharp edges



**Cat 30/50**  
with frog

## FINISHES

Engineered Brick comes in a smooth finish for a contemporary feel.



Frost  
Resistant



Very Low  
Water  
Absorption

SPECIFICATION REFERENCE: NBS PLUS: F10 BRICK/ BLOCK WALLING 215 CONCRETE FACING BRICKWORK; hEN 771-3: 2011

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Engineering  
stock information



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## STOCK INFORMATION

| Product type       | Length (mm) | Depth (mm) | Height (mm) | In Stock | Available Colours | Units per pack | Unit weight (kg) | Weight per pack (t) | Packs per 8 wheeler | Packs per unit lorry |
|--------------------|-------------|------------|-------------|----------|-------------------|----------------|------------------|---------------------|---------------------|----------------------|
| CAT 30 (with frog) | 215         | 102.5      | 65          | Yes      | Light Grey        | 512            | 2.9 kg           | 1.7 t               | 10                  | 15                   |
| CAT 50 (with frog) | 215         | 102.5      | 65          | MTO      | Dark Grey         | 512            | 2.9 kg           | 1.7 t               | 10                  | 15                   |

NB. In stock items requiring over 10,000 no. bricks are treated as made to order.

MTO - made to order (minimum order size 10,000 no. bricks). Lead time for MTO's is 6-8 weeks.

Cat 30 and Cat 50 are not supplied on pallets. Pallets are available on request.

All size dimensions are nominal.

## TECHNICAL INFORMATION

|                                      | Cat 30                                         | Cat 50                            |
|--------------------------------------|------------------------------------------------|-----------------------------------|
| MANUFACTURING STANDARD               | hEN 771-3: 2011+A1 : 2015 Attestation Level 2+ |                                   |
| COMPRESSIVE STRENGTH*                | Min average 30N / mm <sup>2</sup>              | Min average 50N / mm <sup>2</sup> |
| WATER ABSORPTION                     | 5% max                                         | 5% max                            |
| DURABILITY DESIGNATION               | F2 Severe Exposure                             | F2 Severe Exposure                |
| MEAN COEFFICIENT OF WATER ABSORPTION | 1.5 g / (m <sup>2</sup> .s)                    | 1.5 g / (m <sup>2</sup> .s)       |
| MOISTURE MOVEMENT COEFFICIENT**      | 0.46 mm / m                                    | 0.46 mm / m                       |
| ACTIVE SOLUBLE SALTS [SO3]           | 0.03%                                          | 0.03%                             |
| SIZE TOLERANCE                       | hEN 771-3: 2011 (T1) Category D3               |                                   |
| GROSS DENSITY                        | 2200-2300 Kg / m <sup>3</sup>                  | 2200-2300 Kg / m <sup>3</sup>     |
| THERMAL CONDUCTIVITY                 | 1.56 W / m.K                                   | 1.56 W / m.K                      |

|                               | Cat 30                                      | Cat 50                                      |
|-------------------------------|---------------------------------------------|---------------------------------------------|
| INITIAL RATE OF ABSORPTION    | 0.42 Kg / m <sup>2</sup> .m-1               | 0.42 Kg / m <sup>2</sup> .m-1               |
| BOND STRENGTH                 | 0.15 N / mm <sup>2</sup>                    | 0.15 N / mm <sup>2</sup>                    |
| REACTION TO FIRE              | A1 Class                                    | A1 Class                                    |
| TYPE OF MORTAR                | Recommended ratio 6 : 1 or 5 : 1 Sand : OPC | Recommended ratio 6 : 1 or 5 : 1 Sand : OPC |
| WATER VAPOUR PERMEABILITY [u] | 5 / 15u tabulated from EN 1745              | 5 / 15u tabulated from EN 1745              |
| PACK QUANTITY                 | 512                                         | 512                                         |
| PACK SIZE [APX. MM]           | L 850 x D 850 x H 1100mm                    | L 850 x D 850 x H 1100mm                    |
| TYPICAL PACK WEIGHT           | 1700 Kg                                     | 1700 Kg                                     |
| PACKAGING (FULL SHRINK BAG)   | Unpalletted***                              | Unpalletted***                              |

\* Compressive strength in accordance with PD 6697 : 2010 and Eurocode 6.

\*\* Determination of moisture movement and drying shrinkage carried out in accordance with BS EN 772-14:2001 (E)

\*\*\* Pallets are available on request.

## MANUFACTURING

Engineering bricks are manufactured by using advanced manufacturing processes and natural materials. All products are manufactured from natural materials and although we strive to provide consistency of colour, variation may occur in the manufacturing process - this applies to all concrete products within the industry. PLANT OF MANUFACTURE Made at our Fivemiletown Production Plant.

## CERTIFICATION

ISO 9001  
ISO 14001  
ISO 45001  
CE Marking

Quality Management.  
Environmental Management.  
Occupational Health and Safety Management.  
Download our Declaration of Performance (DOP) data at:  
[www.ag.uk.com/resources](http://www.ag.uk.com/resources)