# MEDIUM DENSE CONCRETE BLOCK - BMD

Build Bloc Ltd offers a versatile range of concrete block solutions for both internal and external applications. All blocks are quality assured and tested throughout the manufacturing process.

## Build Bloc Concrete Blocks conform to BS EN 771-3

| PRODUCT SPECIFICATIONS | |
|---|---|
| **BUILDCRETE DENSE CONCRETE BLOCK TO BS EN 771-3** Category II Aggregate Concrete Masonry Units | |
| **DIMENSIONAL TOLERANCES** | Category D1 (+3mm, +5mm) |
| **MEAN UNIT STRENGTH** | 7.3 N/mm² |
| **REACTION TO FIRE** | Class A1 |
| **MOISTURE MOVEMENT** | < 0.6mm/m |
| **WATER VAPOUR PERMEABILITY (μ)** | 5/15* |
| **THERMAL CONDUCTIVITY** | λ 0.48 W/(mK) 10, dry mat |
| **NET DRY DENSITY** | 1500 kg/m³ |

tested to BS EN 772 and figures noted * taken from BS EN1745

| SIZE (mm) & WEIGHT (kg)* | | | |
|---|---|---|---|
| **LENGTH** | **HEIGHT** | **WIDTH** | |
| 440mm | 215mm | 100mm | 140mm |
| **BLOCK WEIGHTS (kg)** | | 15.0 | 21.5 |

*Figure is representative of average production weights.

## Key features:

- **Standard finish block**
- **Good thermal and acoustic performance**
- **Use for above and below ground**
- **Suitable for external and internal walls**
- **Suitable for one-man handling**
- **High fire resistance**
- **Low water absorption**



## Medium Density Concrete Blocks

Our medium dense concrete blocks are the most durable and resilient block which can be used with confidence and are perfect for both internal and external applications requiring high loadbearing capacity and excellent acoustic performance. Our state of the art manufacturing plant ensures a consistent and quality product every time.

## Responsibly Sourced Materials

At Build Bloc we are committed to minimizing our environmental impact and supporting the local economy by sourcing materials from as close to the manufacturing plant as possible.

## Transportation

With over 20 year's management experience in transporting building materials, we have developed a superior delivery model unrivalled by any of our competitors. The Build Bloc fleet of state-of-the-art vehicles guarantee next day delivery on almost every order.

## Delivery and Storage

Concrete blocks should be handled with care. Appropriate risk assessments and Safe Systems of Work should be conducted before any manual handling tasks. Blocks are normally delivered to site in banded packs on flat bed vehicles. Block packs are to be mechanically off-loaded on to a clean, firm area in planned locations to avoid double-handling and damage.

## Health and Safety

Close attention should be given to safe systems of work when handling concrete blocks. Workers are particularly at risk if they are repetitively handling blocks heavier than 20 kg. Safe lift heights will vary depending upon block type and weather conditions.

The following points should be considered before handling concrete blocks:

- Units should be moved in packs by mechanical means whenever possible
- Appropriate construction site Personal Protective Equipment to be used
- Appropriate eye protection and dust suppression/extraction to be used when cutting or chasing
- Minimise manual handling by delivering units as close to the place of use as possible

Further information can be found in the HSE Construction Sheet 37 – Handling Building Blocks

## Blocklaying

**Construction:** Blocks should not generally be laid in temperatures at or below 3°C. Masonry wall construction should be in accordance with the workmanship guidance given in BS 8000-3.

**Mortar:** Mortar specification must be appropriate for its intended use and in accordance with - PD 6697: 2010 Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2. It is common practice for mortar to be provided pre-mixed or dispensed from a calibrated mortar silo on site. The mortar supplier's recommendations should be adhered to. Site mixed mortar should be batched consistently and accurately using batching boxes or buckets. The use of shovels for proportioning should not be used.

**Cutting and Chasing:** A well ventilated dedicated area should be allocated for cutting and chasing of block work

**Jointing and Movement Control:** Following construction, buildings are subject to dimensional changes to structures through settlement, moisture movement and temperature. Joints should be used to account for this movement in accordance with DP-999. Movement joints are generally required at intervals of 6-8 metres for external block work and 1-3 metres from a corner. Movement joints are not normally required for basic domestic dwellings. Consideration should be given to loading conditions, wall heights and thickness and abutments of walls and columns.

**Finished Block Work:** Finished block work should be protected from excessive heat and cold using canvas or polyethylene tarpaulins to avoid rapid drying out and frost damage.

**Painting:** Standard finish dense concrete blocks are not intended to be painted directly. A plaster or render finish is to be applied first.

**Rendering and Plastering:** Rendering and Plastering work should conform to the relevant BS standards. Adequate

times should be applied between coats