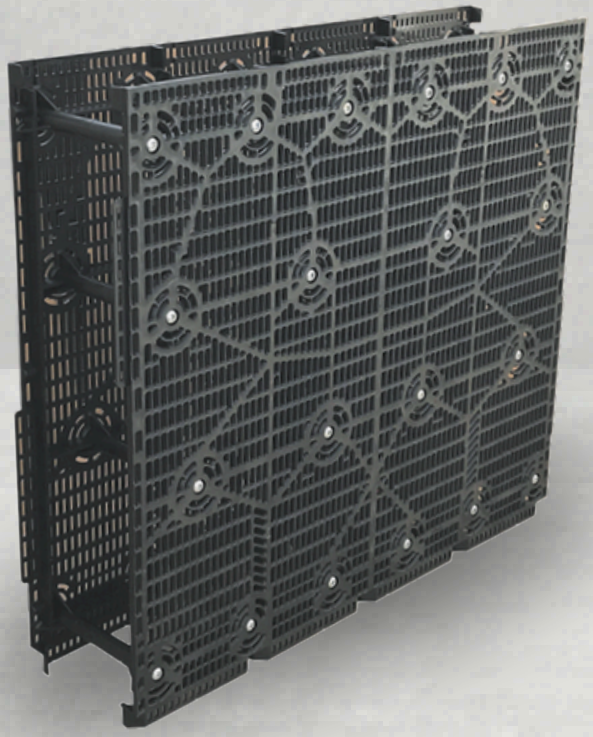
CLIPBLOX®

THE SIMPLE SOLUTION



# DATA SHEET




## 1. Product Range; Formwork for reinforced concrete walls in construction projects including but not limited to, Walls, Pools, Ponds and Water features.

### Plain Blocks:

-Plain Small Block: 605 × 440 × 150 mm – 3.5 kg

-Plain Large Block: 605 × 555 × 150 mm – 3.75 kg

### Perforated Blocks:

-Perforated Small Block: 605 × 440 × 150 mm – 3.5 kg

-Perforated Large Block: 605 × 555 × 150 mm – 3.75 kg

### Flex Blocks:

- Plain Flex Block: 605 × 555 × 150 mm – 3.75 kg
  (bendable to 2 m radius)

- Perforated  Flex Block: 605 × 555 × 150 mm – 3.75 kg
  (bendable to 2 m radius)




## 2. Material

- Material: Recycled Polypropylene
- Thermal Conductivity: ~0.22 W/m·K (material only)
- ClipBlox is a permanent formwork system and does not provide structural or insulation performance on its own

## 3. Mechanical Properties

- Breaking Strength: 125 Newtons
- Maximum Distortion: 7 mm at 20°C
- These values refer to the handling integrity of the formwork, not structural performance

## 4. Manual Handling

- All ClipBlox units are below the HSE threshold of 20 kg for repetitive lifting
- Can be safely handled by one person under normal site conditions
- Recommended PPE: gloves and protective footwear

## 5. Storage & Transport

- Store flat on level, firm ground
- Protect from direct UV exposure and heat extremes
- Do not stack more than 2 pallets high
- Avoid sharp bending of Flex Blocks in cold temperatures

## 6. Environmental Product Declaration (EPD)

An Environmental Product Declaration (EPD) for ClipBlox is available




# APPENDIX – CONCRETE PERFORMANCE REFERENCE

## 1. Structural Performance (Infill Dependent)

| Concrete Type | Density (kg/m³) | Compressive Strength (MPa) | Typical Use |
|---|---|---|---|
| Standard Dense | 2,400 | 25 – 40 | Retaining walls, heavy-duty use |
| Lightweight | 1,800 | 15 – 30 | Non-load-bearing partitions |
| Insulating | 1,600 | 5 – 15 | Thermal barriers |
| Ashcrete (Fly Ash) | 1,600 – 2,400 | 20 – 35 | Sustainable structural uses |

⚠️ ClipBlox does not provide structural strength. Performance depends entirely on the concrete mix and reinforcement.

## 2. Thermal Performance (Infill Dependent)

| Concrete Type | Thermal Conductivity (W/m·K) | U-Value (W/m²K) | R-Value (m²K/W) |
|---|---|---|---|
| Dense Concrete | 1.8 | 12.05 | 0.083 |
| Lightweight | 0.5 | 3.33 | 0.3 |
| Insulating | 0.2 | 1.33 | 0.75 |
| Ashcrete | 0.5 | 3.33 | 0.3 |

⚠️ U-values shown are calculated from the thermal conductivity of the concrete infill. ClipBlox itself does not insulate.

## 3. Concrete Grades (EN 206 / BS 8500 Reference)

| Concrete Grade | Characteristic Strength (MPa) | Use Case | ClipBlox Examples |
|---|---|---|---|
| C16/20 | 20 MPa | Light footings, slabs | Garden walls, planters |
| C20/25 | 25 MPa | Domestic, general use | Small retaining walls, ponds |
| C25/30 | 30 MPa | Structural walls, columns | Most ClipBlox walls |
| C30/37 | 37 MPa | Heavily reinforced or below ground | Garages, heavy-duty builds |
| C35/45 | 45 MPa | Structural frames | Pools, retaining tanks |
| C40/50 | 50 MPa | Water-retaining, industrial | Swimming pools, tanks, critical structures |

📌 Concrete grades follow EN 206 / BS 8500 standards.

📌 Always confirm design mix and reinforcement with a structural engineer based on site conditions.