

## Masterblock Masterlite® Pro Fairfaced 10.4N



A cost effective, close textured Fairfaced unit requiring no decoration.

- Masterlite Pro Fairfaced has low air permeability ensuring good thermal performance
- Suitable for use above and below dpc on the internal leaf and partition walls
- Consistent close textured face (note only one face and one end guaranteed). Available as a 140mm solid unit, below 20kg
- Good background for heavy duty fixings
- Available in solid format in both 100mm and 140mm width with a standard strength of 10.4 N/mm<sup>2</sup>.

### Performance

#### Dimensional tolerances

Category D1

#### Mean unit strength:

Solid 10.4 N/mm<sup>2</sup>

#### Net dry density:

All strengths 1450 kg/m<sup>3</sup>

#### Thermal conductivity (W/mK):

All strengths Internal 0.57  
External 0.61

Based on tabulated values from BS EN 1745

#### Water vapour diffusion coefficient:

All strengths 5/15

Based on tabulated values from BS EN 1745

#### Moisture movement:

All strengths <0.8mm/m

#### Reaction to Fire:

Classification to EN 13501-1 A1

#### Durability:

Based on tabulated values in accordance with table 15, PD 6697:2010 Frost resistant

#### Bond strengths:

Based on tabulated values from BS EN 998-2 Annex C 0.15N/mm<sup>2</sup>

### Masterlite Pro Fairfaced

#### Size (mm)

|                               |         |         |
|-------------------------------|---------|---------|
| Thickness (mm)                | 100     | 140     |
| Density (kg/m <sup>3</sup> )  | 1450    | 1450    |
| Weight (kg)                   | 14.1    | 19.8    |
| Units/m <sup>2</sup> (approx) | 9.88    | 9.88    |
| Colour available              | Natural | Natural |

# Masterblock Masterlite<sup>®</sup> Pro Fairfaced 10.4N

**Table 1 - Thermal resistance**

| Width (mm) | Density | Thermal resistance (m <sup>2</sup> K/W) |       |
|------------|---------|---|-------|
|            |         | 3%                                      | 5%    |
| 100        | Solid   | 0.175                                   | 0.164 |
| 140        | Solid   | 0.246                                   | 0.230 |

**Table 2 - Unit weights**

| Width (mm) | Form  | Unit weight* (kg) | Built weight (kg/m <sup>2</sup> ) |
|------------|-------|-------------------|-----------------------------------|
| 100        | Solid | 14.1              | 151                               |
| 140        | Solid | 19.8              | 212                               |

\*based upon 3% moisture content by weight

**Table 3 - Fire resistance (hours)**

| Width | Form  | Load bearing | Non load bearing |
|-------|-------|--------------|------------------|
| 100   | Solid | 2            | 2                |
| 140   | Solid | 3            | 4                |

\*Above values assume single leaf, no finishes (based upon BS5628 – 3).

**Table 4 - Sound insulation\***

| Width | Form  | Rw dB Fairfaced |
|-------|-------|-----------------|
| 100   | Solid | 39              |
| 140   | Solid | 41              |

Based upon mass law calculation.

**Table 5 - Characteristic strength  $f_k$  factors (N/mm<sup>2</sup>)**

| Width | Form  | Compressive strength of units (N/mm <sup>2</sup> )<br>10.50 |
|-------|-------|---|
| 100   | Solid | 8.20  |
| 140   | Solid | 6.84  |

Based upon BS 5628 pt 1, M4/Type III mortar.

## Applications

Specifically for internal use, in retail and commercial buildings.

Suitable for use above and below dpc internally.

- **100mm Masterlite Pro Fairfaced** suitable for corridor and partition and also for the inner leaf of a external cavity wall.
- **140mm Masterlite Pro Fairfaced** suitable for corridor and partition walls.

## Manufacturing standards

The Masterlite Pro Fairfaced range is manufactured using a semi-dry process and is compliant to European Standard BS 771-3 and complies with Assessment and Verification of Constancy of Performance (AVCP) system 4, Category II masonry units.

All Aggregate Industries' products are manufactured in accordance with ISO 9001 with factory compliance to ISO 14001.

# Masterblock Masterlite® Pro Fairfaced 10.4N

## Sustainability and local sourcing

**Energy use:** Aggregate Industries is at the forefront of sustainability and has committed to reduce carbon emissions by 20% by 2016 based on a 2012 base line.

**Recyclable:** 100% of the product can be recycled thus reducing the amount of material that is sent to landfill.

**Manufacturing location:** produced in the UK, with locally sourced materials under strict environmental and social legislation, for local supply.

**Responsible sourcing:** Aggregate Industries is the first company in the world to achieve a BES 6001:2008 Responsible Sourcing Certificate from BRE Global. Products are assessed on:

- quality management
- environmental management
- health and safety management
- greenhouse gas emissions
- minimising raw material usage
- labour practice
- biodiversity
- community engagement.

## Key aggregate and recycled content

Locally sourced aggregates.

## Generic green guide rating\*

External Cavity Wall of either Brick or Rendered block external leaf and Masterlite Pro Fairfaced internal leaf A+.

100mm partition wall A.

## Policies

Aggregate Industries' policies on the environment and community, health and safety and sustainable solutions for different product applications can be viewed on our website [www.aggregate.com](http://www.aggregate.com)

## Installation standard

**Plastering/Rendering:** Masterlite Pro Fairfaced blocks are primarily intended for leaving undecorated, however where they are to be plastered / rendered, they provide a moderate to low suction background and require the joints to be raked back and a spatter dash coat applied prior to rendering. When plastering, either carlite bonding or hardwall plaster or similar should be used.

**Health and safety:** Manual handling legislation and guidance given in construction sheet number 37, for repetitive manual handling, recommends units below 20kg should be considered. Masterlite Pro Fairfaced blocks are all below the 20kg weight limit for repetitive laying.

## Maintenance and cleaning

Aggregate Industries can supply on request advice on general maintenance.

## COSHH data

Full COSHH data on the Masterblock range of products is available on request. Please call the technical helpline on 01285 646800.

## Technical support

Detailed guidance and assistance with the preparation of specification and use of the Masterblock range of products is available through the sales office. A free technical design service is also available.

**For further information, please refer to our technical services on 01285 646800.**

\* Ratings based upon the generic green guide values (2009), supplied by BRE Global Ltd. [www.thegreenguide.co.uk](http://www.thegreenguide.co.uk)

Carnforth, Lancashire Tel: 01524 736636 Fax: 01524 736635  
North End, Wiltshire Tel: 01285 646900 Fax: 01285 646949  
Melbur, Cornwall Tel: 01726 862222 Fax: 01726 862229

[www.aggregate.com](http://www.aggregate.com)



The information contained within this publication was accurate at time of production. However, Aggregate Industries reserves the right to introduce modifications or changes to detail at any time without notice. No charge is levied for this publication or advice therein, and accordingly the company, its employees and authorised agents can accept no liability whatsoever, either indirectly or directly arising from the use of its products in connection with any information or advice contained in this guide.