

Thermal Insulation



Fire Resistance



Frost Resistance



Sound Insulation



#### **ENVIRONMENT**

The use of Thermalite blocks can significantly reduce energy consumption and environmental damage, compared to other building materials.

- Thermalite is manufactured using over 50% pulverised fuel ash (p.f.a.), a waste product from coal burning power stations, which is both stable and environmentally friendly.
- Waste produced during the manufacturing process is also recycled, which can increase the total level of recycled material up to 80%.
- The micro-cellular structure of Thermalite offers remarkably high heat insulation and, consequently, lower energy consumption for heating of buildings.
- · The cellular structure also forms a very lightweight product, which even contributes to reduced energy consumption during haulage.

Thermalite is proud to be the first aircrete block manufacturer to be awarded the coveted environmental manufacturing standard, BS EN ISO 14001: 1996.

#### QUALITY

All Thermalite Smooth Face blocks are certified by the British Board of Agrément. Additionally, all manufacturing locations hold a Kitemark licence.





BS 6073 : Part 1 BS 6073 : Part 2

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#### **TECHNICAL ADVISORY SERVICE**

Thermalite provide a FREE Technical Advisory Service, staffed by a highly qualified team with specialist knowledge on the use of Thermalite products from the initial design stage through to completion. The service includes:

- Structural Appraisals
- Sound Assessment
- · Thermal Calculations
- Movement Joint Locations
- Energy Ratings
- Render/Plaster Specifications

It is recommended that a Smooth Face sample panel is erected for comparison purposes before construction commences and that selection is undertaken during construction. It may also be necessary to fill small blow holes before decoration

Due to thickness variations within manufacturing tolerances, it may be difficult to build solid partition walls which have a smooth and even surface on both sides.

#### **Customer Services:**

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#### **TECHNICAL DATA**

#### **DIMENSIONS**

Face dimensions (mm) 440 x 215

Block thickness (mm) 75\* 90\* 100 140

#### 150 190 200 215 Tolerances

in accordance with BS 6073: Part 1: 1981

Length and height +3mm -5mm Thickness ±4mm max ±2mm average \*Manufactured to special order only

#### **WEIGHTS**

Block weights at equilibrium density (kg)\*

> Face dimensions (mm) 440 x 215

#### Block thicknesses & weights Smooth Face

75	90	100	140	mm
4.8	5.8	6.4	9.0	kg
150	190	200	215	mm
9.6	12.2	12.9	13.8	kg

#### Hi-Strength Smooth

100 7.1		150 10.7	
190		215	
12 5	1/12	15 2	L.

\*Block weights are calculated at normal dry density, with a moisture content of 3% by weight added to provide the equilibrium value.

#### **SPECIFICATION**

Nominal dry density 660kg/m<sup>3</sup> (730kg/m³ for Hi-Strength Smooth)

Average saturated compressive strength not less than 4.0N/mm<sup>2</sup> (7.0N/mm<sup>2</sup> for Hi-Strength Smooth)

Thermal Conductivity ( ) 0.16W/mK (0.19W/mK for Hi-Strength Smooth)

Drying shrinkage complies with BS 6073 : Part 1 : 1981





smooth face...



## ...for high performance,

# clean lines and bold strokes



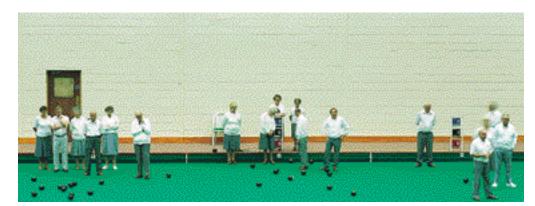
Poole Leisure Centre, Dorset

Looking for a block that offers you the very best surface for painted applications? The answer's staring you in the face - it's Thermalite Smooth Face.

Smooth Face is a paint grade block with the clean lines, even surfaces and neat sharp arrises that smooth faced walling demands and it is available in strengths of 4N/mm<sup>2</sup> and 7N/mm<sup>2</sup> for use in a variety of building projects.

#### **Performance**

Of course, wherever it is used, Smooth Face also delivers the traditional Thermalite benefits - excellent thermal performance, outstanding resistance to moisture penetration and the effects of frost, superior fire protection and a material that can be easily worked and fixed to.





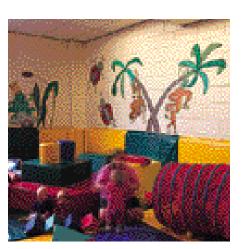


Leisure Centre, Norfoll

Thermal performance can also be improved by reducing the ventilation heat loss through the building fabric. The airtightness test results for Thermalite 100mm blockwork, as conducted by the Building Services Research and Information Association (BSRIA) were better than 0.10m<sup>3</sup>.hr. 1m<sup>-2</sup>.

#### Strength

Additionally, Smooth Face has excellent compressive strength, with **Hi-Strength Smooth Face** available for specific applications where 7N/mm<sup>2</sup> is required.



### Productivity

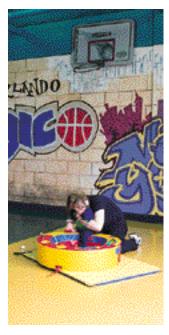
To complement the strength properties, Smooth Face is also lightweight and easy to handle, which can lead to significant productivity gains on site.

In addition, CDM Regulations require specifiers to consider health and safety issues on site. All Smooth Face blocks weigh less than 20kg, thus avoiding adverse risk assessment.

#### Versatility

As a growing number of designers and architects are discovering, the appeal of Smooth Face extends across a whole spectrum of commercial and industrial projects.

Developments in the retail, leisure and public sectors, for example, provide real opportunities for imaginative and exciting surface effects and Smooth Face enables the specifier to make the very most of them.



Specify Smooth Face and you're face to face with performance and versatility.





