

# CBA

UPDATE  
SPRING 2005

Supporting The  
Concrete Block Industry

— *Latest DTI Statistics*

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CONCRETE BLOCK  
ASSOCIATION

[www.cba-blocks.org.uk](http://www.cba-blocks.org.uk)

# Chairman's Report



*Chris Hudson*

Chris Hudson  
Chairman

## Aggregate blocks take market share

**In 2004 aggregate block market share increased by almost 2%, when measured over 12 months, reducing aerated share by a similar amount.**

Aggregate block sales for CBA members increased by 1.4% for the full year, compared to the aerated producers declining by 7% (according to DTI statistics) for 2004.

This outstanding result is thought to have been influenced by two major factors;

### Technical innovation

The CBA Technical Committee achieved RSD accreditation in four individual wall construction methods allowing builders to

avoid expensive and time-consuming pre-completion testing on new properties. In contrast the aerated industry achieved one accreditation.

### House construction types

2004 saw another dramatic increase in flat constructions - up to 42% of new dwellings built compared to 36% in 2003 - which results in a requirement for higher strength blocks.

The technical committee is keen to continue the momentum and have presented an ambitious programme of research and development for 2005. I'm sure you will join me in thanking them for their outstanding work last year and supporting their efforts to keep us at the front of market developments in 2005.

## DTI Statistics for GB ('000s sq.m)

	Dense	Lightweight	Aircrete	Total Agg	Total	Aircrete	Aggregate
<b>2003 Full Year</b>	37175	25161	34047	62336	96383	35.3%	64.7%
<b>2004 Full Year</b>	37461	25751	31674	63212	94886	33.4%	66.6%
<b>% Change</b>	0.8%	2.3%	-7.0%	1.4%	-1.6%		

## New Technical Helpline

In order to make our customers' lives a little easier we have introduced a new **CBA Helpline number 0116 222 1507** for all technical enquiries. The new number automatically diverts the caller to whichever member company has volunteered to handle enquiries for that month. It is already featured on the CBA website and as new technical data sheets are printed or existing ones updated, the new number will be phased in.

**Our thanks to the following member companies who have kindly agreed to answer customers' enquiries through to the Autumn:**

March - Forticrete	July - Aggregate Industries
April - Tarmac	August - Plasmor
May - Hanson	September - Stocks Brothers
June - RMC	October - Lignacite

## CBA Update Restyled

**Why not let us know what you think.**



Old look and new look

It may not have escaped your notice but we have updated the look of CBA Update. The old orange and black format was first introduced in Spring 2001 and we thought it was time for a change. We hope that you approve of the fresh new image and find its content interesting and informative.

Ron Willers, Editor - CBA Update  
t 01285 862094 e-mail r.willers@btinternet.com

# News from the THB



## Reasons to be cheerful

**This is a pivotal year for the brick and block housing industry as we face the combination of major aggressive marketing campaigns by timber and a further wave of changes to the Building Regulations. But despite what is thrown at us there are many reasons to be cheerful about the outlook.**

**John Prescott's** challenge to the housebuilding sector to build new houses for £60,000 - including foundations but excluding land and fit-out - is now to encompass traditionally built options, having initially focused solely on off-site manufactured systems. This is a great opportunity for **CBA** members collectively and individually to prove that our systems are the best - and the best value - for the consumer and the nation. Already **Wates** have announced they are going down the brick and block route - **contact the THB office if you want to take part in the £60,000 competition.**

The steel-frame housing sector has been wrecked by unforeseen massive cost increases in its raw material - and the same thing could happen in the globally influenced timber sector at any time. It would be a foolish housebuilding industry that switched wholesale to such vulnerable sourcing.

Through British Precast we are continually attacking the practice of listing Modern Methods of Construction as anti-competitive and wrong. We have the whole masonry industry with us in this, and the CPA is behind us. The DTI and English Partnerships accept that the housing sector must move to setting performance standards that focus on outputs not methods. The Home Office

report on the Yarls Wood reception centre fire is an indictment of mindless support for off-site construction at all cost - a copy is available from the **THB** office and is downloadable from the website.

The **THB** has responded to the aggressive 'Wood for Good' campaign with a run of four advertisements in Building magazine in early 2005 focusing on fire and flood - you can print these off at the new **THB** website [www.housebuilder.org.uk](http://www.housebuilder.org.uk) The recent focus on the risks of building on the floodplain - a virtual necessity in the South East - provides a great chance for block construction to demonstrate its 'bouncebackability' - the insurers are very interested indeed in this quality of robustness following flood damage.

We have also released the English translation of a Swedish Government report on the life-cycle performance of timber-frame construction, available from the **THB** office.

We are continuing our work on fire through a new European alliance of concrete product interests.

Central to the sustainability theme, and just published, is the CIBSE report TM36, *Climate Change and the indoor environment*, which demonstrates the vital role of masonry as the climate warms up. Together with a December report from Bill Dunster Architects and Arup, these two reports are a tremendous boost for the case for brick and block.

More good news for the CBA is the continuing migration of the timber-munching termites - now camped on the Channel coast (French side!). If you doubt this have a look at [www.termite.com.fr](http://www.termite.com.fr)

Now, in my opinion, that is not a bad list of plus points rolling out of the **THB** programme. All of them will be fed into a major event in our 2005 programme - **THB** is to sponsor the Ecobuild Conference on 23 and 24 May in London, including hosting a high-profile evening reception. For details see [www.ecobuild.co.uk](http://www.ecobuild.co.uk)

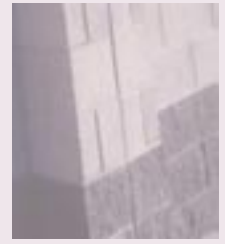
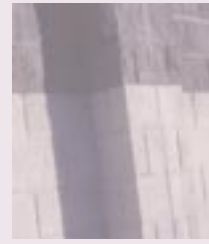
**Our programme of exhibitions this year sees more emphasis on social housing and a little less on self-build. Anita Ladva at the THB office would love to hear from you if you want to get involved. Call or email for full details. T. 0116 253 6161 E. [al@britishprecast.org](mailto:al@britishprecast.org)**

To bring more cohesion to the £1.5 billion masonry industry in the face of the anti-trowel brigade we are in detailed discussion with all parties about the future priorities and structure of the **THB** campaign with a view to forming the Modern Masonry Alliance to take the sector forward. I will bring these plans to CBA as they develop. Let me assure you that we are aware that we need to improve communications with CBA members - appearances at the CBA annual and regional meetings are a start, but are not enough so we are working on new ideas.

Finally let me thank Barry Holmes for his efforts in the last 18 months - Barry is now heading a new urban regeneration initiative for Countryside Properties in the North West. We wish him well.

**Martin Clarke**  
THB Chairman

# Technical Report



## BS EN 771-3 & BS EN 771-5

After the false start with these standards, first published in 2003 and subsequently delayed by the last minute German complaint to the European Commission, revised standards are expected to be published from April 2005 onwards. It is not possible to announce a firm date until CEN have completed their editorial process but April 2005 is expected to be the earliest publication date. A year after publication of the standards BS 6073 & BS 6457 will be withdrawn.

### The changes to EN 771-3 include:

- The need to declare the group of unit (according to Eurocode 6) to which a unit complies (e.g. group 1 – up to 25% voids, group 2 – more than 25% voids, but not more than 60% voids) and/or to give a list of void percentages, shell and web thicknesses, direction of voids, maximum size of individual voids etc.
- The addition of a 4th tolerance category.
- For units to be used with thin layer mortar a requirement for flatness of bed faces to be declared.
- For units to be used with thin layer mortar a requirement for parallelism of bed faces to be declared.
- The option of declaring upper and lower limits of density (net & gross) in addition to the requirement of declaring the mean density with a tolerance of +/- 10%.

- Correction of a number of editorial and drafting errors in the 2003 edition.

### The changes to EN 771-5 include:

- For units to be used with thin layer mortar a requirement for flatness of bed faces to be declared.
- For units to be used with thin layer mortar a requirement for parallelism of bed faces to be declared.
- Correction of a number of editorial and drafting errors in the 2003 edition.

The present BS EN 771-3 and BS EN 771-5 contain national forewords and national annexes, which explain the differences between the new standards and those they will replace. The National Annexes also give guidance on how the standards will be interpreted for use in the UK. The CBA Technical Committee have revised these parts of the standards. The guidance in respect of the changed clauses in EN 771-3 is that it is expected:

- Unit groupings will be declared rather than detailed dimensions and volumes (this information will be easier for the manufacturer and more useful to designers).
- The 4th tolerance category  $\pm 1$ mm on height is for use with units for thin layer mortars.
- The upper and lower density limits will not normally be declared. (A unit with voids could otherwise require 6 density values to be given).

The guidance in respect of EN 771-5 is that it is expected:

- If a manufacturer chooses to CE mark then individual face sizes and shapes of units in a consignment will not be marked but a packing list will be provided.

## Part L of the Building Regulations for England & Wales

Two meetings of the Industry Advisory Group (IAG's) set up by ODPM and run by their contractors for the Part L review process, Faber Maunsell, were attended in December 2004. These meetings reported back to industry on the comments received in respect of the consultation on Part L1 (dwellings) and Part L2 (other buildings).

Beyond summarising the comments and telling us how many sets of comments had been submitted (circa 420) these meetings gave us little information. No indication was given of how the comments would be treated and it was made clear at the start of each meeting that no additional comments were to be made. Attendees were allowed to point out if the written comment summaries had not picked up specific points made and these would be added to the summaries to ensure that they were not overlooked during the review process.



**Gerry Pettit -  
Chairman**  
Concrete Block  
Association -  
Technical Committee

Further IAG meetings are planned for mid March 2005 and at that stage we are promised revised drafts of the consultation proposals. At that stage the comments made will have been considered by ODPM and their advisers and first drafts will have been through the BRAC committee. This early indication of the final content and format of the Approved Document will enable industry to have an additional 3 months preparation time before the official publication date of July 2005.

#### Robust Details

CBA are working to complete the candidate RD for solid walls, which did not get through in the first round of separating wall solutions, as sufficient sites for obtaining the required 30 results could not be found. Additional sites have been found but we still need more. **If you know of builders building separating walls with dense blocks laid flat and they are willing to share the pre-completion testing results with CBA, we will pay for the cost of testing.**

#### Disproportionate Collapse

The amended Approved Document A to the Building Regulations for England & Wales, which came into effect on

1st December 2004, contains new requirements for the disproportionate collapse of buildings.

Buildings are classified according to use and number of storeys and each class has specific requirements. A simple guidance document is being prepared to demonstrate that masonry solutions are straightforward and buildable. It will be a joint document between the CBA, the Brick Development Association (BDA) and the Autoclaved Aerated Concrete Products Association (AACPA). ODPM have offered to include the guidance document on their website linked to the downloadable version of Approved Document A.

#### Institution of Structural Engineers Manual to Eurocode 6

CBA, BDA & AACPA are cooperating in kind and financially in the development of a guide for engineers to Eurocode 6 (EN 1996) the European Masonry Design Code, which will replace BS 5628.

The CBA has a seat on the steering group, which will be overseeing the drafting work, which will be carried out by a consultant, and which is expected to be completed early in 2006.

Institution of Structural Engineers manuals are regarded by practising engineers as the definitive guidance on design. Although this project is running about 12 months late, delays in completing the drafting of Eurocode 6 and getting it published means that the delay with the manual has caused no practical difficulty.

#### Approved Document A

The published version of Approved Document A contains a number of errors. One of these is the strength requirement for blocks and the changes brought about by the publication of BS EN 771-3.

BS EN 771-3 requires strengths to be declared in the air dry state and higher values are obtained when testing dry. Thus AD A minimum block strengths have changed.

2.8 N/mm<sup>2</sup> becomes 2.9 N/mm<sup>2</sup> and 7 N/mm<sup>2</sup> becomes 7.3 N/mm<sup>2</sup>.

Aggregate block strengths obtained from wet testing can be corrected to the air dry condition by multiplying by the 1.2 factor given in BS EN 772-1.



## Environmental & Sustainability

# Performance

Colin Marshall  
Concrete Block  
Association -  
Marketing Committee



Although sometimes quite different in their requirements, environmentally and sustainability issues are increasingly becoming intrinsically linked together, and are arguably amongst the biggest drivers affecting the specification and use of our products.

Climate change is undoubtedly a major driving force for these issues in the construction industry. The impending changes to Part L (thermal insulation) of the building regulations are testament to this. This is coupled by a strong desire to see resources used as efficiently as possible. This goes beyond mere compliance with building regulations and many clients now insist the buildings they commission are subject to some type of environmental rating.

There are many assessment tools available but CBA members will no doubt be familiar with the Building Research Establishment (BRE) methods, including BREEAM for offices and other buildings, and EcoHomes for dwellings.

It is important that CBA members should involve themselves in the design process and understand how our products can affect the way in which buildings are rated.

The alternative is to be unwittingly at the end of a decision chain that precludes our products. For many of us there is an education requirement and it is pleasing to note that a EcoHomes course run in January, organised jointly by the British Precast Concrete Federation and the National House Building Council was oversubscribed. **If you want to attend an event of this type please register your interest.**

But it is equally as important that we continue to remind the regulators that both environmental and sustainability performance must be looked on as a broad a front as possible. A criticism of some of our regulations and environmental assessment tools is that they do not always do this. A good example is the ongoing debate of heavyweight versus lightweight construction. We have long argued the case for heavyweight construction, acknowledging the benefits of thermal mass in helping to absorb excess heat gains. A recent Report (1) by Arup Associates on behalf of the Department of Trade and Industry provides a building design response to climate warming for dwellings. It warns that the relatively poor performance of thermally lightweight construction e.g. timber frame, could result in homes that may become prematurely obsolete without the inclusion of mechanically cooling measures, which in themselves increase energy running costs as well as adding to greenhouse gas emissions. By contrast, in order to ensure that future homes - particularly in the South East where climate change will be more pronounced - are future proofed a number of key measures are proposed. These include a requirement for large areas of room to have heavyweight thermal mass.

This is a great opportunity to promote one of the inherent advantages of concrete blockwork.

But also a great way to reinforce our belief that brick and block homes can be built to cope with changing requirements... and built to last - a significant sustainability factor given the current and projected rate of replacement of the housing stock.

This year work has commenced in developing a new Code for Sustainable buildings. The aim is to achieve higher standards of environmental performance than those stipulated by any current regulations. This initiative is a high priority for the Office of the Deputy Prime Minister (ODPM), and Richard McCarthy, Director General of Sustainable Communities at ODPM, is chairing the steering group. The CBA are very much involved in the consultation process and will ensure that the sustainability credentials of concrete blockwork are championed.

The CBA Environmental Profile project, headed by Dr. Miles Watkins, is progressing well and will provide members with up-to-date environmental performance on a range of common aggregate block products. This should allow us to respond positively to requests for environmental data on our products and is consistent with the needs of EcoHomes and other assessment methods.

(1) UK Housing and Climate Change, heavyweight versus lightweight construction, October 2004 - Arup Research & Development.

# Health & Safety



## Taking the pressure out of it

Protecting silos from over-pressurisation was a major operational concern for Hanson Building Products. Many silos are filled on a daily basis and failure to do so would cause severe damage to plant and risk serious injury to people. In accordance with the latest Process Guide Notes PG3/1 and the Guidance to Prevent Over Pressurisation, silo protection was reviewed and each was fitted with appropriate pressure relief valves (PRV's), reverse jet filters, high level alarm systems and automatic cut off systems. However, experience showed that unless the equipment was well maintained protection was still not guaranteed.

Silos are sealed containers and are filled, daily, by blowing cement into them by the use of air pressure. Providing the pressure inside the silo is controlled there isn't a problem. However, if the silo's filter or PRV becomes blocked for any reason there is a risk of pressure building inside the unit, much like a boiling kettle unable to emit steam through a blocked spout.

If this build up is severe enough it can cause an explosion as the silo ruptures or filter is blown off.

At the Borrás block factory in Wrexham, David Wilshaw, Works Manager, and his engineering team were concerned that such an incident could happen and looked at ways of ensuring such an incident could not happen.

PRV's had to be tested manually by lifting the valve that meant an individual had to climb to the top of the silo, an unpleasant daily task with risks of its own. They decided that the best way to check it was automatically and at ground level.

A small air cylinder was attached to a new PRV via a lightweight cable and with a pressure control switch placed in line they could determine the pressure necessary to open the valve. The pressure control switch was then preset to this pressure and with proximity switches fitted to show when the valve was open

and closed the PRV could be checked for operational functionality.

Signage was installed at the fill pipe instructing the delivery driver to press a button, which starts the maintenance checking process. The preset pressure is used to open the PRV as indicated by the open proximity switch and then is allowed to reseal itself, under gravity, as indicated by the closed proximity switch. If successful a green light is illuminated at ground level to show that cement discharge can be made and the automatic shut off valve is opened. Failure of any of the system checks illuminates a red light, the system shuts down and the discharge cannot be made eliminating any risk of explosion.

The system has been operational for over eighteen months, it has reduced significantly the number of times access is made to the silo top and there have been no reportable over-pressure incidents.

## Press Coverage

2004 was another good year for news about the CBA and its activities with over 50 articles appearing in the following trade publications throughout the year:

- ✓ AJ Focus
- ✓ Architect, Builder, Contractor & Developer
- ✓ Architect's Choice
- ✓ British Builder and Developer
- ✓ Building
- ✓ Building Design
- ✓ Building Homes
- ✓ Building News
- ✓ Construction Manager
- ✓ Construction National
- ✓ Construction Products

- ✓ Contract Journal
- ✓ Design, Architecture, Building & Specification
- ✓ Housebuilder
- ✓ Housing Association
- ✓ Housing Association Building & Maintenance
- ✓ Housing Today
- ✓ Keystone Scotland
- ✓ Local Authority Building & Maintenance
- ✓ Master Builder

- ✓ Professional Builder
- ✓ Professional Builders Merchant
- ✓ Public Sector & Local Government
- ✓ Public Sector Building
- ✓ SiteLines
- ✓ Refurbishment Projects
- ✓ RIBA Journal
- ✓ The Architect
- ✓ The Builder
- ✓ What's New In Building



CBA

# Memberships



## The Concrete Block Association 2005

Although The Concrete Block Association does its best to ensure that any advice, recommendation or information it may give is accurate, no liability or responsibility of any kind (including liability for negligence) is accepted in this respect by the Association, its servants or agents.

The Concrete Block Association greatly appreciates the continued support of our members and associate members.

### MEMBERS - England & Wales

Aggregate Industries UK Ltd	T. 01285 646800
Besblock Ltd	T. 01952 586778
Bromfield Sand & Gravel Ltd	T. 01584 856258
Broome Bros. (Doncaster) Ltd	T. 01302 361733
Cambrian Concrete Products	T. 01352 741412
Cheshire Concrete Products	T. 01606 837364
Forticrete Ltd	T. 0151 521 3545
Fosterville Ltd	T. 01626 852050
E & J W Glendinning Ltd	T. 01364 652601
Hanson Concrete Products Ltd	T. 01235 848877
Interfuse Ltd	T. 0116 2609666
Lafarge Concrete Products	T. 01788 860340
Lignacite Ltd	T. 01842 810678
Mona Precast (Anglesey) Ltd	T. 01248 421772
S Morris Ltd	T. 01458 223991
RMC Concrete Products (UK) Ltd	T. 01788 542111
Sellite Blocks Ltd	T. 01977 661631
Stocks Bros. Ltd	T. 0113 2320022
Stowell Concrete Ltd	T. 01934 834000
Tarmac Topblock Ltd	T. 01902 353522
Thakeham Tiles Ltd	T. 01903 742381
Thomas Armstrong (Concrete Blocks) Ltd	T. 01207 544214

Thomas Scourfield & Sons	T. 01646 651326
Western Blocks Ltd	T. 01736 753128

### MEMBERS - Scotland

Aggregate Industries	T. 01467 651000
Border Ready Mix Ltd	T. 01896 849704
Brand & Rae	T. 01334 652828
Forticrete Ltd	T. 0151 521 3545
David W Gordon	T. 01224 742408
Hoddam Contracting Co Ltd	T. 01576 300279
Patersons Precon Blocks	T. 01236 433351
RMC Concrete Products (UK) Ltd	T. 01236 822461
Skene Group Concrete Products	T. 01383 510248
Tarmac Caledonian Ltd	T. 01463 772210
Tarmac Topblock Ltd	T. 0141 248 6700

### ASSOCIATE MEMBERS - England & Wales

Beton Machinery Sales Ltd	T. 01274 560119
Castle Cement Ltd	T. 0121 779 7771
Columbia Machine Inc (USA)	T. 001 360 694 1501
Europa (UK) Ltd	T. 0117 977 8001
Hargreaves Ash Marketing Ltd	T. 01484 866634

KVM (UK) Ltd	T. 01332 825800
Lafarge Cement UK	T. 01235 448400
Maple Aggregates (UK) Ltd	T. 01273 699001
Maxit LWA Ltd	T. 01928 515656
MBT Feb	T. 0161 794 7411
Rekers (UK) Ltd	T. 01827 63833
Rugby Ltd	T. 01788 542111
Weller Engineering Ltd	T. 0115 944 3204

### ASSOCIATE MEMBERS - Scotland

Bureau Veritas Laboratories	T. 0141 774 6271
Caledonian Slag Cement	T. 0141 440 5200
Castle Cement	T. 0121 779 7771
Grace Construction Products	T. 07808 635232
Lafarge Cement UK	T. 07764 561764
Maxit LWA Ltd	T. 01928 515656
MBT Admixtures	T. 07966 123428
Scotash Ltd	T. 01259 730110
Seament (UK) Ltd	T. 0131 554 1555
Sika Ltd	T. 01501 773721

## Who's who

The following people currently represent your interests on the CBA's Council, Technical and Marketing Committees:

### Council Members

Chris Hudson (Chairman)	- Aggregate Industries
Andy Clements	- Hanson
Allan Eastwood	- Lignacite
Frank Gaiger	- Tarmac
Nick Glancy	- Sellite
Paul Gray	- Lafarge
Shaun Gray	- Forticrete
Martin Home	- Thomas Armstrong
Bill Innes	- David W Gordon
Graham Lobleby	- MBT Feb
John Mitchell	- Consultant
Gerry Pettit	- Tarmac
Trevor Poole	- Hanson
Paul Rosie	- RMC

### Technical Committee Members

Gerry Pettit (Chairman)	- Tarmac
Len Baker	- Consultant
Adrian Bunyard	- Lafarge

Andy Clements	- Hanson
Les Devine	- Aggregate Industries
Tim Fields	- Forticrete
Shaun Gray	- Forticrete
Phil Lever	- Lignacite
Malcolm Storey	- Stocks
Alan Tydeman	- Consultant
Steve Wharton	- RMC

### Marketing Committee Members

John Mitchell	- Consultant
Andy Clements	- Hanson
Colin Marshall	- Tarmac
Jamie Pickles	- RMC
Steve Wharton	- RMC

### Secretary and Treasurer

David Zanker	- BPCF
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If you have any issues you wish to raise with the CBA please feel free to contact one of the appropriate members directly or via David Zanker, [djz@britishprecast.org](mailto:djz@britishprecast.org)

## Showing off



If you are planning on exhibiting at any construction industry events this year, holding a sales conference or would simply like to liven up your office's reception area for a week, then why not borrow the CBA display stand.

It is simple to assemble and dismantle and can be delivered to your door free of charge. The stand is allocated on a 'first come first served' basis so it is advisable to book it well in advance for any vital events.

To book the stand and arrange for its delivery and collection contact Sarah Palmer at AJA Design  
t. 01305 260606 or e-mail: [sarah.palmer@ajadesign.co.uk](mailto:sarah.palmer@ajadesign.co.uk)