NASH NEWS

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NASH™
NATIONAL ASSOCIATION OF STEEL-FRAMED HOUSING INC.

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IN THIS ISSUE:

STEEL-FRAMED HOUSE WINS HIA DISPLAY HOME OF THE YEAR

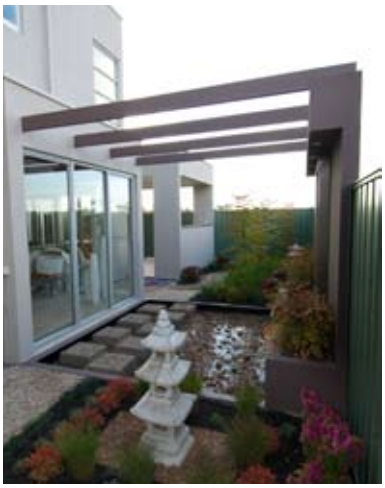
Serenity Homes' Soudai won the HIA Australian Display Home of the Year 2007, crowning its already long list of industry awards and achievements. The Award was presented at the HIA Awards Ceremony held 12 May in Sydney. Soudai was featured in the 2006 September/October edition of NASH News.

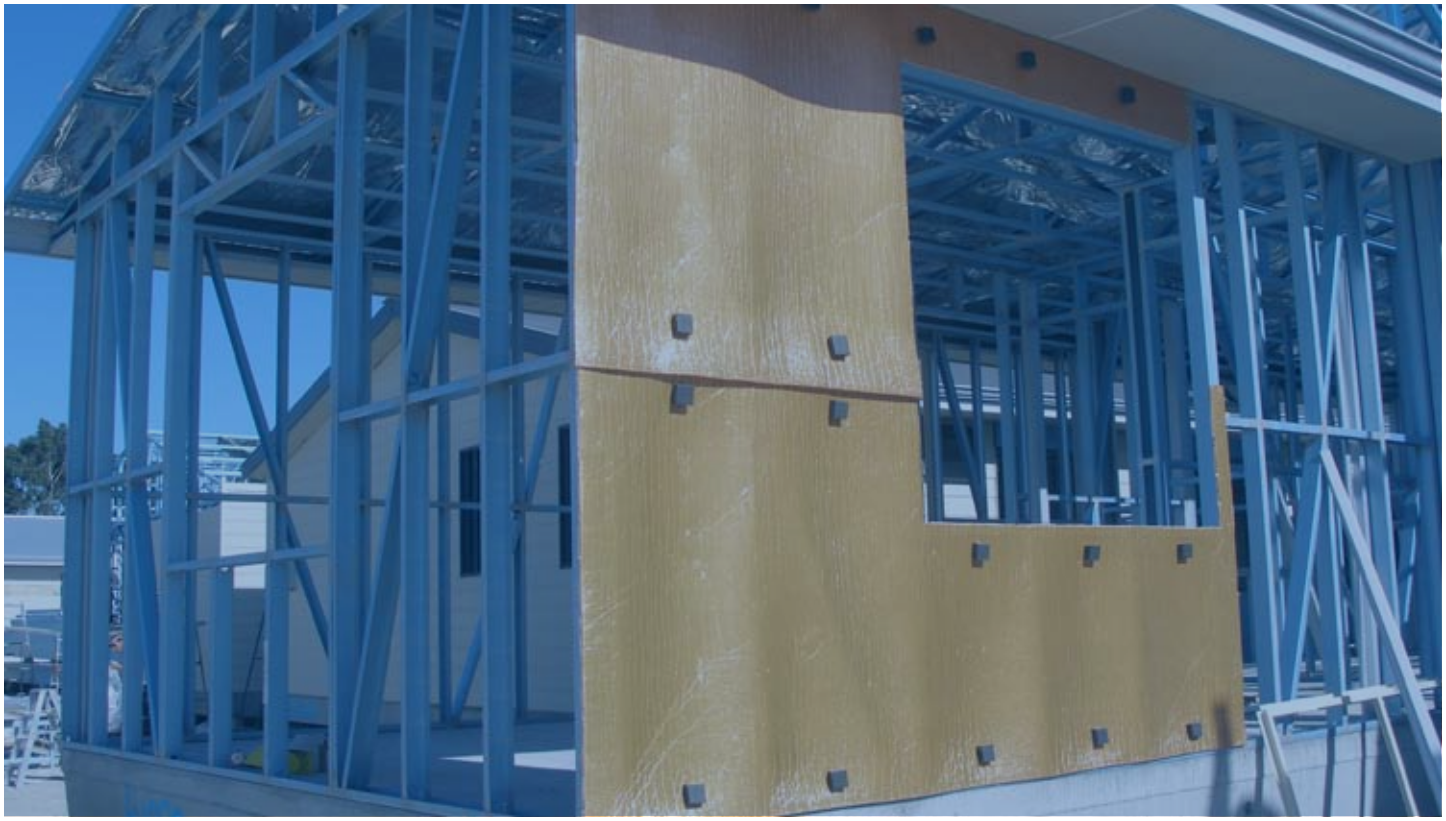
According to HIA judges, Soudai epitomises the way of the future for single allotment suburban housing. They explained that it contains all the latest innovations that take the industry forward and makes superb use of a variety of colours, materials and textures.

Soudai is an architect designed 359.2 square metre home with 3 bedrooms, 3 separate living areas and a mezzanine study area. Materials include a TrueCore® steel frame, plasterboard walls and ceilings, custom made solid timber mouldings and stairs and solid timber and glass doors. On the exterior are Colorbond® steel roofing and commercial aluminum doors and windows. Stone walling has also been used to great effect.

One of the materials at the very core of the house and one frequently described by Serenity Homes' owner, Gary Barnes, as particularly "future considerate" is the steel framing. "Innovation isn't just about fancy design features or hi-tech accessories," said Gary, "it's about thinking through the entire process and enhancing every aspect as much as possible. This starts with the initial concept work and goes all the way through to predictions about how the design will perform in the years to come."

Responsible for fabricating and installing the steel frames is Steel Frame Solutions, who's SA Manager, Gary Scott, said "Gary Barnes and I only work on one level and that is one of premium quality," he explained. "Every frame we install for Serenity Homes will provide the homeowner with peace of mind that the core of their dream home will be structurally sound well into the future. It won't bend, rot, twist, or be eaten by termites."





Air-Cell Insulbeak being installed

BCA THERMAL BREAK COMPLIANCE FOR STEEL FRAMED BUILDINGS

One of the hot topics for steel framing these days is the BCA 2006 Energy Efficiency requirement for a thermal break to be included in steel frame lightweight walls and roofs with exposed rafters. This was covered in detail in the 2006 March/ April edition of NASH News.

The thermal break addresses the issue of heat conductivity, or thermal bridging, across building elements. The provision requires a thermal break of at least R0.2 to be installed between the roof or wall cladding and the steel framing (refer BCA 2007: Vol 1 Section J1.3(d), J1.5(e); Vol 2 Section 3.12.1.2(c), Section 3.12.1.4(d)).

Perhaps an even hotter topic is how this can be achieved in a practical sense. The BCA offers a few suggestions – plastic strips, 12mm polystyrene sheeting or 20mm timber battens – but for all these options additional insulation is still required in the walls to achieve the required minimum R-value.

As a solution specifically designed to meet both the thermal break and insulation requirements, Air-Cell Insulation, Australian pioneers of thermo cellular reflective insulation, has introduced a new product range called Insulbreak™.

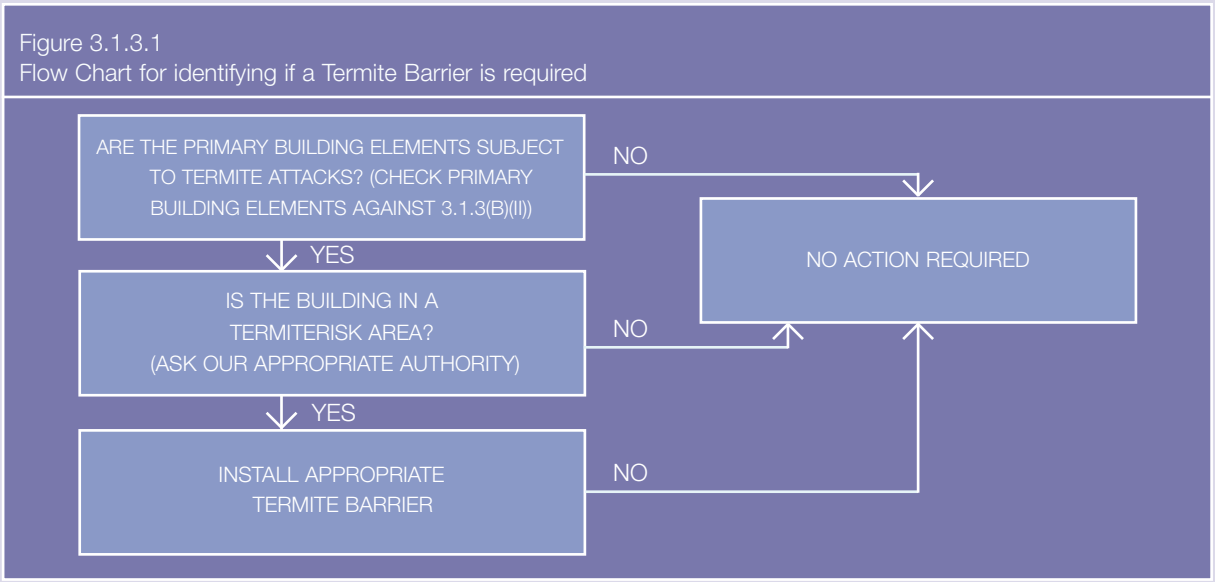
Air-Cell Technical Services Manager, Mr Keith Anderson, explains, “Insulbreak™ is manufactured with a patented closed-cell flame resistant foam structure sandwiched between highly reflective anti-tear foil surfaces, giving the product all the benefits of thermo reflective insulation with the added benefit of delivering the required thermal break and additional acoustic performance.”

UPDATE ON TERMITE REGULATIONS

The NASH Standard for Residential and Low-rise Steel Framing is now called up in both volumes of the Building Code of Australia (BCA) and steel framing is increasingly being selected for low-rise commercial and institutional construction. In view of this it is worth taking a moment to review the termite control regulations applicable across all classes of building. The requirements, and the way they are applied, vary slightly from state to state. This article looks at the basic requirements and highlights some locations where specific provisions apply.

As shown in the BCA chart below, a termite barrier is only required if the primary building elements are not constructed from termite resistant materials and the building is in a designated termite risk area. This chart is from Volume 2 of the BCA, but the process applies equally to all building classes.

Figure 3.1.3.1
Flow Chart for identifying if a Termite Barrier is required

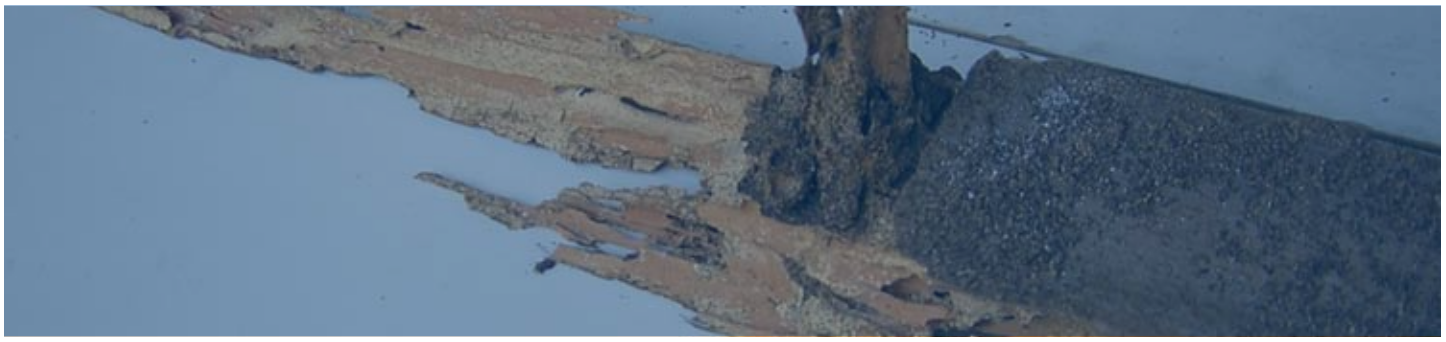


Low-rise dwellings and outbuildings (Classes 1 and 10a)

These classes of building are covered in Volume 2 of the BCA - the Part relevant to termite requirements is Part 3.1.3 *Termite Risk Management*, which states that:

"The requirements of this Part apply when a primary building element of a Class 1 and Class 10 building is susceptible to termite attack."

A primary building element means a member of a building designed specifically to take part of the building loads and includes roof, ceiling, floor, stairway or ramp and wall framing members including bracing members designed for the specific purpose of acting as a brace to those members. In QLD only, the definition is extended to cover door jams, window frames and reveals, architraves and skirtings of Class 1 and 10 buildings.



UPDATE ON TERMITE REGULATIONS (CONTINUED)

Whether a primary building element, as defined, is susceptible to termite attack depends on two factors:

- The opinion of the appropriate authority as to whether the building locality is a known termite risk area,
- The materials from which the primary building element is made.

The appropriate authority is the state or territory agency delegated the power to grant development and building approval. In some states (eg. VIC) the authority publishes a list of council areas that are deemed subject to termite risk. In other states, individual councils may determine the local policy themselves.

Where a building has all its primary building elements constructed from metal, concrete, masonry, fibre-cement, naturally termite resistant or preservative-treated timber, termite risk management does not apply.

Special provisions apply in some areas of the NT where a particularly aggressive termite species, Mastotermes Darwiniensis, is present.

In TAS, all Class 1 and 10 buildings are exempt from termite risk management requirements.

In NSW, a separate requirement administered by the Office of Fair Trading had for many years required builders to install termite barriers even where the primary building elements were made from materials not susceptible to termite attack. The publication (FT030) with this requirement has recently been withdrawn and an advisory statement on termite risk management, in line with BCA requirements, has been introduced onto their web site.

Other residential and non-residential buildings (Classes 2 – 9)

These classes of building are covered in Volume 1 of the BCA. The requirements are basically the same as for dwellings except that the QLD variation to the definition of primary building element does not apply. Only one state or territory variation to the termite risk management requirements for Class 2 - 9 buildings applies - in the NT where special precautions must be taken against Mastotermes Darwiniensis.

In case the potential for termite damage to susceptible structural members in non-residential buildings is in any doubt, the accompanying photo shows a section of wall bottom plate removed from an internal wall in an office building adjoining a western Sydney factory.

Important point…

The presence of a single susceptible primary building element in any class of building requires that termite risk management be applied to the building to protect the susceptible element. One untreated timber nogging, stair tread, beam or joist can render the building subject to a termite management system. This system may be as specified in AS 3660.1 – Termite management – New building work (for any class of building) or one of the barrier systems listed in Part 3.1.3 of BCA Vol 2 (see below). In QLD, a variation requires that any installed termite management system in a Class 1 building should have a minimum life consistent with the expected design life of a dwelling.

Termite 'barriers'

Termite 'barriers' do not actually stop termites. Their purpose is to deflect the termite gallery so that the activity can be seen. Then, in theory, the termites can be destroyed before too much damage is done.

Approved termite 'barriers' include:

- 75mm exposed concrete slab
- Termite shielding eg. termite caps
- Stainless steel mesh
- Graded stone
- Chemicals

Some chemical systems include termiticide as well as deterrent chemicals.

HOUSING TRENDS - STEEL FRAMING AND BRICK ALTERNATIVES

Housing trends - Steel framing and brick alternatives

Melbourne's daily broadsheet, The Age, reported on 4 June that the trend in housing is towards steel framing.

Metricon, which is Victoria's second highest project homes builder, is gearing up to offer steel framing as an option. Managing director, Ross Palazzesi, was quoted as saying that steel framing stops warranty problems caused by warping of timber frames. Metricon is also looking at aerated concrete panels, Hebel, due to problems with inconsistencies in brickwork, lack of bricklayers and an aging bricklayer population with the average bricklayer in Melbourne being over 50 years old.

Metricon staff being trained at Bendigo Regional Institute of Technology on steel framing. Frames supplied by Steel Frame Solutions

BENCHMARKING STUDY UPDATE

Following our successful Qualitative Questionnaire, we have now developed and published the Quantitative Survey. It can be completed online at www.nash.asn.au or we can send you a hard copy.

The Quantitative Survey will:

- provide most of the information necessary for your business planning.
- allow comparisons of your performance with the steel framing and other similar industries.
- enable the measurement of the effect of changes in processes.

It will also provide NASH with accurate industry data for lobbying the Government on issues such as training, industry support and regulations. At the end of the process we will be able to identify areas that will improve the competitiveness of the whole industry.

All information is handled in the strictest confidence and at no stage in the process will information regarding individuals or businesses be accessible, recognisable or made available.

The Survey must be completed by 30 June 2007. Earlier completion would be greatly appreciated.

TRUSTEK AND BLUESCOPE LYSAGHT SUPPORT STEEL FRAMING APPRENTICESHIPS

The Australian Technical College (ATC) – Perth South is one of the 25 Technical Colleges being established by the Australian Government. The College took its first students this year catering for Year 11 and 12 students wishing to enter the trades at the completion of Year 12. The students carry out trade subjects as part of their course and also gain practical experience with employers. At the end of Year 12 the students have completed approximately the equivalent of two years apprenticeship training.

BlueScope Lysaght has entered into a five year partnership with ATC – Perth South and committed to take up 14 students in February. Five of these students recently spent two weeks working at Trustek on the assembly of roof trusses.

TRUSTEK HAS ALSO EMPLOYED 11 APPRENTICES THROUGH THE HIA GROUP TRAINING SCHEME AND IS PLANNING TO INCREASE THIS NUMBER TO 15.

RECYCLED WATER FOR BLUESCOPE WESTERN PORT

Based on the successful introduction of recycled water to their Port Kembla Steelworks (NASH News September/October 2006), BlueScope are now proposing to introduce recycled water from the South East Water sewage treatment plant to their Western Port Steelworks on Victoria's Mornington Peninsula.

The estimated cost of the project is $21.5 million with the State Government contributing $4.1 million, BlueScope Steel $8 million and South East Water $9.4 million. This investment will result in:

- Western Port Steelworks reducing its consumption of fresh water by over 60% (660 mega litres per year).
- South East Water reducing the discharge of treated waste water into Western Port Bay from the South East (sewage) Outfall by 75%.
- reduction of prescribed waste to landfill by 75%.

The project is set for completion in 2009.

TIMBER INDUSTRY PROMOTES 90MM PINE STUDS

The timber industry is encouraging builders to use 90mm instead of 70mm pine studs. They claim it provides a more cost effective solution due to ready availability and better dimensional stability. The 90mm stud is more suited to their plantation and production systems. Concern has been raised from within the building industry about the availability of 70mm studs and their relative cost however the timber industry is continuing to encourage the use of 90mm studs.

In other timber news, the Australian Plantation Products and Paper Council (A3P) have announced that they will not proceed with the introduction of the Structural Pine (SP) grades. These grades were proposed as a solution to the problems with inconsistent deflection of timber trusses (refer NASH News May/June 2006). They are now looking at modifying the existing Machine Graded Pine (MGP) system in an attempt to address the issue.

FATALITIES IN THE WORKPLACE

76 work-related fatalities in Australia (72 workers and 4 bystanders) were reported by the Australian Safety and Compensation Council (ASCC) for the six months 1 July to 31 December 2006.

Four industries accounted for just over two-thirds of fatalities:

- Construction 22% (17)
- Agriculture 16% (12)
- Transport and storage 16% (12)
- Manufacturing 13% (10)

The most prevalent causes of work-related fatalities were:

- Falls from height 17
- Being hit by a falling object 14
- Being hit by a moving object 12
- Vehicle accident 9
- Being trapped between stationary and moving object 7

Unfortunately the statistics do not allow NASH to identify the type of work that was being undertaken and by whom. We encourage all members to keep safety statistics of all incidents so that areas for improvement for our industry can be identified.

STEEL INDUSTRY RATIONALISATION

The Australian Competition and Consumer Commission (ASCC) have approved the merger of OneSteel and Smorgon Steel and the subsequent acquisition by BlueScope Steel of the Smorgon Steel Distribution Businesses. It's anticipated that Smorgon Steel will hold a shareholders meeting before the end of July to consider the Scheme.

NASH'S NEW WA CHAIRMAN
KEITH HUTSON

Keith Hutson has been elected Chairperson of the WA Chapter of NASH and will represent WA on the National Council. He is the Technical/Operations Manager at JV Global Ltd, a world leader in manufacturing roll-formed steel building products.

Keith has over 30 years experience across steel production and the construction industry. His previous roles have included Sales Manager at Roofmart WA, General Manager of PT. Binder Indonesia and State Manager at Binder Engineering.

As Chairperson of the WA Chapter, Keith will focus on supporting the long term growth and development of the steel frame industry in WA. "I am deeply passionate about the steel frame industry not only in this state but across the globe," said Keith. "I look forward to channeling that energy into my new Chairperson role as I continue to promote the advantages of steel in the national and international marketplace," he concluded.

Keith holds qualifications in Blacksmithing and Welding.

NASH'S NEW VICE PRESIDENT
MARK ECKERMANN

Mark Eckermann was elected Vice President of NASH at the Annual General Meeting in November 2006. Mark is the Market Development Manager for steel framing at BlueScope Steel, Port Kembla New South Wales

Mark completed his degree in Materials Engineering at the University of Wollongong whilst a cadet with BHP Steel (now BlueScope Steel). After graduating, Mark was based at the Sydney Sales Office and has worked as Business Analyst, Account Manager and NSW Building Market Coordinator over his 11 year career.

Mark offers NASH his expertise in production, technical development, sales and marketing.

CHAPTER NEWS

All the NASH Chapters held meetings in May and early June and all were well attended. Members were briefed on the preliminary findings of the NASH Qualitative Questionnaire (NQQ) and were introduced to the Quantitative Survey. Discussions also focussed on training and licensing.

The SA Chapter meeting was held on the same day as the National Council meeting with councillors taking the opportunity to attend and meet the local members. Later that evening a successful NASH Standard Seminar was held with 85 people attending. The Seminars already held around Australia have demonstrated a strong interest in steel framing and a hunger for easy to use and relevant information.

The WA Chapter has held a number of meetings. Roger Piggott of Trustek was elected as Vice Chairperson after the resignation of Chris Sampson.

Did you know?

Sensis reported that Kit Homes was the fifth most searched subject on their website in April.

First, second, third and fourth were Wilfred, National Archives of Australia, Candice Falzon and the Cricket World Cup.

MEMBERS

NASH welcomes the following new members:

Company	Chapter	Activity	Contact	Location
Steeline Metal Framiing Systems	QLD	Steel frame fabricator	Peter Peeters Robert King	Slacks Creek QLD
Trustek	WA	Steel frame fabricator	Roger Piggott	Coverdale WA
Nine73 Constructions	WA	Supply of labour for erection of steel frames and trusses	Ben Gow	Mt Hawthorn WA

Ken Watson
Executive Director