



NATIONAL PRECAST
CONCRETE ASSOCIATION AUSTRALIA

Precast Concrete in Australia: Industry & Association

Sarah Bachmann



Australian Precast Concrete Industry



Products supplied for:

- Buildings
- Civil Construction
- Landscaping & Municipal Works



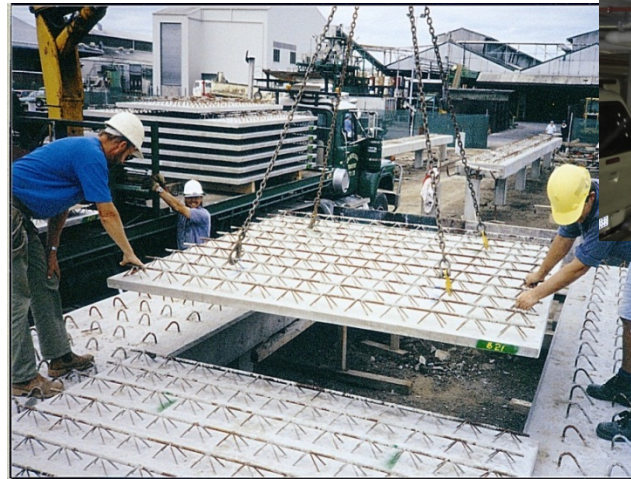
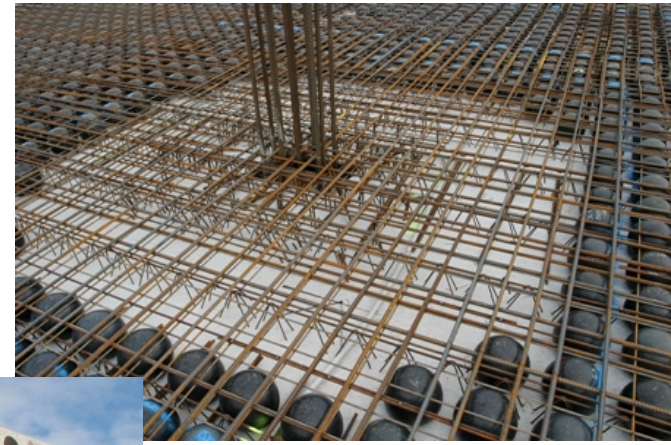
Walling

- Sandwich panels
- Single layer panels
- Hollowcore
- Glass reinforced panels



Flooring

- Hollowcore
- Beam & infill (Ultrafloor)
- Permanent formwork (Transfloor & Humeslab)
- Beams
- Bubbledeck



Columns & Beams

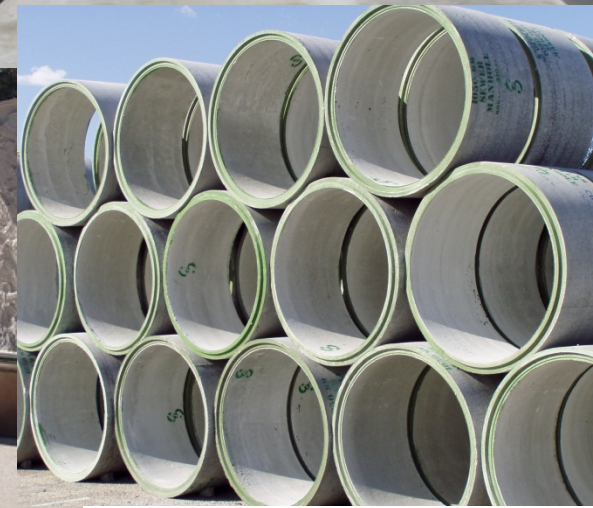
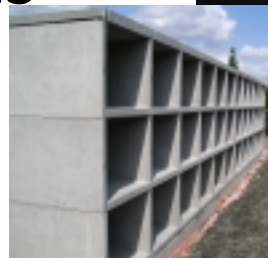


Service Cores, Stairs & Seating Plats



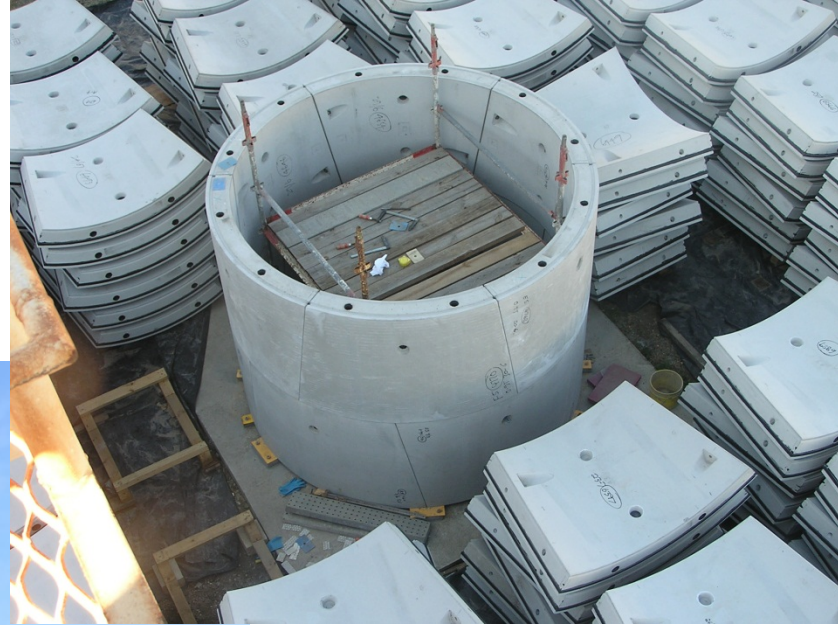
Lanscaping & Municipal

- Marine elements
- Retaining walls
- Culverts
- Pipes
- Monuments
- Noise walls
- Crypts
- Tanks
- Street Furniture



Civil works

- Bridges
- Arches
- Piles
- Safety barriers & kerbs
- Towers & poles
- Drainage products



Finishes

- Off-form (coloured, painted and stained)
- 3D (form liners, tiles, bricks, void formers etc)
- Etching
- Grit (sand) blasting
- Honing & polishing
- Exposed aggregate



National Precast Concrete Association Australia

Promoting the use of precast,
representing the industry and
providing services to Members.



Mission Statement

To be the recognised agency of the Australian precast concrete industry promoting and representing manufacturers of high quality factory-made precast concrete components and promoting precast concrete as the material of choice to the building and civil construction industry



The image shows a document titled "Mission Statement" for the National Precast Concrete Association Australia. The document features a blue and red color scheme. At the top right, there is a logo for "NATIONAL PRECAST CONCRETE ASSOCIATION AUSTRALIA" and the website address "www.nationalprecast.com.au". The main text of the mission statement is as follows:

Mission Statement

To be the recognised agency of the Australian precast concrete industry promoting and representing manufacturers of high quality factory-made precast concrete components and promoting precast concrete as the material of choice to the building and civil construction industries.

This is achieved by:-

- promoting Members' products through the website, publications and exhibitions
- representing the precast concrete industry to government and other authorities
- participating in industry-related technical activities including developing and improving standards and specifications
- providing technical advice to specifiers and potential clients
- referring Members to specifiers and potential clients
- conducting training and information events
- providing resources to tertiary education institutions
- promoting best-practice in occupational health and safety in the workplace
- promoting best-practice in product design and manufacturing processes
- sourcing and disseminating new and relevant industry information
- creating opportunities for Members to network among themselves and with others in the construction industry.

At the bottom right, there is a red banner with the slogan "Making precast first choice." The word "mission statement" is written vertically on the left side of the document.

Resources

- **2 full-time staff**
- **1 part-time consultant**
- **\$300,000 - \$500,000pa turnover**

Membership 2003

- **22 Corporate** (Australian manufacturers)
Fee: turnover based A\$3,000 - \$20,000pa
- **22 Associate** (suppliers)
Fee: flat rate A\$5,000pa
- **2 Overseas** (overseas manufacturers)
Fee: flat rate \$1,500pa

Membership 2011

- **20 Corporate** (Australian manufacturers)
Fee: A\$3,000 - \$25,000pa – turnover based
- **27 Associate** (suppliers) Fee: A\$5,500pa
- **6 Professional Associate** (eg architects, engineers)
Fee: A\$2,000pa
- **5 Overseas** (overseas manufacturers) Fee:
\$1,500pa
- **3 Affiliate** (affiliated organisations eg universities,
overseas precast associations) Fee: A\$2,000pa

2003: mainly Technical focus (advice & representation)

NATIONAL PRECASTER NUMBER 33 • DECEMBER 2003
NATIONAL PRECAST CONCRETE ASSOCIATION AUSTRALIA

PERTH'S Exciting New Convention Centre

The \$200M Perth Convention and Exhibition Centre is a world class development located in the Perth Western Australia bounded by the Swan Street, Burness Bridge Interchange and the Perth CBD. It sits on reclaimed land previously owned by the Perth City Council and used as a car park. The adjacent bus park will become an integral part of the overall development.

The project consists of an Exhibition Halls (80m x 40m), Concourse, Primary Hall and nine self contained car parking covering an area of approximately 30,000sqm.

Part of the project also includes an off ramp bridge and a six level elevated walk.

The entire floor for the Halls is suspended to provide underfloor car parking and is designed to take a 20kPa live load for access for exhibition equipment.

Design consideration needed to take into account the proximity of the project, poor foundation conditions, restricted site and an extremely tight construction program. In addition the number of car bays needed to be maximised.

Multiple Constructors proceeded to review alternative forms of construction including conventional reinforced concrete, post tensioned flat slab, structural steel composite and precast concrete in order to minimise activity on site and maximise speed of construction.

Selta Corporation Ltd the consulting engineers and Multiple worked together to develop a precast concrete solution. After various alternative precast schemes were proposed and priced the most economical and efficient solution was presented to the builder for consideration.

The solution comprises a typical precast concrete member T-beam, 30.8m long, 2.4m wide and 400mm thick with 170mm thick flanges. Hollowcore floor panels 300mm and 400mm thick spanning 4m were used on the main deck level. Post tensioning cables were placed parallel to the beam up-cast together with reinforcement and tied together with a structural concrete topping. (refer Fig 2 for details of this unique precast connection).

The aim of the proposal was to allow manufacture and storage of the precast off site well ahead of site requirements. This would ensure erection could proceed at a rate to suit the construction program.

Early award of the supply contract enabled the precaster to upgrade its production facilities and procure new solutions for the DC300 and DC400 sections.




● Hollowcore floor panels (up to 300mm thickness)	3054 No.
● T-beams, Shell Beams and Girders (up to 2.4m length)	400 No.
● Slabbing Mats	253 No.
● Wall Panels	56 No.
● Retaining Walls	47 No.
● Parapets	84 No.

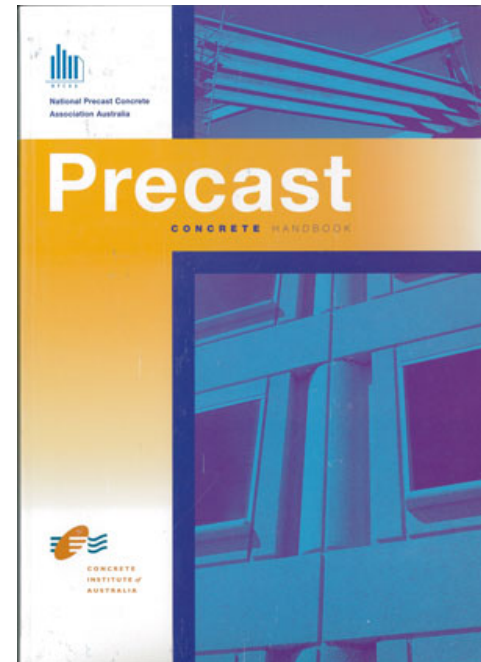
Fig 2. Details of precast concrete connection of Exhibition between precast beams, columns and floor panels.



National Precast Concrete Association Australia

Precast

CONCRETE HANDBOOK



CONCRETE INSTITUTE OF AUSTRALIA

Marketing: rebranding

Style Guide



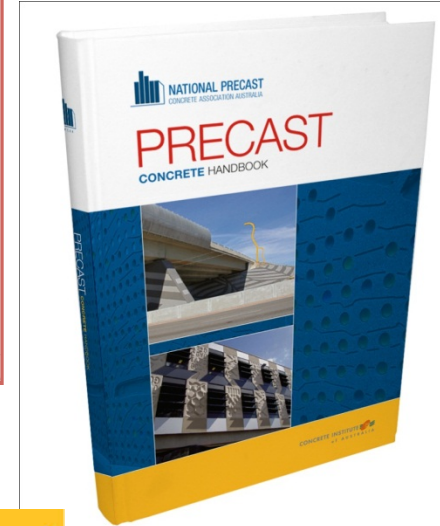
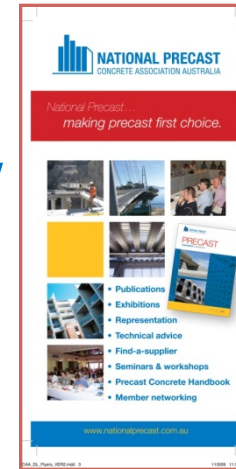
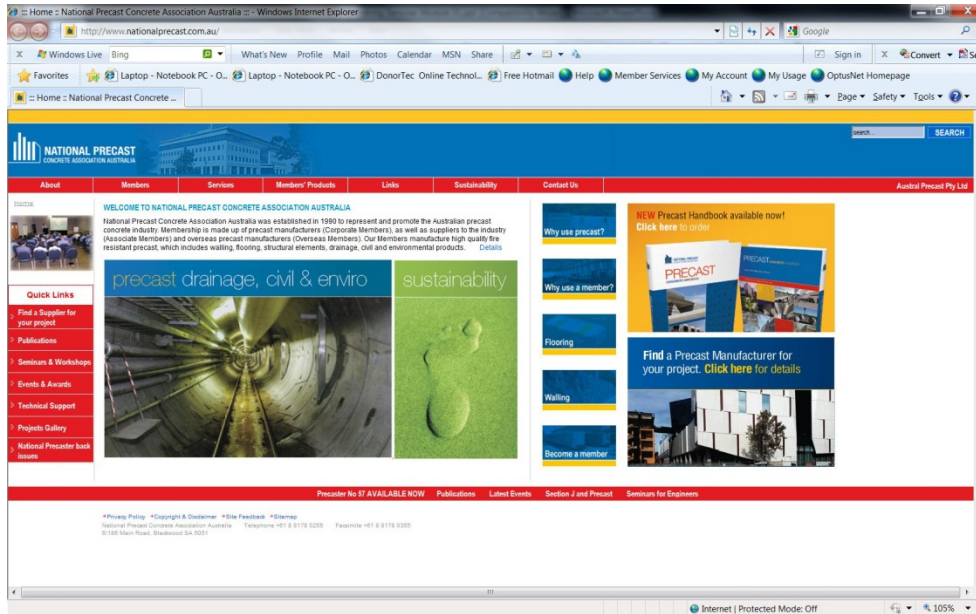
Old Log



Revised Logos



Marketing: brand consistency



NPCAA cements relationship with exhibitions

The National Precast Concrete Association (NPCAA) cements relationship with exhibitions, providing a platform for the industry to showcase its products and services. This relationship is crucial for the industry's growth and innovation.

Advantages of exhibitions: Exhibitions provide a unique opportunity for the industry to showcase its products and services to a large audience of potential customers and suppliers. This is particularly important for the industry as it is a relatively new and growing market.

Benefits of exhibitions: Exhibitions provide a platform for the industry to showcase its products and services to a large audience of potential customers and suppliers. This is particularly important for the industry as it is a relatively new and growing market.

Challenges of exhibitions: Exhibitions can be expensive and time-consuming, and they can be difficult to organize. However, the benefits of exhibitions far outweigh the costs.

Exhibitions, seminars and workshops - 2006

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Exhibitions - 2006

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National Precast... making precast first choice.

Use a National Precast Member... manufacturing high quality factory-made precast.

Members have...

- Minimum 3 years' experience
- Purpose-built facilities
- QA processes
- OHS systems
- Technical competence
- Financial stability
- Environmental compliance.

National Precast... making precast first choice

- Publications
- Exhibitions
- Representation
- Technical advice
- Find-a-supplier
- Seminars & Workshops
- Precast Concrete Handbook
- Member networking.

www.nationalprecast.com.au



National Precast ... making precast first choice

NATIONAL PRECAST
CONCRETE ASSOCIATION AUSTRALIA

Precast is ...

- Easy
- Fast
- Safe
- Economical

- Green
- Sustainable
- Fire resistant

- High quality
- Durable
- Versatile

www.nationalprecast.com.au

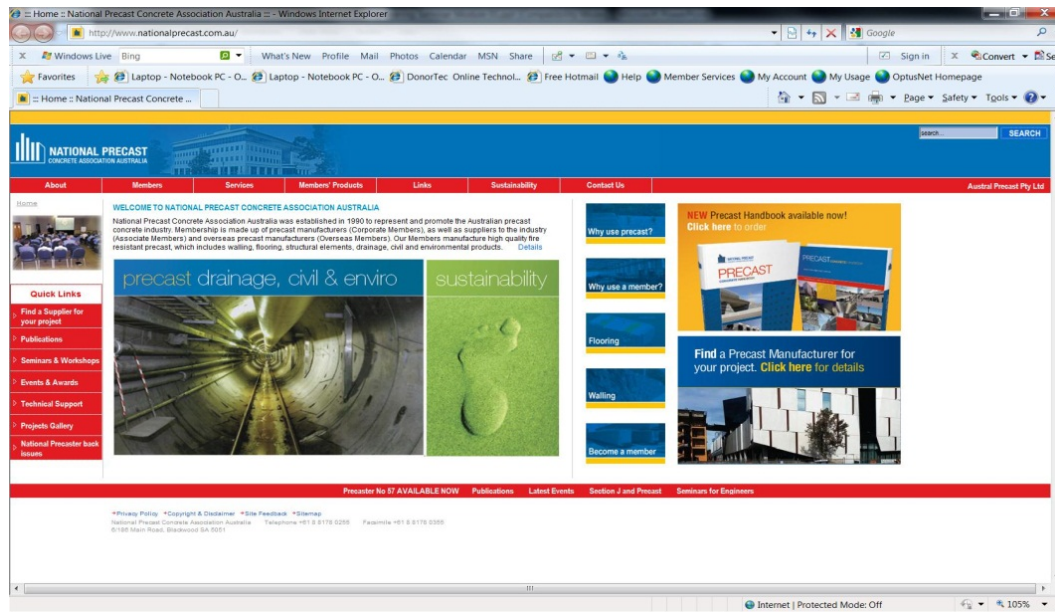
Website

www.nationalprecast.com.au

Member only area

Web based database

Find-a-Supplier search facility



Editorials in industry publications

What are we promoting?
The Association, our
services, our Members,
Members' projects,
benefits of using precast.



Ads in industry publications

Negotiated free advertisements in industry publications

NATIONAL PRECAST
CONCRETE ASSOCIATION AUSTRALIA

Precast concrete products:
• Sustainable / energy efficient / flood resistant / fire resistant
• termite resistant / durable / earthquake resistant
• architecturally versatile / safe / fast / acoustic benefits

Refer to our website for:
• Member contact details
• Product information
• Technical support
• Precast Concrete Handbook
• National Precaster

And... to find out why precast is sustainable!
www.nationalprecast.com.au

Thinking precast?
Use a National Precast Member

NATIONAL PRECAST
CONCRETE ASSOCIATION AUSTRALIA

www.npcaa.com.au

NATIONAL PRECAST
CONCRETE ASSOCIATION AUSTRALIA

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*National Precast...
making precast first choice.*

www.nationalprecast.com.au

Publications

Precast Concrete Handbook - edition 2

National Precaster - 4pa

Detailing Manual

Sandwich Panel Recommended Practice

Technical notes

R-value calculators



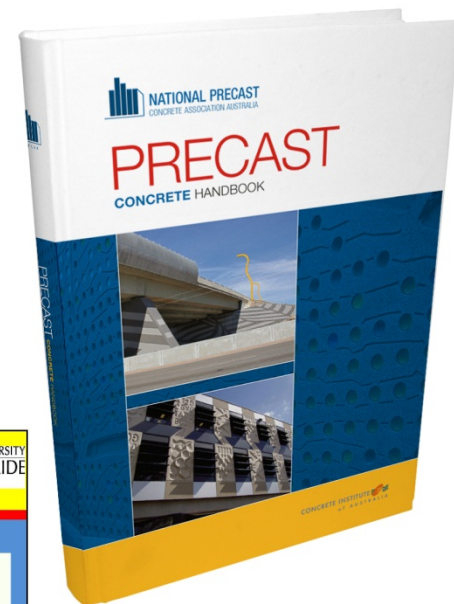
NFCAA cements relationship with exhibitions


The National Precast Concrete Association (NFCAA) calls for attention to architectural and engineering exhibitions for the building and design industries. Successful and profitable exhibitions are essential for the success of the building and design industries. Exhibitions are an important part of the marketing and sales process for precast concrete products. They provide a unique opportunity for precast concrete manufacturers to showcase their products and services to a wide range of potential clients and partners. Exhibitions also provide a valuable opportunity for precast concrete manufacturers to network with other industry professionals and to gain valuable feedback from their customers.



Pre-cast concrete and the building industry


The building industry is a key market for precast concrete. Precast concrete offers a range of benefits for building owners and architects, including speed of construction, quality, and cost-effectiveness. Precast concrete is also a sustainable building material, as it can be recycled and reused. Precast concrete is used in a wide range of building types, including residential, commercial, and industrial buildings. Precast concrete is also used in infrastructure projects, such as bridges, tunnels, and water treatment plants.





Precast Concrete Sandwich Panel Mass Enhanced R-value Calculator

Project: Smith House, Front Lane, Concorde, NSW



Material	
External Layer Thickness (D1) mm	60 Concrete (Standard)
Insulation Thickness (D2) mm	50 Expanded Polystyrene (EPS) M
Internal Layer Thickness (D3) mm	150 Concrete (Standard)

BCA Climate Zone: 5 See Climate Map

Building Class: 5 See Notes

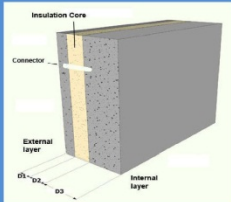
Shading Angle (degrees): 0 See Notes

TOTAL R-value of this Wall: 1.61 (m2K/W)

Mass Enhanced R-value of this Wall: 2.83 (m2K/W) See Notes

Surface Density of Wall: 505 (kg/m2) See Notes

Achieves BCA basic Required R-value: Yes (1.30 (m2K/W)) See Notes



NOTE: The mass enhanced R-value applies only to concrete sandwich panel wall constructions of the form shown here. It is not to be taken as a general value for walls of similar surface density.

Refer to NFCAA Industry Standard at: www.nfcaaconcrete.com.au

Version Beta 2.0 © 2011 National Precast Concrete Association Australia

Note: It is the user's responsibility to use this calculator appropriate to their situation.

[Print Certificate](#)

Education

**Precast for
Engineering
Graduates Seminars**

Safety Seminars

**Seminars at
exhibitions**

**Enterprise Connect
Seminars**



OH&S

Safety Snapshots



Review of National Code of Practice





Member services

- **Member Emails**
- **Project reviews in National Precaster**
- **Website listing**
- **Referral Service**
- **Meetings**
- **Members' Education**
- **Dinners & Social Tours**
- **Members'-only Factory Tours**
- **Joint Meetings with PCNZ**
- **Participation in Exhibitions & Seminars**
- **Discounted publications**
- **Discounted seminar rates**



Meetings

One day duration

**Quarterly in
different States**

Group Meetings

**Members'
Education**

**Preceded by one
day Board Meeting**

Dinners





Social Tours

Joint meetings with Precast New Zealand

Every 2 years

Alternate between
NZ and Australian
venue



Summary

Defined reason for being: Mission Statement

Consistent brand image

Membership growth, Involvement by specifiers

Industry presence (ads, editorials, seminars & exhibitions)

Engagement at a national level with industry counterparts

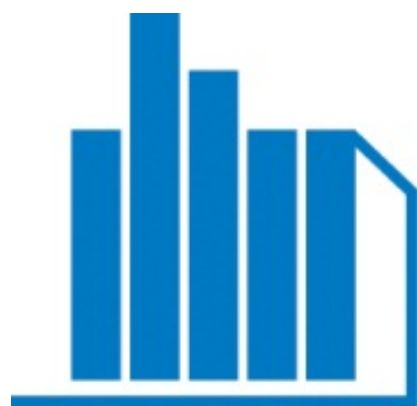
Highly functioning website

Seminars to educate specifiers and users

Technical advice and representation

OHS presence

Growing market share



NATIONAL PRECAST

CONCRETE ASSOCIATION AUSTRALIA