

ptNEWS

Newsletter 1 - 2015



PRESIDENTS REPORT

The first half of this year has seen some extensive work carried out by the Technical Committee of the PTIA.

The efforts of the Technical Committee have been directed towards the preparation and presentation of papers and national seminars on Post-Tensioning Design and Construction, held in cooperation with the Concrete Institute of Australia. The seminars were held late June early July in Sydney, Adelaide, Perth, Brisbane, Melbourne and Hobart. The hard work that has gone into the preparation of these seminars by the Technical Committee is to be commended.

In addition to the above seminars, the PTIA has organised a Melbourne Industry forum where networking and several presentations were held with a range of people related to the post-tensioning industry.

It is great to see some momentum building within our association with the likes of the above mentioned seminars and forums where the potential and advantages of post-tensioned systems can be discussed.

NEW CONTACT DETAILS FOR PTIA

New phone numbers for PTIA

Following the relocation of the PTIA registered office, there has been a change in the phone and facsimile numbers. The new numbers follow:

Telephone: 02 8767 6292

Facsimile: 02 8767 6291

The postal address remains

PO Box 861, Five Dock, NSW 2046.

Email and website addresses remain unchanged.

New Directors on PTIA Board

PTIA is pleased to announce the appointment of two new Directors late last year.

They are:

Don Fraser, Interspan

James Woods, STS Systems

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PROJECT REPORTS

Pacific Fair

Location: *Broadbeach, QLD*

Working with Westfield's Scentre Group, AusPT is responsible for the delivery of post-tensioning and reinforcement services on the extension to the existing shopping centre complex and car park.

With a strong crew of 30+ employed on site, installing 1050 tonne of post-tensioning plus reinforcement over 160,000 square metres of formwork.

AusPT has implemented unique safety initiatives during this project, that we have previously won a safety award for from Scentre Group.



Darling Harbour Live

Location: *Sydney, NSW*

AusPT has been contracted by Lend Lease to undertake the post-tensioning works at the Darling Harbour Live project. This site involves the construction of the main convention centre, exhibition halls and theatre.

All three buildings comprise approximately 600 tonne of post-tensioning. Darling Harbour Live is the first major project AusPT has undertaken in Sydney.

Eastland Shopping Centre

Location: *Ringwood, Victoria*

The construction of Eastland Shopping centre in Victoria is managed by Probuild. This project involves 1060 tonne of post-tensioning over 140,000 square metres.

This large construction is an extension of the existing retail space and car park. At its peak, AusPT has had 30+ men employed to complete works on site.

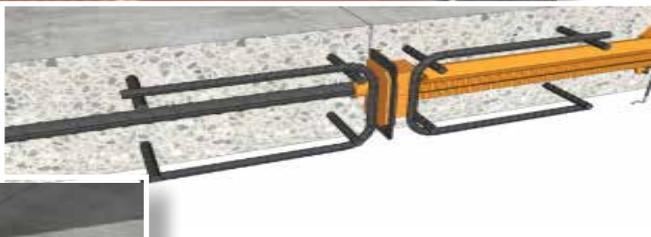
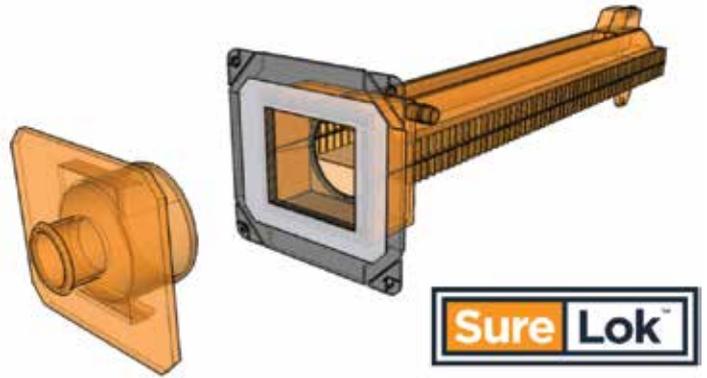
This project consists of approximately 10% multi strand stressing which has required careful planning and detailing to ensure continuity of work without having a negative impact on the overall construction program.



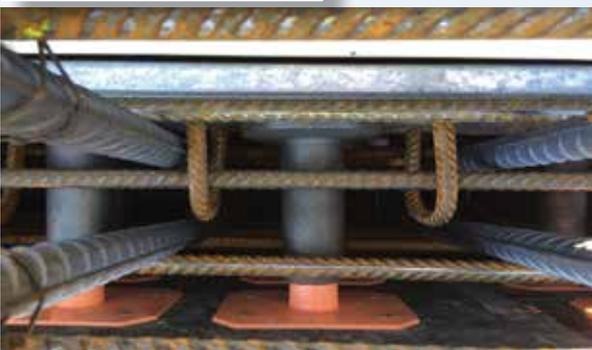
SURELOK™ LAUNCHED

After three long years of innovative development, research and testing, Refobar Australia recently launched their latest product invention, SureLok™.

SureLok is the complete engineered solution for Temporary Movement Joints (TMJ) in Post-Tensioned structures. TMJs have been an unresolved and difficult problem for decades due to the complexity of the joint type itself, requiring two fundamental functions of initial movement and permanent locking. The problems of past options contain a mix of both technical and practical issues that have led to these options being both unreliable and expensive. Previous options for TMJs include "PT Duct" and "Lockable Dowel" systems. The PT Duct system along with its site fabrication method and major difficulties in grouting the joint, prove the system to be unreliable, ultimately failing the two fundamental functions of initial movement and permanent locking in many cases.



Above, SureLok Slab to Slab (SS) and left, Slab to Wall (SW).



The Lockable Dowel resolves the first fundamental function of initial movement, however relies on joint grouting and integrity for permanent locking, whilst being an expensive material choice. The combined problems from both systems can lead to concrete cracking, spawling and long term maintenance issues, as well as questions regarding lateral force transfer for overall building stability and integrity.

SureLok and all of its unique physical features represent the engineering complexity developed into the product to create the first and only sealed product in the world. SureLok has been engineered to provide a solution that meets all design requirements and is fast and simple to install in order to achieve the ultimate goal of raising the quality, safety, reliability and performance of TMJs in concrete buildings.

THE SOLUTION

The product - SureLok - engineers an intelligent void with a pressure sealed system bridging the joint, whilst allowing horizontal movement, before being locked together with a typical cement grout mixture used for post-tensioned tendons. The intelligent void ensures the dowel contains cover for durability and fire within the sleeve and across the joint without having to rely on the joint itself being sealed or grouted. Our team has carried out a number of presentations, including one to the Concrete Institute of Australia (CIA) to test the commercial viability within the industry. The response has been extremely positive, recognising SureLok's place in the market and more specifically for temporary movement joints (TMJ) within post-tensioned buildings.

Frequent feedback raised the equally important need for a Slab-to-Wall (SW) option to be available. As a result, we have accelerated the development of SureLok SW, completing its concept design well ahead of schedule. Initial prototyping phases were completed utilising the latest technology in 3D printing to fast track the development process.

With intense demand, SureLok SW has since completed University testing, is now available to the market and already being installed on project sites (refer pictures). Having both SureLok (SS) and (SW) available completes the SureLok application range, covering all situation requirements for TMJ's. Further expansion for various dowel sizes will also be made available this year.



WE'VE CHANGED FOR THE BETTER

Some exciting changes have occurred with Structural Systems Limited and associated entities including ROCK Australia rebranding into one unified company called SRG Limited. Since November 2014 the amalgamation of these businesses has brought with it a clearer vision for its customers - "Making the Complex Simple".

This means that SRG Limited can now bring their combined expertise, skills and technical excellence in an integrated and precise way to all their projects.

For further information on SRG and the range of services offered please visit srglimited.com.au.

PTIA: BOARD OF DIRECTORS

The current Directors of PTIA are:

President: Andrew Castle, ABC Consultants

Vice President:

Craig Kilpatrick,
Australian Prestressing Services (QLD)

Secretary: Max Schweiger, SRG

Directors: Don Fraser, Interspan

Bruce Grady, OneSteel

Andy Kiker, Australian Post-Tensioning

Haydn Kirrage,
Australian Prestressing Services

Michael O'Neill,
Australian Prestressing Services

Brad Parkinson, SRG

Russell Wheeler, Refobar Australia

James Woods, STS Systems

Technical Seminars

PTIA prepared and presented a series of papers at the recent Concrete Institute of Australia seminars series Post Tension Design and Construction. The seminars were held in Sydney, Adelaide, Perth, Brisbane, Melbourne and Hobart between 23 June and 2 July with a total attendance of some 210 people. The presentations were:

Post-tension design by Prof Peter Dux

Post-tension Construction by Haydn Kirrage (APS) and Shaun Sullivan (SRG)

Software by Shaun Sullivan (SRG)

The papers and presentations by Haydn Kirrage and Shaun Sullivan will be posted to the PTIA website in the near future.

Training Course

The PTIA Monostrand Post-Tensioning Training course (CPCCSF3002A), including assessment for Recognised Prior Learning (RPL) can be accessed through the "News and Events" page of the PTIA website - www.ptia.org.au

Networking Events

- Following its Board meeting in Melbourne on 14 July, PTIA held a PT Industry Forum at the Carlton BrewHouse in Abbotsford for some 45 members and others. Most of the evening focussed on networking between guests and PTIA Directors, with some short presentations on recent activities in the PT industry included.
- PTIA will hold its Annual General Meeting in Brisbane on 15 September, and will invite Brisbane based members to the meeting and a social event following.
- The next PT industry forum will be held on 17 November.

Please visit:
www.ptia.com.au
or email:
info@ptia.org.au
for more information



MEMBER COMPANIES

Corporate Members

Australian Post-Tensioning Pty Ltd
Australian Prestressing Services Pty Ltd
(founding member)
Interspan (NSW) Pty Ltd
SRG Pty Ltd (founding member)
Tensioned Concrete Pty Ltd

Associate Members – suppliers

Ancon Building Products
Crosbie National Cement Pty Ltd
OneSteel Wire Pty Ltd
RefoBar Australia
STS Systems Pty Ltd

Associate Members – consulting engineers

ABC Consultants
ADG Engineers (Aust) Pty Ltd
Bornhorst + Ward Pty Ltd
Costin Roe Consulting Pty Ltd
Hyder Consulting Pty Ltd



"ENSURING EXCELLENCE AND ACCREDITATION FOR THE POST-TENSIONING INDUSTRY"

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