afs rediwall®

PVC-based
Permanent formwork
Lightweight, load-bearing

Ideal for basements, columns, blade & party walls,
lift & stair cores, retaining walls as well
as retention tanks

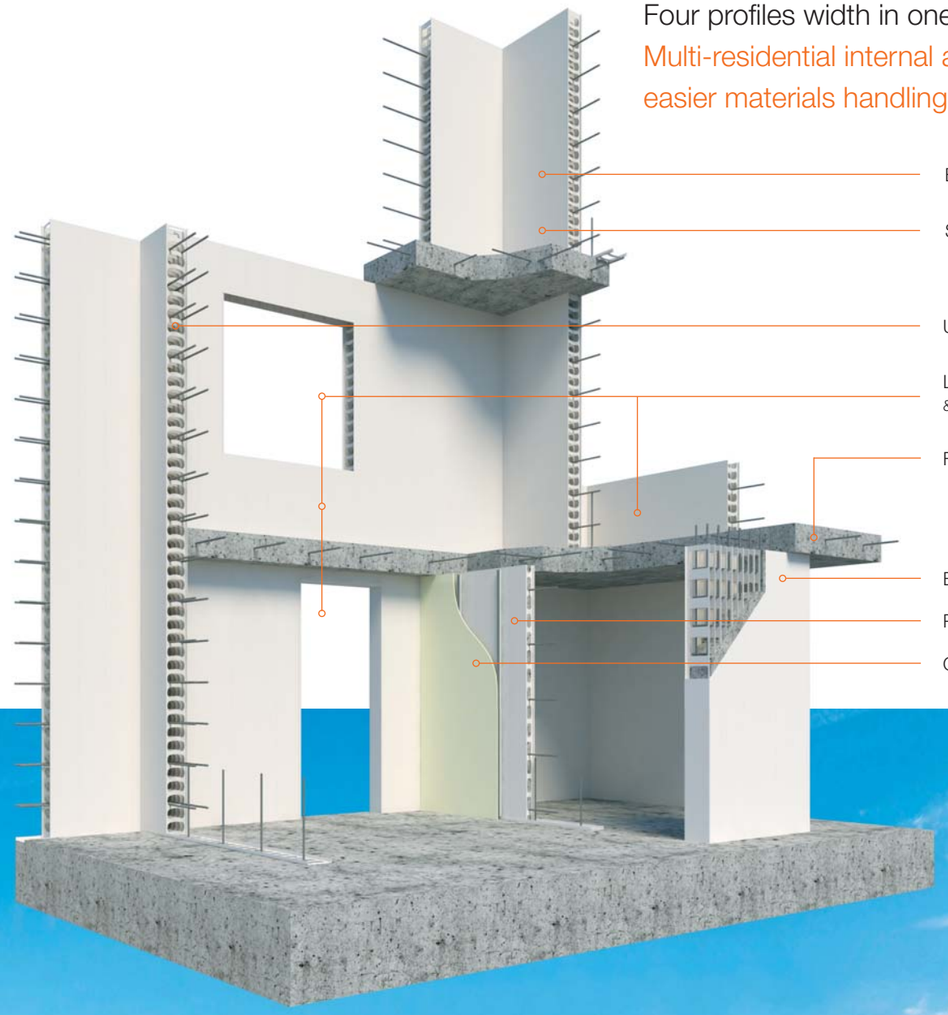
CSR

Permanent formwork walling system for above and below-ground application

AFS Rediwall® is a PVC permanent formwork system and a time-saving alternative to conventional masonry and blockwork. Its precision-extruded components easily interconnect for rapid installation and there is no specialised training needed.

AS3600-compliant, rediwall® is load bearing for multi-level structures providing a consistently clean, even and water-resistant surface that often doesn't require any finishing.

Offered in four profile widths, the rediwall® range solves above- and below-ground walling needs, from basements, columns, party walls, lift/stair cores, through to retention tanks and retaining walls.



110mm, 156mm & 200mm panels feature Speedy-Snap-In™ and Ezy-Fit™ removable corners

256mm panels simply slide in against each other to easily interlock

afs rediwall® offers a broad range of profiles and unique open back Ezy-Fit® corners—making simple work of installation

One system provides the complete above and below ground walling solution

Basements, columns, blade and party walls,
lift & stair cores, retaining walls &
retention tanks

Why architects prefer rediwall®

- System maximises saleable floor space for clients
- AS3600 compliant and water resistant
- Choice of profile widths and comprehensive catalogue of components—one system, one solution
- Panels provide a superior, semi-gloss surface with option for further finishing

Why engineers prefer rediwall®

- Simple reinforcement—single and double
- Full width concrete core thickness
- Simple robust bracing methodology
- Quick reinforcement inspection with Ezy-Fit™ removable corners
- Large holes for optimum concrete placement

Why builders prefer rediwall®

- Significantly quicker floor-cycles, can save days compared to conventional masonry and blockwork
- Significantly less waste and mess than blockwork
- Most economical alternative to a conventional shoring wall available
- Fewer trades needed and sites are kept cleaner and more efficient
- No cranage necessary
- Panels provide a superior, semi-gloss surface with the option for further finishing

Why installers prefer rediwall®

- Panels can be delivered cut-to-size or easily cut down for late changes
- Reinforcement is simple and fast to install and inspect
- Panels can clip or slide together, allowing speed of installation
- Installation is simple to learn and onsite training is available through AFS.

Above and below ground versatility

Speed of construction

Ease of materials handling

Speedy-Snap-In™ panels lock together instantly

Ezy-Fit™ corner panels slide open for access

AS3600 compliant and water resistant

Significant waste reduction

110mm, 156mm, 200mm Speedy-Snap-In™ panels with 90° Ezy-Fit™ removable corners and 256mm slide-together panels for versatile blade walls

Industry-leading innovation for fast, trouble-free installation

The extruded PVC components simply snap or slide readily into place. Assembly is rapid and the resulting wall surface is clean and even.

SYSTEM OVERVIEW

AFS Rediwall® is a PVC permanent formwork system. The extruded components simply snap or slide into place, interconnecting to form load bearing, low maintenance walling.

Installaton of rediwall® can be completed without machinery, doesn't require any specialty trades and its high quality surface needs no additional finishing for most applications.

Suitable as a tough, low-maintenance load-bearing solution for above and below ground application, it is a truly versatile and efficient walling solution.

RW110

Speedy-Snap-In™

Lengths: 2.8m, 3.0m, 3.2m, 3.6m

Accessories:
Ezy-Fit™ Corner, H-Joiner, T-Joiner, Floor Track, End Cap, FC Strip

RW156

Speedy-Snap-In™

Lengths: 2.8m, 3.0m, 3.2m, 3.6m

Accessories:
Ezy-Fit™ Corner, H-Joiner, T-Joiner, J-Track, M/M Joiner, F/F Joiner, Floor Track, End Cap, FC Strip, 115mm Spacer

RW200

Speedy-Snap-In™

Lengths: 2.8m, 3.0m, 3.2m, 3.6m

Accessories:
Ezy-Fit™ Corner, H-Joiner, T-Joiner, J-Track, M/M Joiner, F/F Joiner, Floor Track, End Cap, FC Strip, 115mm Spacer

RW256

Slide in

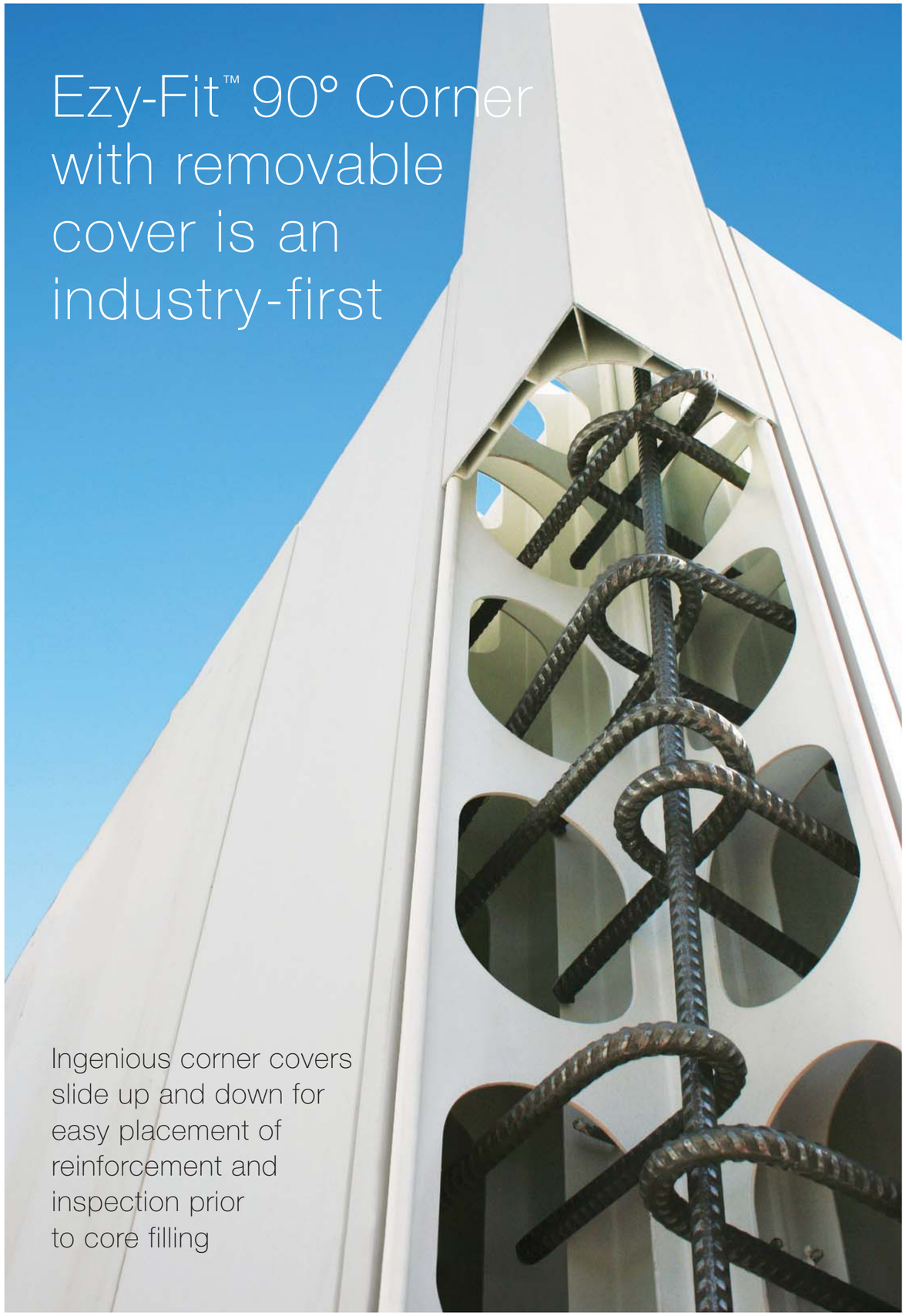
Lengths: 2.8m, 3.0m, 3.2m, 3.6m

Accessories:
End Cap, QuickCap™ End Cap, F/F Joiner, Floor Track, FC Strip

afs rediwall® panels *Interlocking mechanism*		110mm Snap-In	156mm Snap-In	200mm Snap-In	256mm Slide-In
Thickness	Overall	110	156	200	256
	Concrete m^3/m^2	0.105	0.150	0.195	0.251
Application		Basements, party walls, blade walls, retaining walls and retention tanks, service and stormwater pits			Blade walls
Acoustic rating		RW 50 RW + Ctr 45	RW 56 RW + Ctr 50	RW 58 RW + Ctr 53	RW 61 RW + Ctr 54
Fire resistance (FRL)		60/60/60	240/240/240	240/240/240	240/240/240

Product specifications and dimensions are subject to change without notice

Ezy-Fit™ 90° Corner with removable cover is an industry-first

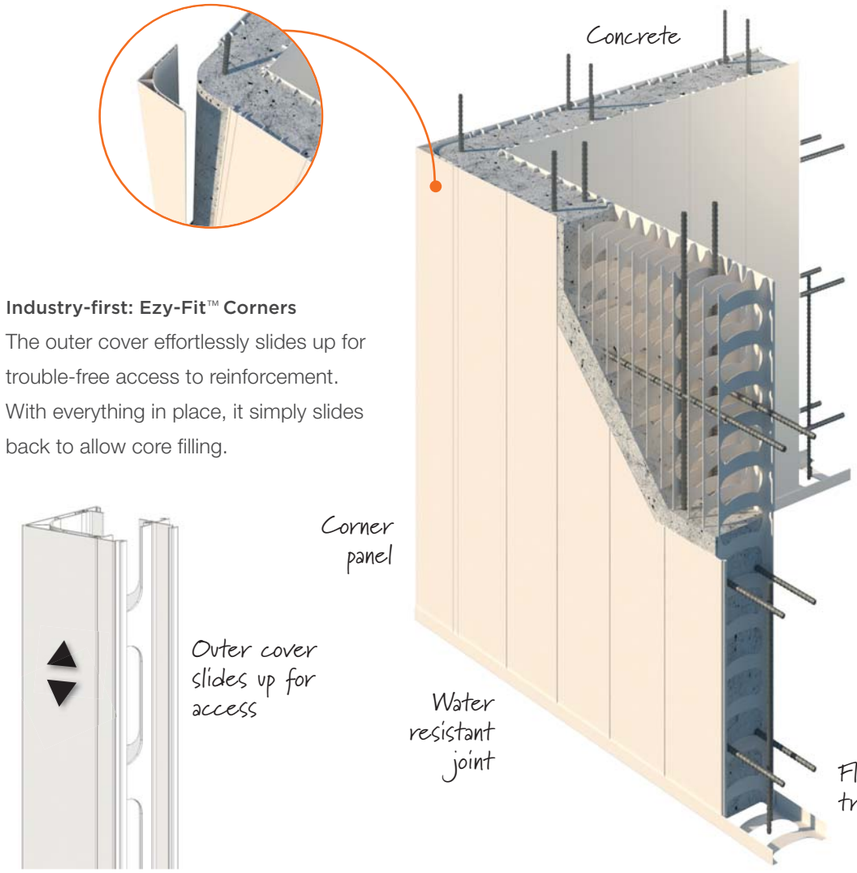


Ingenious corner covers slide up and down for easy placement of reinforcement and inspection prior to core filling

Revolutionary Ezy-Fit™

Open-back corner gives unobstructed access for trouble-free installation of reinforcement bars.

Certifying engineers simply remove the cap to approve placement prior to pouring concrete—that's not possible with conventional systems.



Industry-first: Ezy-Fit™ Corners

The outer cover effortlessly slides up for trouble-free access to reinforcement. With everything in place, it simply slides back to allow core filling.

Comprehensive walling system

The rediwall® system offers an exhaustive range of accessories—specific to each profile width—including everything you need to make curved and straight walls, above or below ground.

Corners | H-Joiners | T-Joiners | J-Track | 115 Spacers | End Caps | Floor Track

To learn more visit afsformwork.com.au

Patented Speedy-Snap-In™ system ensures easier, faster installation

Snap, brace, pour

110mm, 156mm and 200mm PVC-based panels simply snap-in together, while the 256mm profiles utilise a slide-together action.

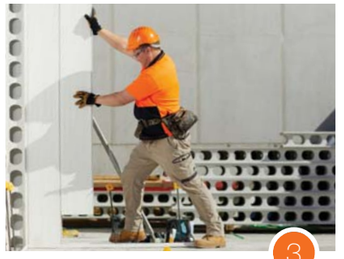
Regardless of the interlocking mechanism, rediwall® panels can be quickly installed and braced for core-filling, without specialised training or trades.

1

Lightweight panels make for easier materials handling

2

Panels effortlessly interlock with snap-in or slide-together mechanisms



3

And simply slide down to seat into the floor tracking and form a wall

4

Bracing

5

Reinforcement placement

6

Core filling

INSTALLATION GUIDE AND AFTER-SALES SERVICE

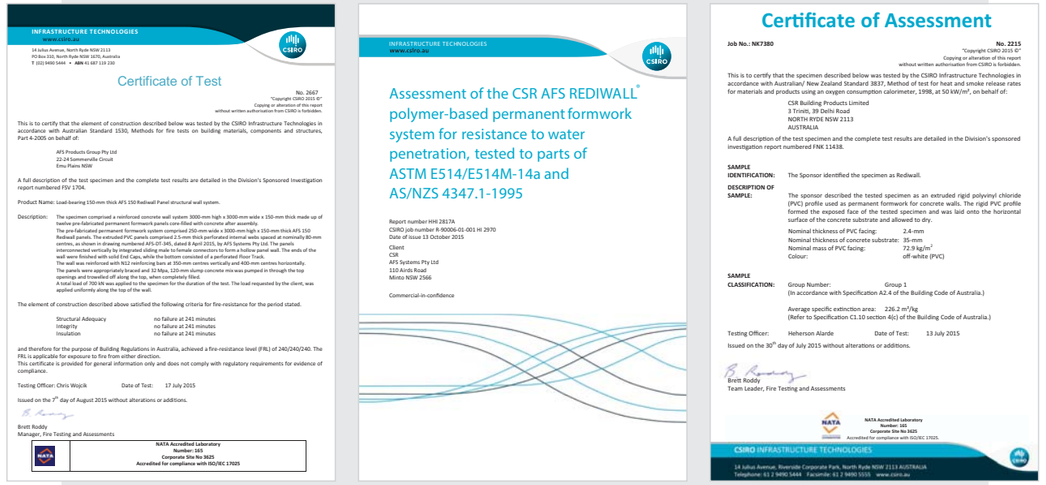
Dedicated project co-ordinators and on site training & assistance

By design the afs rediwall® system can be installed by anyone without training, with the assistance of our Installation Guide.

Additionally, our after-sales service team offers customers hands-on assistance on-site.
Or you can choose an AFS-recommended installer.

To learn more visit
afsformwork.com.au

AS3600 compliant and CSIRO-certified for fire compliance and resistance to water penetration



INFRASTRUCTURE TECHNOLOGIES
www.csiro.au

14 Julius Avenue, North Ryde NSW 2113
PO Box 310, North Ryde NSW 1670, Australia
T (02) 9490 5444 • ABN 41 687 119 230

Certificate of Test

No. 2667
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This is to certify that the element of construction described below was tested by the CSIRO Infrastructure Technologies in accordance with Australian Standard 1530, Methods for fire tests on building materials, components and structures, Part 4-2005 on behalf of:

AFS Products Group Pty Ltd
22-24 Sammarella Circuit
Emu Plains NSW

A full description of the test specimen and the complete test results are detailed in the Division's Sponsored Investigation report numbered FSV 1704.

Product Name: Load-bearing 150-mm thick AFS 150 Rediwall Panel structural wall system.

Description: The specimen comprised a reinforced concrete wall system 3000-mm high x 3000-mm wide x 150-mm thick made up of twelve pre-fabricated permanent formwork panels core-filled with concrete after assembly.
The pre-fabricated permanent formwork system comprised 250-mm wide x 3000-mm high x 150-mm thick AFS 150 Rediwall panels. The extruded PVC panels comprised 2.5-mm thick perforated internal webs spaced at nominally 80-mm centres, as shown in drawing numbered AFS-DT-345, dated 8 April 2015, by AFS Systems Pty Ltd. The panels interconnected vertically by integrated sliding male to female connectors to form a hollow panel wall. The ends of the wall were finished with solid End Caps, while the bottom consisted of a perforated floor Track.
The wall was reinforced with N12 reinforcing bars at 350-mm centres vertically and 400-mm centres horizontally.
The panels were appropriately braced and 32 Mpa, 120-mm slump concrete mix was pumped in through the top openings and trowelled off along the top, when completely filled.
A total load of 700 kN was applied to the specimen for the duration of the test. The load requested by the client, was applied uniformly along the top of the wall.

The element of construction described above satisfied the following criteria for fire-resistance for the period stated.

Structural Adequacy	no failure at 241 minutes
Integrity	no failure at 241 minutes
Insulation	no failure at 241 minutes

and therefore for the purpose of Building Regulations in Australia, achieved a fire-resistance level (FRL) of 240/240/240. The FRL is applicable for exposure to fire from either direction.
This certificate is provided for general information only and does not comply with regulatory requirements for evidence of compliance.

Testing Officer: Chris Wojcik Date of Test: 17 July 2015

Issued on the 7th day of August 2015 without alterations or additions.

Brett Roddy
Manager, Fire Testing and Assessments

NATA Accredited Laboratory
Number: 165
Corporate Site No 3625
Accredited for compliance with ISO/IEC 17025

INFRASTRUCTURE TECHNOLOGIES
www.csiro.au

Assessment of the CSR AFS REDIWALL® polymer-based permanent formwork system for resistance to water penetration, tested to parts of ASTM E514/E514M-14a and AS/NZS 4347.1-1995

Report number HHI 2817A
CSIRO job number R-N0006-01-001 HI 2970
Date of issue 13 October 2015

Client
CSR
AFS Systems Pty Ltd
110 Airds Road
Minto NSW 2566

Commercial-in-confidence

Certificate of Assessment

Job No.: NK7380 **No. 2215**

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without written authorisation from CSIRO is forbidden.

This is to certify that the specimen described below was tested by the CSIRO Infrastructure Technologies in accordance with Australian/ New Zealand Standard 3837, Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter, 1998, at 50 kW/m², on behalf of:

CSR Building Products Limited
3 Trinnis, 39 Delhi Road
NORTH RYDE NSW 2113
AUSTRALIA

A full description of the test specimen and the complete test results are detailed in the Division's sponsored investigation report numbered FNK 11438.

SAMPLE IDENTIFICATION: The Sponsor identified the specimen as Rediwall.

DESCRIPTION OF SAMPLE: The sponsor described the tested specimen as an extruded rigid polyvinyl chloride (PVC) profile used as permanent formwork for concrete walls. The rigid PVC profile formed the exposed face of the tested specimen and was laid onto the horizontal surface of the concrete substrate and allowed to dry.

Nominal thickness of PVC facing:	2.4-mm
Nominal thickness of concrete substrate:	35-mm
Nominal mass of PVC facing:	72.9 kg/m²
Colour:	off-white (PVC)

SAMPLE CLASSIFICATION: Group Number: Group 1
(In accordance with Specification A2.4 of the Building Code of Australia.)

Average specific extinction area: 226.2 m²/kg
(Refer to Specification C1.10 section 4(c) of the Building Code of Australia.)

Testing Officer: Heherson Alarde Date of Test: 13 July 2015

Issued on the 30th day of July 2015 without alterations or additions.

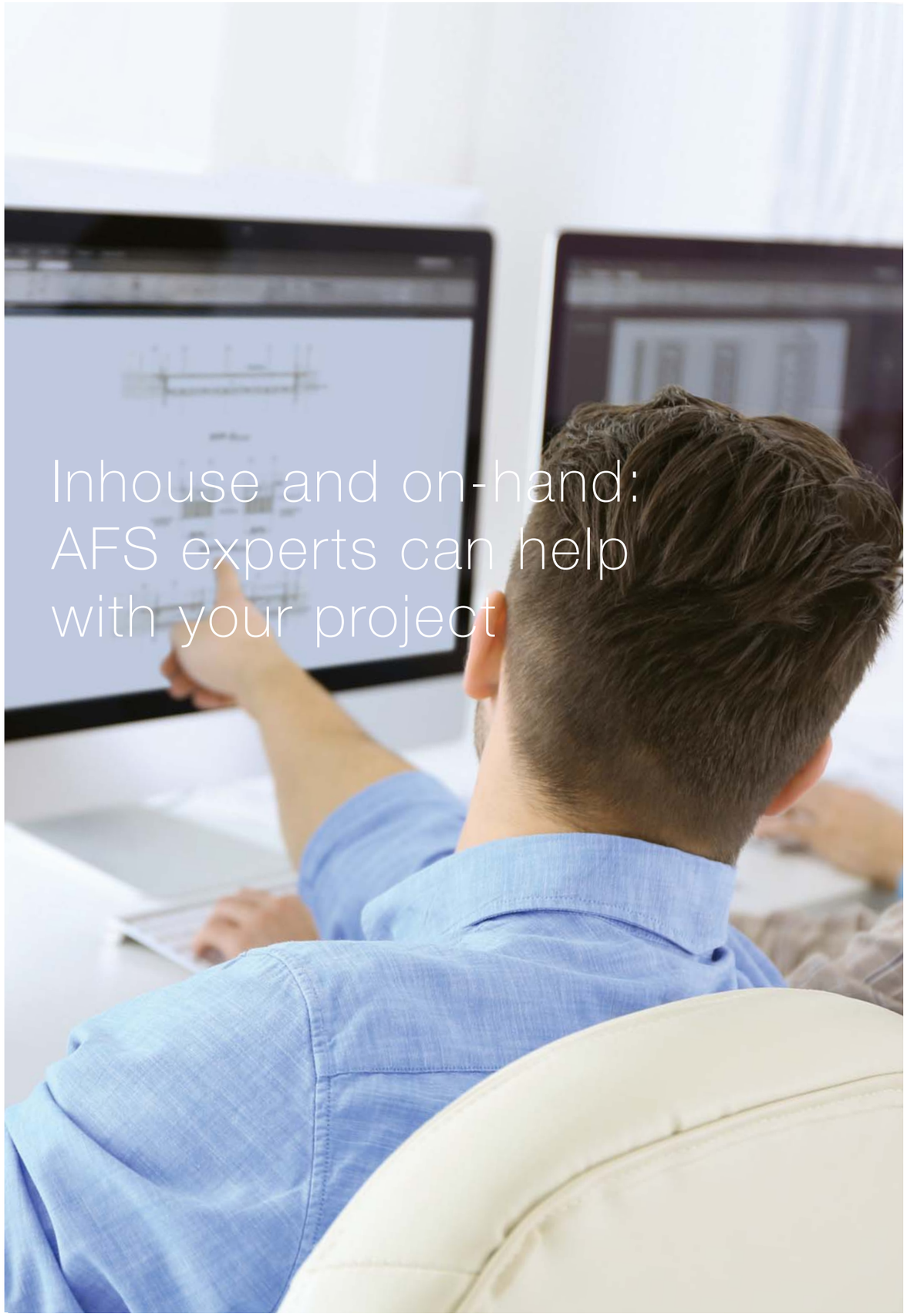
Brett Roddy
Team Leader, Fire Testing and Assessments

NATA Accredited Laboratory
Number: 165
Corporate Site No 3625
Accredited for compliance with ISO/IEC 17025.

CSIRO INFRASTRUCTURE TECHNOLOGIES
14 Julius Avenue, Riverside Corporate Park, North Ryde NSW 2113 AUSTRALIA
Telephone: 61 2 9490 5444 Facsimile: 61 2 9490 5555 www.csiro.au

Lightweight panels provide load bearing walling solutions for any commercial or residential project

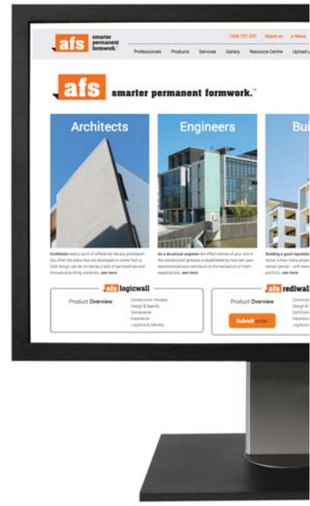
rediwall® can be utilised for above or below ground applications whether straight or curved

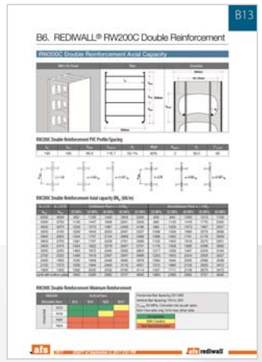


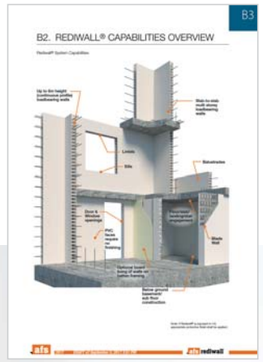
Inhouse and on-hand: AFS experts can help with your project

AFS offers architects, engineers and builders a wealth of technical reference and in-house engineering, drafting and estimating expertise.

This ensures a customer can get the best advice on a project at concept design or when plans are available. Building professionals enjoy how easy the AFS website makes it to upload plans for assessment and estimation.



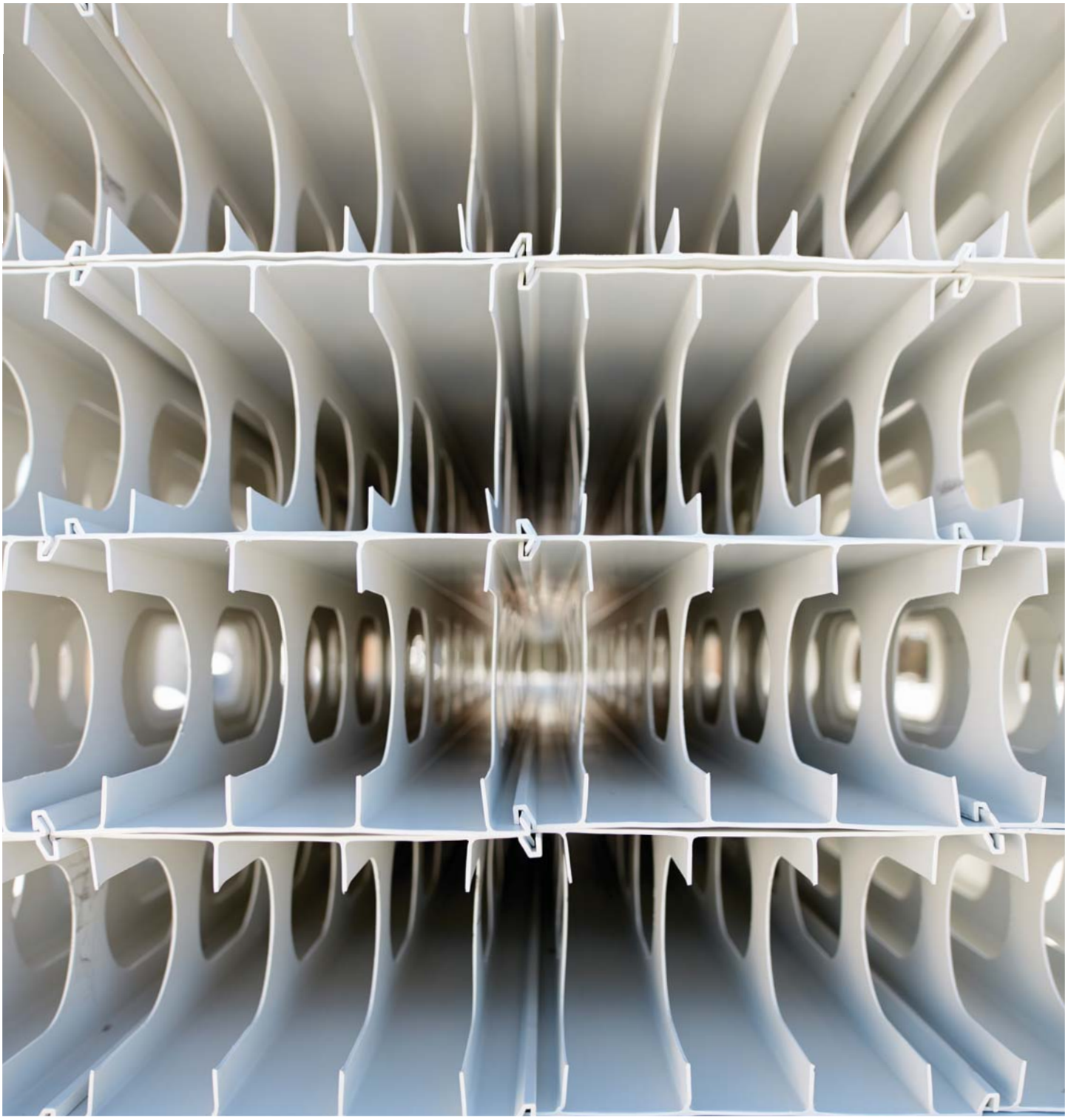




Customers enjoy ready reference to technical manuals, papers and design guides

To learn more visit afsformwork.com.au

PVC-based permanent formwork for basements, columns, blade & party walls, lift & stair cores, retaining walls and retention tanks



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