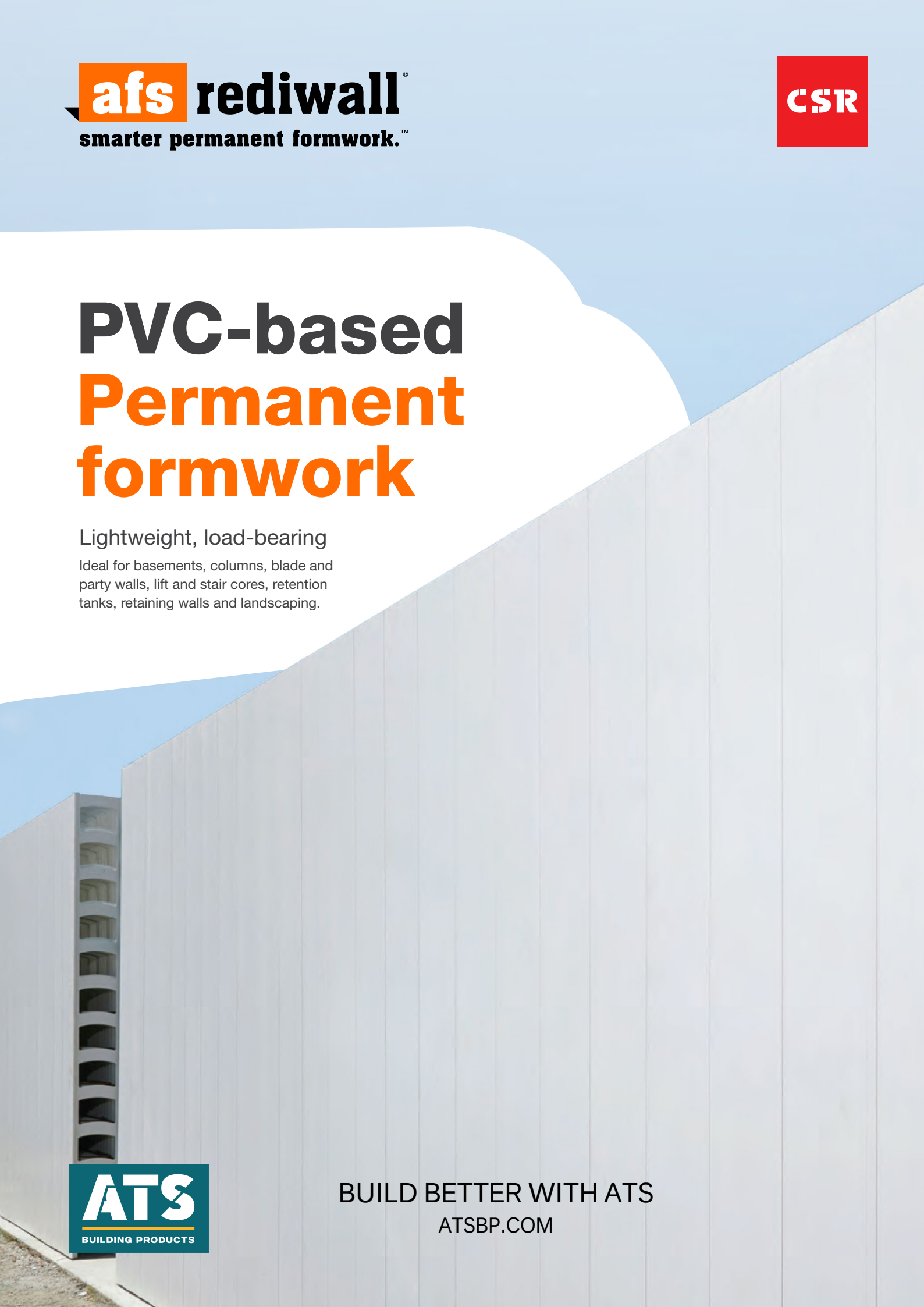
afs rediwall®
smarter permanent formwork.™

CSR

PVC-based Permanent formwork

Lightweight, load-bearing

Ideal for basements, columns, blade and party walls, lift and stair cores, retention tanks, retaining walls and landscaping.



ATS BUILDING PRODUCTS

BUILD BETTER WITH ATS

ATSBP.COM

afs rediwall®
smarter permanent formwork.™

PVC-based 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.

CodeMark Certified and AS3600-compliant, Rediwall® is load-bearing for multi-level structures. It presents a consistently even, water-resistant and durable surface that often doesn't require any finishing.

Largest range of profiles provides the versatility needed for most internal and external walling.

PVC-based and delivered to-size for ease of materials handling and faster installations.

Load-bearing with CodeMark Certification, AS3600 compliance and water resistance.

One system provides the complete above and below ground walling solution.

Efficient, adaptable, and built for performance, AFS Rediwall® simplifies installation while ensuring superior results on every project.

Architects

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

Engineers

- 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.

Builders

- Significantly quicker floor-cycles, can save days even weeks compared to conventional masonry and blockwork.
- No cranage necessary.
- 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.
- Panels provide a superior, semi-gloss surface with the option for further finishing.

Installers

- 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 snap or slide together, allowing speed of installation.
- Installation is simple to learn and onsite training is available through AFS.

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.

RW110 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 Snap-in™

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

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

RW200 Snap-in™

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

Accessories:
Ezy-Fit™ Corner, H-Joiner, T-Joiner, J-Track, F/F Joiner, Floor Track, End Cap, FC Strip, 115mm Spacer, F/F Column Panel, Curve Panel, VBL 200

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, H-Joiner, VBL 256

RW275 Snap-in™

Lengths:
3.0m, 3.6m

Accessories:
End Cap, F/F Joiner, FC Strip, H-Joiner, VBL 250+

RW300 Snap-in™

Lengths:
3.0m, 3.6m

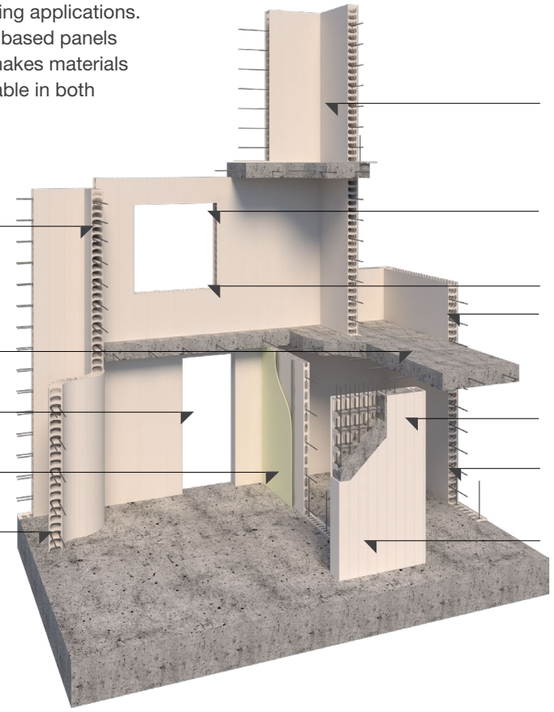
Accessories:
End Cap, F/F Joiner, FC Strip, H-Joiner, VBL 250+

Benefits include:

- Speed of construction
- Ease of materials handling
- Load-bearing structure
- Ezy-Fit™ corner panels slide open for access
- AS3600 compliant
- Fire performance
- Lightweight, durable system
- Above and below ground versatility
- Easily snap or slide panels into place
- CodeMark certified compliance assured
- Water resistant
- Significant waste reduction

Industry-leading range of profile widths.

With six profile widths, the AFS Rediwall® system is the solution for a variety of walling applications. Robust and load-bearing, its pvc-based panels are not crane-dependent which makes materials handling easy. And they are available in both stock or cut-to-size lengths.



	RW110 Snap-In	RW156 Snap-In	RW200 Snap-In	RW256 Slide-In	RW275 Slide-In	RW300 Slide-In
Wall Thickness	105mm	150mm	194mm	250mm	269mm	294mm
Filled Wall Mass (kg/m²)	252	360	466	600	646	706
Application	Party walls		Basements, party and blade walls, retaining walls and retention tanks, service and stormwater pits		Basements, party and blade walls, columns, retaining walls	
Acoustic Rating (Rw) Rw + Ctr	50 45	56 50	58 53	61 54	(>60) >55	(>60) >55
Max Fire Resistance Level (based on CSIRO testing)	90/90/90 (N*f<152 kN/m, Hwu<2700)##	240/240/240 (N*f<333 kN/m, Hwu<3000)##	240/240/180 (N*f/ØNu=0.53)#	240/240/240 (N*f/ØNu=0.54)#	240/240/240 (N*f/ØNu=0.69)#	240/240/240 (N*f/ØNu=0.70)#
Design Axial Capacities# (kN/m)	315	450	2015	2731	2968	3277

Based on AS3600-2018 with Hwu=3000, f'c=32 Mpa UNO
Based on CSIRO Fire Test Report Number FSV1704, SGA Evidence of Suitablity Report 2013/277.65 R1.2
#2 2 layers of reinforcement

AFS Rediwall® Accessories.

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

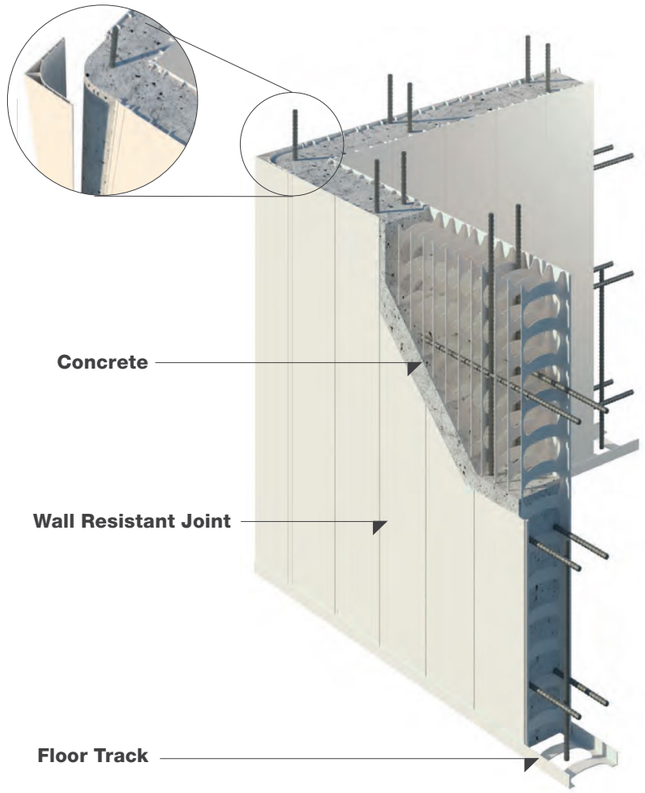
Ingenious corner covers slide up and down for easy placement of reinforcement and inspection prior to core filling.

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

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

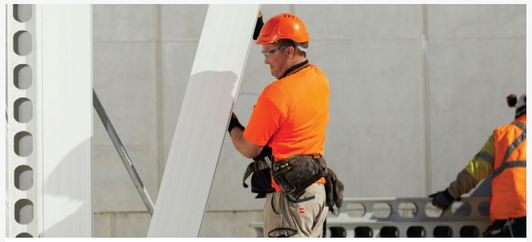
The Rediwall® system offers an exhaustive range of accessories — specific to each profile width, including everything you need to make curved and straight walls, above or below ground.

Patented Speedy Snap-In™ System ensures easier, faster installation.

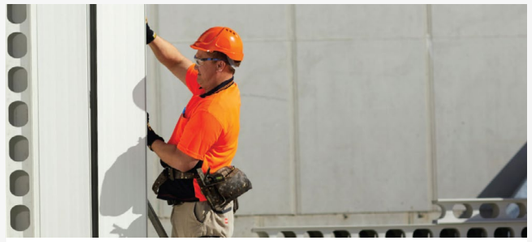
It's as easy as snap, brace, pour!

110mm, 156mm and 200mm PVC-based panels simply snap-in together, while the 256mm, 275mm and 300mm profiles utilise a slide-together action.

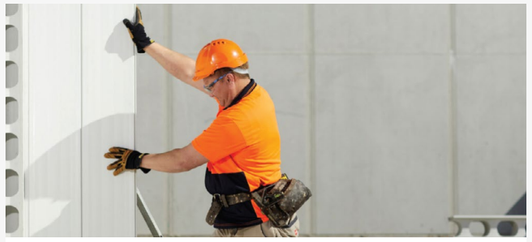
Regardless of the interlocking mechanism, Rediwall® panels can be quickly installed and braced for corefilling, without specialised training or trades.



Step 1 Lightweight panels make for easier materials handling.

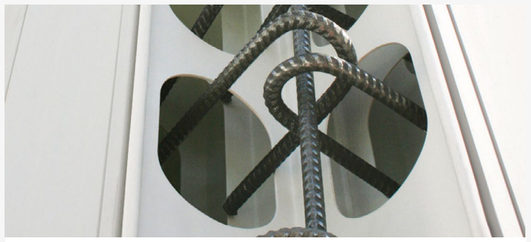


Step 2 Panels effortlessly interlock with snap-in or slide-together mechanisms.



Step 3 And simply slide down to seat into the floor tracking and form a wall.

Step 4 Bracing.



Step 5 Reinforcement placement.

Step 6 Core filling.

After-Sales Service.

Our After-Sales Service team offers customers hands-on assistance on-site.

Installation Guide.

By design the AFS Rediwall® system can be installed with little or no training, using the assistance of our Installation Guide.

AFS Rediwall® meets or exceeds all critical building performance requirements.

Compliance & Certification

AFS Rediwall® is one of the industry's most tested permanent formwork systems.

Certificate of Conformity

CodeMark Australia

global-mark

Global-Mark Pty Ltd,
Suite 4.07, 32 Delhi Road, North Ryde
NSW 2113, Australia

Tel: +61 (02) 9886 0277 - www.Global-Mark.com.au

Certificate Holder:

AFS Systems Pty Ltd
110 Airds Road
Minto, NSW, 2566

Tel: 1300 727 237

afsformwork.com.au

Certificate number: CM 30107 Rev 4

THIS TO CERTIFY THAT

AFS REDIWALL®

Type and/or use of product:

AFS REDIWALL® is a permanent formwork system for internal and external loadbearing and non-loadbearing reinforced concrete walls with structural, fire, weatherproofing, acoustic and thermal performance characteristics.

Description of product:

AFS REDIWALL® comprises:

1. Interlocking PVC panel extrusions as permanent formwork, and associated PVC accessories.
2. Fibre cement sheet or PVC end closures.
3. Reinforcing steel.
4. Concrete fill.
5. A range of finishing options as described in A2.

AFS REDIWALL® types are as follows, the numerical values representing the thickness of the wall in millimetres:

1. RW110C Single Reinforcement.
2. RW150C Single Reinforcement.
3. RW200C Single or Double Reinforcement.
4. RW250S Double Reinforcement.
5. RW275S Double Reinforcement.
6. RW300S Double Reinforcement.

Scope of certification: The CodeMark Scheme is a building product certification scheme. The rules of the Scheme are available at the ABCB website www.abcb.gov.au. This Certificate of Conformity is to confirm that the relevant requirements of the Building Code of Australia (BCA) as claimed against have been met. The responsibility for the product performance and its fitness for the intended use remain with the certificate holder. The certification is not transferrable to a manufacturer not listed on Appendix A of this certificate.

Disclaimer: The Scheme Owner, Scheme Administrator and Scheme Accreditation Body do not make any representations, warranties or guarantees, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within this certificate; and the Scheme Owner, Scheme Administrator and Scheme Accreditation Body disclaim to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this certificate.

The purpose of Global-Mark **construction site audits** is to confirm the practicability of installing the product; and to confirm the appropriateness and accuracy of installation instructions

In placing **the CodeMark mark** on the product/system, the certificate holder makes a declaration of compliance with the certification standard(s) and confirms that the product is identical to the product certified herein. In issuing this Certificate of Approval Global-Mark has relied on the **expertise of external bodies** (laboratories, and technical experts).

Herve Michoux
Global-Mark Managing Director

Peter Gardner
Unrestricted Building Certifier

Date of issue: 10/05/2022

Date of expiry: 10/05/2025

Certificate number: CM30107 — This certificate is only valid when reproduced in its entirety. — Page 1 of 13

CodeMark Certified

AFS Rediwall® complies with NCC performance requirements for:

- *Fire resistance/non-combustibility*
- *Structural stability (AS3600)*
- *Weatherproofing*
- *Sound insulation*
- *Bushfire provisions (BAL)*
- *Termite resistance*

Water Performance — CSIRO Certified

Recognising the importance of resistance to water penetration, testing has been undertaken whereby Rediwall® panels were interlocked, core-filled with concrete and exposed to 6m hydro static head of pressure for a period of 100 hours as per ASTM E514/E514M and AS/NZS 4347.1 testing and passed for no water penetration.

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 2837
CSIRO job number 8-00008-01-005 HI 2970
Date of issue 1 May 2015

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

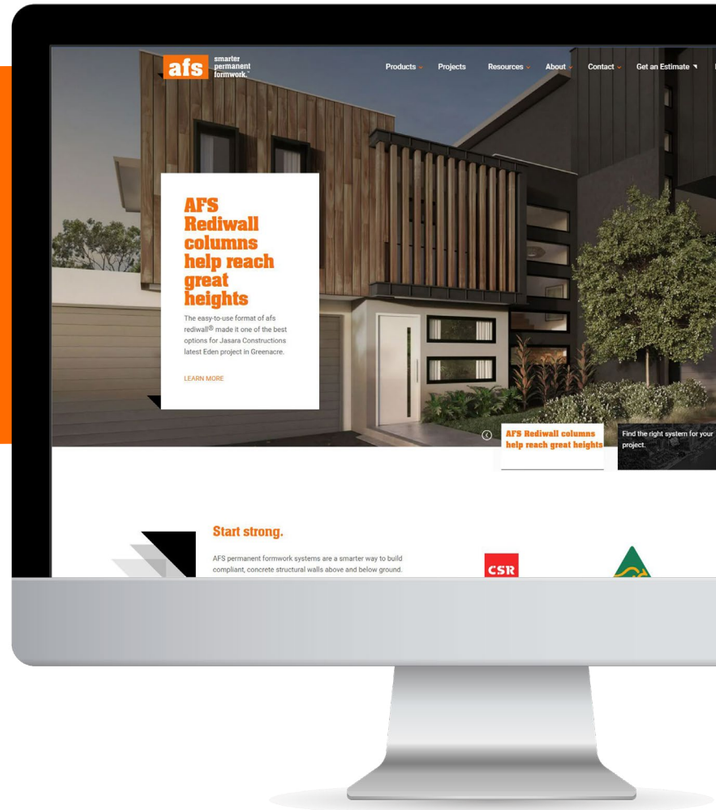
Commercial-in-confidence

INFRASTRUCTURE TECHNOLOGIES

Certificate of Test

In-house and on-hand: AFS experts can help with your project.

Talk to our experts: 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.

Fire testing for AFS Rediwall® includes:

Fire Performance
Expert assessment based on extensive fire testing of Rediwall® for both internal and external application confirms compliance to the following NCC performance requirements:

- CP1 Structural stability
- CP2 Spread of fire
- CP3 Spread of fire and smoke / aged care buildings
- CP4 Materials and assemblies
- CP7 Emergency equipment
- CP8 Openings and penetrations

AS5113/BS8414 Façade Test
Passes in 'No spread of flame', 'Temperature rise limit criteria', and 'No flaming'.

AS5637.1 Reaction to Fire (Room Test)

- Group Number 1 can be used in all building types and classes
- Smoke Growth Rate Index: SMOGRARC 28.3m²/s2 x1000

AS1530.3 Fire Hazard Properties

- *Ignitability index - 10*
- *Heat evolved index - 0*
- *Spread of flame index - 0*
- *Smoke developed index - 6*

AS1530.4 Fire Resistance Level (FRL)

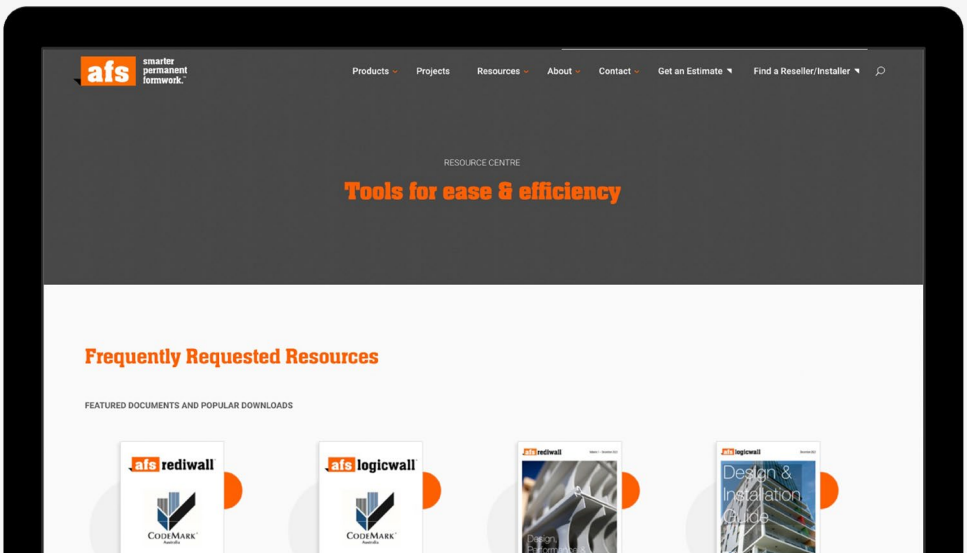
AFS Rediwall®	Max. FRL.
RW 110	90/90/90
RW 156	240/240/240
RW 200	240/240/240
RW 256	240/240/240
RW 275	240/240/240
RW 300	240/240/240

AS1530.4 FRL Service Penetrations
AFS Rediwall®, containing various service penetrations, has been tested and assessed to AS1530.4 to achieve a fire resistance level FRL –/120/120 with the PVC facing left in place.

Need more information?

Learn more about the compliance credentials of AFS Rediwall® by visiting our website **ATSBP.COM** or contact **ATS Trade Centre.**

1800 577 551



ATS BUILDING PRODUCTS

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ATSBP.COM

afs smarter permanent formwork.™

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157 Briens Road Northmead NSW 2152

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VIC
372 Lower Dandenong Road Braeside VIC 3195

QLD
2/177 Jackson Road Sunnybank Hills QLD 4109

SA
48 Lipson Street Port Adelaide SA 2105

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CSR