



File: 2013/277.59 R3.0

ASSESSMENT SUMMARY

Product Name	CSR Rediwall®
Manufacturer	AFS Walling Solutions, a division of CSR Ltd
Assessment Reports	Stephen Grubits & Associates, Fire Engineering Report 2013/277.30 R1.1, Issued 6 July 2017 Stephen Grubits & Associates, Rediwall BCA Compliance Guide 2013/277.59 R1.0, Issued 24 January 2018 Stephen Grubits & Associates, Fire Engineering Report 2013/277.59 R2.0, Issued 24 January 2018
Applicable Building Code	National Construction Code 2016 Building Code of Australia Volume 1
Relevant BCA Performance Requirements	CP2, CP3 and CP4
Purpose of this document	To summarise findings of SGA Report Numbers 2013/277.59 R1.0 and 2013/277.59 R2.0.
Date of Issue:	1 st February 2018
Date of Expiry	Date BCA 2016 is amended or Superseded

Overview

The performance of the above mentioned product was assessed by Stephen Grubits & Associates (SGA) at the request of AFS Walling Solutions, a division of CSR Ltd. The application of the CSR Rediwall® system when proposed to be either unclad or over-clad with either of the following was assessed for a variety of building locations (see limitations):

- Plasterboard, using steel furring channels of specific orientation and spacing;
- Plasterboard directly affixed to the Rediwall® surface;
- Non-combustible cement render; and
- Unclad while plastic formwork remains in place.

The application of the above mentioned product in fire-isolated exits or fire control rooms were addressed via Performance Assessments outlined in SGA Fire Engineering Report 2013/277.59 R2.0.

Limitations

The assessment is strictly limited to:

- Class 2 to 9 buildings, having a rise in stories of 3 to 8 (higher rise of stories may be considered);
- Consist of Type A or Type B construction;
- Limited to "Internal" wall applications in fire-isolated exits, lift shafts, carparks, required Fire Control Rooms, walls bounding sole-occupancy units, corridors in apartment buildings bounding public corridors and sole-occupancy units, Partition walls in an apartment, and service shafts

Issued by:	Carlos Quaglia (C10 - BPB0334)		Approved by:	Rose Pengilly (Director)	
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Findings

SGA Guide 2013/277.59 R1.0

Rediwall® when unclad meets the DTS provisions of the NCC for combustibility and reaction to fire for fire isolated exits, lift shafts, carparks, service shafts and required fire control rooms in buildings with effective height greater than 50 m.

Rediwall® with direct fixed Gyprock® meets the DTS provisions of the NCC for combustibility and reaction to fire for, walls bounding sole occupancy units, corridor walls in apartment buildings bounding corridors and sole-occupancy units and partition walls within an apartment.

Rediwall® over-clad with Gyprock® using furring channels meets the DTS provisions of the NCC for combustibility and reaction to fire for walls bounding sole occupancy units, corridor walls in apartment buildings bounding corridors and sole-occupancy units, and Partition walls within an apartment.

SGA Report 2013/277.30 R1.1

1. A Rediwall™ that had the outer surface plastic formwork membranes stripped off on both sides is, in our opinion, non-combustible in spite of retaining the embedded plastic ribs.
2. A Rediwall™ that retains the outer surface plastic formwork membranes is, in our opinion, a wall of non-combustible construction that has a left-in-situ combustible formwork. The left-in-situ combustible formwork may be considered as an attachment or as a lining to the underlying concrete wall dependent upon its location and use within the building.

SGA Report 2013/277.59 R2.0

The following tables below provide a summary of the assessment results from the two Performance Assessments provided in SGA Report 2013/277.59 R2.0, issued 24 January 2018 for the application of the Rediwall® system in fire-isolated exits and/or fire control rooms when over-clad in the specified configuration.

	Description of over-cladding	Key Fire Safety Measures	Performance Requirements
Performance Assessment 1 Fire-isolated Exits	1. Plasterboard, using steel furring channels of specific orientation and spacing	Any gaps exposing the cavity between the Rediwall® and plasterboard are to be fully sealed.	Complies with CP2, CP3 and CP4
	2. Plasterboard directly affixed to the Rediwall® surface	No additional measures required as arrangement considered equivalent to an unclad Rediwall® system with respect to fire spread and development of untenable conditions.	Complies with CP2, CP3 and CP4
	3. Non-combustible cement render	No additional measures required as arrangement considered equivalent to an unclad Rediwall® system respect to fire spread and development of untenable conditions.	Complies with CP2, CP3 and CP4

Table 1 - Summary of Performance Assessment 1 for Rediwall® application when over-clad in specific configurations.

	Description of over-cladding	Key Fire Safety Measures	Performance Requirements
Performance Assessment 2 Fire Control Rooms (subject to Specification E1.8)	1. Plasterboard, using steel furring channels of specific orientation and spacing	Any gaps exposing the cavity between the Rediwall® and plasterboard are to be fully sealed.	Complies with CP2, CP3 and CP4
	2. Plasterboard directly affixed to the Rediwall® surface	No additional measures required as arrangement considered equivalent to an unclad Rediwall® system with regards to fire spread and development of untenable conditions.	Complies with CP2, CP3 and CP4
	3. Non-combustible cement render	No additional measures required as arrangement considered equivalent to an unclad Rediwall® system with regards to fire spread and development of untenable conditions.	Complies with CP2, CP3 and CP4

Table 2 - Summary of Performance Assessment 2 for Rediwall® application when over-clad in specific configurations.