

Reid™ Shims

Reid™ Shims have been independently tested and rated with a 20t Working Load Limit determined in accordance with AS 3850.1:2015.



**AS 3850.1:2015
COMPLIANT***

Figure 1: Reid™ logo and 20t WLL as per Clause 2.8.2



Figure 2: Independently tested and rated to 20t WLL



As per clause 2.8.1, all shims are marked with the WLL and Reid brand for traceability.*

Table 1: Shim details

Shim Thickness (mm)	Colour	Pack Qty	Part No.
1	Brown	100	SHIM01
2	Blue	200	SHIM02
3	Green	100	SHIM03
5	Yellow	100	SHIM05
10	Black	40	SHIM10
15	Grey	40	SHIM15
20	White	30	SHIM20



Figure 3: Shim range

Table 2: Compliance details

Clause number	Requirement	Compliant
2.2	The Working Load Limit has been determined by testing in accordance with Appendix A, using a FOS per Table 2.1	✓
2.8.1	Deform elastically at full load	✓
	Not continue to creep more than 5% up to 15 mins at full load;	✓
	Not continue to creep more than 3% after 15 mins at full load up to 48 hrs;	✓
	Resist corrosion stains, not be affected by cold weather, alkali, ground chemicals	✓
	Not oxidize or expand when exposed to moisture	✓
2.8.2	Permanently marked with WLL & for traceability	✓
	WLL derived using statistical methods based on ultimate load determined from the onset of plastic deformation	✓
2.8.2	The Working Load Limit has been determined by testing in accordance with Clause 2.2 & the compressive strength of the material per Appendix A.	✓
A3	Testing and recording of results	✓
A4	Statistical evaluation of test results, using formula A4, $X_k = x(1 - k_1 COV)$.	✓
A5	Production Validation through testing to confirm compliance of critical specification requirements (dimensions, material properties and load bearing capacity where appropriate).	✓
A11.3	Shim specimen to be conditioned in accordance with ASTM D618, procedure A.	✓
A11.4	Compression test per ASTM D695	✓
A11.5	The compressive strength shall be expressed in MPa and	✓
	Determined from the stress to to deform or rupture the specimen.	✓
A11.6	Tested with WLL load X FoS per table 2.1 for 48 hrs @ 15-25° C.	✓
	Tested with WLL load for 12 hrs @ 40° C.	✓

* See note on p2

Reid™ Shims have been independently tested and now bear the 20t WLL as well as the Reid™ logo for identification. All Reid™ Shims are packed in durable poly bags and bear the label, shown in Figure 4, featuring the batch number for traceability.

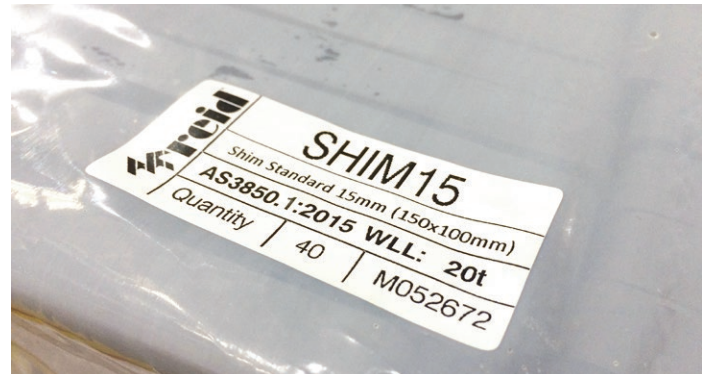


Figure 4: Shim packaging label featuring Reid™ brand, logo, WLL & batch # for traceability

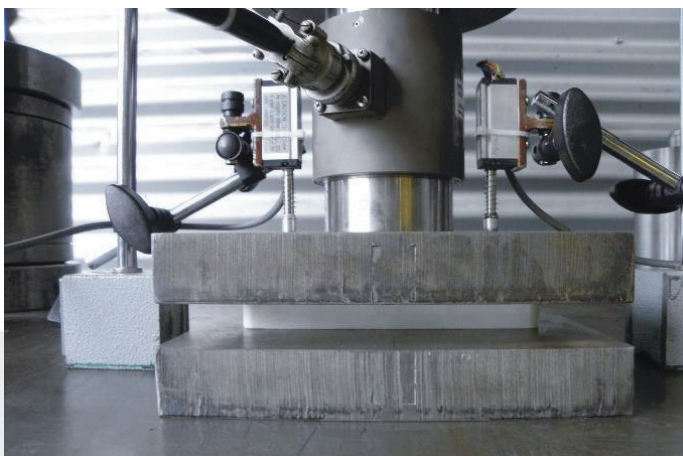


Figure 5: Compression test



Figure 6: Test setup used for elevated temperature compression test

To reflect the progress of the industry and the new innovative uses of precast and tilt-up construction, Australian Standard AS 3850 was updated in 2015. This update included a change in title to AS 3850:2015 Prefabricated Concrete Elements, a widened scope to include all prefabricated elements in Building Construction and splitting of the document into two parts:

- Part 1, called 'General requirements' details the new performance and testing requirements for suppliers of componentry into the industry. These new requirements are significantly different to AS 3850:2003 and should enable the industry to have greater confidence in the products that they are specifying and using;

- Part 2, called 'Building construction', aligns with the 2008 National Code of Practice for Precast, Tilt-Up and Concrete Elements in Building Construction and focuses on the interrelation of the various stages of manufacture, construction, transport and erection. It is specifically for the construction design and documentation of prefabricated concrete elements in building construction and provides guidance for the Erection Designer and highlights the importance of the Erection Design and Documentation.

The new AS 3850:2015 is central for the safe, efficient and cost-effective manufacture, construction, transport and erection of prefabricated concrete elements.



All Reid™ branded products and all products manufactured at our Melbourne manufacturing facility are designed, manufactured, tested and supplied in compliance with our Quality Management System which has been independently audited and certified by SAI Global to ISO 9001:2015. ramsetreid™ undertake strict quality control processes to ensure performance specifications and metallurgical properties are maintained.

* ramsetreid™ are currently in discussions with Australian Standards and the BD-066 committee regarding the wording of Clause A5.3 and the associated cost implications to the Precast industry. ramsetreid™ manage production validation in compliance with our ISO 9001:2015 quality management system. It is expected that Clause A5.3 will be reviewed later in 2016 by the BD-066 committee.

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In the interests of product improvement, ramsetreid™ reserves the right to alter product specifications as required. Information included in this compliance document is correct at time of printing. It is the responsibility of the user to ensure product selected is appropriate for its intended use. For further technical information go to www.ramsetreid.com or contact ramsetreid™ on the numbers indicated. ITW Australia Pty. Ltd. ABN 63 004 235 063 trading as ramsetreid™ © Copyright 2016™ Trademarks of Cetram Pty. Ltd. used under license by ramsetreid™