



November | 2025 AUS

3Dx™ 8.5t Narrow Edge Lifting Anchor

Compliance Document

Reid™ 3Dx™ 8.5t Narrow
Edge Lifting Anchor
complies with
AS 3850.1:2024



reid.com.au | 1300 780 250

Product Overview



Stronger than before

More compact than ever... a high capacity anchor that is suitable for use in thin or congested panels.



Faster to full capacity

Short time frames to achieve full tensile and shear capacities, saving you time and money on your project. 3Dx™ anchors do not require shear bars to achieve their stated capacity, further saving you time and money.



Anchorshield™

Anchorshield™ coating not only extends the design life but mitigates delamination caused by galvanic reactions, all the while enabling simple and easy visual QA checks.



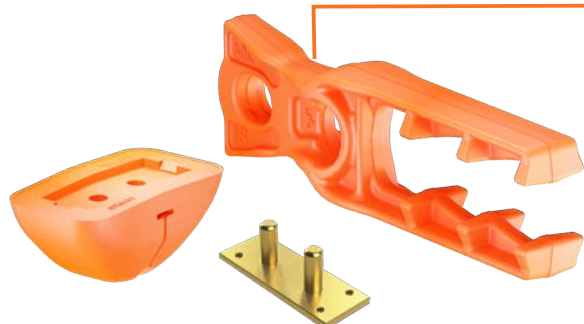
AS 3850.1:2024
Compliant



Figure 1:
3Dx™ 8.5t Narrow Edge Lifting Anchor

The 3DX8AVF Void Former features a patented “pre-bent” design for the void to further grab the anchor head, mitigating slurry ingress. A small foot print minimises conflicts with reo placement.

3Dx™ anchor (3DX8A),
void (3DX8AVF) &
support plate (3DX85NP)



The 3DX8A is forged and heat treated, continuing with the history of quality products from Reid™.

The 3Dx™ 8.5t Narrow provides the precaster with a true next generation lifting solution.

We've taken our ever popular 3Dx™ 10t anchor design and complemented it with a more compact 8.5t alternative. Together, they cover the vast majority of anchor placement requirements.



Compliance Details

Table I: AS 3850.1:2024 Compliance Details

Clause	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.	
2.5.1	Manufactured from ductile steel.	
2.5.2.1	WLL determine per clause 2.2	
	Manufactured from ductile steel which exhibits plastic deformation prior to failure at all service temperatures for which the insert is designed to be used.	
	When loaded to tensile failure, a ductile failure and plastic deformation is observed and the failure surface is fully fibrous with no cleavage fracture.	
	Insert assembly including void former shall be marked to ensure compatibility with other system components.	 Refer Figure 2
A2	Concrete for testing complies with AS 1379, tested per AS 1012.	
A3	Testing and recording of results.	
A4	Statistical evaluation of test results, using formula A4, $X_k = x(1 - k_s \text{COV})$.	
A5	Production Validation through testing to confirm compliance of critical speciation requirements (dimensions and arrangement of the steel reinforcement, material properties and load bearing capacity where appropriate).	
A6	Tension testing of the manufactured lifting insert.	
A7	Characteristic capacity determined from a comprehensive test program including individual and combined effects per Table A3.	

Reid™ 3Dx™ 8.5t Edge Lift Anchors
comply with AS 3850.1:2024



Product Identification



The 3DX8A 3Dx™ 8.5t Narrow lifting anchor is colour coded orange for easy system validation.

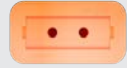


Figure 2: Reid™ 3DX8A Anchor Markings



Technical Data

8.5 Tonne Narrow Edge Lifting System:

Anchor	Lifting Clutch	Void Former
		Isometric View:  Top View: 
3DX8A	3DX10ALC	3DX8AVF & 3DX85NP



Please Note: Anchor 3DX85A must be used with the related Void Former 3DX8AVF.

Table 2: AS 3850.1:2024 Performance Data

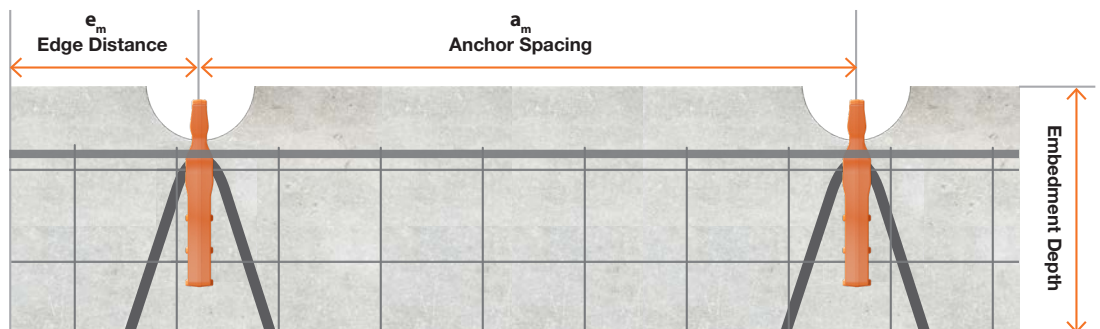
Panel Thickness (mm)	Part No.	Max WLL (tonne)	Stripping (WLL, t)							Placement (WLL, t)		
			12MPa		15MPa		20MPa		25MPa	25MPa	32MPa	40MPa
			Tensile ¹	Shear ²	Tensile ¹	Shear ²	Tensile ¹	Shear ²	Shear ²	Tensile	Tensile	Tensile
100	3DX8A	8.5	3.1	1.2	3.5	1.4	4.4	1.5	1.6	5.2	5.2	5.2
120			7.0	1.6	8.0	1.8	8.5	2.0	2.1	8.5	8.5	8.5
150			8.5	1.9	8.5	2.2	8.5	2.3	2.4	8.5	8.5	8.5
175			8.5	2.2	8.5	2.5	8.5	2.6	2.7	8.5	8.5	8.5

1. Tensile data is WLL during the stripping process.

2. Shear data is the Capacity based on avoiding cracking around lifter during the stripping process.

3. Minimum panel reinforcement : SL82, N16 Perimeter Bar, centrally placed.

Table 3:
Minimum edge and spacing distances required to achieve performances in Table 2.



Minimum Edge and Spacing Limits			
Anchor Part Number	Minimum Edge Distance e_m (mm)	Minimum Anchor Spacing a_m (mm)	Embedment Depth (mm)
3DX8A 	420	840	**

**Embedment depth is the effective depth of whole system (Recess former, Edge Lift Anchor and the tension bars).

Note: Reid™ reserves the right modify and change the above specifications.

Installation support details

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Installation Support Details

- The anchor must always be used with a minimum N16 tension bar with material properties in accordance with AS/NZS 4671:2019 Grade 500N and leg length of 500 mm. This is to ensure that the anchor lifts to its ultimate strength as well as a requirement out lined in AS 3850.1:2024.
- The anchor must be orientated at right angles to the edge of the panel, and have the appropriate tension bar fitted through the lower elliptical hole of the anchors, tension bar can be fitted either above or below the mesh/mat.

These bars must be bent down into the panel at an included angle of 30 - 60° and with a bend diameter of 4 bar diameters.

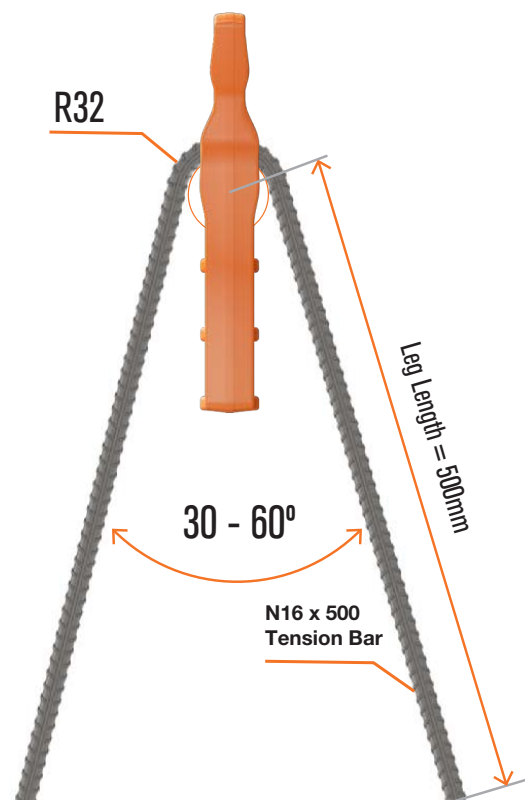
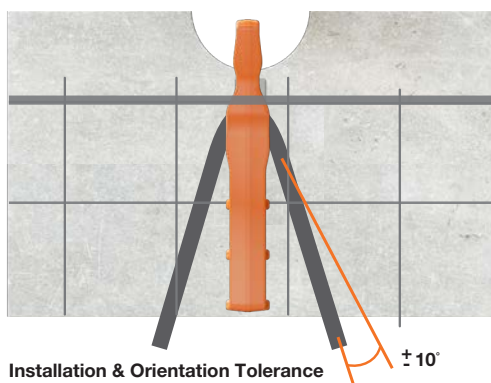


Figure 3: : Tension bar Installation



Quality and Compliance

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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. Reid™ undertake strict quality control processes to ensure performance specifications and metallurgical properties are maintained.

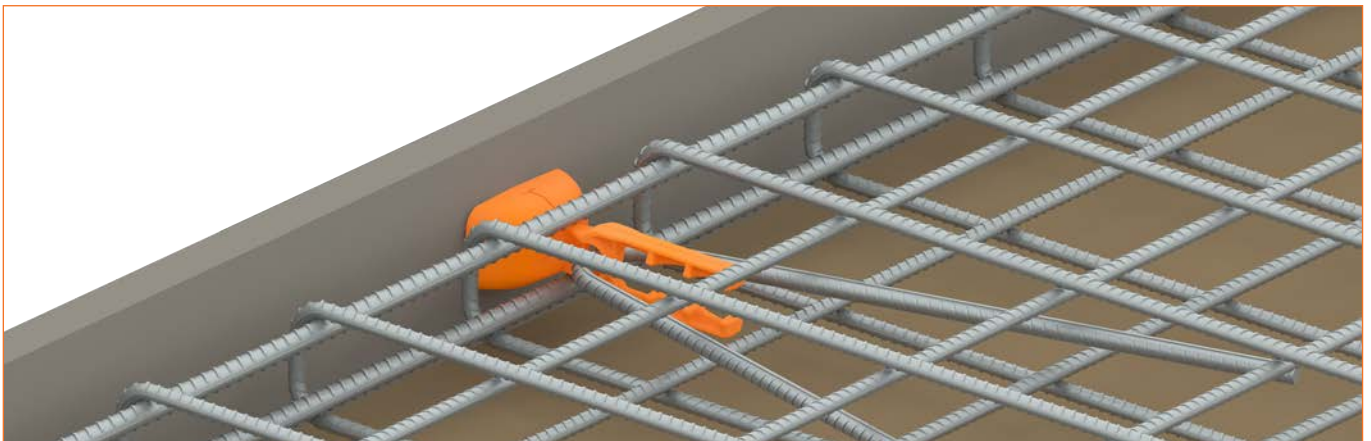
To reflect the continued progress of the industry and the new innovative uses of precast and tilt-up construction, Australian Standard AS 3850 Part 1 and Part 2 has recently been updated in 2024. AS 3850 Part 1, Part 2 and Part 3 are detailed below.

- Part 1, called 'General requirements' details the updated performance and testing requirements for suppliers of componentry into the industry. These requirements are significantly different to AS 3850:2015 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. It was updated to align with the changes in Part 1 and the content in Part 3.
- Part 3, called 'Civil construction' provides requirements impacting prefabricated concrete elements in civil, infrastructure and non-building construction. Similar to Part 2, it focuses on various stages of safety, planning, manufacturing, constructions design, casting, transportation, erection and incorporation into the final structure.

The new AS 3850.1:2024 is central for the safe, efficient and cost-effective manufacture, construction, transport and erection of prefabricated concrete elements.



Quality and compliance are at the core of everything we do. Our commitment to ISO 9001:2015 Certification ensures every Reid™ product meets the highest standards of safety, performance, and reliability.



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