reid™

December | 2025 AUS

3Dx™ IOt Edge Lift Anchor

Compliance Document

Reid™ 3Dx™ IOt Edge Lift Anchor complies with AS 3850.1:2024

Genuine AnchorShield™ Reid™

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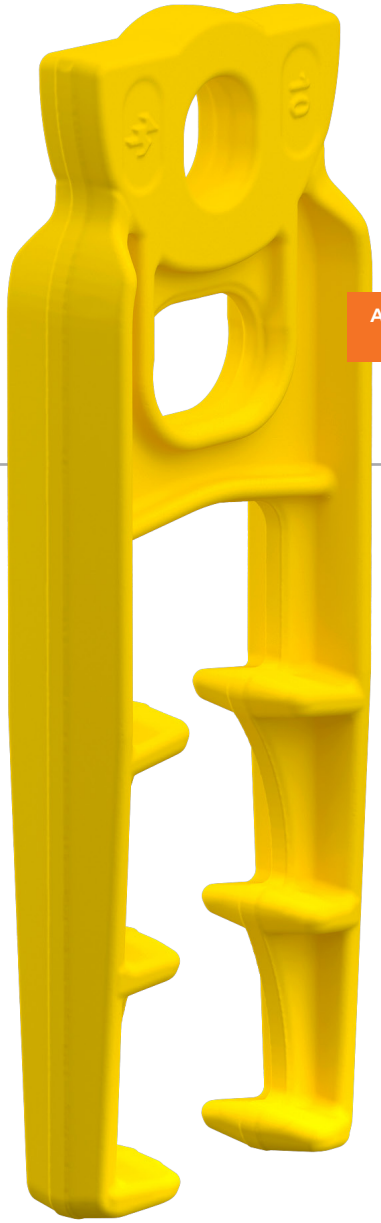
Product Overview

Stronger than ever
A 10t WLL anchor with high capacity across a wide range of panels.

Faster to full capacity
Shorter time frames to achieve full tensile and shear capacities, allowing you to save time on your project.

Anchorshield™
The coating mitigates delamination caused by galvanic reactions, while at the same time allows for easy visual QA checks.

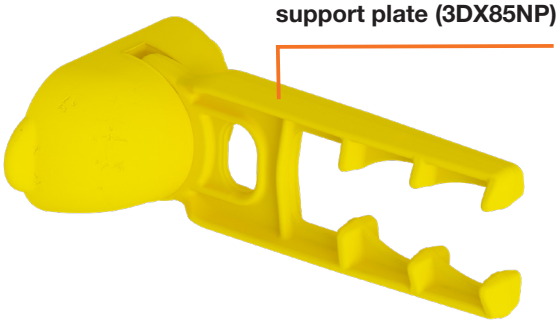


CHARTERED VERIFIED ENGINEER

AS 3850.1:2024 Compliant

Genuine AnchorShield™ Reid™

Figure 1:
Reid™ 3Dx™ 10t Edge Lift Anchor



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, $X_k=x(1-k_s COV)$.	✓
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™ IOt Edge Lift Anchors comply with AS 3850.1:2024 ✓

TESTED TO LOCAL CONDITIONS

Product Identification

Genuine AnchorShield™ Reid™

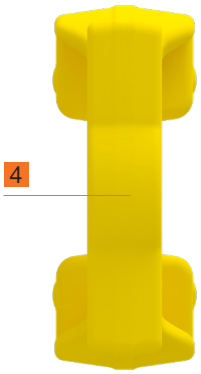
Reid™ 3Dx™ 10t anchors are colour coded yellow for easy system validation.

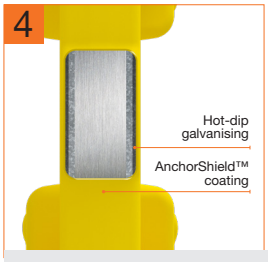
Figure 2: Reid™ 3DX10A Anchor Markings

Working Load Limit

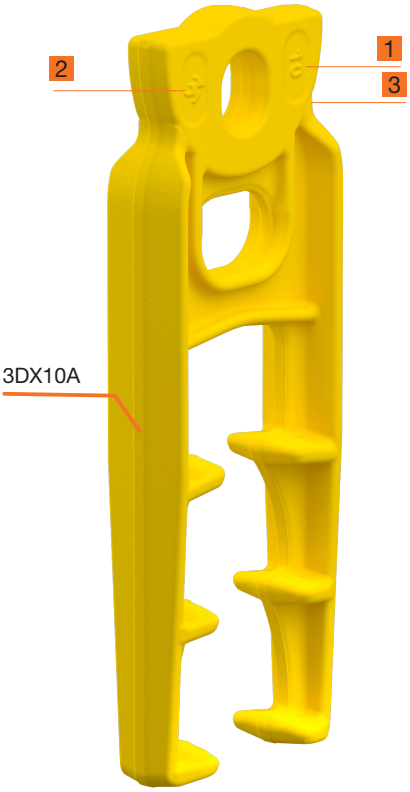
Reid™ Logo

Batch Number





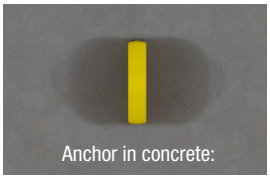
The entire 3DX10A is coated with AnchorShield™



3Dx™ 10t Edge Lift Anchor galvanised to AS/NZS 4680:2006

Technical Data

10 Tonne 3Dx™ Edgelifting System Product Codes:

Anchor	Lifting Clutch	Void Former
 3DX10A	 3DX10ALC	Isometric View:  Top View:  3DX85VF
 Anchor in concrete:		

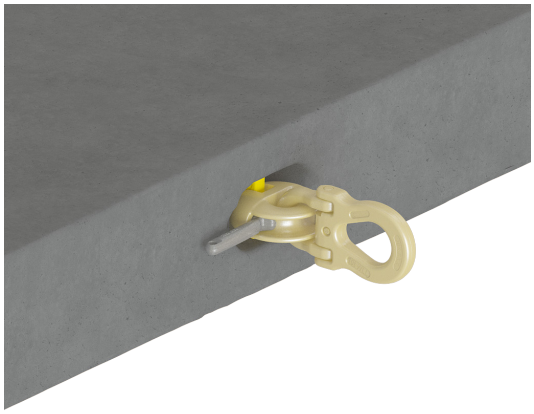


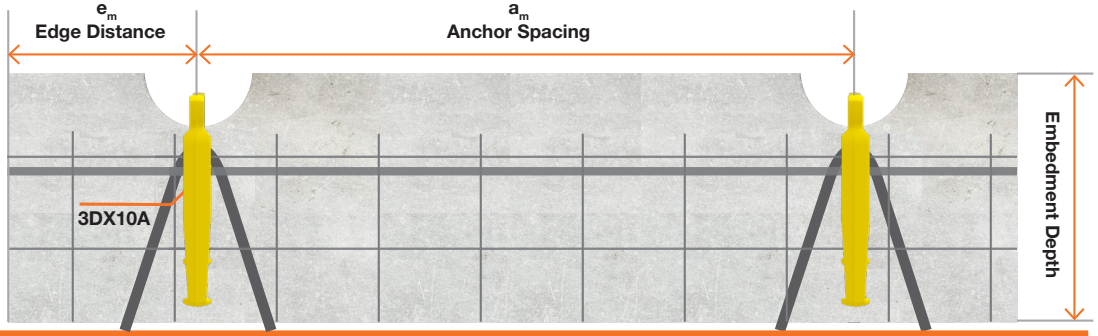
Table 2: AS 3850.1:2024 Performance Data

Panel Thickness (mm)	Part No.	Max WLL (tonne)	Stripping					Placement (WLL)		
			15MPa		20MPa		25MPa	25MPa	32MPa	40MPa
			Tensile[1]	Shear[2]	Tensile[1]	Shear[2]	Shear[2]	Tensile	Tensile	Tensile
120	3DX10A	10	6.3	1.5	7.3	1.8	2.0	8.2	9.3	10.0
150			8.9	2.2	9.5	2.7	2.9	10.0	10.0	10.0
175			9.4	2.7	9.8	3.1	3.2	10.0	10.0	10.0
200			10.0	3.0	10.0	3.2	3.3	10.0	10.0	10.0
250*			10.0	3.7	10.0	3.9	4.1	10.0	10.0	10.0
300*			10.0	4.3	10.0	4.7	5.0	10.0	10.0	10.0

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.

* Data is based on double mesh reinfocement

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)
3DX10A 	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.

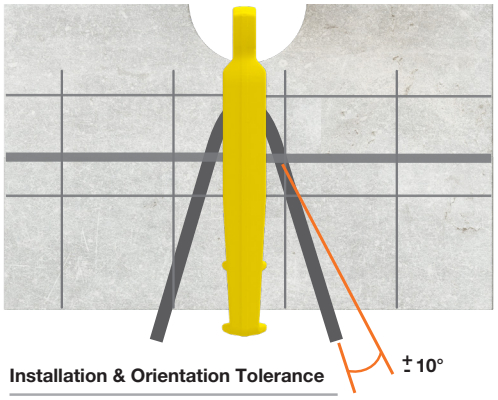
Installation Support Details

AS 3850.1:2024 Compliant

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 500mm. This is to ensure that the anchor lifts to its ultimate strength as well as a requirement outlined in AS3850.1:2024.
- 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.



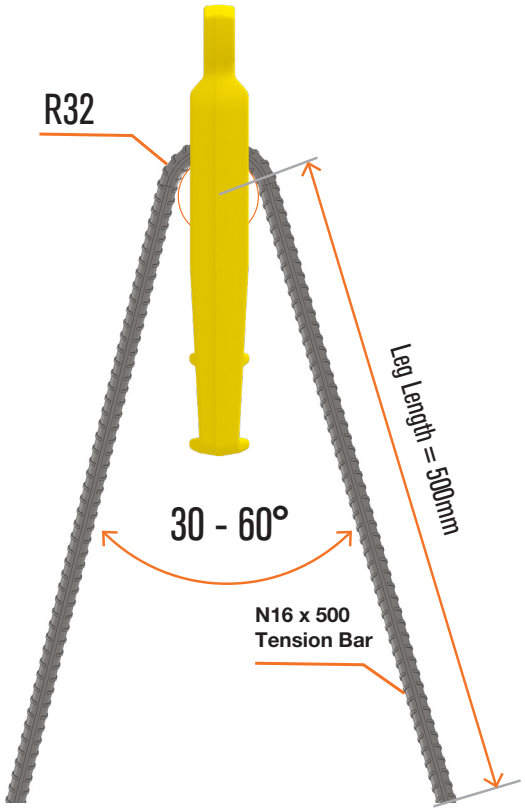
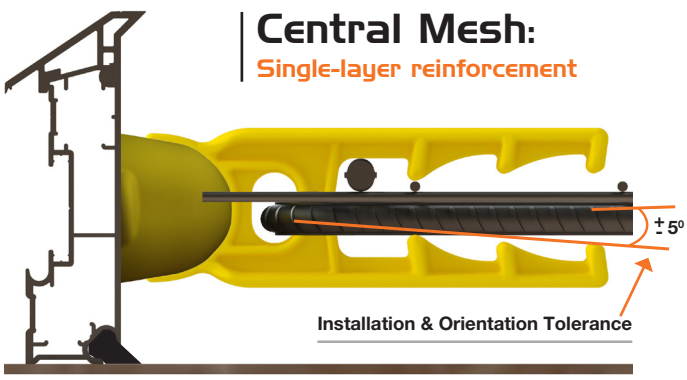
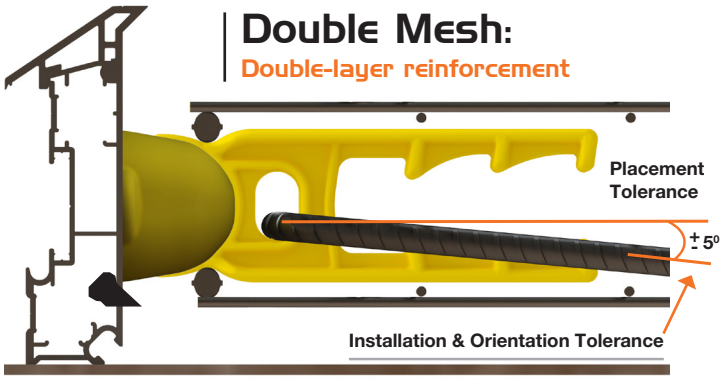


Figure 3: Tension bar Installation





Quality and Compliance

AS 3850.1:2024 Compliant

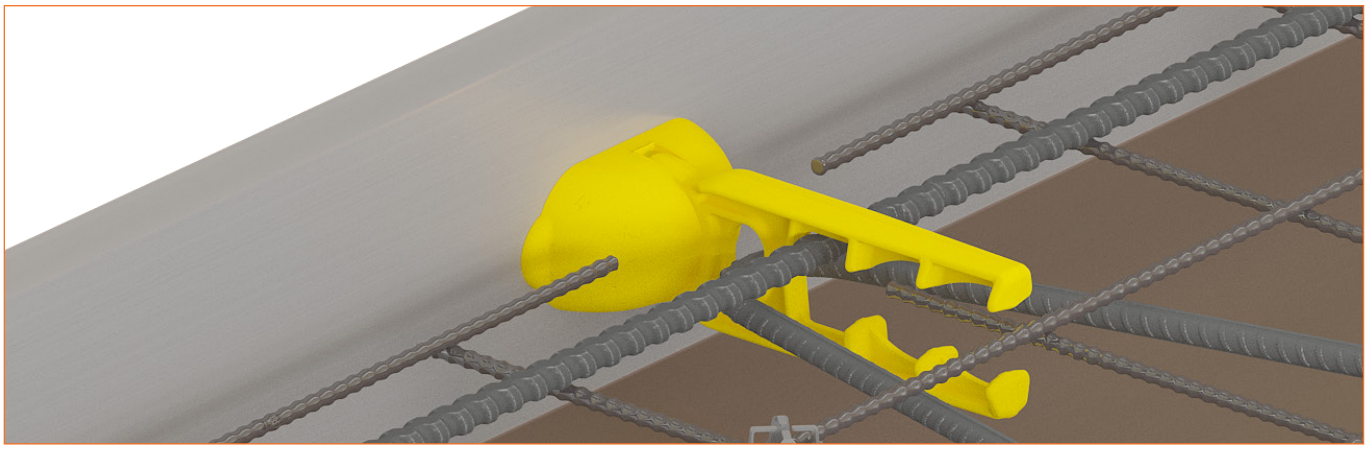
All Reid™ branded products and all products manufactured at our Melbourne manufacturing facility are designed, manufactured, tested and supplied in compliance with our Quality Management System which has been independently audited and certified by SAI Global to ISO 9001:2015. Reid™ undertake strict quality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



Customer Service

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Construction Systems