reid™

March | 2025 AUS

Plate Face Lift Anchor

Compliance Document

Reid™ Plate Face Lift Anchors comply with AS 3850.1:2024

Plate Face Lift Anchors

Consistent with the Reid™ commitment to local testing, Reid™ Plate Face Lift Anchors have been extensively tested in concrete.

Analysis of the subsequent test data in accordance with AS 3850.1:2024 Compliant Appendix A results in Reid™ Plate Face Lift Anchors having Working Load Limit capacities that are far higher and more accurate than those simply calculated using the CCD method applicable for footed anchors.

CHARTERED VERIFIED ENGINEER

AS 3850.1:2024 Compliant

Figure 1:
Reid™ Plate Face Lift Anchors

3DX85LC* & 3DX10ALC lifting clutches are compatible with Reid™ Plate Face lift Anchors

*No longer available for purchase.

Compliance Details

Table 1: 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, 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™ Plate Face Lift Anchors comply with AS 3850.1:2024 ✓

TESTED IN LOCAL CONDITIONS

Plate Face Lift Anchors

Reid™ Plate Face Lift anchor feature a round foot to develop a concrete cone when under load. It has a plate style head allowing for use with 3Dx clutches

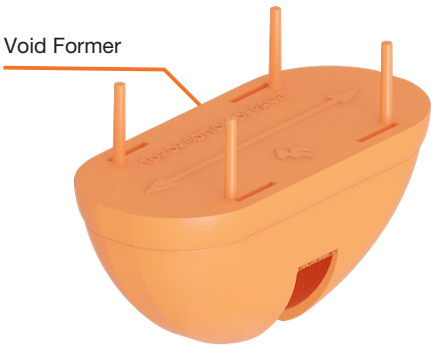
- Develops capacity quickly at low strength
- Mitigates the need to swap clutches when facelifting and edge lifting
- No extra reinforcement is required to achieve capacity.
- Ability to puddle anchor in where required (ensure proper vibration around the anchor)
- Easy and fast void removal.
- Increased safety with built-in redundancy and guaranteed ductile failure mode in case of concrete failure or overloading.

Figure 2: Reid™ Plate Face Lift Assembly

Head Identification (WLL, Reid™ Logo, Insert Length)

Batch Number

Panel Thickness



NOTE:
The Reid™ Face Lift Anchor must be placed as per the arrow indicators on the top of the Void Former.

Product Specifications

Table 2: AS 3850.1:2024 Performance Data (WLL)

Panel Thickness (mm)	Working Load Limit (Tonne)					
	Concrete Strength f_{cm} (MPa)					
	15MPa	20MPa	25MPa	32MPa	40MPa	55MPa
150	3.4	4.0	4.5	5.0	6.0	7.0

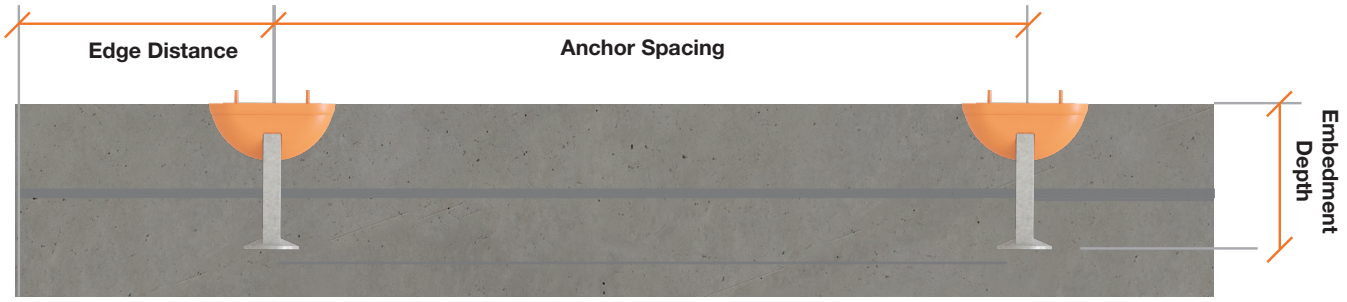


Table 3a: Minimum edge distance & anchor spacing required to achieve Table 2 performance.

Part Number	7PA125PRF
Embedment Depth h_{ef} (mm)	130
Limiting Edge Distance e_m (mm)	390
Limiting Spacing a_m (mm)	780

Table 3b: Minimum edge & spacing distances to achieve WLL in Table 2 for shear towards an edge

Concrete Strength		7PA125PRF
Minimum Edge Distance e_m (mm)	15MPa	560
	25MPa	
Minimum Spacing a_m (mm)	15MPa	1520
	25MPa	

Note: If conditions are outside stated parameters, please contact a Reid Engineer.

Table 4: Part Number & Head Identifacation

PART NUMBER	Discription
7PA125	7t Plate anchor 125mm long
5FLAPRF	Face Lift Plastic Recess former
7PA125PRF	Kit consisting of 7t Plate Anchors & Voids

TESTED IN LOCAL CONDITIONS

Quality and Compliance

AS 3850.1:2024 Compliant

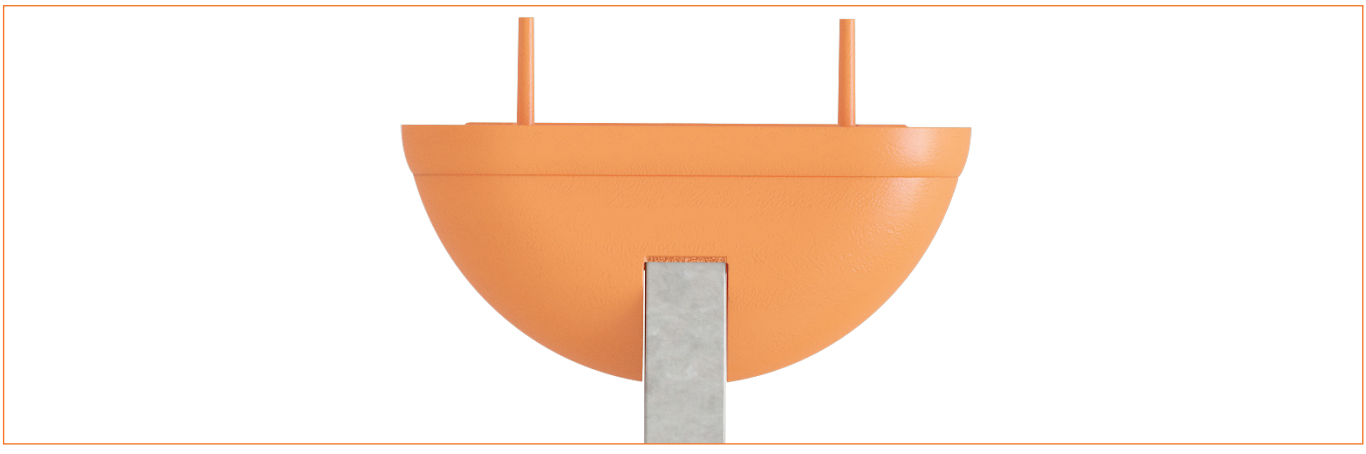
All Reid™ branded products and all products manufactured at our Melbourne manufacturing facility are designed, manufactured, tested and supplied in compliance with our Quality Management System which has been independently audited and certified by SAI Global to ISO 9001:2015. Reid™ undertake strict quality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

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