

EYE BOLT CONCRETE SCREW-ANCHOR

ZINC

Eye Bolt Concrete Screw-Anchor is a totally removable rotation setting, thread forming anchor, ideal for either temporary or permanent anchoring.

Part of the Allfasteners hex Concrete Screw-Anchor range the Eye Bolt version can be installed into substrates such as concrete, brick, hollow brick or block. The Eye Bolt Concrete Screw-Anchor is particularly well suited to close-to-edge or close-to-anchor fixing as it does not expand and burst the surrounding substrate.

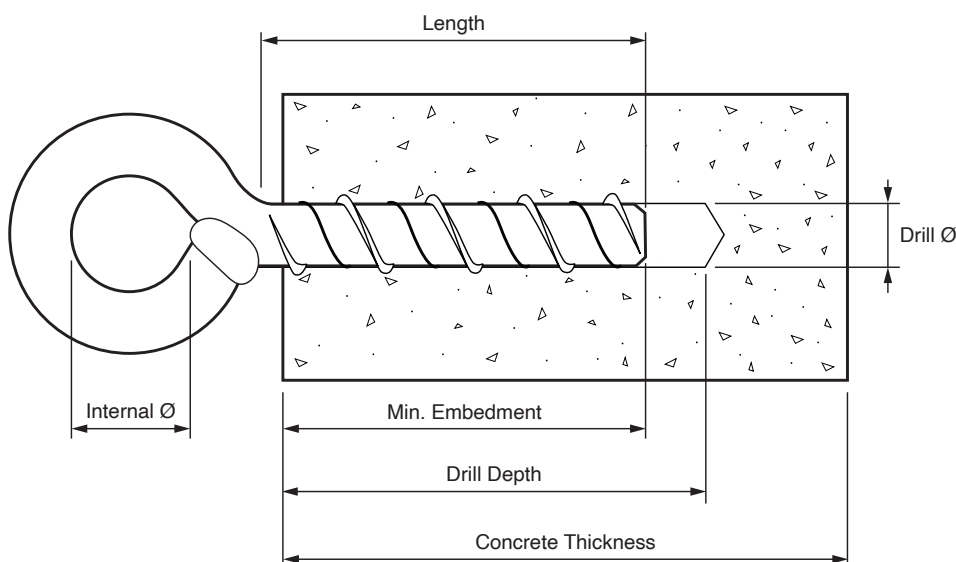


SAED M12 Eye Bolt Driver 1/2" Socket
SKU: 14S-SAED

MATERIAL SPECIFICATION

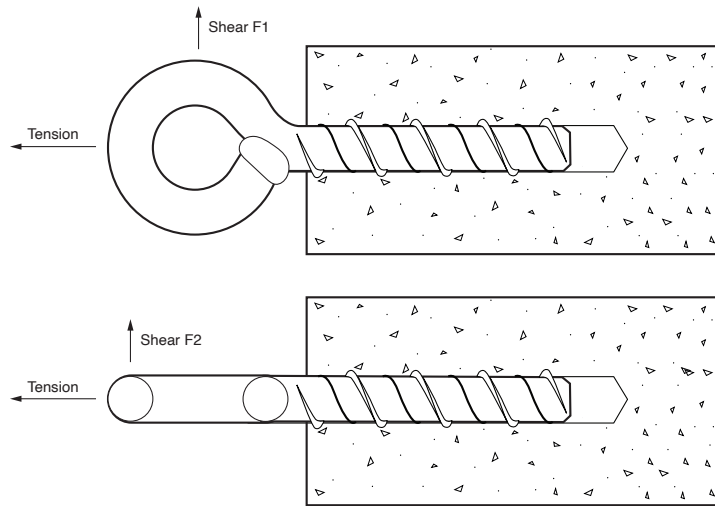
Eye Bolt Concrete Screw-Anchors are manufactured from a heat treated carbon steel that is zinc plated to a commercial standard coating.

Anchor Body	10B21 Boron Steel
Plating Zinc Clear	5 microns (min.) AS1789-FE/ZN



EYE BOLT CONCRETE SCREW-ANCHOR ZINC

PERFORMANCE DATA



Ultimate Limit State Design Capacities in 32MPa concrete¹⁾

SKU	Description Dia x Length	Internal Eye Diameter	Drill Hole Dia x Depth $d_o \times h_i$	Minimum Concrete Thickness	Minimum Edge Distance	Design Capacity in 32MPa Concrete			Anchor Failure from Shear Load with a Capacity Reduction Factor of 0.6 ²⁾	
						Tension	Shear F1	Shear F2	Shear F1 (fail)	Shear F2 (fail)
1SAEY12075	12 x 75mm	21.6mm	12 x 90mm	140mm	130mm	13.8kN	3.8kN	2.4kN	18kN	18kN
1SAEY12100	12 x 100mm	21.6mm	12 x 115mm	150mm	130mm	18.0kN	3.8kN	2.4kN	18kN	18kN

1) A global capacity reduction factor of 0.6 is used.

2) It is not recommended to load anchors to these values. Anchors yield in bending and exhibit permanent deformation under this loading. Therefore, these shear strengths may only apply for a static short-term load, in one direction and without load reversal. Permanent deflection is a few millimetres in magnitude. Shear loads should be limited to the Design or WLL capacities.

Working Load Limit Capacities in 32MPa concrete¹⁾

SKU	Description Dia x Length	Internal Eye Diameter	Drill Hole Dia x Depth $d_o \times h_i$	Minimum Concrete Thickness	Minimum Edge Distance	WLL Capacity in 32MPa Concrete			Anchor Failure from Shear Load with a Factor of Safety of 3.0 ²⁾	
						Tension	Shear F1	Shear F2	Shear F1 (fail)	Shear F2 (fail)
1SAEY12075	12 x 75mm	21.6mm	12 x 90mm	140mm	130mm	7.7kN	1.9kN	1.2kN	10kN	10kN
1SAEY12100	12 x 100mm	21.6mm	12 x 115mm	150mm	130mm	10.0kN	1.9kN	1.2kN	10kN	10kN

1) A global factor of safety of 3.0 is used.

2) It is not recommended to load anchors to these values. Anchors yield in bending and exhibit permanent deformation under this loading. Therefore, these shear strengths may only apply for a static short-term load, in one direction and without load reversal. Permanent deflection is a few millimetres in magnitude. Shear loads should be limited to the Design or WLL capacities.

Notes:

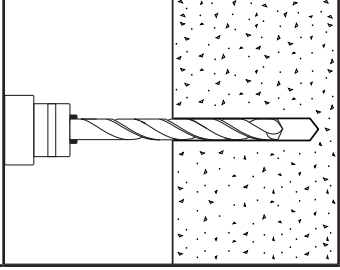
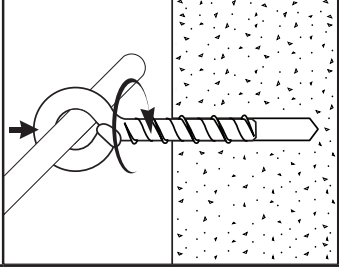
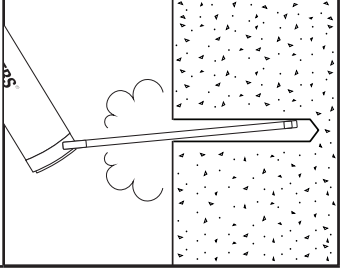
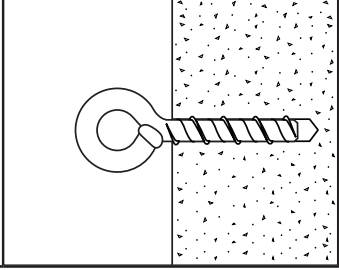
- The above capacities are for a static load in uncracked concrete. If conditions are different, the responsible engineer should use a higher factor of safety.
- These anchors are not suitable for fall arrest systems or other similar safety critical applications.
- If the anchors are closely spaced, anchor spacing influence should be considered. This can be estimated using our AFOS anchor design software by modelling screw anchors of same diameter.
- Combined actions of shear and tension acting simultaneously should be considered, if applicable. The following equation shall be satisfied:

$$(\text{Tension Load/Tension Capacity}) + (\text{Shear Load/Shear Capacity}) \leq 1.2$$
Where $(\text{Tension Load/Tension Capacity}) \leq 1.0$ and $(\text{Shear Load/Shear Capacity}) \leq 1.0$

EYE BOLT CONCRETE SCREW-ANCHOR ZINC



INSTALLATION

1	Using a 12mm diameter masonry bit drill a hole to the recommended depth.		3	Place the concrete screw-anchor in the hole and commence turning applying forward pressure to start the self-tapping action. Additional forward pressure may be applied for dense material.	
2	Clean the hole thoroughly removing debris with a hand pump, compressed air, or vacuum.		4	Use a rod (lever) to continue tightening anchor until the correct embedment is reached.	

Customer Service 1800 255 349 | techadvice@allfasteners.com.au | allfasteners.com.au

Allfasteners® 78-84 Logistics Street Keilor Park VIC 3042 Australia +61 3 9330 0555 Allfasteners Pty Ltd. ACN 113 948 100 ABN 86 766 075 300
Copyright © 2022. The contents of this document remains the property of Allfasteners® and may not be reproduced without prior written permission.

Important Note

Whilst all reasonable care is taken in compiling technical data on the Company's products, all information, recommendations, or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it, that the actual conditions of use are suitable and that, in the light of our continual research and development programme the information relating to each product has not been superseded. Allfasteners, its agencies and employees, disclaim any and all liability in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.