ALLFASTENERS .COM.AU

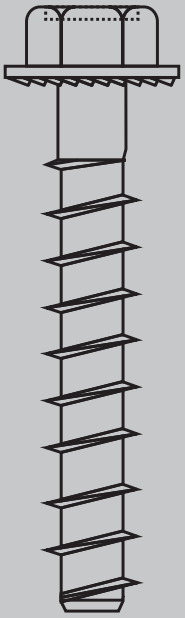
SAH-G

CONCRETE SCREW-ANCHOR HEX HEAD / GALVANISED

GAL

CERTIFICATION | TDS

Technical Data Sheet



ETA

NCC COMPLIANT AS 5216

For Install Support
techadvice@allfasteners.com.au

For Specification Support
engineering@allfasteners.com.au

For Customer Support
1800 255 349

SAH-G

Concrete Screw-Anchor Hex Head,
Galvanised

NCC COMPLIANT AS 5216

ETA

- Connecting structural steel or timber to concrete
- Facades, balustrades, building services, height access systems, industrial, fencing
- Galvanised (60µm min.)

ETA cracked and uncracked concrete

R30 - R120 fire rated

Supported by AFOS anchor design software

Anchor Summary

Part Number	Description, Dia x L	Max. Fixture Thickness, t_{fix}	Embedment Depth, h_{nom}	Drill Hole Dia x Depth, d_0 x h_1	Minimum Concrete Thickness, h_{min}	Design Capacity in 32MPa Cracked Concrete[2]		Indicative Price Per Fixing[3]
						Tension	Shear	
1SAHG06075	6 x 75mm[1]	**20mm**	55mm	6 x 64mm	100mm	2.0kN[1]	2.0kN[1]	$0.71
1SAHG06100	6 x 100mm[1]	**45mm**						$0.91
1SAHG08075	8 x 75mm	**10mm**	65mm	8 x 75mm	110mm	2.7kN	10.4kN	$1.21
1SAHG08100	8 x 100mm	**35mm**						$1.41
1SAHG10085	10 x 85mm	**10mm**	75mm	10 x 85mm	130mm	8.4kN	12.8kN	$1.64
1SAHG10100	10 x 100mm	**25mm**						$1.72
1SAHG10120	10 x 120mm	**45mm**						$2.14
1SAHG10150	10 x 150mm	**75mm**						$2.53
1SAHG12100	12 x 100mm	**5mm**	95mm	12 x 105mm	160mm	8.4kN	26.0kN	$2.81
1SAHG12125	12 x 125mm	**30mm**						$3.41
1SAHG12150	12 x 150mm	**55mm**						$4.01
1SAHG16100	16 x 100mm[4]	**5mm**	95mm	16 x 105mm	170mm	33.0kN[4]	36.8kN[4]	$3.87
1SAHG16150	16 x 150mm[4]	**55mm**						$5.41

1) The 6mm anchor is to be used only for multiple anchor redundant non-structural systems in concrete. Higher design capacities are possible depending on specific system arrangement (up to 3.0kN).

2) Without concrete edge or anchor spacing influence. This table contains preliminary design information only. Please refer to our AFOS Anchor Design Software and the ETA for more details.

3) Based on a volume of 400+ to 1000+ fixings, as of January 2023.

4) The 16mm anchor is not NCC compliant in the absence of ETA data for this diameter. Capacities are given for uncracked concrete only with an ULS capacity reduction factor of 0.6.

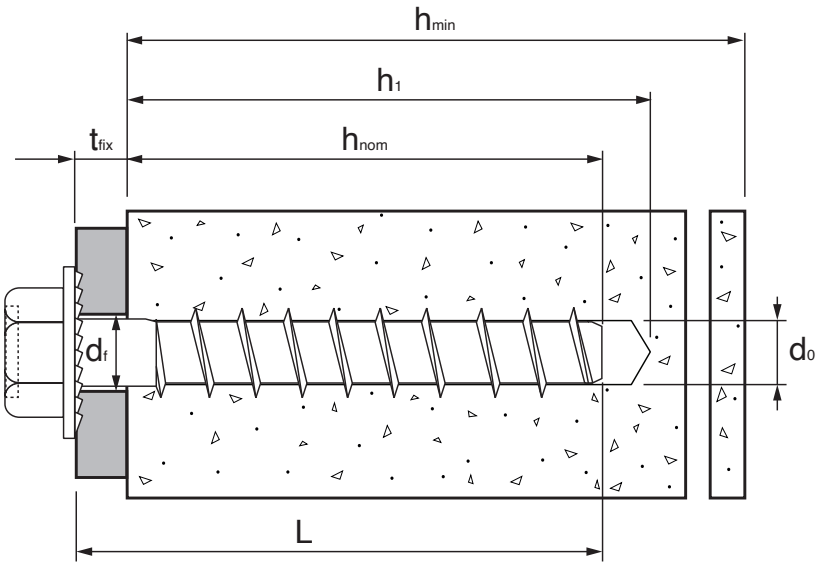
SAH-G

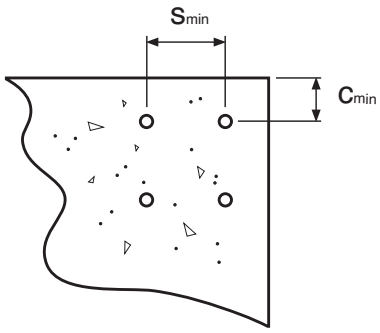
CONCRETE SCREW-ANCHOR HEX HEAD / GALVANISED

Installation Parameters

Anchor Size		[mm]	6	8	10	12	16
Nominal diameter of drill bit	d_o	[mm]	6	8	10	12	16
Fixture clearance hole diameter	d_f	[mm]	9	11	13	15	19
Minimum edge distance	c_{min}	[mm]	40	50	60	70	90
Minimum spacing	s_{min}	[mm]	40	50	60	70	90
Nominal installation torque (torque wrench)	T_{inst}	[Nm]	20	40	60	80	100
Max. power output, power tool setting	T_{max}	[Nm]	80	185	350	350	450

The minimum embedment depths are specified based on ETA values tested and are required for NCC compliance and design according to AS 5216. For non-safety critical applications, smaller embedment can be used.

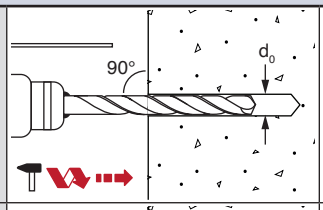
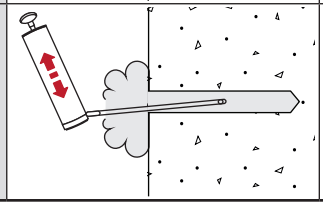


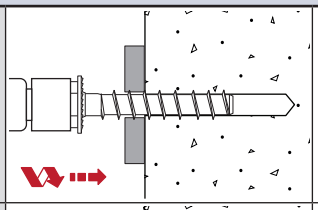
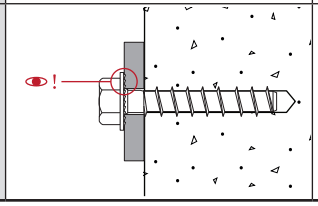


SAH-G

CONCRETE SCREW-ANCHOR HEX HEAD / GALVANISED

Installation Instructions:

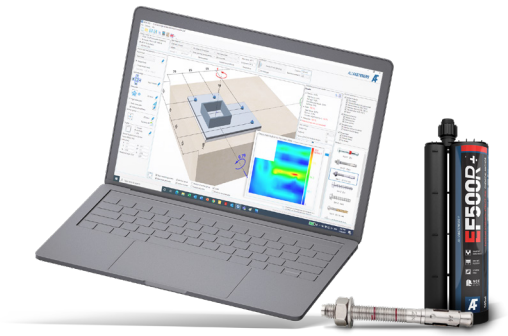
Drill hole preparation and cleaning		
1		Drill hole perpendicular to concrete surface. Using a vacuum drill, continue with step 3.
2		Blow out dust or alternatively vacuum clean down to the bottom of the hole.

Install concrete screw-anchor		
3		Screw in anchor by using a torque wrench or impact driver. Apply installation torque T_{inst} by using a calibrated torque wrench or by tool setting T_{max} if using an impact driver. Ensure not to overtighten.
4		Check to ensure that you have full contact of screw head with fixture.

For other anchor properties, please refer to the ETA on our website.

AFOS®
Anchor Design Software

DOWNLOAD **allfasteners.com.au/afos**



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.

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 © 2023. The contents of this document remains the property of Allfasteners® and may not be reproduced without prior written permission.