

CONCRETE SCREW ANCHORS

ZINC PLATED FOR CONCRETE

CERTIFICATION

TECHNICAL DATA



ICC-ESR 5217
ICC-ESR Evaluated



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CONCRETE SCREW ANCHORS

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ICC ESR-5217

Concrete Screw Anchors are a totally removable, medium duty, rotation setting, thread forming anchor, ideal for either temporary or permanent anchoring into substrates such as concrete, brick, hollow brick or block. The 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.

ICC Evaluation is for cracked and uncracked concrete substrates.



HEX HEAD

AVAILABILITY

- Zinc Clear Carbon Steel

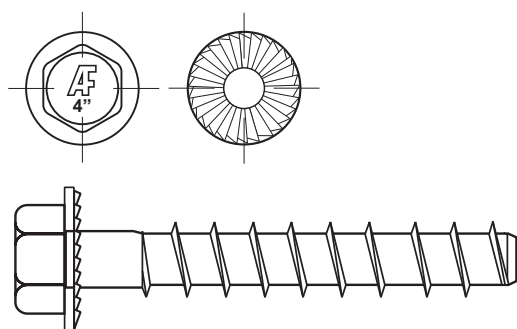
APPROVALS

- ICC-ESR 5217 Evaluation
- 2021, 2018, 2015 & 2012 International Building Code (IBC)
- 2021, 2018, 2015 & 2012 International Residential Code (IRC)
- 2020 City of Los Angeles Building Code (LABC)
- 2020 City of Los Angeles Residential Code (LARC)
- 2022 California Building Code (CBC)
- 2022 California Residential Code (CRC)
- 2020 Florida Building Code - Building
- 2020 Florida Building Code - Residential
- Approved for providing anchorage to cracked & uncracked concrete per ESR-5217
- Supported by AFOS anchor design software

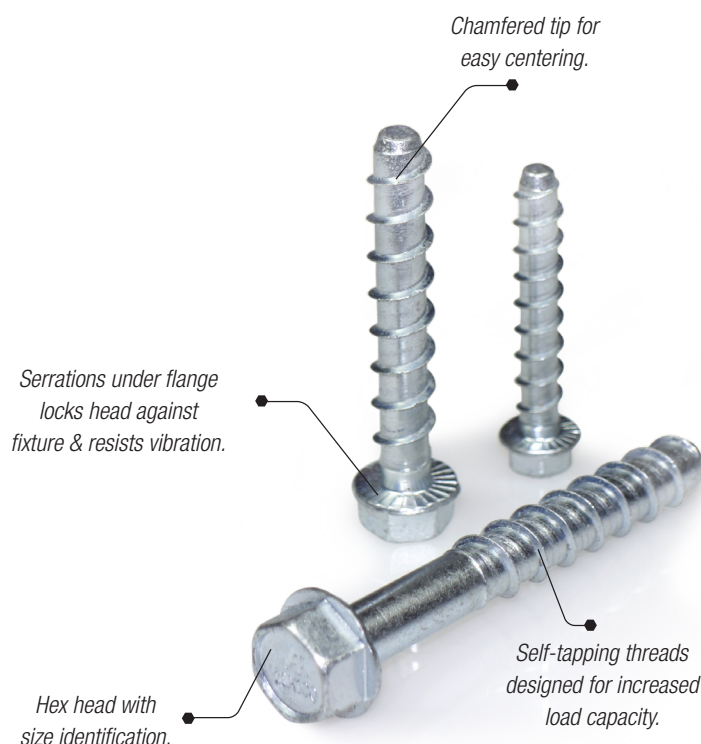
KEY BENEFITS

- Quick installation with a drill and drive method using a hex socket, ratchet or a torque controlled impact wrench.
- Unlike chemical anchoring or sleeved anchors, Concrete Screw Anchors can be removed with ease leaving the hole clear of debris
- The large self-tapping thread feature of this bolt is designed for fast advancing and high performance capacity as threads are formed in substrate material on installation.

PHYSICAL PROPERTIES



HEX HEAD WITH SIZE





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MATERIAL SPECIFICATIONS

Concrete Screw-Anchors are a fast installation and immediate loading, completely removable anchor. The large diameter self tapping screw by nature makes this anchor ideal for high load applications.

CARBON STEEL

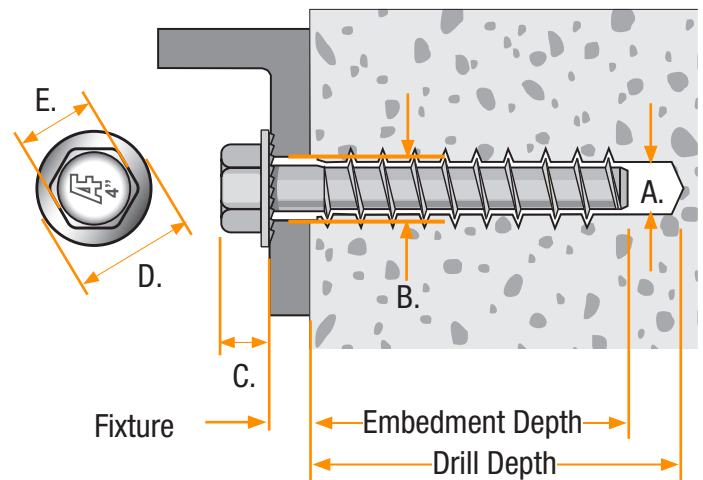
The Carbon Steel Concrete Screw-Anchors material composition consists of carbon steel.

INSTALLATION SPECIFICATIONS

- A. Anchor/Drill \varnothing , inch.
- B. Clearance hole \varnothing in fixture, inch (major diameter).
- C. Flanged head height, inch.
- D. Washer \varnothing , inch.
- E. Wrench size, inch.

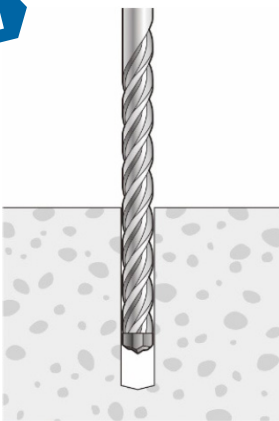
TABLE A1

A	B	C	D	E
1/4	3/8	9/32	9/16	7/16
3/8	1/2	3/8	3/4	9/16
1/2	5/8	1/2	1	3/4
5/8	3/4	9/16	1-1/8	15/16



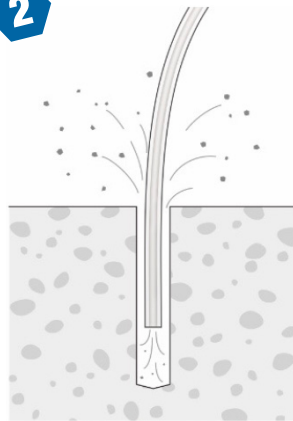
INSTALLATION INSTRUCTIONS

1



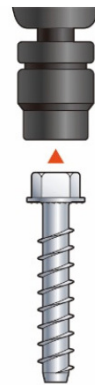
1. Drill a hole into the base material to the required depth using a drill bit that meets the requirements of ANSI B212.15.

2



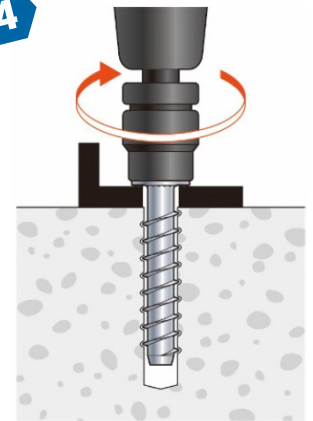
2. Remove Dust and debris from the hole using a hand pump or compressed air.

3



3. Select a powered impact wrench or torque wrench, attach an appropriate sized hex socket to the wrench and mount the screw anchor head into the socket.

4



4. Drive the anchor through the fixture into the hole until the head of the anchor comes into contact with the fixture.



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INSTALLATION PARAMETERS

TABLE 1: SAH-Z SCREW ANCHOR WITH HEX WASHER HEAD INSTALLATION PARAMETERS¹

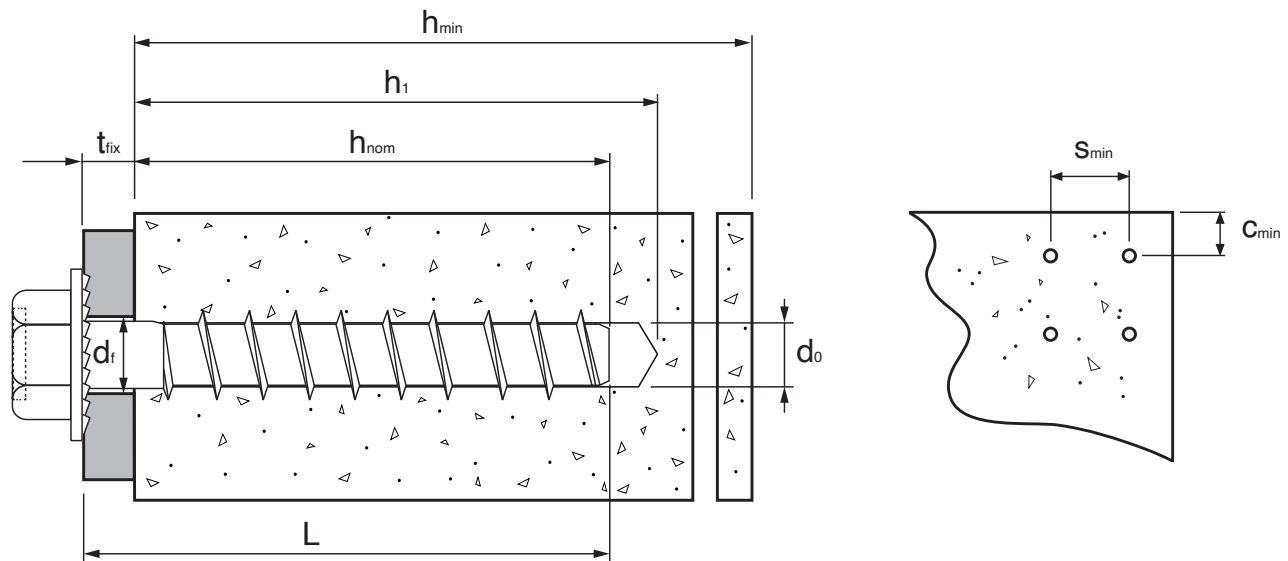
CHARACTERISTICS	SYMBOL	UNIT	NOMINAL ANCHOR DIAMETER														
			1/4"		3/8"			1/2"			5/8"				3/4"		
Drill Bit Diameter	d_o	in (mm)	1/4 (6.4)		3/8 (9.5)			1/2 (12.7)			5/8 (15.9)				3/4 (19.1)		
Nominal Embedment Depth	h_{nom}	in (mm)	1-5/8 (41)	2-1/2 (64)	1-5/8 (41)	2-1/2 (64)	3-1/4 (83)	2-1/4 (57)	3 (76)	4-1/4 (108)	3-1/4 (83)	4 (102)	5 (137)	5-1/2 (140)	4 (102)	5-1/2 (140)	6-1/4 (159)
Effective Embedment Depth	h_{ef}	in (mm)	1.24 (31.6)	2.01 (51.1)	1.21 (30.8)	1.98 (50.3)	2.62 (66.5)	1.66 (42.1)	2.30 (58.3)	3.37 (85.5)	2.54 (64.6)	3.19 (80.9)	3.99 (101.3)	4.42 (112.3)	3.14 (79.8)	4.41 (112.1)	5.05 (128.3)
Minimum Hole Depth	h_{hole}	in (mm)	2 (51)	2 (51)	2 (51)	2-7/8 (73)	3-5/8 (92)	2-5/8 (67)	3-3/8 (86)	3-3/8 (86)	3-5/8 (92)	4-1/2 (114)	5-3/8 (137)	6 (152)	4-1/2 (114)	6 (152)	6-3/4 (171)
Fixture Hole Diameter	d_r	in (mm)	3/8 (9.5)		1/2 (12.7)			5/8 (15.9)			3/4 (19.1)				7/8 (22.2)		
Maximum Installation Torque ²	$T_{inst,max}$	ft.lb (Nm)	21 (29)		N/A			N/A			N/A				103 (140)		
Maximum Impact Wrench Torque Rating	$T_{impact,max}$	ft.lb (Nm)	135 (185)		135 (185)			260 (350)			260 (350)				440 (600)		
Minimum Concrete Thickness	h_{min}	in (mm)	3-5/8 (91)	4-1/2 (114)	3-5/8 (91)	4-1/2 (114)	5-1/4 (133)	4-1/4 (107)	5 (126)	6-1/4 (158)	5-1/4 (133)	6 (152)	7 (177)	7-1/2 (190)	6 (152)	7-1/2 (190)	8-1/4 (209)
Critical Edge Distance	c_{ac}	in (mm)	1.5 h_{gr}														
Minimum Edge Distance (c_{min})	c_{min}	in (mm)	1-3/4 (44)														
Minimum Spacing (s_{min})	s_{min}	in (mm)	3 (76)														
Wrench Socket Size	—	in	7/16		9/16			3/4			15/16				1-1/8		

1. The tabulated data is to be used in conjunction with the design criteria given in ACI 318 (-19 and -14) Chapter 17 or ACI 318-11 Appendix D, as applicable.
2. N/A - Manual torque wrench installation not evaluated.

INSTALLATION PARAMETERS

TABLE 2: SAH-Z SCREW ANCHOR WITH HEX WASHER HEAD INSTALLATION PARAMETERS

ANCHOR SIZE			1/4"	3/8"	1/2"	5/8"	3/4"
Nominal Diameter of Drill Bit	d_o	in.	1/4	3/8	1/2	5/8	3/4
Fixture Clearance Hole Diameter	d_f	in.	3/8	1/2	5/8	3/4	7/8
Minimum Edge Distance	c_{min}	in.	1-3/4				
Minimum Spacing	s_{min}	in.	3				
Maximum Installation Torque	$T_{inst,max}$	ft.lb.	21	N/A	N/A	N/A	103
Maximum Impact Wrench Torque Rating	$T_{impact,max}$	ft.lb.	135	135	260	260	440





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TABLE 3: SAH-Z SCREW ANCHOR WITH HEX WASHER HEAD HEADDESIGN INFORMATION^{1,2}

CHARACTERISTICS	SYMBOL	UNIT	NOMINAL ANCHOR DIAMETER														
			1/4"		3/8"			1/2"			5/8"				3/4"		
Nominal Embedment Depth	h_{nom}	in (mm)	1-5/8 (41)	2-1/2 (64)	1-5/8 (41)	2-1/2 (64)	3-1/4 (83)	2-1/4 (57)	3 (76)	4-1/4 (108)	3-1/4 (83)	4 (102)	5 (137)	5-1/2 (140)	4 (102)	5-1/2 (140)	6-1/4 (159)
Effective Embedment Depth	h_{ef}	in (mm)	1.24 (31.6)	2,01 (51.1)	1.21 (30.8)	1.98 (50.3)	2.62 (66.5)	1.66 (42.1)	2.30 (58.3)	3.37 (85.5)	2.54 (64.6)	3.19 (80.9)	3.99 (101.3)	4.42 (112.3)	3.14 (79.8)	4.41 (112.1)	5.05 (128.3)
Anchor Category	1, 2 or 3	—	3	2	1	1	1	2	2	2	1	1	1	1	2	2	2
STEEL STRENGTH IN TENSION & SHEAR																	
Minimum Specified Ultimate Strength	f_{uta}	psi (N/mm²)	101,525 (700)		113,130 (780)			113,130 (780)			113,130 (780)				113,130 (780)		
Minimum Specified Yield Strength	f_y	psi (N/mm²)	81,220 (560)		90,505 (624)			90,505 (624)			90,505 (624)				90,505 (624)		
Effective Stress Area (Screw Anchor Body)	A_{se}	in² (mm²)	0.0453 (29.2)		0.1020 (65.8)			0.1827 (117.9)			0.2888 (186.3)				0.4145 (267.4)		
Steel Strength in Tension	N_{sa}	lb (kN)	4,585 (20.4)		11,535 (51.3)			20,680 (92.0)			32,665 (145.3)				46,895 (208.6)		
Strength Reduction Factor for Steel Failure in Tension	Φ_{sa}	—	0.65														
Steel Strength in Shear	V_{sa}	lb (kN)	1,350 (6.0)		3,150 (14.0)			6,745 (30.0)			10,115 (45.0)				15,060 (67.0)		
Steel Strength in Shear, Seismic	$V_{sa,eq}$	lb (kN)	1,125 (5.0)		1,800 (8.0)			3,730 (16.6)			6,880 (30.6)				13,240 (58.9)		
Strength Reduction Factor for Steel Failure in Shear	Φ_{sa}	—	0.60														
PULLOUT STRENGTH IN TENSION³																	
Pullout Strength in Uncracked Concrete	$N_{p,uncr}$	lb (kN)	N/A	4,025 (17.9)	1,395 (6.2)	2,990 (13.3)	N/A	N/A	4,115 (18.3)	7,485 (33.3)	N/A	6,585 (29.3)	8,320 (37.0)	N/A	N/A	N/A	N/A
Pullout Strength in Cracked Concrete	$N_{p,cr}$	lb (kN)	605 (2.7)	1,080 (4.8)	720 (3.2)	1,755 (7.8)	2,630 (11.7)	1,350 (6.0)	2,790 (12.4)	5,195 (23.1)	3,125 (13.9)	4,045 (18.0)	5,195 (23.1)	5,825 (25.9)	4,405 (19.6)	7,330 (32.6)	8,790 (39.1)
Pullout Strength in Cracked Concrete, Seismic	$N_{p,eq}$	lb (kN)	605 (2.7)	1,080 (4.8)	720 (3.2)	1,755 (7.8)	2,630 (11.7)	1,350 (6.0)	2,790 (12.4)	4,720 (21.0)	2,920 (13.0)	4,045 (18.0)	5,015 (22.3)	5,825 (25.9)	4,405 (19.6)	7,330 (32.6)	8,790 (39.1)
Normalization Exponent, Uncracked Concrete	n	—	0.50		0.50			0.50			0.50				0.50		
Normalization Exponent, Cracked Concrete	n	—	0.40		0.50			0.50			0.40				0.50		
Strength Reduction Factor for Pullout Strength in Tension	Φ_p	—	0.45	0.55	0.65	0.65	0.65	0.55	0.55	0.55	0.65	0.65	0.65	0.65	0.55	0.55	0.55

TABLE CONTINUES ON NEXT PAGE...



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TABLE 3: SAH-Z SCREW ANCHOR WITH HEX WASHER HEAD HEADDESIGN INFORMATION^{1,2}

CHARACTERISTICS	SYMBOL	UNIT	NOMINAL ANCHOR DIAMETER														
			1/4"		3/8"		1/2"		5/8"				3/4"				
CONCRETE BREAKOUT STRENGTH IN TENSION																	
Effective Embedment	h_{er}	in (mm)	1.24 (31.6)	2.01 (51.1)	1.21 (30.8)	1.98 (50.3)	2.62 (66.5)	1.66 (42.1)	2.30 (58.3)	3.37 (85.5)	2.54 (64.6)	3.19 (80.9)	3.99 (101.3)	4.42 (112.3)	3.14 (79.8)	4.41 (112.1)	5.05 (128.3)
Effectiveness Factor for Un-cracked Concrete	k_{uncr}	in-lb (SI)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	24 (10.0)	27 (11.3)	24 (10.0)	24 (10.0)
Effectiveness Factor for Cracked Concrete	k_{cr}	in-lb (SI)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	17 (7.1)	24 (10.0)	21 (8.8)	21 (8.8)
Strength Reduction Factor for Concrete Breakout Strength in Tension	Φ_{cb}	—	0.45	0.55	0.65	0.65	0.65	0.55	0.55	0.55	0.65	0.65	0.65	0.65	0.55	0.55	0.55
Axial Stiffness in Service Load Range in Un-cracked Concrete	β_{uncr}	lb/inch x 10 ⁵ (N/mm)	2.719 (48)	1.928 (34)	6.240 (109)	4.502 (79)	3.670 (64)	8.809 (154)	7.079 (124)	5.649 (99)	10.377 (182)	9.099 (159)	8.080 (1411)	7.684 (135)	13.204 (231)	11.075 (194)	10.410 (182)
COV for β_{uncr}	v	%	38														
Axial Stiffness in Service Load Range in Cracked Concrete	β_{cr}	lb/inch x 10 ⁵ (N/mm)	1.451 (25)	1.100 (19)	3.318 (58)	2.563 (45)	2.179 (38)	4.887 (86)	4.120 (72)	3.487 (61)	6.134 (107)	5.568 (98)	5.117 (90)	4.941 (86.5)	8.063 (141)	7.119 (125)	6.825 (120)
COV for β_{cr}	v	%	48														
CONCRETE BREAKOUT STRENGTH IN SHEAR																	
Nominal Diameter	d_o^2	in (mm)	0.250 (6.4)		0.375 (9.5)		0.500 (12.7)			0.625 (15.9)				0.750 (19.1)			
Load Bearing Length of Anchor	l_e	in (mm)	1.24 (31.6)	2.01 (51.1)	1.21 (30.8)	1.98 (50.3)	2.62 (66.5)	1.66 (42.1)	2.30 (58.3)	3.37 (85.5)	2.54 (64.6)	3.19 (80.9)	3.99 (101.3)	4.42 (112.3)	3.14 (79.8)	4.41 (112.1)	5.05 (128.3)
Reduction Factor of Concrete Breakout Strength in Shear	Φ_{cb}	—	0.70														
CONCRETE PRYOUT STRENGTH IN SHEAR																	
Coefficient for Pryout Strength	k_{cp}	—	1.0	1.0	1.0	1.0	2.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Reduction Factor for Pryout Strength in Shear	Φ_{cp}	—	0.70														

- The tabulated data is to be used in conjunction with the design criteria given in ACI 318 (-19 and -14) Chapter 17 or ACI 318-11 Appendix D, as applicable.
- The strength reduction factor applies when the load combination from the IBC or ACI 318 are used and the requirements of ACI 318-19 17.5.3, ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable, are met. If the load combinations of ACI 318-11 Appendix C are used, the appropriate value of f must be determined in accordance with ACI 318-11 D.4.5.



CONCRETE SCREW ANCHORS

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PERFORMANCE DATA

TABLE 4: EXAMPLE SAH-Z SCREW ANCHOR W/ HEX WASHER HEAD ALLOWABLE STRESS DESIGN VALUES FOR ILLUSTRATIVE PURPOSES^{1,2,3,4,5,6,7,8,9,10}

NOMINAL ANCHOR DIAMETER d_o (inch)	NOMINAL EMBEDMENT DEPTH h_{nom} (inch)	ALLOWABLE TENSION LOAD $T_{allowable, ASD}$ (lb)
1/4	1-5/8	504
1/4	2-1/2	1,271
3/8	1-5/8	613
3/8	2-1/2	1,313
3/8	3-1/4	2,235
1/2	2-1/4	954
1/2	3	1,529
1/2	4-1/4	2,759
5/8	3-1/4	2,133
5/8	4	2,892
5/8	5	3,654
5/8	5-1/2	4,897
3/4	4	2,791
3/4	5-1/2	4,130
3/4	6-1/2	5,061

1. Single anchor
2. Single tension loading only
3. Concrete determined to remain uncracked for the life of the anchorage.
4. Load combinations taken from ACI 318 (-19 or -14) Section 5.3 or ACI 318-11 Section 9.2, as applicable with no seismic loading.
5. 30% Dead Load (D) and 70% Live Load (L), controlling load combination 1.2 D + 1.6L.
6. Calculation of the weighted average of $a = 1.2 \times 0.3 + 1.6 \times 0.7 = 1.48$
7. Nominal weight concrete, $f'_c = 2,500$ psi.
8. $c_{a1} = c_{a2} \geq c_{ac}$
9. Concrete thickness $h \geq h_{min}$
10. Values are for Condition B (supplementary reinforcement in accordance with ACI 318 (-19 or -14) 17.3.3 or ACI 318-11 D.4.3 is not provided)



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ICC ESR-5217

ANCHOR SUMMARY

TABLE 4: SAH-Z SCREW ANCHOR W/ HEX WASHER HEAD ANCHOR SUMMARY

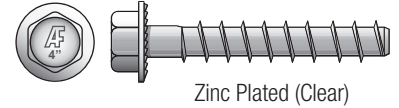
PART NUMBER	DESCRIPTION DIA. X L	MAX FIXTURE THICKNESS, t_{fix}	EFFECTIVE EMBEDMENT DEPTH, h_{ef}	EMBEDMENT DEPTH, h_{nom}	DRILL HOLE DIA. X DEPTH, $d_o \times h_t$	MINIMUM CONCRETE THICKNESS, h_{min}	DESIGN CAPACITY IN 2,500 PSI CRACKED CONCRETE ¹	
							TENSION	SHEAR
1SAHZ14134	1/4 x 1-3/4"	1/8"	1.24"	1-5/8"	1/4 x 2"	3-5/8"	272 lbs.	820 lbs.
1SAHZ14214	1/4 x 2-1/4"	5/8"	1.24"	1-5/8"	1/4 x 2"	3-5/8"	272 lbs.	820 lbs.
1SAHZ14300	1/4 x 3"	1-3/8"	1.24"	1-5/8"	1/4 x 2"	3-5/8"	272 lbs.	820 lbs.
		1/2"	2.01"	2-1/2"	1/4 x 2-7/8"	4-1/2"	594 lbs.	810 lbs.
1SAHZ14400	1/4 x 4"	2-3/8"	1.24"	1-5/8"	1/4 x 2"	3-5/8"	272 lbs.	820 lbs.
		1-1/2"	2.01"	2-1/2"	1/4 x 2-7/8"	4-1/2"	594 lbs.	810 lbs.
1SAHZ38134	3/8 x 1-3/4"	1/8"	1.21"	1-5/8"	3/8 x 2"	3-5/8"	468 lbs.	787 lbs.
1SAHZ38212	3/8 x 2-1/2"	7/8"	1.21"	1-5/8"	3/8 x 2"	3-5/8"	468 lbs.	787 lbs.
1SAHZ38300	3/8 x 3"	1-3/8"	1.21"	1-5/8"	3/8 x 2"	3-5/8"	468 lbs.	787 lbs.
		1/2"	1.98"	2-1/2"	3/8 x 2-7/8"	4-1/2"	1141 lbs.	1654 lbs.
1SAHZ38400	3/8 x 4"	2-3/8"	1.21"	1-5/8"	3/8 x 2"	3-5/8"	468 lbs.	787 lbs.
		1-1/2"	1.98"	2-1/2"	3/8 x 2-7/8"	4-1/2"	1141 lbs.	1654 lbs.
		3/4"	2.62"	3-1/4"	3/8 x 3-5/8"	5-1/4"	1709 lbs.	1890 lbs.
1SAHZ12300	1/2 x 3"	3/4"	1"	2-1/4"	1/2 x 2-5/8"	4-1/4"	743 lbs.	1270 lbs.
1SAHZ12400	1/2 x 4"	1-3/4"	1.66"	2-1/4"	1/2 x 2-5/8"	4-1/4"	743 lbs.	1270 lbs.
		1"	2.30"	3"	1/2 x 3-3/8"	5"	1534 lbs.	2071 lbs.
1SAHZ12500	1/2 x 5"	2-3/4"	1.66"	2-1/4"	1/2 x 2-5/8"	4-1/4"	743 lbs.	1270 lbs.
		2"	2.30"	3"	1/2 x 3-3/8"	5"	1534 lbs.	2071 lbs.
		3/4"	3.34"	4-1/4"	1/2 x 4-5/8"	6-1/4"	2857 lbs.	4047 lbs.
1SAHZ12600	1/2 x 6"	3-3/4"	1.66"	2-1/4"	1/2 x 2-5/8"	4-1/4"	743 lbs.	1270 lbs.
		3"	2.30"	3"	1/2 x 3-3/8"	5"	1534 lbs.	2071 lbs.
		1-3/4"	3.34"	4-1/4"	1/2 x 4-5/8"	6-1/4"	2857 lbs.	4047 lbs.
1SAHZ58400	5/8 x 4"	3/4"	2.54"	3-1/4"	5/8 x 3-5/8"	5-1/4"	2031 lbs.	4805 lbs.
1SAHZ58600	5/8 x 6"	2-3/4"	2.54"	3-1/4"	5/8 x 3-5/8"	5-1/4"	2031 lbs.	4805 lbs.
		2"	3.19"	4"	5/8 x 4-1/2"	6"	2629 lbs.	6069 lbs.
		1"	3.99"	5"	5/8 x 5-3/8"	7"	3377 lbs.	6069 lbs.
		1/2"	4.42"	5-1/2"	5/8 x 6"	7-1/2"	3786 lbs.	6069 lbs.
1SAHZ34500	3/4 x 5"	1"	3.14"	4"	3/4 x 4-1/2"	6"	2423 lbs.	9036 lbs.
1SAHZ34600	3/4 x 6"	2"	3.14"	4"	3/4 x 4-1/2"	6"	2423 lbs.	9036 lbs.
		1/2"	4.41"	5-1/2"	3/4 x 6"	7-1/2"	4032 lbs.	9036 lbs.
1SAHZ34700	3/4 x 7"	3"	3.14"	4"	3/4 x 4-1/2"	6"	2423 lbs.	9036 lbs.
		1-1/2"	4.41"	5-1/2"	3/4 x 6"	7-1/2"	4032 lbs.	9036 lbs.
		3/4"	5.05"	6-1/4"	3/4 x 6-3/4"	8-1/4"	4835 lbs.	9036 lbs.
1SAHZ34800	3/4 x 8"	4"	3.14"	4"	3/4 x 4-1/2"	6"	2423 lbs.	9036 lbs.
		2-1/2"	4.41"	5-1/2"	3/4 x 6"	7-1/2"	4032 lbs.	9036 lbs.
		1-3/4"	5.05"	6-1/4"	3/4 x 6-3/4"	8-1/4"	4835 lbs.	9036 lbs.



CONCRETE SCREW ANCHORS

ZINC PLATED FOR CONCRETE

ORDERING INFORMATION



Zinc Plated (Clear)

TABLE 5: SAH-Z SCREW ANCHOR W/ HEX WASHER HEAD ORDERING INFORMATION

PART NUMBER	ANCHOR* X LENGTH (in.)	CLEARANCE HOLE Ø (in.)	WRENCH SIZE (in.)
1SAHZ14134	1/4 x 1-3/4	3/8	7/16
1SAHZ14214	1/4 x 2-1/4	3/8	7/16
1SAHZ14300	1/4 x 3	3/8	7/16
1SAHZ14400	1/4 x 4	3/8	7/16
1SAHZ38134	3/8 x 1-3/4	1/2	9/16
1SAHZ38212	3/8 x 2-1/2	1/2	9/16
1SAHZ38300	3/8 x 3	1/2	9/16
1SAHZ38400	3/8 x 4	1/2	9/16
1SAHZ12300	1/2 x 3	5/8	3/4
1SAHZ12400	1/2 x 4	5/8	3/4
1SAHZ12500	1/2 x 5	5/8	3/4
1SAHZ12600	1/2 x 6	5/8	3/4
1SAHZ58400	5/8 x 4	3/4	15/16
1SAHZ58600	5/8 x 6	3/4	15/16
1SAHZ34500	3/4 x 5	7/8	1-1/8
1SAHZ34600	3/4 x 6	7/8	1-1/8
1SAHZ34700	3/4 x 7	7/8	1-1/8
1SAHZ34800	3/4 x 8	7/8	1-1/8

*Drill Diameter

RECOMMEDED INSTALL TOOLS

Bosch® 18V High Torque Impact Wrench with Pin Detent with (2) FatPack Batteries (4.0Ah)

Bosch Power Tools deliver stronger performance and lasting reliability. The Bosch HTH181-01 high torque impact wrench offers a heavy duty all-metal motor, impact hammer and anvil system, made to hold up in tough environments. It comes with (2) FatPack Lithium-Ion advanced technology batteries that combines Electronic Cell Protection, a unique battery pack design and customized electronics to deliver optimal battery life and performance. Bosch 18V Batteries equipped with Coolpack Technology. This will provide better performance from your tools in extreme heats and frigid temperatures.



TABLE 6: TORQUE WRENCH ORDERING INFORMATION

PART NUMBER	TYPE
9HTH181-01	Pin Detent



CONCRETE SCREW ANCHORS

ZINC PLATED FOR CONCRETE



ICC ESR-5217

RECOMMENDED SOCKETS

Bosch® 1/2-Square Drive Socket - Impact Ready

Impact tough deep well socket engineered for high torque. Forged steel reduces breakage. Absorbs torque peaks to reduce stress. Hardened core increases socket strength, reduces fractures. Engineered to meet ISO standards.

**TABLE 7: SOCKET ORDERING INFORMATION**

PART NUMBER	TYPE
5BS27273	3/8
5BS27274	7/16
5BS27275	1/2
5BS27276	9/16
5BS27279	5/8
5BS27280	11/16
5BS27281	3/4
5BS27282	13/16
5BS27283	7/8
5BS27284	15/16

TRADE APPLICATION

	CARPENTER	CONSTRUCTION	RACKING INSTALLER	CONCRETE FORMWORKER
BOTTOM PLATES	✓			
AWNINGS		✓		
PALLET RACKING			✓	
FORMWORK SUPPORT				✓
FLOORING	✓			
SHELVING			✓	
BRACING	✓		✓	
RAILINGS / BALUSTRADE / SAFETY BARRIERS		✓		✓
MACHINERY			✓	
CURTAIN WALL		✓		



CONCRETE SCREW ANCHORS

ZINC PLATED FOR CONCRETE

ORDERING INFORMATION

