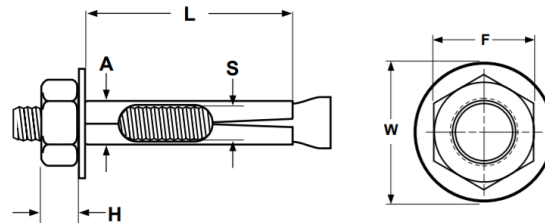


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HEX SLEEVE ANCHOR – STEEL ZINC AND 18-8 STAINLESS STEEL

The following Specification Sheet applies to all **Hex Sleeve Anchor – Steel Zinc and 18-8 Stainless Steel** in our **J25, J3, J5, J6, J7, and 75** series of products.



MATERIAL SPECIFICATIONS

Anchor Component	Carbon Steel Version	Stainless Steel Version
Plow-Bolt	AISI 1010/1018	Type 304 Stainless Steel
Expansion Sleeve	AISI 1010	Type 304 Stainless Steel
Extender	AISI 1010	N/A
Zinc Plating	ASTM B 633, SCI, Type III (Fe/Zn5)	N/A

INSTALLATION SPECIFICATIONS

Acorn Nut and Hex Head

Dimension	Nominal Anchor Diameter, d					
	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"
ANSI Drill Bit Size, d_{bit} (in.)	1/4	5/16	3/8	1/2	5/8	3/4
Fixture Clearance Hole, d_h (in.)	5/16	3/8	7/16	9/16	11/16	15/16
Plow Bolt Size (UNC)	10-24	1/4-20	5/16-18	3/8-16	1/2-13	5/8-11
Nut Height (in.)	3/16	7/32	17/64	21/64	7/16	35/64
Washer O.D., d_w (in.)	1/2	5/8	13/16	1	1-3/8	1-3/4
Wrench Size (in.)	3/8	7/16	1/2	9/16	3/4	15/16

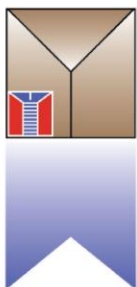
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Ultimate and Allowable Load Capacities for Carbon and Stainless Steel Anchors in Normal Weight Concrete^{1,2,3}

Nominal Anchor Diameter d in.	Min. Embed. Depth h in.	Guide Installation Torque ft.-lbs.		Minimum Concrete Compressive Strength, f' _c											
				3,000 psi				3,500 psi				4,000 psi			
				Ultimate		Allowable		Ultimate		Allowable		Ultimate		Allowable	
		Carbon	Stainless	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.
1/4	1/2	2	-	225	1,000	55	250	240	1,000	60	250	260	1,000	65	250
	1	6	4	910	1,120	230	280	980	1,120	245	280	1,050	1,120	265	280
5/16	1	12	-	1,205	2,360	300	590	1,300	2,360	325	590	1,390	2,360	350	590
3/8	1-1/4	18	18	1,875	4,110	470	1,030	2,040	4,110	510	1,030	2,165	4,110	540	1,030
1/2	1-1/2	26	26	2,235	4,860	560	1,215	2,420	4,860	605	1,215	2,580	4,860	645	1,215
5/8	2	50	40	4,870	4,860	1,220	1,215	5,260	4,860	1,315	1,215	5,625	4,860	1,405	1,215
3/4	2-1/4	90	60	5,045	11,040	1,260	2,760	5,450	11,040	1,365	2,760	5,825	11,040	1,455	2,760

- The ultimate load values listed above must be reduced by a minimum safety factor of 4.0 or greater to determine the allowable working load. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
- Allowable load capacities listed are calculated using an applied safety factor of 4.0. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
- Tabulated load values are for anchors installed at a minimum spacing distance between anchors and an edge distance of 12 times the anchor diameters.

Ultimate and Allowable Load Capacities for Carbon and Stainless Steel Anchors in Hollow or Solid Concrete Masonry^{1,2,3,4}

Nominal Anchor Diameter d in.	Minimum Embed. Depth h in.	Guide Installation Torque ft.-lbs.	Minimum Edge Dist. in.	Minimum End Dist. in.	Ultimate Loads		Allowable Loads	
					Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.
1/4	1	4	3-3/4	4	800	1,140	160	225
5/16	1	8			905	1,570	180	310
3/8	1-1/4	15			1,100	1,570	220	310
1/2	1-1/2	18			1,525	1,570	305	310
5/8	1-1/2	30			2,250	1,770	450	355

- Tabulated load values are for anchors installed in minimum 6 inch wide, Grade N, Type II, normal-weight concrete masonry units conforming to ASTM C 90. Mortar must be minimum Type N, S, or M. Masonry prism compressive strength must be 1,500 psi minimum at time of installation.
- Allowable load capacities listed are calculated using an applied safety factor of 5.0. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
- A suitable anchor length must be selected which includes consideration of a fixture to engage the base material at the minimum embedment depth when anchoring into hollow concrete masonry. (e.g. attachment thickness + face shell thickness embedment + one half inch = suitable anchor length)
- The consistence of hollow concrete block masonry base material can vary greatly. Consideration of job site testing should be given to verify conformance of base materials and anchor performance in actual conditions.

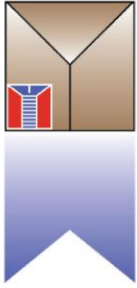
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Ultimate and Allowable Load Capacities for Carbon or Stainless Steel Anchors in Solid Clay Brick Masonry^{1,2}

Nominal Anchor Diameter d in.	Minimum Embed. Depth h, in.	Guide Installation Torque ft.-lbs.	Minimum Edge Dist. in.	Minimum End Dist. in.	$f'm \geq 1,500 \text{ psi (10.4 MPa)}$			
					Ultimate		Allowable	
					Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.
1/4	1	4	4	1-1/2	800	950	160	190
3/8	1-1/4	15	8	8	1,100	3,000	220	600
1/2	1-1/2	26	8	8	1,560	3,150	310	630
5/8	2	40	8	8	2,470	5,250	495	1,050

1. Tabulated load values are for anchors installed in Grade SW, multiple wythe solid clay brick masonry conforming to ASTM C 62.

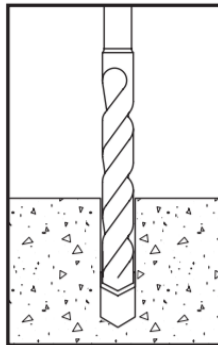
2. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety.

INSTALLATION INSTRUCTIONS

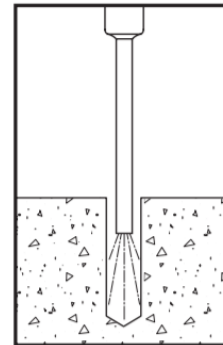
Hex/Acorn

Using the proper diameter bit, drill a hole into the base material to a depth of at least 1/2" or one anchor diameter deeper than the embedment required.

The tolerances of the drill bit used must meet the requirements of ANSI Standard B21.15

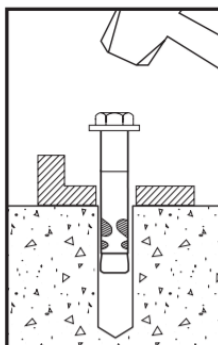


Blow the hole clean of dust and other material. Do not expand the anchor prior to installation.

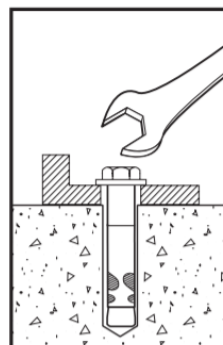


Position the washer on the anchor and thread on the nut.

Drive the anchor through the fixture into the anchor hole until the nut and washer are firmly seated against the fixture. Be sure the anchor is driven to the required embedment depth.



Tighten the anchor by turning the nut or head 3 to 5 turns past finger tight or by applying the guide installation torque from the finger tight position.



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