

# BASIC GUIDE TO MECHANICAL AND CHEMICAL ANCHOR INSTALLATION



AC-100 MEDIUM INSTALLATION TOOL



Wedge-Bolt Block Plug



DROP-IN SETTING TOOL



BLOWOUT BULB



POWERFAST NOZZLE

AC100 NOZZLE



## ESTIMATED NUMBER OF INSTALLATIONS PER CARTRIDGE IN SOLID BASE MATERIALS

### ESTIMATED NUMBER OF ANCHORS WHICH CAN BE INSTALLED USING THE 8 OZ. AC100 PLUS CARTRIDGE

ROD SIZE	DRILL DIA.	HOLE DEPTH (IN INCHES) USING THREADED ROD													
		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1/4	5/16	129	86	64	51	43	36	31	28	25	23	21	19	18	16
3/8	7/16	74	49	37	29	24	21	18	16	14	13	12	11	10	9
1/2	9/16	53	35	26	21	17	14	13	11	10	9	8	7	7	6
5/8	3/4	27	17	13	10	8	7	6	5	5	4	4	3	3	3
3/4	7/8	21	14	10	8	6	5	5	4	3	3	3	2	2	2
7/8	1	17	11	8	6	5	4	4	3	3	2	2	2	2	1
1	1 1/8	14	9	7	5	5	4	3	2	2	2	2	1	1	1
1 1/8	1 1/4	12	8	6	4	3	3	2	2	2	1	1	1	1	1
1 1/4	1 3/8	10	7	5	4	3	2	2	2	1	1	1	1	1	1

### ESTIMATED NUMBER OF ANCHORS WHICH CAN BE INSTALLED USING THE 12 OZ. AC100 PLUS CARTRIDGE

ROD SIZE	DRILL DIA.	HOLE DEPTH (IN INCHES) USING THREADED ROD													
		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1/4	5/16	187	124	93	74	62	53	46	41	37	33	30	28	26	24
3/8	7/16	111	74	55	44	36	31	27	24	21	19	18	16	15	14
1/2	9/16	78	52	39	31	25	22	19	17	15	13	12	11	10	10
5/8	3/4	39	26	19	15	13	11	9	8	7	6	6	5	5	4
3/4	7/8	31	21	15	12	10	8	7	6	5	5	4	4	4	3
7/8	1	26	17	12	10	8	7	6	5	4	4	3	3	3	3
1	1 1/8	21	14	10	8	6	5	5	4	3	3	2	2	2	2
1 1/8	1 1/4	19	12	9	7	6	5	4	3	3	3	2	2	2	2
1 1/4	1 3/8	16	11	7	6	5	4	3	3	2	2	2	2	1	1

### ESTIMATED NUMBER OF ANCHORS WHICH CAN BE INSTALLED USING THE 30 OZ. AC100 PLUS CARTRIDGE

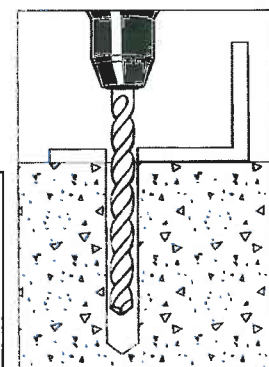
ROD SIZE	DRILL DIA.	HOLE DEPTH (IN INCHES) USING THREADED ROD													
		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1/4	5/16	457	304	228	182	152	130	113	101	91	81	75	69	64	60
3/8	7/16	264	176	132	105	82	75	65	58	52	47	43	40	37	34
1/2	9/16	190	126	94	75	63	54	47	41	37	34	31	28	26	24
5/8	3/4	97	64	48	38	32	27	23	21	19	17	15	14	13	12
3/4	7/8	76	51	38	29	25	21	18	16	14	13	12	11	10	9
7/8	1	63	42	31	25	20	17	15	13	12	11	10	9	8	8
1	1 1/8	52	34	25	20	17	14	12	11	10	9	8	7	7	6
1 1/8	1 1/4	46	30	22	18	15	12	11	9	8	7	7	6	6	5
1 1/4	1 3/8	39	26	19	15	12	10	9	8	7	7	6	5	5	4

**FASTENERS, INC**  
**1895 WEST DARTMOUTH AVE**  
**DENVER, CO 80110**

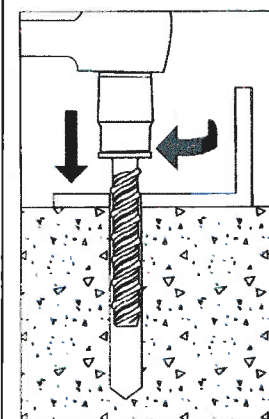
**PHONE: 303-777-7555**  
**FAX: 303-781-9175**  
 Open Monday — Friday 7:00 AM - 4:30 PM



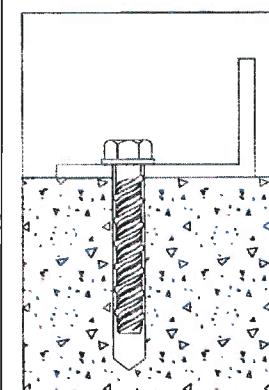
## Installation Procedure for "Blue-Tipped" Wedge-Bolts



Be sure to use the proper diameter bit. With "Blue Tipped" Wedge-Bolts, you must use the specified appropriate Wedge-Bit only. In solid base materials, drill a hole at least 1/2" or one anchor diameter deeper than the embedment required. Be sure to blow the hole clean of dust and other materials. When attaching to hollow base material, insert the appropriate "Block Plug" into the anchor hole.

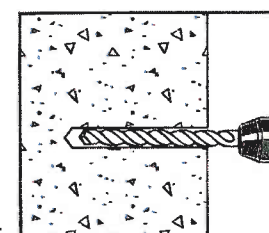


Insert the anchor through the fixture into the anchor hole. Begin tightening the anchor by rotating clockwise and applying pressure in toward the base material. This will engage the first few threads as the anchor begins to advance.....

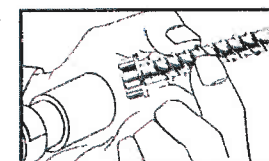


Continue tightening the anchor until the head is firmly seated against the fixture while achieving the required embedment depth. In extremely dense materials, use of an impact wrench is recommended.

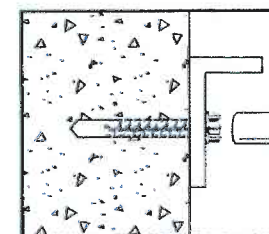
## Typical Installation Procedure for a 3/16" Wedge-Bolt



Using a 3/16" diameter bit, drill a hole into the base material to a depth of at least 1/2" deeper than the embedment required. A TAPPER drill bit must be used. Blow the hole clean of dust and other materials.

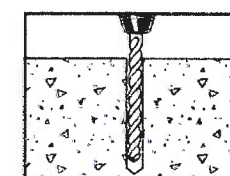


Using the Combo 3/16" Wedge-Bolt / TAPPER Tool and the appropriate driver, insert the head of the Wedge-Bolt anchor. The drill motor should be set to "rotation only" mode.

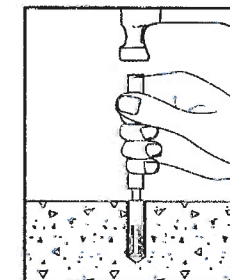


Place the chamfered end of the 3/16" Wedge-Bolt through the fixture into the pre-drilled hole and drive the anchor in one steady continuous motion until it is fully seated at the proper embedment. The driver will automatically disengage from the head of the Wedge-Bolt.

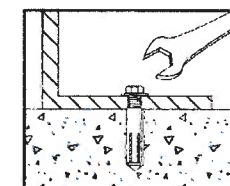
## Typical Installation of Steel Drop-In Anchors



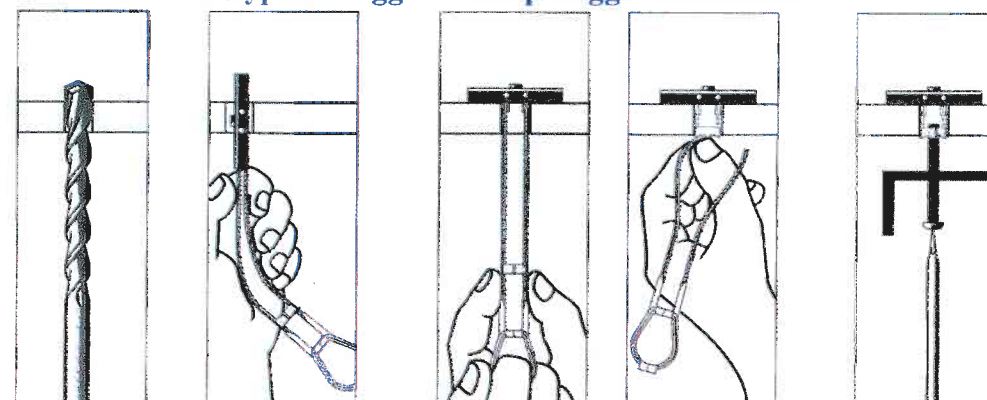
Drill a hole to the depth of embedment required. Do not over drill the hole unless the application calls for a subset anchor.



Blow the hole clean. Insert the anchor into the hole and tap flush with the surface. Using a drop in setting tool, set the anchor by driving the tool with a sufficient number of hammer blows until the shoulder of the tool is seated against the anchor. Anchor will not hold allowable loads required if the shoulder of the setting tool does not seat against the anchor. Insert bolt or rod and tighten. Minimum thread engagement should be at least 2/3 the total anchor length.

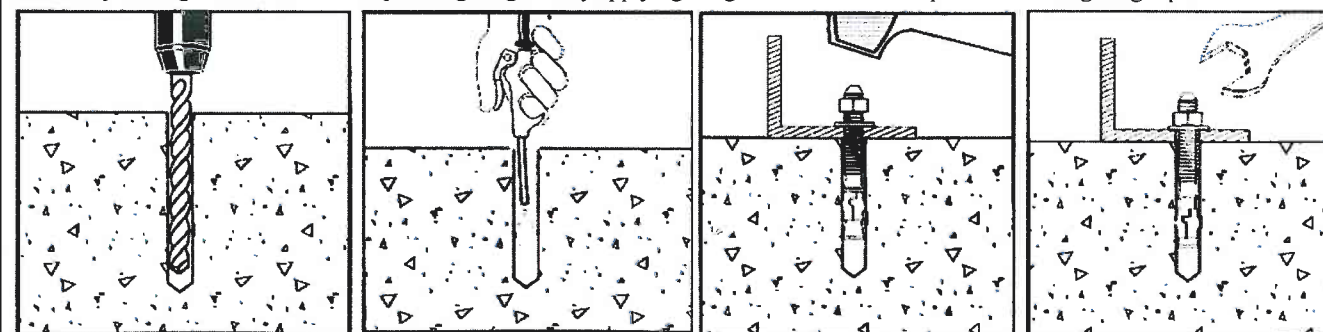


## Typical Toggle / Strap Toggle Installation



## TYPICAL WEDGE ANCHOR INSTALLATION

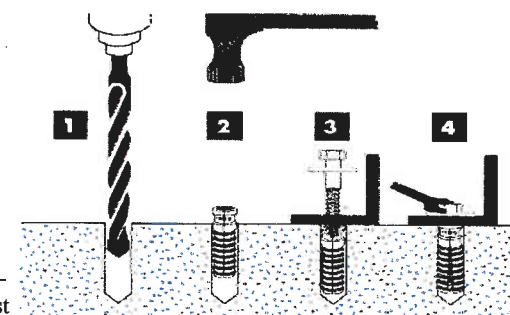
Using the proper diameter bit, drill a hole into the base material to a depth of at least 1/2" or one anchor diameter deeper than the embedment required. The tolerances of the drill bit used should meet the requirements of NASI Standard B212.15. Blow the hole clean of dust and other material. Position the washer on the anchor and thread 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 3 to 5 turns past finger tight or by applying the guide installation torque from the finger tight position.



## Dropin Drill Bit Sizes and Embedments

Anchor Size	Drill Bit	Embedment
1/4	3/8	7/8
5/16	5/8	1 1/2
3/8	5/8	1 1/2
1/2	3/4	1 1/2
5/8	1"	1 1/2

## Lag Shield Installation



## Nail-In Installation

