Pound-It™ Drive Anchors

wej-it HIGH-PERFORMANCE ANCHORS

Description

The Pound-It Drive Anchors are a **tamper-proof and vibration resistant one-piece anchor** designed for use in concrete, grout filled block, or masonry. The Pound-It Drive Anchor is pre-formed with a bend along the anchor shaft that creates an expansion wedge that locks the anchor in place. There is **no need for secondary tightening** which speeds up and greatly reduces the cost of the anchor installation.

Flat Head

Forming Head

Mushroom Head

Rod-Coupling

Tie-Wire

Key Features & Benefits

- **Pre-formed one-piece anchor design allows for easy installation**
- Available in the following head styles:
  - Flat Head
  - Mushroom Head
  - Forming Head
  - Rod-Coupling
  - Tie-Wire
- The forming head can be used for temporary applications – removable
- The rod-coupling head and tie-wire head are easy to install and can be used in place of direct fastening
- The mushroom head is also available in 316ss for corrosive environments

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Applications

- Tamper-Proof Applications
- Exterior Applications
- Metal Track Attachments
- Concrete Framework
- Roofing Applications
- Fastening Wood or Light-Gauge Steel
- Suspended Ceiling Panels

Specifications, Listings and Approvals

Diameters: 3/16" – 3/8"

Materials:
Carbon steel with zinc plating
– AISI c1038 carbon steel
– ASTM B633, SC1, Type III (Fe/Zn 5)
Type 316 Stainless Steel

Head Styles:
– Flat Head
– Mushroom Head
– Forming Head
– Rod-Coupling
– Tie-Wire

Pound-It™ Drive Anchors

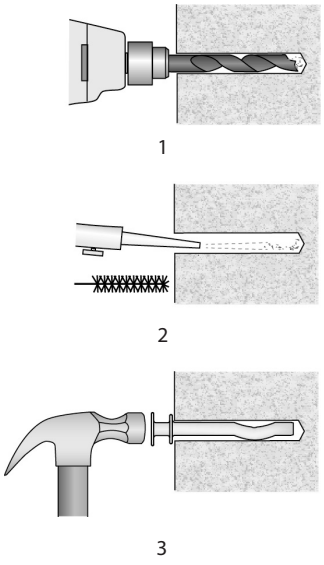
Installation Information

Instructions

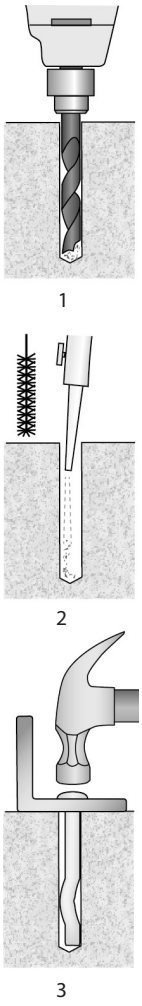
1. Drill the hole perpendicular to the work surface at least 1/2" of the anchors diameter deeper than the required embedment depth.
   To assure full holding power, do not ream the hole or allow the drill to wobble.
2. Clean the hole using compressed air and a nylon brush. A clean hole is necessary for proper performance.
3. Drive anchor through the fixture into the hole making sure the head solidly against the fixture. Be sure the anchor is driven to the required embedment depth.

NOTE: Always wear safety glasses. Follow drill manufacturer's instructions. Use only solid carbide-tipped drill bits meeting ANSI B212.15 diameter standards.

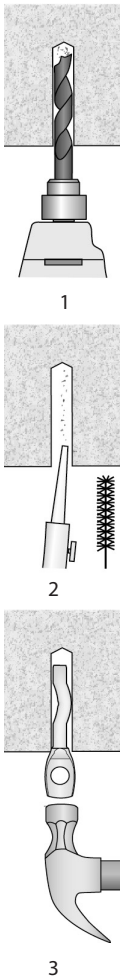
Forming Head



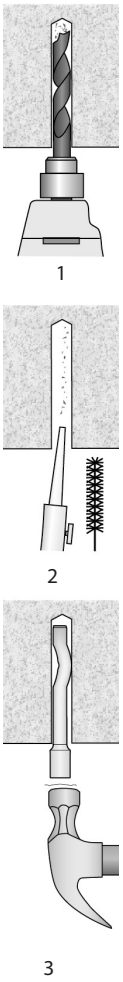
Mushroom or Flat Head



Tie-Wire



Rod-Coupling



Installation Data

Anchor Type	Anchor Dia. (in.)	Drill Bit Dia. (in.)	Fixture Clearance Hole (in.)	Head Height (in.)	Head Size (in.)	Head Width (in.)	Tie-Wire Hole (in.)	UNC Thread Size
Mushroom Head	3/16	3/16	1/4	7/64	7/16	-	-	-
	1/4	1/4	5/16	7/64	1/2	-	-	-
	3/8	3/8	7/16	7/32	3/4	-	-	-
Flat Head	1/4	1/4	5/16	7/64	1/2	-	-	-
Rod-Coupling	1/4	3/16	5/16	1/2	7/16	-	-	1/4 - 20
	3/8	1/4	7/16	5/8	9/16	-	-	3/8 - 16
Tie-Wire	3/16	3/16	1/4	19/32	-	9/64 x 7/16	3/16	
	1/4	1/4	5/16	5/8	-	3/16 x 9/16	9/32	
Forming	3/16	3/16	1/4	30/64	13/32	-	-	-
	1/4	1/4	5/16	29/64	1/2	-	-	-

Performance Data

Ultimate and Allowable Loads (lbs.) for Carbon Steel Mushroom/Flat Head – Normal-Weight Concrete

Anchor Dia. (in.)	Embed. Depth (in.)	Drill Bit Dia. (in.)	Allowable								Ultimate							
			2,000 psi		3,000 psi		4,000 psi		5,000 psi		2,000 psi		3,000 psi		4,000 psi		5,000 psi	
			Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear
3/16	7/8	3/16	125	263	133	300	155	320	160	330	500	1050	530	1200	620	1280	640	1320
	1		130	300	150	420	185	440	190	445	520	1200	600	1680	740	1760	760	1780
	1-1/4		180	430	220	490	258	523	273	560	720	1720	880	1960	1030	2090	1090	2240
1/4	1	1/4	148	373	180	465	198	525	210	580	590	1490	720	1860	790	2100	840	2320
	1-1/4		198	430	283	518	293	595	338	650	790	1720	1130	2070	1170	2380	1350	2600
3/8	1-3/4	3/8	423	873	538	1118	753	1278	793	1290	1690	3490	2150	4470	3010	5110	3170	5160

*Allowable load capacities are calculated using an applied safety factor of 4:1

Ultimate and Allowable Loads (lbs.) for Stainless Steel Mushroom Head – Normal-Weight Concrete

Anchor Dia. (in.)	Embed. Depth (in.)	Drill Bit Dia. (in.)	Allowable								Ultimate							
			2,000 psi		3,000 psi		4,000 psi		5,000 psi		2,000 psi		3,000 psi		4,000 psi		5,000 psi	
			Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear
3/16	7/8	3/16	120	225	138	290	150	300	158	318	480	900	550	1160	600	1200	630	1270
	1		128	288	150	403	180	428	185	438	510	1150	600	1610	720	1710	740	1750
	1-1/4		183	420	218	470	250	493	270	545	730	1680	870	1880	1000	1970	1080	2180
1/4	1	1/4	158	360	178	450	193	510	220	548	630	1440	710	1800	770	2040	880	2190
	1-1/4		205	418	270	495	280	530	315	593	820	1670	1080	1980	1120	2120	1260	2370
3/8	1-3/4	3/8	410	805	498	938	620	1070	633	1130	1640	3220	1990	3750	2480	4280	2530	4520

*Allowable load capacities are calculated using an applied safety factor of 4:1

Ultimate and Allowable Loads (lbs.) for Carbon Steel Rod Coupling – Normal-Weight Concrete

Anchor Dia. (in.)	Embed. Depth (in.)	Drill Bit Dia. (in.)	Allowable								Ultimate							
			2,000 psi		3,000 psi		4,000 psi		5,000 psi		2,000 psi		3,000 psi		4,000 psi		5,000 psi	
			Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear
1/4	1-1/4	3/16	198	248	310	248	313	248	313	248	790	990	1240	990	1250	990	1250	990
3/8	1-3/4	1/4	273	443	420	500	498	520	498	540	1090	1770	1680	2000	1990	2080	1990	2160

*Allowable load capacities are calculated using an applied safety factor of 4:1

Ultimate and Allowable Loads (lbs.) for Carbon Steel Tie-Wire – Normal-Weight Concrete

Anchor Dia. (in.)	Embed. Depth (in.)	Drill Bit Dia. (in.)	Allowable						Ultimate					
			3,000 psi		4,000 psi		5,000 psi		3,000 psi		4,000 psi		5,000 psi	
			Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear
3/16	1-1/8	3/16	240	238	260	238	273	238	960	950	1040	950	1090	950
1/4	1-1/8	1/4	265	325	285	325	303	325	1060	1300	1140	1300	1210	1300

*Allowable load capacities are calculated using an applied safety factor of 4:1

Ultimate and Allowable Loads (lbs.) for Carbon Steel Forming – Normal-Weight Concrete

Anchor Dia. (in.)	Embed. Depth (in.)	Drill Bit Dia. (in.)	Allowable								Ultimate							
			2,000 psi		3,000 psi		4,000 psi		5,000 psi		2,000 psi		3,000 psi		4,000 psi		5,000 psi	
			Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear	Tens.	Shear
3/16	1-1/4	3/16	188	418	235	470	300	580	310	608	750	1670	940	1880	1200	2320	1240	2430
1/4	1-1/4	1/4	200	433	293	493	338	595	345	695	800	1730	1170	1970	1350	2380	1380	2780

*Allowable load capacities are calculated using an applied safety factor of 4:1

Ultimate and Allowable Loads (lbs.) - Grout-Filled Concrete Masonry

Anchor Dia. (in.)	Embed. Depth (in.)	Drill Bit Dia. (in.)	1,500 psi							
			Allowable				Ultimate			
			Carbon Steel		Type 316 Stainless Steel		Carbon Steel		Type 316 Stainless Steel	
			Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear
3/16	7/8	3/16	75	140	75	140	300	560	300	560
	1		95	153	85	153	380	610	340	610
	1-1/4		185	240	180	383	740	960	720	1530
1/4	1	1/4	170	443	165	410	680	1770	660	1640
	1-1/4		198	525	193	475	790	2100	770	1900

*Allowable load capacities are calculated using an applied safety factor of 4:1

Load Adjustment Factors

Spacing - Tension & Shear

Anchor Dia.		3/16	1/4	3/8
Embedment h_v		7/8	1	1-3/4
Critical Spacing S_{cr}		1-3/4	2	3-1/2
Min. Spacing S_{min}		7/8	1	1-3/4
Actual Spacing S_{act}	7/8	0.50	-	-
	1	0.57	0.50	-
	1-1/2	0.86	0.75	-
	1-3/4	1.00	0.88	0.50
	2	-	1.00	0.57
	2-3/4	-	-	0.79
	3-1/2	-	-	1.00

For tension and shear loads, the critical spacing (S_{cr}) is equal to 2 embedment depths at which the anchor achieves 100% of load. Minimum spacing (S_{min}) is equal to 1 embedment depth at which the anchor achieves 50% of load.

Edge Distance - Tension

Anchor Dia.		3/16	1/4	3/8
Critical Edge Dist. C_{cr}		2-5/8	3-1/2	5-1/4
Min. Edge Dist. C_{min}		1	1-1/4	1-7/8
Actual Edge Dist. C_{act}	1	0.50	-	-
	1-1/4	0.63	0.50	-
	1-7/8	0.77	0.65	0.50
	2-1/2	0.95	0.78	0.61
	2-5/8	1.00	0.82	0.64
	3-1/2	-	1.00	0.75
	5-1/4	-	-	1.00

For Tension anchor loads, the critical edge distance (C_{cr}) is equal to 14 anchor diameters at which the anchor achieves 100% of load. Minimum edge distance (C_{min}) is equal to 5 anchor diameters at which the anchor achieves 50% of load.

Edge Distance - Shear

Anchor Dia.		3/16	1/4	3/8
Critical Edge Dist. C_{cr}		2-5/8	3-1/2	5-1/4
Min. Edge Dist. C_{min}		1	1-1/4	1-7/8
Actual Edge Dist. C_{act}	1	0.25	-	-
	1-1/4	0.37	0.25	-
	1-7/8	0.65	0.45	0.25
	2-1/2	0.95	0.67	0.41
	2-5/8	1.00	0.70	0.45
	3-1/2	-	1.00	0.60
	5-1/4	-	-	1.00

For Shear anchor loads, the critical edge distance (C_{cr}) is equal to 14 anchor diameters at which the anchor achieves 100% of load. Minimum edge distance (C_{min}) is equal to 5 anchor diameters at which the anchor achieves 25% of load.

Order Information

Flat-Head: Zinc-Plated Carbon Steel

Catalog No.	Anchor Size (in.)	Drill Bit Dia. (in.)	Min. Embed. (in.)	Box Quantity	Carton Quantity
PFH1420	1/4 x 2	1/4	1-1/4	100	1000
PFH1422	1/4 x 2-1/2	1/4	1-1/4	100	1000
PFH1430	1/4 x 3	1/4	1-1/4	100	1000
PFH1432	1/4 x 3-1/2	1/4	1-1/4	100	1000
PFH1440	1/4 x 4	1/4	1-1/4	100	1000

Forming Head: Zinc-Plated Carbon Steel

Catalog No.	Anchor Size (in.)	Drill Bit Dia. (in.)	Min. Embed. (in.)	Box Quantity	Carton Quantity
PFS3623	3/16 x 2-3/4	3/16	1-1/4	100	1000
PFS1423	1/4 x 2-3/4	1/4	1-1/4	100	1000

Mushroom Head: Zinc-Plated Carbon Steel

Catalog No.	Anchor Size (in.)	Drill Bit Dia. (in.)	Min. Embed. (in.)	Box Quantity	Carton Quantity
PMH3610	3/16 x 1	3/16	7/8	100	1000
PMH3611	3/16 x 1-1/4	3/16	7/8	100	1000
PMH3612	3/16 x 1-1/2	3/16	1-1/4	100	1000
PMH3620	3/16 x 2	3/16	1-1/4	100	1000
PMH3622	3/16 x 2-1/2	3/16	1-1/4	100	1000
PMH3630	3/16 x 3	3/16	1-1/4	100	1000
PMH3632	3/16 x 3-1/2	3/16	1-1/4	100	1000
PMH3640	3/16 x 4	3/16	1-1/4	100	1000
PMH1410	1/4 x 1	1/4	7/8	100	1000
PMH1411	1/4 x 1-1/4	1/4	1	100	1000
PMH1412	1/4 x 1-1/2	1/4	1-1/4	100	1000
PMH1420	1/4 x 2	1/4	1-1/4	100	1000
PMH1422	1/4 x 2-1/2	1/4	1-1/4	100	1000
PMH1430	1/4 x 3	1/4	1-1/4	100	1000
PMH1432	1/4 x 3-1/2	1/4	1-1/4	100	1000
PMH1440	1/4 x 4	1/4	1-1/4	100	1000
PMH3820	3/8 x 2	3/8	1-3/4	25	250
PMH3822	3/8 x 2-1/2	3/8	1-3/4	25	250
PMH3830	3/8 x 3	3/8	1-3/4	25	250
PMH3832	3/8 x 3-1/2	3/8	1-3/4	25	250
PMH3840	3/8 x 4	3/8	1-3/4	25	250
PMH3850	3/8 x 5	3/8	1-3/4	25	250
PMH3860	3/8 x 6	3/8	1-3/4	25	250

Mushroom Head: Type 316 Stainless Steel

Catalog No.	Anchor Size (in.)	Drill Bit Dia. (in.)	Min. Embed. (in.)	Box Quantity	Carton Quantity
PMHSS3610	3/16 x 1	3/16	7/8	100	1000
PMHSS3611	3/16 x 1-1/4	3/16	7/8	100	1000
PMHSS3612	3/16 x 1-1/2	3/16	1-1/4	100	1000
PMHSS3620	3/16 x 2	3/16	1-1/4	100	1000
PMHSS1411	1/4 x 1-1/4	1/4	1	100	1000
PMHSS1412	1/4 x 1-1/2	1/4	1-1/4	100	1000
PMHSS1420	1/4 x 2	1/4	1-1/4	100	1000
PMHSS1422	1/4 x 2-1/2	1/4	1-1/4	100	1000
PMHSS1430	1/4 x 3	1/4	1-1/4	100	1000
PMHSS3820	3/8 x 2	3/8	1-3/4	25	250
PMHSS3822	3/8 x 2-1/2	3/8	1-3/4	25	250
PMHSS3830	3/8 x 3	3/8	1-3/4	25	250

Tie-Wire: Zinc-Plated Carbon Steel						
Catalog No.	Anchor Size (in.)	Tie Wire Hole (in.)	Drill Bit Dia. (in.)	Min. Embed. (in.)	Box Quantity	Carton Quantity
PTW3611	3/16 x 1-1/4	3/16	3/16	1-1/8	100	1000
PTW1413	1/4 x 1-3/4	9/32	1/4	1-1/8	100	1000

Rod-Coupling: Zinc-Plated Carbon Steel						
Catalog No.	Anchor Size (in.)	Thread Size (UNC)	Drill Bit Dia. (in.)	Min. Embed. (in.)	Box Quantity	Carton Quantity
PPS14	1/4 x 1-7/8	1/4 - 20	3/16	1-1/4	100	1000
PPS38	3/8 x 2-3/8	3/8 - 16	1/4	1-3/4	50	500

For more information, please contact:

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