

8MM Pins, Specialty Fasteners, Assemblies and Powder Loads



8MM HEAD DRIVE PINS (X-DN TYPE PINS)

8MM HEAD DIAMETER DRIVE PINS

CAT. NO.	SHANK LENGTH	SHANK DIA.	STD. BOX	STD. CTN.
50180	16mm (K) -5/8"	.145	100	5,000
50180	16mm (K) -5/8"	.145	100	5,000
50182	19mm (K) -3/4"	.145	100	5,000
50184	22mm -7/8"	.145	100	5,000
50186	27mm -1"	.145	100	5,000
50188	32mm -1-1/4"	.145	100	1,000
50190	37mm -1-1/2"	.145	100	1,000
50192	42mm -1-5/8"	.145	100	1,000
50194	47mm -1-7/8"	.145	100	1,000
50196	52mm -2"	.145	100	1,000
50198	57mm -2-1/4"	.145	100	1,000
50200	62mm -2-1/2"	.145	100	1,000
50202	72mm -2-7/8"	.145	100	1,000

8MM DIAMETER HEAD DRIVE PINS WITH TOP HAT

50210	16mm (K) -5/8"	.145	100	5,000
50214	22mm -7/8"	.145	100	5,000
50216	27mm -1"	.145	100	5,000

(K) - knurled

8MM DIAMETER HEAD DRIVE PINS WITH TOP HAT

CAT. NO.	SHANK LENGTH	SHANK DIA.	STD. BOX	STD. CTN.
51700	16mm (K) Top Hat	.145	1,000	5,000
51750	22mm Top Hat	.145	1,000	5,000

8MM DIAMETER HEAD DRIVE PINS WITH 1" WASHER

50220	27mm-1"	.145	100	1,000
50222	32mm-1-1/4"	.145	100	1,000
50224	37mm -1-1/2"	.145	100	1,000
50226	52mm-2"	.145	100	1,000
50228	62mm-2-1/2"	.145	100	1,000
50230	72mm-2-7/8"	.145	100	1,000

(K) - knurled



HAMMER DRIVE PINS (NO POWDER LOADS REQUIRED)

PRODUCT DESCRIPTION

Hammer Drive pins are designed for permanently fastening a fixture to concrete and some types of masonry. This fastener is designed for use in a standard hand tool and should not be used in a powder actuated tool. The pins are formed with a 1/4" diameter head on one end and a 0.140" diameter shank in various lengths. A 3/8" diameter steel washer is mounted over the point to retain the drive pin in the fastener guide of the tool providing guidance during the driving operation. This fastener is recommended for light duty static load applications where holding power is not a critical factor. It should not be used overhead. Federal Specification - Meets the descriptive requirements of FF-P-395 C (superseded).

1/4" HEAD DIAMETER HAMMER DRIVE PINS

CAT. NO.	SHANK LENGTH	SHANK DIA.	STD. BOX	STD. CTN.
50294	3/4"	.140	100	1,000
50296	1"	.140	100	1,000
50298	1-1/4"	.140	100	1,000
50300	1-1/2"	.140	100	1,000
50302	2"	.140	100	1,000
50304	2-1/2"	.140	100	1,000
50306	3"	.140	100	1,000

HAMMER DRIVE SETTING TOOL

CAT. NO.	DESCRIPTION	STD. BOX	STD. CTN.
50310	Hammer Drive Tool - Standard	1	1



.22 CALIBER LOADS FOR LADD CEILING MASTER TOOL (L1600)

CAT. NO.	DESCRIPTION	STD. BOX	STD. CTN.	MASTER CTN.
50514	Green - Ladd	100	5,000	20,000
50516	Yellow - Ladd	100	5,000	20,000
50518	Red - Ladd	100	5,000	20,000



.25 CALIBER LOADS FOR RAMSET® D45, D60, D60L

CAT. NO.	DESCRIPTION	STD. BOX	STD. CTN.	MASTER CTN.
50530	Gray, .25 disk	100	1,000	10,000
50532	Brown, .25 disk	100	1,000	10,000
50534	Green, .25 disk	100	1,000	10,000
50536	Yellow, .25 disk	100	1,000	10,000

.25 CALIBER RED DISK LOADS FOR RAMSET® MODEL D45

50538	Red, .25 disk	100	1,000	10,000
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.25 CALIBER SINGLE LOADS FOR HILTI® DX100, DX200

CAT. NO.	DESCRIPTION	STD. BOX	STD. CTN.	MASTER CTN.
50560	Green, .25 single	100	5,000	20,000
50562	Yellow, .25 single	100	5,000	20,000
50564	Red, .25 single	100	5,000	20,000
50566	Purple, .25 single	100	5,000	20,000



.27 CALIBER 10 LOAD STRIPS FOR P3600 AND MODEL DX 451, DX 40, DX A41

CAT. NO.	DESCRIPTION	STD. BOX	STD. CTN.	MASTER CTN.
50606	Purple, .27 strip	100	1,000	20,000



Powder Actuated Fasteners Performance Data - Ultimate Loads

ULTIMATE LOAD CAPACITIES FOR POWDER ACTUATED FASTENERS IN ASTM A36 STEEL

PIN DESCRIPTION	SHANK TYPE	NOMINAL STEEL THICKNESS							
		1/8"		3/16"		1/4"		3/8"	
		TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)
Ballistic Point Pin (0.150" Shank)	Smooth	590 (2.6)	2,090 (9.3)	910 (4.0)	3,030 (13.5)	1,560 (6.9)	2,730 (12.1)	2,250 (10.0)	2,625 (11.7)
0.300" Head Drive Pin	Knurled	1,100 (4.9)	990 (4.4)	1,705 (7.6)	3,050 (13.6)	2,240 (10.0)	2,800 (12.5)	2,600 (11.6)	3,025 (13.5)
8mm Head Drive Pin (0.145" Shank)		Smooth	865 (3.8)	1,325 (5.9)	1,775 (7.9)	2,825 (12.6)	2,050 (9.1)	2,800 (12.5)	2,410 (10.7)
8mm head CSI Pin (0.157" Shank)	Spiral Knurled	-	-	-	-	4,810 (21.4)	3,199 (14.2)	3,390 (15.1)	2,925 (13.0)
1/4"-20 Threaded Stud (0.145" Shank)	Knurled	1,100 (4.9)	2,230 (9.9)	1,630 (7.3)	2,770 (12.3)	2,160 (9.6)	3,300 (14.7)	2,560 (11.4)	3,760 (16.7)
3/8" Head Drive Pin (0.172" Shank)		Smooth	950 (4.2)	2,700 (12.0)	1,490 (6.6)	3,700 (16.5)	1,820 (8.1)	3,890 (17.3)	3,020 (13.4)
10mm Head Drive Pin (0.177" Shank)	Smooth	-	-	850 (3.8)	4,150 (18.5)	1,300 (5.8)	4,150 (18.5)	1,900 (8.5)	4,400 (19.6)
3/8"-16 Threaded Stud (0.205" Shank)		Knurled	1,120 (5.0)	2,770 (12.3)	2,700 (12.0)	5,460 (24.3)	3,730 (16.6)	8,090 (36.0)	-
Ceiling Clips w/ 0.300" Head Pin (0.145" Shank)	Smooth	1,030 (4.6)	1,190 (5.3)	1,090 (4.8)	1,190 (5.3)	1,090 (4.8)	1,190 (5.3)	1,090 (4.8)	1,190 (5.3)
Economy Ceiling Clips w/ 0.300" Head Pin (0.145" Shank)		Smooth	950 (4.2)	1,290 (5.7)	1,090 (4.8)	1,290 (5.7)	1,090 (4.8)	1,290 (5.7)	1,090 (4.8)
Ceiling Clips - LADD Pin (0.152" Shank)	Smooth	1,180 (5.2)	1,200 (5.3)	1,180 (5.2)	1,200 (5.3)	1,180 (5.2)	1,200 (5.3)	1,180 (5.2)	1,200 (5.3)

- The ultimate tension and shear values are for fasteners only. Steel or wood members connected to the substrate must be investigated for compliance with the applicable code.
- The values listed above are ultimate load capacities which should be reduced by a factor of safety to determine the allowable working load. For allowable load capacities, see the allowable load tables.
- Fasteners must be driven to obtain an embedment equivalent to the nominal steel thickness with the point of the fastener penetrating through the steel base material.
- Fasteners must be driven to obtain a minimum embedment of 1/2". The point of the fastener does not need to penetrate through the steel base material.
- Multiple fasteners are recommended for any attachment for increased reliability.

ULTIMATE LOAD CAPACITIES FOR POWDER ACTUATED FASTENERS IN ASTM A36 STEEL

PIN DESCRIPTION	SHANK TYPE	NOMINAL STEEL THICKNESS							
		1/8"		3/16"		1/4"		3/8"	
		TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)
Ballistic Point Pin (0.150" Shank)	Smooth	590 (2.6)	2,090 (9.3)	910 (4.0)	3,030 (13.5)	1,560 (6.9)	2,730 (12.1)	2,250 (10.0)	2,625 (11.7)
0.300" Head Drive Pin		Knurled	1,100 (4.9)	990 (4.4)	1,705 (7.6)	3,050 (13.6)	2,240 (10.0)	2,800 (12.5)	2,600 (11.6)
8mm Head Drive Pin (0.145" Shank)	Smooth	865 (3.8)	1,325 (5.9)	1,775 (7.9)	2,825 (12.6)	2,050 (9.1)	2,800 (12.5)	2,410 (10.7)	2,620 (11.7)

- The ultimate tension and shear values are for fasteners only. Steel or wood members connected to the substrate must be investigated for compliance with the applicable code.
- The values listed above are ultimate load capacities which should be reduced by a factor of safety to determine the allowable working load. For allowable load capacities, see the allowable load tables.
- Fasteners must be driven to obtain an embedment equivalent to the nominal steel thickness with the point of the fastener penetrating through the steel base material.
- 8mm head CSI pin and 10mm head drive pin fasteners must be driven to obtain a minimum embedment of 1/2". The point of the fastener does not need to penetrate through the steel base material.
- Multiple fasteners are recommended for any attachment for increased reliability.

ULTIMATE LOAD CAPACITIES FOR POWDER ACTUATED FASTENERS IN MASONRY (F'M ≥ 1,500)^{1,2,3,4}

PIN DESCRIPTION	MIN. EMBED. DEPTH h _e IN. (MM)	HOLLOW CMU				GROUT FILLED CONCRETE MASONRY	
		FACE		FACE		MORTAR JOINT	
		TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)
Ballistic Point Pin (0.181"/0.150" Shank)	1 (25.4)	320 (1.4)	740 (3.3)	570 (2.6)	900 (4.1)	510 (2.3)	960 (4.3)
.300"/8mm Head Drive Pin or 1/4"-20 Threaded Stud (0.145" Shank)	1 (25.4)	320 (1.4)	740 (3.3)	570 (2.6)	900 (4.1)	510 (2.3)	960 (4.3)
3/8" Head Drive Pin (0.172" Shank)	1 (25.4)	-	-	740 (3.3)	850 (3.8)	-	3,199 (14.2)
3/8"-16 Threaded Stud (0.205" Shank)	1 (25.4)	160 (0.7)	670 (3.0)	860 (3.9)	1,460 (6.6)	1,060 (4.8)	1,030 (4.6)

- Successful fastening to the face shell of Hollow CMU is typically done with the lightest powder load level.
- The values listed above are ultimate load capacities which should be reduced by a factor of safety to determine the allowable working load. For allowable load capacities, see the allowable load tables.
- Multiple fasteners are recommended for any attachment for increased reliability.
- Concrete masonry units are typical 8 x 8 x 16 inch units meeting the requirements of ASTM C90, Grade N, lightweight block.

ULTIMATE LOAD CAPACITIES FOR POWDER ACTUATED FASTENERS IN ASTM A572 STEEL^{1,2,3,4,5}

PIN DESCRIPTION	SHANK TYPE	NOMINAL STEEL THICKNESS							
		1/8"		3/16"		1/4"		3/8"	
		TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)	TENSION LBS. (KN)	SHEAR LBS. (KN)
10mm Head Drive Pin (0.177" Shank)	Smooth	1,275 (5.7)	3,850 (17.1)	1,075 (4.8)	3,250 (14.5)	1,800 (8.0)	3,900 (17.3)	2,275 (10.1)	4,250 (18.9)
8mm head CSI Pin (0.157" Shank)		Spiral Knurled				3,975 (17.7)	2,900 (12.9)	3,300 (14.7)	2,675 (11.9)

- The ultimate tension and shear values are for fasteners only. Steel or wood members connected to the substrate must be investigated for compliance with the applicable code.
- The values listed above are ultimate load capacities which should be reduced by a factor of safety to determine the allowable working load. For allowable load capacities, see the allowable load tables.
- Fasteners must be driven to obtain an embedment equivalent to the nominal steel thickness with the point of the fastener penetrating through the steel base material.
- 8mm head CSI pin and 10mm head drive pin fasteners must be driven to obtain a minimum embedment of 1/2". The point of the fastener does not need to penetrate through the steel base material.
- Multiple fasteners are recommended for any attachment for increased reliability.