# Fasteners

## Zip-in<sup>®</sup>

## Self-Piercing Sheet Metal Screws The Standard by which all others are judged.

### A unique thread design and quality controlled manufacture spell the Zip-in<sup>®</sup> difference.

Zip-in's<sup>®</sup> sophisticated heat treat process allows the screw to taper to a fine, sharp point without sacrificing critical point strength. A single starting thread (1) is machined down to the very tip of the point and is the source of Zip-in's<sup>®</sup> penetrating power. A second thread (2) above the point engages after initial penetration and moves the screw in double fast. Zip-in's<sup>®</sup> screws are faster driving, with a greater capacity for fastening heavier gauges of sheet metal than any other self-drilling type.

Zinc Plated

Undercut-Indented Hex Washer Slotted Head

ated

Zip-in® Screws are the best selling sheet metal screws worldwide.

- Burr Free hex washer slotted head
- Undercut Always seats flush.
- One 1/4" hex driver accommodates all sizes of Zip-in<sup>®</sup> Screws.
- Full 1/4" (No. 8) head will not strip out of hex driver opening at anytime during operation.

#### Combination Lead Double Thread

- Single starting thread machined down to very tip of screw point.
- Instantly penetrates and engages in heavy gauge sheet metal and layered light gauge.

#### Sharp Tapered Point

- Quality controlled heat treat.
- Sharp tapered point will not mushroom, break or walk.
- Complete operator control precise hole alignment.

Look for the Dots! ® Trademarked & Patented Head Markings indicate one and only genuine Zip-ins®.

U.S. Patent No. D524,638



Self-Piercing Sheet Metal Screws Consistent High Quality from Head to Tip.

#### **Specifications**

Catalog			
Number	Description	Head Color	Head Size
Zip-in <sup>®</sup> Screv	NS		
HW6x3/8Z	Zip-in® Screw	Zinc Plated	1/4"
HW7x1/2Z*	Zip-in® Screw	Zinc Plated	1/4"
HW8x1/2Z*	Zip-in® Screw	Zinc Plated	1/4"
HW8x3/4Z*	Zip-in® Screw	Zinc Plated	1/4"
HW8x1Z*	Zip-in® Screw	Zinc Plated	1/4"
HW8x1-1/2Z*	Zip-in® Screw	Zinc Plated	1/4"
HW8x2Z*	Zip-in® Screw	Zinc Plated	1/4"
HW10x1/2Z	Zip-in® Screw	Zinc Plated	1/4"
HW10x3/4Z	Zip-in® Screw	Zinc Plated	1/4"
HW10x1Z	Zip-in® Screw	Zinc Plated	1/4"
White Painte	d Zip-in® Regist	ter Screws	
HW8x1-1/2ZW	Zip-in® Screw	O White (W)	1/4" Hex Slotted
HW8x2ZW	Zip-in® Screw	O White (W)	1/4" Hex Slotted

HW8x3ZW Zip-in® Screw		0	White (W)	1/4" Hex Slotted
PO8x2ZW	Zip-in® Screw	0	White (W)	#2 Phillips
Painted She	et Metal Screws			
HW6x3/8ZA	Sheet Metal Screw		Almond (A)	1/4"
HW6x3/8ZCC	Sheet Metal Screw	$\bigcirc$	Classic Cream (CC)	1/4"
HW6x3/8ZCL	Sheet Metal Screw		Clay (C)	1/4"
HW6x3/8ZMB	Sheet Metal Screw	•	Musket Bronze (MB)	1/4"
HW6x3/8ZRB	Sheet Metal Screw	•	Royal Brown (RB)	1/4"
HW6x3/8ZW	Sheet Metal Screw	0	White (W)	1/4"

HW7x1/2ZA	Sheet Metal Screw		Almond (A)	1/4"
HW7x1/2ZCC	Sheet Metal Screw	$\bigcirc$	Classic Cream (CC)	1/4"
HW7x1/2ZCL	Sheet Metal Screw		Clay (C)	1/4"
HW7x1/2ZMB	Sheet Metal Screw		Musket Bronze (MB)	1/4"
HW7x1/2ZRB	Sheet Metal Screw		Royal Brown (RB)	1/4"
HW7x1/2ZW	Sheet Metal Screw	$\bigcirc$	White (W)	1/4"
HW8x1ZRB	Sheet Metal Screw		Royal Brown (RB)	1/4"
HW8x1ZW	Sheet Metal Screw	$\bigcirc$	White (W)	1/4"
HW8x3/4ZRB	Sheet Metal Screw		Royal Brown (RB)	1/4"
HW8x3/4ZW	Sheet Metal Screw	$\bigcirc$	White (W)	1/4"
Drill-In Screws	Type A, Single	Th	read	

HW10x1-1/2	Drill-In Screw	Zinc Plated	5/16"
HW10x2	Drill-In Screw	Zinc Plated	5/16"
HW12x2	Drill-In Screw	Zinc Plated	5/16"

Catalog			For	Uses Bit	Anchor Kit
Number	Anchor Size	Screw Size(s)	Screw Size	Diameter	Quantity
Red Lip	Plastic Anche	ors			
PA810	3/16" x 7/8"	_	8-9-10	3/16"	_
PA1012	1/4" x 1"	-	10-12	1/4"	_
PA1416	5/16" x 1-3/8""	_	14-16	5/16"	_
Red Lip	Plastic Anche	or Kits			
PA810K	3/16" x 7/8"	SP8x1	_	3/16"	100
PA1012K	1/4" x 1"	SP10x1-1/4	-	1/4"	100
PA1416K	5/16" x 1-3/8""	SP14x1-1/2	-	5/16"	50
Red Lip	Plastic Anche	or Kits with	Hex Wash	er Scre	ws
PA810KW	3/16" x 7/8"	HW8x1Z	_	3/16"	100
PA1012KW	1/4" x 1"	HW10x1Z	_	1/4"	100

\* Denotes popular screw sizes available in pails.

Consult Malco Suggested Trade Prices for specific package quantities available for each screw size. *Count on Malco for full, accurate piece counts in every ZIP-IN package you buy.* Note: Package sizes available in handy boxes, tubs, bulks & pails.

2-Inch Length Phillips Oval Head

3-Inch Length 1/4" Hex Head



#### Red Lip Plastic Anchors Kits / Kits with Hex Washer Heads Use with wood, sheet metal or lag screws.

Flexible anchor is ideal for masonry or stone. Lip on collar prevents anchor from pushing through hole in hollow walls.



#### Red Lip Plastic Anchor Kits All kits contain equal quantities of anchors

All kits contain equal quantities of anchors and screws with one matching carbide tipped drill bit.



## **Bit-Tip**<sup>®</sup>

# Drill & Tap

### Screws

## The One Operation Fastener with a True Drilling Action Point

By drilling its own hole, Bit-Tip<sup>®</sup> produces the optimum hole size, resulting in better thread engagement and a tighter fit. One operation fastening also means no alignment problems.

Bit-Tip<sup>®</sup> has a wide range of industry applications. Select the Bit-Tip<sup>®</sup> that's right for the job. Point length will determine metal thickness that can be drilled, tapped and fastened. Also, plywood, soft wood, composition board, drywall, insulation and laminates may be fastened to metal framing or components.

Made from strong, high quality, specially heat treated steel. Bit-Tip® Self Drilling and Tapping Screws are precision cold forged insuring uniformity of dimension and drill point contours.

The versatile Bit-Tip<sup>®</sup> Screw is an excellent replacement for fastening operations now using rivets, nuts and bolts, spot welds or adhesives. Bit-Tip<sup>®</sup> also eliminates the need for costly auxiliary fastening equipment such as drill bits, taps and welding equipment.

Requires only a standard screw gun power tool rated at 2500 RPM equipped with drilling depth locator.

### Time Saver

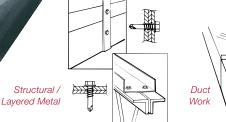
Bit-Tip<sup>®</sup> Drill and Tap Screws produce optimum hole size for a quick tight fit!

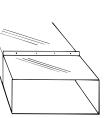
Quick Tight Fit!

### Now Even Faster!

Drill & Tap Screws drill their own holes, taps a matching thread in steel .220 thick in less time than it takes to drill a pilot hole for other standard fasteners.

### Industrial Applications:





Choose from: Hex or Slotted Hex Washer Heads

TOP VIEW

HEX

WASHERS





U.S. Patent No. D524,638

Look for the Dots! ® Trademarked & Patented Head Markings indicate one and only genuine Bit-Tips®.

## Drill & Tap Screws Specifications



NOTE: Package sizes available in handy boxes, tubs, bulks and Pails. \* Denotes popular screw sizes available in pails.

#### Material thickness recommendation for Bit-Tips® For This Material Thickness

1. Jacob >>									
eder	112				.050	.100	.150	.200	
	BT131	HW	8-18x1/2	1/4					
	BT132	HW	8-18x5/8	1/4					
	BT133	HW	8-18x3/4	1/4	.035	.100			
Bit-Tip Screw #2 Point	BT134	HW	8-18x1	1/4	.033	1.100			
	BT231	HS	8-18x1/2	1/4					
	BT233	HS	8-18x3/4	1/4					
	BT141	HW	10-16x1/2	5/16	.035	.110			
	BT142	HW	10-16x5/8	5/16					
	BT143	HW	10-16x3/4	5/16					
Bit-Tip Screw #3 Point	BT144	HW	10-16x1	5/16		.110		.175	
	BT153	HW	10-24x3/4	5/16					
	BT156	HW	10-24x1-1/2	5/16					
	BT163	HW	12-14x3/4	5/16					
Bit-Tip Screw #3 Point	BT164	HW	12-14x1	5/16		.110		.210	
	BT174	HW	1/4-14x1	3/8		.110		.220	

Consult Malco Suggested Trade Prices for specific package quantities available for each screw size. *Count on Malco for full, accurate piece counts in every Bit-Tip® package you buy.*  Test results furnished are given purely as a guide and do not constitute a warranty of any type. IResults may vary by modification to the fastener or in certain applications.

### Bit-Tip® Screw Strength

			Pull-out values (lbs), in common steel gauges								Thread Strength	Torsional Strength			
			26	24	22	20	18	16	14	13	1/8	10	3/16	lbs.	lbs.
6	20	#2	141	208	268	331	513	633	874					1125	24
8	18	#2	150	187	289	334	507	643	977					1575	42
10	16	#2	145	235	295	364	572	708	1,015	1,972				2100	61
10	24	#3								1,528	2,120	2,199		2350	65
12	14	#3								1,541	1,990	2,650	3,515	2800	92
1/4	14	#3								1,504	1,818	2,413	3,190	3850	150
1/4	14	#3								1,788	2,330	2,830	4,420	4275	168



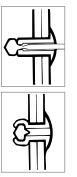
## **Blind Rivets**

Steel / Aluminum / Stainless / Copper / Painted & Washers

Painted	AA42DCC	=	$\bigcirc$	Classic Cre
Fainteu	AA42DMB	=	•	Musket Bro
	AA42DRB	=	•	Royal Brow
Rivets	AA42DW	=	$\bigcirc$	White
	AA44DMB	=	•	Musket Bro
Aluminum Rivet and Mandrel	AA44DRB	=		Royal Brow
	AA44DW	=	0	White

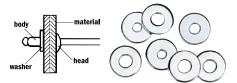
DCC	=	$\bigcirc$	Classic Cream	
OMB	=	•	Musket Bronze	
DRB	=	•	Royal Brown	
DW	=	0	White	
OMB	=	•	Musket Bronze	
DRB	=	•	Royal Brown	
אור/	_	$\cap$	W/hite	

Available in 100 piece bags. See price list for more package sizes.





### Rivet Washers



Back up washers for riveting in soft materials. Non-blind applications only. Install washer on rivet head protruding through backside of material to be fastened. Washers are zinc plated steel.

Catalog Number	Size in. (mm)	Inside Dia. in. (mm)	Outside Dia. in. (mm)	Thickness in. (mm)
4RW	1/8 (3.18)	.130 (3.30)	.500 (12.70)	.0478 (1.21)
5RW	5/32 (3.98)	.160 (4.06)	.500 (12.70)	.0478 (1.21)
6RW	3/16 (4.75)	.191 (4.85)	.500 (12.70)	.0478 (1.21)

### Shear and Tensile Strengths 🚖 📖 🕇

	× (50) 🛉	
Rivet Dia.	Minimum Shear	Tensile lbs.
1/8"	260	310
3/16"	540	680
1/8"	120	150
3/16"	260	320
1/8"	120	150
3/16"	260	320
	420	530
3/16"	950	1200
1/8"	350	450
	1/8" 3/16" 1/8" 3/16" 1/8" 3/16" 1/8" 3/16"	Rivet Dia. Minimum Shear   1/8" 260   3/16" 540   1/8" 120   3/16" 260   1/8" 120   3/16" 260   1/8" 120   3/16" 260   1/8" 120   3/16" 260   1/8" 120   3/16" 260

**Specifications** \* DW= White Painted Rivets (indicated by the O). See above for more painted rivets.

Sherune	alivits Dw= while Painted Rivers (Indicate	ed by the $\bigcirc$ ). See at		anneu nveis.				
Rivet Diameter	Description	Hole Size # / Drill #	Rivet Diameter	Rivet Body Length	Rivet Body Diameter	Rivet Head Width	Rivet Head Thickne	Grip
SS42D	Steel Rivet Plated Steel Mandrel		1/8"	.232	.125	.250	.032	.063125
		—						
SS43D	Steel Rivet Plated Steel Mandrel	_	1/8"	.294	.125	.250	.032	.126187
SS44D	Steel Rivet Plated Steel Mandrel	_	1/8"	.357	.125	.250	.032	.188250
SS46D	Steel Rivet Plated Steel Mandrel	_	1/8"	.481	.125	.250	.032	.313375
<u>SS42DW * O</u>	Steel Rivet Plated Steel Mandrel	.232 / Drill #30	1/8"	.125	.250	.032	.063125	
SS44DW * O	Steel Rivet Plated Steel Mandrel	.357 / —	1/8"	.125	.250	.032	.188250	.126187
SS62D	Steel Rivet Plated Steel Mandrel	_	3/16"	.277	.187	.375	.047	.020125
SS64D	Steel Rivet Plated Steel Mandrel	.192196 /	3/16"	.402	.187	.375	.047	.188250
SS66D	Steel Rivet Plated Steel Mandrel	— / Drill #11	3/16"	.527	.187	.375	.047	.251375
AA42D	Aluminum Rivet Aluminum Mandrel	_	1/8"	.232	.125	.250	.032	.063125
AA43D	Aluminum Rivet Aluminum Mandrel	_	1/8"	.294	.125	.250	.032	.126187
AA44D	Aluminum Rivet Aluminum Mandrel	_	1/8"	.357	.125	.250	.032	.188250
AA46D	Aluminum Rivet Aluminum Mandrel	_	1/8"	.481	.125	.250	.032	.313375
AA48D	Aluminum Rivet Aluminum Mandrel	.128132 / —	1/8"	.606	.125	.250	.032	.376500
AA42DW * O	Aluminum Rivet Aluminum Mandrel (White)	.232 / Drill #30	1/8"	.125	.250	.032	.063125	
AA44DW * O	Aluminum Rivet Aluminum Mandrel (White)	.357 / —	1/8"	.125	.250	.032	.188250	
AA64D	Aluminum Rivet Aluminum Mandrel	— / Drill #11	3/16"	.527	.187	.375	.047	.251375
AS42D	Aluminum Rivet Plated Steel Mandrel	_	1/8"	.232	.125	.250	.032	.063125
AS44D	Aluminum Rivet Plated Steel Mandrel	_	1/8"	.357	.125	.250	.032	.188250
SS/SS42D	Stainless Rivet Stainless Mandrel	_	1/8"	.232	.125	.250	.032	.063125
SS/SS44D	Stainless Rivet Stainless Mandrel	-	1/8"	.357	.125	.250	.032	.188250
SS/SS46D	Stainless Rivet Stainless Mandrel	_	1/8"	.481	.125	.250	.032	.313375
SS/SS48D	Stainless Rivet Stainless Mandrel	.128132 / —	1/8"	.606	.125	.250	.032	.376500
CS42D	Copper Rivet Plated Steel Mandrel	-	1/8"	.232	.125	.250	.032	.063125
CS44D	Copper Rivet Plated Steel Mandrel	-	1/8"	.357	.125	.250	.032	.188250