

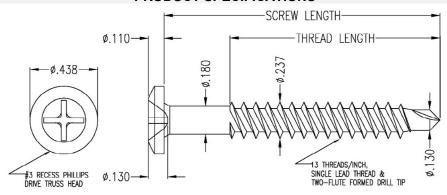
# TIP-TOP® #14 HEAVY-DUTY SCREW

## **DESCRIPTION**

TIP-TOP® Screw Manufacturing, Inc. #14 Heavy-Duty (#14 HD) Screws are #14 diameter, equipped with a P-3 truss head and are available with either a drill point or a spade point.

The #14 HD Screw can be used in most types of roofing applications. The #14 HD Screws are E-Coated and must pass twice the FM 4470 standard for corrosion resistance, totaling 30 cycles in a Kesternich cabinet. The #14 HD Screws are also required to pass 20° and 40° bend tests (hardness) and be able to penetrate a 20-gauge deck in under 3 seconds with a 50 lb. (222 N) load.

#### PRODUCT SPECIFICATIONS



#### PRODUCT INFORMATION

Item Numbers		Screw Length		Thread Length		QTY per Bucket
Drill Point	Spade Point	Inches	(Millimeters)	Inches	(Millimeters)	
90150PD	9D0150PD	1-1/2	(38.1)	1-1/2 (Full)	(38.1)	1,000
90200PD	9D0200PD	2	(50.8)	2 (Full)	(50.8)	1,000
90250PD	9D0250PD	2-1/2	(63.5)	2-1/2 (Full)	(63.5)	1,000
90300PD	9D0300PD	3	(76.2)	3 (Full)	(76.2)	1,000
90350PD	9D0350PD	3-1/2	(88.9)	3-1/2 (Full)	(88.9)	1,000
90400PD	9D0400PD	4	(101.6)	3-7/8	(76.2)	1,000
90450PD	9D0450PD	4-1/2	(114.3)	3-7/8	(76.2)	1,000
90500PD	9D0500PD	5	(127)	3-7/8	(76.2)	1,000
90550PD	9D0550PD	5-1/2	(139.7)	3-7/8	(76.2)	1,000
90600PD	9D0600PD	6	(152.4)	3-7/8	(76.2)	1,000
90700PD	9D0700PD	7	(177.8)	3-7/8	(76.2)	500
90800PD	9D0800PD	8	(203.2)	3-7/8	(76.2)	500
90900PD	9D0900PD	9	(228.6)	3-7/8	(76.2)	500
91000PD	9D1000PD	10	(254)	3-7/8	(76.2)	500
91100PD	9D1100PD	11	(279.4)	3-7/8	(76.2)	500
91200PD	9D1200PD	12	(304.8)	3-7/8	(76.2)	500

#### **INSTALLATION GUIDELINES**

For Steel and Wood Decks: Using the #3 Phillips drive bit provided and a 0 – 2500 RPM screw gun, install the #14 HD Screw into the deck. The #14 HD Screw must penetrate the deck a minimum of 1 inch, as measured from the underside of the deck to the screw tip. The #14 HD Screw must be installed perpendicular to the deck. Do not overdrive or underdrive the screw to prevent damage to roofing materials.

For Concrete Decks: Pre-drill a 3/16 inch diameter hole using a drill bit that meets the requirement of ANSI Standard B212.15. The hole must be a minimum of 1/2 inch deeper than the screw embedment. Using the #3 Phillips drive bit provided and a 0 – 2500 RPM screw gun, install the #14 HD Screw into the deck. The #14 HD Screw must penetrate the deck a minimum of 1 inch, as measured from the underside of the deck to the screw tip. The #14 HD Screw must be installed perpendicular to the deck. Do not overdrive or underdrive the screw to prevent damage to roofing materials.

# **PERFORMANCE DATA**

#### **MATERIAL STRENGTH (lbs)**

Property	Standard	Value	
Tensile Strength:	ASTM F606-10	2,827	
Shear Strength:	NASM 1312-20	2,556	
Corrosion Resistance:	FM 4470, ASTM D6294, DIN 50018	<15% red rust after 30 Kesternich cycles	

#### **AVERAGE SHEAR (lbs)**

Property	Value		
Threads:	2,558		
Shank:	2,935		

## AVERAGE PULLOUT STRENGTH IN STEEL AND WOOD (lbf)

Thickness/Type	B-Deck 22ga. Ksi 33	19/32 OSB APA Rated	15/32 Plywood APA Rated	Structural Concrete
Spade Point:	648	315	320	740
Drill Point:	668	298	343	740

# **CODE APPROVALS AND LISTINGS**





# **DISCLAIMER**

Pullout values are reported as an average ultimate value based on tests performed in a controlled laboratory environment. They are intended to be used as a guideline only and are not guaranteed in any way by TIP-TOP Screw Manufacturing, Inc. Pullout values may vary greatly by substrate conditions. Pullout values must be conducted to verify that the substrate provides adequate pullout resistance required for each application.