

#12 DPH FASTENER

DESCRIPTION

#12 DPH Fasteners are specifically engineered to secure insulation, coverboards, and base sheets to corrugated steel and wood substrates.

ADVANTAGES

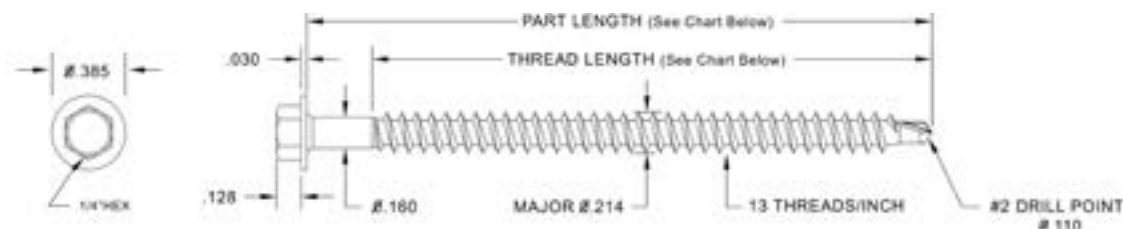
- ▶ Heavier shank and buttress thread diameter for increased pullout resistance and shear strength
- ▶ Epoxy coated for enhanced corrosion resistance
- ▶ Our exclusive double fluted self-drilling point with tapered entry thread design, quickly penetrates for superior drill speeds

TYPICAL PROPERTIES*

PROPERTY	VALUE
Material	SAE C1022, heat treated
Coating	Epoxy E-Coat
Fastener Head	1/4 inch Hex
Fastener Tip	#2 Double flute self-drilling point
Thread Size	.214 in
Thread/Inch	13
Tensile Strength	2,500 lbf
Shear Strength	1,900 lbf (thread zone)
Corrosion Resistance	<15% Red rust after 30 cycles
Recycled content	20%

* All values shown are nominal.

PRODUCT SPECIFICATIONS



PRODUCT PACKAGING

PART #	FASTENER LENGTH		THREAD LENGTH*		PACKAGE		QTY PALLET
	Inches	MM	Inches	MM	Quantity	Weight	
DPH-1625	1 5/8	41.3	Full	41.3	1,000	11.8	80,000
DPH-2250	2 1/4	57.2	Full	57.2	1,000	16.2	80,000
DPH-2875	2 7/8	73.0	Full	73.0	1,000	19.7	80,000
DPH-3250	3 1/4	82.6	2 7/8	73.0	1,000	21.5	80,000
DPH-3750	3 3/4	95.3	2 7/8	73.0	1,000	24.6	80,000
DPH-4500	4 1/2	114.3	3 7/8	98.4	1,000	28.8	60,000
DPH-5000	5	127.0	3 7/8	98.4	1,000	31.5	60,000
DPH-6000	6	152.4	3 7/8	98.4	1,000	37.1	60,000
DPH-7000	7	177.8	3 7/8	98.4	500	20.9	40,000
DPH-8000	8	203.2	3 7/8	98.4	500	23.9	40,000

* All values shown are nominal. Thread length measured from tip of the drill point to end of the threads



Enlarged to show detail

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PERFORMANCE DATA*

Average Ultimate Pullout Values for Wood Substrates

SUBSTRATE	THICKNESS (Inches)			
	7/16	1/2	5/8	3/4
OSB	265	300	325	440
Plywood	—	365	475	720

SPF #2 *	
Including Tip	Excluding Tip
700	—

* lbf/inch of thread penetration

Average Ultimate Pullout Values for Corrugated Steel Decks at Various Yield Strengths

THICKNESS	YIELD STRENGTH (ksi)			
	33.0	36.5	80.0	102.0
18 Gauge	710	—	1,000	1,145
18 Gauge	540	—	715	800
20 Gauge	355	—	505	580
22 Gauge	285	—	410	465
24 Gauge	—	230	—	—

* NOTE: The physical properties listed above are presented at typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation. Ultimate Pullout values must be reduced by a minimum safety factor of ≥ 3.0 to determine allowable working load.

INSTALLATION

For Steel and Wood Decks: Using the 1/4 inch hex socket driver provided and a 0-2500 rpm screw gun, install the fastener into the deck. The fastener must penetrate the deck a minimum of 3/4 inch, as measured from the underside of the deck to the fastener tip. Care should be taken to orient the fastener perpendicular to the deck and not to overdrive the fastener to prevent damage to the insulation or membrane.

PULLOUT TESTING

The strength of different roof decks can vary widely and can be adversely affected by moisture and other conditions. Therefore, it is recommended that a fastener pull test be conducted to help evaluate deck condition and fastener suitability. Contact Performance Roof Systems Technical Services to schedule testing.

APPROVED ACCESSORIES

- 3" Recessed Metal Insulation Plate