



Drill Point Fasteners

#12 Fasteners



PRODUCT DATA SHEET

DESCRIPTION

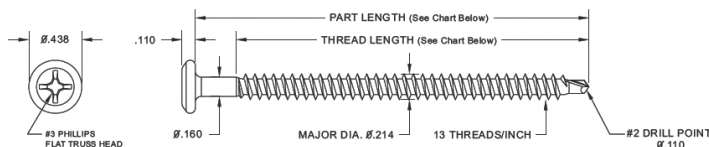
Drill Point Fasteners are #12 fasteners that are specifically engineered to attach insulation, cover boards and base sheets to wood and steel decking (16 to 22 gauge). These fasteners incorporate a #3 Phillips recess, flat truss head with a #2 double flute self-drilling point. The drill point has an exclusive tapered entry thread design that allows for fastener penetration into steel roof decks and offers exceptional back-out resistance.

BASIC USES

Drill Point Fasteners are designed specifically for the mechanical attachment of MuleHide's Poly ISO 1 and Poly ISO 2 roof insulation boards and other FM approved insulation/cover boards into steel and wood decks. The Drill Point Fasteners may be used in conjunction with the MuleHide 3" Insulation Plates.

SPECIFICATIONS

Property	Standard	Average Ultimate Value
Wire	--	SAE C-1022, heat treated wire
Coating	--	TRU-Kote™ Epoxy E-Coat
Corrosion Resistance	FM 4470, ASTM D6294, DIN 50018	<15% Red Rust After 30 Cycles
Tensile Strength	ASTM F606-10	2,500 lb.
Shear Strength	NASM 1312-20	1,900 lb (thread zone)



PACKAGING

Screw Length*	Thread Length*	Pieces/Box	Weight/Box
1-5/8"	1-5/8" (Full)	1000	12.5 lbs.
2-1/4"	2-1/4" (Full)	1000	16.1 lbs.
3"	3"	1000	20.2 lbs.
4"	3-7/8"	1000	25.9lbs.
5"	3-7/8"	1000	32.0 lbs.
6"	3-7/8"	1000	37.5 lbs.
7"	3-7/8"	500	22.5 lbs.
8"	3-7/8"	500	24.7 lbs.

*Screw length and thread length are ± 1/16"

CODE APPROVALS/COMPLIANCE

MuleHide Drill Point Fasteners comply with the requirements of the following specifications, test and code requirements when properly installed:

- FM Standard 4450/4470 Approval
- Miami-Dade Approved
- Florida Product Approval

LEED® INFORMATION

LEED Eligible Recycle Content	20%
Manufacturing Location	Bryan, OH

INSTALLATION INSTRUCTIONS

Steel and Wood Decks

Install fasteners with #3 Phillips drive bit provided in box and a variable speed screw gun. Fastener must penetrate the deck a minimum of 3/4" as measured from the underside of the roof deck to the fastener tip. Ensure that the fastener is installed perpendicular to the surface of the roof deck. Care should be taken to not overdrive the fastener causing damage to the roof insulation, fastener or roof deck.

Use eye protection when installing fasteners.

PROTECTION & SAFETY

MuleHide maintains safety data sheets on all of its non-exempt products. Safety data sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. MuleHide's safety data sheets should be read and understood by all of your supervisory personnel and employees before using MuleHide products in your facilities.

ADDITIONAL INFORMATION

On projects where a MuleHide standard or premium warranty is requested, an authorized MuleHide representative shall inspect all completed work.

The information given on this PDS is subject to change without notice. Always check the MuleHide website at www.mulehide.com for the latest information, changes and updates or contact MuleHide at 800-786-1492.



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PERFORMANCE INFORMATION

AVERAGE ULTIMATE PULLOUT VALUES IN CORRUGATED STEEL DECK SUBSTRATES													
Thickness	24 ga.	22 ga.			20 ga.			18 ga.			16 ga.		
Strength, ksi	36.5	33.0	80.0	102.0	33.0	80.0	102.0	33.0	80.0	102.0	33.0	80.0	102.0
Pullout (lbs)	230	285	410	465	355	505	580	540	715	800	710	1,000	1,142
AVERAGE ULTIMATE PULLOUT VALUES IN WOOD SUBSTRATES													
Type	APA Rated OSB				APA Rated Plywood								
Thickness	7/16"	15/32"	19/32"	23/32"	15/32"	19/32"	23/32"	SPF #2					
Pullout (lbs)	265	300	325	440	365	475	720	700*					
* lbf./in. of thread penetration including tip. - Pullout values are offered only as a guide and are not guaranteed in any way. - Designated holding powers are dependent upon quality of substrate and accuracy of installation. - MuleHide recommends that fastener pullout testing be performed to verify fastener performance.													

DISCLAIMER

The statements provided concerning the material shown are intended as a guide for material usage and are believed to be true and accurate at the time of printing. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. ("MuleHide"). Since the manner of use is beyond our control, MuleHide does not authorize anyone to make any warranty of merchantability or fitness for any particular purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material. This product may be eligible for a MuleHide warranty, please check the MuleHide website at www.mulehide.com or contact MuleHide directly at 800-786-1492 for details. Buyer and user accept the product under these conditions and assume the risk of any failure, any injury to person or property (including that of the user), loss or liability resulting from the handling, storage or use of the product whether or not it is handled, stored or used in accordance with the directions or specifications. MuleHide must be notified in writing of any claims and be given the opportunity to inspect the alleged failure before repairs are made.