



Product Description:

The IB #12 Purlin Fastener is designed to secure insulation and membrane to structural steel purlins in a metal retrofit applications. It is intended to be used in conjunction with the IB TPO 3" IW Insulation Plate, IB PVC 3" IW Insulation Plate, and the IB 2-3/8" Barbed Seam Plates.

Features:

- Extra stable #3 square drive provides superior bit engagement
- Drill point design prevents fastener walking
- Shank diameter is smaller than that of the drill point and the outside thread diameter
- 24 threads per inch provides greater pull-out values
- Drills through steel thicknesses of 18 ga (.045" nominal) through 1/4" (.250")
- Cathodic epoxy e-coat

Sizes:

3-3/4" - 8-3/4"

Packaging:

The fasteners come pre-packaged in a plastic bucket. See table for quantity and weights. Includes one #3 square bit.

Approvals:



Listed with various component assemblies at Florida Building Code (FBC), Factory Mutual (FM), ICC/ES, and Texas Department of Insurance (TDI). Refer to individual assembly approvals for additional information and requirements. Visit our website for links to these agencies and listings at: www.ibroof.com.

Typical Pull-out values (lbf. avg):

Steel 18 ga: 424	Steel 12 ga: 1477
Steel 16 ga: 599	Steel 3/16": 2300*
Steel 14 ga: 869	Steel 1/4": 2300*

* Denotes tensile failure of fastener (fastener failed in tensile before pulling out of substrate)

Application:

The IB #12 Purlin Fastener must penetrate through the steel purlins a minimum of 1". Using a screw gun capable of 1800–2500 rpm and equipped with depth sensing nosepiece, drive the fastener until a slight depression is seen around the plate, or with very rigid insulation boards, watch for the plate to dimple. **Note:** Care must be taken not to overdrive the fastener and fracture the skin of the insulation. Fastener must be tight enough so that the plate does not turn.



Product details stated are nominal as manufactured, and the results of tests and/or calculations and therefore are non-binding and do not represent a guarantee or warranted characteristics. User and/or designer are responsible for confirming suitable performance for specific application and conforming with all applicable laws and regulations.

Fastener Properties			
Fastener Dimensions		Fastener Strength Values	
Head	#3 square, pancake	Property	(lbs. ult)
Head Height	.110"	Tensile	2300
Head Diameter	.425"	Torsional	100 lbf-in
Thread Diameter (major)	.209"	Coating and Corrosion	
Thread Diameter (minor)	.157"	FM 4470	15/15 Kesternich
Blank Diameter	.179"	ASTM B117	800 salt spray
Threads per inch	24		

Fastener Length	Thread Length	Pilot Length	Max Insulation Thickness	Wt.	Quantity
3-3/4"	2-5/8"	3/4"	Up to 2-3/4"	33 lbs.	1000
4-3/4"	2-5/8"	3/4"	1-1/4" to 3-3/4"	41 lbs.	1000
5-3/4"	2-5/8"	3/4"	2-1/4" to 4-3/4"	48 lbs.	1000
6-3/4"	2-5/8"	3/4"	3-1/4" to 5-3/4"	28 lbs.	500
7-3/4"	2-5/8"	3/4"	4-1/4" to 6-3/4"	36 lbs.	500
8-3/4"	2-5/8"	3/4"	5-1/4" to 7-3/4"	40 lbs.	500

Note: Thread length measured from top of threads to top of pilot

Storage:

Store in a dry area, indoors, out of direct sunlight in the original unopened container.

Safety Precautions:

Use proper equipment and assistance when moving, lifting, handling, or transporting membrane rolls to avoid personal injuries as well as damage to the membrane. Safety goggles or protective eye wear are recommended. Refer to the Product Safety Data Sheet for additional safety information.

Go to <https://ibroof.com/tds> for the most up-to-date version of this document.

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