

System ES® Insulation Assemblies

#12 assembled to metal & plastic insulation plates

For insulation attachment using pre-assembled #12 fasteners and plates



- System ES insulation assemblies, when installed with Stealth tools, increase productivity up to 30% and allow the contractor to install the roof assembly in a more ergonomically correct position versus standard installation methods.

- Screw and plate relationship is perpendicular every time, allowing for proper and quicker installations.
- Preassembled fasteners can be placed on the deck or loaded into the Stealth installation tools, giving the contractor the ability to use crew members in other areas of the roof project.

Application

#12 Phillips w/ Round Galvalume Plate

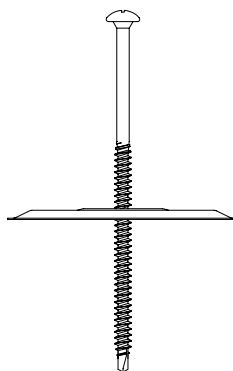
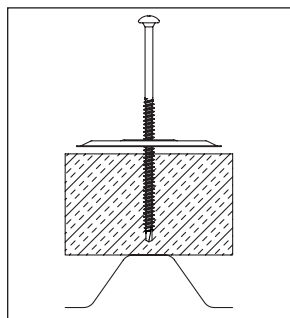
Mechanical attachment of insulation per manufacturers' requirements

Materials:

- Steel thickness from 22 ga (.028 in.) through 18 ga (.045 in.):
Min penetration: 3/4"
- Wood 2x (1-1/2" thick):
Min penetration: 1"

Use with:

- Stealth Shorty, Stealth 10, or Stealth 20 ELF installation tools
- Steel roof decks include all FM approved 18-20-22 ga



Head Drive: #3 Phillips
Head Height: Max .118"
Head Dia: Max .448"
Thread Major Dia: .222"
Shank Dia: .167"
Plate: 3" round Galvalume
Material: AZ50 Galvalume

Strength (lbs ult.):

Tensile: 2410
Torsional: 76 in-lbs min
Shear: 1815

Pull-out (lbs avg.):

Steel 22 ga: 513
Steel 20 ga: 695
Steel 18 ga: 787
2x dimensional lumber (1" penetration): 462
3/4" FR Plywood: 575

#12 Hex w/ Round Galvalume Plate

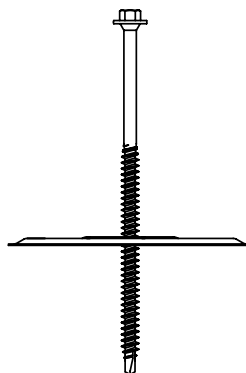
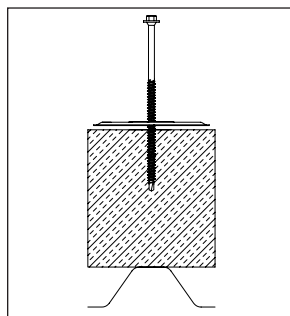
Mechanical attachment of insulation per manufacturers' requirements

Materials:

- Steel thickness from 22 ga (.028 in.) through 18 ga (.045 in.):
Min penetration: 3/4"
- Wood 2x (1-1/2" thick):
Min penetration: 1"

Use with:

- Stealth Shorty, Stealth 10, or Stealth 20 metal installation tools
- Steel roof decks include all FM approved 18-20-22 ga



Head Drive: 1/4" hex
Head Height: Max .140"
Head Major Dia.: Max .448"
Thread Major Dia: .226"
Shank Major Dia: .167"

Plate: 3" Round Galvalume
Material: AZ50 Galvalume

Strength (lbs ult.):

Tensile: 2410
Torsional: 76 in-lbs min
Shear: 1815

Pull-out (lbs avg.):

Steel 22 ga: 513
Steel 20 ga: 695
Steel 18 ga: 787
2x dimensional lumber (1" penetration): 462
3/4" FR Plywood: 575

Notes

Dimensions are nominal inches unless noted. Steel roof decks include all FM-approved 18-20-22 ga. FM-approved wood decks include 3/4" F.R. plywood and 2x dimensional lumber. Structural concrete to be predrilled with standard 3/16" carbide drill bit to minimum 1/2" deeper than fastener penetration.

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Insulation Assemblies

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Selection

Length	Part No.	Steel	Wood	Concrete	Carton Wt. (lbs)	Carton Qty.	Skid Qty.
#12 Phillips Metal							
1-5/8"	A8513-995V	Up to 7/8"	Up to 5/8"	N/A	27	500	13,500
2-1/4"	A8518-995V	Up to 1-1/2"	Up to 1-1/4"	N/A	14	250	9,000
2-7/8"	A8523-995V	Up to 2-1/8"	Up to 1-7/8"	N/A	15	250	9,000
3-1/4"	A8526-995V	1/2" to 2-1/2"	1/4" to 2-1/4"	N/A	16	250	9,000
3-3/4"	A8530-995V	1" to 3"	3/4" to 2-3/4"	N/A	17	250	9,000
4-1/2"	A8536-995V	1-3/4" to 3-3/4"	1-1/2" to 3-1/2"	N/A	18	250	6,750
5"	A8540-995V	2-1/4" to 4-1/4"	2" to 4"	N/A	19	250	6,750
6"	A8548-995V	3-1/4" to 5-1/4"	3" to 5"	N/A	20	250	6,750
7"	A8556-995V	4-1/4" to 6-1/4"	4" to 6"	N/A	17	200	5,400
8"	A8564-995V	5-1/4" to 7-1/4"	5" to 7"	N/A	19	200	5,400
#12 Hex Metal							
1-5/8"	C7400-995V	Up to 7/8"	Up to 5/8"	N/A	26	500	13,500
2-1/4"	C7410-995V	Up to 1-1/2"	Up to 1-1/4"	N/A	14	250	9,000
2-7/8"	C7420-995V	Up to 2-1/8"	Up to 1-7/8"	N/A	15	250	9,000
3-1/4"	C7430-995V	1/2" to 2-1/2"	1/4" to 2-1/4"	N/A	16	250	9,000
3-3/4"	C7440-995V	1" to 3"	3/4" to 2-3/4"	N/A	17	250	9,000
4-1/2"	C7450-995V	1-3/4" to 3-3/4"	1-1/2" to 3-1/2"	N/A	18	250	6,750
5"	C7460-995V	2-1/4" to 4-1/4"	2" to 4"	N/A	19	250	6,750
6"	C7470-995V	3-1/4" to 5-1/4"	3" to 5"	N/A	20	250	6,750
7"	C7480-995V	4-1/4" to 6-1/4"	4" to 6"	N/A	17	200	5,400
8"	C7490-995V	5-1/4" to 7-1/4"	5" to 7"	N/A	19	200	5,400

Approvals

Dekfast fasteners and plates are Factory Mutual approved for attachment of insulation board to roof deck. Refer to FM Approval Guide and Supplements for current FM approved insulation fastening patterns. Dekfast fasteners exceed Factory Mutual corrosion-resistance Standard 4470.

Installation

For optimum results, all Dekfast preassembled fasteners must be installed with Stealth installation tools.

Options

