

#12 Belted

#12 Dekfast insulation attachment

For insulation attachment using #12 Dekfast with a #3 Phillips drive collated for the isofast® fastening system



- “The fastest way to install roofing fasteners!”
- Belted fasteners and plates increase productivity and are ergonomically correct, allowing the contractor to install the roof assembly in an upright position when using the IF 160 or IF 240 installation tools.

Application

#12 Belted Fasteners
Collated fasteners for insulation attachment

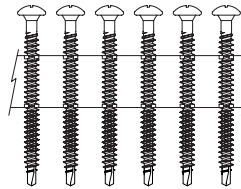
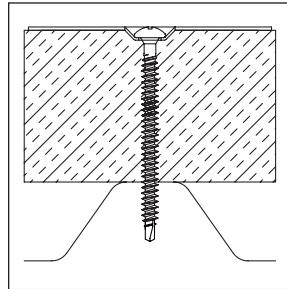
Materials:

- 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:

- IFC/PH 70x70 (2-3/4" x 2-3/4")
Galvalume stress plates
- IF/IG-C 82x40 (3-1/4" x 1-1/2")
Galvalume stress plates

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"

Strength (lbs ult.):

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

Pull-out (lbs avg.):

Steel:
22 ga: 513
20 ga: 695
18 ga: 787
2x dim. lumber (1" penetration): 462
Plywood 3/4" thick (through penetration): 575

Notes

Dimensions are nominal inches unless noted. Ultimate values listed are the result of laboratory testing. Pull-out (pounds ultimate) strength values may vary from tabulated loads depending upon the uniqueness of the application. The specific job conditions should be considered and appropriate safety factors applied when specifying the proper fasteners.

Selection

Length	Part No.	Carton Wt. (lbs)	Carton Qty.	Skid Qty.
2-1/4"	A8518-995TPL	13	750	40,500
2-7/8"	A8523-995TPL	16	750	40,500
3-1/4"	A8526-995TPL	17	750	40,500
3-3/4"	A8530-995TPL	20	750	40,500
4-1/2"	A8536-995TPL	23	750	36,000
5"	A8540-995TPL	26	750	36,000
6"	A8545-995TPL	31	750	36,000
7"	A8556-995TPL	36	750	36,000
8"	A8564-995TPL	41	500	36,000

Approvals

Dekfast fasteners and plates are Factory Mutual approved for attachment of insulation board and/or roof cover to roof deck. Refer to FM Approval Guide and Supplements for current FM approved insulation fastening patterns. #12 belted fasteners exceed Factory Mutual corrosion-resistance Standard 4470.

Installation

#12 belted fasteners up to and including 6" must be installed with the IF 160 automatic setting tool. Belted fasteners 7" and longer must be installed utilizing the IF 240 automatic setting tool.

Options

<p>#12</p>	<p>Installation Tools</p>	<p>Coatings</p>	<p>isofast® Plates</p>
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#15 Belted

#15 Dekfast seam attachment

For membrane attachment using #15 Dekfast with a #3 Phillips drive collated for the isofast® fastening system



- “The fastest way to install roofing fasteners!”
- Belted fasteners and plates increase productivity and are ergonomically correct, allowing the contractor to install the roof assembly in an upright position when using the IF 160 or IF 240 installation tool.

- Displaces labor costs.
- Reduces workers’ compensation claims as they relate to MSD injuries incurred while installing fasteners.
- Reduces installation costs up to 50%.

Application

#15 Belted Fasteners
Collated fasteners for membrane attachment utilizing high performance installation tools

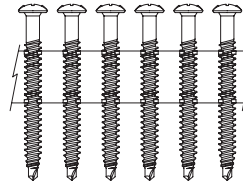
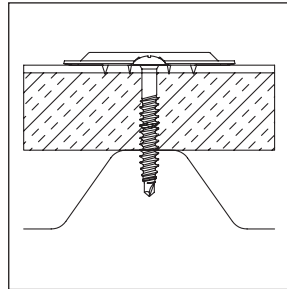
Materials:

- Steel thickness from 26 ga (.019 in.) Through 18 ga (.045 in.); Min penetration: 3/4"
- Wood 2x (1-1/2" thick); Min penetration 1"

Use with:

- IF-2.375-AT (2-3/8") stacked Galvalume stress plates
- IF-82x50-AT (3-1/4" x 1-1/2") stacked Galvalume stress plates

Steel roof decks include all FM approved 18-20-22 ga



Head Drive: #3 Phillips
Head Height: Max .130"
Head Dia: Max .448"
Thread Major Dia: .263"
Shank Major Dia: .204"
Threads per Inch: 13

Strength (lbs ult.):

Tensile: 4350
Torsional: 130 in-lbs min
Shear: 3700

Pull-out (lbs avg.):

Steel:
22 ga: 706
20 ga: 898
18 ga: 1140
Plywood 3/4" thick (through penetration): 703
Wood 2x (1-1/2" penetration): 692
Non-FM approved decks:
26 ga: 301
24 ga: 453

Notes

Dimensions are nominal inches unless noted. Ultimate values listed are the result of laboratory testing. Pull-out (pounds ultimate) strength values may vary from tabulated loads depending upon the uniqueness of the application. The specific job conditions should be considered and appropriate safety factors applied when specifying the proper fasteners.

Selection

Length	Part No.	Carton Wt. (lbs)	Carton Qty.	Skid Qty.
2"	C2010-995TPL	21	1000	42,000
3"	C2020-995TPL	31	1000	30,000
4"	C2030-995TPL	21	500	21,000
5"	C2040-995TPL	25	500	15,000
6"	C2050-995TPL	30	500	15,000
7"	C2060-995TPL	35	500	15,000
8"	C2070-995TPL	39	500	15,000
9"	C2075-995TPL	44	500	15,000

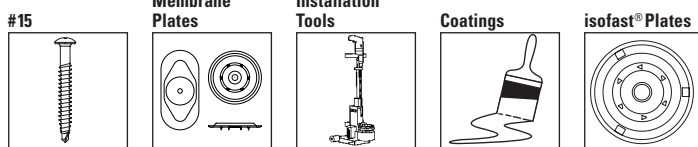
Approvals

Dekfast fasteners and plates are Factory Mutual approved for attachment of roof cover to roof deck. Refer to FM Approval Guide and Supplements for current FM approved insulation fastening patterns. #15 belted fasteners exceed Factory Mutual corrosion-resistance Standard 4470.

Installation

The #15 belted fasteners up to and including 6" lengths must be installed with the IF 160 automatic setting tool. Belted lengths 7" and longer must be installed utilizing the IF 240 automatic setting tool.

Options



isofast® Plates

2-3/4" square, 2-3/8" round
Stacked insulation and membrane plates
used with the isofast® fastening system

- "The fastest way to install roofing fasteners!"
- Belted fasteners and isofast plates increase productivity and are ergonomically correct, allowing the contractor to install the roof assembly in an upright position when using the IF 160 or IF 240 installation tools.

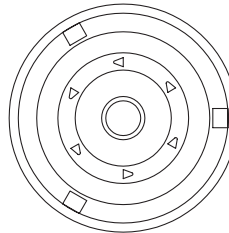
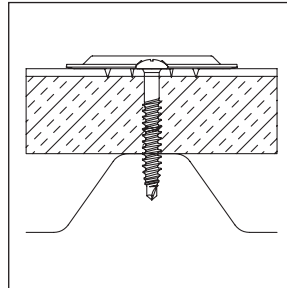
- Displaces labor costs.
- Reduces workman's compensation claims as they relate to injuries incurred while installing fasteners.
- Reduces installation costs up to 50%.



Application

**IF-2.375-AT
Membrane Plate**

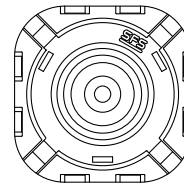
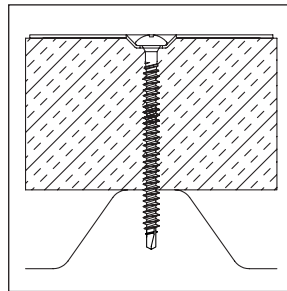
- Use with:
- #15 Belted Fasteners



OD: 2 3/8" Round
ID: .265"
Thickness: .042"
Finish: AZ50 Galvalume®

**IF-L-70 x 70
Insulation Plate**

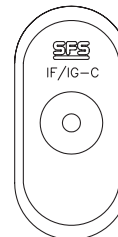
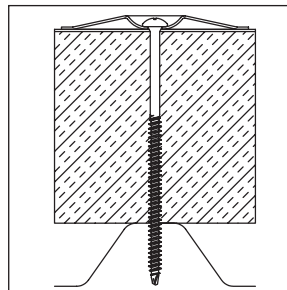
- Use with:
- #12 Belted Fasteners
 - #15 Belted Fasteners



OD: 2-3/4" x 2-3/4" Square
ID: .257"
Thickness: .019"
Finish: AZ50 Galvalume

**IF/IG-C 82x40
Membrane Plate**

- Use with:
- #12 Belted Fasteners
 - #15 Belted Fasteners



OD: 3-1/4" x 1-1/2" Oblong
ID: .220"
Thickness: .042"
Finish: AZ50 Galvalume

Notes

Dimensions are nominal inches unless noted.

Continued on following page

isofast® Plates

2-3/4" square, 2-3/8" round
 Stacked insulation and membrane plates
 used with the isofast® fastening system

Selection

Description	Part No.	Carton Wt. (lbs)	Carton Qty.	Skid Qty.
2-3/8" Round	M7680-TPL	41	500	31,500
2-3/4" Square	M7710-TPL	41	750	40,500
3-1/4" x 1-1/2" Oblong	M7700-TPL	37	750	18,250

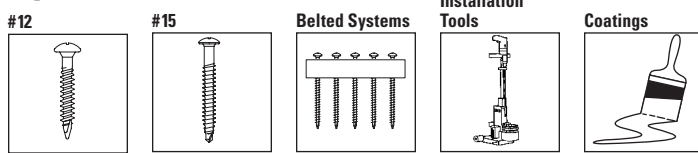
Approvals

isofast fasteners and plates are FM approved for insulation and roof cover attachment. Refer to FM approval guide and its supplements for current approved fastening spacings.

Installation

isofast plates are designed to be used with isofast fasteners and the IF 160 or IF 240 installation tools. Use in applications approved by the roofing system manufacturer.

Options



Insulation Panel Fastener

#14 #3 square drive, drill point
For use in vented and/or composite nailboard applications

- Flat profile head for flush engagement to the nailboard.
- No plates necessary.
- 5/8" oversized head reduces fastener patterns.

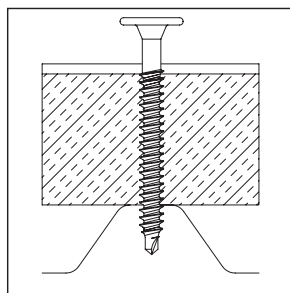
- Standard gray e-coat coating provides compatibility with white, galvanized or gray deck undersides.

Application

Insulation Panel Fasteners
#14 #3 square drive, drill point

Materials:

- Dimensional wood 2x (1-1/2" thick):
Min penetration: 1"
- Steel thickness: 22-20-18 ga:
Min penetration: 3/4"



Head: #3 square drive
Head Dia: .645" – .620"
Head Height: .078" – .072"
Thread Major Dia: .245"
Shank Dia: .190"

Strength (lbs ult.):

Tensile: 1970
Shear: 2700
Torque: 125 in-lbs

Pull-out (1" penetration) (lbs avg.):

Face Grain: 823
Edge Grain: 845
1-1/2" Penetration:
Face Grain: 1344
Edge Grain: 1320
Grade E steel deck:
22 ga (.030): 498

Notes

Dimensions are nominal inches unless noted. Ultimate values listed are the result of laboratory testing. Pull-out (pounds ultimate) strength values may vary from tabulated loads depending upon specific wood density variation. The specific job conditions should be considered and appropriate safety factors applied when specifying the proper fasteners.

Selection

Length	Part No.	Carton Wt. (lbs)	Carton Qty.	Skid Qty.
2-5/8"	B7221-995R	15	500	12,000
3"	B7224-995R	16	500	12,000
3-1/2"	B7228-995R	18	500	12,000
4"	B7232-995R	21	500	12,000
4-1/2"	B7236-995R	23	500	12,000
5"	B7240-995R	25	500	12,000
5-1/2"	B7244-995R	27	500	12,000
6"	B7248-995R	29	500	12,000
6-1/2"	B7252-995R	31	500	12,000
7"	B7256-995R	33	500	12,000
7-1/2"	B7260-995R	34	500	12,000
8"	B7264-995R	18	250	6,000
8-1/2"	B7266-995R	20	250	6,000
9"	B7268-995R	20	250	6,000
10"	B7272-995R	23	250	6,000
11"	B7276-995R	25	250	6,000
12"	B7280-995R	26	250	6,000

Installation

Install fasteners with self-drill fastener installation tool or drill using caution to avoid fastener strip out. The standard carton package includes one #3 square drive bit (Part Number J0945P).

Options

Coatings



ISO-TAK®

Thermal efficient fastening system
For attachment of membrane and insulation reducing thermal bridging



- Guards against fastener thermal bridging
- Ideal for low slope roof and cold storage construction
- Cost savings through energy conservation

- Lower cost alternative for attaching thick roof assemblies
- Factory Mutual approved

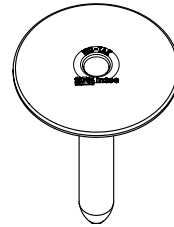
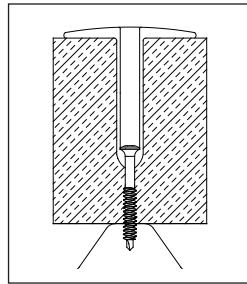
Applications

ISO-TAK System

Materials:

- #14 Dekfast fastener
- Polypropylene sleeve for insulation attachment
- Polyimide sleeve for membrane attachment

The combination of sleeve and fastener length will determine the minimum and maximum build-up thickness the system can accommodate, with a maximum thickness up to 18"



Fastener

Fastener Head: Countersunk head, drive T25
Fastener Head Dia: 0.358"
Thread Major Dia: 0.240"

Sleeve

Material: Polypropylene, PP
Plate Dia: 3" Round
Shank Dia: 0.590

Pull-out (lbs. avg.):
22 ga: 573
20 ga: 660
18 ga: 1005

Notes

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Selection

Fastener Length	Fastener Part No.	Carton Wt. (lbs)	Carton Qty.
2-3/8"	1185063	9	500
4"	1185059	14	500
6"	1193134	21	500
8"	1193137	28	500

Sleeve Length	Sleeve Part No.	Carton Wt. (lbs)	Carton Qty.
4-1/8"	1037836	23	500
5-1/4"	1037838	26	500
6-1/2"	1037839	13	250
8-7/8"	1037842	16	250
10"	1037843	18	250
11-1/4"	1037844	15	200

Approvals

Dekfast fasteners 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. ISO-TAK fasteners exceed Factory Mutual corrosion-resistance Standard 4470.

Installation

The ISO-TAK Fastening System has been developed in close collaboration with leading Scandinavian roofing contractors as a solution to the problems associated with thermal bridging. For ease of installation, special drive shafts and driving tools are available.

Options

Installation Tools

