

Bulletin Number: T20-002

Date: February 13, 2020

Distribution: External

Page 1 of 3

Minimum Insulation Fastening Requirements – Adhered Membrane To Qualify for a 55 mph JM Peak Advantage® Guarantee (max. 20 year term)

The following requirements represent the minimum fastener and plate attachment criteria to qualify for a 55 mph JM Peak Advantage Guarantee up to a 20 year term. This information does not represent compliance with applicable building codes, FM requirements, or guarantees above 55 mph and/or greater than 20 years. *For compliance with specific wind uplift criteria and systems beyond a standard 20 year Peak Advantage Guarantee, please contact JM Technical Services at 1-800-922-5922 Option 3.*

Adhered Bituminous Membrane Minimum Requirements				Adhered Single Ply Membrane Minimum Requirements			
<i>See Notes below for required Perimeter and Corner Enhancements^{2,3}</i>				<i>See Notes below for required Perimeter and Corner Enhancements^{2,3}</i>			
Insulation Type	Thickness	4' x 4' Board	4' x 8' Board	Insulation Type	Thickness	4' x 4' Board	4' x 8' Board
ENRGY 3® Products	1"-1.4"	8	16	ENRGY 3 Products	1"-1.4"	8	16
	1.5" or Greater	4	8		1.5"-1.9"	6	12
		2" or Greater	4		8	2" or Greater	4
Invinsa® Roof Board	0.25"	6	12	Invinsa Roof Board	0.25"	8	16
ProtectoR® HD	0.5"	4	8				
SeparatoR® CGF	0.5"	4	8	ProtectoR HD	0.5"	4	8
DensDeck® Prime	0.25"-0.5"	4	8	SeparatoR® CGF	0.5"	4	8
	0.625"	4	6				
DEXCell® FA Glass-Mat	0.25"-0.5"	4	8	RetroPlus	0.5"	8	16
	0.625"	4	6				
SECUROCK® Gypsum-Fiber	0.25"-0.5"	4	8	DensDeck Prime	0.25"	5	10
	0.625"	4	6		0.50"	4	8
FESCO® Board ^{4*}	Min. 0.75"	8	N/A		0.625"	4	6
FESCO® HD ^{4*}	1"	4	N/A	DEXCell FA Glass-Mat	0.25"	5	10
DuraBoard® ^{4*}	Min. 0.5"	8	N/A		0.50"	4	8
Retro-Fit™ ^{4*}	0.5"	8	16		0.625"	4	6
RetroPlus™	0.5"	8	16	SECUROCK Gypsum-Fiber	0.25"-0.375"	5	10
					0.50"	4	8
					0.625"	4	6

*These boards are suitable for use in bituminous systems only.

(SEE PAGE 2 for applicable conditions)

Bulletin Number: T20-002

Date: February 13, 2020

Distribution: External

Page 2 of 3

The following conditions apply to the Minimum Fastening Rates for Adhered Bituminous Membranes and Single Ply Membranes:

1. These attachment rates pertain to roof heights equal to or less than 60' in elevation. Perimeter and corner enhancements are not required for 55 mph JM guarantees up to a 20 year term using the below rates.
2. For buildings above 60' in elevation the enhancements for perimeters (+50%) and corners (+100%) are required on all adhered assemblies.
3. These attachment rates apply with the following deck types: min. 22 ga steel, structural concrete, and min. 5/8" plywood or wood plank. Contact JM Technical Services for fastening rates in decks not listed.
4. UltraFast® #12 Fasteners and 3" Plates are acceptable for insulation fastening in min. 22ga Steel decking. All Purpose #14 Fasteners or Structural Concrete Deck Fasteners and 3" Plates are acceptable for insulation fastening in structural concrete decks. All Purpose #14 Fasteners and 3" Plates are acceptable for insulation fastening in wood decks. Flat-bottom insulation plates are to be used with high density cover boards such as Gypsum and Polyiso Coverboards.
5. Cover board suitability is dependent upon roofing system type and guarantee terms. Contact JM Technical Services for approved cover board types per system.

<u>Urethane Insulation Adhesive Bead Spacing</u>			
<u>Insulation/Cover Board Type</u>	<u>JM Two-Part Urethane Insulation Adhesive (2PUIA)</u>	<u>JM One-Step Foamable Adhesive</u>	<u>JM Roofing Systems Urethane Adhesive (RSUA)</u>
Any	12" o.c.	12" o.c.	12" o.c.

The following conditions apply to the Minimum Urethane Insulation Adhesive Bead Spacing:

1. Perimeter and corner enhancements are not required for 55 mph JM guarantees up to a 20 year term using the below rates.
2. These rates apply to insulation securement to concrete decks and insulation to insulation securement.
3. Bonded pull tests may be required for the following deck types: lightweight insulating concrete, gypsum, cementitious wood fiber, and min. 22 ga steel. Contact JM Technical Services for job specific requirements when these deck types are encountered.
4. Max. 4' x 4' insulation boards are to be utilized in adhered applications.

<u>Minimum Pullout Resistance</u>			
<u>Adhered Systems</u>	<u>Mechanically Attached Membrane Systems</u>	<u>Base Sheet Attached with Screws/Plates</u>	<u>Base Sheet Attached with Nailable Fastener</u>
300 lbs (136.1 kg)	400 lbs (181.4 kg)	300 lbs (36.1 kg)	40 lbs (18.1 kg)

The following conditions apply to the Minimum Pullout Resistance:

1. The pullout resistance information listed for Adhered Systems, Mechanically Attached Membrane Systems, and Base Sheet Attached with Screws/Plates is applicable to the following deck types: min. 22ga steel, structural concrete, min. 5/8" plywood, and wood plank
2. The pullout resistance information listed for Base Sheet Attached with Nailable Fastener is applicable to the following deck types: lightweight insulating concrete, cementitious wood fiber, and gypsum decks.
3. Contact JM Technical Services when minimum pullout requirements are not attained or applicable decking not listed above is encountered.

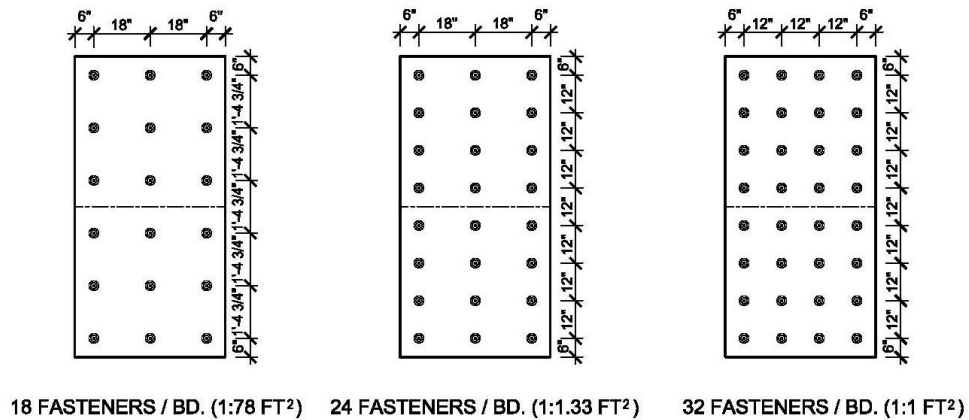
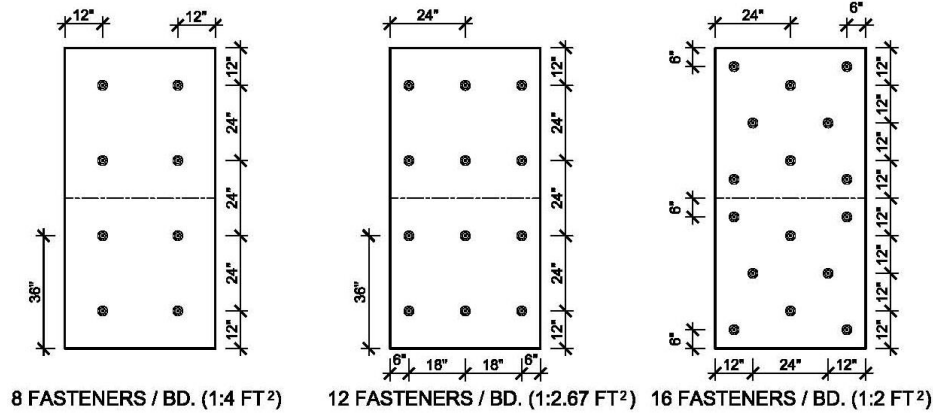
Bulletin Number: T20-002

Date: February 13, 2020

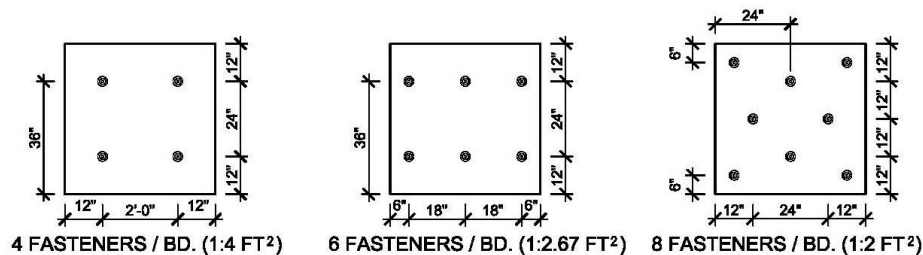
Distribution: External

Page 3 of 3

The following diagrams represent the attachment patterns for 4'x8' insulation boards.
For specific insulation types and minimum requirements please refer to the specific rate listed above.



The following diagrams represent the attachment patterns for 4'x4' insulation boards.
For specific insulation types and minimum requirements please refer to the specific rate listed above.



Todd Nathan
Technical Services Director