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**Reduced Insulation Fastening Pattern for Metal Retrofit
May 6, 2021**

To: Carlisle SynTec Systems' Manufacturer's Representatives, Distributors, and Authorized Applicators

A reduced insulation fastening pattern has been approved for adhered membrane assemblies used for metal retrofit projects. The reduced fastening pattern incorporates 12, 10, and 8 fasteners per 4' x 8' insulation board in three different zones extending from the roof perimeter to the field of the roof:

- **Zone "A"** – A 12'-wide area that includes the perimeters and corners
- **Zone "B"** – A 12'-wide secondary perimeter that extends adjacent to Zone "A"
- **Zone "C"** – The remainder of the roof (the field)

In these zones, each **4' x 8'** insulation/underlayment board shall be fastened as follows:

Roof Zone	Fastening rate per sq. ft.	Number of fasteners per board
Zone "A"	1 per 2.6	12
Zone "B"	1 per 3.2	10
Zone "C"	1 per 4	8

This reduced fastening pattern is applicable:

1. For projects where the building's height is not greater than 50 feet.
2. When a minimum pullout value of 360 lbs. is achieved using Carlisle HP-X Fasteners.
3. For **projects that do not incorporate Sure-Seal® HP Recovery Board**. All other currently approved insulations/underlayments may be used as outlined in the published Carlisle specification.
4. For projects with membrane system warranties up to 20 years with a maximum wind speed coverage of 55 mph.

The reduction in the overall number of fasteners will vary based on each roof's configuration and size, but in most cases a savings of 37%-42% can be realized. Please refer to the attached drawing for additional information concerning these fastening patterns and the roof zones' layout.



Samir Ibrahim
Director of Systems and Design Review