

**Mechanically Fastened Roofing Systems Fastening Criteria  
Up to 20 YR Warranty (1)  
22 GA. Steel and Structural Concrete Decks**

Table III

Peak Gust Wind Speed Warranty	Max. Building Height	Min. Number of Perimeter Sheets			Field Membrane Width	Perimeter Sheet Width	Fastening Density* (Field & Perimeter Sheets)
		Local Wind Speed					
		Up to 110 MPH	110-120 MPH	120 MPH or Greater			
55 MPH	Up to 60'	1	2	3	10'	6.5'	12" O.C.
					8'	6.5'	12" O.C.
	61' to 100'	2	2	3	10'	6.5'	6" O.C.**
					8'	6.5'	12" O.C.
72 MPH	Up to 60'	2	2	3	10'	6.5'	12" O.C.
					8'	6.5'	12" O.C.
	61' to 100'	3	4	4	10'	6.5'	6" O.C.**
					8'	6.5'	12" O.C.
80 MPH (1)	Up to 60'	3	3	4	10'	4.5'***	12" O.C.
					8'	4.5'***	12" O.C.
	61' to 100'	3	4	4	10'	4.5'***	6" O.C.**
					8'	4.5'***	12" O.C.
90 MPH (2)	Up to 60'	3	4	4	10'	4.5'***	6" O.C.
					8'	4.5'***	12" O.C.
	61' to 100'	4	5	5	10'	4.5'***	6" O.C. **
					8'	4.5'***	12" O.C.

\* Using HP Fasteners On Steel Deck with Polymer Seam Plates

\*\*12" o.c. Spacing can be utilized by using HP-Xtra Fasteners and 2-3/8" Polymer Seam Plates.

\*\*\*As an option, 9" wide EPDM Pressure Sensitive RUSS can be used beneath the field sheets for perimeter securement.

- (1) 20 year is the maximum warranty available with peak gust wind speed of 80 MPH. Projects with greater wind speed coverage **MUST** be submitted to Carlisle for review and possible considerations.
- (2) 90 MPH wind speed coverage is limited to warranties up to 15 YR. Warranty of longer duration, when 90 MPH coverage is required **MUST** be submitted to Carlisle for review and possible considerations.

**Mechanically Fastened Roofing Systems Fastening Criteria  
Up to 20 YR Warranty  
Wood Decks**

**Table IV**

Peak Gust Wind Speed Warranty	Deck Type	Projected Pull-Out Values	Min. Number of Perimeter Sheets		Field Membrane Width	Perimeter Sheet Width	Fastening Density (Field & Perimeter Sheets)
			Local Wind Speed				
			Up to 100 MPH	100 MPH to 110 MPH (Max.)			
55 MPH	7/16" OSB	210 lbs	2	3	10'	4.5'*	9" O.C.
			2	3	8'	4.5'*	12" O.C.
	15/32" 3-Ply Plywood	240 lbs	2	3	8'	4.5'*	12" O.C.
	15/32" 5-Ply Plywood	530 lbs	1	1	10'	6.5'	12" O.C.
	5/8" OSB	310 lbs	2	3	10'	4.5'*	12" O.C.
			2	3	8'	4.5'*	12" O.C.
72 MPH	15/32" 3-Ply Plywood	240 lbs	2	3	8'	4.5'*	12" O.C.
	15/32" 5-Ply Plywood	530 lbs	1	1	10'	6.5'	12" O.C.
	5/8" OSB	310 lbs	2	3	10'	4.5'*	12" O.C.
			2	3	8'	4.5'*	12" O.C.
80 MPH	<i>Contact Carlisle for Approval and Evaluation</i>						

\* As an option to using 4.5' perimeter sheets, 9" wide EPDM Pressure Sensitive RUSS can be used beneath the field sheets for perimeter securement.

**Table V Re-roofing Substrate Criteria - Up to 20 YR Warranty**

Acceptable Roof Deck/Substrate	EPDM Membrane (See Table I and II for minimum membrane thickness)		
	Adhered - Design "A"	Ballasted - Design "B"	Mechanically Fastened
<b>RETROFIT / NO TEAR-OFF</b>			
Existing Smooth Surface BUR or Mineral Surface Cap Sheet	Direct Application (1)	Insulation	Direct Application (1)
Gravel Surfaced BUR	Insulation	Insulation	Insulation
Coal Tar Pitch	Insulation	Insulation	Insulation
Modified Bitumen	Direct Application (1)	Insulation	Direct Application (1)
Existing Single-Ply	Insulation	Insulation	Direct Application (1) (2)
Sprayed-in-place Urethane	Complete Tear-off Required	Insulation	Complete Tear-off Required

(1) Direct application permitted for projects with warranties up to 15 YR unless specifically approved by Carlisle. For acceptable insulations, when 20 YR warranty is required refer to Table VI paragraph 1.05.

(2) Direct application over existing PVC is not permitted regardless of warranty duration. Carlisle may be contacted for specific substrate requirement.

NOTE: Projects with Warranties greater than 20 YR require total removal of existing materials. Refer to Table VI and VII for further material requirements.

NOTE: Refer to Roof Deck and Substrate Criteria Table in Part III for additional installation requirements.