

TECHNICAL BULLETIN

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5-V 26 GAUGE

Manufacturer's Recommended Fastening Pattern For Buildings Less than 20' Mean Roof Height

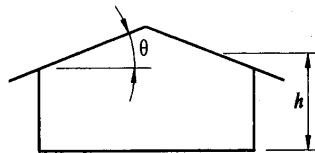
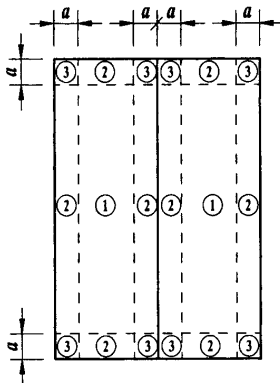
Roof Pitch 7°(1.5:12^{***}) to 27°(6.1:12)

***Minimum recommended slope for 5V is 3:12

Fastening Pattern for Various Wind Speeds					
Fastener	Substrate	Wind Speed	Roof Zone 1	Roof Zone 2	Roof Zone 3
#9-15 x 1-1/2" Woodgrip	1/2" Plywood	90-120 MPH	24"	24"	24"
		120-140 MPH	24"	24"	21" *
		140-160 MPH	24"	18"	18" *
#9-15 x 1-1/2" Woodgrip	1x4 Wood	90-120 MPH	24"	24"	24"
	Purlins** over	120-140 MPH	24"	24"	21" *
	1/2" Plywood	140-160 MPH	24"	18"	18" *

Notes:

1. Table is calculated using ASCE 7-10 "Minimum Design Loads for Buildings and Other Structures".
2. Values cannot be utilized for buildings with a mean roof height greater than 20'.
3. Values cannot be used for buildings with a roof pitch less than 7° or greater than 27°.
4. Fastening pattern is the distance between fasteners running parallel to the panel length.
5. Fastening pattern perpendicular to panel rib is 12" o/c, i.e., one fastener next to each major rib unless noted with an asterisk (*).
6. Fastening pattern perpendicular to panel rib noted with an asterisk (*) is 9.5"/2.5"/9.5"/2.5" pattern, i.e., one fastener on each side of each major panel rib.
7. Calculations use pullout values provided by the screw manufacturer.
8. Factor of safety used for pullout is 3.00 when attaching to plywood & 1x4 strips. Adjust values accordingly for a different factor of safety.
9. Deflections for loads acting towards the surface of the panel are assumed to be supported by the solid decking beneath the roof panel.
10. See Diagram below for roof zone definition.
11. Wood plywood or purlin substrate must be designed in accordance with the applicable local building code.
12. **Installation over 1x4 strips may allow the strips to telegraph through the panel. Extra care should be taken when walking on the panels so as not to exaggerate this condition.



Dimension "a" is defined as 10% of the least horizontal dimension or $.4h$, whichever is smaller, but not less than 4% of the least horizontal dimension or 3 ft. Where "h" is defined as the mean roof height in feet.

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