



PBR-Panel on 16 ga Purlins

Roof Fastener Spacing (feet)

Wind Speed (mph)
Exposure Category
120D

Roof Slope: 0.5:12 to 1.5:12				
	zone 1'	zone 1	zone 2	zone 3
Thickness	-21.3 psf	-37.6 psf	-49.8 psf	-68.2 psf
24 ga	5.00	5.00	4.00	2.50

Roof Slope: 1.5:12 to 6:12		
	z 2n,2r,3e	zone 3r
zone 1,2e	-43.7 psf	-76.3 psf
z 2n,2r,3e	-64.1 psf	-76.3 psf
zone 3r	-76.3 psf	-76.3 psf
z 1,2e,2r	4.50	2.50
z 2n,2r,3e	3.00	2.50
zone 3r	2.50	2.50

Roof Slope: 6:12 to 12:12		
	z 2n,3r	zone 3e
z 1,2e,2r	-39.7 psf	-68.2 psf
z 2n,3r	-43.7 psf	-68.2 psf
zone 3e	-68.2 psf	-68.2 psf
z 1,2e,2r	5.00	2.50
z 2n,3r	4.50	2.50
zone 3e	4.50	2.50

130D

	zone 1'	zone 1	zone 2	zone 3
Thickness	-25.2 psf	-44.3 psf	-58.6 psf	-80.1 psf
24 ga	5.00	4.50	3.00	2.00

	z 2n,2r,3e	zone 3r
zone 1,2e	-51.4 psf	-89.7 psf
z 2n,2r,3e	-75.3 psf	-89.7 psf
zone 3r	-89.7 psf	-89.7 psf
z 1,2e,2r	3.50	2.00
z 2n,2r,3e	2.50	2.00
zone 3r	2.00	2.00

	z 2n,3r	zone 3e
z 1,2e,2r	-46.7 psf	-80.1 psf
z 2n,3r	-51.4 psf	-80.1 psf
zone 3e	-80.1 psf	-80.1 psf
z 1,2e,2r	4.00	2.00
z 2n,3r	3.50	2.00
zone 3e	3.50	2.00

140D

	zone 1'	zone 1	zone 2	zone 3
Thickness	-29.3 psf	-51.5 psf	-68.1 psf	-93 psf
24 ga	5.00	3.50	2.50	2.00

	z 2n,2r,3e	zone 3r
zone 1,2e	-59.8 psf	-104.1 psf
z 2n,2r,3e	-87.5 psf	-104.1 psf
zone 3r	-104.1 psf	-104.1 psf
z 1,2e,2r	3.00	1.50
z 2n,2r,3e	2.00	1.50
zone 3r	1.50	1.50

	z 2n,3r	zone 3e
z 1,2e,2r	-54.2 psf	-93 psf
z 2n,3r	-59.8 psf	-93 psf
zone 3e	-93 psf	-93 psf
z 1,2e,2r	3.50	2.00
z 2n,3r	3.00	2.00
zone 3e	3.00	2.00

150D

	zone 1'	zone 1	zone 2	zone 3
Thickness	-33.7 psf	-59.2 psf	-78.3 psf	-106.9 psf
24 ga	5.00	3.00	2.50	1.50

	z 2n,2r,3e	zone 3r
zone 1,2e	-68.7 psf	-119.6 psf
z 2n,2r,3e	-100.5 psf	-119.6 psf
zone 3r	-119.6 psf	-119.6 psf
z 1,2e,2r	2.50	1.50
z 2n,2r,3e	1.50	1.50
zone 3r	1.50	1.50

	z 2n,3r	zone 3e
z 1,2e,2r	-62.3 psf	-106.9 psf
z 2n,3r	-68.7 psf	-106.9 psf
zone 3e	-106.9 psf	-106.9 psf
z 1,2e,2r	3.00	1.50
z 2n,3r	2.50	1.50
zone 3e	2.50	1.50

160D

	zone 1'	zone 1	zone 2	zone 3
Thickness	-38.4 psf	-67.4 psf	-89.1 psf	-121.7 psf
24 ga	5.00	2.50	2.00	1.50

	z 2n,2r,3e	zone 3r
zone 1,2e	-78.3 psf	-136.2 psf
z 2n,2r,3e	-114.5 psf	-136.2 psf
zone 3r	-136.2 psf	-136.2 psf
z 1,2e,2r	2.50	1.00
z 2n,2r,3e	1.50	1.00
zone 3r	1.00	1.00

	z 2n,3r	zone 3e
z 1,2e,2r	-71 psf	-121.7 psf
z 2n,3r	-78.3 psf	-121.7 psf
zone 3e	-121.7 psf	-121.7 psf
z 1,2e,2r	2.50	1.50
z 2n,3r	2.50	1.50
zone 3e	2.50	1.50

170D

	zone 1'	zone 1	zone 2	zone 3
Thickness	-43.5 psf	-76.2 psf	-100.7 psf	-137.5 psf
24 ga	4.50	2.50	1.50	1.00

	z 2n,2r,3e	zone 3r
zone 1,2e	-88.4 psf	-153.8 psf
z 2n,2r,3e	-129.3 psf	-153.8 psf
zone 3r	-153.8 psf	-153.8 psf
z 1,2e,2r	2.00	1.00
z 2n,2r,3e	1.50	1.00
zone 3r	1.00	1.00

	z 2n,3r	zone 3e
z 1,2e,2r	-80.3 psf	-137.5 psf
z 2n,3r	-88.4 psf	-137.5 psf
zone 3e	-137.5 psf	-137.5 psf
z 1,2e,2r	2.00	1.00
z 2n,3r	2.00	1.00
zone 3e	2.00	1.00

180D

	zone 1'	zone 1	zone 2	zone 3
Thickness	-48.8 psf	-85.5 psf	-113 psf	-154.2 psf
24 ga	4.00	2.00	1.50	1.00

	z 2n,2r,3e	zone 3r
zone 1,2e	-99.2 psf	-172.5 psf
z 2n,2r,3e	-145 psf	-172.5 psf
zone 3r	-172.5 psf	-172.5 psf
z 1,2e,2r	2.00	1.00
z 2n,2r,3e	1.00	1.00
zone 3r	1.00	1.00

	z 2n,3r	zone 3e
z 1,2e,2r	-90.1 psf	-154.2 psf
z 2n,3r	-99.2 psf	-154.2 psf
zone 3e	-154.2 psf	-154.2 psf
z 1,2e,2r	2.00	1.00
z 2n,3r	2.00	1.00
zone 3e	2.00	1.00

190D

	zone 1'	zone 1	zone 2	zone 3
Thickness	-54.5 psf	-95.3 psf	-125.9 psf	-171.9 psf
24 ga	3.50	2.00	1.50	1.00

	z 2n,2r,3e	zone 3r
zone 1,2e	-110.6 psf	-192.3 psf
z 2n,2r,3e	-161.7 psf	-192.3 psf
zone 3r	-192.3 psf	-192.3 psf
z 1,2e,2r	1.50	1.00
z 2n,2r,3e	1.00	1.00
zone 3r	1.00	1.00

	z 2n,3r	zone 3e
z 1,2e,2r	-100.4 psf	-171.9 psf
z 2n,3r	-110.6 psf	-171.9 psf
zone 3e	-171.9 psf	-171.9 psf
z 1,2e,2r	1.50	1.00
z 2n,3r	1.50	1.00
zone 3e	1.50	1.00

Notes:

1. Allowable spacing is based on a Design Pressures listed in the Miami-Dade NOA, 20-0331.03 and determined by linear interpolation of those values. 1/3 increase is not included for wind. The fasteners and fastening patterns are shown in the Approval.
2. Allowable spacing is based on an applied load determined using ASCE 7-16 for the Wind Speeds, Wind Exposure Categories, "Roof Slopes, and Roof Zones shown, assuming 10 square feet of tributary area, Enclosed Gable Roof, 3 or more span case, Topographic Factor of 1, and Mean Roof Height of 20 feet.
3. Allowable spacing is determined for wind suction using the pressures shown, resulting from the combination $0.6DL + 0.6W$. Also considered is the inward wind pressure, 20 psf live load and the weight of the panel.

#N/A

