

Maximum Snow Load, Wind Exposure B

Dome Diameter	Pipe Diameter	Pipe Gage	Wind Speed	Roof Snow (psf)	Remarks
16'	0.922" O.D.	18	100 mph		This pipe diameter cannot be used.
16'	1.163" O.D.	17	100 mph	25	
16'	1.315" O.D.	16	100 mph	35	
16'	1.66" O.D.	16	100 mph	65	
16'	1.9" O.D.	16	100 mph	85	
20'	0.922" O.D.	18	100 mph		This pipe diameter cannot be used.
20'	1.163" O.D.	17	100 mph	25	
20'	1.315" O.D.	16	100 mph	40	
20'	1.66" O.D.	16	100 mph	65	
20'	1.9" O.D.	16	100 mph	85	
24'	0.922" O.D.	18	100 mph		This pipe diameter cannot be used.
24'	1.163" O.D.	17	100 mph		This pipe diameter cannot be used.
24'	1.315" O.D.	16	100 mph	20	
24'	1.66" O.D.	16	100 mph	40	
24'	1.9" O.D.	16	100 mph	50	
30'	0.922" O.D.	18	100 mph		This pipe diameter cannot be used.
30'	1.163" O.D.	17	100 mph		This pipe diameter cannot be used.
30'	1.315" O.D.	16	100 mph	20	
30'	1.66" O.D.	17	100 mph	40	
30'	1.9" O.D.	16	100 mph	50	
36'	0.922" O.D.	18	100 mph		This pipe diameter cannot be used.
36'	1.163" O.D.	17	100 mph		This pipe diameter cannot be used.
36'	1.315" O.D.	16	100 mph	20	
36'	1.66" O.D.	16	100 mph	40	
36'	1.9" O.D.	16	100 mph	50	
44'	0.922" O.D.	18	100 mph		This pipe diameter cannot be used.
44'	1.163" O.D.	17	100 mph		This pipe diameter cannot be used.
44'	1.315" O.D.	16	100 mph	20	
44'	1.66" O.D.	16	100 mph	30	
44'	1.9" O.D.	16	100 mph	45	
60'	0.922" O.D.	18	100 mph		This pipe diameter cannot be used.
60'	1.163" O.D.	17	100 mph		This pipe diameter cannot be used.
60'	1.315" O.D.	16	100 mph		This pipe diameter cannot be used.
60'	1.66" O.D.	16	100 mph		This pipe diameter cannot be used.
60'	1.9" O.D.	16	100 mph		This pipe diameter cannot be used.

- ~ Dead Load of 2 psf has been applied on the horizontal projection.
- ~ Stress increase factor of 1.33 has been applied for load combinations including wind loads.
- ~ Fabric covering must not deflect greater than 1/2" between struts due to applied loads.
- ~ Wind pressure for this table is using an exposure category B per ASCE 7-02

Exposure B: shall apply where the ground surface roughness as described as, urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger, prevail in the upwind direction for a distance of at least 2630 ft. or 10 times the height of the building, whichever is greater.

Exposure C: shall apply for all cases where exposures B or D do not apply.

Exposure D: shall apply where the ground surface roughness as described as, flat, unobstructed areas and water surfaces outside hurricane-prone regions. This category includes smooth mud flats, salt flats and unbroken ice, prevails in the upwind direction for a distance at least 5000 ft. or 10 times the building height, whichever is greater. Exposure D shall extend inland from the shoreline for distance of 660 ft. or 10 times the height of the building, whichever is greater.

- ~ Contact the Engineer of Record for foundation and additional information before using the above table and/or before construction.
- ~ The code used in forming this table is the International Building Code, IBC 2003

The above loads are estimates only and should not be used for any specific project without prior consultation with Precision Structural Engineering, Inc., Tel. 541-850-6300, www.structure1.com

Maximum Snow Load, Wind Exposure C

Dome Diameter	Pipe Diameter	Pipe Gage	Wind Speed	Roof Snow (psf)	Remarks
16'	0.922" O.D.	18	85 mph		This pipe diameter cannot be used.
16'	1.163" O.D.	17	85 mph	25	
16'	1.315" O.D.	16	85 mph	35	
16'	1.66" O.D.	16	85 mph	65	
16'	1.9" O.D.	16	85 mph	85	
20'	0.922" O.D.	18	85 mph		This pipe diameter cannot be used.
20'	1.163" O.D.	17	85 mph	25	
20'	1.315" O.D.	16	85 mph	40	
20'	1.66" O.D.	16	85 mph	65	
20'	1.9" O.D.	16	85 mph	85	
24'	0.922" O.D.	18	85 mph		This pipe diameter cannot be used.
24'	1.163" O.D.	17	85 mph		This pipe diameter cannot be used.
24'	1.315" O.D.	16	85 mph	20	
24'	1.66" O.D.	16	85 mph	40	
24'	1.9" O.D.	16	85 mph	50	
30'	0.922" O.D.	18	85 mph		This pipe diameter cannot be used.
30'	1.163" O.D.	17	85 mph		This pipe diameter cannot be used.
30'	1.315" O.D.	16	85 mph	20	
30'	1.66" O.D.	17	85 mph	40	
30'	1.9" O.D.	16	85 mph	50	
36'	0.922" O.D.	18	85 mph		This pipe diameter cannot be used.
36'	1.163" O.D.	17	85 mph		This pipe diameter cannot be used.
36'	1.315" O.D.	16	85 mph	20	
36'	1.66" O.D.	16	85 mph	40	
36'	1.9" O.D.	16	85 mph	50	
44'	0.922" O.D.	18	85 mph		This pipe diameter cannot be used.
44'	1.163" O.D.	17	85 mph		This pipe diameter cannot be used.
44'	1.315" O.D.	16	85 mph	20	
44'	1.66" O.D.	16	85 mph	30	
44'	1.9" O.D.	16	85 mph	45	
60'	0.922" O.D.	18	85 mph		This pipe diameter cannot be used.
60'	1.163" O.D.	17	85 mph		This pipe diameter cannot be used.
60'	1.315" O.D.	16	85 mph		This pipe diameter cannot be used.
60'	1.66" O.D.	16	85 mph		This pipe diameter cannot be used.
60'	1.9" O.D.	16	85 mph		This pipe diameter cannot be used.

- ~ Dead Load of 2 psf has been applied on the horizontal projection.
- ~ Stress increase factor of 1.33 has been applied for load combinations including wind loads.
- ~ Fabric covering must not deflect greater than 1/2" between struts due to applied loads.
- ~ Wind pressure for this table is using an exposure category C per ASCE 7-02

Exposure B: shall apply where the ground surface roughness as described as, urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger, prevail in the upwind direction for a distance of at least 2630 ft. or 10 times the height of the building, whichever is greater.

Exposure C: shall apply for all cases where exposures B or D do not apply.

Exposure D: shall apply where the ground surface roughness as described as, flat, unobstructed areas and water surfaces outside hurricane-prone regions. This category includes smooth mud flats, salt flats and unbroken ice, prevails in the upwind direction for a distance at least 5000 ft. or 10 times the building height, whichever is greater. Exposure D shall extend inland from the shoreline for distance of 660 ft. or 10 times the height of the building, whichever is greater.

- ~ Contact the Engineer of Record for foundation and additional information before using the above table and/or before construction.
- ~ The code used in forming this table is the International Building Code, IBC 2003

The above loads are estimates only and should not be used for any specific project without prior consultation with Precision Structural Engineering, Inc., Tel. 541-850-6300, www.structure1.com