## Wind Speed Design

Height	Zone 1 (PSF)	Zone 2 (PSF)	Zone 3 (PSF)
15'	28.6	47.9	72.1
20'	28.6	47.9	72.1
25'	28.6	47.9	72.1
30'	28.6	47.9	72.1
35'	30	50.3	75.7
40'	31.1	52.2	78.6
45'	32	53.6	80.8
50'	33.1	55.5	83.7
55'	34	57	85.8
60'	34.8	58.4	88

## Uplift Pressures Calculated in RoofWindDesigner.com

**Calculation Criteria** 

ASCE 7-10 (2015 Michigan Building Code) 115 MPH Wind Design Speed Enclosed Building Risk Category II (most common) Exposure B (urban / suburban areas) Steel Deck, Flat (1.5:12 or less) EPDM Roof System Design Uplift-Resistance Capacity No parapet included

## DISCLAIMER

1. The Registered Design Professional is <u>responsible</u> for determining the Design Uplift-Resistance Capacity (MBC 2015: 1603.1.4):

**1603.1.4 Wind design data.** The following information related to wind loads shall be shown, regardless of whether wind loads govern the design of the lateral force-resisting system of the structure:

- 5. Design wind pressures to be used for exterior component and cladding materials not specifically designed by the *registered design professional* responsible for the design of the structure, psf (kN/ m<sup>2</sup>).
- 2. Loads shown are for information purposes only and are not be used as certified design loads.
- 3. Design Uplift-Resistance Capacity Loads include a reasonable safety factor of 2.0x
- 4. Confirm tested assembly complies with requirements of the Red Shield Warranty, if applicable.

## WIND UPLIFT COMPLIANCE

When reviewing Wind Uplift Design pressures, refer to Firestone tested assemblies in the following reports:

- 1. Firestone Code Approval Guide (lists common FM tested assemblies)
- 2. FM RoofNav, Design Pressure shown with safety factor included
- 3. UL Evaluation Reports, Maximum Design Pressure shown
- 4. State of Florida Product Approvals, Maximum Design Pressure shown
- 5. ICC ESR-3026, Allowable Wind Uplift Pressure shown

Note: Tested assemblies depicting Allowable Wind Uplift Pressures or Maximum Design Pressures already include a reduction (half) in the tested uplift pressure as a safety factor; therefore, you must double the tested uplift pressure in order to compare it to the Design Uplift-Resistance Capacity.

