

where

$(GC_r) = 1.9$ for rooftop structures and equipment with A_f less than $(0.1Bh)$. (GC_r) shall be permitted to be reduced linearly from 1.9 to 1.0 as the value of A_f is increased from $(0.1Bh)$ to (Bh)

q_h = velocity pressure evaluated at mean roof height of the building

A_f = vertical projected area of the rooftop structure or equipment on a plane normal to the direction of wind, in ft^2 (m^2)

The vertical uplift force, F_v , on rooftop structures and equipment shall be determined from Eq. 29.5-3.

$$F_v = q_h(GC_r)A_r \text{ (lb) (N)} \quad (29.5-3)$$

where

$(GC_r) = 1.5$ for rooftop structures and equipment with A_r less than $(0.1BL)$. (GC_r) shall be permitted to be reduced linearly from 1.5 to 1.0 as the value of A_r is increased from $(0.1BL)$ to (BL)

q_h = velocity pressure evaluated at the mean roof height of the building

A_r = horizontal projected area of rooftop structure or equipment, in ft^2 (m^2)

29.6 PARAPETS

Wind loads on parapets are specified in Section 27.4.5 for buildings of all heights designed using the Directional Procedure and in Section 28.4.2 for low-rise buildings designed using the Envelope Procedure.

29.7 ROOF OVERHANGS

Wind loads on roof overhangs are specified in Section 27.4.4 for buildings of all heights designed using the Directional Procedure and in Section 28.4.3 for low-rise buildings designed using the Envelope Procedure.

29.8 MINIMUM DESIGN WIND LOADING

The design wind force for other structures shall be not less than 16 lb/ft^2 (0.77 kN/m^2) multiplied by the area A_f .