

COMPONENTS AND CLADDING (C&C):

Elements of the building envelope that do not qualify as part of the MWFRS.

DESIGN FORCE, F : Equivalent static force to be used in the determination of wind loads for other structures.

DESIGN PRESSURE, p : Equivalent static pressure to be used in the determination of wind loads for buildings.

DIAPHRAGM: Roof, floor, or other membrane or bracing system acting to transfer lateral forces to the vertical Main Wind-Force Resisting System. For analysis under wind loads, diaphragms constructed of untopped steel decks, concrete filled steel decks, and concrete slabs, each having a span-to-depth ratio of two or less, shall be permitted to be idealized as *rigid*. Diaphragms constructed of wood structural panels are permitted to be idealized as *flexible*.

DIRECTIONAL PROCEDURE: A procedure for determining wind loads on buildings and other structures for specific wind directions, in which the external pressure coefficients utilized are based on past wind tunnel testing of prototypical building models for the corresponding direction of wind.

EAVE HEIGHT, h_e : The distance from the ground surface adjacent to the building to the roof eave line at a particular wall. If the height of the eave varies along the wall, the average height shall be used.

EFFECTIVE WIND AREA, A : The area used to determine (GC_p). For component and cladding elements, the effective wind area in Figs. 30.4-1 through 30.4-7, 30.5-1, 30.6-1, and 30.8-1 through 30.8-3 is the span length multiplied by an effective width that need not be less than one-third the span length. For cladding fasteners, the effective wind area shall not be greater than the area that is tributary to an individual fastener.

ENVELOPE PROCEDURE: A procedure for determining wind load cases on buildings, in which pseudo-external pressure coefficients are derived from past wind tunnel testing of prototypical building models successively rotated through 360 degrees, such that the pseudo-pressure cases produce key structural actions (uplift, horizontal shear, bending moments, etc.) that envelop their maximum values among all possible wind directions.

ESCARPMENT: Also known as scarp, with respect to topographic effects in Section 26.8, a cliff or steep slope generally separating two levels or gently sloping areas (see Fig. 26.8-1).

FREE ROOF: Roof with a configuration generally conforming to those shown in Figs. 27.4-4

through 27.4-6 (monoslope, pitched, or troughed) in an open building with no enclosing walls underneath the roof surface.

GLAZING: Glass or transparent or translucent plastic sheet used in windows, doors, skylights, or curtain walls.

GLAZING, IMPACT RESISTANT: Glazing that has been shown by testing to withstand the impact of test missiles. See Section 26.10.3.2.

HILL: With respect to topographic effects in Section 26.8, a land surface characterized by strong relief in any horizontal direction (see Fig. 26.8-1).

HURRICANE PRONE REGIONS: Areas vulnerable to hurricanes; in the United States and its territories defined as

1. The U.S. Atlantic Ocean and Gulf of Mexico coasts where the basic wind speed for Risk Category II buildings is greater than 115 mi/h, and
2. Hawaii, Puerto Rico, Guam, Virgin Islands, and American Samoa.

IMPACT PROTECTIVE SYSTEM: Construction that has been shown by testing to withstand the impact of test missiles and that is applied, attached, or locked over exterior glazing. See Section 26.10.3.2.

MAIN WIND-FORCE RESISTING SYSTEM (MWFRS): An assemblage of structural elements assigned to provide support and stability for the overall structure. The system generally receives wind loading from more than one surface.

MEAN ROOF HEIGHT, h : The average of the roof eave height and the height to the highest point on the roof surface, except that, for roof angles of less than or equal to 10°, the mean roof height is permitted to be taken as the roof eave height.

OPENINGS: Apertures or holes in the building envelope that allow air to flow through the building envelope and that are designed as “open” during design winds as defined by these provisions.

RECOGNIZED LITERATURE: Published research findings and technical papers that are approved.

RIDGE: With respect to topographic effects in Section 26.8 an elongated crest of a hill characterized by strong relief in two directions (see Fig. 26.8-1).

WIND TUNNEL PROCEDURE: A procedure for determining wind loads on buildings and other structures, in which pressures and/or forces and moments are determined for each wind direction considered, from a model of the building or other structure and its surroundings, in accordance with Chapter 31.