

area is defined in this context as the projection onto a vertical plane (normal to the wind) of the area enclosed by the envelope of the tree or bush.

Ho (1992) estimated that the majority of buildings (perhaps as much as 60 percent to 80 percent) have an exposure category corresponding to Exposure B. While the relatively simple definition in the standard will normally suffice for most practical applications, oftentimes the designer is in need of additional information, particularly with regard to the effect of large openings or clearings (e.g., large parking lots, freeways, or tree clearings) in the otherwise “normal” ground surface roughness B. The following is offered as guidance for these situations:

1. The simple definition of Exposure B given in the body of the standard, using the surface roughness category definition, is shown pictorially in Fig. C26.7-1. This definition applies for the surface roughness B condition prevailing 2,630 ft (800 m)

upwind with insufficient “open patches” as defined in the following text to disqualify the use of Exposure B.

2. An opening in the surface roughness B large enough to have a significant effect on the exposure category determination is defined as an “open patch.” An open patch is defined as an opening greater than or equal to approximately 164 ft (50 m) on each side (i.e., greater than 165 ft [50 m] by 164 ft [50 m]). Openings smaller than this need not be considered in the determination of the exposure category.
3. The effect of open patches of surface roughness C or D on the use of exposure category B is shown pictorially in Figs. C26.7-3 and C26.7-4. Note that the plan location of any open patch may have a different effect for different wind directions.

Aerial photographs, representative of each exposure type, are included in the commentary to aid

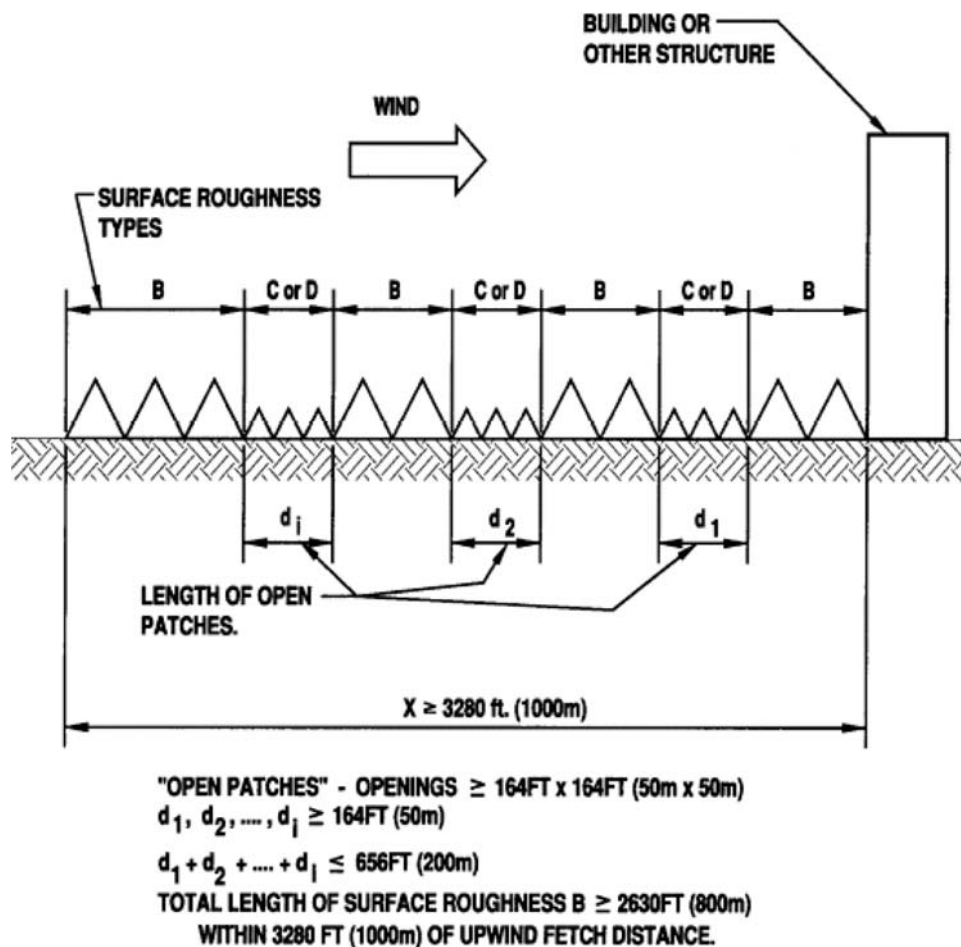


FIGURE C26.7-3 Exposure B with Upwind Open Patches.