

EXPOSURE C

ISSUE:

Homes built in subdivisions located in open terrain such as the pararies of South Florida or other large open tracts of land would be in Exposure C. The first homes built would be required to comply with Exposure C pressures even though they would be located in Exposure B when the development is built out. The time they would be at risk to Exposure C conditions is typically short relative to the recurrence cycle of hurricanes.

RECOMMENDATION:

Utilize ASCE 7 criteria with an exception that buildings in subdivisions located in open terrain away from water bodies will be considered to be in Exposure B.

LANGUAGE:

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Surface Roughness B: Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.

Surface Roughness C: Open terrain with scattered obstructions having heights generally less than 30 ft (9.1 m). This category includes flat open country, grasslands, and all water surfaces in hurricane-prone regions.

6.5.6.3 Exposure Categories.

Exposure B: Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2630 ft (800 m) or 10 times the height of the building, whichever is greater.

Exception: For buildings whose mean roof height is less than or equal to 30 ft (9.1 m), the upwind distance may be reduced to 1500 ft (457 m).

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

Exception: Exposure B shall apply for buildings in developments where the surface roughness condition is Surface Roughness C at initiation but will be in Exposure B upon build-out.

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