GEW71-14 605.1.1.1

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Revise as follows:

605.1.1.1 Permanent shading devices for fenestration. Vertical fenestration within 45 degrees (785 rad) of the nearest west, south, and east cardinal ordinate shall be shaded by permanent horizontal exterior projections with a projection factor greater than or equal to 0.25. Where different windows or glass doors have different projection factor values, each shall be evaluated separately, or an area-weighted projection factor value shall be calculated and used for all windows and glass doors. Horizontal projections shall extend laterally beyond the edge of the glazing not less than one-half of the height of the glazing, except at building corners.

Exception: Shading devices are not required for the following buildings and fenestrations:

- Buildings located in hurricane-prone regions in accordance with Section 1609.2 of the International Building Code or on any other building with a mean roof height exceeding the height limits specified in Table 1504.8 of the International Building Code based on the exposure category and basic wind speed at the building site.
- 2. Where fenestration is located in a building wall that is within 18 inches (457 mm) of the lot line.
- 3. Where equivalent shading of the fenestration is provided by buildings, structures, geological formations, or permanent exterior projections that are not horizontal, as determined by sun angle studies at the peak solar altitude on the spring equinox, and three hours before and after the peak solar altitude on the spring equinox.
- 4. Where fenestration contains dynamic glazing that has a lower labeled solar heat gain coefficient (SHGC) equal to or less than 0.12, and the ratio of the higher and lower labeled visible transmittance (VT) is greater than or equal to 5. Dynamic glazing shall be automatically controlled to modulate, in multiple steps, the amount of solar gain and light transmitted into the space in response to daylight levels or solar intensity. Functional testing of controls shall be conducted in accordance with Section C408.3.1 of the *International Energy Conservation Code*.
- 5. Fenestration used to enclose a vestibule.

Reason: Many buildings are required to have a vestibule and should be exempt from the shading requirement since there is a buffer already established. The vestibule area is different than other vertical fenestration, any heat gain in these areas will not have an effect on the building and vestibules are already regulated by other regulations.

Cost Impact: Will not increase the cost of construction.

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