

WAC 51-11C-40231 Section C402.4.1—Maximum area.

C402.4.1 Maximum area. The vertical fenestration area (not including opaque doors and opaque spandrel panels) shall not exceed 30 percent of the gross above-grade wall area. The skylight area shall not exceed 5 percent of the gross roof area.

C402.4.1.1 Increased vertical fenestration area with daylight responsive controls. A maximum of 40 percent of the gross above-grade wall area shall be permitted to be vertical fenestration for the purpose of prescriptive compliance with Section C402.1.4 or for the component performance alternative in Section C402.1.5, provided all of the following requirements are met:

1. In buildings not greater than two stories above grade, no less than 50 percent of the conditioned floor area is within a *daylight zone*.

2. In buildings three or more stories above grade, not less than 25 percent of the net floor area is within a *daylight zone*.

3. *Daylight responsive controls* complying with Section C405.2.4.1 are installed in daylight zones.

4. Visible transmittance (VT) of vertical fenestration is greater than or equal to 1.1 times solar heat gain coefficient (SHGC).

EXCEPTION: Fenestration that is outside the scope of NFRC 200 is not required to comply with Item 4.

C402.4.1.2 Reserved.

C402.4.1.3 Increased vertical fenestration area with high-performance fenestration. The vertical fenestration area (not including opaque doors and opaque spandrel panels) is permitted to exceed 30 percent but shall not exceed 40 percent of the gross above grade wall area, for the purpose of prescriptive compliance with Section C402.1.3 provided that each of the following conditions are met:

1. The vertical fenestration shall have the following U-factors:

a. Nonmetal framing (all) = 0.28

b. Metal framing (fixed) = 0.34

c. Metal framing (operable) = 0.36

d. Metal framing (entrance doors) = 0.60

2. The SHGC of the vertical fenestration shall be less than or equal to 0.35, adjusted for projection factor in compliance with C402.4.3.

An area-weighted average shall be permitted to satisfy the *U-factor* requirement for each fenestration product category listed in Item 1 of this section. Individual fenestration products from different fenestration product categories shall not be combined in calculating the area-weighted average *U-factor*.

The compliance path described in this section is not permitted to be used for the total building performance compliance path in Section C407. The compliance path described in this section is permitted to be used for the component performance alternative in Section C402.1.5, provided that the requirements of Section C402.1.5 are met.

C402.4.1.4 Increased vertical fenestration area with high-performance mechanical systems. The vertical fenestration area (not including opaque doors and opaque spandrel panels) is permitted to exceed 30 percent but shall not exceed 40 percent of the gross above-grade wall area, for the purpose of prescriptive compliance with Section C402.1.4 or for the component performance alternative in Section C402.1.5, provided that the mechanical system complies with all requirements of Section C403.6 Dedicated outdoor air systems (DOAS) without utilizing

the exceptions to Section C403.6. This increased glazing fraction is not permitted to be used to establish the reference case for the Total Building Performance compliance path in Section C407.

[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40231, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.025, 19.27A.045, and 19.27.074. WSR 13-23-096, § 51-11C-40231, filed 11/20/13, effective 4/1/14. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40231, filed 2/1/13, effective 7/1/13.]