

**R402.1.5 Component performance alternative.** Where the proposed total *building thermal envelope* conductance ( $TC_p$ ) is less than or equal to the total *building thermal envelope* thermal conductance ( $TC_r$ ) using factors in Table R402.1.2, the building shall be considered to be in compliance with Table R402.1.2. The total thermal conductance (TC) shall be determined in accordance with Equation 4-1. In addition to TC compliance, the maximum fenestration *U-factors* of Section R402.6 shall be met.

$$TC_p \leq TC_r$$

**Equation 4-1**

Where:

$$TC_p = U_pA + F_pP$$

$$TC_r = U_rA + F_rP$$

$U_pA$  = The sum of proposed *U-factors* times the assembly areas in the proposed building.

$F_pP$  = The sum of the proposed *F-factors* times the slab-on-grade perimeter lengths in the proposed building.

$U_rA$  = The sum of *U-factors* in Table R402.1.2 times the same assembly areas as in the proposed building. For the combined area of glazing and skylights, use the lower of:

(a). 15 percent of the total conditioned floor area.

(b). The combined area of glazing and skylights.

$F_rP$  = The sum of *F-factors* in Table R402.1.2 times the same slab-on-grade perimeter lengths as in the proposed building.