

ENERGY EFFICIENCY

**TABLE N1101.5(1)  
DEFAULT GLAZED FENESTRATION U-FACTORS**

FRAME TYPE	SINGLE PANE	DOUBLE PANE	SKYLIGHT	
			Single	Double
Metal	1.2	0.8	2	1.3
Metal with thermal break	1.1	0.65	1.9	1.1
Nonmetal or metal clad	0.95	0.55	1.75	1.05
Glazed block	0.6			

**TABLE N1101.5(2)  
DEFAULT DOOR U-FACTORS**

DOOR TYPE	U-FACTOR
Uninsulated metal	1.2
Insulated metal	0.6
Wood	0.5
Insulated, nonmetal edge, max 45% glazing, any glazing double pane	0.35

**TABLE N1101.5(3)  
DEFAULT GLAZED FENESTRATION SHGC**

SINGLE GLAZED		DOUBLE GLAZED		GLAZED BLOCK
Clear	Tinted	Clear	Tinted	
0.8	0.7	0.7	0.6	0.6

**TABLE N11 02.1  
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT<sup>a</sup>**

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT <sup>b</sup> U-FACTOR	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT <sup>c</sup> WALL R-VALUE	SLAB <sup>d</sup> R-VALUE AND DEPTH	CRAWL SPACE <sup>e</sup> WALL R-VALUE
1	1.2	0.75	0.40	30	13	3	13	0	0	0
2	0.75	0.75	0.40	30	13	4	13	0	0	0
3	<u>0.40</u>	0.65	0.40 <sup>e</sup>	30	13	5	19	0	0	5/13
4 except Marine	0.40	0.60	<u>0.40</u>	38	13	5	19	10/13	5, 2 ft	10/13
5 and Marine 4	<u>0.40</u>	0.60	<u>0.40</u>	38	19 or 13 + 5 <sup>g</sup>	13	30 <sup>f</sup>	10/13	10, 2 ft	10/13
6	0.35	0.60	NR	49	19 or 13 + 5 <sup>g</sup>	15	30 <sup>f</sup>	10/13	10, 4 ft	10/13
7 and 8	0.35	0.60	NR	49	21	19	30 <sup>f</sup>	10/13	10, 4 ft	10/13

- a. R-values are minimums. V-factors and SHGC are maximums. R-19 insulation shall be permitted to be compressed into a 2 x 6 cavity.
- b. The fenestration V-factor column excludes skylights. The solar heat gain coefficient (SHGC) column applies to all glazed fenestration.
- c. The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.
- d. R-5 shall be added to the required slab edge R-values for heated slabs.
- e. Deleted.
- f. Or insulation sufficient to fill the framing cavity, R-19 minimum. There is no requirement to exceed R-30
- g. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25% or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.