

PROPOSED replacement table and footnotes for 2022:

CLIMATE ZONE	LOG WALL, $W_{L, \dots}^{h,j}$	FENESTRATION U-FACTOR ^{b,c}	SKYLIGHT U-FACTOR ^b	FENESTRATION SHGC ^b	ATTIC CEILING R-VALUE	CEILING INSULATION ENTIRELY ABOVE DECK	WOOD FRAME WALL R-VALUE ^{ed}	FLOOR R-VALUE ^{d,e}
0 - 1	≥ 5 in.	0.50 <u>0.40</u>	0.75 <u>0.60</u>	0.25	<u>0.035</u> (R-30)	<u>0.039</u> (R-25ci)	<u>0.084</u> (R-13+0ci or R- 0+7.5ci)	<u>0.064</u> (R-13)
2	≥ 5 in.	0.4 <u>0.35</u>	0.65 <u>0.53</u>	0.25	<u>0.03</u> (R-38)	<u>0.039</u> (R-25ci)		<u>0.064</u> (R-13)
3	≥ 5 in.	0.35 <u>0.28</u>	0.55 <u>0.53</u>	0.25	<u>0.03</u> (R-38)	<u>0.039</u> (R-25ci)	<u>0.06</u> (R-20+0ci or R-11+5ci or R- 0+12.5ci)	<u>0.047</u> (R-19)
3 MARINE								
4A (Moist) & EXCEPT MARINE	≥ 5 in.	0.33 <u>0.28</u>	0.55 <u>0.53</u>	0.4	<u>0.026</u> (R-49 ^k)	<u>0.032</u> (R-30ci)	<u>0.045</u> (R-20+5ci or R- 13+10ci or R-0+15ci)	<u>0.047</u> (R-19)
4B (Dry) & EXCEPT MARINE								
5 EXCEPT 4 MARINE	≥ 5 in.	0.32 <u>0.28</u>	0.55 <u>0.53</u>	NR	<u>0.026</u> (R-49 ^k)	<u>0.032</u> (R-30ci)		<u>0.033</u> (R-30)
5A (Moist) EXCEPT MARINE	≥ 5 in.	0.32 <u>0.28</u>	0.55 <u>0.50</u>	NR	<u>0.026</u> (R-49 ^k)	<u>0.032</u> (R-30ci)	<u>0.045</u> (R-20+5ci or R- 13+10ci or R-0+15ci)	<u>0.033</u> (R-30)
5B (Dry) EXCEPT MARINE	5" SG≤0.50: 7" SG>0.50							
6A (Moist)	5" SG≤0.50: 7" SG>0.50	0.30 <u>0.27</u>	0.55 <u>0.50</u>	NR	<u>0.026</u> (R-49 ^k)	<u>0.032</u> (R-30ci)	<u>0.045</u> (R-20+5ci or R- 13+10ci or R-0+20ci)	<u>0.033</u> (R-30)
6B (Dry)	5" SG≤0.50: 7" SG>0.50							
					<u>0.024</u>	<u>0.035</u>	<u>0.036</u>	<u>0.028</u>

7-7.8.8	≥ 7 in. 5" $SG \leq 0.50$: 7" $SG > 0.50$	0.30 0.27	0.55 0.50	NR	(R-60 ^k)	(R-35ci)	(R-20+10ci or R- 13+15ci or R-0+25ci)	(R-38)
7-8.8.8	≥ 7 in. 5" $SG \leq 0.50$: 7" $SG > 0.50$	0.30 0.27	0.55 0.50	NR	0.024 (R-60 ^k)	0.035 (R-35ci)		0.028 (R-38)

For SI: 1 foot = 304.8 mm.

NR = Not Required.

- a. R-values are minimums. U-factors and SHGC are maximums. ~~When~~ Where insulation is installed in a cavity, the thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified.
 - b. The fenestration U-factor column excludes skylights. The SHGC column applies to all fenestration.
 - Exception: In Climate Zones 1 through 3, skylights may shall be permitted to be excluded from glazing areas, where provided that the SHGC for such skylights does not exceed 0.30.
 - c. In Climate Zones 5-8, the maximum glazing area is 20%. Glazing area includes window and skylight openings, as a percentage of wall area. Sunrooms are exempt from this requirement.
 - d. "13+5" means R-13 cavity insulation plus R-5 continuous insulation. If structural sheathing covers 25% of the wall, structural sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of the wall, it shall be supplemented with insulated sheathing of at least R-2.
- The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example "10/13" means R-10 cavity insulation plus R-13 continuous insulation.
- ~~d. e. Or~~ Alternatively, insulation sufficient to fill the framing cavity providing not less than an R-value of 5-8.
- e. f. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation plus R-10 continuous insulation on the interior or exterior of the home. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation plus R-15 continuous insulation on the interior or exterior of the home. Alternatively, compliance with "15/19" shall be R-13 cavity insulation on the interior of the basement or exterior of the home.

BASEMENT <u>e.g.</u> / CRAWL WALL R- VALUE	SLAB R- VALUE & DEPTH	HEATED SLAB R- VALUE^{e,h}	MAX. INFILTRA- TION	HVAC SYSTEM EFFICIENCYⁱ
<u>0.36</u> (R-0)	0	<u>5ci edge &</u> <u>under</u>	4 ACH50	
<u>0.36</u> (R-0)	0	<u>5ci edge &</u> <u>under</u>		<u>80 AFUE,</u> <u>8.2 HSPF /</u> <u>15 SEER /</u> <u>12 EER HP</u>
<u>0.091</u> (<u>5ci /or R-</u> <u>13</u>)	<u>0.767</u> <u>510ci, 2-ft.</u>	<u>5ci edge &</u> <u>under</u>	3 ACH50	
0.059 (<u>10ci /or R-</u> <u>13</u>)	<u>0.684</u> <u>10ci, 42-ft.</u>	<u>10ci edge &</u> <u>under</u>	3 ACH50	<u>90 AFUE</u> <u>gas/LP, 85</u> <u>AFUE oil,</u> <u>8.5 HSPF /</u> <u>15 SEER /</u> <u>12 EER</u>
0.05 (<u>15ci /or R-</u> <u>19 or R-</u> <u>13+5ci</u>)	<u>0.684</u> <u>10ci, 42-ft.</u>	<u>10ci edge &</u> <u>under</u>		
0.05 (<u>15ci /or R-</u> <u>19 or R-</u> <u>13+5ci</u>)	<u>0.684</u> <u>10ci, 42-ft.</u>	<u>10ci edge &</u> <u>under</u>	3 ACH50	<u>90 AFUE</u> <u>gas/LP, 85</u> <u>AFUE oil,</u> <u>9.25 HSPF /</u> <u>15 SEER /</u> <u>12 EER</u>
0.05 (<u>15ci /or R-</u> <u>19 or R-</u> <u>13+5ci</u>)	<u>0.655</u> <u>15ci, 4-ft.</u>	<u>15ci edge &</u> <u>under</u>	3 ACH50	<u>90 AFUE</u> <u>gas/LP, 85</u> <u>AFUE oil,</u> <u>9.5 HSPF /</u> <u>15 SEER /</u> <u>12 EER</u>
<u>0.038</u>	<u>0.636</u>			

2021 Mass Wall U-Factor
0.197
0.165
0.098
0.098
0.082
0.082
0.06

<u>(20ci /or R-13+10ci)</u>	<u>±520, 4-ft.</u>	<u>15ci edge & under</u>	<u>3 ACH50</u>	<u>90 AFUE gas/LP, 85 AFUE oil, 3.6 COP / 17.1 EER</u>	0.057
<u>0.038</u> <u>(20ci /or R-13+10ci)</u>	<u>0.636</u> <u>±520, 4-ft.</u>	<u>±5 20ci edge & under</u>			

cavity which is less than the label or design cified in the table.

ed fenestration SHGC requirements in Climate-

2021 IECC-R T402.1.2

ening area, plus actual glazed area of glass in

VT 2020 RBES

~~percent or less of the exterior, insulating-
-25 percent of exterior, structural sheathing shall-~~

“13+5” means R-13 cavity insulation plus R-5

2021 IECC-I

~~th R-19 as the absolute minimum in Climate Zones-~~

Delete this footnote.

ation on the interior of the basement wall.

ation on the interior of the basement wall.

wall plus R-5 continuous insulation on the interior

2021 IECC-R T402.1.3