

NFRC Certified U-factors and Solar Heat Gain Coefficients

All projects will be quoted on the basis of the NFRC certified system U-factor. For identification purposes we will still refer to the panel U-factors based on the panel only simulation or test. The important distinction is that the certified U-factors are based on a model of the system, 79" x 79" and consists of 2 panels, a center batten as well as head, sill and jamb members. Most site built window wall, curtainwall, sloped glazing and skylight systems are modeled at this size, allowing direct product comparisons.

The following are our Certified Product U-Factors and SHGCs based on NFRC 100, 200 and 201-2010:

Walls

	Panel Only (2008)	System U-factor [System SHGC C/C, C/W, W/W]					
		2" Batten	2 1/2" Batten #12SSSE	2 1/2" Batten #4SSSE	2 3/4" ST TB	4 1/2" Fin	3 1/4 IS
TB	0.53	0.52 [0.44, 0.27, 0.21]					
	0.23	0.28 [0.29, 0.25, 0.21]	0.29 [0.29, 0.25, 0.21]	0.30 [0.29, 0.25, 0.21]	0.29 [0.29, 0.25, 0.21]	0.28 [0.29, 0.25, 0.20]	0.32 [0.30, 0.26, 0.21]
	0.14	0.19 [0.17, 0.15, 0.14]	0.20 [0.17, 0.15, 0.14]	0.21 [0.17, 0.15, 0.14]	0.20 [0.17, 0.15, 0.14]	0.19 [0.17, 0.15, 0.13]	0.23 [0.17, 0.16, 0.14]
	0.10	0.16 [0.12, 0.12, 0.10]	0.16 [0.12, 0.12, 0.10]	0.18 [0.12, 0.12, 0.10]	0.17 [0.12, 0.12, 0.10]	0.16 [0.12, 0.12, 0.10]	0.20 [0.12, 0.12, 0.10]
	0.05 *	0.12 [0.26, 0.22, 0.17]	0.13 [0.26, 0.22, 0.17]	NA	0.13 [0.26, 0.22, 0.17]	NA	NA
4" K100	0.55	0.53 [0.42, 0.25, 0.20]	{2.5" batten}				
	0.15	0.20 [0.09, 0.08, 0.05]	{2.5" batten}				
	0.08	0.15 [0.06, 0.04, NA]	{2.5" batten}				
Non-TB	0.53	0.62 [0.44, 0.27, 0.22]		0.63 [0.44, 0.27, 0.22]	0.63 [0.44, 0.27, 0.22]	0.62 [0.44, 0.27, 0.22]	0.65 [0.45, 0.28, 0.22]
	0.29	0.41 [0.30, 0.26, 0.21]		0.41 [0.30, 0.26, 0.21]	0.42 [0.30, 0.26, 0.21]	0.41 [0.29, 0.26, 0.21]	0.44 [0.30, 0.26, 0.21]
	0.22	0.33 [0.17, 0.16, 0.14]		0.34 [0.17, 0.16, 0.14]	0.34 [0.17, 0.16, 0.14]	0.34 [0.17, 0.15, 0.14]	0.36 [0.18, 0.16, 0.14]
	0.18	0.29 [0.12, 0.12, 0.10]		0.30 [0.13, 0.13, 0.10]	0.31 [0.13, 0.13, 0.10]	0.30 [0.12, 0.12, 0.10]	0.33 [0.13, 0.13, 0.11]

Roofs

TB	0.53	0.56 [0.43, 0.26, 0.21]			n/a	n/a	
	0.23	0.29 [0.29, 0.25, 0.20]	0.29 [0.29, 0.25, 0.20]	0.31 [0.29, 0.25, 0.20]			0.33 [0.29, 0.25, 0.21]
	0.14	0.20 [0.16, 0.15, 0.13]	0.20 [0.16, 0.15, 0.13]	0.22 [0.17, 0.15, 0.14]			0.24 [0.17, 0.15, 0.14]
	0.10	0.17 [0.12, 0.12, 0.10]	0.17 [0.12, 0.12, 0.10]	0.19 [0.12, 0.12, 0.10]			0.21 [0.12, 0.12, 0.10]
	0.05 *	0.13 [0.26, 0.22, 0.16]	0.13 [0.26, 0.22, 0.16]	NA			NA
4" K100	0.55	0.55 [0.43, 0.26, 0.21]	{2.5" batten}				
	0.15	0.19 [0.10, 0.08, 0.06]	{2.5" batten}				
	0.08	0.14 [0.06, 0.04, NA]	{2.5" batten}				
Non-TB	0.53	0.68 [0.44, 0.27, 0.22]		0.69 [0.44, 0.27, 0.22]	n/a	n/a	0.72 [0.44, 0.27, 0.22]
	0.29	0.44 [0.29, 0.26, 0.21]		0.45 [0.29, 0.26, 0.21]			0.48 [0.30, 0.26, 0.21]
	0.22	0.37 [0.17, 0.16, 0.14]		0.37 [0.17, 0.16, 0.14]			0.40 [0.18, 0.16, 0.14]
	0.18	0.32 [0.13, 0.13, 0.10]		0.33 [0.13, 0.13, 0.10]			0.36 [0.13, 0.13, 0.11]

Things to remember:

* NFRC Certified U-factor for 0.05 U panel with 2" batten and thermal cover is 0.10 SHGC 0.22 c/w and 0.16 w/w

U-factors are for comparison of like products, not energy calculations as actual installed U-factor may vary from the certified value due to size difference.

TB systems use thermally broken perimeter, Non-TB systems use standard aluminum perimeter. A TB panel in non-TB perimeter is not an NFRC certified product.

Certified products may be found listed in the NFRC Certified Products Directory found on line at www.nfrc.org

NFRC Certified SHGC will differ from other published values due to sample size and test method.

All grid patterns are covered by the above values.