

Optimum

Thermal Performance Report

Date: 12/17/2019
 Type: Fixed Window
 Glass: 48mm Planitherm XN (#2, #5), 4/18/4/18/4

North American Standard

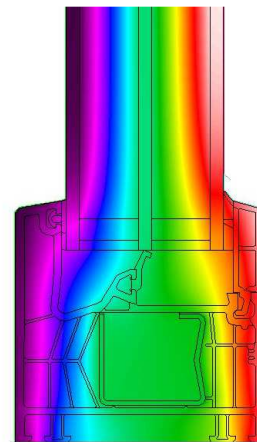
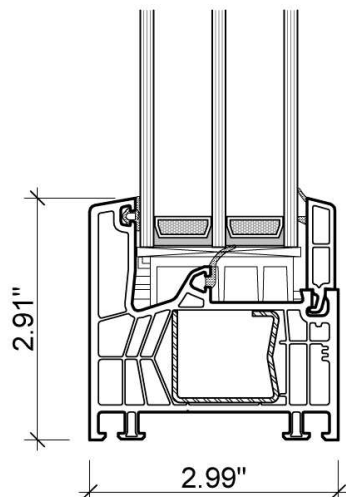
Performance values modeled with LBNL THERM & Window7 per NFRC 100 & 200
 47" x 59" Window size @ standard 0°F exterior temperature

Glass:	$U_g = .126$ Btu/hr-ft ² F	SHGC = .51	VLT = .74	
Window:	$U_w = .151$ Btu/hr-ft ² F	SHGC = .40	VLT = .58	CR = 77

European Standard

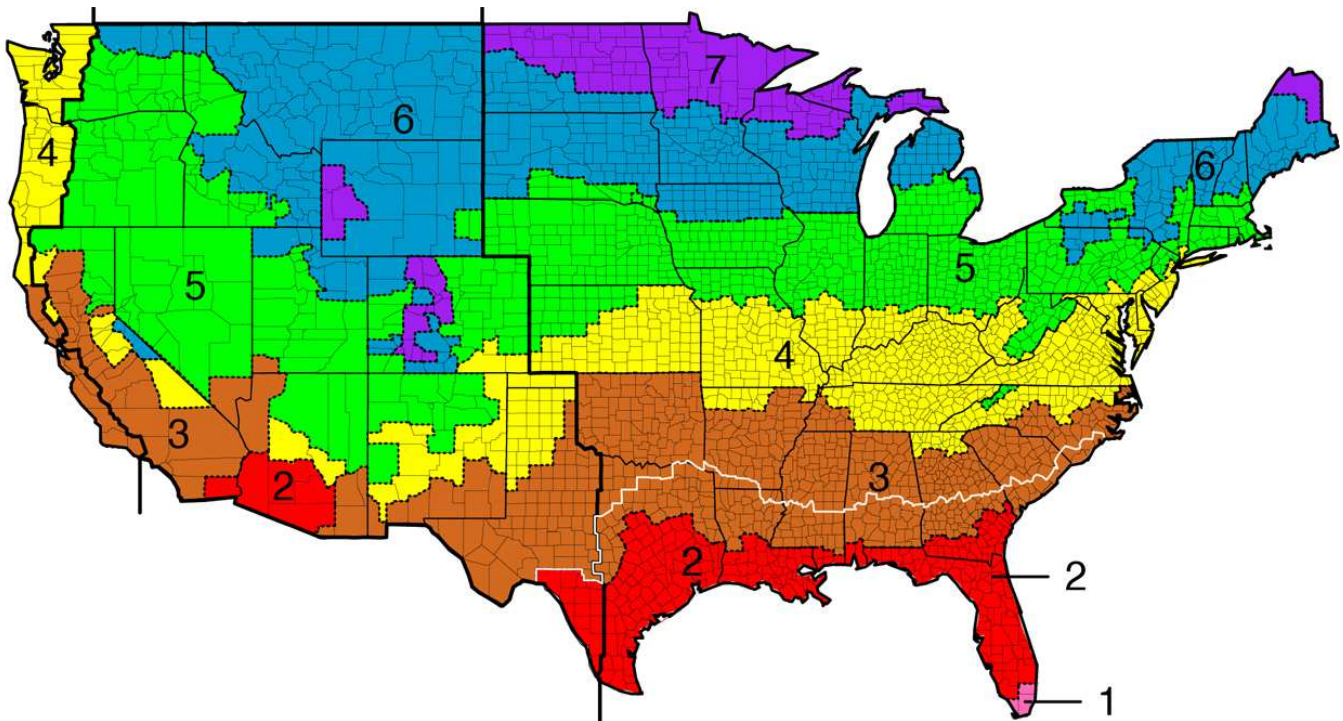
Performance values modeled with LBNL THERM & Window7 per ISO 673 / EN 673
 48" x 58" Window size @ standard 32°F exterior temperature

Frame:	$U_f = .196$ Btu/hr-ft ² F
Spacer:	$\Psi = .0144$ Btu/hr-ftF
Glass:	$U_g = .097$ Btu/hr-ft ² F
Window:	$U_w = .130$ Btu/hr-ft ² F



Climate Specific Performance

Performance values modeled with LBNL THERM & Window7 per ISO 673 / EN 673
48" x 58" Window size @ climate specific winter exterior temperatures



Frame: $U_f = .194$ Btu/hr.ft²F

Spacer: $\Psi = .0143$ Btu/hr.ft.F

Glass: SHGC = .51

Climate Zone	Glass U-Value Btu/hr.ft ² F	Window U-Value Btu/hr.ft ² F
Zone 7 (10°F)	.112	.141
Zone 6 (25°F)	.103	.134
Zone 5 (28°F)	.100	.132
Zone 4 (36°F)	.096	.128