

Climate Zone Chart

For the specific performance data for each make-up, click on the make-up description.

1" Low-E Insulating Glass								
Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VE 1-2M								
VE 1-40							X	
VE 1-42							X	
VE 1-52								
VE 1-55								
VE 1-85								
VE 2-2M							X	
VE 2-40						X	X	
VE 2-42							X	
VE 2-52							X	
VE 2-55							X	
VE 2-85								
VE 3-2M							X	
VE 3-40					X	X	X	
VE 3-42					X	X	X	
VE 3-52							X	
VE 3-55							X	
VE 3-85								
VE 4-2M							X	
VE 4-40					X	X	X	
VE 4-42							X	
VE 4-52								
VE 4-55							X	
VE 4-85								
VE 5-2M							X	
VE 5-40					X	X	X	
VE 5-42							X	
VE 5-52							X	
VE 5-55							X	
VE 5-85								
VE 6-2M							X	
VE 6-40							X	
VE 6-42							X	
VE 6-52							X	
VE 6-55							X	
VE 6-85								
VE 7-2M							X	
VE 7-40					X	X	X	
VE 7-42						X	X	
VE 7-52							X	
VE 7-55							X	
VE 7-85							X	
VE 8-2M							X	
VE 8-40					X	X	X	
VE 8-42					X	X	X	
VE 8-52							X	
VE 8-55							X	
VE 8-85								
VE 9-2M							X	
VE 9-40	X		X	X	X	X	X	
VE 9-42					X	X	X	
VE 9-52						X	X	
VE 9-55					X	X	X	
VE 9-85							X	

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VE 10-2M							X	
VE 10-40					X	X	X	
VE 10-42					X	X	X	
VE 10-52							X	
VE 10-55						X	X	
VE 10-85							X	
VE 11-2M							X	
VE 11-40					X	X	X	
VE 11-42					X	X	X	
VE 11-52							X	
VE 11-55						X	X	
VE 13-2M								
VE 13-40							X	
VE 13-42								
VE 13-52								
VE 13-55								
VE 13-85								
VE 14-2M							X	
VE 14-40					X	X	X	
VE 14-42					X	X	X	
VE 14-52							X	
VE 14-55						X	X	
VE 14-85							X	
VE 15-2M								
VE 15-40							X	
VE 15-42								
VE 15-52								
VE 15-55								
VE 15-85								
VNE 1-37							X	
VNE 1-63							X	
VNE 2-63							X	
VNE 3-37	X		X	X	X	X	X	
VNE 3-63					X	X	X	
VNE 4-37					X	X	X	
VNE 4-63					X	X	X	
VNE 5-37					X	X	X	
VNE 5-63					X	X	X	
VNE 6-37					X	X	X	
VNE 6-63							X	
VNE 7-37					X	X	X	
VNE 7-63							X	
VNE 8-37					X	X	X	
VNE 8-63							X	
VNE 9-37	X		X	X	X	X	X	
VNE 9-63					X	X	X	
VNE 10-37					X	X	X	
VNE 10-63						X	X	
VNE 11-37					X	X	X	
VNE 11-63					X	X	X	
VNE 12-37					X	X	X	
VNE 12-63								
VNE 13-37							X	
VNE 13-63							X	
VNE 14-37					X	X	X	
VNE 14-63							X	

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VNE 15-37							X	
VNE 15-63							X	
VRE 1-30					X	X	X	
VRE 1-38							X	
VRE 1-46							X	
VRE 1-54							X	
VRE 1-59								
VRE 1-67								
VRE 2-30	X		X	X	X	X	X	
VRE 2-38					X	X	X	
VRE 2-46							X	
VRE 2-54							X	
VRE 2-59							X	
VRE 2-67							X	
VRE 3-30	X	X	X	X	X	X	X	
VRE 3-38	X		X	X	X	X	X	
VRE 3-46					X	X	X	
VRE 3-54					X	X	X	
VRE 3-59						X	X	
VRE 3-67							X	
VRE 4-30	X		X	X	X	X	X	
VRE 4-38					X	X	X	
VRE 4-46					X	X	X	
VRE 4-54							X	
VRE 4-59							X	
VRE 4-67							X	
VRE 5-30	X		X	X	X	X	X	
VRE 5-38					X	X	X	
VRE 5-46					X	X	X	
VRE 5-54							X	
VRE 5-59							X	
VRE 5-67							X	
VRE 6-30	X		X	X	X	X	X	
VRE 6-38					X	X	X	
VRE 6-46							X	
VRE 6-54							X	
VRE 6-59							X	
VRE 6-67							X	
VRE 7-30	X	X	X	X	X	X	X	
VRE 7-38					X	X	X	
VRE 7-46					X	X	X	
VRE 7-54					X	X	X	
VRE 7-59							X	
VRE 7-67							X	
VRE 8-30	X	X	X	X	X	X	X	
VRE 8-38			X	X	X	X	X	
VRE 8-46					X	X	X	
VRE 8-54					X	X	X	
VRE 8-59							X	
VRE 8-67							X	
VRE 9-30	X	X	X	X	X	X	X	
VRE 9-38	X		X	X	X	X	X	
VRE 9-46					X	X	X	
VRE 9-54					X	X	X	
VRE 9-59					X	X	X	
VRE 9-67					X	X	X	

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VRE 10-30	X	X	X	X	X	X	X	
VRE 10-38	X		X	X	X	X	X	
VRE 10-46					X	X	X	
VRE 10-54					X	X	X	
VRE 10-59						X	X	
VRE 10-67							X	
VRE 11-30	X	X	X	X	X	X	X	
VRE 11-38	X		X	X	X	X	X	
VRE 11-46					X	X	X	
VRE 11-54					X	X	X	
VRE 11-59						X	X	
VRE 11-67							X	
VRE 13-30					X	X	X	
VRE 13-38								
VRE 13-46							X	
VRE 13-54								
VRE 13-59								
VRE 13-67								
VRE 14-30	X	X	X	X	X	X	X	
VRE 14-38	X		X	X	X	X	X	
VRE 14-46					X	X	X	
VRE 14-54					X	X	X	
VRE 14-59							X	
VRE 14-67							X	
VRE 15-30					X	X	X	
VRE 15-38							X	
VRE 15-46							X	
VRE 15-54								
VRE 15-59								
VRE 15-67								

1" Low-E Insulating Glass + White Silk-screen 40% Coverage

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VE 1-2M							X	
VE 1-40					X	X	X	
VE 1-42							X	
VE 1-52							X	
VE 1-55							X	
VE 1-85								
VE 2-2M							X	
VE 2-40	X		X	X	X	X	X	
VE 2-42					X	X	X	
VE 2-52						X	X	
VE 2-55					X	X	X	
VE 2-85							X	
VE 3-2M					X	X	X	
VE 3-40	X		X	X	X	X	X	
VE 3-42	X		X	X	X	X	X	
VE 3-52					X	X	X	
VE 3-55					X	X	X	
VE 3-85							X	
VE 4-2M					X	X	X	
VE 4-40	X		X	X	X	X	X	
VE 4-42					X	X	X	
VE 4-52						X	X	
VE 4-55					X	X	X	
VE 4-85							X	

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VE 5-2M					X	X	X	
VE 5-40	X		X	X	X	X	X	
VE 5-42					X	X	X	
VE 5-52						X	X	
VE 5-55					X	X	X	
VE 5-85							X	
VE 6-2M							X	
VE 6-40					X	X	X	
VE 6-42					X	X	X	
VE 6-52							X	
VE 6-55					X	X	X	
VE 6-85							X	
VE 7-2M					X	X	X	
VE 7-40	X	X	X	X	X	X	X	
VE 7-42	X		X	X	X	X	X	
VE 7-52					X	X	X	
VE 7-55					X	X	X	
VE 7-85							X	
VE 8-2M					X	X	X	
VE 8-40	X		X	X	X	X	X	
VE 8-42	X		X	X	X	X	X	
VE 8-52					X	X	X	
VE 8-55					X	X	X	
VE 8-85							X	
VE 9-2M					X	X	X	
VE 9-40	X	X	X	X	X	X	X	
VE 9-42	X		X	X	X	X	X	
VE 9-52					X	X	X	
VE 9-55	X		X	X	X	X	X	
VE 9-85						X	X	
VE 10-2M					X	X	X	
VE 10-40	X	X	X	X	X	X	X	
VE 10-42	X		X	X	X	X	X	
VE 10-52					X	X	X	
VE 10-55					X	X	X	
VE 10-85							X	
VE 11-2M					X	X	X	
VE 11-40	X		X	X	X	X	X	
VE 11-42	X		X	X	X	X	X	
VE 11-52					X	X	X	
VE 11-55					X	X	X	
VE 11-85							X	
VE 13-2M							X	
VE 13-40							X	
VE 13-42							X	
VE 13-52								
VE 13-55							X	
VE 13-85								
VE 14-2M					X	X	X	
VE 14-40	X		X	X	X	X	X	
VE 14-42	X		X	X	X	X	X	
VE 14-52					X	X	X	
VE 14-55					X	X	X	
VE 14-85							X	

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VE 15-2M							X	
VE 15-40							X	
VE 15-42							X	
VE 15-52								
VE 15-85								
VNE 1-37					X	X	X	
VNE 1-63					X	X	X	
VNE 2-37	X		X	X	X	X	X	
VNE 2-63					X	X	X	
VNE 3-37	X	X	X	X	X	X	X	
VNE 3-63	X	X	X	X	X	X	X	
VNE 4-37	X	X	X	X	X	X	X	
VNE 4-63	X		X	X	X	X	X	
VNE 5-37	X		X	X	X	X	X	
VNE 5-63	X		X	X	X	X	X	
VNE 6-37	X		X	X	X	X	X	
VNE 6-63					X	X	X	
VNE 7-37	X	X	X	X	X	X	X	
VNE 7-63					X	X	X	
VNE 8-37	X	X	X	X	X	X	X	
VNE 9-37	X	X	X	X	X	X	X	
VNE 9-63	X	X	X	X	X	X	X	
VNE 10-37	X	X	X	X	X	X	X	
VNE 10-63					X	X	X	
VNE 11-37	X	X	X	X	X	X	X	
VNE 11-63	X		X	X	X	X	X	
VNE 12-37	X	X	X	X	X	X	X	
VNE 12-63					X	X	X	
VNE 13-37					X	X	X	
VNE 13-63					X	X	X	
VNE 14-37	X	X	X	X	X	X	X	
VNE 14-63					X	X	X	
VNE 15-37					X	X	X	
VNE 15-63					X	X	X	
VRE 1-38					X	X	X	
VRE 1-46						X	X	
VRE 1-54							X	
VRE 1-59							X	
VRE 1-67							X	
VRE 2-38	X		X	X	X	X	X	
VRE 2-46					X	X	X	
VRE 2-54					X	X	X	
VRE 2-59					X	X	X	
VRE 2-67						X	X	
VRE 3-38	X	X	X	X	X	X	X	
VRE 3-46	X		X	X	X	X	X	
VRE 3-54	X		X	X	X	X	X	
VRE 3-59					X	X	X	
VRE 3-67					X	X	X	
VRE 4-38	X	X	X	X	X	X	X	
VRE 4-46	X		X	X	X	X	X	
VRE 4-54					X	X	X	
VRE 4-59					X	X	X	
VRE 4-67					X	X	X	

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VRE 5-38	X	X	X	X	X	X	X	
VRE 5-46	X				X	X	X	
VRE 5-54					X	X	X	
VRE 5-59					X	X	X	
VRE 5-67					X	X	X	
VRE 6-38	X		X	X	X	X	X	
VRE 6-46					X	X	X	
VRE 6-54					X	X	X	
VRE 6-59					X	X	X	
VRE 6-67							X	
VRE 7-38	X	X	X	X	X	X	X	
VRE 7-46	X		X	X	X	X	X	
VRE 7-54	X		X	X	X	X	X	
VRE 7-59					X	X	X	
VRE 7-67					X	X	X	
VRE 8-38								
VRE 10-38	X	X	X	X	X	X	X	
VRE 10-46	X		X	X	X	X	X	
VRE 10-54	X		X	X	X	X	X	
VRE 10-59					X	X	X	
VRE 10-67					X	X	X	

1" Reflective Insulating Glass

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VP 7-13	X			X				
VP 8-13	X			X				
VP 9-13	X			X				
VP 10-13	X			X				
VP 11-13	X			X				
VP 14-13	X			X				
VS 1-08	X			X				
VS 2-08	X	X		X				
VS 2-14	X			X				
VS 3-08	X	X		X				
VS 3-14	X			X				
VS 4-08	X	X		X				
VS 4-14	X			X				
VS 5-08	X	X		X				
VS 5-14	X			X				
VS 6-08	X	X		X				
VS 6-14	X			X				
VS 7-08	X	X		X				
VS 7-14	X	X		X				
VS 8-08	X	X		X				
VS 8-14	X			X				
VS 9-08	X	X		X				
VS 9-14	X			X				
VS 10-08	X	X		X				
VS 10-14	X			X				
VS 11-08	X	X		X				
VS 11-14	X			X				
VS 13-08	X	X		X				
VS 14-08	X	X		X				
VS 14-14	X			X				
VS 15-08	X	X		X				
VT 9-20	X			X				
VY 1-08	X	X		X				
VY 1-14								

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VY 2-08	X	X		X				
VY 3-08	X	X		X				
VY 4-08	X	X		X				
VY 5-08	X	X		X				
VY 6-08	X	X		X				
VY 7-08	X	X		X				
VY 7-14	X			X				
VY 8-08	X	X		X				
VY 8-14	X			X				
VY 9-08	X	X		X				
VY 9-14	X			X				
VY 10-08	X	X		X				
VY 10-14	X			X				
VY 11-08	X	X		X				
VY 11-14	X			X				
VY 13-08	X	X		X				
VY 14-08	X	X		X				
VY 14-14	X			X				
VY 15-08	X	X		X				
VY 15-14								

1" Reflective Insulating Glass + White Silk-screen 40% Coverage

Make-up	Zone 1	Zone 2	Zone 3A & B	Zone 3C	Zone 4	Zone 5 & 6	Zone 7	Zone 8
VT 2-20	X			X				
VT 3-20	X			X				
VT 4-20	X			X				
VT 5-20	X			X				
VT 6-20	X			X				
VT 7-20	X			X				
VT 10-20	X			X				

*Examples listed above are based on ASHRAE/IESNA Standard 90.1-2004 performance requirements

**This information is a guideline, it is still recommended to use energy modeling for the most accurate representation of a building's expected performance.

***Calculating ASHRAE compliance involves determining a number of parameters for the project prior to selecting a product. For example purposes, we have made the following assumptions. (Note: any change to these assumptions will affect whether or not the product complies.)

Assumptions for calculations –

- Spandrel glass is not calculated – calculations estimate 1/3 spandrel area and 2/3 vision area
- Calculations based on rough openings, not actual sizes
- Applications incorporate commercial windows, not residential
- A 50% glass-to-wall ratio – lower glass-to-wall ratio will expand number of products that can be used
- Solar Heat Gain Coefficient (SHGC) and U-Value for each climate zone are maximized based upon the above assumptions and they take into account the required 2 points achieved by exceeding ASHRAE by 14% for new construction.

**** Climate Zone 1 = U-Value 1.04 / SHGC 0.17; Climate Zone 2 = U-Value 1.04 / SHGC 0.15; Climate Zone 3A & 3B = U-Value 0.40 / SHGC 0.17;

Climate Zone 3C = U-Value 1.04 / SHGC 0.17; Climate Zone 4 = U-Value 0.40 / SHGC 0.21; Climate Zone 5 & 6 = U-Value 0.40 / SHGC 0.22;

Climate Zone 7 = U-Value 0.40 / SHGC 0.31; Climate Zone 8 = U-Value 0.35 / SHGC no requirement

***** Climate Zone 8 = Please contact Viracon's Architectural Design Group for specific product recommendations at 800.533.2080.

Click here for the [Climate Zone Map](#).