

CUSTOM GLASS OPTIONS

New Morning Windows offers a wide range of glass options, including low emissivity coated (LOE) glass products supplied by Cardinal® IG. Insulated glass manufactured by Cardinal IG incorporates either a standard aluminum or a XL Edge™ (flat back or U-back, stainless steel, warm edge) spacer. Most glass supplied to us by Cardinal IG is insulated with the XL Edge™ spacer. Cardinal's IG units are not available in all the window shapes we manufacture. Call our Customer Service Department to discuss available options. Cardinal's IG units incorporate desiccants to optimize moisture absorption and offer the same warranty coverage. We also offer options such as argon gas in the air space, capillary tubes and aluminum grilles between the glass (see grille information).

The following glass types can be combined to form many varieties of insulated glass options. If you require a glass type not listed please contact our Customer Service Department for availability.

	Annealed	Tempered
Cardinal LOE ² -172	yes	yes
Cardinal LOE Sun-145	yes	yes
LOF Hard Coat LoE	yes	yes
Clear Glass	yes	yes
Gray and Bronze Tinted Glass	yes	yes
Pyrolytic Reflective Bronze Glass	yes	yes
Obscure Pattern 62 Glass	yes	yes
Spandral Glass (limited color selection)	no	yes
Laminated Safety Glass	yes	yes
Monolithic	yes	yes



GLASS PERFORMANCE DATA (Glass performance data provided by Cardinal IG)

Center of Glass U-Values - with Argon (Winter U-Value (Btu/hr/ft ² /°F) of IG Unit)	1/4" air space, LOE ² -172	0.33	1/2" air space, LOE ² -172	0.24
	5/32" air space, LOE Sun-145	0.35	1/2" air space, LOE Sun-145	0.27
Solar Heat Gain Coefficient (#2 Surface)	5/32" thick glass, LOE ² -172	0.40	1/4" thick glass, LOE ² -172	0.40
	5/32" thick glass, LOE Sun-145	0.32	1/4" thick glass, LOE Sun-145	0.31
Shading Coefficient (#2 Surface)	5/32" thick glass, LOE ² -172	0.47	1/4" thick glass, LOE ² -172	0.40
	5/32" thick glass, LOE Sun-145	0.37	1/4" thick glass, LOE Sun-145	0.36
Relative Heat Gain (Btu/hr/ft ² - #2 Surface)	5/32" thick glass, LOE ² -172	96	1/4" thick glass, LOE ² -172	95
	5/32" thick glass, LOE Sun-145	77	1/4" thick glass, LOE Sun-145	76

NOTES New Morning does not manufacture any type of art glass, including beveled, v-groove, stained, glue chip or brass coming glass options. We do have access to outside suppliers, but for accurate quoting and ordering you must be specific and descriptive in the type of glass needed. We will install customer-supplied glass in our window frames (call for details).

LOE coated insulated glass is always constructed with the coating on the second surface from the exterior, unless the customer specifically requests it on the third surface.

The overall thickness of the insulated glass is determined by the type and size of the window ordered and may be determined by ANSI standards.

Capillary tubes for high altitude window installations must be specified at the time of order by the customer.

Inward 90-degree angles on flat glass are not available. We do offer Lexan®, a water-clear, high impact resistant polycarbonate alternative to glass.