

Energy Select™ is the family of low-emissivity coated glass products designed to meet and exceed the most stringent code requirements for commercial applications. These high-performance glass solutions go beyond what is required today, positioning architects to meet the challenges of designing for the future. With a broad range of architectural low-e options and tinted glass colors, Energy Select provides aesthetic appeal and energy efficiency, meeting the design and performance requirements of each project. AGC has made choosing the right product easier: For Every Code. For Every Region.



ENERGYSelect[™] 23

Energy Select 23 provides a neutral blue reflected color, with a great combination of performance characteristics—50% visible light transmittance (VLT) and 0.23 solar heat gain coefficient (SHGC)—that is ideal for meeting the most challenging energy code requirements. For maximum energy savings and indoor comfort, this high-performing solar control low-e is simply the best product to select for hotter climate regions.

ENERGYSelect[™] 28

Energy Select 28 is a premium low-e glass, offering maximum performance to meet the most stringent energy code requirements. Energy Select 28 utilizes the coating on the #2 surface of the glass to provide a 0.28 SHGC, blocking 76% of the solar energy without sacrificing daylighting. Energy Select 28 has a visible light transmittance of 62% and 2.18 light-to-solar-gain ratio, with a more neutral, blue aesthetic. A triple IGU combined with Energy Select 63 on surface #5 offers a 0.13 U-value with a 0.25 SHGC.

ENERGYSelect[™] 31

With a solar heat gain coefficient of 0.31 and visible light transmittance of 62%, the high clarity and neutral appearance make Energy Select 31 a natural choice for commercial and mixed-use building applications—meeting even the most stringent energy code requirements. Energy Select 31 provides exceptional performance for both warm and cold weather throughout North America, resulting in energy savings on both heating and cooling. Its neutral color offers 21% mid-range reflectance, an excellent light-to-solar-gain of 2.01 and high visible light transmittance.

ENERGYSelect[™] 36

Energy Select 36 low-e glass is designed to block solar heat gain. This product provides energy efficiency, attractive neutral appearance and high visible light transmittance of 65% while blocking 68% of the solar energy. The 0.36 SHGC helps lower cooling costs and provides a superior 1.79 light-to-solar-gain ratio. For colder regions where a low U-value is required, Energy Select 36 combined with Energy Select 63 on surface #5 results in a 0.13 U-value.

ENERGYSelect[™] 40

Energy Select 40 low-e glass blocks 69% of the solar energy with a 0.39 SHGC. The 69% visible light transmittance and low indoor reflectance of 12% deliver energy savings and high levels of natural light, resulting in a stunning neutral appearance. For applications requiring lower U-value, Energy Select 40 can be combined with Energy Select 63 in a triple-glazed IGU.

ENERGYSelect[™] R42

Energy Select R42 is a neutral reflective low-e glass with moderate solar control—0.42 SHGC—and a high level of visible light transmittance at 62%. With just the right amount of reflectivity to bring the glass to life, Energy Select R42 is the perfect choice for high-rise residential and commercial facades. This versatile product is the natural choice for regions where air conditioning is used most of the year, while still providing energy savings in cooler temperatures with a 0.25 winter U-value. Energy Select R42 can also be combined in a triple IGU with Energy Select 63 on the #5 surface, achieving a 0.13 U-value.

ENERGYSelect[™] 63

Energy Select 63 is a neutral low-emissivity glass for use on the #2 or #3 surface, providing passive solar energy and a U-value performance of 0.26 if used with a Solarshield® tinted glass on the outboard lite. Utilized on the #2 and #4 surfaces of a triple insulating unit, the U-value can be lowered to 0.13. Energy Select 63 allows for solar gain and high levels of visible light of 76%, supporting the need for energy-efficient daylighting.

Note: These are all sputter-coated low-e glass products. Visit our website for information on low-e coatings on tinted glass, or Energy Select 73 Pyrolytic low-e.

ENERGY SELECT™

PERFORMANCE DATA COMPARISONS — DUAL INSULATING GLASS — All data based on 1" (25 mm) Unit: 1/4" (6 mm) | 1/2" (13 mm) spacer | 1/4" (6 mm)

Energy Select™ Solar Control Low-e on Clear over Clear

Product	Transmittance			Reflectance			Winter U-Value		Shading Coefficient	SHGC (100% Air)	LSG	DW Index
	Visible	Solar	UV	Out	In	Solar	Air	Argon				
Energy Select 23 (2) Clear	50%	19%	13%	22%	22%	44%	0.29	0.24	0.27	0.23	2.16	0.36
Energy Select 28 (2) Clear	62%	24%	15%	13%	14%	41%	0.29	0.24	0.32	0.28	2.18	0.47
Energy Select 31 (2) Clear	62%	27%	10%	21%	20%	44%	0.29	0.24	0.36	0.31	2.01	0.43
Energy Select 36 (2) Clear	65%	31%	14%	14%	16%	32%	0.29	0.25	0.41	0.36	1.79	0.49
Energy Select 40 (2) Clear	69%	34%	17%	12%	12%	31%	0.29	0.25	0.44	0.39	1.79	0.53
Energy Select R42 (2) Clear	62%	37%	22%	26%	21%	33%	0.30	0.25	0.49	0.42	1.46	0.48
Clear Energy Select 63 (3)	76%	48%	32%	11%	11%	23%	0.30	0.26	0.68	0.59	1.29	0.64

Solarshield® Tinted Glass over Energy Select™ 36 on Clear

Product	Transmittance			Reflectance			Winter U-Value		Shading Coefficient	SHGC (100% Air)	LSG	DW Index
	Visible	Solar	UV	Out	In	Solar	Air	Argon				
Solarshield Pure Grey Energy Select 36 (3)	33%	17%	6%	7%	13%	13%	0.29	0.24	0.33	0.29	1.15	0.25
Solarshield Pure Bronze Energy Select 36 (3)	39%	19%	6%	9%	13%	15%	0.29	0.24	0.37	0.31	1.26	0.27
Solarshield Pure Green Energy Select 36 (3)	56%	23%	7%	13%	14%	12%	0.29	0.24	0.41	0.35	1.59	0.40
Solarshield Meadow Green Energy Select 36 (3)	51%	20%	5%	12%	14%	9%	0.29	0.24	0.36	0.31	1.65	0.36
Solarshield Forest Green Energy Select 36 (3)	48%	18%	4%	11%	14%	7%	0.29	0.24	0.33	0.29	1.64	0.33
Solarshield Sky Blue Energy Select 36 (3)	54%	23%	9%	13%	14%	12%	0.29	0.24	0.40	0.35	1.54	0.41
Solarshield Pure Blue Energy Select 36 (3)	42%	19%	8%	10%	13%	11%	0.29	0.24	0.36	0.31	1.34	0.36
Solarshield Midnight Blue Energy Select 36 (3)	25%	10%	4%	6%	13%	5%	0.29	0.24	0.23	0.20	1.27	0.23

Solarshield® Tinted Glass over Energy Select™ 40 on Clear

Product	Transmittance			Reflectance			Winter U-Value		Shading Coefficient	SHGC (100% Air)	LSG	DW Index
	Visible	Solar	UV	Out	In	Solar	Air	Argon				
Solarshield Pure Grey Energy Select 40 (3)	35%	18%	7%	6%	10%	13%	0.29	0.24	0.34	0.29	1.20	0.28
Solarshield Pure Bronze Energy Select 40 (3)	42%	20%	7%	7%	10%	15%	0.29	0.24	0.37	0.32	1.32	0.30
Solarshield Pure Green Energy Select 40 (3)	61%	25%	9%	10%	11%	11%	0.29	0.24	0.42	0.37	1.65	0.44
Solarshield Meadow Green Energy Select 40 (3)	55%	22%	6%	10%	11%	8%	0.29	0.24	0.37	0.32	1.71	0.39
Solarshield Forest Green Energy Select 40 (3)	51%	20%	5%	9%	11%	7%	0.29	0.24	0.34	0.30	1.71	0.35
Solarshield Sky Blue Energy Select 40 (3)	58%	25%	11%	10%	11%	11%	0.29	0.24	0.41	0.36	1.60	0.45
Solarshield Pure Blue Energy Select 40 (3)	45%	21%	9%	8%	10%	10%	0.29	0.24	0.37	0.32	1.40	0.39
Solarshield Midnight Blue Energy Select 40 (3)	27%	11%	5%	6%	10%	5%	0.29	0.24	0.24	0.21	1.32	0.26

Solarshield® Tinted Glass over Energy Select™ 63 on Clear Passive Solar Low-e Insulating Glass

Product	Transmittance			Reflectance			Winter U-Value		Shading Coefficient	SHGC (100% Air)	LSG	DW Index
	Visible	Solar	UV	Out	In	Solar	Air	Argon				
Solarshield Pure Grey Energy Select 63 (3)	39%	26%	14%	6%	9%	10%	0.30	0.26	0.41	0.36	1.08	0.33
Solarshield Pure Bronze Energy Select 63 (3)	46%	29%	13%	7%	10%	11%	0.30	0.26	0.45	0.39	1.19	0.35
Solarshield Pure Green Energy Select 63 (3)	66%	32%	17%	9%	11%	9%	0.30	0.26	0.48	0.41	1.61	0.52
Solarshield Meadow Green Energy Select 63 (3)	61%	26%	12%	9%	11%	7%	0.30	0.26	0.41	0.36	1.71	0.45
Solarshield Forest Green Energy Select 63 (3)	56%	24%	9%	8%	10%	6%	0.30	0.26	0.37	0.33	1.72	0.41
Solarshield Sky Blue Energy Select 63 (3)	63%	31%	21%	9%	11%	9%	0.30	0.26	0.47	0.41	1.54	0.53
Solarshield Pure Blue Energy Select 63 (3)	49%	27%	17%	7%	10%	9%	0.30	0.26	0.43	0.37	1.32	0.46
Solarshield Midnight Blue Energy Select 63 (3)	30%	13%	10%	5%	9%	5%	0.30	0.26	0.25	0.22	1.35	0.30

Performance values are based on representative production samples and product modeling data using LBNL Windows 6.3 software. Actual values may differ based on variations in the manufacturing process. For more information, please visit us.agc.com or contact Technical Services at 888-234-8380. Environmental conditions based on NFRC 100-2010. Argon data based on 10% air and 90% argon. Coating Surface indicated in (). Thermal stress analysis or building codes may determine the requirement for heat-treated glass. Contact AGC Technical Services to ensure the correct form of glass to be supplied.

PROCESSING CAPABILITIES



DUAL IGU



TRIPLE IGU



HEAT-TREATED



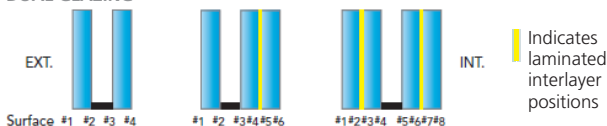
LAMINATED



SPANDREL

CONVENTIONS IN COATING POSITIONS

DUAL GLAZING



AGC IS A GLOBAL LEADER IN MANUFACTURING GLASS

AGC Glass Company North America is one of the largest manufacturers of glass and glass-related products in North America, offering an extensive selection of flat glass and high-performance coatings for architectural, interior, residential and industrial applications.

Acid-Etched » Back-Painted » Clear and Tinted Float » Coated Glass » Low-Iron » Reflective » Tempered



GLASS CALCULATOR

Create quick and accurate glass configurations from our entire catalog of product offerings. Scan code to use the glass calculator.

us.agc.com/glass-calculator