

Insulated Glass Units: Digitally printed Ceraprint in a gradient transmission of small dots on extra-clear glass



Photo credit : Olivier Blouin - Saint-Laurent Sports Complex

INSULATED GLASS

Double or triple glazed insulated units, a wide range of glass with high-energy efficiency, high quality interlayers, and multiple options such as tempered, color applications, digital print, laminated glass to customized insulated glazing. Laurier Architectural offers the versatility you need for your projects.



Sustainable building:
Verified EDP and HPD

Technical Performance:
ASTM E 2190
CAN/CSGB 12.8

DOUBLE INSULATED GLASS UNITS



1 inch (25 mm) insulated unit make-up:
Two 6 mm glass sheets with 1/2-inch space filled with 90% argon gas

Technical data for double glazed units of standard make-up. Other make-ups are available, contact your representative or our technical service at infotechnique@laurier.net for additional information.

GLASS 1	GLASS 2	TRANSMISSION		REFLECTIVITY		U VALUE BTU / HR FT ² °F	R VALUE WINTER NIGHT	SHADING COEFFICIENT SC / CA	SOLAR HEAT GAIN COEFFICIENT SHGC	RELATIVE HEAT GAIN RHG
		VISIBLE %	SOLAR %	EXT %	INT %					
No Low-E										
Clear	Clear	80	67	15	15	0.45	2.23	0.85	0.74	177
«Hard Coat» – Pyrolytic										
Clear	80/71 F3	78	56	14	14	0.26	3.81	0.77	0.67	158
80/71 F2	Clear	78	56	14	14	0.26	3.81	0.72	0.63	148
Clear	Energy Advantage F3	74	54	18	16	0.29	3.42	0.80	0.69	164
«Soft Coat» Double Silver										
ES36 F2	Clear	65	32	15	18	0.24	4.15	0.41	0.36	84
ES40 F2	Clear	70	34	12	14	0.24	4.11	0.44	0.38	90
SN 68 F2	Clear	68	33	11	12	0.25	4.08	0.43	0.37	89
LowE 272* F2	Clear	70	36	11	12	0.25	4.06	0.46	0.40	94
SKN 176 F2	Clear	70	31	13	15	0.24	4.18	0.38	0.33	80
«Soft Coat» Triple Silver										
SNX 62/27 F2	Clear	62	23	11	12	0.24	4.20	0.30	0.26	63
LowE 366* F2	Clear	63	24	11	12	0.24	4.19	0.31	0.27	65
Tinted										
Gray	ES 40 F2	35	19	7	10	0.24	4.11	0.34	0.30	71
Gray	Energy Advantage F3	37	31	8	14	0.29	3.42	0.51	0.44	106
Reflective										
Eclipse Advantage clear F2	Clear	60	47	29	31	0.31	3.25	0.64	0.55	131
Eclipse Advantage clear F2	ES 40 F3	53	26	28	25	0.24	4.13	0.42	0.37	88
Eclipse Advantage gray F2	Clear	30	25	11	31	0.31	3.25	0.39	0.34	82
Eclipse Advantage gray F2	80/71 F3	29	22	10	28	0.26	3.92	0.34	0.30	72

* Available with Neat+
Technical data provided in these charts comes from Guardian Glass Analytics Performance Calculator and the values represent nominal values for center of glass with no spacer system of framing.

Options

Glass

- Double or triple sealed units
- Sealed units with grilles
- Annealed, tempered and Heat Strengthened glass
- Heat Soak Test
- Tinted or extra-clear glass
- Acid etch glass
- Ceramic frit
- Digital printed
- Laminated glass

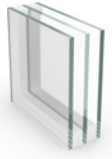
Sealants

- Polysulfide or Silicone



Photo: Éric Massicotte – River Station

TRIPLE INSULATED GLASS UNITS



1 3/4 inch (43 mm) insulated unit make-up:
Three 6mm glass sheets with 1/2-inch space filled with 90% argon gas

GLASS 1	GLASS 2	GLASS 3	TRANSMISSION		REFLECTIVITY		U VALUE BTU / HR FT ² °F	R VALUE WINTER NIGHT	SHADING COEFFICIENT SC / CA	SOLAR HEAT GAIN COEFFICIENT SHGC	RELATIVE HEAT GAIN RHG
			VISIBLE %	SOLAR %	EXT %	INT %					
«Hard Coat» - Pyrolytic											
80/71 F2	Clear	80/71 F5	69	43	18	18	0.136	7.37	0.63	0.55	128
Energy Advantage F2	Clear	Energy Advantage F5	62	39	22	22	0.158	6.33	0.61	0.53	124
«Soft Coat» Double Silver											
ES36 F2	Clear	ES36 F5	48	20	20	20	0.120	8.31	0.34	0.29	69
ES40 F2	Clear	ES40 F5	55	23	15	15	0.122	8.20	0.37	0.32	76
SN 68 F2	Clear	SN 68 F5	52	22	13	13	0.123	8.11	0.43	0.32	74
LowE 272 F2	Clear	LowE 180 F5	55	24	13	13	0.124	8.06	0.39	0.34	79
«Soft Coat» Triple Silver											
SNX 62/27 F2	Clear	SNX 62/27 F5	43	14	13	13	0.118	8.49	0.26	0.22	53
LowE 366 F2	Clear	LowE 180 F5	55	20	14	18	0.126	7.96	0.27	0.24	57
Tinted											
Gray	Energy Select 40 F3	Clear	32	16	8	17	0.183	5.48	0.30	0.27	63
Gray	LowE 272 F3	Clear	32	17	8	15	0.184	5.43	0.31	0.27	65
Reflective											
Eclipse Advantage Clear F2	Clear	SN68 F5	47	31	25	22	0.142	7.06	0.40	0.35	83
Energy Select R 34 F2	Clear	Energy Select 40 F5	43	19	27	21	0.121	8.26	0.31	0.27	64

Technical data provided in these charts comes from Guardian Glass Analytics Performance Calculator and the values represent nominal values for center of glass with no spacer system of framing.

INSULATED GLASS UNITS WITH LAMINATED GLASS

GLASS 1	GLASS 2	GLASS 3	GLASS 4	TRANSMISSION		REFLECTIVITY		U VALUE BTU / HR FT ² °F	R VALUE WINTER NIGHT	SHADING COEFFICIENT SC / CA	SOLAR HEAT GAIN COEFFICIENT SHGC	RELATIVE HEAT GAIN RHG	STC *
				VISIBLE %	SOLAR %	EXT %	INT %						

1 1/8 inch (28 mm) insulated unit make-up:
One 6 mm and two 4 mm glass sheets with 0.060 inch (1.52 mm) acoustic pvb, 12 mm space filled with 90% argon gas

LowE 272 F2	4 mm clear	4 mm clear		69	33	11	12	0.24	4.12	0.45	0.4	94	44
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1 3/4 inch (43 mm) insulated unit make-up:
Two 6 mm and two 4 mm glass sheets with 0.060 inch (1.52 mm) acoustic pvb, 12 mm space filled with 90% argon gas

LowE 272 F2	6 mm clear	4 mm clear	4 mm clear	62	29	17	16	0.17	5.79	0.45	0.39	93	41
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* STC data is estimated according to the glazing make-up. They have not been tested in laboratory. Technical data provided in these charts comes from Guardian Glass Analytics Performance Calculator and the values represent nominal values for center of glass with no spacer system of framing.

INSULATED GLASS UNITS WITH SILKSCREEN OR DIGITAL PRINTING

GLASS 1	GLASS 2	GLASS 3	TRANSMISSION		REFLECTIVITY		U VALUE BTU / HR FT ² °F	R VALUE WINTER NIGHT	SHADING COEFFICIENT SC / CA	SOLAR HEAT GAIN COEFFICIENT SHGC	RELATIVE HEAT GAIN RHG
			VISIBLE %	SOLAR %	EXT %	INT %					

1 inch (25 mm) double insulated unit make-up:

Two 6 mm glass sheets with 1/2-inch space filled with 90% argon gas

Clear glass with 40% ceramic frit coverage	ES 40 F2		43	21	16	18	0.24	4.11	0.37	0.32	76
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1 3/4 inch (43 mm) triple insulated unit make-up:

Three 6mm glass sheets with 1/2-inch space filled with 90% argon gas

Clear glass with 40% ceramic frit coverage	ES 40 F2	ES 73 F3	36	17	18	23	0.14	6.98	30	26	63
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Technical data provided in these charts comes from Guardian Glass Analytics Performance Calculator and the values represent nominal values for center of glass with no spacer system of framing.



INSULATED GLASS UNITS WITH CERAFRIT OR CERAPRINT

In addition to enhancing the look of a building, insulated glass with an incorporated ceramic frit, either silkscreen or digital print, is an attractive option for limiting glare and reducing solar heat gain.