



GRAPHITE BLUE™

LOOKS BEAUTIFUL. PERFORMS BEAUTIFULLY.

Designers and architects have been searching for a new substrate that combines the attractive aesthetics of a light blue-grey color and the performance required for today's code environment. Introducing Graphite Blue™, Viracon's newest substrate.

With high levels of light transmission combined with low interior and exterior reflectivity, Graphite Blue™ is an appealing solution for your next project. In addition, excellent solar control and reduced glare can be achieved when combined with one of Viracon's high-performance Low-E coatings.

Graphite Blue can be incorporated into insulating glass units, laminated make-ups or used monolithically. Silk-screening or DigitalDistinctions™ by Viracon, a digital printing solution, can also be added to enhance your design. Graphite Blue can also be heat-treated and is available in 1/4" (6mm), 5/16" (8mm) and 3/8" (10mm) thicknesses to accommodate your design specifications.



29=Graphite Blue™



Graphite Blue Uncoated

► The image above is viewed from the exterior and is provided as a reference for the visual aesthetics of the substrate. Sky conditions, viewing angle and other factors can influence perceived color.

VIRACON SUBSTRATE OFFERING

SOLAR OPTICAL PROPERTIES AND THERMAL CHARACTERISTICS WITH AIR

1" Insulating Glass Unit - 1/4" (6mm) Graphite Blue™ with designated coating - 1/2 (13.2mm) Airspace - 1/4" (6mm) Clear

Product	Transmittance			Reflectance		U-Value			Shading Coefficient	Relative Heat Gain	SHGC	LSG	European U-Value
	Visible	Solar	U-V	Exterior	Interior	Solar	Winter	Summer					
VE29-2M	49%	24%	8%	8%	11%	16%	0.29	0.26	0.35	74	0.30	1.63	1.6
VE29-85	52%	33%	17%	8%	12%	13%	0.31	0.29	0.48	99	0.41	1.27	1.7
VE29-48	33%	21%	13%	10%	10%	13%	0.31	0.29	0.34	72	0.29	1.14	1.7
VE29-45	27%	16%	6%	6%	28%	13%	0.30	0.26	0.34	72	0.23	1.17	1.7
VE29-42	26%	17%	10%	11%	14%	13%	0.31	0.29	0.29	62	0.25	1.04	1.7
VUE29-50	34%	14%	4%	8%	11%	15%	0.29	0.26	0.24	52	0.21	1.62	1.5
VUE29-40	28%	12%	3%	10%	15%	15%	0.29	0.26	0.21	46	0.18	1.56	1.6
VUE29-30	21%	9%	2%	11%	20%	16%	0.29	0.26	0.18	39	0.15	1.40	1.5
VRE29-59	36%	19%	10%	18%	20%	21%	0.30	0.27	0.30	63	0.26	1.38	1.6
VRE29-54	33%	18%	10%	18%	16%	21%	0.30	0.27	0.28	61	0.25	1.32	1.6
VRE29-46	30%	16%	9%	19%	16%	22%	0.30	0.27	0.26	56	0.23	1.30	1.6
VRE29-38	25%	13%	8%	23%	21%	26%	0.30	0.26	0.22	48	0.19	1.32	1.6

WITH ARGON

Product	Transmittance			Reflectance		U-Value			Shading Coefficient	Relative Heat Gain	SHGC	LSG	European U-Value
	Visible	Solar	U-V	Exterior	Interior	Solar	Winter	Summer					
VE29-2M	49%	24%	8%	8%	11%	16%	0.25	0.21	0.34	71	0.30	1.63	1.3
VE29-85	52%	33%	17%	8%	12%	13%	0.27	0.24	0.47	97	0.41	1.27	1.4
VE29-48	33%	21%	13%	10%	10%	13%	0.27	0.24	0.33	69	0.29	1.14	1.4
VE29-45	27%	16%	6%	6%	28%	13%	0.25	0.21	0.26	54	0.22	1.23	1.3
VE29-42	26%	17%	10%	11%	14%	13%	0.27	0.24	0.28	60	0.24	1.08	1.4
VUE29-50	34%	14%	4%	8%	11%	15%	0.25	0.21	0.23	49	0.20	1.70	1.2
VUE29-40	28%	12%	3%	10%	15%	15%	0.25	0.21	0.20	43	0.17	1.65	1.2
VUE29-30	21%	9%	2%	11%	20%	16%	0.25	0.20	0.16	36	0.14	1.50	1.2
VRE29-59	36%	19%	10%	18%	20%	21%	0.26	0.22	0.29	61	0.25	1.44	1.3
VRE29-54	33%	18%	10%	18%	16%	21%	0.26	0.22	0.27	58	0.24	1.38	1.3
VRE29-46	30%	16%	9%	19%	16%	22%	0.25	0.22	0.25	54	0.22	1.36	1.3
VRE29-38	25%	13%	8%	23%	21%	26%	0.25	0.21	0.21	46	0.18	1.39	1.3

The solar and optical data presented is center-of-glass data based on the National Fenestration Rating Council measurements standards. They were calculated using Lawrence Berkley National Laboratory's (LBNL) WINDOW 5.2/6.3 software.

1. If a coating is applied to Graphite Blue, the glass must be heat treated.
2. Available in maximum dimensions 96" x 144" (2134mm x 3658mm).

Note: The maximum size for annealed glass under any condition is 50 sq ft (4.65 sq m). Maximum size for heat treated glass under any condition is 65 sq ft (6.04sq m).

Coating Type	Outboard Glass Substrate	Transmittance of Coating
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VE	29	-	85
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In this example, VE-85 is the coating and VE29-85 is the VE-85 coating applied to Graphite Blue.

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Graphite Blue is a registered trademark of Pilkington.

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