

EnviroTone™

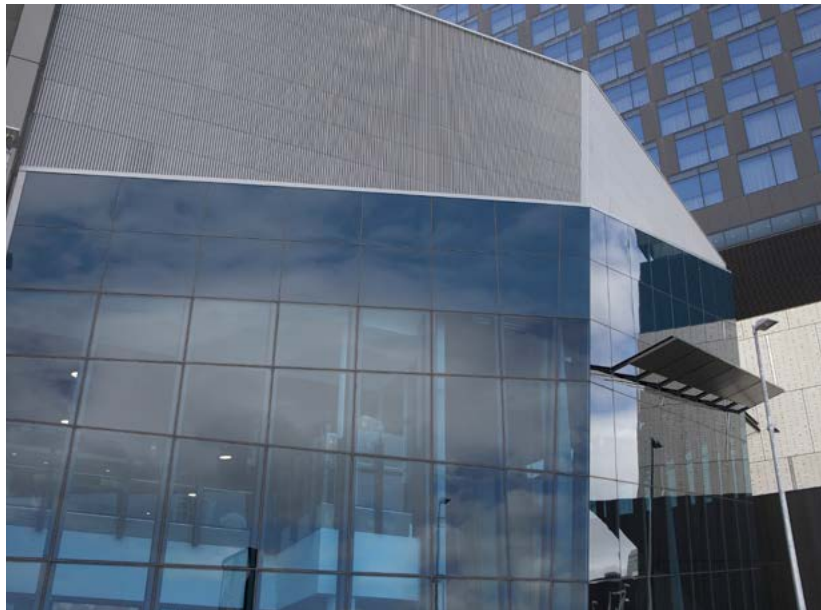
Solar Control Toned Glass



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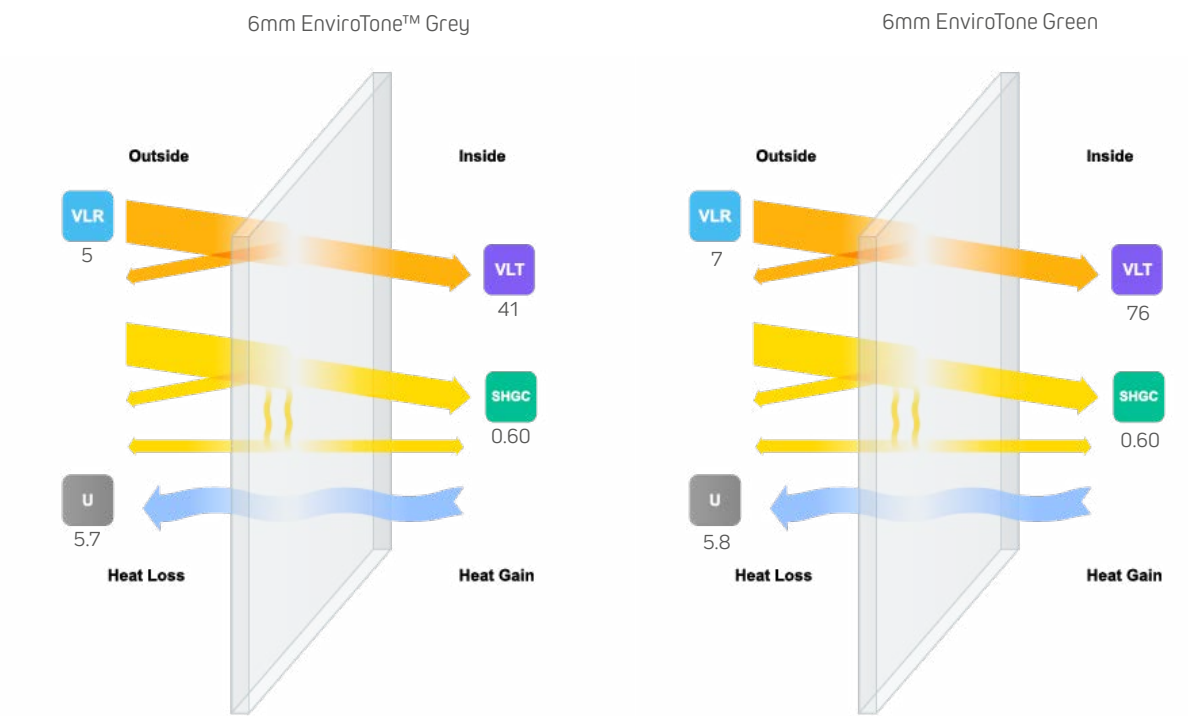
EnviroTone™

EnviroTone™ float glass provides a level of solar control which helps to manage both the aesthetic appearance of the building and the improvement of the buildings energy management performance. Achieved through the reduction of solar heat gain without the need for significant additional reflectivity, EnviroTone™ also reduces both UV penetration and glare to the inside of the building.



Manufactured by adding different chemicals and metal oxides to the batch during the float glass manufacturing process, the EnviroTone™ range of toned glass reduces the solar heat gain by absorbing solar energy within the body of the glass.

Different colours absorb solar energy to different levels; the darker the glass, the more heat that is absorbed. As such, it's often the case that toned glass products have to be heat treated (either toughening or heat strengthening) to avoid breakage through thermal stress.



EnviroTone™ Float

Common tones are grey, bronze and green which are available in 4mm through 12mm* (*Grey only).



The tone and light transmission of the glass will differ dependent on the glass's thickness, ie 10mm grey toned glass will appear darker than 6mm toned glass and will have a lower light transmission.



All EnviroTone™ glass is easily toughened, laminated and processed and can be glazed monolithically or as part of a KlymetControl™ IGU. Incorporating the glass into a KlymetControl™ IGU will improve the solar and thermal performance of the product over an IGU made up of just clear float glass, especially when used in conjunction with KlymetShield™ Low E glass as the inner pane.

Glass Product	Normal Thickness	Visible Light		Solar Energy		UV Trans.	U-value W/m2-C	SHGC	Shading Co.
		Trans.	Refl. Out	Trans.	Refl.				
Float - Toughened and Annealed									
EnviroTone™ Grey	4	56	6	57	5	35	5.9	0.68	0.78
	5	48	5	51	5	31	5.8	0.64	0.74
	6	41	5	44	5	17	5.7	0.60	0.66
	8	33	5	31	5	14	5.7	0.51	0.59
	10	27	5	31	5	11	5.7	0.51	0.59
	12	21	4	25	5	7	5.6	0.47	0.55
EnviroTone™ Green	4	81	7	55	6	38	5.9	0.67	0.77
	5	79	7	49	5	34	5.8	0.63	0.73
	6	76	7	45	5	29	5.8	0.60	0.70
	10	63	6	29	5	11	5.9	0.70	0.81
EnviroTone™ Bronze	4	60	6	59	6	30	5.9	0.69	0.80
	5	55	6	52	5	23	5.8	0.65	0.75
	6	50	5	47	5	19	5.8	0.62	0.71
	10	34	5	36	5	9	5.7	0.54	0.63
EnviroTone™ Ocean Blue ³	6	55	6	60	6	27	5.2	0.69	0.79

See the SOLOS Glass Performance Guide for further information.

High Performance Toned Glass

EnviroTone™ Plus

EnviroTone™ Plus provides richer colours and an improved SHGC in combination with low internal and external reflectance when compared to standard EnviroTone™. This not only improves the solar control performance of the glass but also assists in maintaining natural views when looking from the interior of the building.

The standard range of EnviroTone™ Plus higher performing tones are:

- EnviroTone™ Plus Green
- EnviroTone™ Plus Grey
- EnviroTone™ Plus Blue
- EnviroTone™ Plus Dark Grey

Because these higher performing tones absorb more heat than standard tones, it is advised that a thermal safety check is undertaken prior to finalising the order to confirm whether the glass needs heat treating. Certainly SOLOS Glass recommends that EnviroTone™ Plus Grey, with a VLT of 9%, is heat treated for every application due to the large amount of heat it absorbs.

Both EnviroTone™ Plus Green and EnviroTone™ Plus Blue offer excellent VLT for the level of SHGC performance provided. EnviroTone™ Plus Grey, with its deep cool grey colour is ideal for where additional privacy is required and reducing glare is a priority.

