

Introducing Comfort Shield

A cooler ride for every passenger!

Riders don't just see out the window...they feel it. AROW's new Comfort Shield glass is engineered to significantly reduce the heat that make bus rides uncomfortable.



Glass Performance Comparison Chart

Performance Metrics	Comfort Shield Tempered			Legacy / Traditional Tempered		
	Green	Blue	Blue	Green	Gray	Gray
Nominal Thickness¹ 3/16" (5mm) and 1/4" (6mm) are common for heavy-duty transit buses.	6mm	6mm	5mm	5mm	5mm	6mm
Light Transmittance¹ The percentage of visible light permitted to pass through the glazing. As light transmittance increases, more light passes through the glass, leading to a less encumbered view through the glass.	45%	68%	72%	80%	50%	44%
Infrared Transmittance² Is typically invisible to the human eye, but it can be felt as heat. A higher infrared transmittance means that more heat can be felt through the glass and inside the bus.	4%	4%	9%	26%	38%	30%
Solar Heat Gain Coefficient (SHGC)² Is the fraction of solar radiation admitted through the glass, either transmitted directly and/or absorbed, and subsequently released as heat inside the bus. The lower the value, the less solar heat is transmitted.	0.27	0.40	0.43	0.53	0.48	0.44
Ultraviolet (UV) Transmittance² UV and radiation are invisible to the human eye. Overexposure can cause sunburn and some forms of skin cancer. As such, it is desirable to minimize UV transmittance passing through glass and into the bus.	14%	53%	49%	40%	30%	25%
Heat Energy Transmittance (BTU/HR*FT²)³ Is a standard unit of measurement for heat energy transfer. One British Thermal Unit (BTU) equals the amount of heat required to raise the temperature of 1lb of water by 1°F. This data shows how many heating BTU's are passing through the glass per square ft, per hour, and into the bus.	5	6	11	29	43	32

Comfort Shield is available on the following windows:

Passenger Windows

Comfort Shield Tempered Green 45% LT 6mm
 Comfort Shield Tempered Blue 68% LT 6mm
 Comfort Shield Tempered Blue 72% LT 5mm

Driver Windows

Comfort Shield Tempered Blue 72% 5mm

¹These values are provided in accordance with the raw material manufacturers' specifications

²These values were measured using a window energy profiler meter. The window energy profiler is model WP4500 sold by EDTM Glass, Window, and Film Test Equipment. Additional details are available at their website www.edtm.com.

³These values are provided through in-house testing where a 120-volt, 250-watt infrared heat lamp is set up at a distance to achieve 100 BTU/HR per ft² on an unobstructed solar energy meter and the glass is then positioned between the heat lamp and the meter, displaying a reduced heat energy transfer.