

TECH BRIEF

Windows & Glass

When designing your cab, a lot of critical factors need to be considered when determining placement, type, and safety/specialty certifications for its windows. There are several ways to resolve a window issue, but OEMs must always keep the machine's application, environment, and other safety concerns top of mind.



Types of Glass

Laminated Windscreen Glass

Laminated glass consists of two individual pieces that are fused together using the transparent plastic, polyvinyl butyral (PVB) through extreme heat and high pressure. The vinyl provides numerous safety benefits, as it prevents the glass from shattering and acts as a protective barrier for operators.

Tempered Glass

Harder and stronger than standard glass, tempered glass is designed to break into dull, pebble-like pieces when broken so they aren't dangerous to operators when the window breaks. Both laminated and tempered glass are good options for your cab in order to prevent serious operator injury.



Advanced Window Options

Tinting

As opposed to polymer windows, glass has significantly more expansive tinting options (pictured above). Newer ceramic high UV-protective tints have significant value for cooling and solar head gain in a cab. Tinting options vary within types of glass as well. For example, tempered glass typically has no UV-protection, but conversely laminated glass is an excellent reflector of UV.

Abrasion and Scratch Resistance

Glass is less durable and does not have the impact rating of polymer. However, glass does have a better functional abrasion resistance. Still, glass is also less cost effective, as forming and bending of glass is very expensive, making a formed piece of glass almost 10 times more expensive than a flat piece of the same size.

Glass Designation and Labeling

All glass is given a rating of American Standard, or AS, followed by the number indicating what position the glass can be used, based on its optical quality. For example, AS1 is the clearest glass with at least 70% light transmission and can be used anywhere in a motor vehicle. But AS3 can only be used in certain location in certain vehicles. Another label to be aware of is the DOT code which is assigned by the National Highway Traffic Safety Administration to the glass manufacturer.

CONTACT

Please visit ADCEquipmentinnovations.com or contact us directly for more information. Our dedicated team of long-term, invested employees look forward to working with you.

7102 Zinser Street
Weston, WI 54476

1-920-975-1200 Main Phone
1-715-355-4440 Main Fax

<http://adcequipmentinnovations.com/>
sales@adcequipment.com Email Us

GS Global Resources
926 Perkins Drive
Mukwonago, WI 53149

1-262-378-5200 Main Phone
1-262-378-5400 Main Fax
1-800-261-8735 Toll Free

GSGR.com
sales@gsg.com