



Technical Bulletin: 2011-002; 9/29/2011

Simplified Explanation of Safety Glazing Standards

The purpose of this bulletin is to provide a clear definition of the requirements imposed by the FMVSS ANSI/SAE Z26.1-1997 standard, which outlines the various types of Safety Glazing Materials (both glass and plastic) for use in vehicles operating on land and highways.

This bulletin shall specifically address the six basic standards which cover transit bus vehicles as follows: AS-1, AS-2, AS-3, AS-4, AS-5, AS-14 and AS-15B. For supplementary information, **Technical Bulletin 2011-001** may be used for reference as it relates to the glazing labeling (“BUG”) requirements imposed by the U.S. Department of Transportation (DOT). The DOT “BUG” identifies the glazing manufacturer and the standard to which the glazing was manufactured.

Table 1: Acceptable Application

Acceptable Application	Glazing Standard						
	AS-1	AS-2	AS-3	AS-4	AS-5	AS-14	AS-15B
May be used anywhere in the vehicle	X						
May be used anywhere in the vehicle, except windshields		X					
May be used anywhere in the vehicle, except windshields and certain specified locations (those required for operator driving visibility)			X				
May be used anywhere in the vehicle, except windshields and certain specified locations (those required for operator driving visibility)				X			
May be used anywhere in the vehicle except windshields and specific locations (those required for operator driving visibility)					X		
May be used anywhere in the motor vehicle						X	
May be used anywhere in the motor vehicle except windshields							X



Table 2: Glazing Type

Glazing Type	Glazing Standard						
	AS-1	AS-2	AS-3	AS-4	AS-5	AS-14	AS-15B
Laminated Glass	X						
Laminated or Tempered Glass		X					
Laminated or Tempered Glass			X				
Rigid Plastics				X			
Rigid Plastics					X		
Glass-Plastics (interior film lamination)						X	
Tempered Glass-Plastics (interior film lamination)							X

Table 3: % Permissible Light Transmittance

% Permissible Light Transmittance	Glazing Standard						
	AS-1	AS-2	AS-3	AS-4	AS-5	AS-14	AS-15B
Greater than or equal to 70%	X						
Greater than or equal to 70%		X					
No restriction			X				
Greater than or equal to 70%				X			
No restriction					X		
Greater than or equal to 70%						X	
Greater than or equal to 70%							X

Notes:

- Data extracted from ANSI/SAE Standard Z26.1-1997;
- For additional information relating to this bulletin, contact: AskArowGlobal@arowglobal.com