

standard: American National Standard for Safety Glazing Materials for Glazing Motor Vehicles and Motor Vehicle Equipment Operating on Land Highways—ANSI/SAE Z26.1–1996 (“ANSI/SAE Z26.1–1996”). AAMA stated in its petition that incorporating ANSI/SAE Z26.1–1996 would improve safety, achieve international harmonization, streamline and clarify FMVSS No. 205, and eliminate wire glass as an approved safety glazing option. On January 2, 1998, we granted the AAMA’s petition.

FMVSS No. 205 specifies performance requirements for the types of glazing that may be installed in motor vehicles. It also specifies the vehicle locations in which the various types of glazing may be installed. The standard incorporates by reference ANSI Standard Z26.1, “Safety Code for Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highways,” as amended through 1980 (“ANS Z26.1”).<sup>1</sup> The requirements in ANS Z26.1 are specified in terms of performance tests that the various types or “items” of glazing must pass. There are 21 “items” of glazing for which requirements are currently specified in FMVSS No. 205.

The Society of Automotive Engineers (SAE) Glazing Materials Standards Committee, acting under the sponsorship of ANSI, has revised the ANSI standard periodically. However, since the FMVSS cannot be changed except through rulemaking, revisions to the ANSI standard do not become part of FMVSS No. 205 unless we expressly identify and incorporate them through a rulemaking. SAE previously petitioned us to upgrade ANS Z26.1 with 1983 and 1990 revisions. However, we denied those petitions.

In addition to incorporating some of the revisions of the ANSI standard, we have occasionally updated FMVSS No. 205 directly by adding provisions similar or identical to those in various revisions of the ANSI standard.

## II. Summary of the Notice of Proposed Rulemaking (NPRM)

On August 4, 1999, NHTSA published a NPRM (64 FR 42330) proposing to amend FMVSS No. 205 by incorporating by reference ANSI/SAE Z26.1–1996. In this notice, NHTSA discussed the benefits of incorporating ANSI/SAE Z26.1–1996, and proposed revisions to FMVSS No. 205.

<sup>1</sup> The most recent revision we incorporated into FMVSS No. 205 was ANSI Z26.1a–1980, which supplemented the 1977 version. It was incorporated by a final rule published on February 23, 1984 (49 FR 6732).

### A. Benefits of Incorporating ANSI/SAE Z26.1–1996

NHTSA tentatively concluded that incorporating ANSI/SAE Z26.1–1996 would be beneficial for (1) improved safety, (2) harmonization with foreign glazing standards, and (3) streamlining and clarification.

#### 1. Improved Safety

ANSI Z26.1 requires a fracture test (Test No. 7) of a 305 mm (12 in.) square, flat sample of glazing. In contrast, ANSI/SAE Z26.1–1996 requires the use of a full-size production piece of vehicle window glass. Paragraph 5.7.2 of ANSI/SAE Z26.1–1996 states that the specimens of glazing selected for testing “shall be of the most difficult part or pattern designation within the model number.” NHTSA stated that it interpreted this to mean the portion of glazing which we consider most likely to fail the test.

ANSI/SAE Z26.1–1996 also improves safety by eliminating wire glass as an approved glazing material. Wire glass is flat-rolled glass reinforced with wire mesh. Wire glass is known to shatter more readily at lower impact speeds and is more lacerative than laminated glass. Wire glass was used in past automotive applications. However, this practice has been discontinued and, to our knowledge, no company currently produces wire glass for vehicle use.

#### 2. Harmonization with Foreign Glazing Standards

Incorporating ANSI/SAE Z26.1–1996 will improve harmonization between US, Canadian, and European glazing standards in the following ways:

- The test fixture for the impact, fracture and penetration resistance tests (Tests 6, 7, 8, 9, 10, 11, 12, 13, 14 and 26) is identical to the support frame required in Economic Commission for Europe (ECE) Regulation R43.
- The equipment used for the abrasion test (Tests 17 and 18) is similar to that used under ECE R43.
- The Weathering Test (Test 16) is similar to International Organization for Standardization (“ISO”) Standard 3917, which requires a xenon light source, instead of the carbon arc light source currently specified in FMVSS No. 205.
- The solvents specified in the chemical resistance test (Test 20) have been revised to conform to the requirements of the American Society for Testing and Materials (ASTM) and Occupant Safety and Health Administration (OSHA). These are the same solvents specified in ECE R43. This will also result in consistency with the NTTAA (National Technology

Transfer Advancement Act), which requires use of voluntary consensus standards unless such use is infeasible or otherwise inconsistent with law.

- Canadian Motor Vehicle Safety Standard No. 205, “Glazing Materials,” already incorporates ANSI/SAE Z26.1–1996. Therefore, we would achieve closer harmonization of our Standard No. 205 and Canadian Standard No. 205.

#### 3. Streamlining and Clarification

The proposed incorporation by reference of ANSI/SAE Z26.1–1996 would permit the deletion of most of the existing text of FMVSS No. 205. The amendments of the past 20 years have resulted in a patchwork of requirements that must be read in conjunction with the ANSI Z26.1 in order to gain a comprehensive understanding of the overall requirements of FMVSS No. 205. Adoption of the proposal would simplify FMVSS No. 205, consistent with our regulatory reform efforts.

### B. Proposed Revisions to FMVSS No. 205

NHTSA discussed some proposed revisions to FMVSS No. 205, as described below.

First, NHTSA discussed the general nature of the textual changes to ANSI Z26.1. We stated that our substitution of the 1996 version for the 1980 version of the ANSI standard would not make many substantive changes to our standard since our current standard already contains many provisions of the 1996 version. They were directly added to our standard in various rulemaking proceedings between 1977 and 1996 to supplement the 1977 version of the ANSI standard.<sup>2</sup> Therefore, the practical effect of our incorporation by reference of the 1996 ANSI standard is that it would enable us to eliminate the provisions added to our standard between 1977 and 1996.

Second, NHTSA proposed to modify the application section of FMVSS No. 205 so that the standard explicitly applied to vehicles.

Third, NHTSA proposed that “the most difficult part or pattern” for the Fracture Test means that all portions of the glazing surface must be able to pass the test requirements.<sup>3</sup> We explained

<sup>2</sup> The 1996 provisions include new types of glazing, e.g. items 4A, 11C, 12, 13, 14, 15A, 15B, 16A, and 16B. ANSI/SAE Z26.1–1996 also includes numerous editorial and minor substantive changes made to be consistent with FMVSS No. 205 or to be internally consistent. We have listed these changes in a table submitted to the docket for the NPRM (Docket No. NHTSA 99–6024).

<sup>3</sup> The requirement for specimens to be tested for the fracture test in section 5.7.2 of ANSI/SAE