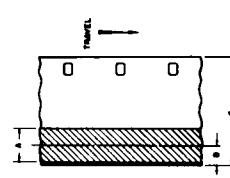


# motion-picture standards

## Two American Standards

Published here are American Standards PH22.31-1958, Motion Picture Safety Film, and PH22.113-1958, 16mm Flutter Test Film, Magnetic Type, which were approved by the American Standards Association on December 10, 1958.

PH22.31, a revision of Z22.31-1946, and PH22.113 had their trial publication in the February 1958 Journal. Subsequently, editorial modifications of both standards were proposed and approved and are incorporated in these final drafts. Paragraph 1.1 of PH22.31 has been changed to simplify the scope. This final draft of PH22.113 differs from that published for trial and comment in that the diagram has been changed, a table of dimensions has been added and the Appendix has been reworded for clarification. A test film produced in accordance with these specifications is available from Society Headquarters.—  
*J. Howard Schumacher, Staff Engineer.*

<p style="font-size: small;">ASA Inc., U.S. Pat. Off. <b>PH22.113-1958</b>  *UDC 778.5 771.531.581.2</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;"><b>American Standard</b></p> <h2 style="text-align: center;">16mm Flutter Test Film, Magnetic Type</h2> <p><b>1. Scope</b></p> <p>1.1 This standard specifies a 3000 cps magnetic sound test film for use in determining the presence of flutter in 16mm magnetic sound reproducers.</p> <p><b>2. Test Film</b></p> <p>2.1 The test film shall have an originally recorded, 200-mil width, magnetic sound record as shown in the drawing. The location and dimensions shall be in accordance with American Standard PH22.97-1956, 200-Mil Magnetic Sound Record on 16mm Film Base, Perforated One Edge, or the latest revision thereof approved by the American Standards Association, Incorporated.</p> <p>2.2 The recorded frequency shall be 3000 ± 25 cps with a film rate of 24 perforations per second (approximately 36 ft per minute).</p> <p>2.3 The recording shall be made at 100% modulation level with a tolerance of ± 0 — 2 db. 100% modulation is defined as the recording-head current at which 3% total harmonic distortion occurs at a signal frequency of 1000 cps.</p> <p>2.4 The total rms flutter of the sound recorder shall not exceed 0.1% and the flutter amplitude, at any single flutter rate, shall not exceed 0.05% (as defined in American Standard Z57.1-1954, Method of Determining Flutter Content of Sound Recorders and Reproducers, or the latest revision thereof approved by the American Standards Association, Incorporated).</p> </div> <div style="width: 45%;">  <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: center;">Dimension</th> <th style="text-align: center;">Inches</th> <th style="text-align: center;">Millimeters</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">0.200 ± 0.002</td> <td style="text-align: center;">5.08 ± 0.05</td> </tr> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">0.103 ± 0.002</td> <td style="text-align: center;">2.62 ± 0.05</td> </tr> <tr> <td style="text-align: center;">C</td> <td style="text-align: center;">0.630 nom</td> <td style="text-align: center;">16 nom</td> </tr> </tbody> </table> <p><b>3. Film Stock</b></p> <p>3.1 The film stock shall be of the low-shrinkage safety type, cut and perforated in accordance with American Standard PH22.12-1953, Dimensions for 16mm Film, Perforated One Edge, or the latest revision thereof approved by the American Standards Association, Incorporated.</p> <p><b>4. Length of Film</b></p> <p>4.1 The film shall be supplied in 100-ft and 400-ft lengths.</p> <p><b>5. Identification</b></p> <p>5.1 The film shall have identification markings at both ends.</p> <p><i>Notes:</i> A test film produced in accordance with this standard is available from the Society of Motion Picture and Television Engineers.</p> <p style="text-align: center;"><b>APPENDIX</b></p> <p style="font-size: x-small;">(This Appendix is not a part of American Standard 16mm Flutter Test Film, Magnetic Type, PH22.113-1958, but is included to facilitate its use.)</p> <p>It is recognized that there are certain desirable features in a test film of this kind that will simplify its use in measuring flutter. Because of the variety of flutter-measuring meters, one such feature is reasonable uniformity of the level of reproduction throughout the length of the test film. Therefore, it is recommended that the variations in the output level</p> </div> </div>	Dimension	Inches	Millimeters	A	0.200 ± 0.002	5.08 ± 0.05	B	0.103 ± 0.002	2.62 ± 0.05	C	0.630 nom	16 nom
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<p style="font-size: small;">ASA Inc., U.S. Pat. Off. <b>PH22.31-1958</b>  Revision of Z22.31-1946  *UDC 778.5 771.533</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;"><b>American Standard</b></p> <h2 style="text-align: center;">Motion-Picture Safety Film</h2> <p><b>1. Scope</b></p> <p>1.1 This standard specifies and defines safety film as applied to motion-picture film.</p> <p>1.2 The notes are a part of the standard.</p> <p><b>2. Safety Film</b></p> <p>2.1 The term "safety film" as applied to motion-picture film shall comply with American Standard PH1.25-1956, Specifications for Safety Photographic Film, or the latest revision thereof approved by the American Standards Association, Incorporated.</p> <p>2.2 All motion-picture and magnetic film, regardless of width, shall be manufactured so as to meet the definition of safety photographic film.</p> <p>2.3 Only safety film shall be made available for and used in 16mm and 8mm motion-picture cameras and projectors.</p> </div> <div style="width: 45%;"> <p><b>NOTES</b></p> <p>1. 35mm nitrate motion-picture film is no longer manufactured in the U.S. However, there are existing nitrate films still in use or in storage and there are others existing or of future manufacture which may be imported. There is no intent in this standard to limit the use of such 35mm nitrate films, but by designating them as "nonstandard" it is intended to emphasize that the hazard involved in their handling requires the observation of adequate precautions and safeguards. (See "Standards of the National Board of Fire Underwriters for Storage and Handling of Cellulose Nitrate Motion Picture Film as Recommended by the National Fire Protection Association," NBFU Pamphlet No. 40, November 1953.)</p> <p>2. Nitrate film, because of its attendant fire hazards, has never been manufactured in the U.S. in the 16mm and 8mm widths since these are traditionally for amateur and nontheatrical use. However, small quantities of nitrate film may be in existence as a result of foreign import or from slitting operations of certain intermediate laboratory processing films. The purpose of 12.3 is therefore to classify and designate as nonstandard the handling or use of all such film.</p> </div> </div>
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