

Standards and Recommended Practices

Approved American National Standards

Two American National Standards were approved by the American National Standards Institute on November 13, 1985: ANSI/SMPTE 179-1985, Motion-Picture Film (8-mm Type S) — Printed Areas — 35-mm Film Perforated 2R and 5R; and ANSI/SMPTE 181-1985, Motion-Picture Film (8-mm Type S) — Printed Areas — 16-mm Film Perforated 8-mm Type S (1—3). Copies of the standards are available for a nominal fee from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

Approved SMPTE Recommended Practices

The Society's Executive Committee for Standards Approval approved two SMPTE Recommended Practices: RP 127-1985, Specifications for Type U Audio Level and Multifrequency Test Film for 35-mm Studio Audio Reproducers, Magnetic Full-Coat Type; and RP 128-1985, Specifications for Audio Level and

Multifrequency Test Film for 70-mm Striped Six-Track Release Print Audio Reproducers, Magnetic Type. These and other SMPTE Recommended Practices are available from Society Headquarters for \$3.00 each.

Approved International Standard

The International Organization for Standardization (ISO) approved an International Standard, the technical content of which is published here for your information. ISO 6896-1984, Cinematography — Intermittent Sprockets for 35-mm Motion-Picture Projectors — Dimensions, is in agreement with American National Standard Dimensions of Universal Intermittent Sprockets for 35-mm Motion-Picture Projectors, ANSI PH22.35-1982. This material is reproduced with permission from the ISO and is copyrighted by the American National Standards Institute, 1430 Broadway, New York, NY 10018, from which copies are available.

— *Alex E. Alden, Manager of Engineering*

SMPTE Standards Subscription Service

The Society provides a Standards Subscription Service to assist firms, libraries, and individuals in establishing and maintaining a complete and current file of approved American National Standards and SMPTE Recommended Practices in the motion picture, television, and video magnetic recording fields. Through this service, the Society makes automatic distribution to Standards Subscribers of all new and revised American National Standards and SMPTE Recommended Practices that are approved during the calendar year in these fields.

For further information, write to: Standards Subscription Service, Engineering Department, Society of Motion Picture and Television Engineers, 862 Scarsdale Avenue, Scarsdale, NY 10583.

American National Standard motion-picture film (8-mm type S)— printed areas— 35-mm film perforated 2R and 5R

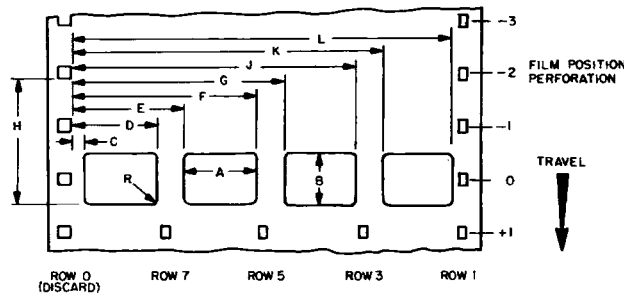
Approved November 13, 1985

Sponsor: Society of Motion Picture and Television Engineers

1. Scope

Page 1 of 2 pages

This standard specifies the location and size of the 8-mm type S printed picture area for negative and intermediate optical reduction printing on 35-mm motion-picture film perforated 2R-1664 in positions 1 and 0 and for print films derived by optical or contact printing on 35-mm film perforated 5R-1667 in positions 1, 3, 5, 7, and 0.



Dimensions	Inches		Millimeters	
A	0.228	ref	5.79	ref
B	0.163	min	4.14	min
C*	0.047	max	1.19	max
D	0.271	min	6.88	min
E*	0.361	max	9.17	max
F	0.585	min	14.86	min
G*	0.675	max	17.14	max
H†	0.393 ± 0.002		9.98 ± 0.05	
J	0.899	min	22.83	min
K*	0.989	max	25.12	max
L	1.213	min	30.81	min
R	0.005	max	0.13	max

*See Note 3.

†See Note 2 and Appendix A1.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of publication. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute. Printed in USA

Copyright © 1985 by the Society of Motion Picture and Television Engineers. Reprinted by permission.

 American National Standards Institute, 1430 Broadway, New York, N.Y. 10018

Page 2 of 2 pages

2. Reference Standards

The following American National Standards are intended to be used in conjunction with this standard:

ANSI PH22.155-1982, Motion-Picture Film (8-mm Type S)—Projector Usage

ANSI PH22.157-1971 (R1984), Dimensions of Camera Aperture Image on Super 8 Motion-Picture Film

ANSI PH22.165-1981, Dimensions for 35-mm Motion-Picture Film Perforated 8-mm Type S, 5R (1-3-5-7-0)

ANSI PH22.182-1978 (R1984), Dimensions for Photographic Sound Record on 8-mm Type S (Super 8) Motion-Picture Prints

3. Dimensions

3.1 The dimensions shall be as given in the figure and table.

3.2 Dimensions A, B, and H apply to all images. The differences in values from the reference perforation, Dimensions B through L, excluding H,

establish the minimum area to be printed. For convenience, and to avoid unnecessary addition and subtraction in applying this standard, a reference dimension of 0.311 in (7.90 mm) from the positioning perforation is suggested.

Note 1: The vertical Dimension B of the reduced 8-mm type S image of the original camera aperture image should be nominally centered on the horizontal centerline of the perforation although the exact location will be determined by Dimension H and its tolerance.

Note 2: The direction of film travel shown in the figure is to aid in illustrating the minus-2 perforation and is the direction of motion in the projector for the resulting 8-mm print if the figure is as seen from the light source of a projector used for direct front projection.

Note 3: If photographic audio is to be applied to the print, it is necessary to consider the required compatibility between this standard and ANSI PH22.182-1978, and the strong trade preference that a clear septum not appear between the edge of the printed picture and the edge of the printed track. Both standards allow overlap (double) printing of adjacent areas of the printed picture and printed track without permitting undesirable incursions of one area into the unrestricted area of the other. A suggested value of 0.0015 in (0.038 mm) less than maximum may be used until the values are established.

Appendix

(The Appendix is not a part of this American National Standard, but is included for information purposes only.)

A1. If prints are made with a step printer, the registration device should be in the —2 perforation, or that perforation which corresponds to the —2 perforation, when the final print stage is reached, to obtain maximum benefit of cancellation as films are projected in accordance with ANSI PH22.55-1982, which specifies the —2 position for projected films.

A2. The position numbers appearing in the scope of this standard specify how the rows of perforations are placed on the film. This designation is necessary only when the

film stock is wider than its end use and more than one combination of perforation rows is possible. The perforation rows are numbered starting at the reference edge, which is the edge nearest that row of perforations which is retained in the slitting operation. The row of perforations which is discarded is given the number 0. Negative or intermediate films which are not slit may contain a 0-numbered row of perforations if that perforated row corresponds to the discard row of perforations on the subsequent print stock.

American National Standard motion-picture film (8-mm type S)— printed areas— 16-mm film perforated 8-mm type S (1-3)

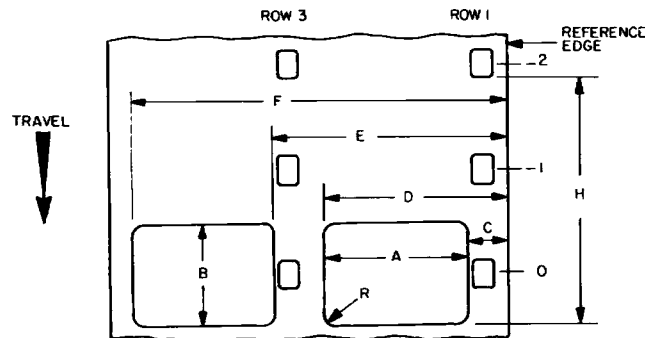
Approved November 13, 1985

Sponsor: Society of Motion Picture and Television Engineers

Page 1 of 2 pages

1. Scope

This standard specifies the location and size of the 8-mm type S printed picture areas for negative/positive and reversal printing on 16-mm motion-picture film perforated 8-mm type S, 2R-1667 and 2R-1664 in positions 1 and 3.



Dimensions	Inches	Millimeters
A	0.228 ref	5.79 ref
B	0.163 min	4.14 min
C	0.058 max	1.47 max
D*	0.282 min	7.16 min
E	0.372 max	9.45 max
F*	0.596 min	15.14 min
H†	0.393 ± 0.002	9.98 ± 0.05
R	0.005 max	0.13 max

*See Note 4.

†See Note 3 and Appendix A1.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of publication. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute. Printed in USA

Copyright © 1985 by the Society of Motion Picture and Television Engineers. Reprinted by permission.

 American National Standards Institute, 1430 Broadway, New York, N.Y. 10018

Page 2 of 2 pages

2. Reference Standards

The following American National Standards are intended to be used in conjunction with this standard:

ANSI PH22.151-1981, Dimensions for 16-mm Film Perforated 8-mm Type S (Super 8) (1-3)

ANSI PH22.155-1982, Motion-Picture Film (8-mm Type S)—Projector Usage

ANSI PH22.157-1971 (R1984), Dimensions of Camera Aperture Image on Super 8 Motion-Picture Film

ANSI PH22.182-1978 (R1984), Dimensions for Photographic Sound Record on 8-mm Type S (Super 8) Motion-Picture Prints

3. Dimensions

3.1 The dimensions shall be as given in the figure and table.

3.2 Dimensions A, B, and H apply to all images. The differences in values from the reference perforation, Dimensions B through F, establish the minimum area to be printed. For convenience, and to avoid unnecessary addition and subtraction

tion in applying this standard, a reference dimension of 0.311 in (7.90 mm) from the positioning perforation is suggested.

Note 1: The reduction ratio of prints made from 16-mm negatives or reversal originals shall be approximately 1.8:1. The correct ratio is controlled by Dimensions C through F.

Note 2: The vertical Dimension B of the reduced 8-mm Type S image of the original camera aperture image should be nominally centered on the horizontal centerline of the perforation although the exact location will be determined by Dimension H and its tolerance.

Note 3: The direction of film travel shown in the figure is to aid in illustrating the minus-2 perforation and is the direction of motion in the projector for the resulting 8-mm print if the figure is as seen from the light source of a projector used for direct front projection.

Note 4: If photographic audio is to be applied to the print, it is necessary to consider the required compatibility between this standard and ANSI PH22.182-1978, and the strong trade preference that a clear septum not appear between the edge of the printed picture and the edge of the printed track. Both standards allow overlap (double) printing of adjacent areas of the printed picture and printed track without permitting undesirable incursions of one area into the unrestricted area of the other. A suggested value of 0.0015 in (0.038 mm) more than minimum may be used until the values are established.

Appendix

(The Appendix is not a part of this American National Standard, but is included for information purposes only.)

A1. If prints are made with a step printer, the registration device should be in the —2 perforation, or that perforation which corresponds to the —2 perforation, when the final print stage is reached, to obtain maximum benefit of cancellation as films are projected in accordance with ANSI PH22.55-1982, which specifies the —2 position for projected films.

A2. The parenthetical numerals have been added to the title of this standard to specify how the rows of perforations are placed on the film. This designation is necessary

only when the film stock is wider than its end use and more than one combination of perforation rows is possible. The perforation rows are numbered starting at the reference edge, which is the edge nearest to that row of perforations which is retained in the slitting operation. The row of perforations which is discarded is given the number 0. Negative or intermediate films which are not slit may contain a 0-numbered row of perforations if that perforated row corresponds to the discard row of perforations on the subsequent print stock.