

Errata and Lacunae

In chronological *Journal* order, there is given below information to correct or supply data regrettably not properly given in the original *Journal* publication.

JANUARY

On p. 27, col. 1 and 3, the author's name

For: IKUE FUJIMURA

Read: IKUO FUJIMURA

MAY

On pp. 377-379

For: (Fig. 20) through (Fig. 29)

Read: (Fig. 21) through (Fig. 30)

On p. 410

Add: 238. New Prod., *Journal*, 73:74, Jan. 1964.

On p. 411

Add: **Roster of the Subcommittee for**

"Considerations in Color Film

Production for Color Television

E. Ancona

V. J. Duke

K. D. Erhardt

F. H. Gerhardt

A. Haines

W. R. Holm

J. J. Kowalak

H. N. Kozanowski

A. J. Miller

R. M. Morris

W. E. Pohl

R. E. Putnam

A. Quiroga

E. H. Reichard

F. J. Scobey

C. Smith

T. G. Veal

J. R. Whittaker

JUNE, PART II

On p. 5

For: ROBERT C. RHEINCK

Read: ROBERT C. RHEINECK

On p. 33

For: **Byrne, John A.**, etc.

Read: **Byrne, John P.**, Mot.-Pic. Sensitometrist, Army Pictorial Center, Mail: 41-37 49th St., Long Island City 4, N.Y. (M)

On p. 101

For: **Mole-Richardson Co.**, etc.

Read:

Mole-Richardson Co., 937 North Sycamore Ave., Hollywood, Calif. 90038

Since its founding by Peter Mole, in Hollywood, in 1927, Mole-Richardson has devoted all of its research and manufacturing facilities to the production of lighting and power equipment designed to satisfy the needs of the motion-picture, television, and studio photographic industries. Today, Mole-Richardson products are sold and serviced around the world. The Company has a continuous program to improve and develop new techniques of design and manufacture to meet the challenges of these industries. Its equipment includes Solarspots, the new Molequartz line, Molarcs and Moleffects with all their related accessories, including lighting controls, hanging devices, pedestals, power distribution equipment and cables. Our increasing line of related supplies includes Carbons, Globes, Floor and Peel Paste, Blood, MacBeth Filters, Gelatine and Acetate, Scrim Materials, and even Books.

Address inquiries to: Warren K. Parker, President, *at the address above.*

standards and recommended practices

Proposed American Standards

Three Proposed American Standards are published here for a trial period and public review. Comments should be addressed to Alex E. Alden, Staff Engineer, at Society Headquarters prior to October 12. If no adverse criticism is received by that date, the proposed standards will be submitted to ASA Sectional Committee PH22 for further processing.

PH22.20, Dimensions of 8mm Motion-Picture Projected Image, is a proposed revision of the 1957 issue differing primarily in an editorial manner to conform in style and format with more recent standards. It should be noted, however, that this proposal does differ in the method of specifying the positioning of the projected image in respect to the perforation holes.

Two proposals which do differ somewhat from the earlier versions are PH22.24, which previously specified a 16mm splice, and PH22.77 an 8mm splice. In these proposals the 8 and 16mm splices have been combined and the two proposals divided again, but into the intended usage of the splice. PH22.24, Dimensions of Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Projection Type, specifies a 100-mil splice intended for projector usage. PH22.77, Dimensions of Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Laboratory Type, specifies a narrower 70-mil splice intended for preprint material and laboratory usage.—A.E.A.

8mm Motion-Picture Projected Image

PH22.20

Revision of
PH22.20-1957

Appendix

(This Appendix is not a part of Proposed American Standard Dimensions of 8mm Motion-Picture Projected Images, PH22.20, but is included to facilitate its use.)

A1. Dimensions A, B and R

Dimensions A, B and R apply to the portion of the image on the film that is to be projected; the actual opening in the aperture plate has to be slightly smaller. The exact amount of this difference depends on the lens used and on the separation of the emulsion and the physical aperture. To minimize the difference in size and make the image of the aperture as sharp as practicable on the screen, this separation should be no larger than is necessary to preclude scratching of the film. When the reduction in size from the image to the actual aperture is being computed, it is suggested a 1-in. f/1.6 lens be assumed, unless there is reason for doing otherwise.

A2. Limiting Aperture

The limiting aperture is usually between the film and the light source, so that it will give the maximum protection from heat. If other factors are more important, it may be on the other side of the film.

A3. Edge Guide

In 8mm projectors, the edge guide should bear on the

film edge adjacent to the perforations. The other film edge usually is slit after processing, and so is more likely to weave laterally with respect to the pictures.

The value of Dimension D has been chosen so that film having a slight shrinkage when it is projected will be properly centered. This is the normal condition.

A4. Dimensions F and H

Dimensions F and H are measured along the path of the film from the top and bottom of the image area, formed on the film by the aperture, to the stopping position of the registration device. It is customary to provide a framing movement of approximately 0.025 in. (0.64mm) above and below this nominal position. For any given projector, the perforation used for the film registration device need not necessarily be the one shown. In such cases, Dimensions F and H will have to be adjusted to suit, but at all times the relationship must be maintained.

If the film does not stop exactly where the film registration device leaves it, because of coating or some other cause, a slight adjustment of the values of Dimensions F and H will be necessary.

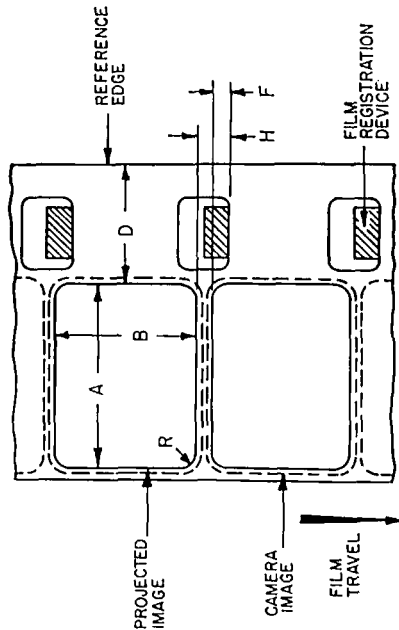


Figure shows arrangement seen from inside projector for lamphouse, looking toward the lens.

Dimensions*	Inches	Millimeters
A	0.172 ± 0.001	4.37 ± 0.03
B	0.129 ± 0.001	3.28 ± 0.03
D	0.119 ± 0.002	3.02 ± 0.05
F	0.012 max	0.30 max
H	0.038 min	0.97 min
R	0.010 max	0.25 max

* See Appendix.

1.2 Exceptions. Since 8mm prints are made by several methods, the image area on the film, designated as "camera image" in the figure, can differ in size from that shown. For this reason, this standard does not apply to 8mm prints made by continuous optical reduction methods.

2. Dimensions

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

2.2 Vertical Angle. The angle between the vertical edges of the image and the edges of normally positioned film shall be $0^\circ \pm \frac{1}{2}^\circ$.

2.3 Horizontal Angle. The angle between the horizontal edges of the image and the edges of normally positioned film shall be $90^\circ \pm \frac{1}{2}^\circ$.

1. Scope

1.1 Specifications. This standard specifies the dimensions of the projected image and the relative position of the aperture producing this image, the reference edge, and the film registration device for 8mm motion-picture projectors. The location of the perforations is based on dimensions given in American Standard Dimensions for 8mm Motion-Picture Film, PH22.17-1954.

Proposed American Standard Dimensions of

Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Projection Type

PH22.24

Revision of
PH22.24-1952

Appendix

(This Appendix is not a part of Proposed American Standard Dimensions of Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Projection Type, PH22.24, but is included to facilitate its use.)

A1. Dimension A

Dimension A is given a negative, but no positive, tolerance, because narrower splices are less conspicuous on the screen and are less likely to affect the normal curvature of the film as it follows the bends in its path through cine-machinery.

A2. Dimension B

Dimension B controls the longitudinal registration of the two films being spliced. It is measured to the perforations that are most commonly used for registration on splicing blocks, and to the nearer edges of these perforations, because they are edges that are generally used for the registration.

A3. Orienting the Films

In the plan view, the splice is arranged with the perforations at the bottom, in order to show them as they appear on most splicers. It is desirable to orient the films in splicing so that a magnetic head scanning the film would, at a splice, drop down onto the trailing film rather than bump up onto it.

A4. Preventing White Line

In order to prevent the appearance of a white line on the screen, the scraped area should be 0.001 to 0.003 in. narrower than the area covered by the overlapping film. Presence of this narrow uncemented area will not shorten the life of the splice.

1.2 Laboratory and Professional Uses. The narrower splices used for laboratory and professional purposes are covered by Proposed American Standard Dimensions of Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Laboratory Type (revision of PH-22.77-1952).

1.3 Excepted Splicers. It is not intended that this standard be prejudicial to diagonal, scarf or tape splicers.

2. Dimensions

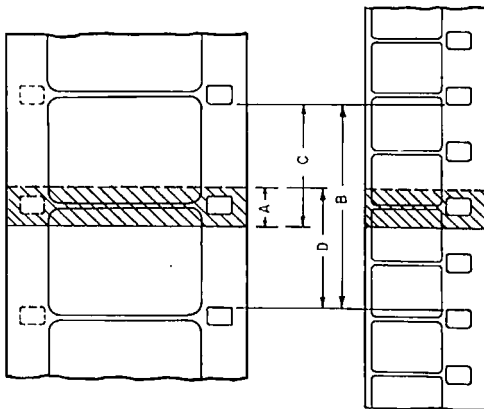
2.1 Specifications. The dimensions shall be as given in the figure and table.

2.2 Film Width at Splice. Film width at the splice shall not exceed 0.317 in. for 8mm film and 0.630 in. for 16mm film. If the film has been widened during scraping, the extra width shall be removed.

2.3 Lateral Offset for Perforation Overlap. Perforation overlapping shall not be offset laterally by more than 0.002 in.

2.4 Lateral Offset for Film Edges. Edges of the two spliced films shall not be offset laterally by more than 0.002 in., unless a difference in the lateral shrinkages of the two strips makes it impossible to maintain the tolerance. Shoulders formed by such misalignment shall be beveled after the cement has dried.

2.5 Angle Between Edges. In the plan view, the angle between the respective edges of the spliced films shall be $180^\circ \pm 4'$. Thus, the spliced film shall be aligned to the extent that, when one portion of the film is placed against a straight edge, the other portion will not deviate more than 0.006 in. (approximate film thickness) in 6 in.



Dimensions	Inches	Millimeters
A	0.100 + 0.000 - 0.005	2.54 + 0.00 - 0.13
B	0.548 ± 0.001	13.92 ± 0.03
C	0.324 ± 0.000 - 0.003	8.23 ± 0.00 - 0.08
D	0.324 ± 0.000 - 0.003	8.23 ± 0.00 - 0.08
E	0.012 max	0.30 max

Tolerances shown are not to be cumulative.

1. Scope

1.1 Specifications. This standard specifies the dimensions of transverse cemented splices on 16mm and 8mm motion-picture film primarily intended for projection such as release prints and reversal films.

Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Laboratory Type

PH22.77
Revision of
PH22.77-1952

Appendix

(This Appendix is not a part of Proposed American Standard Dimensions of Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Laboratory Type, PH22.77, but is included to facilitate its use.)

A3. Orienting the Films

It is desirable to orient the films in splicing so that a magnetic head scanning the film would, at a splice, drop down onto the trailing film rather than bump up onto it.

A1. Dimension B

Dimension B controls the longitudinal registration of the two films being spliced. It is measured to the perforations that are most commonly used for registration on splicing blocks, and to the nearer edges of these perforations because they are edges that are generally used for the registration.

A4. Preventing White Line

In order to prevent the appearance of a white line on the screen, the scraped area should be 0.001 to 0.003 in. narrower than the area covered by the overlapping film. Presence of this narrow uncemented area will not shorten the life of the splice.

A2. Dimensions C and D

Dimensions C and D were chosen to give a splice which has one edge along the frame line. This provides the so-called "invisible splice" when printing "A" and "B" rolls of original photography.

Page 1 of 2 pages

1.2 Splices Specified Elsewhere. The wider reversal films are covered by Proposed American Standard Dimensions of Transverse Cemented Splices on 16mm and 8mm Motion-Picture Film, Projection Type (revision of PH22.24-1952).

1.3 Excepted Splicers. It is not intended that this standard be prejudicial to diagonal, scarf or tape splicers.

2. Dimensions

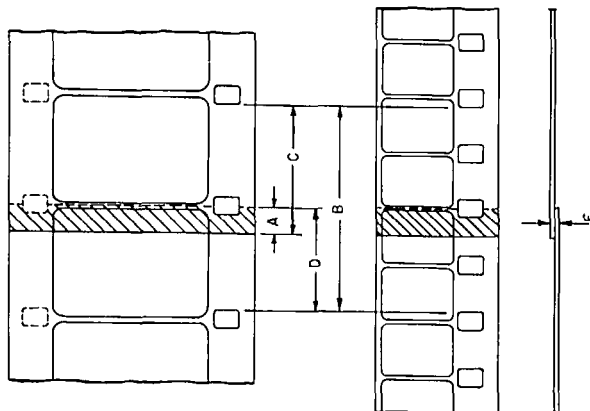
2.1 Specifications. The dimensions shall be as given in the figure and table.

2.2 Film Width at Splice. Film width at the splice shall not exceed 0.317 in. for 8mm film and 0.630 in. for 16mm film. If the film has been widened during scraping, the extra width shall be removed.

2.3 Lateral Offset for Perforation Overlap. Perforation overlapping shall not be offset laterally by more than 0.002 in.

2.4 Lateral Offset for Film Edges. Edges of the two spliced films shall not be offset laterally by more than 0.002 in., unless a difference in the lateral shrinkages of the two strips makes it impossible to maintain the tolerance. Shoulders formed by such misalignment shall be beveled after the cement has dried.

2.5 Angle Between Edges. In the plan view, the angle between the respective edges of the spliced films shall be $180^\circ \pm 4'$. Thus, the spliced film shall be aligned to the extent that, when one portion of the film is placed against a straight edge, the other portion will not deviate more than 0.006 in. (approximate film thickness) in 6 in.



Dimensions	Inches	Millimeters
A	0.070 ± 0.003	1.78 ± 0.08
B	0.548 ± 0.001	13.92 ± 0.03
C	0.344 ± 0.003	8.74 ± 0.08
D	0.274 ± 0.000	6.96 ± 0.00
E	0.012 max	0.30 max

Tolerances shown are not to be cumulative.

1. Scope

1.1 Specifications. This standard specifies the dimensions of Transverse Cemented Splices on 16mm and 8mm motion-picture film primarily intended for use in laboratory and professional applications.