

SMPTE STANDARD

SMPTE 195-2000

Revision of
ANSI\SMPTE 195-1993

for Motion-Picture Film (35-mm) — Motion-Picture Prints — Projectable Image Area



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1 Scope

1.1 This standard specifies the maximum dimensions of the film image area intended for projection from a 35-mm motion-picture film and the placement of this area relative to the perforations and the reference edge of the film.

1.2 This standard specifies three types of image areas intended for theatrical projection (see A.4):

- Style A: General theatrical release prints commonly referred to as nonanamorphic or wide screen;
- Style B: Theatrical release prints with an anamorphic image;
- Style C: Classic theatrical prints.

2 Dimensions

The dimensions shall be as given in figure 1 and table 1.

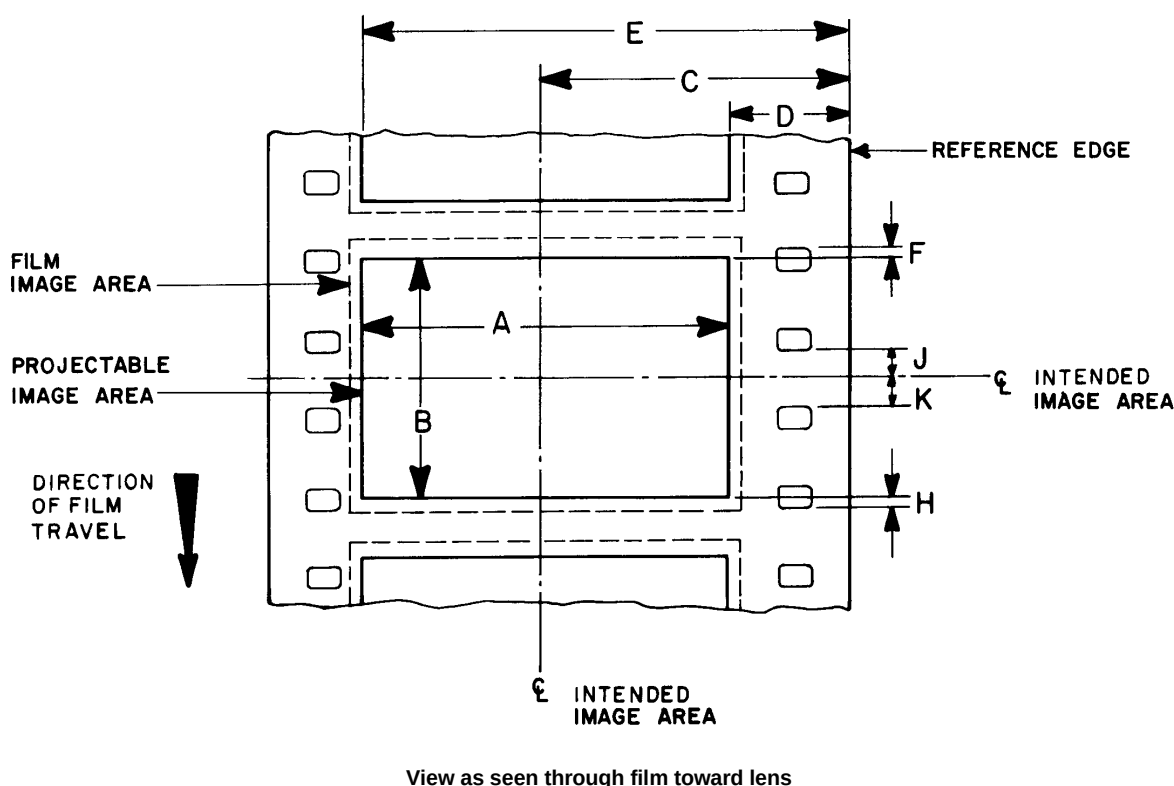


Figure 1 – Projectable image area

Table 1 – Dimensions

Dimensions	Inches	Millimeters
A	0.825 nom	20.96 nom
B (style A)	0.446 min 0.500 max	11.33 min 12.70 max
B (style B)	0.690 max	17.53 max
B (style C)	0.602 nom	15.29 nom
C*	0.738 ref	18.75 ref
D	0.324 min	8.23 min
E	1.151 max	29.24 max
F = H	within 0.012	within 0.30
J = K	nominally equal	nominally equal
*See A.1.		

NOTES

1 Projector aperture

Dimensions B, D, and E define the image area on the film that is available for projection. They do not define the opening in the projection aperture plate. The size of this opening may differ from dimensions A and B, for example, because of the physical separation necessary between the aperture plate and the film to avoid scratching the film, the slant of the marginal rays accepted by the projection lens, etc.

2 Actual projected area

It is recognized that, in many cases, the actual film image area that is projected may be smaller than the

projectable maximum and, in some cases, may be nonrectangular (for example, an irregular four-sided figure bound by either straight or curved lines). Such departures may result from equipment considerations, such as slight inconsistencies among lenses, screen sizes, etc.; from geometric limitations such as the screen surface being at an angle other than 90° from the projection axis, or being nonplanar or both; and from aesthetic considerations such as pictorial composition within more restrictive image limits. In the absence of specific instructions to the contrary, it is intended that the actual projected film image area be the largest appropriately-shaped figure that can be inscribed within the specified dimensions.

Annex A (informative)
General information

A.1 Centerlines

The centerlines of the image area are given for convenience in interpreting the standard, facilitating such applications as the optical design of equipment, and assisting in the understanding of suitable mechanical embodiments related to projectable image area. Note that the centerline of the projectable image area is displaced from the centerline of the film by 0.050 in (1.27 mm) nominal.

A.2 Related standards

SMPTE 59 and ANSI/SMPTE 111 define image areas for other important phases of motion-picture operations and are

consistent with this standard and with one another under currently acceptable commercial practices.

A.3 Image area for television

It is recognized that home television receivers are adjusted to show a distribution of picture sizes ranging downward from the maximum. Guides to picture composition, based upon a statistical survey of receivers in use, are presented in SMPTE RP 27.3. Note that some portion of the audience will see the entire transmitted area, but for certainty in presentation of critical information over broadcast television, such information should be confined to a smaller, central area.