International Standard ISO 2907

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Cinematography — Maximum projectable image area on 35 mm motion-picture film — Position and dimensions

Cinématographie — Surface maximale projetable pour une image sur film cinématographique 35 mm *— Position et dimensions*

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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

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It has been approved by the member bodies of the following countries:

Australia	Germany, F.R.	Sweden
Belgium	Italy	United Kingdom
Canada	Korea, Dem. P. Rep. of	USA
Czechoslovakia	Mexico	
France	Poland	

The member body of the following country expressed disapproval of the document on technical grounds:

USSR

This second edition cancels and replaces the first edition (i.e. ISO 2907-1972).

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Cinematography — Maximum projectable image area on 35 mm motion-picture film — Position and dimensions

1 Scope and field of application

This International Standard specifies the position and dimensions for the maximum projectable image area on 35 mm motion-picture prints with rectilinear (non-anamorphic) pictures and anamorphic pictures requiring a lateral expansion ratio of 2 : 1 and an aspect ratio of 2,35 : 1.

2 Dimensions

The dimensions shall be as shown in the figure and given in table 1; they apply to measurements of the maximum projectable image area on a recently exposed and processed motion-picture print.

NOTE — It is recognized that, in many cases, the actual film image area that is projected may be smaller than the maximum projectable image area. It is intended that the actual projected image area be the largest appropriately shaped figure that can be inscribed within the specified dimension.

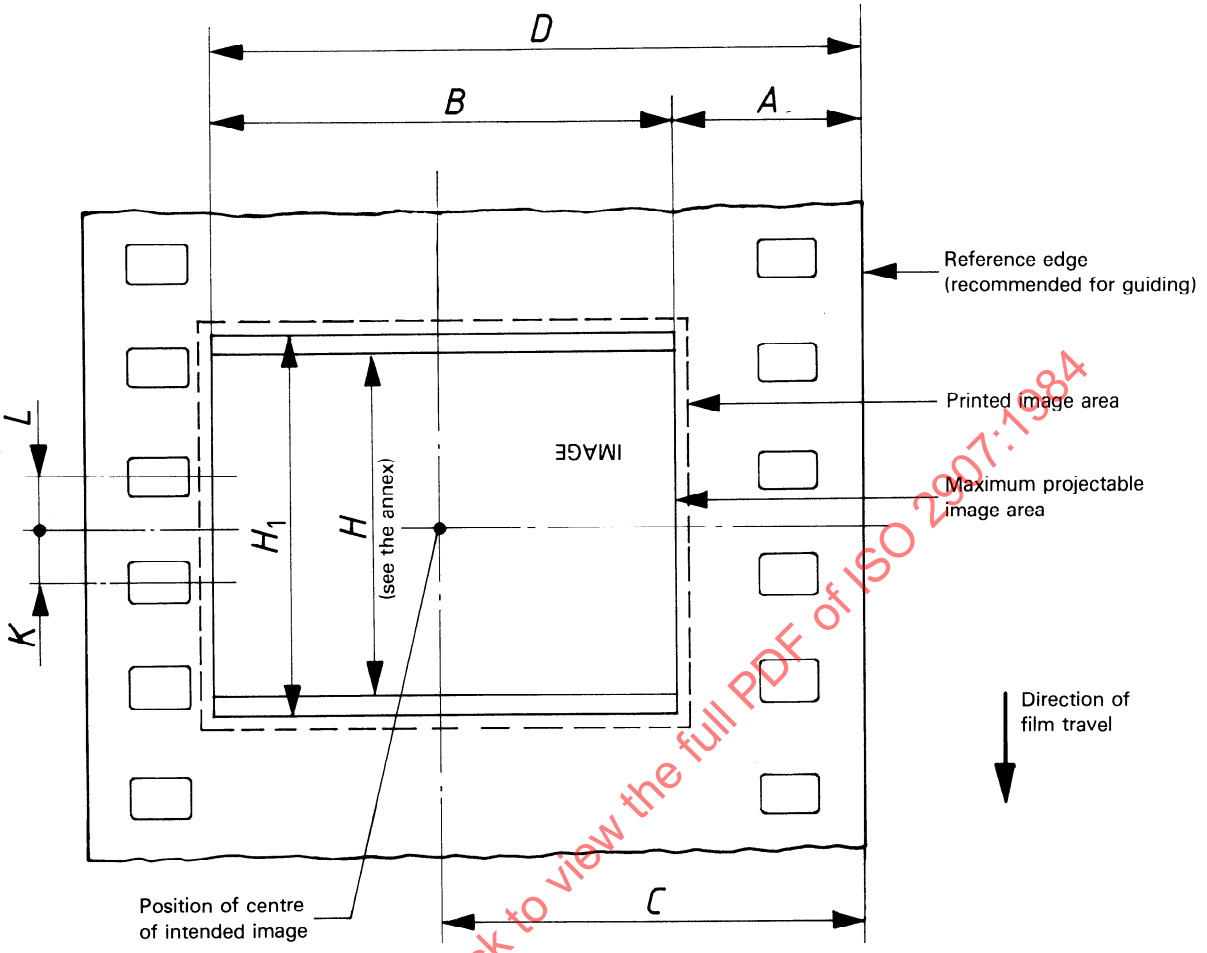

Figure — Maximum projectable image area
(the film is shown as seen from inside the projector looking towards the lens)

Table 1 — Dimensions

Dimension	Non-anamorphic pictures		Anamorphic pictures	
	mm	in	mm	in
A min.	8,20	0.323	8,10	0.319
*B** nominal	21,11	0.831	21,29	0.838
C nominal	18,75	0.738	18,75	0.738
D max.	29,31	1.154	29,39	1.157
H_1 max.	15,29	0.602	18,21	0.717
K and *L***				

* *B* is a derived value given for information

** *K* and *L* shall be approximately equal.

Annex

Projectable image height and image steadiness

(This annex forms part of the standard.)

A.1 Projectable image height

For aesthetic and practical reasons, theatrical projection may present 35 mm images in such a manner that the actual projected area is less than the maximum projectable area. Photography intended for theatrical exhibition recognizes this, and may be composed for more elongated rectangular formats. Several aspect ratios for the final projected picture of non-anamorphic prints are recognized through usage. (See table 2.)

A.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. 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. It is intended that the actual projected film image area be the largest appropriately-shaped figure that can be inscribed within the specified dimensions.

NOTE — In each case, it is intended that the projected area be symmetrically located about the horizontal centreline of the maximum projectable area.

Table 2 — Projectable image height, H of a non-anamorphic print

Aspect ratio	Image height H	
	mm (nominal)	in (nominal)
1,85 : 1	11,33	0.446
1,75 : 1	11,96	0.471
1,66 : 1	12,62	0.497
1,37 : 1	15,29	0.602

A.3 Image steadiness

Image steadiness can be improved if the reference edge is also the guided edge.

Bibliography

ISO 23, *Cinematography — Camera usage of* 35 mm *motion-picture film — Specifications.*

ISO 358, *Cinematography — Maximum aspect ratio of projector aperture for projection of* 35 mm *non-anamorphic motion-picture film — Specifications.*

ISO 491, Cinematography — 35 mm *motion-picture film and magnetic film — Cutting and perforating dimensions.*

ISO 2906, *Cinematography — Image area produced by camera aperture on* 35 mm *motion-picture film — Position and dimensions.*

ISO 2939, *Cinematography — Picture image area and photographic sound record on* 35 mm *motion-picture release prints — Positions and dimensions.*

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