
SMPTE STABLE DOCUMENT



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The SMPTE Operations Manual for Standards states:

A document should be stabilized if it is believed to be substantially correct, does not contain harmful or misleading recommendations, may still be relevant to equipment or practices in use, is stable, but does not represent current technology, and need not be subject to future reviews.

A Stable document shall still be made available and offered for sale by the Society, but it shall be prefaced by a cover page explaining its current status.

At any time, a Technology Committee may revise, amend, or otherwise initiate a new Project on a Stable document.

A Stable document is “In Force”, and not deprecated or withdrawn.

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Note:

SMPTE “Stable” documents were previously described as “Archived” and the attached document may be marked as “Archived”. The status of a SMPTE document described as “Archived” is exactly as described above for a “Stable” document.

Stable documents may not adhere to the latest style and format of SMPTE documents, or to current usage of normative language. Suitable care should be taken in interpretation.

SMPTE RECOMMENDED PRACTICE

RP 65-2000

 Revision of
RP 65-1995

Motion-Picture Enlargement/Reduction Ratios



Page 1 of 3 pages

1 Scope

This practice specifies the enlargement/reduction ratios to be used in copying motion pictures from one film size to another while maintaining the aspect ratio and composition of the original film.

This practice also specifies the dimensions of the projectable image area on the resulting copy, and gives the dimensions for a matte which produces an opaque border on the final projection copy. Also specified are dimensions for camera viewfinder marks which can be used in composing the original photography for the copy format.

2 Ratios and dimensions

The enlargement/reduction ratios and dimensions shall be as given in the tables. All table dimensions are in inches. The centers of the original image, the projectable image area, the matte, the viewfinder marks, and the copy image shall all be coincident with the center of the copy format as given in the appropriate referenced standard. When a matte dimension is not given, no matte is required in that direction since the copied image fills the standard image dimension of the copy format.

Table 1 – Reduction from 35-mm to 16-mm

From 35-mm projection format to 16-mm projection format		1.37:1 1.37:1	1.66:1 1.66:1	1.85:1 1.85:1
Reduction ratio		0.461 ± 0.002	0.461 ± 0.002	0.461 ± 0.002
Projectable image on 16-mm copy	Width	0.380 ref	0.380 ref	0.380 ref
	Height	0.278 nom	0.229 nom	0.206 nom
Matte on 16-mm copy	Height		0.229 + 0.005 – 0.0	0.206 + 0.005 – 0.0
Viewfinder marks for original	Width	0.825 ref	0.825 ref	0.825 ref
	Height	0.602 ref	0.497 ref	0.446 ref

Table 2 – Enlargement from 16-mm to 35-mm

From 16-mm projection format to 35-mm projection format		1.33:1 1.33:1
Enlargement ratio		2.105 ± 0.002
Projectable image on 35-mm copy	Width	0.800 nom
	Height	0.602 ref
Matte on 35-mm copy	Width	0.800 + 0.010 – 0.0
Viewfinder marks for original	Width	0.380 ref
	Height	0.286 ref