

# Cinematography — Picture areas for motion-picture films and slides for television — Position and dimensions

## 1 Scope and field of application

This International Standard defines those areas of the images on 35 mm, 16 mm and 8 mm Type S motion-picture films and on 5 cm x 5 cm slides, which are transmitted by television, together with the safe action and title areas within which any pictorial or written matter may be expected to be received on a domestic television receiver. It applies to non-anamorphic images of 4 : 3 ratio.

## 2 References

- ISO 68, *Cinematography — 16 mm motion-picture raw stock film — Cutting and perforating dimensions.*
- ISO 466, *Cinematography — Image produced by 16 mm motion-picture camera aperture — Positions and dimensions.*
- 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 3645, *Cinematography — Image area produced by 8 mm Type S motion-picture camera aperture and maximum projectable image area — Positions and dimensions.*

## 3 Definitions

**3.1 transmitted area:** The area of the image on film or slide which is transmitted from the television station.  
 NOTE — The viewed area: It is recognized that the actual image area that is viewed will be smaller than the transmitted area. It is, however, intended that the area displayed by the receiver matches as closely as possible the transmitted area.

**3.2 action area:** The area on the film or slide within which pictorial matter may be composed, and which may reasonably be expected to be reproduced on a domestic receiver.

NOTE — In slides, the picture is so composed that the slide is used with the larger dimension of the action area horizontal.

**3.3 safe title area:** The area on the film or slide within which all essential information, such as titles, should be composed and may reasonably be expected to be reproduced on a domestic receiver.

NOTE — In slides, the written matter is so composed that the slide is used with the larger dimension of the safe title area horizontal.

## 4 Dimensions

NOTE — All dimensions given in Imperial units are shown in the annex.

### 4.1 Transmitted area

The dimensions of the transmitted areas of the images on 35 mm, 16 mm and 8 mm Type S films and on 5 cm x 5 cm slides are given in table 1 and illustrated in figures 1, 2, 3 and 4 respectively.

### 4.2 Action area

The dimensions of the action area on 35 mm, 16 mm and 8 mm Type S films and on 5 cm x 5 cm slides are given in table 1 and illustrated in figures 1, 2, 3 and 4 respectively.

NOTE — The dimensions of the action area were calculated by multiplying the transmitted area width by 0.675, 0.900 and 0.180, for the height, width and corner radius respectively.

### 4.3 Safe title area

The dimensions of the safe title area on 35 mm, 16 mm and 8 mm Type S films and on 5 cm x 5 cm slides are given in table 1 and illustrated in figures 1, 2, 3 and 4 respectively.

NOTE — The dimensions of the safe title area were calculated by multiplying the transmitted area width by 0.600, 0.800 and 0.160 for the height, width and corner radius respectively.

## 5 Positions

**5.1** On 35 mm, 16 mm and 8 mm Type S film, the horizontal and vertical centrelines of the transmitted area, action area, and safe title area coincide with the corresponding centrelines of the 35 mm, 16 mm and 8 mm Type S camera image as defined in ISO 2906, ISO 466 and ISO 3645 respectively.

**5.2** On slides, the horizontal and vertical centrelines of the transmitted area, action area and safe title area coincide with the corresponding centrelines of a 5 cm x 5 cm slide.

Table 1 — Dimensions

Dimensions	mm			
	35 mm film	16 mm film	8 mm Type S film	5 cm x 5 cm slides
A	15.10 ± 0.10	7.00 ± 0.05	3.90 ± 0.05	21.50 ± 0.20
B	20.12 ± 0.10	9.35 ± 0.05	5.20 ± 0.05	28.60 ± 0.20
C ref.	18.75 ± 0.05	7.98 ± 0.05	4.32	25.4 ± 0.2
D max.	13.6	6.3	3.50	19.3
E max.	18.1	8.4	4.70	25.7
F min.	3.6	1.7	0.95	5.1
G max.	12.1	5.6	3.10	17.2
H max.	16.1	7.5	4.20	22.8
J nom.	3.2	1.5	0.85	4.6

NOTE — In some instances, the values of the metric dimensions are not exact conversions of the inch dimensions shown in the annex.

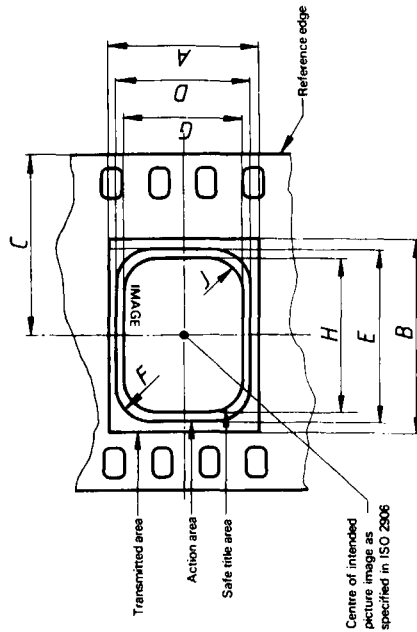


Figure 1 — Image area on 35 mm motion-picture film for television

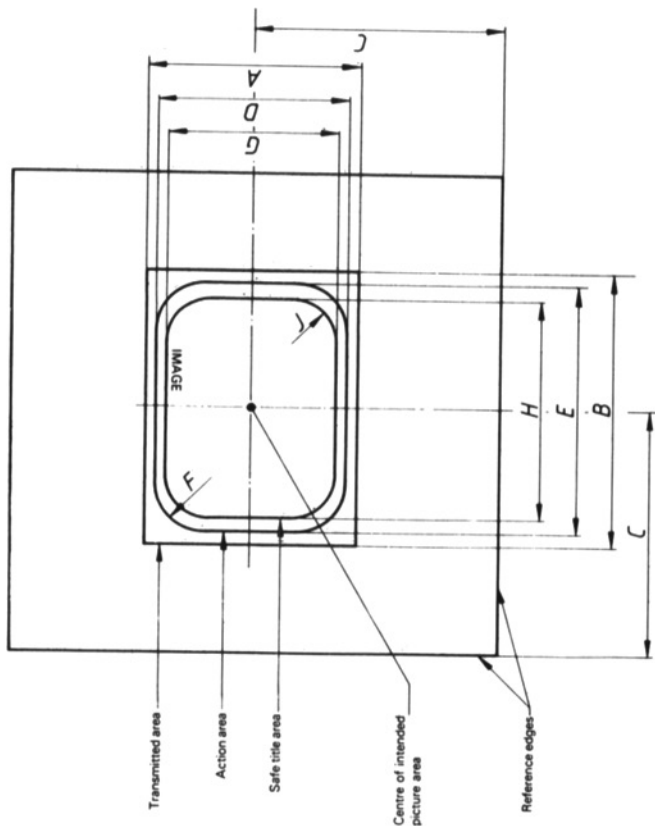


Figure 4 — Image area on 5 cm x 5 cm (2 in x 2 in) slides for television

Annex

Additional data

(This annex does not form part of the standard.)

Table 2 — Inch dimensions

Dimensions	in		
	35 mm film	16 mm film	8 mm Type S film
A	0.594 ± 0.004	0.276 ± 0.002	0.154 ± 0.002
B	0.792 ± 0.004	0.368 ± 0.002	0.205 ± 0.002
C ref.	0.738 ± 0.002	0.314 ± 0.002	0.170
D max.	0.54	0.25	0.138
E max.	0.71	0.33	0.185
F min.	0.1	0.1	0.037
G max.	0.48	0.22	0.122
H max.	0.63	0.29	0.166
J nom.	0.13	0.06	0.033
			2 in x 2 in slides
			0.846 ± 0.008
			1.126 ± 0.008
			1.0 ± 0.008
			0.78
			1.01
			0.2
			0.68
			0.666
			0.18

NOTE — The inch dimensions follow the practice of those countries using the Imperial system.

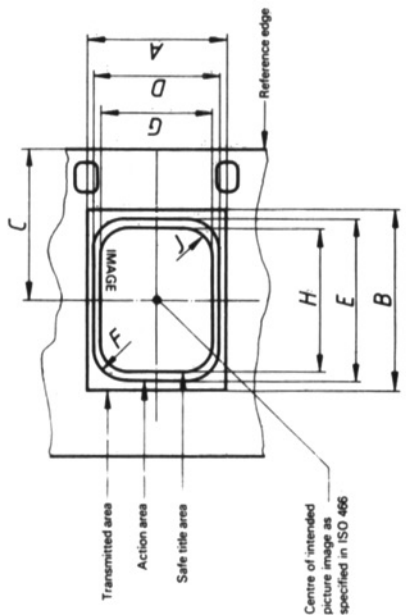


Figure 2 — Image area on 16 mm motion-picture film for television

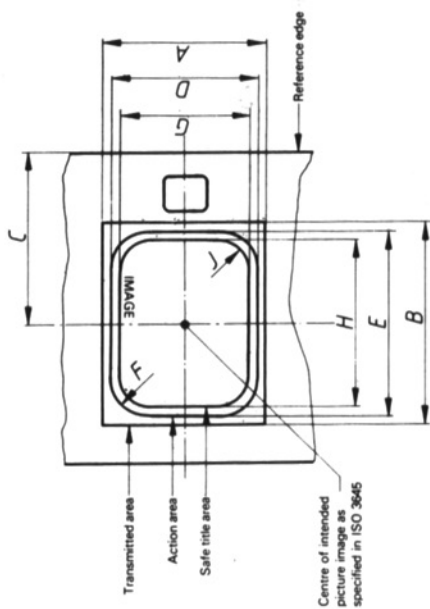


Figure 3 — Image area on 8 mm Type S motion-picture film for television