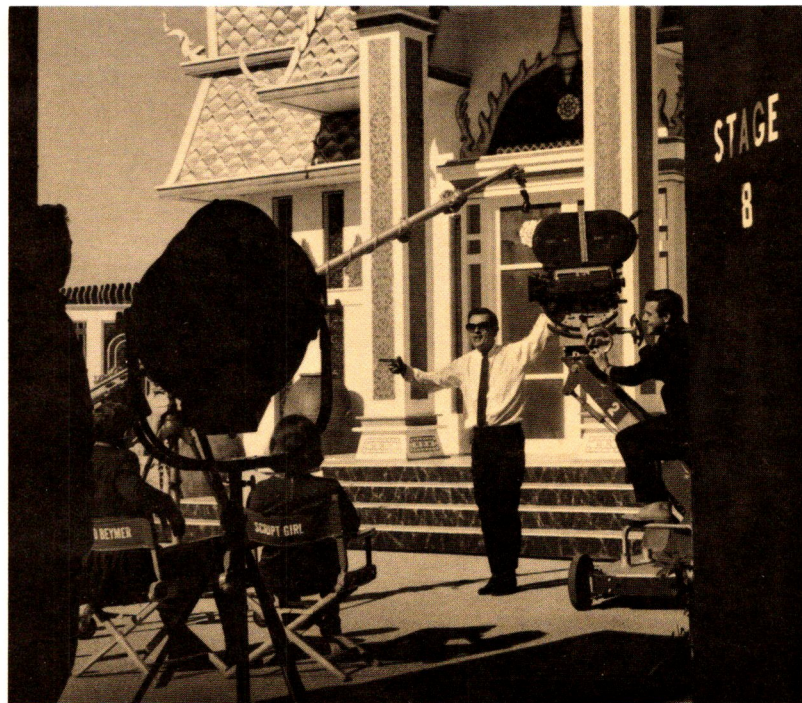
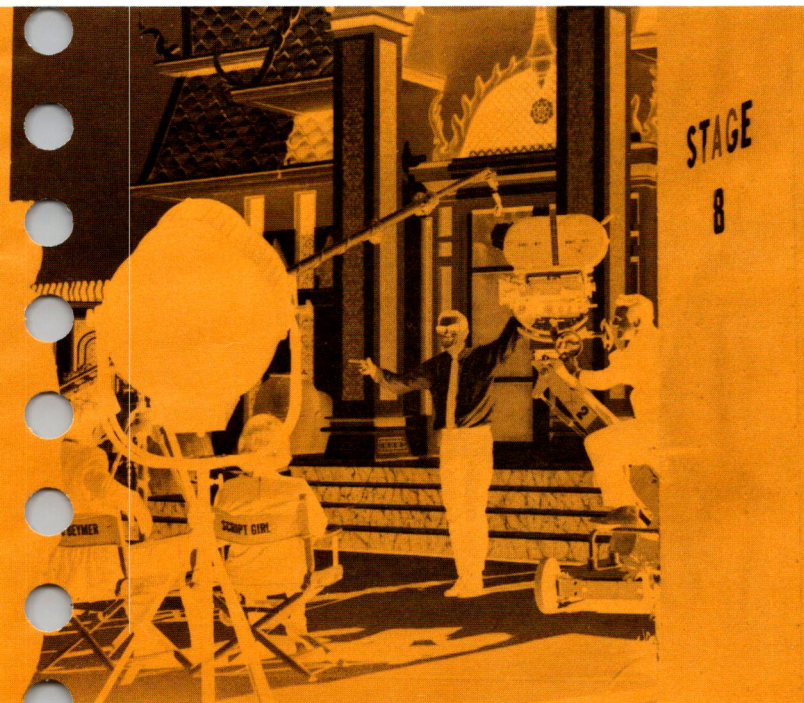


Color Negative Film
Type 5251 (35mm)

Eastman



Built-in masks for automatic color correction

Professional cinematographers have found the EASTMAN Color Negative System ideal for major motion picture releases, TV features and TV commercials. This color system offers wide exposure latitude and excellent color reproduction.

Built into EASTMAN Color Negative Film is a color mask that makes automatic color corrections. It is this feature that gives Color Negative its well-balanced color quality. Essentially, EASTMAN Color Negative Film consists of three light-sensitive emulsions, each sensitized differently. Incorporated in these emulsion layers are dye couplers which react simultaneously during development to produce separate negative silver and dye images

in each layer. Later, the silver images are removed by bleaching. Two of the dye couplers are themselves colored, and it is this color that provides the automatic color correction mask.

The original color of these dye couplers is removed during the development in proportion to the amount of development that takes place. The remaining colored couplers (the familiar orange hue) act as a mask for color correction. Release prints of the finest quality can then be made on EASTMAN Color Print Film.

EASTMAN Color Negative Film is available in 35mm and for special applications, in 65mm and 16mm (SO 216) widths.

EXPOSURE INDEX:

Tungsten—50 Daylight*—32

*With KODAK WRATTEN Filter No. 85

These values are suitable for use with Weston, General Electric and similar exposure meters with or without the calculators for ASA Exposure Indexes. This value applies if the meter reading is taken from the camera position and the subject has average reflectance, or if the reading is made on a gray card (such as the KODAK Neutral Test Card) of about 18% reflectance, held close to, and in front of the subject, facing the camera. For unusually light- or dark-colored subjects, the exposure should be decreased or increased respectively, from that indicated by the meter.

For meters which are equipped for measuring incident light, the following data will be found useful:

ILLUMINATION (INCIDENT LIGHT) TABLE FOR TUNGSTEN:

Shutter speed approximately 1/50 second—24 frames per second, 170° shutter.

Lens Apertures	f2.3	f2.8	f3.5	f4.0	f5.6
Number of foot-candles required	150	200	300	400	800

LIGHTING CONTRAST:

The lighting contrast should be the same as that used for black-and-white photography. However, for color films the lighting contrast is more critical. The ratio of keylight-plus-fill-light to fill-light alone should be 2 or 3 to 1 and should seldom exceed 4 to 1, except where a special effect is desired. In addition to watching lighting contrast, it is important to be careful about subject contrast as well.

COLOR BALANCE:

This film is color balanced for use with tungsten lamps operating at a color temperature of 3200 K, with no correction filters over either lamps or camera lens. It may also be used with tungsten lamps operating at color temperatures slightly above or below this value (as for example, "CP" lamps) without correcting filters, since final color balancing can be done in printing. Filter recommendations for other lighting conditions are as follows:

Light Source	Light Source* Filter Required	Camera Filter* Required
3200 K Tungsten lamps or "CP" lamps (approx. 3350 K)	None	None
M-R Type 170 150 Amp. H.I. Arc	Straw-colored gelatin filter such as Brigham Y-1	KODAK WRATTEN No. 85
M-R Type 40 40 Amp. Duarc	Florentine Glass	KODAK WRATTEN No. 85
Low color temperature (yellow-flame) carbons	Mole-Richardson YF-101	None
Daylight (sunlight plus some skylight)	None	KODAK WRATTEN No. 85

*These are approximate corrections only, since final color balancing will be done in printing.

RESOLVING POWER:

Test-Object Contrast	1.6:1	1000:1
Lines per mm	20	90
Development	EASTMAN Color Negative Process	

*These values were determined as described in "A Simple Camera for the Measurement of Photographic Resolving Power," by J. H. Altman, Phot. Science and Eng., Vol. 5, No. 1, pp. 17-20, Jan.-Feb. 1961.

BASE:

Safety base with removable jet antihalation backing.

IDENTIFICATION:

The letter A appears at the extreme left position of the latent-image footage marking to identify this film.

SAFELIGHT:

This film should be handled in total darkness until after the stop bath following color development. The remaining operations can be carried out in a lighted room if desired. Where illumination must be provided for dials, meters, etc., during color development, a fixture fitted with a KODAK Safelight Filter, WRATTEN Series 3 may be used provided that such illumination is not allowed to be incident upon the film itself.

STORAGE OF FILM PRIOR TO EXPOSURE:

EASTMAN Color Negative Film which is to be stored for an extended period should be held at a temperature not exceeding 55°F. Upon removal from storage, ample time should be allowed for the film to reach equilibrium with the workroom conditions (about an hour) before the tape is removed from the can, in order to avoid condensation of moisture on the cold film from the atmosphere.

STORAGE OF FILM AFTER EXPOSURE:

The film should be processed soon after exposure.

PROCESSING:

EASTMAN Color Negative Film may be processed in conventional-type continuous processing machines, with minor modifications to allow for all of the steps required. These steps include pre-bath, spray wash, color development, spray wash, stop bath, wash, bleach, wash, fix, wash, stabilizing bath, rinse, and dry. Processing times will vary somewhat with individual processing machines, depending upon the degree of agitation employed, replenishment rates, etc.

Information pertaining to the processing formulas, chemicals, suggestions for processing control, etc., is available upon request.

ROLL LENGTHS, PERFORATIONS, CORES AND WINDING**Type 5251 (35mm)**

100 ft., camera spool, BH .1866 type perforations
200 ft., U core, BH .1866 type perforations
400 ft., U core, BH .1866 type perforations
1000 ft., U core, BH .1866 type perforations

SPECIAL ORDER

200 ft., camera spool, BH .1866 type perforations
2000 ft., U core, BH .1866 type perforations
65mm x 500 ft., PA core, KS .1866 type perforations
65mm x 1000 ft., P core, KS .1866 type perforations

Type SO 216 (16mm)

100 ft., camera spool, perforated two edges
400 ft., T core, perforated two edges

SPECIAL ORDER

100 ft., camera spool, perforated one edge, B wind
200 ft., camera spool, perforated two edges
400 ft., T core, perforated one edge, B wind
1200 ft., Z core, perforated two edges

For more detailed information about films, prices, credit terms and delivery—or for technical service—contact our nearest office.

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