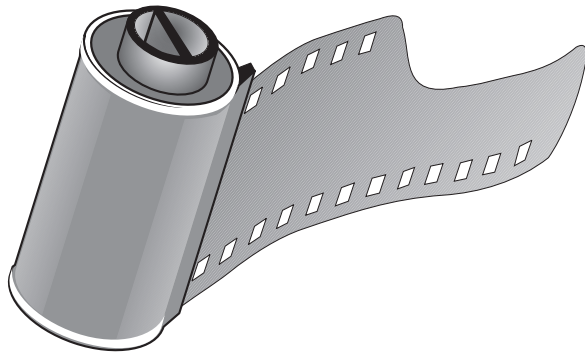

A Simple Exposure Index and Developing Time Test for Film



Because negative density is affected by both exposure and development, photographers are often uncertain of the cause of “bad” negatives. A thin negative may be the result of underexposure and/or underdevelopment. Conversely, a very dense negative may be the result of overexposure and/or overdevelopment. A simple test can be performed on your next roll of film that checks both your exposure index (ASA/ISO setting) and your developing time for that type of film.

Procedure:

The test requires that two exposures be made of a test target. The target can be any evenly-toned flat object such as a sheet of paper, a painted wall, or a smooth cloth without printed designs. Avoid strong colors; pastel colors are OK. The test procedure is as follows:

- A. Place the target in open shade to avoid strong light and harsh shadows.
- B. Fill the frame of the viewfinder with the target, but do not focus upon it. Set the focus at infinity to obscure detail. Be sure that you do not cast a shadow on the target.
- C. Meter the target and note the reading.
- D. Make one exposure 5 stops less than your meter indicates.
- E. Make another exposure 4 stops more than your meter indicates.
- F. Shoot the rest of the roll on normal subject matter, and process as usual.

1

Exposure Index Evaluation

After processing, examine the negative exposed 5 stops less than indicated. It should have a slight grey density compared with the unexposed edge of the film. If it does not show or is extremely faint, your film is being underexposed at the ASA(ISO) setting you used for the test. Cut the film speed in half for your next roll of film, and rerun the test.

If the grey is significantly darker than a discernable grey, the film is receiving more exposure than necessary. Double the film speed to reduce exposure. This portion of the test will establish your personal exposure index (EI) for the film tested with your equipment and your working methods.

NOTE: This exposure index test *must* be correct before the developing time evaluation is valid. Do not proceed until EI is correct.

2

Developing Time Evaluation

The second part of the test is a check for proper film developing time. A correct exposure index *must* be found before this part of the test is valid.

Make a properly exposed contact sheet to see if the frame exposed 4 stops more than metered exposure makes a print-tone just perceptibly greyer than paper white. A properly exposed contact sheet is made by giving the paper just enough exposure under the enlarger to make the film sprocket holes almost disappear in the black of the print.

After printing, note the frame with plus 4 stops exposure. If it is very noticeably grey, then film developing time needs to be increased to boost contrast in the negative. If the print does not show a light trace of grey and is paper-white, then the developing time of the film needs to be reduced to lower negative contrast.