

METER SETTINGS ABOVE OR BELOW THE RECOMMENDED SETTINGS

If ILFORD films have been inadvertently exposed at a meter setting above or below the recommended settings, usable negatives can often be obtained. Development times are given in the fact sheets for individual films. Obviously, the quality of negatives processed in this way will not be so high as conventionally processed ones. The recommended time gives the best results without too much fog or variable speed.

SAFELIGHT RECOMMENDATIONS

Handle ILFORD films in total darkness. For very brief inspections during processing, use the ILFORD 908 (very dark green) safelight filter, with a 15W bulb, fitted in a darkroom lamp (such as the ILFORD DL10 or DL20). Do not allow direct lighting from the safelight to fall on the film.

When processing films by inspection, the safest way is to use infra-red illumination in the darkroom, with infra-red goggles to see the film. This method ensures the film cannot be fogged and makes it easy to see the image.

DEVELOPMENT

Development times are given on the film packaging and in the fact sheets for individual films.

The recommended development times for ILFORD films produce negatives of average contrast suitable for printing in all enlargers. The development times are intended as a guide and may be altered if a different result is needed.

For manual processing in deep tanks, the development times are based on intermittent agitation – see 'Deep tank processing'.

For use in rotary processors without a pre-rinse, reduce the deep tank development times by up to 15%. If using a pre-rinse, see 'Rotary processors' below.

Note Development times may need adjusting to suit individual processing systems and working practices. If an established system is producing good results, adjust the recommended development times until the desired contrast level is obtained. Higher or lower than average contrast negatives may be preferred by some individuals to suit their particular darkroom set-up and working methods.

Note Development times in other manufacturers' developers are included for your convenience, and are only a general guide. Adjust these times to suit your processing system. Other manufacturers can and do change their product specifications from time to time, and the development times may change as a result.

DEVELOPMENT AT DIFFERENT TEMPERATURES

ILFORD films can be processed over a range of temperatures. For best results, however, all processing solutions should be within 5°C. As a general rule, follow the processor instructions for developer operating temperature and machine speed. A guide to altering development times with different processing temperatures is to decrease/increase the development time by about 10% for each 1°C rise/fall in temperature.

PUSH PROCESSING

Most ILFORD films can produce high quality prints even when exposed at meter settings above their ISO rating. ILFOTEC HC and MICROPHEN are specially designed for push processing and therefore are the preferred developers. However, other ILFORD developers can also be used – see the fact sheets for individual films.

Push processing will give higher contrast negatives than normal, together with more noticeable grain.

CONVERTING DEVELOPMENT TIME TO MACHINE SPEED

In general, refer to the technical information of the machine's manufacturer to convert development time to machine speed.

STARTING PROCESSING

Films can be processed to optimum levels of permanence in automatic processors, provided the general ILFORD processing guidelines are followed. The key to optimum permanence is for negatives to be thoroughly fixed and washed, and then stored in a cool (10–20°C), dry place in the dark.

DEEP TANK PROCESSING

Manual agitation

Lower the processing rack into the tank and tap the rack on the top edge of the tank to remove any air bubbles. Lift the rack out of the solution and return it immediately. Tap the rack again on the top edge of the tank.

At the end of each minute, lift the rack out of the solution, tilt it to one side and return it to the tank. Repeat this another two times, alternating the direction of the tilt. Tap the rack on the top edge of the tank after the three lifts. See the diagram.