

Basics for photography of the fire scene for investigation

This article is not a final say on what to do or how to take photographs for fire scenes. If you are going to take photographs for investigation, you must also have knowledge on investigation. This article is simply additional to supplement your knowledge in fire science.

Key points:

Digital vs. film:

Digital has come a long way – it is now able to be used for evidence as long as the images are not modified. The best way to do this is to burn a copy of the images without any modifications onto a cd or dvd. You can adjust brightness, etc on a second set of images, which can be used as long as the image has not been altered for content. This is the same thing that photo labs do to negatives automatically. Be sure that you have protocols or guidelines set up in advance for this, so questions will not come up later.

A good way to look at digital and film both is the image is not evidence – the photo is an extension of your perception of the scene or image.

Federal Rules of Evidence, Article X (Contents of Writings, Recordings and Photographs), Rule 101(1) defines writings and recordings to include magnetic, mechanical or electronic recordings. Rule 101(3) states that if data are stored in a computer or similar device, any printout or other output readable by sight, shown to reflect the data accurately, is an "original". Rule 101(4) states that a duplicate is a counterpart produced by the same impression as the original...by mechanical or electronic re-recording or by other equivalent techniques which accurately reproduces the original. And Rule 103 (Admissibility of Duplicates) states a duplicate is admissible to the same extent as an original unless (1) a genuine question is raised as to the authenticity of the original or (2) in the circumstances it would be unfair to admit the duplicate in lieu of the original. This means a photograph can be stored digitally in a computer that a digital photograph stored in a computer is considered an original, and any exact copy of the digital photograph is admissible as evidence.

Be sure to check with your local prosecutor to be on the safe side.

Lens choice:

There are different lenses that can be used, it is good to have an idea of what to use.

- 50mm lens is about the same as the eye sees

- A wide angle lens will show more of a scene

- A telephoto lens will get a closer shot

- Macro lens allows you to take close up shots with great detail

Flash:

Flash can be useful for daytime as well as during the night or dark areas. It can bring out what may get lost in shadows if it is not used.

Position:

Keep in mind that not everything on a fire ground is seen best at eye level. You might have to climb on top of something or get low to the ground to get a better shot. If you are photographing a building, get a shot from each corner, as well as head on from each side.

Lead in:

Take shots that get the whole scene, and then move into a smaller, followed by close up shots of the items in question. This helps keep a consistent style rather than going back and forth to get shots, and miss something important. If you are photographing something small, a ruler in the shot can be useful to show size of an item. If you have to move something to get a shot, photograph it before the item is moved, the item being moved, and then the item in question. This can be useful if you need to show damage later.

Other shots:

Be sure to get other items in the shots – power lines, nearby structures etc. This can help show many things – was there power to the building, were nearby structures at risk, other hazards. If you are at a scene on a road – car accident, etc, be sure to get shots of intersections, signs – street signs, warning signs, and other items that might be relevant including hazards, parked vehicles, damage in the road and so on.

Notes:

A picture is worth a thousand words, but it is very helpful to make notes of each image you have taken, as well as a log so you can reference the shots later. It can be a long time between a fire ground operation and a court date if it comes to that.

Accessories:

Often there are many other things that can be helpful in photographing a fire ground, beyond a camera and film. These include a tripod, spare batteries – this is very important, a plastic to cover the camera – useful if you are in a building that water might still be dripping down, a flashlight / floodlight – makes it much easier to focus in darker areas, and can help illuminate the scene for safety. Pen and paper for notes, an assistant can be useful as well. They can help with lighting, sketch out your position on a diagram to show the coverage you have while taking photos and can help jog your memory on shots you have taken. Also anything else that might be useful for you for photos of the scene.

Chain of custody:

Be sure that you follow the chain of custody. This means that the images need to stay with you and secured in case you are called to court. If your department's guidelines require you to turn the film / digital files over to your chief or other officer be sure that this is done in a timely manner, so questions can not arise on the validity of the film / images.

Wrap up:

This is just a very brief overview on photography of the fire scene. If you are interested in learning more, it is suggested that you take a class, because there is quite a lot to learn about photography and its uses on fire ground operations.

Further reading:**Crime Scene and Evidence Photographer's Guide**

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This is a page that you can carry with the camera in the camera bag.
Here is a list of things to do at the scene.

- Series shots:
 1. Overview
 2. Midrange
 3. Close-up

- Moving items – shots before the move, during, and after.
- Notes – make quick notes of each image you have taken as quickly as possible
- Sketch where you shot from – a diagram of the scene and where you were standing when you took each shot. This will help show the jury the layout of the house
- Lens choice:
 - 50mm lens is about the same as the eye sees
 - A wide angle lens will show more of a scene
 - A telephoto lens will get a closer shot
 - Macro lens allows you to take close up shots with great detail
- Focus – make sure that the shots are in focus. Detail is crucial, especially if the photos are going to be used in court and enlarge.
- Flash – use flash in daylight if you need to bring out shadow areas, as well as at night or indoor shots
- Accessories: tripod, plastic covering for camera, flashlight / floodlight, pen and paper for notes, ruler, assistant, and anything else you may find useful.
- Handling the evidence – you need to follow the chain of custody for the images taken. Either from film or digital, you can not allow the film to get out of your hands until you can get it to the proper location, set up in advance by the department so there is no confusion on the scene.

These are just a few tips for fire scene photography techniques. There is quite a bit more that is involved. This is simply a quick overview. If you want to learn more the best bet is to take a course designed for more detailed information.