Use of Infrared Camera in Water Intrusion Investigations

Introduction

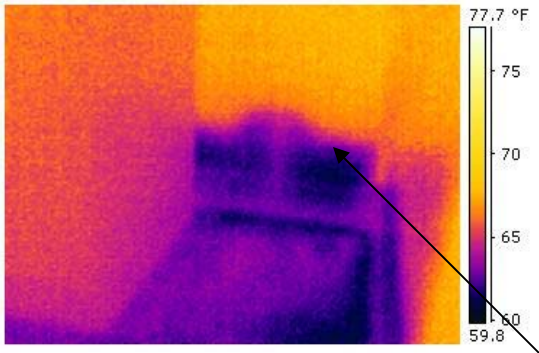
Water intrusion and responding to water intrusion episodes continues to be a significant part of managing indoor environmental quality. The Safety and Industrial Hygiene Unit has recently acquired a FLIR Model B2 infrared camera. The primary intended use of this technology is an additional tool for use during water intrusion investigations.

How Does an Infrared Camera Work?

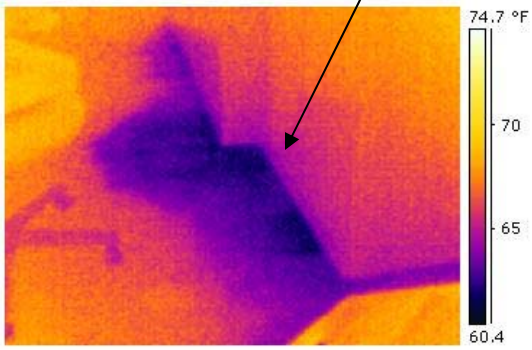
The camera detects differences in surface temperatures and converts this information to an image that we can see called a thermogram. Due to evaporation, wet areas are typically colder than the surrounding dry areas. On the thermogram, the surface temperatures are indicated by different colors or shades if in black and white. Because the camera only indicates differences in surface temperature, verification that the material is indeed wet needs to be made with a moisture meter. One huge advantage in using an infrared camera is the speed in surveying large areas and hard to reach areas that may be missed with moisture meters alone.

Thermograms and Photographs

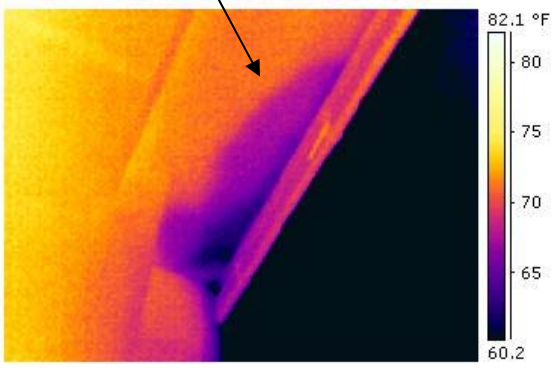
While documenting the extent of water intrusion, it is important to include a corresponding photograph along with the thermogram. The following are few examples.

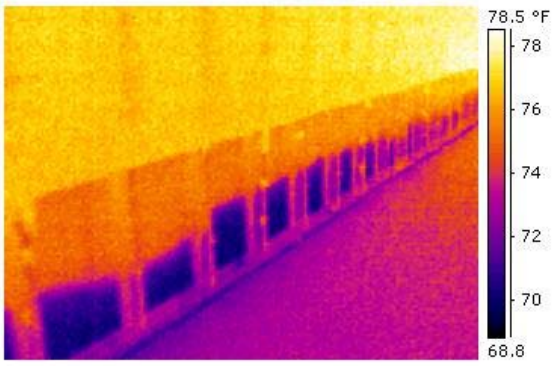


Darker areas indicate wet materials. Material includes carpet and drywall.

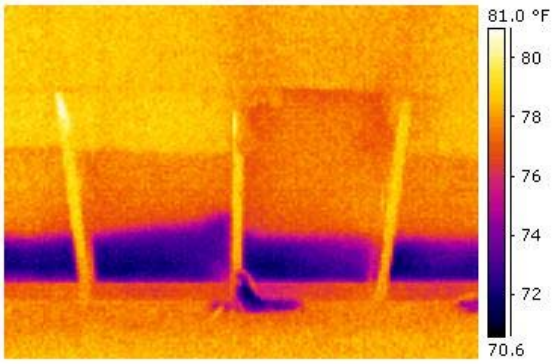


Hard to reach soffit area that most likely would have been overlooked using traditional moisture meters alone.





Examples of large areas surveyed.



Contact Us

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