Training Bulletin

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Reading Surface Temperature Continued



The distance to spot ratio is a characteristic of a thermal imaging camera (TIC) that indicates the size of the area being measured in relation to the distance between the camera and the object being observed. It is typically represented as a numerical value, such as 12:1 or 20:1. For example, a TIC with a distance-to-spot ratio of 12:1 means that the camera can measure a 1-inch spot from a distance of 12 inches.

Understanding the distance-to-spot ratio is crucial for accurate temperature measurements. If the object being measured is smaller than the spot size indicated by the ratio, the TIC may inadvertently capture the surrounding area and provide a less precise reading. Conversely, if the object is larger than the spot size, the TIC may only measure a portion of the object, leading to inaccurate temperature readings.

- The digital temperature is not reading the gasses in the room but just solid surfaces. Caution this is not an indicator of a possible flashover.
- All companies will carry the FLIR thermal imaging K55 model with a 20:1 distance to spot ratio.