

Standards Of Professional Practice For The Use Of An Infrared Camera

Inspection Purpose & Scope

1. The purpose of these Standards of Professional Practice (Standards) is to establish a uniform standard for inspectors who voluntarily use these Standards when performing residential home inspections or commercial property field surveys utilizing an infrared camera as an additional tool.
2. Inspections performed in accordance with these Standards:
 1. Are not full thermographic scans of the building as performed by thermographers but rather a value added service of performing an inspection utilizing an additional diagnostic tool;
 2. Provide the client with additional objective information about the condition of inspected components at the time of the inspection;
 3. Are conducted by a professional home inspector, not by a thermographer or technical specialist;
 4. Are general and do not include or confirm conformity to ASNT – TC – 1A TIR level 1, ASTM C 1060, ASTM 1153 – 97, ASTM 1934;
 5. Do not provide a warranty or guarantee regarding the condition of the components or areas inspected with the IR camera;
3. These Standards do not limit inspectors from:
 1. Including other services or components in addition to those required in these Standards;
 2. Excluding components from the inspection if requested by the client.

Inspection & Report

1. Inspectors shall inspect readily accessible, visually observable, installed components as designated in these Standards.
2. Inspectors shall include comments in their written report that:
 1. Identifies components that exhibit an anomaly in the infrared camera and can be verified by a second means of measurement in the professional judgment of the inspector;
 2. Provides a description as to the nature of the deficiencies reported above that are not self-evident;
 3. Recommends correction, further evaluation, or monitoring of components identified above.

Infrared Inspection

1. Specific Components:

1. Main electrical panel, all sub panels and service disconnects:

1. Inspector shall:

1. Remove all residential panel covers when in his/her professional opinion it is safe to do so;
2. Turn on high drain electrical appliances if feasible and practical;
3. Perform a scan of all breakers and connections within the panels or disconnects;
4. Verify any anomalies in the thermogram by a secondary means.

2. Inspector is not required to:

1. Remove panel covers that are abnormally hot or register as live when touched with a voltage detector or judged to be unsafe for other reasons by the inspector;
2. Provide an opinion on any abnormalities in the thermogram if the suspected condition cannot be verified by a secondary means.
3. Remove panel covers for commercial properties as per ASTM E2018-15.

2. Moisture:

1. Inspector shall:

1. Perform functional flow and functional drainage tests on all plumbing fixtures and fittings before the following step;
2. Scan ceilings under overhead water sources including toilets, showers, sinks, tubs, laundry rooms, kitchens, and skylights;
3. Scan all finished basement walls below grade to a height of twelve inches above the floor slab;
4. Scan Bathroom floors around toilets, showers, tubs, sinks platform of vanities;
5. Scan Laundry room;
6. Scan Kitchen under sinks, floors in front of dishwashers, floors in front of refrigerators;
7. Scan Floors in front of all: exterior doors and bay windows;
8. Any other water sources that are visible and accessible;
9. verify any apparent anomalies in the thermogram with a moisture meter if safe and accessible.

2. Inspector is not required to:

1. Scan any other areas of the building not specified in this section;
2. Provide an opinion on any abnormalities apparent in the thermogram if the suspected condition cannot be verified by a moisture meter;
3. Scan any areas which are not practical or outside the operating parameters of the camera;
4. Scan any areas such as crawlspaces or attics or any other such areas where access is limited or areas which have to be accessed with the aid of a ladder.

3. Visible Defects:

1. General Use Electrical Receptacles and Light Switches - Where visual signs of overheating are noticed on or around a receptacle or switch faceplate, a thermographic scan will be performed in an attempt to determine whether the problem is active. Should the problem appear to be active and can be verified with a second means of measurement, the inspector will recommend the services of a licensed electrician to investigate the problem.
2. Wet building materials: - Where signs of moisture are observed, a thermographic scan will be performed in an attempt to quantify the extent of the problem. It must however be understood that conditions on site at the time of the inspection may not be within an acceptable range which will enable the problem to manifest itself as a thermographic anomaly in the camera. The inspector will verify the presence of moisture with the use of a moisture meter if safe and accessible.
3. Break in exterior envelope of building- Where breaches are noted in the exterior building envelope, the inspector will make every attempt to determine whether they are a source of moisture intrusion into the building envelope by a scan of the interior wall in the vicinity of the exterior breach. It must however be understood that conditions on site at the time of the inspection may not be within an acceptable range which will enable the problem to manifest itself as a thermographic anomaly in the camera. Simply put, the lack of thermographic evidence does not indicate there is no moisture intrusion in the area. Rather, the inspector can only say there is not thermographic evidence that indicates there is. The inspector will verify the presence of moisture with the use of a moisture meter if safe and accessible.

General Limitations & Exclusions

1. General Limitations

1. For residential properties, the same General Limitations that apply to ASHI's Standards of Practice as noted in the Visual Inspection Agreement shall apply here.

2. For commercial properties, the same General Limitations that apply to ASTM E2018-15 as noted in the Visual Walk-Through Survey Agreement for Commercial Properties shall apply here.
2. General Exclusions
1. For residential properties, the same General Exclusions that apply to ASHI's Standards of Practice as noted in the Visual Inspection Agreement shall apply here.
 2. For commercial properties, the same General Exclusions that apply to ASTM E2018-15 as noted in the Visual Walk-Through Survey Agreement for Commercial Properties shall apply here.