

## Inspection Report Summary

**Prepared for:** *XXXXXXXXXXXXXXXXXXXX*

**Property Location:** *XXXXXXXXXXXXXXXXXX*  
*Dallas, Texas 75XXX*

**Contact Info:** *Home Phone: XXXXXXXXXXXXXXX*  
*E-mail: XXXXXXXXXXXXXXXXXXXX*

**Date of Inspection:** *October XX, 2003*

**Date of Report:** *October XX, 2003*

This report is prepared for the exclusive use of the client listed above, and does not provide environmental evaluations of hazardous materials, termite inspection, code enforcement inspection, engineers or structural inspection, or landscaping inspection. Mayfield Thermography Consulting Services does not provide to the client a warranty, express or implied, as to the condition of the property inspected, including but not limited to, any hidden defects that are not detected during the course of the moisture inspection provided by Mayfield Thermography Consulting Services.

# Mayfield Thermography Consulting Services®

Inspection Summary for Property  
Located at  
XXXXXXXXXXXXXX  
Dallas, Texas 75XXX

## Table of Contents

<b><u>Scope</u></b>	<b>Page 3</b>
<b><u>Protocol Used</u></b>	<b>Page 4</b>
<b><u>Partial Infrared Inspection</u></b>	<b>Page 4</b>
<b><u>Summary</u></b>	<b>Page 6</b>
<b><u>Recommendations</u></b>	<b>Page 6</b>
• <b>Roof System</b>	<b>Page 6</b>
• <b>Roof Vents</b>	<b>Page 7</b>
• <b>Attic Insulation</b>	<b>Page 7</b>
• <b>Supply Air Ducts</b>	<b>Page 7</b>
• <b>Other / Mold Etc.</b>	<b>Page 7</b>
<b><u>Cautionary Statement</u></b>	<b>Page 7</b>

*This report is prepared for the exclusive use of the client listed above, and does not provide environmental evaluations of hazardous materials, termite inspection, code enforcement inspection, engineers or structural inspection, or landscaping inspection. Mayfield Thermography Consulting Services does not provide to the client a warranty, express or implied, as to the condition of the property inspected, including but not limited to, any hidden defects that are not detected during the course of the moisture inspection provided by Mayfield Thermography Consulting Services.*

---

©2003 Mayfield Thermography Consulting Services

1805 Glengarry Drive • Carrollton, Texas 75006 • (972) 323-0058 • Fax (972) 323-0062

• [tom.mayfield@comcast.net](mailto:tom.mayfield@comcast.net)

# Mayfield Thermography Consulting Services®

Inspection Summary for Property  
Located at  
XXXXXXXXXXXXXXXXXX  
Dallas, Texas 75XXX



## Scope

On October xx, 2003, we inspected the one story brick veneer residence located at xxxxxxxxxxxxxxxx, Dallas County, Texas, to determine the possible presence of moisture and/or moisture intrusion in the improvements. This report provides a preliminary partial assessment of the conditions at the property reflecting possible historic and active moisture intrusion problems. Additional testing is needed to validate the findings of this brief, initial report and to identify any remaining anomalous areas with high probability of unchecked moisture intrusions not yet inspected. A full report can be provided for a negotiated fee if requested, as this limited inspection was performed as a courtesy to xxxxxxxxxxxxxxxx and her realtor.

This nondestructive method of moisture detection was by use of a Palm I/R Radiometric 500 Digital camera with personal digital assistant (PDA) and 50 mm proprietary lens. The camera looks in the 7-12 micrometer wavelength range and can discern temperature differences of .05 degrees centigrade. The camera was calibrated to manufacturer's specifications.

This report is prepared for the exclusive use of the client listed above, and does not provide environmental evaluations of hazardous materials, termite inspection, code enforcement inspection, engineers or structural inspection, or landscaping inspection. Mayfield Thermography Consulting Services does not provide to the client a warranty, express or implied, as to the condition of the property inspected, including but not limited to, any hidden defects that are not detected during the course of the moisture inspection provided by Mayfield Thermography Consulting Services.

# Mayfield Thermography Consulting Services®

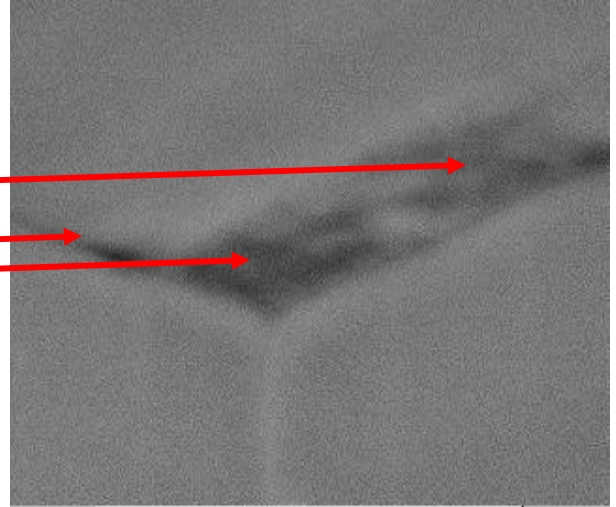
## Protocol Used

A partial visual inspection of the property was done initially to identify areas within the structure (interior, exterior and attic, etc.) that may show areas with moisture infiltration signs. Some common visual clues of moisture intrusions are insect or termite infestations, cracking and peeling of painted and caulked surfaces, and discoloration of painted surfaces of drywall, fascia and soffit. The Mayfield Thermography Consulting Services proprietary infrared inspection method was used on this limited partial inspection of this structure to identify anomalous areas with high probability of unchecked moisture intrusions in addition to areas showing signs of historical moisture intrusion that have since dried up. Both of these types of areas should be validated and tracked back to their sources by a third party engineering consultant with a proven track record in the area of moisture detection and resolution.

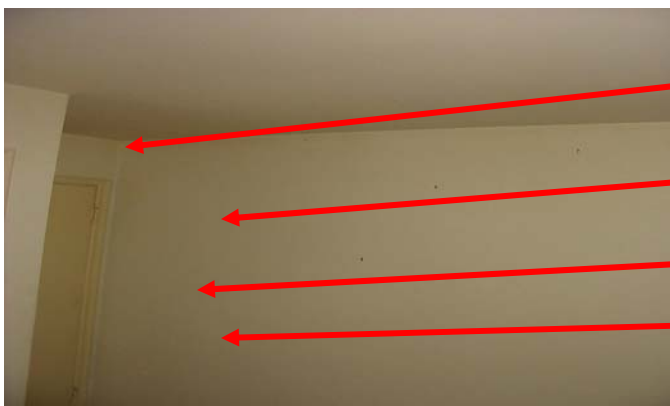
## Partial Infrared Inspection



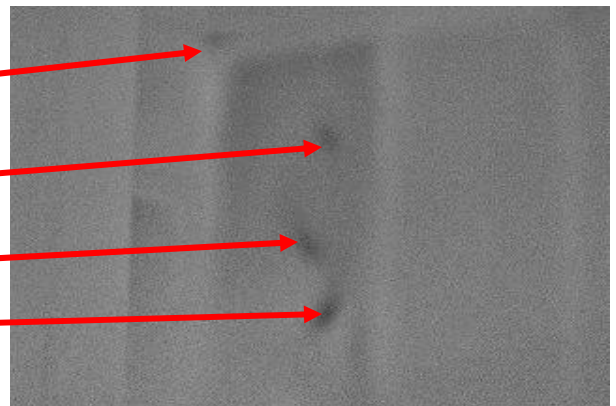
**First bedroom southwest corner at ceiling.**



**First bedroom southwest corner at ceiling.**



**First bedroom northeast corner wall by entry opposite hot water heater closet.**



**First bedroom northeast corner wall by entry opposite hot water heater closet.**

This report is prepared for the exclusive use of the client listed above, and does not provide environmental evaluations of hazardous materials, termite inspection, code enforcement inspection, engineers or structural inspection, or landscaping inspection. Mayfield Thermography Consulting Services does not provide to the client a warranty, express or implied, as to the condition of the property inspected, including but not limited to, any hidden defects that are not detected during the course of the moisture inspection provided by Mayfield Thermography Consulting Services.

©2003 Mayfield Thermography Consulting Services

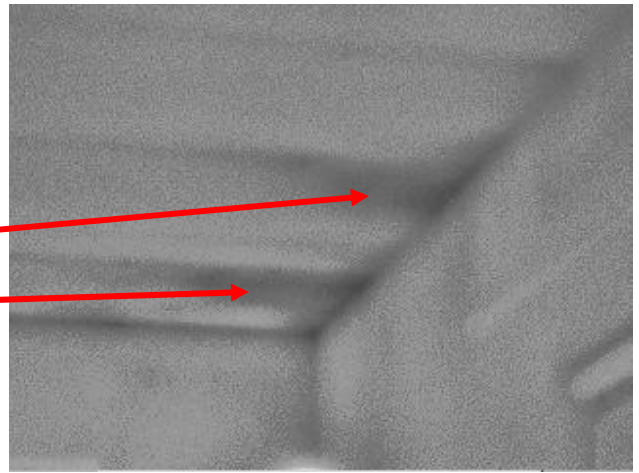
1805 Glengarry Drive • Carrollton, Texas 75006 • (972) 323-0058 • Fax (972) 323-0062

• [tom.mayfield@comcast.net](mailto:tom.mayfield@comcast.net)

# Mayfield Thermography Consulting Services®



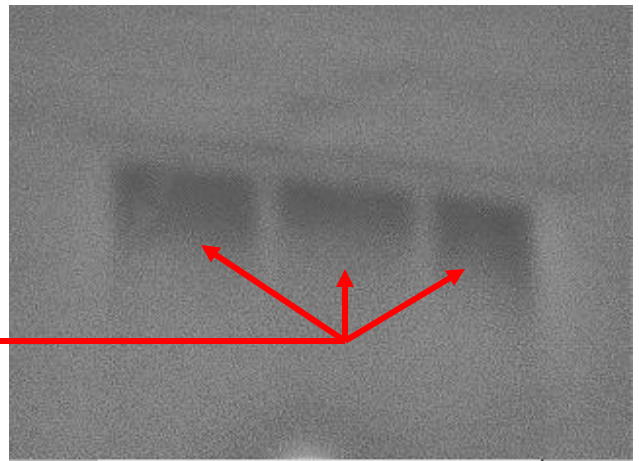
**Second bedroom southeast corner ceiling.**



**Second bedroom southeast corner ceiling.**



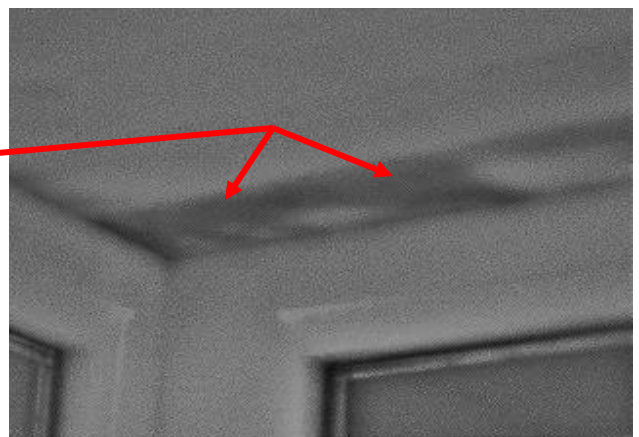
**Second bedroom west wall at ceiling opposite shower.**



**Second bedroom west wall at ceiling opposite shower.**



**Master bedroom northeast corner ceiling.**



**Master bedroom northeast corner ceiling.**

*This report is prepared for the exclusive use of the client listed above, and does not provide environmental evaluations of hazardous materials, termite inspection, code enforcement inspection, engineers or structural inspection, or landscaping inspection. Mayfield Thermography Consulting Services does not provide to the client a warranty, express or implied, as to the condition of the property inspected, including but not limited to, any hidden defects that are not detected during the course of the moisture inspection provided by Mayfield Thermography Consulting Services.*

# Mayfield Thermography Consulting Services®

## Summary

The Mayfield Thermography Consulting Services proprietary infrared analysis indicates historical and active moisture intrusion and moisture retention within the wall and ceiling cavities. Some, limited moisture intrusion is typical in most residential construction. In some cases, this water easily leaves the structure with no accumulation with proper attic ventilation. When the water does not leave the structure due to poor attic ventilation, its cumulative effect can cause long-term (and often accelerated) deterioration of the structure. In many types of residential construction, more water enters than can exit. When this happens, there is a gradual increase in the amount of retained moisture and moisture accumulation within the wall and ceiling cavities. Moisture signatures, such as some of those identified in much of this house, are not indicative of saturated water presence, but of a widespread and growing accumulation of moisture vapor and some condensation being retained in the insulated wall and ceiling cavities. Such accumulations of moisture vapor and condensation should not cause immediate and catastrophic structural failure, but would be expected to be associated with long-term deterioration. Further, some mold / fungi growth may be associated with this type of moisture in addition to the increased possibility of drawing the presence of termite and wood ants. Based on our experience there could be some possibility of localized hidden damage. Analysis for mold / fungi, hidden damages, and insect colonies requires intrusive inspections, and is beyond the scope of this non-invasive inspection. It is therefore recommended based on our visual and infrared inspection that the anomalies we have identified should be investigated and validated by a third party Roofing / Engineering Consultant and Indoor Air Quality Testing Firm.

## Recommendations

- **Roof System**

The existing overlay composite roof on this house is in good shape but does in our opinion need additional attic ventilation by adding power vents or by adding four to six dormer vents. The pictures below are of typical installations of dormer vents on a composite roof and tile roof. All roof edge flashing, valley flashing, vent stacks, chimney flashing and any other type of roof penetrations should be inspected and verified that all are sealed in a “watertight” manner by a third party roofing / engineering consultant. Once the roof is secured and waterproofed and all air conditioning vent boots are replaced or corrected to prevent condensation problems and all damaged interior drywall is replaced. A final infrared inspection should then be performed to look for any possible leaks or deficiencies and to validate the entire correction process. Mayfield Thermography Consulting Services would be happy to validate the correction process.



**Dormer vents installed on a composite roof.**



**Dormer vents installed on a tile roof.**

This report is prepared for the exclusive use of the client listed above, and does not provide environmental evaluations of hazardous materials, termite inspection, code enforcement inspection, engineers or structural inspection, or landscaping inspection. Mayfield Thermography Consulting Services does not provide to the client a warranty, express or implied, as to the condition of the property inspected, including but not limited to, any hidden defects that are not detected during the course of the moisture inspection provided by Mayfield Thermography Consulting Services.

©2003 Mayfield Thermography Consulting Services

1805 Glengarry Drive • Carrollton, Texas 75006 • (972) 323-0058 • Fax (972) 323-0062

• [tom.mayfield@comcast.net](mailto:tom.mayfield@comcast.net)

# Mayfield Thermography Consulting Services®

- **Roof Vents**

Power vents or the addition of four to six dormer vents should be installed to increase the amount of attic ventilation. The correct number of vents (square inches) required by local building code should be installed. These vents should be only the highest quality vents, which are guaranteed not to leak.

- **Attic Insulation**

Wet insulation around the perimeter of this house needs to be removed and replaced in addition to all damaged sheetrock. Verify the amount of blown insulation and/or batt type insulation is sufficient to achieve the proper R-Value to prevent costly utility bills.

- **Supply Air Ducts**

Infrared inspection of several floor mounted air supply registers indicates moisture anomalies possibly the result in incorrectly sealed air duct boots to the registers or boots which are not insulated properly resulting in the formation of condensation.

- **Other / Mold**

Because of growing concerns about the ramifications of mold, we recommend indoor air quality testing for mold is in those areas indicated as having anomalies.

## Cautionary Statement

Even when air conditioning system ventilation boots, roof installations, roof ventilation and gutter systems are installed according to accepted building practice, to current manufacturer's recommendations, and to current building codes, it does not guarantee that moisture penetration or unseen moisture presence is eliminated. Strict attention to details in addressing deficiencies that are noted in this report is essential during the correction process to insure that the roofing ventilation and gutter system along with the correct installation of all air conditioning system ventilation boots are verified to effectively protect the house. Generally, a roof is a water shedding device, it is not a waterproof device unless designed and installed as such. Moisture intrusion problems are difficult to fix the first time. We strongly recommend using qualified, experienced professional contractors who have had documented success in moisture intrusion repairs. Once the repairs are complete, we recommend another moisture inspection as indicated above to validate the repairs and document their performance.

Reviewed by: Thomas R. Mayfield *IRT, CIAQT*

This report is prepared for the exclusive use of the client listed above, and does not provide environmental evaluations of hazardous materials, termite inspection, code enforcement inspection, engineers or structural inspection, or landscaping inspection. Mayfield Thermography Consulting Services does not provide to the client a warranty, express or implied, as to the condition of the property inspected, including but not limited to, any hidden defects that are not detected during the course of the moisture inspection provided by Mayfield Thermography Consulting Services.

---

©2003 Mayfield Thermography Consulting Services

1805 Glengarry Drive • Carrollton, Texas 75006 • (972) 323-0058 • Fax (972) 323-0062

• [tom.mayfield@comcast.net](mailto:tom.mayfield@comcast.net)