



StructureScan®

Scientific Approach = Accurate Results

StructureScan® is a division of StructureTec which performs thermal imagery analysis of roofs. **StructureScan**® surveys are used to depict substrata conditions not visible with the naked eye and can be performed on both ballasted and non-ballasted roof systems.

Thermal Imagery Scan

Wet insulation changes the ability of the roof system to store and conduct thermal energy, thus causing changes in the temperature of the roof surface. Using a hand-held camera, 100% of the roof's surface is photographed. Areas with wet insulation will appear lighter than dry areas due to an increase in temperature. This data is recorded onto



a DVD and the outlines of the wet areas are painted on the roof surface. CADD drawings of the roof with the areas delineated are also provided with color photographs of the roof.

A detailed report delineating conditions and recommendations is also provided.

Applications

This nondestructive, moisture detection process is useful in several different phases of a roofing project.

It is highly effective with an evaluation to help determine needs for repair, restoration, or replacement. It can be used during or directly after the construction phase of a project to ensure contractor performance. It can also be utilized to audit an existing warranty or completed construction, determining if the contractor or manufacturer have any corrective requirements.

Advantages

There are many advantages to having a **StructureScan**® performed. First, it is a scientific approach which ensures that the data acquired is extremely accurate. It covers 100% of the roof surface. Because it is nondestructive, it can be performed even if the roof is under warranty. The cause of the condition is addressed by pinpointing the initial problem, there-

StructureScan®
is your roof
system's most
reliable preventa-
tive or remedial
maintenance tool.

ADVANTAGES

- Data is extremely accurate if obtained by a licensed thermographer with appropriate equipment
- Data acquired covers 100% of the roof surface
- Nondestructive - minimally invasive, the membrane is left intact

EXPERTISE REQUIRED

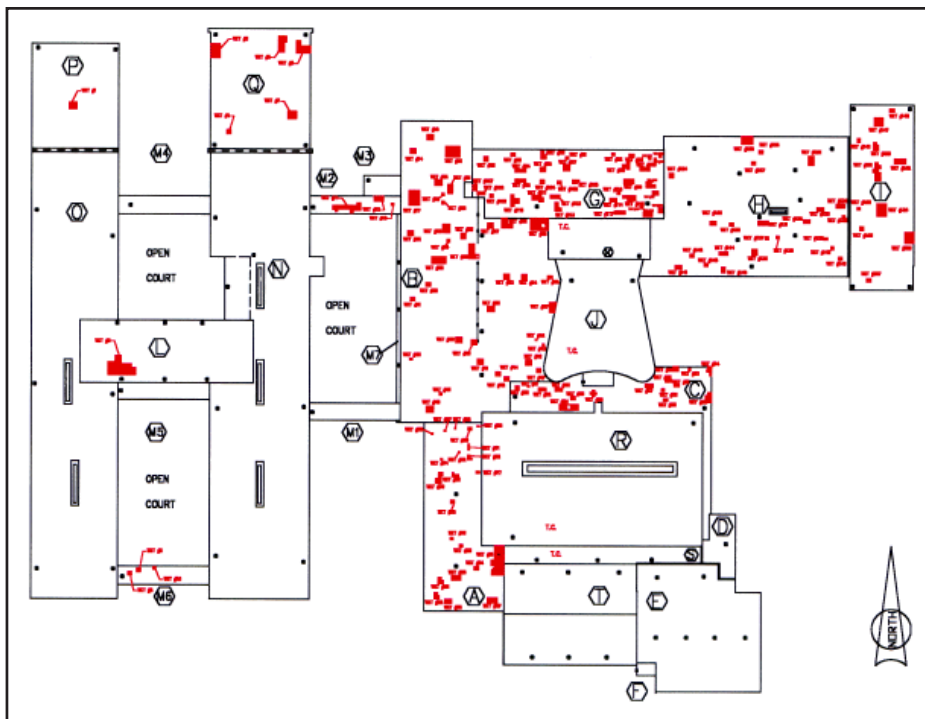
- Highly weather dependent
- Generally needs to be performed at night
- Readings may be affected by interior heat sources and differences in insulation thickness
- Results are qualitative rather than quantitative, requiring an experienced operator for interpretation

■ **Roofing experts generally agree that the most reliable method of moisture detection in a roof system is using an infrared survey. It is important to note, however, that the results from an infrared survey are highly dependent upon many different variables, requiring the direction and interpretation of a trained, certified expert in order to achieve usable results.**

fore treating the "disease" (cause) and not just the "symptoms" (effects). It is not uncommon to find that the roofs areas which have never leaked are the areas in the worst condition. This scan properly identifies the areas requiring repair, restoration, or replacement, enabling facility managers to strategically plan and properly invest dollars.

Experience and Expertise

StructureTec provides the expertise necessary to perform a *StructureScan*®. There are many challenges involved in the process with which StructureTec has vast experience. The thermal imagery scan is highly weather dependent and generally needs to be performed at night. The readings on the specialized camera can also be affected by interior heat sources and differences in insulation thickness. The biggest challenge, however, is that results are qualitative rather than quantitative. This requires an experienced and certified operator for interpretation. StructureTec's team includes individuals who combine specialized training and licensing with years of practical experience to provide end results which are accurate and reliable.



Overview of building roof. Red markings designate wet areas.

The Outcome

StructureScan® is your roof system's soundest preventative or remedial maintenance tool. Properly utilized, it can dramatically extend the life of your roof, while substantially lowering your overall roof maintenance expenditures. ■

BENEFITS

- Able to develop a long-range strategic plan
- Able to scan both ballasted and non-ballasted roof systems
- Identifies small problems before they become larger problems
- Saves dollars by eliminating unnecessary roof replacement
- Can be performed even if roof is under warranty
- Aids with warranty repair and/or contractor bidding
- Precise repairs are possible to eliminate leakage conditions
- Addresses the "cause" of the problem, not just the "effect"
- Properly invest dollars in the areas that require replacement

StructureScan® Features

- Multiple Cameras and Capabilities
 - Short Wave
 - Long Wave
- High Level Verification
 - Tramex
 - Delmhorst
 - Test Cuts
- Certified Personnel
- CADD Drawings Delineating Wet Areas
- Visually Examined During Daylight Hours by Certified Roofing Technician
- Photographs of Roof-Related Problems from Thermogram and Other Relevant Components & Problems

Total Building Envelope Management SolutionSM

www.structuretec.com

(800) 745-7832