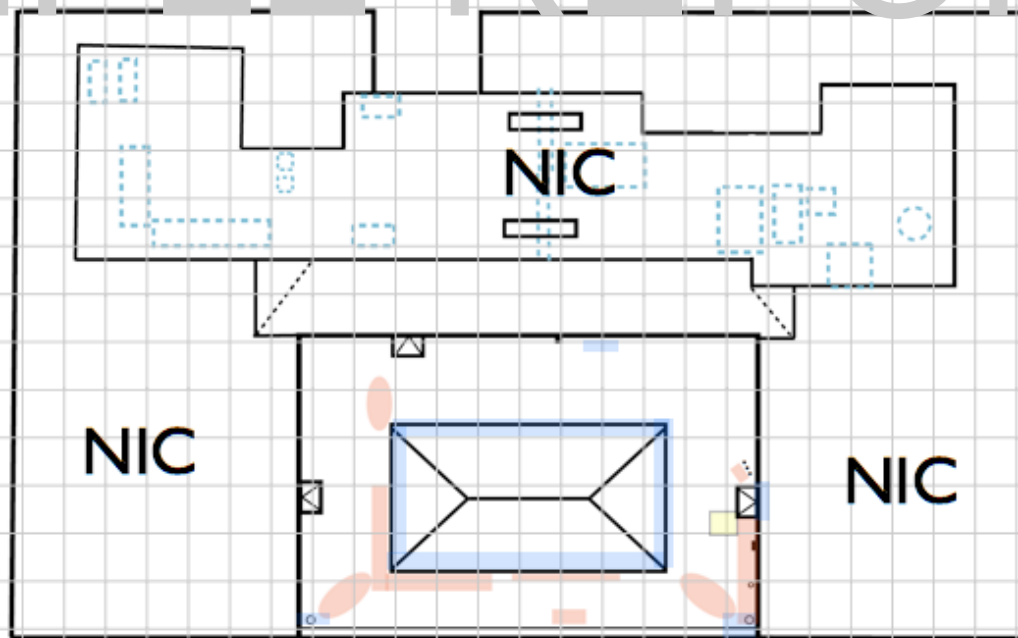


# MOISTURE SURVEY INFRARED & IMPEDANCE

- DATE Your Scheduled IR Date
- CLIENT Bldg Engineer ( Principal - Roof Contractor)
- SITE Architect Lofts, Downtown, Los Angeles, CA
- AREA Fifth Floor Roof
- START TIME 5:15 pm, Sunset 5:42 pm to 8:00 pm
- END TIME 8:00 pm
- DAY TEMP 61 F High / 55 F Start Surface 40 F to 60 F
- WEATHER Clear - Light Clouds Rain Predicted
- ALTITUDE Not Recorded
- START TEMP 55 F
- BAROMETER 30.09
- INTERIOR TEMP / AIR MOVEMENT Not Observed
- UNDER DECK COND / CHANGE IN CONST NA
- WIND SPEED 4 mph gusts from 6 to 8 mph
- HUMIDITY 31%
- DEW POINT 26 F
- SURFACE MOISTURE Only in Small Ponds - Field ND
- CORE MOISTURE Range, dry - 5%, wet - 20-100 %
- TYPICAL MOISTURE Dry in Field to wet 20%-100%%
- SCALE DRAWING PROVIDED No - Atlas Sketch NTS
- CORE REPAIRS BY OTHERS No - None Taken Typical
- PHOTOS OF GENERAL CONDITIONS Yes - Overall
- PHOTOS OF SPECIFIC CONDITIONS Several - anomalies
- PHOTOS OF INTERIOR CONDITIONS Confirming Elect
- IR IMAGES OF ANOMALIES Relied Upon For Survey
- IR INTERIOR IMAGES Rf moisture no manifestation, 1 leak

SAMPLE REPORT

- Red - Substantial moisture detected from 20% to 80%
- Yellow - Moisture detected from 5% to 20%
- Blue - Moisture detected at general ions & encapsulated wood from 10% to 80%
- White - Primarily no moisture detected some lack of access under equipment in this area



**ARCHITECTS LOFTS**  
Downtown Los Angeles, CA

**NOTE:**

ASTM D7954 M-15a, Electronic NDT Impedance 17.1 Technique B - Grid format scanning and recording modified for our use, No Coating Mfg limits or standard provided for additional threshold or sampling. ASTM C1153 Location of Wet Insulation in Roofing Using Infrared Imaging, used as a primary resource confirming observation in night environment. Cool winter day temperature and light clouds reduce optimal conditions. Strong confidence in results was achieved, confirming DT by contractor is required.



**Gary G. Weaver**  
PASSED CREDENTIAL REQUIREMENTS FOR:  
RCI - Registered Roof Observer  
Ibaag - Certified Roof Inspector  
RCI # 0707 Ibaag # 20707158  
Tile Roof Institute, InterNACHI Infrared Certified

- Yes SAFETY WALK CONDUCTED
- Yes INTERIOR OBSERVED
- 65 F INTERIOR TEMP / CONDITIONED
- Steel INTERIOR CONSTRUCTION
- Corner AREA OF LEAKS
- Unknown RUST / ROTTED DECK / ANOMALY
- No SKYLIGHT FALL PROTECTION
- NA EXTERIOR
- Parapet PERIMETER EDGE PARAPET
- Yes SKYLIGHT TPE
- Yes Minor TRIP HAZARD
- Window ACCESS
- Gen Hosp HOSPITAL LOCATION



## MOISTURE DETECTION PROTOCOL

DATE Your Survey Date  
CLIENT Requesting Mfg Rep- Paul  
SITE The Suites Hotel & Spa  
AREA Rooftop Equipment Well  
ADDRESS 111 Downtown LA  
OBSERVER Gary Weaver

LOW SLOPE ROOFING  CONCRETE DECKING  WOOD DECKING  WALLS

A scale drawing of the roof areas is to be provided by the Contractor prior to the survey. All areas shall indicate the type and location of penetrations for reference during the survey. Proximity of moisture to features noted on the drawing shall be verifiable and reproducible. Core cut and probe are required.

Atlas IR safety check list shall be completed prior to any infrared thermography. Weather conditions which may impact the quality of the infrared images shall be documented.

A minimum of three independent testing sources (IR, Impedance, DT verification) shall be used to confirm anomalies indicating the likelihood of moisture at a site and to verify the accuracy of the findings.

- NDT Fluke Building Science Infrared Color \*
- NDT Fluke Building Science Infrared Black & White \*
- NDT Tramex Roof & Wall Scanner Component Calibrated Electronic Impedance \*
- NDT Tramex Roof, Drywall, Wood, Masonry Adjustable Calibrated Electronic Impedance \*
- NDT / DT Tramex Concrete Hygro-I Scanner
- NDT ASTM Mat Test \*
- NDT DT ASTM Calcium Chloride Test \*
- DT Tramex Component Calibrated Electronic Impedance Probe
- NDT Wet Test Low Voltage Electronic Field Vector Mapping
- NDT Dry Test High Voltage Electronic
- DT ASTM Test Cut \*
- DT ASTM Modified Test Cut \*
- DT ASTM AAMA Calibrated Spray Rack \*
- DT ASTM AAMA Calibrated Spray Rack, Calibrated (Vacuum Enhanced) \*
- DT AAMA Calibrated Spray Hand Wand
- DT RILEM Tubes
- DT Controlled Flow Step-up Water Test
- DT ASTM Flood Test (intended for waterproofing only) \*
- DT ASTM Flood Test (modified from waterproofing for roofing)

\* Designates ASTM Test Standard Established, all test protocols shall be modified for our use unless otherwise indicated, D7954-Impedance, D7438-Calibration of Hand Held Meters, D1079 Terminology.

\* Info submitted for comment & review by Mfg Representatives Paul Xxx & David Xxx, Contractor is Named Principal of Contracting Specialties Inc., Distributor is Wpfg Dist

Reviewed by:

Site Observer  Site Technician  Office QAO  Preparer

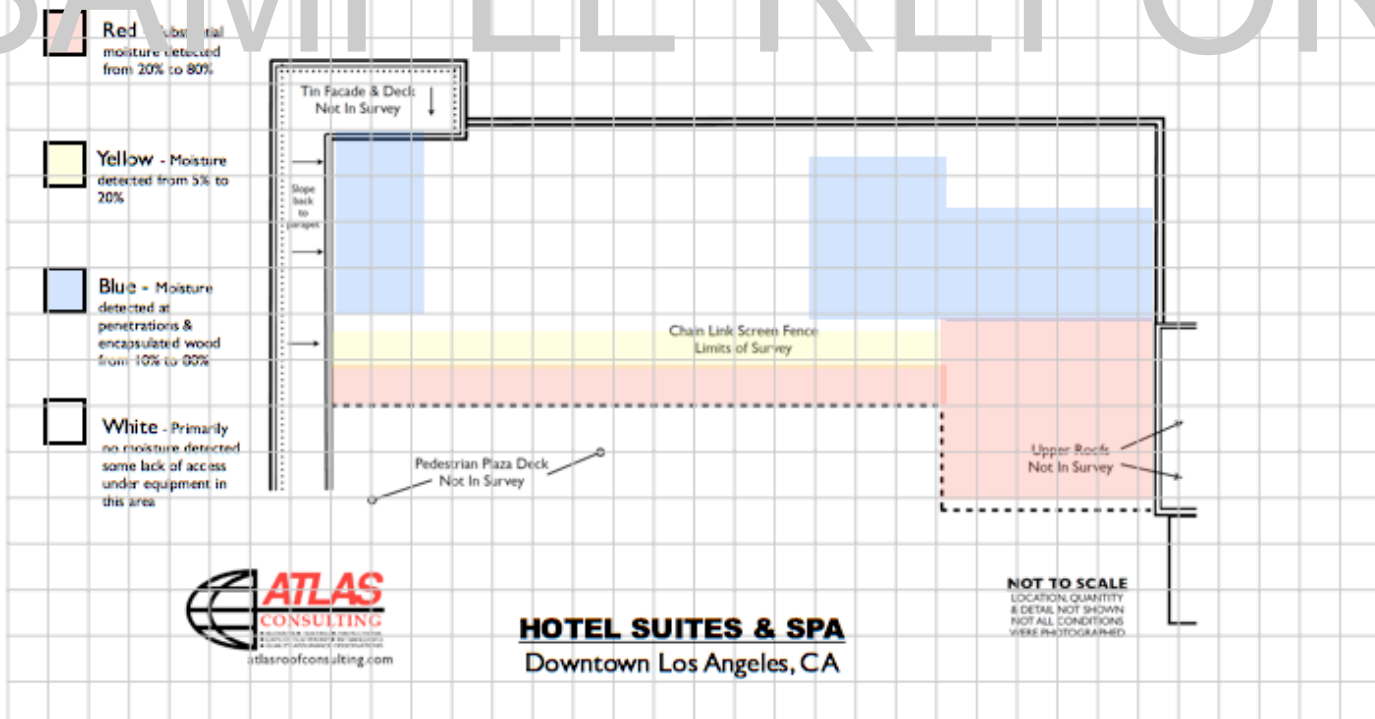
# MOISTURE SURVEY INFRARED & IMPEDANCE

- DATE Your Inspection Date,
- CLIENT MFG Technical (Roof Membrane)
- SITE Hotel Suites & Spa DTLA, CA
- AREA Roof Top Equipment Area
- START TIME NA Night IR Not Conducted
- END TIME NA
- DAY TEMP 76 F / Surface 84 F to 91 F
- WEATHER Clear - Rain Predicted
- ALTITUDE Not Recorded
- START TEMP NA
- BAROMETER Not Recorded

- WIND SPEED 2.2 mph gusts to 5 mph
- HUMIDITY Not Recorded
- DEW POINT Not Recorded
- SURFACE MOISTURE Not Detected (Electronic)
- CORE MOISTURE Range, some teens 20-70 %
- TYPICAL MOISTURE Less than 30 % average
- SCALE DRAWING PROVIDED None Provided
- CORE REPAIRS BY OTHERS No
- PHOTOS OF GENERAL CONDITIONS Yes
- PHOTOS OF SPECIFIC CONDITIONS Several
- IR IMAGES OF ANOMALIES Some Daytime Not

Relied Upon For Survey

# SAMPLE REPORT



**NOTE:**

ASTM D7954 M-15a, Electronic NDT Impedance I7.1 Technique B - Grid format scanning and recording modified for our use, No Sika limits or standard provided for additional threshold or sampling.

ASTM C1153 Location of Wet Insulation in Roofing Using Infrared Imaging, not used as a primary resource or in a night environment due to determination by other means.



**Gary G. Weaver**  
RCI - Registered Roof Observer  
Haag - Certified Roof Inspector  
RCI # 0707 Haag # 20707158

- Yes SAFETY WALK CONDUCTED
- No INTERIOR
- None AREA OF LEAKS
- No / Conc RUST / ROTTED DECK
- NA SKYLIGHT FALL PROTECTION
- NA EXTERIOR
- Parapet PERIMETER EDGE PARAPET
- NA SKYLIGHT TPE
- Yes TRIP HAZARD
- Roof Top ACCESS
- No WC HOSPITAL LOCATION