

## Forensic Water Intrusion Inspection and Study is an analysis of:

- The ability of the existing roofing and/or waterproofing materials to prevent water intrusion,
- A determination as to if the manufacturer installation techniques/specifications were followed.
- Any counter-indications of the actual materials in relation to the substrate,
- The ability of the substrate to provide an effective base to support adhesion of the roofing or waterproofing,
- To physio-chemically determine the responsibility and/or culpability of the material manufacturer, the contractor, the general contractor, the architect or the engineer in relation to a waterproofing failure,
- The most important aspect of the study is to recommend the most effective materials from a cost-benefit standpoint and to assure water-tightness for a minimum of 20 years.

South Florida's unique environment exposes steel-reinforced concrete structures to a significant amount of rainfall, year-round on-shore ocean breezes, a high-chloride environment and substantial changes in temperature that affects the movement of a structure. This mandates proper roofing/waterproofing to protect structures from:

- · Water intrusion into the concrete and its reinforcing steel,
- The extremely aggressive affects of chloride ions,
- The formation of ferrous and ferric materials which are the by-product of corrosion which is very destructive to the structural concrete and its ability to withstand load,
- Deterioration of the building's structural integrity.

A structure's exposure to the elements will lead to concerns to its structural integrity if it is not waterproofed properly or if the waterproofing has failed - not because of the occasional leak in a parking garage but due to the damaging effects water intrusion has on the reinforcing steel.

Where a structural engineer's expertise concerns structural integrity and structural load, Integral Preservation Systems' (IPS) expertise is the chemical composition of construction materials with a particular focus on waterproofing and roofing materials and their ability to protect a structure.

Property Managers and their Boards benefit from Integral Preservation Systems (IPS) being a part of their water intrusion problem-solving team due to our expertise in matching the proper material chemistries with the roofing/waterproofing need. By also performing inspections of the application of the waterproofing material, IPS ensures the property receives a legally-binding long-term warranty from the manufacturer for any and all of the waterproofing work that is completed.

At the end of a project, the only one who is responsible for the water-tightness warranty is the product manufacturer, not the applicator or the engineer, which is why manufacturers pay IPS to oversee all applications of their products; they want it done correctly by vetted and approved applicators. Numerous attorneys, structural engineers and property managers depend on IPS' expertise when it concerns their clients' roofing/waterproofing failure and/or solution. Visit <a href="https://www.ipsconsult.net">www.ipsconsult.net</a> for a list of projects and for more information.

IPS has the unique skills and knowledge to assist property owners, homeowners' associations, architects and structural engineers with solutions to these problems. All materials are chosen based on their engineering characteristics and their exceptional ability to perform in high-chloride environments.

## The only solution is water-tightness.

Should you have any questions and would like to schedule an inspection, please contact Maria Clark at 561.251.3743 or maria@ipsconsult.net.