

Overview of EMT/Detec Capabilities

1. Rigorous Testing for Accuracy:

- The unit undergoes testing for its ground circuit and operating functions before the start of its main operation.
- It's continually tested at regular intervals throughout its usage.
- A final check is done at the end of the testing process.

This rigorous procedure ensures that the unit is always operating at 100% accuracy, giving builders, contractors, and developers confidence in the results.

2. Versatility in Membrane Scanning: The Detec Integrascan unit is compatible with a broad spectrum of waterproofing membranes. This includes:

- **IPO:** Insulation Plastomeric Polymer Bitumen
- **PVC:** Polyvinyl Chloride
- **Mod Bit:** Modified Bitumen
- **Hot & Cold Fluid Applied:** These are liquid waterproofing products that can be applied either hot or cold.
- **Traffic Coating:** Typically used for pedestrian or vehicular traffic areas to protect underlying waterproofing layers or to waterproof the concrete surface.
- **HDPE:** High-Density Polyethylene
- **White & Black EPDM:** Ethylene Propylene Diene Monomer rubber, known for its durability and versatility in various environments.

Given its impressive capabilities, the Detec Integrascan unit is a valuable tool in the arsenal of professionals who prioritize the integrity and longevity of their structures. It seems like a comprehensive solution to a significant and potentially costly problem in the construction industry.

It's evident that while various methods exist for testing waterproofing membranes, each comes with its own set of challenges and limitations.

Limitations of Alternative Testing Methods:

1. Vector Mapping:

- **Incomplete Coverage:** Cannot test the entire area comprehensively.
- **Time-Intensive Setup:** Setting up the equipment and preparing for the test can be tedious.
- **Vertical Surface Challenges:** This method is unreliable when used on vertical surfaces.
- **Material Limitations:** Ineffective for Black EPDM and semi-conductive waterproofing membranes.

2. High Voltage Testing:

- **Weather Constraints:** Ineffective in wet conditions which can be a frequent occurrence in some regions.
- **Potential Damage:** There's a risk of burning and subsequently damaging the membrane.
- **Safety Concerns:** The use of high voltage introduces potential hazards at the construction or testing site.
- **Detection Limitations:** Inability to detect breaches present in seam voids.
- **Material Limitations:** Like vector mapping, it's also ineffective for Black EPDM and semi-conductive waterproofing membranes.

3. Flood Testing:

- **Lack of Precision:** While it can indicate the presence of a leak, it doesn't pinpoint its exact location.
- **Structural Risks:** The weight of the water can lead to excess loading, posing a risk of structural damage.
- **Vertical Limitations:** This method is unsuitable for vertical membrane structures.
- **Seam Voids:** Cannot effectively test or identify breaches in seam voids.
- **Environmental Concerns:** Utilizes a significant amount of water, which is wasteful and not environmentally friendly, especially in areas with water scarcity.

Given these limitations, it's clear why a method like low voltage leak detection, especially using advanced equipment like the Detec Integrascan unit, is so valuable. It addresses many of the concerns and challenges presented by these alternative methods, offering a more comprehensive, safer, and efficient approach to waterproofing membrane testing.