

# **Specification Guideline**

# **Water Leak Detection – Zonal Systems**

Furnish a complete system to include electronic Single/Multi zone alarm panel, modular TraceTek TT1000/TT1100 sensing cable, AquiTron™ water sensing probes, auxiliary components and BMS interface as supplied by Aquilar and manufactured by TraceTek and AquiTron™.

**SENSING CABLE:** The system shall provide pre-connectorised sensing cable and sensing cable components all with locking connectors. The sensing cable shall, for the majority of cases, be capable of being cleaned in situ with a damp cloth. The sensing cable shall be capable of withstanding all liquids within the designated areas, such that it can be reused after cleaning. The sensing cable and all interconnecting jumper cables shall comply with class 2 plenum rating for LSF (low smoke and fume). Polyethylene cable materials shall be prohibited due to smoke and fumes generated in case of fire. The sensing cable shall be vibrant yellow for easy identification within floor voids, drip trays and general service areas. The cable shall be of a four-wire construction, in order to provide continuous verification of sensing circuit integrity. The four wires shall have a fluoropolymer insulation or coating and be wound helically around a central fluoropolymer core. The sensing cable shall be of such construction that no metallic parts are exposed in order to avoid corrosion. The sensing cable system may feature modular branching connectors in order to introduce tee splices into the layout. The sensing cable shall be TraceTek TT1000/TT1100 as supplied by Aquilar Ltd T: 01403 216100

**WATER DETECTION PROBES:** Each AquiTron™ probe shall be provided with pre-installed connectors for connection into the TraceTek system and be capable of being floor or wall mounted. The orange epoxy powder coated, low profile guard plate will ensure that the probe will not fall over and bright colour give high visibility. The water sensing tips shall be of specially coated grade of stainless steel to eliminate the chances of corrosion.

**ZONAL ALARM PANEL:** The alarm module shall be capable of monitoring systems up to 100 metres in length of sensing cable per zone and or 5 water detection Probes per zone. The alarm panel shall continuously monitor the system for water presence or loss of continuity. Volt-free contacts for leak shall be provided for each zone. Continuity shall be provided as a summary relay for BMS and remote interface. The alarm modules shall be provided with a 3A, 240Vac non switched supply.

The module shall be the AT-SZA for the single zone and AT-MZA for the multi zone as manufactured by AquiTron™.

**INSTALLATION:** The installation shall not take place until all construction work to the area of installation is completed, all debris and construction by products have been taken away and the area cleaned.

The sensing cable system and alarm module shall be of the type that is simple to install, commission and maintain Without the need for special tools, e.g., oscilloscopes, sine wave generators, etc.

Sensing cable shall be removed should it be necessary to conduct any local building modifications and replaced when completed.

Upon completion of the installation the TraceTek / AquiTron™ system shall be commissioned in strict accordance to the manufacturer’s instructions.

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**The system shall be supplied by Aquilar Ltd, Weights & Measures House, 20 Barttelot Road, Horsham, West Sussex. RH12 1DQ. Tel: 01403 216100 Email: info@aquilar.co.uk**