The Alton Towers Project
A Case Study

“Protecting you & your premises”
• Part of Alton Towers hotel, the spa opened in 2004.

• Hydro pool, hot tub, foot baths, 5 relaxation rooms.

“Protecting you & your premises”
The Problem

• Stace – consultants to Alton Towers

• Hotel at end of 10 year warranty with builders

• Passive Fire Protection Issues
  – Protection of Steel Girders and Beams
  – Compartmentation

“Protecting you & your premises”
The Enforcers

- Building Control
- Fire Authority
- Insurer

“Protecting you & your premises”
The Historical Evidence

Recent Events

• Cliveden House Spa - Jan 2016
  – Awaiting insurance details
• Junction Leisure Bournemouth - Dec 2014
  – £750,000.00 insurance pay-out
• Eden Isles Florida - Jan 2015
  – 1 fatality
• Northern Moscow - Dec 2008
  – 6 fatalities

“Protecting you & your premises”
The Solution

• Comprehensive site survey
• Passive Option Problems
  – Close spa to gain access to girders for fireproofing
  – Close spa to install compartmentation in ceiling void above Crystal Bath room
  – Cost

“Protecting you & your premises”
The Solution

• Comprehensive site survey

• Active Options
  – Keeps the spa open
  – Install sprinkler system
    • Plant space, pipe sizes and cost
  – Install high pressure watermist system
    • Cost
  – Install low pressure watermist system
    • Potential

“Protecting you & your premises”
The Testing

- IMO Resolution MSC 258 (84)
- MED approval from Lloyd’s Register
- Approved By DNV
- FM5560 Appendix 1 for HC-1

“Protecting you & your premises”
The Benefits

Low Pressure Watermist System

• Less installation time than other options
• Minimalize damage to structures
• More cost effective

“Protecting you & your premises”
Specific Benefits to Alton Towers

• No need to close the spa to the public
• Worked at night to minimise disruption
• Small pipe works – minimal re-decoration
• Drainage, power and water supply already available
• Small tank and pump – fitted easily into existing plant room space
• Interfaced with fire alarm system for rapid response

“Protecting you & your premises”
The Installation

MALE PLANT ROOM

FEMALE PLANT ROOM

CRYSTAL BATH STEAM ROOM

WATER TANK

PUMP N + N

“Protecting you & your premises”
Standards

Installed and maintained to standard NFPA750

“Protecting you & your premises”
More Information

Fire Suppression Guide

Guidance to Watermist Systems

Watermist Guide

Risk Management Guidelines

“Protecting you & your premises”
Any questions?

“Protecting you & your premises”
More Help or Advice?

0845 402 3045

info@assured-ltd.co.uk

www.assured-ltd.co.uk

“Protecting you & your premises”
Thank you for listening

“Protecting you & your premises”