

Watermist Fire Protection in 2016

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Why is watermist so contentious?

Is it or isn't it a sprinkler system?

Reluctance to accept by Building Control and Insurers.

Lack of component testing

Test based designs

Cowboy charter

Lack of standards



Is mist system the same as a a sprinkler system?

NO!

Automatic mist nozzles do use the same frangible bulb as sprinklers.

Sprinklers suppress fire by wetting, mist suppress fire by cooling.

Sprinklers provide floor wetting

Mist delivers droplets into the combustion air stream.

Mist nozzles have height limitations



Lack of acceptance by Building control and Insurers

Building Control:

Not fire system experts.

Need the 'comfort' of a British Standard to justify acceptance.

Insurers:

Seeking full property protection

Risk averse

Lack fire system technical expertise



Lack of component testing standards

FM/UL embed component testing in their fire testing.

CEN has been drafting component test documents for 6 years.

Major test houses (LPCB/VdS) have in-house component test protocols

Lack of published test standards has put off manufacturers



Test based designs



Limited 'common' test protocols

Do tests replicate actual hazards?

High cost of testing

Validation – 3rd parties

Lots of tests done

Tests inform application and limitations of tests

Cowboys charter

tyco

*Fire & Integrated
Solutions*

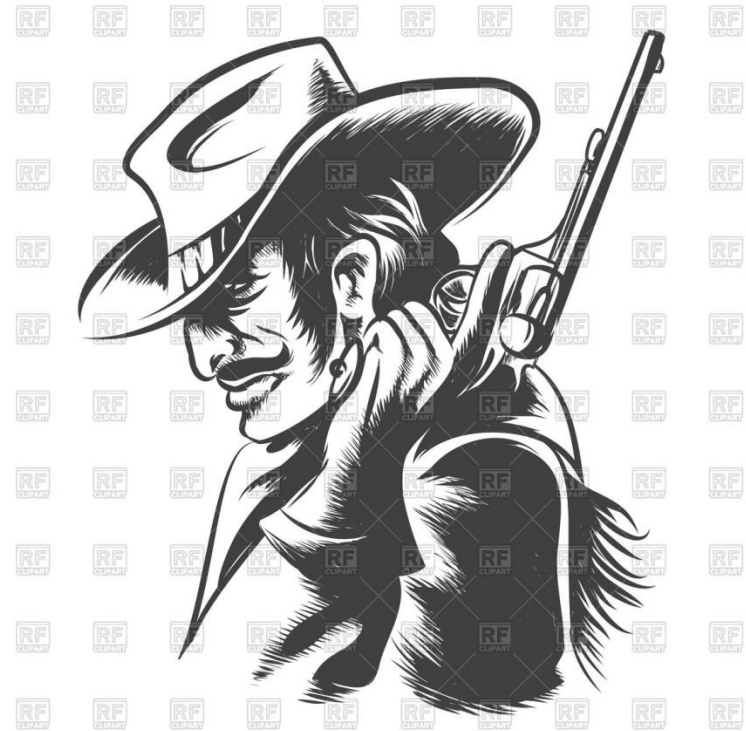
Lack of standards leaves buyers
vulnerable to 'plausible salesmen'

Seduced by low water flows and
small water storage

Discharge times depend on, or ignore
FRS response times

Entrants into the market lack a fire
engineering background or
understanding

Installer audit schemes needed



Lack of watermist standards



NFPA750 – onus on manufacturers to provide tested design solutions.

FM 5560 – insurer in-house standard for components and fire tests

CEN – moving towards creating standards for design, fire tests and components (later?)

New British Standards

Standards :

- raise public awareness of industry best practices
- - set benchmarks for effective application for fire protection watermist.

BS – 8458 – published – domestic and residential design and installation

BS -8489 – commercial and industrial – design, installation and test protocols.

- **Public domain rules for design and installation**
- **Test protocols**
- **Recommendation for component certification**

Thankyou !!