

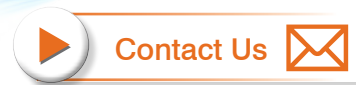
Hot/Cold Aisle Containment

What does the **NFPA** say about aisle containment in data centers with **Sprinkler Systems?**



08312015

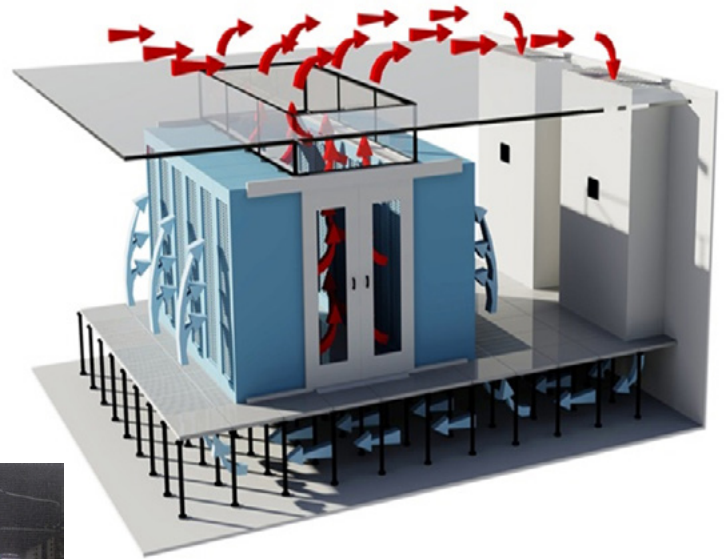
ORR Protection Systems
Mission Critical Fire Protection Experts®
www.orrprotection.com



Fact: Traditional **Data Center/**
Telco designs are changing significantly!

Question: Has your **fire protection strategy** changed?

*If it hasn't, you probably
have a problem...
and it may be **BIGGER** than
you think!*



Download Lee Kaiser's Hot Aisle/Cold Aisle
Article from **7x24 Exchange Magazine**

Hot/Cold
Aisle Containment

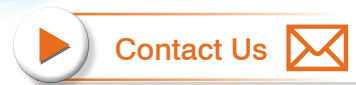
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Sprinkler System Challenges

Minimizing Obstruction



Spray Patterns: Are obstructions effecting the **spray pattern requirements** of NFPA 13?

NFPA 13 gives requirements for handling obstructions

Obstructions to Sprinkler Discharge.

Sprinkler placement is a very important aspect of making sure air handling structure within a mission critical facility does not interfere with the ability of the sprinkler system to perform when called upon. Additional sprinklers may need to be considered in your design to adequately cover the area. Chapter 8 of NFPA 13 gives rules for handling obstructions.

PROPER SPRINKLER PATTERN

OBSTRUCTED SPRINKLER PATTERN

Distribution Pattern From a Standard Spray Sprinkler

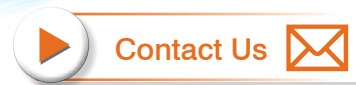
For specific requirements, please review Chapter 8 in NFPA 13-2010.





Sprinkler System Challenges

Minimizing Obstruction



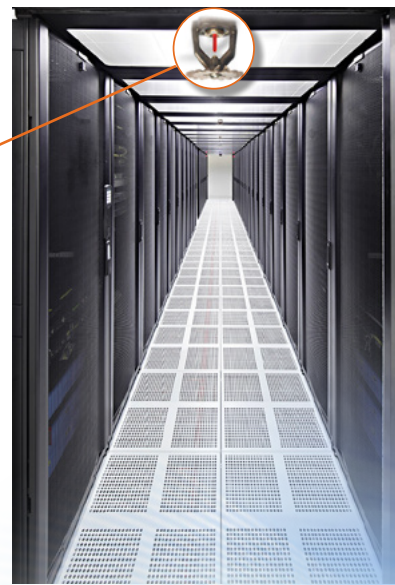
Spray Patterns: Are obstructions preventing water from reaching the hazard?

Install Sprinklers underneath fixed obstructions

NFPA 13 (2010 Edition)

8.5.5.3.1

Sprinklers shall be installed under fixed obstructions over 4 ft (1.2 m) wide such as ducts, decks, open grate flooring, cutting tables, and overhead doors.

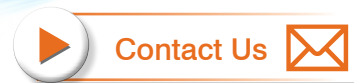


Cold Aisle Containment





Sprinkler System Challenges



Automatic Obstruction Removal:

Are you certain the proposed automatic means of obstruction removal will have no impact on performance?

NFPA 75 (2013)

5.7.8.1* sprinkler system modifications shall not be required where all of the following conditions are met...

Sprinkler Systems: Automatic Obstruction NEW NFPA 75 Requirements

- Releasing devices are listed for the purpose
- Remove all obstructions for entire suppression zone
- Removal doesn't impact egress (per NFPA 101)
- Doesn't lower intended level of protection
- Removed by Smoke Detection

Schedule a Hot Aisle / Cold Aisle Containment Fire Protection **Lunch & Learn** for your team.

[Click Here](#)

Note: Thermal Mechanical and Fusible links not permitted

