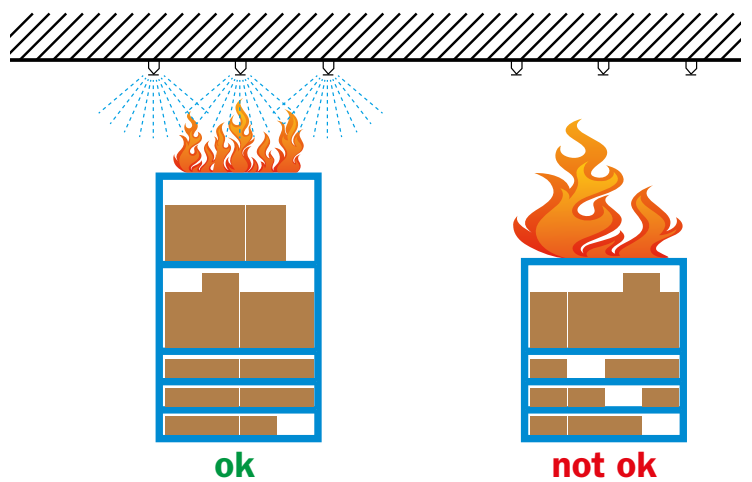




ESFR K14 (K 200 in metric units) sprinkler heads

No longer acceptable in buildings higher than 10.7m

Recent tests made on 6m high rack storage of class IV and group A plastic commodities in 12.2m high buildings fitted with Early Suppression Fast Response K14 showed failures to suppress fire due to excessive clearance (distance between top of storage and ceiling).



K14 sprinkler

Clearance issue is exacerbated the bigger the combustible load and the taller the building. **Edition 2013 of NFPA 13 no longer accepts ESFR K14 for buildings above 10.7m.** All ESFR design tables have been revised.

Previously the clearance test (above 6m) was not part of the sprinkler heads approval. By September 2, 2014 all manufacturers should have their ESFR (whatever K factor) sprinkler heads submitted to this new clearance test. Some already passed.

WHAT TO DO FOR ON-GOING ESFR PROJECTS

- Check that no K14 is planned for building exceeding 10.7m
- Prefer K17, K25, K22 or other K that passed the clearance test

WHAT TO DO FOR CURRENT ESFR K14 IN BUILDING >10.7m

- Replace ESFR K14 by ESFR K17, K22 or K25 sprinklers
- Set up one level of in rack sprinklers
- Reduce the height of storage (preferably down to 3 m or less) and limitation of the pile sizes (93 m² maximum with piles separated by at least 7.6 m). Typical situation in shipping areas

Discuss the various options with your AXA MATRIX Risk consultant