# First Draft Report on NFPA 13 Released

By Dana Peterson

he National Fire Protection Association (NFPA) has released the First Draft Report of the new proposed standard for the 2016 edition of NFPA 13. The First Draft Report may be viewed at *www.nfpa.org/13*.

Public comments (proposed changes) on the First Draft Report were received until May 16, 2014.

Discussion on the First Draft Report and public comments began during the NFPA 13 Technical Committee at the Second Draft meetings held June 18 and 25 in San Diego, California.

The Second Draft Report will become the final version of the 2016 edition to be voted on by the NFPA membership at the annual meeting in June 2015. It is scheduled to be released for public comment on January 16, 2015. Comments can only be made through preregistered motions from the floor of the annual meeting, can only address previous comments, and cannot add new content.

As this particular code is employed broadly across the country, affecting many APPA member institutions, the APPA Standards and Codes Council wishes to report on the changes that are proposed in the currently available First Draft Report that is under consideration by the Technical Committee.

The changes outlined below are the Council's best assessment and interpretation of the most impactful changes found in the First Draft Report. Although there is a possibility that some of these changes may vary to some extent, this is intended as a good overview of what will likely be coming up. This is by no means guaranteed to be complete or error free. Changes that on the surface appear to be simply a restatement of current language, minor changes in terminology, or grammatical corrections have not been included. APPA members are encouraged to view the First Draft Report if details and exact language are desired.

Please remember that unless you are in a jurisdiction that automatically updates the code to "the latest edition," the 2016 edition will require adoption through a public process in your jurisdiction and have an effective date established. Typically this occurs a year or more after the date of edition.

### **CHAPTER 3**

- New definitions established for "concealed space," "extension fitting," and "CMDA sprinkler."
- Deletes definitions of "available height for storage" and "low piled storage."
- Clarification on what determines if shelving is considered open or closed.

### **CHAPTER 5**

- New wording for determining classification of materials and packaging by type and amount.
- Deletes references to Group A plas-

tics by weight or volume to determine if Class IV is in favor of table.

### **CHAPTER 6**

- Changes requirements for compatibility information from being a part of the manufacture's listing instructions to being available from manufacturer.
- New requirements for stainless steel pipe.
- Changes requirements for combination systems using steel pipe and fittings with corrosion inhibitors from being certified by a testing laboratory investigation to being a listed product.

### CHAPTER 7

- Sets air venting and means of relief requirements for wet pipe systems with black pipe or galvanized steel pipe.
- Requires dry pipe systems to have an air maintenance device.
- Deletes a figure showing arrangement of supply piping with relief valve and backflow device.
- Deletes all language covering circulating closed loop systems in its entirety.

### **CHAPTER 8**

- Requires floor control valve assemblies in multi-story buildings.
- Adds Control Mode Specific Application (CMSA) and (ESFR) sprinklers as acceptable types in light hazard occupancies.
- Eliminates area separation require-

ments where sprinklers listed for both standard response and quick response are used.

- Permits extended coverage sprinklers to cover areas below an overhead door.
- Eliminates language about galvanized pipe in 8.4.7.2.
- Establishes sprinkler requirements when dealing with obstructions.
- Exempts minimum pressure requirements for certain hip type roofs.
- Provides new figure for obstructions against walls.
- Specifies positioning of deflectors above and below obstructions.
- Sets sprinkler type required below round ducts.
- Deletes requirement that sidewall sprinklers in soffits must be within 4" of soffit bottom and project no more than 8 inches (or 12 inches if over a wall cabinet).
- Notes that roofs with pitches less than 2 in 12 should be considered as flat.
- Provides new figure for "Positioning of sprinklers to avoid obstruction."
- Prohibits sprinklers on ceilings with slopes greater than 8 in 12, or higher than 24 feet.
- Guidance on how to determine if groups of pipes or conduits should be treated individually or in aggregate as an obstruction.
- Specifies when sprinklers can be deleted from soffits, eaves, and over-hangs.
- Sprinklers shall not be required in bathrooms not exceeding 55 square feet built of non-combustible materials with a 15 minute rating, except in nursing homes.
- Deletes requirement that shields installed to protect electrical equipment must be non-combustible.
- Exempts revolving doors from having to have sprinkler coverage.
- Exempts areas above the water's surface in indoor pools from requiring sprinkler protection except if the pool is able to be covered.
- Establishes requirements for main

drain test connection locations.

- Establishes requirement that if heat trace is used, it must be electronically supervised to a constantly attended location.
- Makes a requirement to provide an automatic drain valve for NFPA 25 testing.
- Stipulates that sprinkler piping shall not be used for electrical grounding.

### **CHAPTER 9**

- Provides new standards for ferrous hanger rods.
- Gives a new table for section moduli for trapeze hangers.

# Kuhl<sup>®</sup> Series

Durability, energy management and control features

Take control of energy usage and reduce operating expenses. Commercial grade Kühl air conditioners can be connected to a Building Management System or demand response services.

- Wi-Fi capabilities
- Utility Demand Response
- 7-day programmability (with optional accessory-sold separately)
- Building Management System capable
- Built-in environmental sensors
- Commercial-grade durability

877-599-5665. ext. 516

www.friedrich.com

e FriedrichLink

KWW

Wireless thermostat

(optional accessory)

controls of up to 8 Kühl units\* from a single

wall-mounted thermostat.

BMS ready PTACs and Single Package Vertical Units

# FRIEDRICH

- Establishes new requirements for slotted holes.
- Specifies use of pipe diameter instead of line type for determination of minimum penetration of screws.
- New requirements for the maximum unsupported length of pipe at the end of a run.
- New requirements for pipe stands.
- New requirements for pipe clearances from structure.
- Additional limitations for when material requirements for pipe hangers do not apply.
- New seismic coefficient table.
- Establishes seismic coefficients for nipple risers of various lengths less than 4 feet.
- New table for maximum spacing of steel pipe restraints.

#### **CHAPTER 10**

• Chapter 10 has undergone a substantial rewrite. It is not possible to produce a succinct summary of changes for this compilation. Refer to the actual NFPA text.

### **CHAPTER 11**

- Adds draft curtains as a means to avoid extending the more demanding sprinkler load protective area where two hazards are adjacent to each other and only one requires delayed fusing.
- Revisions to determining the required discharge for residential sprinklers.

### **CHAPTER 12**

- How to measure roof heights with corrugated decks and with insulation in various configurations.
- Same draft curtain language

from Chapter 11.

- Deletes language requiring ESFR sprinklers to only be wet pipe, and language that limits the system area of operation increase to no more than 3,500 square feet for dry pipe and preaction systems.
- Allows certain types of storage occupancies to be protected by ESFR and CMSA systems.
- Clarifies the component data points for determining minimum water supply for hydraulically designed systems and revises the table for hose stream allowance and water supply duration.
- Removes several types of joist spaces from not requiring a minimum design area of sprinkler operation.
- Revised table for control mode for density per area for protection of wood pallets.

### IT'S TIME TO MAKE THE CHANGE! UNDERGROUND CONTROLLED DENSITY INSULATING FILL and CORROSION PROTECTION SYSTEM



The global economy and environmental demands have dramatically impacted the energy generation and distribution marketplace trifold. Owners are experiencing the skyrocketing maintenance and operating costs coupled with dwindling budgets; Gilsulate®500XR is the proven solution. Gilsulate®500XR offers a multitude of benefits with key points such as: long-term reliability, no maintenance system, superior BTU reductions, cost-effectiveness, flexibility, simplistic design & installation making it the overall value and choice owners are seeking today!





NATIONAL CENTER THERAPEUTICS MANUFACTURING - TEXAS A&M 24 " HDPE CWSR INSULATED WITH GILSULATE®500XR. A&M' S CAMPUS DISTRIBUTION MASTER PLAN FOR CWSR/HWSR RECENTLY CHANGED FROM PIP TO GILSULATe®500XR.

THERMAL ENERGY CORP (TECO) CHP EXPANSION PROJECT GLISULATE<sup>6</sup>500XR HAS BEEN THE SYSTEM INSULATING/PROTECTING TECO'S STEAM/COND./PUMP COND. FOR 25 YEARS! "FAILURE IS NOT AN OPTION FOR TECO."

Gilsulate International Incorporated • 800-833-3881 • 661-799-3881 • www.gilsulate.com

### **CHAPTER 14**

• Changes to table for some head orientations for ESFR protection of palletized and solid piled Class I to Class IV commodities.

### **CHAPTER 16**

- Adds in-rack sprinklers as an additional means to protect structural columns enclosed within storage racks.
- Requires a sprinkler density increase where various commodity classes are encapsulated.
- Requires sprinklers for every row of shelving where solid shelves are utilized.
- Tables for single- or double-row racks for Class I to Class IV commodities greater than 25 feet delete references to figures.

### **CHAPTER 17**

- Deletes reference to "decision tree" figure.
- Same in-rack sprinkler requirement as in Chapter 16.
- Deletes references to figure for five tables covering storage of various heights with various ceiling clearances.
- New provisions for the protection of exposed expanded group A plastics.

### **CHAPTER 20**

• New requirements for sprinkler location and spacing in transverse flues.

### **CHAPTER 21**

- Specifies the parameters to be used to calculate the sprinkler design area and numbers on a branch line.
- Permits the use of sprinklers tested in accordance with the requirements, but not specifically listed.
- Revises two tables for extended coverage with CMSA sprinkler design.
- Deletes the table covering the storage of palletized, solid-piled, bin box, shelf, or back-to-back unexpanded plastic commodities.
- Deletes table for storage of unexpanded plastic commodities in open racks.

### **CHAPTER 23**

- Deletes figure of summary sheet.
- Deletes requirement for needing to include several items on the summary sheet.
- Adds a number of additional required entries on the summary sheet.
- Stipulates that water flow velocity shall not be limited when hydraulic calculations are done under certain methods.
- Requires increasing the design area in systems that have insufficient head in a branch line.
- Removes provision that allows relaxed requirements where ESFR sprinklers are used above or below an obstruction.
- Revises requirements for in-rack sprinklers.

• Revises entire section, figures, and tables for pipe schedules.

### **CHAPTER 25**

- Extends relief from having to retest after a modification to all existing systems (except pressure test).
- Stipulates the testing requirements for additions to existing systems.
- Adds noting the location of the venting valve, and the results of the dry pipe preaction valve test to the system signage requirements. (3)

Dana Peterson is associate university architect at the University of New Hampshire and a member of APPA's Standards and Codes Council; he can be reached at *dana*. *peterson@unh.edu*.



### Modulate system capacity to match varying loads.

Rawal Devices' APR Control makes any standard A/C unit a variable-capacity system. You get:



- Better equipment longevity and reliability
- Improved humidity control
- Availability as a "factory-installed" option

# Email: PerfectRH@Rawal.com

or call 800.727.6447 to schedule a Product Presentation

