
3 1999 NFPA 13:1-6.1 SPRINKLER PROTECTION WITHIN DECORATIVE WOOD "BOX BEAMS"

In a NFPA 13 sprinklered building, decorative wood box beams require sprinkler protection within the "box beam" cavity in accordance with 1-6.1, unless one of the exceptions to 5-13.1.1 can be applied (in particular, Exception Nos. 5, 8, and 9). If an exception to 5-13.1.1 is obtainable, then 7-2.3.1.3(b) is not applicable (3000 s.f. hydraulic design area). Confirmed with Dana Haagensen, NFPA 13 Committee.

4 SFM POLICY SFM REQUIREMENT TO REVIEW ARCHITECTURAL EXEMPTION SCOPE OF WORK PRIOR TO SPRINKLER EXEMPTION SCOPE OF WORK

It is a policy of this office that any sprinkler or fire alarm system exemption scope of work can only be reviewed after the associated architectural scope of work is reviewed as a prerequisite. Many times, sprinkler exemptions are submitted which entail sprinkler changes due to architectural changes – partitions added, removed, doors added, removed, etc. These architectural scopes of work are usually of such small caliber that a full review is not required. However, this office reserves the right to review the architectural scope of work, and process the review as an exemption if it is small enough in scope, or require a full review based on life-safety scope involved.

In the past, this office has allowed local fire prevention AHJ's and our district inspection offices to review the architectural work, without it being submitted to the SFM Plan Review department. In an effort to provide a more complete and consistent review process for small scopes of architectural work, this office now mandates that all scopes of architectural work be reviewed prior to review of sprinkler exemptions. This office will access the architectural scope of work submitted and determine whether the architectural work can be accepted as an exemption submittal or if the architectural scope must be submitted as a full review.

You must inform your building owner customers that the architectural review is a requirement, prior to review of sprinkler exemption scope. Failure to do so will result in your sprinkler exemption being denied.

Please be aware that there are exceptions to the prerequisite of an architectural review. If sprinkler deficiencies are attributed to an annual sprinkler system inspection and there is no architectural work associated with the sprinkler exemption work, then an architectural review is not applicable and, therefore, not required. Please inform this office of no architectural work in the "Description Of Work" box on the sprinkler exemption form.

5 1999 NFPA 13 CLASSIFICATION OF COMMODITIES OFTEN STORED UNDER EXTERIOR CANOPIES OF RETAIL FOOD STORES AND SUPERCENTERS

Plastic Shopping Carts:

See NFPA 13:Table 7-2.3.2.2. If carts are Group A plastics (you would have to verify with manufacturer), then use Solid Piled", "Up to 5 feet", OH2 discharge.

Outdoor Cooking Propane Tanks:

Propane is a Class 1A flammable liquid, as per the MSDS data found at <http://www.amerigas.com/pdf/MSDS2002.pdf>. Per NFPA 30:4-8.2, 1996 edition, use Figure 4-8.2(a) (storage in metal containers). Following the figure, it allows use of Table 4-8.2(f) which requires a 0.19 density/1500 sq. ft. This office defaults to OH Group 2 as a minimum. However, NFPA 30:4-8.2.2 requires a maximum spacing of 100 sq. ft. per head for Class A liquids.

6 1999 NFPA 20:2-7.1 REQUIREMENT FOR SPRINKLER PROTECTION OF REMOTE PUMP HOUSE

June 9, 2003, response to POR:

You request guidance from this office regarding protection requirements for a sprinklered pump house located 30 feet from the sprinklered building served by the fire pump. Resultant from a contact to NFPA regarding this issue, this office was informed that the 1999 edition of NFPA 20 inadvertently did not clarify the intent of this code section as relating to your scenario.

Please be advised that the NFPA 20 committee has pending documentation rectifying this issue. Please refer to NFPA 20 Committee Comment on Proposal No. 20-25, attached. In accordance with the proposed table, your scenario is acceptable to this office.

(Log #28)

20-15-(2-7.1.3 [5.12.1.2.1]) : Accept in Principle

SUBMITTER: Richard R. Kaiser, Code Consultants, Inc.

COMMENT ON PROPOSAL NO:20-25

RECOMMENDATION: Add wording to end of the first sentence of paragraph 2-7.1.3 [5.12.1.2.1] as follows:

“...shall be located at least 15.3 m (50 ft) away from the protected building or protected in accordance with 2-7.1.1 and 2-7.1.2 [5.12.1.1].”

SUBSTANTIATION: Indoor fire pump units are assumed to be adequately protected from damage due to fire by 1-hour or 2-hour rated construction in accordance with Section 2-7.1.1 andf 2-7.1.2 [5.12.1.1]. That same level of protection should be adequate and should be allowed for fire pump units located on the outside of the building. If the 50 ft separation is addressing a concern for collapse of the exterior wall resulting in damage to the outdoor fire pump unit, that same concern is not addressed with indoor fire pump installations. If fire rated construction is adequate protection for indoor installations, then fire rated construction should be just as adequate for outdoor installations.

COMMITTEE MEETING ACTION:Accept in Principle

Replace Section 2-7.1.1, Section 2-7.1.2 and Section 2-7.1.3 [Section 5.12.1.1 and Section 5.12.1.2 in the MOS Preprint] with the following:

“2-7.1.1 [5.12.1.1] Indoor Fire Pump Units. Indoor fire pump units shall be physically separated or protected by fire rated construction in accordance with Table 2-7.1.1 [5.12.1.1]

Table 2-7.1.1 [5.12.1.1] Equipment Protection		
Pump Room/ House	Building(s) Exposing Pump Room/House	Required Separation
Not Sprinklered	Not Sprinklered	2 hour fire-rated or 15.3 m (50 ft)
Not Sprinklered	Fully Sprinklered	
Fully Sprinklered	Not Sprinklered	
Fully Sprinklered	Fully Sprinklered	1 hour fire-rated or 15.3 m (50 ft)

2-7.1.2 [5.12.1.2] Outdoor Fire Pump Units.

2-7.1.2.1 [5.12.1.2.1] Fire pump units located outdoors shall be located at least 15.3 m (50 ft) away from any exposing buildings.

2-7.1.2.2 [5-12.1.2.2] Outdoor installations also shall be required to be provided with protection against possible interruption in accordance with Section 2-7.1 [5.12.1]”

COMMITTEE STATEMENT: Distance and fire rated separation are acceptable alternatives. Fire pumps in buildings other than the building being protected are indoor pump units and their requirements should be in the appropriately titled section.

NUMBER OF COMMITTEE MEMBERS:28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 22

ABSTENTION: 1

NOT RETURNED: 5 Jaeger, Jensen, Mowrer, Packer, Puchovsky

EXPLANATION OF ABSTENTION:

SDANO: See my Explanation of Abstention on Comment 20-1 (Log#3).

7-16-2003 reply from Dana Haagensen:

The 1996 edition does not address the minimum pipe size requirements for a closed-cone relief valve discharge. In the revision process for the 2003 edition, however, the Committee has agreed that the same minimums and information would apply to a closed-cone valve as an open-cone valve (see attached - Proposal 20-48, Log #123, from the May 2003 NFPA Report on Proposals).

There is also indication in A-2-13.8 that hydraulic calculations may be necessary in order to verify that the limitations of the relief valve are not exceeded.