

## Tech Tuesday Student Resources

July 19<sup>th</sup>, 2022

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# TechNotes

Editor - Roland Asp, CET

Issue # 442

June 23, 2020

## **TechNotes Issue #442**

**June 23, 2020**

### **The New Expert of the Day (EOD) Process**

The NFSA has a new association management system (AMS) that improves the member benefits and user experience on the website. One of the key benefits to being an NFSA member is the ability to ask a technical question on codes and standards and receive an informal interpretation from one of several NFSA subject matter experts (SME) who represent the industry on dozens of NFPA, ICC, and other codes and standards.

Requests for an informal technical interpretation to the NFSA expert of the day (EOD) program has traditionally been by fax, phone, or email. Starting on July 15, 2020, the NFSA is transferring the EOD process to the new AMS where members can submit questions, track the progress, and view their EOD cases. The step by step process is detailed below or can be viewed at [www.nfsa.org/protech](http://www.nfsa.org/protech) "MX - EOD and Technical Resources" (or [view the video directly here](#)).

### **Submitting a question to the EOD:**

1. Sign into [Members/Sign In](#) at [www.nfsa.org](http://www.nfsa.org)

### **Upcoming Technical Tuesdays**

**July 21, 2020**

### **Sizing Fire Pumps for Sprinkler Contractors**

Presented by Mike Joanis,  
P.E., Director of Contractor Services

### **NFPA Technical Meeting Voting THIS WEEK ONLY:**

Voting is open from **June 22nd through June 26, 2020.**

[See NFSA's Guide to NFPA's 2020 Annual Technical Meeting - Virtual Edition for voting guidance.](#)



View older issues in the "Member's Only" section

You are already signed in.

[Sign Out](#)

## Sign In

Username

Password

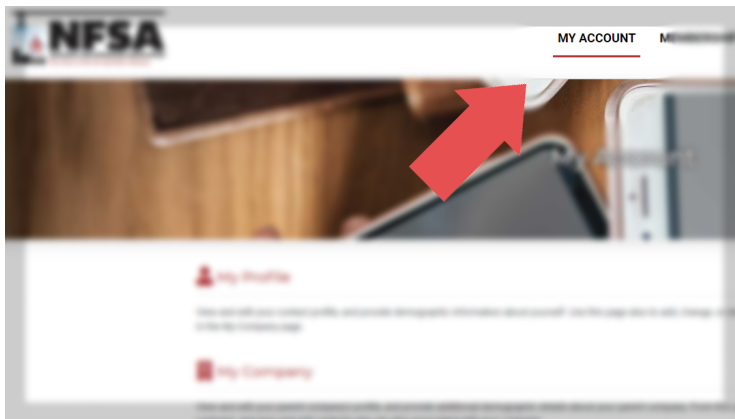
☐ Keep me signed in if I close the browser

[Sign In](#)

Do you need help signing into our site?

- ☐ Find my account by e-mail address
- ☐ I forgot my password
- ☐ Contact customer service

2. Along the upper ribbon, click [MY ACCOUNT](#)



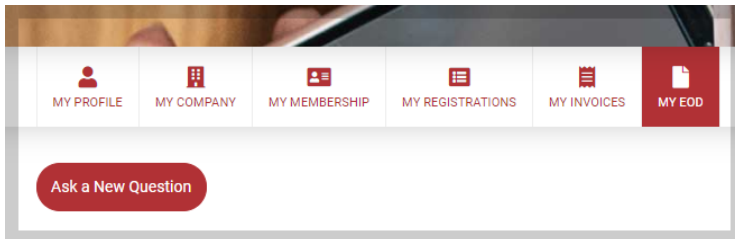
3. Scroll down and click on [My EOD](#)



## My EOD

The NFSA Expert of the Day (EOD) program continues on as a popular benefit to NFSA membership. The service provides members with informal interpretations on fire sprinkler codes and standards. Interpretations can assist in understanding what the standards actually say as well as navigate through a gray area based on actual field conditions. Valued for their consistency, logic and committee insights, the EOD program is relied on by contractors and AHJs alike when questions arise.

4. To ask a new question, click [Ask a New Question](#)



5. In the next page an input form is displayed. Fill in the following (see Case Details Table):

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intermediate  
temperature  
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< Back

**CUSTOMER DETAILS**

Customer

**CASE DETAILS**

Case Title \*

Question Delaying Project

☐ Yes ☐ No

NFPA Standard

▼ All

Edition

▼ All

Section

ICC Code (If Applicable)

▼

Other Codes (If Applicable)

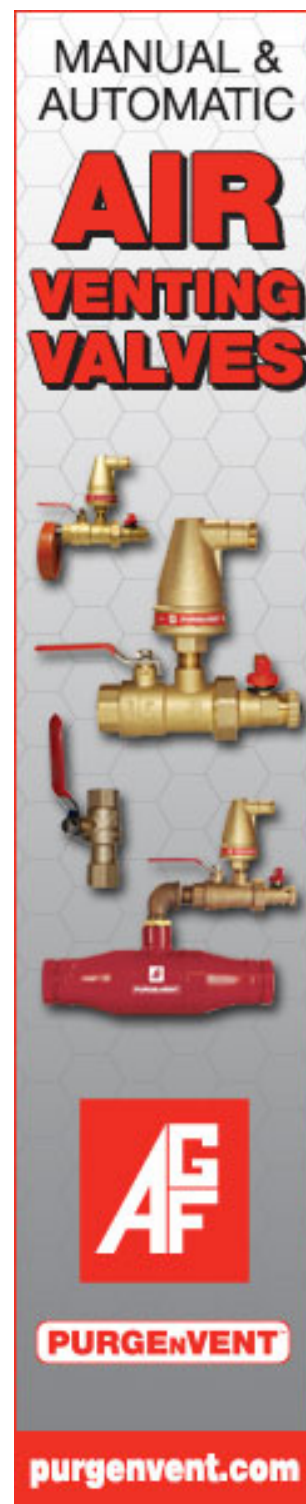
▼

EOD Question \*

Save & Submit >

**Case Details Table**

Field Name	Response	Description/Example
Case Title	Subject Line	A short and summarized subject using a few key words e.g. cloud ceilings, ESFR



Layout Technician Training

Layout Technician Training:

<https://LayoutTechnicianClass>

Layout Technician Training -  
Fundamentals  
Online Training  
Open for Registration  
Jan 1 - Dec 31, 2020

		obstructions, water supply, etc.
Question Delaying Project	Yes/No	Some EODs are time sensitive. This assists the NFSA SME in processing the request.
NFPA Standard	Standard Number and Suffix	e.g. "13" for NFPA 13, "13R" for NFPA 13R, "914" for NFPA 914, "101" for NFPA 101.
Edition	Year	Indicate the four-digit edition year. e.g. 1996, 2003, 2018, etc.
Section	Code Section Number	Indicate the section number that the question is referencing. If there is not a section number or unsure, use a section number or chapter that comes the closest. e.g. if the EOD question is about the beam rule in the 2016 edition of NFPA 13, write in: 8.6.5.1.2.
ICC Code (if applicable)	Model Code	If the question is regarding a model code, such as the International Building Code (IBC), indicate which code from the drop-down box.
Other Codes (if applicable)	Other Code	If the question is regarding a code or standard from other organizations, legacy codes, or state codes, indicate which code from the drop-down box.
EOD Question	Succinct Question	Ask the question in one or two sentences. Questions that can be answered with a "Yes" or "No" are preferred. The additional information, background, and attaching supporting documents comes on the next screen

6. Press Save & Submit in the lower right-hand corner.
7. In the next page, an input form is displayed with the EOD Case Title, case number, and the EOD question.
  - a. This page provides an additional text box for more information on the case, but is not required to be filled in.
  - b. Attachments, such as drawings or pictures can be uploaded to the case from this page.

My Account

EOD Case Title: Safety Factors 2

CAS-08433-D3Z6R3

Is a 20% safety factor required by NFPA 13?

New Message

New Message to EOD

The county requires a 20% safety factor. There are times this is unachievable. Does NFPA 13 require a safety factor?

Upload a File

Browse...

Submit Message Cancel

Back to Cases

8. When complete press Submit Message. The EOD is now considered an active EOD case and will be processed by a NFSA SME.
  - a. Updates to the EOD case are sent via email.
9. The My EOD tab updates, tracks, and records each submission.
  - a. Active EOD cases are in the EOD SME queue for processing.
  - b. Resolved EOD cases are EOD responses that are complete.



Ask a New Question

My Active EOD Cases (Click on a Case Below to Respond or Add Attachments)

EOD Case Title	Case Number	EOD Assigned	Standard	Edition	Section	Created On
Safety Factors	CAS-08431-V7W6T0	MXServices, NFSA			Chapter 23	6/22/2020 11:36 AM
Safety Factors	CAS-08430-L3P8H9	MXServices, NFSA	13	2016	Chapter 23	6/22/2020 11:35 AM
IBC Test HUGO	CAS-08428-X0G9Y5	MXServices, NFSA				6/22/2020 9:34 AM

My Resolved EOD Cases (Click on Case Below to Review)

EOD Case Title	Case Number	EOD Assigned	Standard	Edition	Section	Created On
A Code to End All Codes TEST	CAS-08425-S4F4W0	Hugo, Jeffrey	S000	2000	52.5	6/19/2020 8:01 AM

## EOD Processing and Updates

After the EOD case is submitted, the NFSA member will receive an email noting the case has been received and is being processed by NFSA. As the case updates, and when the case is resolved (completed), emails are generated to keep the member updated. The My EOD page under the My Account tab also shows active and past EOD cases that the member has generated.

## Frequently Asked Questions

### **Can I still call the EOD?**

Yes. The NFSA SME is always available by phone during business hours (Monday through Friday, 8:00 am to 4: 00 pm Eastern time zone) at (443) 863-4464.

### **Can I still send my question to [eod@nfsa.org](mailto:eod@nfsa.org)?**

No. Starting on July 15, 2020, the EOD program switches over to processing technical questions through the new AMS.

### **Is there a way to search my history of questions?**

Yes. The My EOD tab serves as the portal for asking questions, tracking active cases, and viewing resolved cases.

For any updates to this process, please refer to [the blog post here](#)

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National Fire Sprinkler Association, 514 Progress Dr, Ste A, Linthicum Heights, MD 21090

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# TechNotes

Editor - Roland Asp, CET

#478

12/28/2021

This Edition of TechNotes is a summary of the technical resources available to our members through the NFSA's website by Michael Joanis, PE.

The [NFSA](#)'s website includes several options for members to search and acquire technical information. With over 100 years of providing industry leading technical resources to our members, I bet if you have a sprinkler question, we have addressed it through one, if not several, of our technical resources. Here are some examples of how to find these resources on our web site.

First, it is important when you access the website to ensure you are [signed in](#) as a member. Being signed in provides full access to all the available technical resources. This page provides an opportunity to immediately sign in if you know your username and password. There are also options available for help signing in or an opportunity to create a new user account. When creating a new account, use your work email with the email extension that matches those of your company and then select the member company name. This will allow the system to confirm you are an employee of the member company and approve your new user account. If you have any problems logging in, you can always contact NFSA member services at [membership@nfsa.org](mailto:membership@nfsa.org) for assistance.



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or every environment  
Large Inventory ships fast  
[potterroemer.com](http://potterroemer.com)

Once you are logged in, stop by the [my account page](#) to review and update your [member profile](#). This provides you with the opportunity to manage your contact information, preferences, invoices, registrations, certificates, as well as your Expert Of the Day submissions and responses.

A good place to start when you have a technical question is our [code tracker page](#). This page will allow you to search states and local jurisdictions to review applicable building codes, fire codes, and NFPA standards. When you have a technical question, it is always good practice to ensure you know the applicable codes and standards for the jurisdiction where the project is located. Technical requirements can vary based on the codes and standards adopted by the jurisdiction where the work is being performed.



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**SYSTEMS ITM**

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MORE >**

There is a [resources page](#) that provides links to several NFSA technical resources including our [guides](#), whitepapers, and [product advisories](#). Our technical blog posts can be found [here](#) as well.

The National Fire Sprinkler Magazine archives can be found [here](#) along with archived copies of [TechNotes](#). These articles can also be [searched](#). When searching, try to be as specific as possible. A search for a broad topic such as NFPA 13 will return many hits, while a search for seismic bracing will be much more specific.

NFSA Subject Index Document Search Results	
Please click on document below to download.	
<a href="#">SQ 129 Winter 2004</a>	<a href="#">Seismic Bracing - When Clearance is Needed (Retraction in Spring 2005)</a>
<a href="#">ET 109 03/04/08</a>	<a href="#">Seismic Bracing for Pipe Stands</a>
<a href="#">ET 183 7/6/10</a>	<a href="#">Question 13- Supporting a Seismic Separation Assembly</a>



## **FIRE PROTECTION WALL MOUNT NITROGEN GENERATORS**

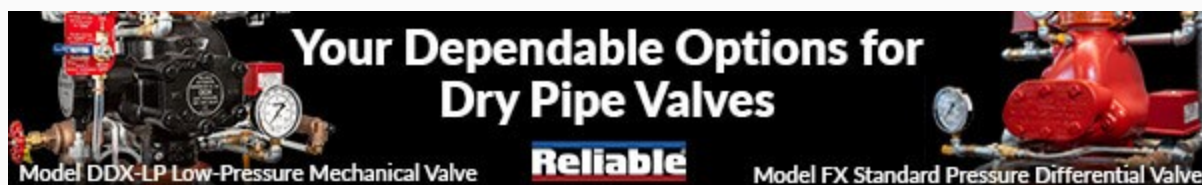
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One of the best resources for answers to your technical questions is the [Expert of the Day \(EOD\) Handbook](#). If you have a technical question, there is a really good chance others have had the same question. Such questions have been provided technical responses and these are available in the EOD handbooks. The EOD handbooks are a great resource for fire sprinkler contractors, layout technicians, engineers, authorities having jurisdiction, inspectors, and students. It includes three hardcover books and a searchable electronic index with 1,530 pages covering 2,288 questions on 745 topics. These questions were asked by NFSA members and answered by NFSA's subject matter experts through the Expert of the Day (EOD) program and published in TechNotes. NFSA subject matter experts represent a broad range of fire sprinkler knowledge and representation in the industry including professional engineers, NICET certified in water-based layout technicians, NICET certified in inspection and testing, master code professionals, and certified building officials experienced in fire sprinkler systems. The questions and answers cover the model building and fire codes as well as NFPA standards including 1, 11, 13, 13R, 13D, 14, 15, 16, 20, 22, 24, 25, 30, 72, 101, 409, and 5000. The EOD Handbook is a valuable resource that taps the extensive knowledge of the NFSA experts.



There is also an opportunity to collaborate with your peers in the [NFSA Community](#). Members can use the [Fastest Water Forum](#) to ask questions, share ideas, and collaborate with other NFSA members. This forum gives you access to the collective experience and knowledge base of all our members. It provides opportunities to share your questions and obtain valuable feedback.



The ultimate option to address your technical questions is to submit an [Expert of the Day \(EOD\) request](#). You can ask a technical question that will be reviewed and answered by NFSA's subject matter experts through the Expert of the Day (EOD) program. Responses are usually provided within one business day. The full description of the process to submit an EOD can be found [here](#).

## SUBMIT A NEW EOD QUESTION

**CASE DETAILS**

Case Subject/Title \*

The "beam rule" and obstructions to SSP sprinkler pattern development.

Question Delaying Project

☐ Yes ☒ No

NFPA Standard

13 x

All

Edition

2019 x

All

Section

10.2.7.1.2

ICC Code (If Applicable)

Other Codes (If Applicable)

Please summarize your question using 350 Characters (~50 words) or less - Additional background, clarification, and attachments can be provided in the Next Step \*

Is it acceptable to interpolate the Table 10.2.7.1.2 maximum allowable distances of the deflector above the bottom of an obstruction when applying the beam rule?

NFSA's technical staff and resources are consistently ranked as the number one member benefit. As outlined above, we make every effort to make those resources available to our members in many different formats. We encourage you to explore these benefits and take advantage of all NFSA membership has to offer. These technical resources and member benefits directly support our mission "to protect lives and property from fire through the wide-spread acceptance of the fire sprinkler concept."



## Learning and Development



### **Learning Branches: Tradeoffs and Tradeups – IBC/IFC**

Fire sprinkler systems provide economical and material tradeoffs in the model codes. This program covers many of the 125+ tradeups in the 2018 and 2021 International Building Code and International Fire Code that are relevant to fire sprinkler contractors, architects, and code officials. This course covers many of the long serving trade ups in the model codes, the financial benefits of trade ups for building designers and building owners, and tools to convince customers and communities that fire sprinkler systems and trade ups save lives, property and money which benefit everyone that uses current codes.

**When: Jan 24, 2022 from 01:00 PM to 02:00 PM (ET)**

**Associated with Learning and Development**



### **Layout Technician Training**

The purpose of the layout technician course is to take a person with basic knowledge of math, physical science and drafting skills and teach them to be productive basic sprinkler layout and detailing technicians. All of the work elements necessary for NICET Level II Certification will be covered by the course including sprinkler selection, sprinkler spacing and location, obstructions to sprinklers, water supplies (public mains, tanks and pumps), hydraulic calculation of sprinkler systems, and standpipe system layout and calculation.

**Layout Tech Training - Virtual Training Class**

**Layout Tech - Blended Practicum**

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Jan 25 - Feb 17, 2022

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Feb 9 - Feb 17, 2022

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# TechNotes

Editor - Roland Asp, CET

#490

06/28/2022

This edition of TechNotes was written by Roland Asp, CET, Manager of Codes and Standards for NFSA.

## **NFSA TechNotes #490 - Best of NFSA's Expert of the Day: NFPA 13 – Installation Rules**

The NFSA processes over 1,200 informal interpretations a year from its members. This is done through the Expert of the Day (EOD) program, where members ask the industry's top fire sprinkler subject matter experts questions on fire sprinkler related rules, codes, and standards.

NFSA has been offering the EOD service to our members since 2004 and it has proven to be one of the most valuable and popular of the many benefits of NFSA membership. Members submit real world questions regarding water-based fire protection systems and receive an accurate and timely answer to their question. These responses have saved our members time and money and have helped ensure that the fire protection systems meet the requirements of the applicable codes and standards.

NFSA subject matter experts (SME) include Professional Engineers (PE), Certified Engineering Technicians (CET), Certified Building Officials (CBO), and more. Several SMEs have high-level NICET certifications for the Inspection and Testing of Water-Based Systems and Water-Based System Layout. Our SMEs are also members of many NFPA and ICC committees, so they have additional knowledge beyond the wording of the code or standard—and know why it was implemented. This insight can prove very valuable when navigating the sometime confusing matrix of codes, standards, and other resources that make up the fire sprinkler industry.

## **Upcoming TechTuesdays**

The next 6 months of TechTuesday webinars will be a series of “best of” topics and will highlight some of the best and interesting questions posed to the EOD program.

July: NFPA 13 – Installation Rules

August: NFPA 13 – Discharge Rules

September: NFPA 14 – Standpipes

October: Model Codes – ICC and NFPA

November: NFPA 25 – ITM

December: NFPA 20 – Fire Pumps



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## The Data of EOD

NFSA uses the data from EOD for more than just answering an individual question. NFSA also analyzes the incoming questions to see if there are common themes which may indicate that additional work needs to be done on a particular topic. For example, if a specific question is being asked over and over, perhaps NFPA 13 (or the applicable code or standard) needs to be clarified or additional research may be warranted. The data contained in the EOD program is a powerful tool that NFSA is using to make our industry and the relevant codes and standards even more effective. Many of the changes to the NFPA standards originated as a question to the EOD program.

The collection and analysis of the data from the EOD program took a great leap forward in July 2020 when NFSA rolled out our new EOD process. Requests for an informal technical interpretation to the NFSA EOD program have traditionally been by fax, phone, or email. Starting on July 15, 2020, the NFSA transferred the EOD process to a new association management system (AMS). This system allows the member to easily submit questions, track the progress, and view their EOD cases. For those who are not familiar with this “new process,” Technotes Issue #442 reviews this process. This technotes can be accessed here:

[TechNotes Issue #442](#)

This new process not only improved the member experience with EOD, it also greatly improved NFSA’s ability to track the topics and to drill down to specific sections of the codes and standards. This is valuable information that NFSA has and will continue to use to clarify the related codes and standards.

As an example, in the first 6 months or so of 2022, the top ten topics addressed by EOD regarding NFPA 13 (all edition years) were as follows:

Topic	Count of Topic
Obstructions	122
Concealed Spaces	49
Commodity Classification	47
Hazard and Occupancy Classification	38
Design Area	32
Exterior Projections	25
Hangers and Support	24
Seismic Protection	22
Fire Department Connections (FDC)	22
<u>ESFR</u> Obstructions	20
ESFR Sprinkler Protection	20
Sidewall Sprinklers	20

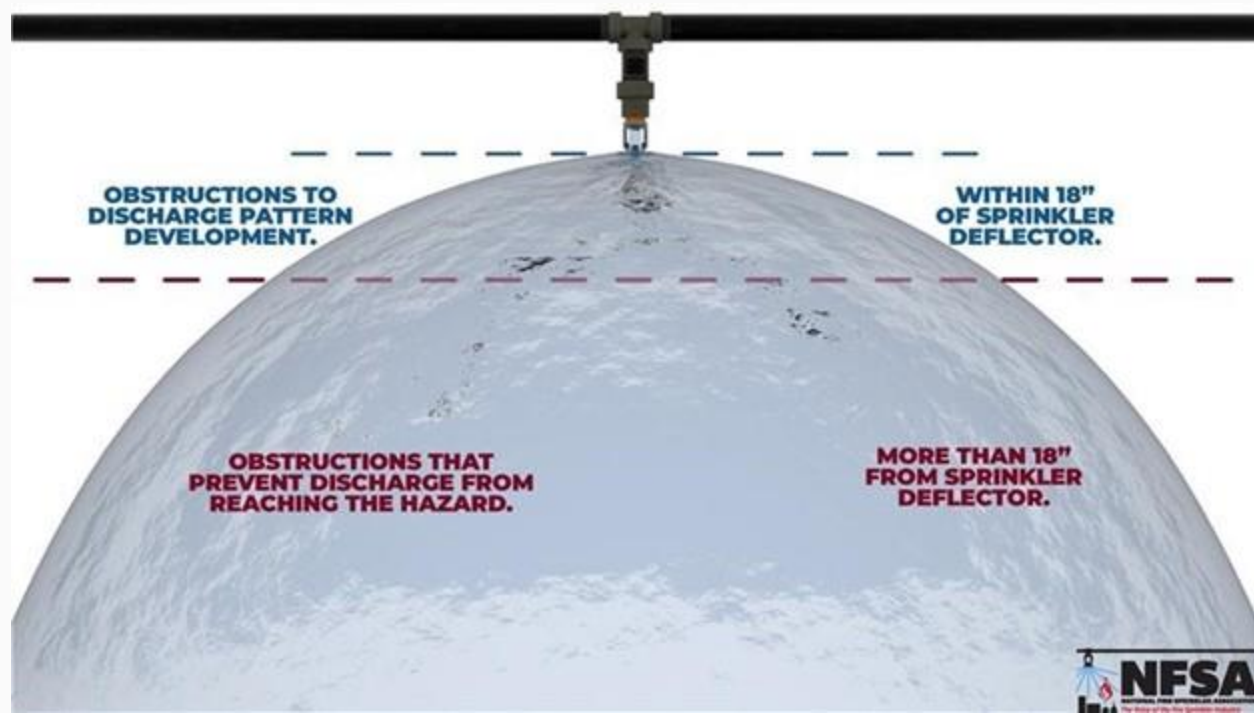
As it pertains to the installation committee, the data shows that obstructions, concealed spaces, and exterior projections generated the majority of questions. This indicates that these topics may need to be clarified in NFPA 13.

## EOD Data in Action

In fact, this data has already been used to improve the standards and each of these topics have been addressed in the 2022 edition of NFPA 13:

### Obstructions:

The obstruction rules within NFPA 13 were substantially revised in the 2022 edition in order to clarify and expand upon this often-confusing topic. The obstruction tables throughout the standard have been reformatted to reduce confusion and new obstruction rules were added to the standards to deal with situations that were not addressed in earlier editions. For example, new rules for Suspended or Floor-Mounted Vertical Obstructions in Ordinary Hazard Occupancies was developed. Previous editions of NFPA 13 dealt with this subject in light hazard occupancies only. As shown by the number of EOD questions on this subject, this new rule adds much needed clarification to the standard.



## Concealed Spaces:

The data shows the concealed spaces are another topic that is in need of clarification. Recent additions to NFPA 13 have clarified this sometimes-confusing topic. For example, based upon actual EOD questions, a new section was added to NFPA 13 (9.2.1.2.2) to clarify that non-combustible or limited combustible spaces with non-fueled fired equipment (such as vertical terminal air conditioner or VTAC units) with an access panel for maintenance is simply a type of concealed space and sprinkler protection is not required. Another example is soffits of combustible construction. Section 9.2.1.11 in the 2022 edition of NFPA 13 indicates that soffits of combustible construction will not require sprinkler protection where they are below noncombustible or limited combustible ceilings and are separated into volumes not exceeded 160 cubic feet. The annex to this section states that the interior of the soffit may contain ductwork, electrical components and plumbing and mechanical equipment. Further, it states that it is not the intent to require dampers the ductwork.

## Exterior Projections:

Based upon a number of EOD questions on exterior projections, it was clear that this topic was another confusion point in NFPA 13. To help clarify the requirements for this topic, a new definition was added that defines exterior definition for the first time. Section 3.3.73 defines an exterior projection as an extension beyond an exterior wall that can collect heat below. This definition (and other changes to the exterior projection rules) will help clarify where and when sprinkler projection is required in these building features. It should also be noted that the balcony rules from NFPA 13R were brought into NFPA 13. For the first time, balconies (with a roof above) serving dwelling units in a Type V building protected with a NFPA 13 system will require sprinkler protection.

The above is but a few examples of how the questions submitted to NFSA's EOD program help make the relevant NFPA standards better and to continue to provide unsurpassed life and property protection. Member questions help ensure that the fire sprinkler industry is part of this process.

NFSA will continue answering members EOD questions and use the information to help improve the applicable codes and standards.

The EOD service is not only a member benefit but is also a benefit to the entire fire sprinkler industry.



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## Learning and Development



**Come see us at  
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**Learning Branches**



**What's New with NFSA's  
Layout Technician Class?**

Team NFSA has made available a variety of classes occurring once a month at NFSA HQ in Baltimore, MD. Joining us at headquarters not only provides you with a top-notch, in-person learning experience, but also gives you face time with NFSA staff and increased access to NFSA resources!

In an effort to provide more real-time learning opportunities that are accommodating of various schedules, Team NFSA is hosting a new webinar series, Learning Branches. These technical sessions, available for Continuing Education Units, cover a large spectrum of topics and will be scheduled on various days and times each month.

Register now!

The NFSA's Learning and Development Team has restructured and revamped its Layout Technician class. While the course maintains many of its core contents and topics, it is being taught in a new way that provides deeper learning, more engaging activities, and directly applicable real-world scenarios.

[Learn More and Register Here](#)

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**The National Fire Sprinkler Association is proud to present our NEW 2019-2020 Edition EOD Handbook**

The EOD Handbook is now a three-volume set of over 1,500 pages covering hundreds of topics that are relevant to automatic fire sprinkler systems, standpipes, water supplies, inspection, testing and maintenance, codes, and standards.

Order the latest volume, the 2019-2020 Edition, as a single book or order the three-volume set!



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**National Fire Sprinkler Association**

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