NFPA 170 Technical Committee on Fire Safety and Emergency Symbols

First Draft Meeting (F2017) Agenda
Friday, March 11th, 2016 ● 9:30 AM – 4:00 PM ET

1. Call to Order: 9:30 AM
2. Introductions and Attendance
3. Committee Roster Review
4. Agenda Review
5. Approval of Previous Meeting Minutes (Attachment 1)
6. NFPA Staff Liaison Presentation
7. Chairman Remarks
8. Address Public Inputs and Generate First Revisions (Attachment 2)
9. NFPA 1 Annex E discussion
10. Other Business
11. Adjourn Meeting: 4:00 PM

Additional Meeting Information:

- This meeting will be held via a blended Adobe Connect web/teleconference platform. The meeting and teleconference information will be provided to technical committee members via an Outlook Meeting Invite. Guests should contact Kim Shea (kshea@nfpa.org) for instructions to connect to the web/teleconference

- All NFPA Technical Committee meetings are open to the public. Please contact me for information on attending a meeting as a guest. Read NFPA's Regulations Governing Committee Projects (Section 3.3.3.3) for further information.

- Please submit requests for additional agenda items to the chair and staff liaison at least seven days prior to the meeting, and notify the chair and staff liaison as soon as possible if you plan to introduce any committee comments at the meeting.

C. Standards Administration

Attachment 1:

Previous Meeting Minutes

NFPA 170 – Technical Committee on Fire Safety and Emergency Symbols
Second Draft Follow-Up Meeting (2014)
Adobe Connect Web Meeting and Teleconference

April 3, 2014 – 11:00 AM – 12:00 PM EDT

Attendees:

Brad Schiffer
Scott Bailey
Randal Brown
Lily Dhillon
James Mundy
Christopher Willms
Thomas Wood
Chris Butts
Sean Mitchell
Thomas Wellen
Colleen Kelly (NFPA Staff)

NFPA Liaisons:

Chad Duffy
Audrey Goldstein

1. Meeting called to order at 11:02 AM EDT on April 3, 2014 by Chairman Brad Schiffer.
2. Attendance was completed.
3. The proposed comments were reviewed and acted upon.
4. Old business was addressed and will be considered for inclusion next cycle.
5. Meeting adjourned at 11:56 AM EDT.

NFPA 170 – Technical Committee on Fire Safety and Emergency Symbols
Second Draft Meeting (2014)
Adobe Connect Web Meeting and Teleconference

January 22, 2014 – 4:00PM-6PM EST

Attendees:

Brad Schiffer
Phillp Brown
Randal Brown
David Cox
Lily Dhillon
James Mundy
Thomas Wood
Chris Butts
Thomas Wellen
Sean Mitchell (Guest)
Audrey Goldstein (NFPA Staff)
Jacqueline Wilmont (NFPA Staff)

NFPA Liaison:

Chad Duffy

1. Chairman Brad Schiffer called the meeting to order at 4:01PM EST on January 22nd and welcomed the committee.

2. Attendance was completed.

3. Chairman Brad Schiffer reviewed the agenda and provided introductory and procedural information.

4. Staff Liaison Chad Duffy provided a brief presentation covering committee member responsibilities, actions, revision cycle and the new process.

5. The meeting minutes of May 13th-14th, 2013 and May 28th, 2013 were reviewed and accepted.

6. The committee proceeded to review and act on proposals.

7. Meeting adjourned at 5:15PM EST.

Attachment 2:

Public Inputs

Public Input No. 25-NFPA 170-2015 [Chapter 2]

Chapter 2 Referenced Publications

2.1 General.

The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA *101*® , *Life Safety Code*®, 2015 edition.

NFPA 704, *Standard System for the Identification of the Hazards of Materials for Emergency Response,* 2012 edition.

2.3 Other Publications.

2.3.1 ANSI Publications.

American National Standards Institute, Inc., 25 West 43rd Street, 4th Floor, New York, NY 10036.

ICC/ ANSI A117.1, *Accessible and Usable Buildings and Facilities,* 2009.

ANSI Z535.1, *Safety Color Code,* 2011.

2.3.2 NECA Publications.

National Electrical Contractors Association, 3 Bethesda Metro Center, Suite 1100, Bethesda, MD 20814.

NECA **NEIS** 100, *Symbols for Electrical Construction Drawings*, ~~2006~~ **2013** .

2.3.3 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Mandatory Sections.

NFPA 10, *Standard for Portable Fire Extinguishers,* 2013 edition.

NFPA *101* ®, *Life Safety Code*®, 2015 edition.

Statement of Problem and Substantiation for Public Input

Referenced current standard number and edition.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 26-NFPA 170-2015 [Chapter D]	

Submitter Information Verification

Submitter Full Name: Aaron Adamczyk
Organization: [Not Specified]
Street Address:
City:
State:
Zip:
Submittal Date: Sun Oct 25 00:51:08 EDT 2015

Public Input No. 29-NFPA 170-2016 [New Section after 2.3.3]

2.3.5 FAMA Publications.

Fire Apparatus Manufacturers Association, P.O. Box 397, Lynnfield, MA 01940-0397, www.fama.org.

FAMA TC008, *Graphical Symbols for Automotive Fire Apparatus* .

FAMA TC010, *Standard Product Safety Sign Catalog for Automot* . *ive Fire Apparatus* , 2012.

Statement of Problem and Substantiation for Public Input

This proposal is identical to NFPA 1901 (2016 Edition) 2.3.8. This is the culmination of work started in February 2012 by the NFPA 170 Fire Apparatus Safety Symbols Task Group. After the NFPA 170 Task Group conducted a survey of fire apparatus manufacturers, a committee from the Fire Apparatus Manufacturers Association (FAMA) took over the task and developed documents and standard symbols. To date, 22 FAMA symbols have been cited in 24 sections of NFPA 1901. Whereas NFPA 170's scope is to "present symbols used for fire safety, emergency, and associated hazards", NFPA 170 should at a minimum should recognize the FAMA symbols in the same manner as NFPA 1901. NFPA 1901 takes the reference one step further in 4.9.4.3 "Safety signs referenced in this standard beginning with the letters FAMA shall conform to the text and graphics of the referenced safety sign number found in FAMA TC010, Standard Product Safety Sign Catalog for Automotive Fire Apparatus." I am not suggesting to include this additional language. I am only suggesting to include the FAMA documents in the NFPA 170 reference section.

Submitter Information Verification

Submitter Full Name: Thomas Wood
Organization: Boca Raton Fire Rescue Service
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jan 05 10:10:59 EST 2016

Public Input No. 2-NFPA 170-2015 [Section No. 3.3.1]

3.3.1 Photoluminescent.

Having the

~~ability to store incident electromagnetic radiation typically from ambient light sources, and release it in the form of visible light~~

property of emitting light that continues for a length of time after excitation by visible or invisible light has been removed. [***101*** , 2015]

Statement of Problem and Substantiation for Public Input

I feel the description of PHOTOLUMINESCENT used currently is confusing and I propose to use the description of this term taken from Underwriters Laboratories Inc. Standard UL924 for Emergency Lighting and Power Equipment.

Submitter Information Verification

Submitter Full Name: MARINA BATZKE
Organization: AMERICAN PERMALIGHT INC
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 13 15:10:48 EDT 2015

Public Input No. 1-NFPA 170-2015 [Section No. 3.3.4]

3.3.4 –

Self-luminous (Emergency Symbols).

~~A type of sign~~ ~~with an integral legend~~ ~~that is~~

~~self-energized used for an emergency symbol with respect to luminosity and requires no external power source, or photoluminescent materials having the ability to store incident electromagnetic radiation typically from ambient light sources, and release it in the form of visible light~~

powered continuously by a self-contained energy source other than a battery, such as radioactive tritium gas. Operation of a self-luminous signs is independent of external power supplies or other external forms of energy. This definition does not include exit signs dependent upon photoluminescent materials .

Statement of Problem and Substantiation for Public Input

I find the current description of SELF-LUMINOUS lacks clear explanation. I propose to use the description of self-luminous taken from Underwriters Laboratories Inc. Standard UL924 for Emergency Lighting and Power Equipment.

Submitter Information Verification

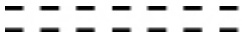
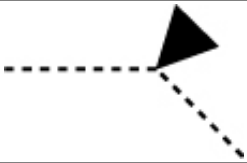
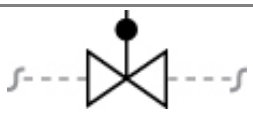
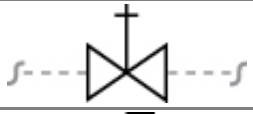
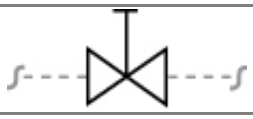
Submitter Full Name: MARINA BATZKE
Organization: AMERICAN PERMALIGHT INC
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 13 15:05:05 EDT 2015

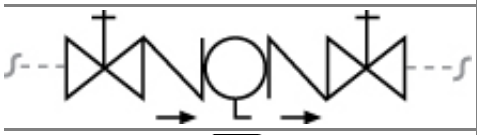
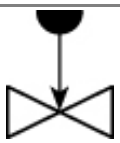
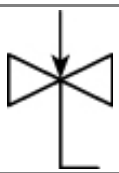
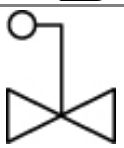
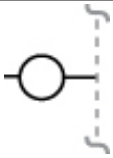
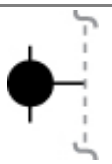
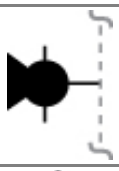
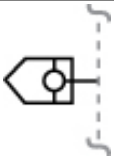
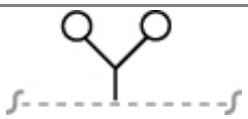
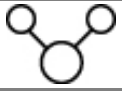
Public Input No. 23-NFPA 170-2015 [Section No. 7.2]

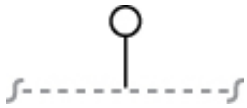
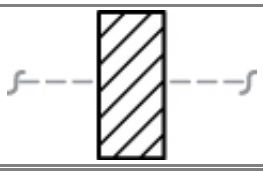
7.2* Water Supply and Distribution Symbols.

Water supply and distribution symbols shall be as given in Table 7.2.

Table 7.2 Water Supply and Distribution Symbols

Symbol	Description	Comments
	Public water main	Indicate pipe size and material
	Private water main	Indicate pipe size and material
	Water main under building	Indicate pipe size and material
	Suction pipe	Indicate pipe size and material
	Thrust block	
	Riser	
	Pipe elbow up or down	Height on either side indicated by pipe height tags
	Pipe tee up or down	Height of crossed pipes indicated by pipe height tags
	Valves (general)	Basic shape; indicate valve size
	Valve in pit	Indicate valve size
	Post-indicator valve	Indicate valve size
	Key-operated valve	Indicate valve size
	OS&Y valve (outside screw and yoke, rising stem)	Indicate valve size
	Indicating butterfly valve	Indicate valve size
	Nonindicating valve (nonrising-stem valve)	Indicate valve size
	Check valve	Basic shape; indicate valve size, direction of flow
		Also referred to as a

	Backflow preventer — double check type	double check valve assembly
	Backflow preventer — reduced pressure zone (RPZ) type	
	Pressure-regulating valve	
	Pressure relief valve	
	Float valve	
	Meter	Indicate type
	Private hydrant, one hose outlet	Indicate size, type of thread, or connection
	Public hydrant, two hose outlets	Indicate size, type of thread, or connection
	Public hydrant, two hose outlets and pumper connection	Indicate size, type of thread, or connection
	Wall hydrant, two hose outlets	Indicate size, type of thread, or connection
	Private housed hydrant, two hose outlets	Indicate size, type of thread, or connection
	Siamese fire department connection	Specify type, size, and angle
	Freestanding siamese fire department connection	Sidewalk or pit type; specify size

	Single fire department connection	Specify type, size, thread, and angle
	Fire pump with driver	Specify driver type and rated capacity
	Freestanding test header	Freestanding; specify number and sizes of outlets
	Wall-mounted test header	Wall; specify number and sizes of outlets
	Screen/strainer	

Additional Proposed Changes

File Name	Description	Approved
Table_7.2_Proposed_symbols_FDC.pdf	Specific Symbols for types of wall flush and free standing FDC connections	

Statement of Problem and Substantiation for Public Input

Identification of specific symbols for types of wall flush and free standing FDC connections

Submitter Information Verification

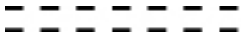
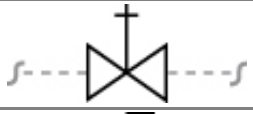
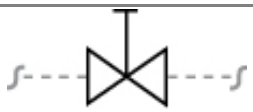
Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Fri Oct 09 15:04:54 EDT 2015

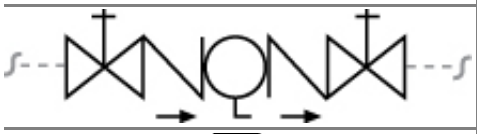
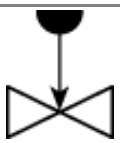
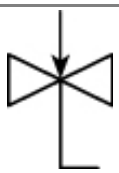
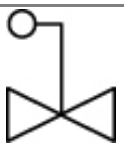
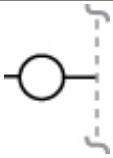
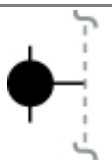
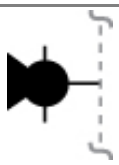
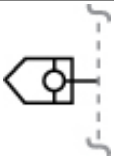
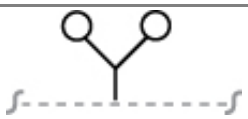
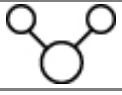
Public Input No. 24-NFPA 170-2015 [Section No. 7.2]

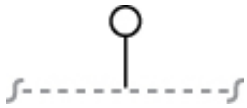
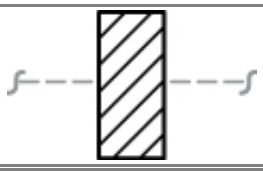
7.2* Water Supply and Distribution Symbols.

Water supply and distribution symbols shall be as given in Table 7.2.

Table 7.2 Water Supply and Distribution Symbols

Symbol	Description	Comments
	Public water main	Indicate pipe size and material
	Private water main	Indicate pipe size and material
	Water main under building	Indicate pipe size and material
	Suction pipe	Indicate pipe size and material
	Thrust block	
	Riser	
	Pipe elbow up or down	Height on either side indicated by pipe height tags
	Pipe tee up or down	Height of crossed pipes indicated by pipe height tags
	Valves (general)	Basic shape; indicate valve size
	Valve in pit	Indicate valve size
	Post-indicator valve	Indicate valve size
	Key-operated valve	Indicate valve size
	OS&Y valve (outside screw and yoke, rising stem)	Indicate valve size
	Indicating butterfly valve	Indicate valve size
	Nonindicating valve (nonrising-stem valve)	Indicate valve size
	Check valve	Basic shape; indicate valve size, direction of flow
		Also referred to as a

	Backflow preventer — double check type	double check valve assembly
	Backflow preventer — reduced pressure zone (RPZ) type	
	Pressure-regulating valve	
	Pressure relief valve	
	Float valve	
	Meter	Indicate type
	Private hydrant, one hose outlet	Indicate size, type of thread, or connection
	Public hydrant, two hose outlets	Indicate size, type of thread, or connection
	Public hydrant, two hose outlets and pumper connection	Indicate size, type of thread, or connection
	Wall hydrant, two hose outlets	Indicate size, type of thread, or connection
	Private housed hydrant, two hose outlets	Indicate size, type of thread, or connection
	Siamese fire department connection	Specify type, size, and angle
	Freestanding siamese fire department connection	Sidewalk or pit type; specify size

	Single fire department connection	Specify type, size, thread, and angle
	Fire pump with driver	Specify driver type and rated capacity
	Freestanding test header	Freestanding; specify number and sizes of outlets
	Wall-mounted test header	Wall; specify number and sizes of outlets
	Screen/strainer	

Additional Proposed Changes

File Name	Description	Approved
Table_7.2_Proposed_symbols_Underground_and_Risers.pdf	Underground line type compatible with Civil details, Specific Risers for wet, dry and pre-action.	

Statement of Problem and Substantiation for Public Input

Bringing underground line type in alignment with Civil details for site plans. Specific Risers for wet, dry and pre-action types.

Submitter Information Verification

Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Mon Oct 12 11:07:33 EDT 2015

Public Input No. 22-NFPA 170-2015 [Section No. 7.5]

7.5 Indicating Appliances.

Symbols for indicating appliances shall be as given in Table 7.5.

Table 7.5 Symbols for Indicating Appliances

Symbol	Description	Comments
	Water motor alarm (water motor gong)	Shield optional

Additional Proposed Changes

File Name	Description	Approved
Table_7.5_Proposed_symbols_BELLS.pdf	Specific symbols for types of bell devices	

Statement of Problem and Substantiation for Public Input

Identification between water and electric driven devices

Submitter Information Verification

Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Fri Oct 09 14:49:30 EDT 2015

Public Input No. 13-NFPA 170-2015 [Section No. 7.6.1.1]

7.6.1.1 Water-Based Systems.

Symbols for water-based systems shall be as given in Table 7.6.1.1.

Table 7.6.1.1 Symbols for Water-Based Systems

Symbol	Description
	Wet charged system — automatically actuated
	Wet charged system — manually actuated
	Dry system — automatically actuated
	Dry system — manually actuated
	Foam system — automatically actuated
	Foam system — manually actuated
	Water mist extinguishing system — automatically actuated
	Water mist extinguishing system — manually actuated

Additional Proposed Changes

File Name	Description	Approved
Table_7.6.1.1._Proposed_New_Symbols.pdf	6 proposed new symbols for Table 7.6.1.1	

Statement of Problem and Substantiation for Public Input

Clarifications for Nitrogen and pre-action type symbols with specific graphics for each type.

Submitter Information Verification

Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:

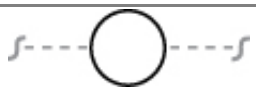
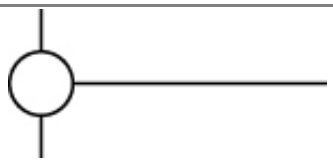
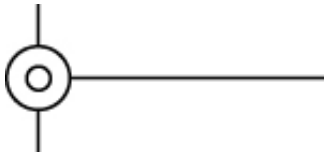
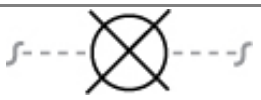
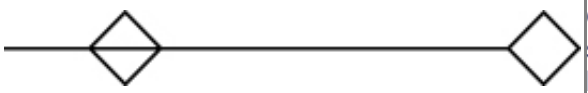
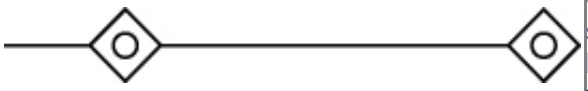
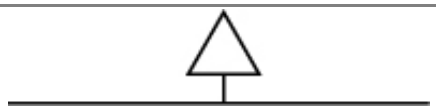
Zip:
Submittal Date: Wed Oct 07 15:51:51 EDT 2015

Public Input No. 14-NFPA 170-2015 [Section No. 7.6.2]

7.6.2* Symbols for Fire Sprinklers.

Symbols for fire sprinklers shall be as given in Table 7.6.2.

Table 7.6.2 Symbols for Fire Sprinklers

Symbol	Description	Comments
	Upright sprinkler	
	Pendent sprinkler	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Upright sprinkler; on sprig	
	Upright sprinkler on top of riser nipple	
	Upright sprinkler on top of riser nipple with sprig	
	Pendent sprinkler; on drop nipple	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Sprinkler, with guard	Upright sprinkler head shown
	Sidewall sprinkler	
	Outside sprinkler	Specify type, orifice size; for example, open sprinkler (window or cornice)
	Open sprinkler on branch line	
	Open sprinkler on branch line with sprig	
	Water spray nozzle	
	Window sprinklers	

Additional Proposed Changes

File Name	Description	Approved
170_Table_7.6.2_Proposed_Attic_1.pdf	Additional Head symbols for Attic Type Sprinklers - Part 1	

Statement of Problem and Substantiation for Public Input

Providing unique type symbols for attic sprinkler protection applications.

Submitter Information Verification

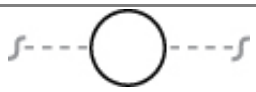
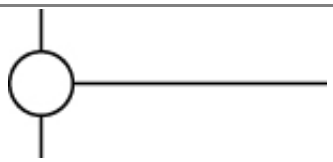
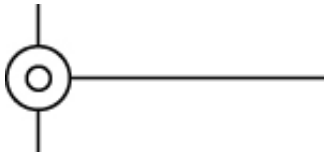
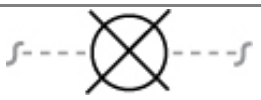
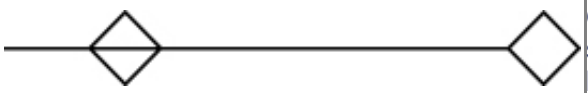
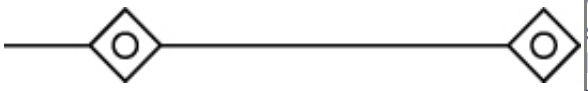
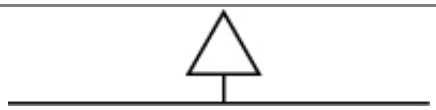
Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Thu Oct 08 11:17:24 EDT 2015

Public Input No. 15-NFPA 170-2015 [Section No. 7.6.2]

7.6.2* Symbols for Fire Sprinklers.

Symbols for fire sprinklers shall be as given in Table 7.6.2.

Table 7.6.2 Symbols for Fire Sprinklers

Symbol	Description	Comments
	Upright sprinkler	
	Pendent sprinkler	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Upright sprinkler; on sprig	
	Upright sprinkler on top of riser nipple	
	Upright sprinkler on top of riser nipple with sprig	
	Pendent sprinkler; on drop nipple	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Sprinkler, with guard	Upright sprinkler head shown
	Sidewall sprinkler	
	Outside sprinkler	Specify type, orifice size; for example, open sprinkler (window or cornice)
	Open sprinkler on branch line	
	Open sprinkler on branch line with sprig	
	Water spray nozzle	
	Window sprinklers	

Additional Proposed Changes

File Name	Description	Approved
170_Table_7.6.2_Proposed_Attic_2.pdf	Additional Attic Uprights, Vertical Sidewalls and Concealed Space Sprinkelrs	

Statement of Problem and Substantiation for Public Input

Specific Sprinkler Head symbols for specialty type applications.

Submitter Information Verification

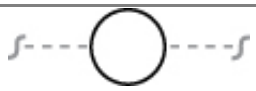
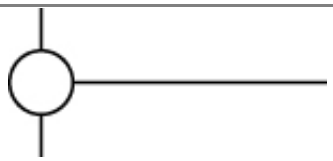
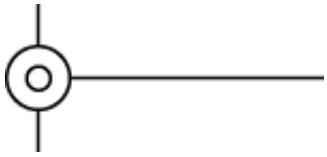
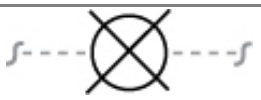
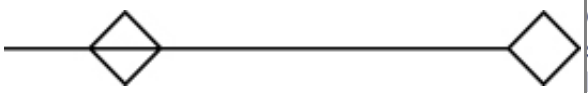
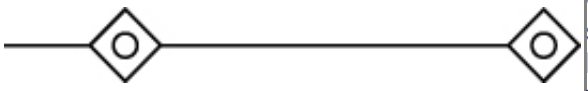
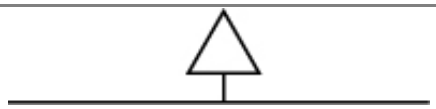
Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Thu Oct 08 11:36:12 EDT 2015

Public Input No. 16-NFPA 170-2015 [Section No. 7.6.2]

7.6.2* Symbols for Fire Sprinklers.

Symbols for fire sprinklers shall be as given in Table 7.6.2.

Table 7.6.2 Symbols for Fire Sprinklers

Symbol	Description	Comments
	Upright sprinkler	
	Pendent sprinkler	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Upright sprinkler; on sprig	
	Upright sprinkler on top of riser nipple	
	Upright sprinkler on top of riser nipple with sprig	
	Pendent sprinkler; on drop nipple	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Sprinkler, with guard	Upright sprinkler head shown
	Sidewall sprinkler	
	Outside sprinkler	Specify type, orifice size; for example, open sprinkler (window or cornice)
	Open sprinkler on branch line	
	Open sprinkler on branch line with sprig	
	Water spray nozzle	
	Window sprinklers	

Additional Proposed Changes

File Name	Description	Approved
Table_7.6.2_Proposed_symbols_Dry.pdf	Specific symbols for dry type sprinkler applications	

Statement of Problem and Substantiation for Public Input

This provides a vaster library of symbols for specific dry type sprinklers in the industry

Submitter Information Verification

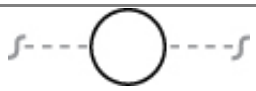
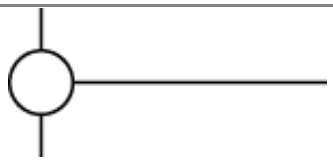
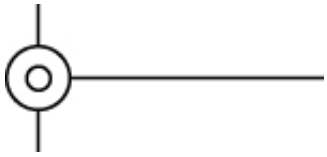
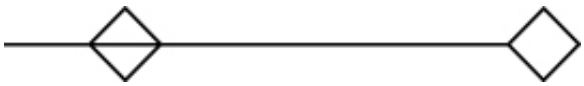
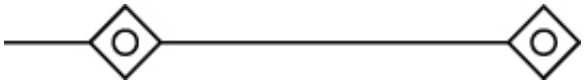
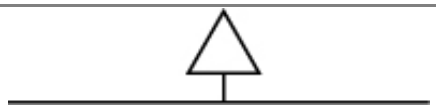
Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Thu Oct 08 11:46:37 EDT 2015

Public Input No. 17-NFPA 170-2015 [Section No. 7.6.2]

7.6.2* Symbols for Fire Sprinklers.

Symbols for fire sprinklers shall be as given in Table 7.6.2.

Table 7.6.2 Symbols for Fire Sprinklers

Symbol	Description	Comments
	Upright sprinkler	
	Pendent sprinkler	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Upright sprinkler; on sprig	
	Upright sprinkler on top of riser nipple	
	Upright sprinkler on top of riser nipple with sprig	
	Pendent sprinkler; on drop nipple	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Sprinkler, with guard	Upright sprinkler head shown
	Sidewall sprinkler	
	Outside sprinkler	Specify type, orifice size; for example, open sprinkler (window or cornice)
	Open sprinkler on branch line	
	Open sprinkler on branch line with sprig	
	Water spray nozzle	
	Window sprinklers	

Additional Proposed Changes

File Name	Description	Approved
Table_7.6.2_Proposed_symbols_EC_and_RN.pdf	Revision to Head Guard Notation, add Extended Coverage notation, revise Riser nipple with head on top.	

Statement of Problem and Substantiation for Public Input

Adding marking indicate extended coverage head type on any standard sprinkler symbol, change head guard notation from "X" to a "G", Revise Head at top of riser nipple for clarity of riser nipple and head indicating pipe direction.

Submitter Information Verification

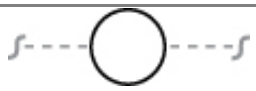
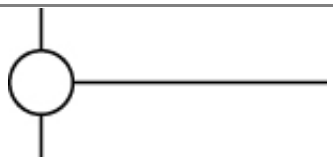
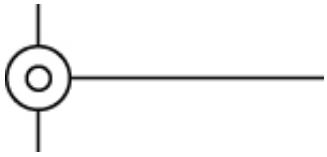
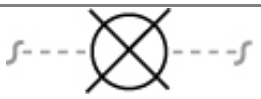
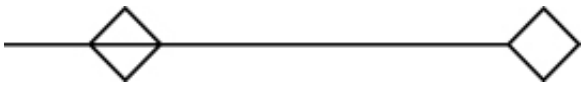
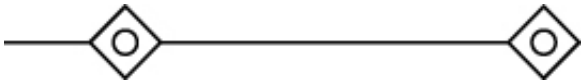
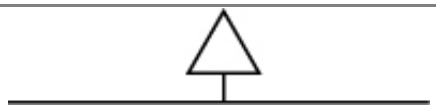
Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Thu Oct 08 12:42:07 EDT 2015

Public Input No. 18-NFPA 170-2015 [Section No. 7.6.2]

7.6.2* Symbols for Fire Sprinklers.

Symbols for fire sprinklers shall be as given in Table 7.6.2.

Table 7.6.2 Symbols for Fire Sprinklers

Symbol	Description	Comments
	Upright sprinkler	
	Pendent sprinkler	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Upright sprinkler; on sprig	
	Upright sprinkler on top of riser nipple	
	Upright sprinkler on top of riser nipple with sprig	
	Pendent sprinkler; on drop nipple	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Sprinkler, with guard	Upright sprinkler head shown
	Sidewall sprinkler	
	Outside sprinkler	Specify type, orifice size; for example, open sprinkler (window or cornice)
	Open sprinkler on branch line	
	Open sprinkler on branch line with sprig	
	Water spray nozzle	
	Window sprinklers	

Additional Proposed Changes

File Name	Description	Approved
Table_7.6.2_Proposed_symbols_OPEN_and_NOZZLE.pdf	Revisions to type of open and nozzle sprinklers	

Statement of Problem and Substantiation for Public Input

Options for specific symbols of open and nozzle sprinklers

Submitter Information Verification

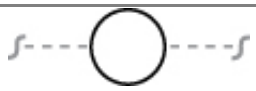
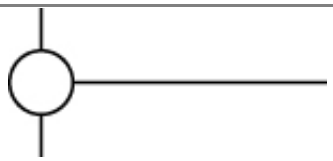
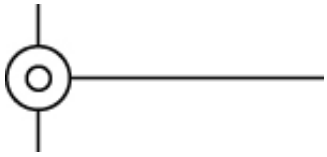
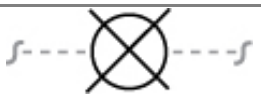
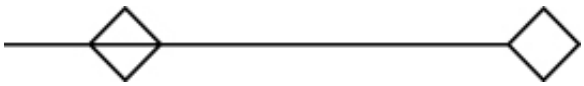
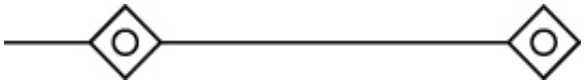
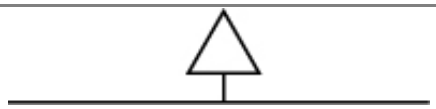
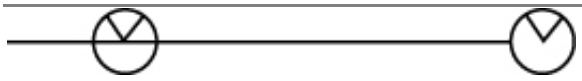
Submitter Full Name: William Smith
Organization: Telgian
Street Address:
City:
State:
Zip:
Submittal Date: Thu Oct 08 12:53:21 EDT 2015

Public Input No. 19-NFPA 170-2015 [Section No. 7.6.2]

7.6.2* Symbols for Fire Sprinklers.

Symbols for fire sprinklers shall be as given in Table 7.6.2.

Table 7.6.2 Symbols for Fire Sprinklers

Symbol	Description	Comments
	Upright sprinkler	
	Pendent sprinkler	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Upright sprinkler; on sprig	
	Upright sprinkler on top of riser nipple	
	Upright sprinkler on top of riser nipple with sprig	
	Pendent sprinkler; on drop nipple	Note “DP” on drawing and/or in specifications where dry pendent sprinklers are employed
	Sprinkler, with guard	Upright sprinkler head shown
	Sidewall sprinkler	
	Outside sprinkler	Specify type, orifice size; for example, open sprinkler (window or cornice)
	Open sprinkler on branch line	
	Open sprinkler on branch line with sprig	
	Water spray nozzle	
	Window sprinklers	

Additional Proposed Changes

File Name	Description	Approved
Table_7.6.2_Proposed_symbol_TEMPERATURE.pdf	Addition for identification of specific sprinkler temperatures	

Statement of Problem and Substantiation for Public Input

Sprinkler head legends can often be unclear and cause an excessive amount of types of symbols on drawings. The specific identification of unique temperatures alleviates this search for head symbols and legends to confirm temperatures.

Submitter Information Verification

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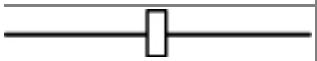
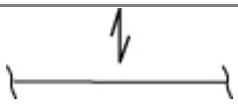
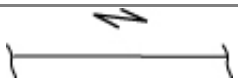
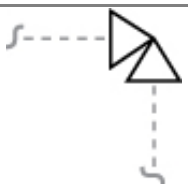
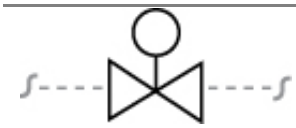
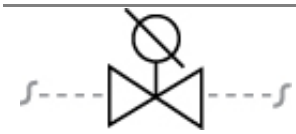
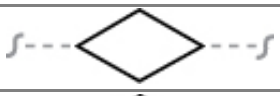
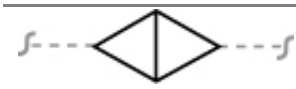
Submittal Date: Thu Oct 08 13:10:34 EDT 2015

Public Input No. 20-NFPA 170-2015 [Section No. 7.6.3]

7.6.3* Symbols for Piping, Valves, Control Devices, and Hangers.

Symbols for piping, valves, control devices, and hangers shall be as given in Table 7.6.3.

Table 7.6.3 Symbols for Piping, Valves, Control Devices, and Hangers

Symbol	Description	Comments
	Sprinkler piping and branch line	Indicate pipe size
	Pipe trace heater	See NECA 100, symbol 5.106
	Mechanical coupling	
	Pipe hanger	Diagonal stroke imposed on the pipe that the hanger supports
	Lateral brace	
	Longitudinal brace	
	Four-way brace	Only used to brace risers
	Angle valve (angle hose valve)	Indicate size, type, and other required data
	Check valve (general)	
	Alarm check valve	Specify size, direction of flow
	Dry pipe valve	Specify size
	Dry pipe valve with quick opening device (accelerator or exhauster)	Specify size and type
	Deluge valve	Specify size and type
	Preaction valve	Specify size and type

Additional Proposed Changes

File Name	Description	Approved
Table_7.6.3_Proposed_symbols_PIPE_SEISMIC_AND_VALVES.pdf	Additions to pipe, seismic and valve symbols	

Statement of Problem and Substantiation for Public Input

Additional symbols to clarify pipe types, seismic rise and line cable restraints, also addition of nitrogen charged dry valves.

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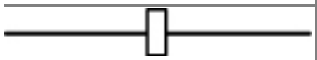
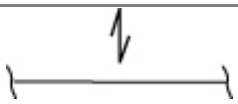
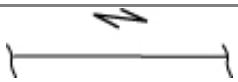
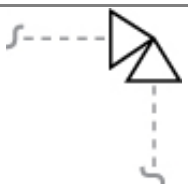
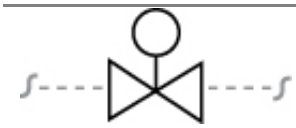
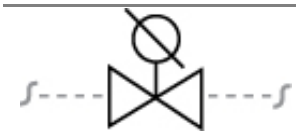
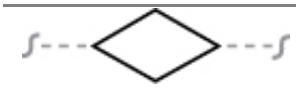
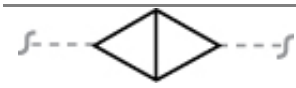
Submittal Date: Fri Oct 09 08:29:50 EDT 2015

Public Input No. 21-NFPA 170-2015 [Section No. 7.6.3]

7.6.3* Symbols for Piping, Valves, Control Devices, and Hangers.

Symbols for piping, valves, control devices, and hangers shall be as given in Table 7.6.3.

Table 7.6.3 Symbols for Piping, Valves, Control Devices, and Hangers

Symbol	Description	Comments
	Sprinkler piping and branch line	Indicate pipe size
	Pipe trace heater	See NECA 100, symbol 5.106
	Mechanical coupling	
	Pipe hanger	Diagonal stroke imposed on the pipe that the hanger supports
	Lateral brace	
	Longitudinal brace	
	Four-way brace	Only used to brace risers
	Angle valve (angle hose valve)	Indicate size, type, and other required data
	Check valve (general)	
	Alarm check valve	Specify size, direction of flow
	Dry pipe valve	Specify size
	Dry pipe valve with quick opening device (accelerator or exhauster)	Specify size and type
	Deluge valve	Specify size and type
	Preaction valve	Specify size and type

Additional Proposed Changes

File Name	Description	Approved
Table_7.6.3_Proposed_symbols_VALVES_2.pdf	Clarify types of wet system valves and assemblies, add nitrogen Pre-Action charged valve.	

Statement of Problem and Substantiation for Public Input

Clear identification of types of wet valves, addition of nitrogen type valves.

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Public Input No. 3-NFPA 170-2015 [New Section after 11.5]

11.5.1 Materials.

Diagrams shall be made of any material including photoluminescent or self-luminous, provided that an electrical charge is not required to maintain the diagram luminescence. Materials shall comply with one of the following:

(1) ASTM E2072, Standard Specification for Photoluminescent (Phosphorescent) Safety Markings and ASTM E2073, Standard Test Method for Photopic Luminance of Photoluminescent (Phosphorescent) Markings;

OR

(2) ANSI/UL 1994, Standard for Luminous Egress Path Marking Systems.

Statement of Problem and Substantiation for Public Input

In order to make the Emergency Diagrams readable during darkness scenarios (at night, power failure, earthquake, tornado, hurricane), they shall be made using non-electrical self-illuminating materials, such as photoluminescent or self-luminous materials. NFPA 101 Chapter 7 Means of Egress addresses this in 7.2.2.5.5.10 and I have submitted editorial updates to Ron Coté, P.E., Principal Engineer, National Fire Protection Association with regards to the two related ASTM Standards.

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Public Input No. 26-NFPA 170-2015 [Chapter D]

Annex D Informational References

D.1 Referenced Publications.

The documents or portions thereof listed in this annex are referenced within the informational sections of this standard and are not part of the requirements of this document unless also listed in Chapter 2 for other reasons.

D.1.1 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 220, *Standard on Types of Building Construction*, 2015 edition.

NFPA 2001, *Standard on Clean Agent Fire Extinguishing Systems*, 2015 edition.

D.1.2 Other Publications.

D.1.2.1 ANSI Publications.

American National Standards Institute, Inc., 25 West 43rd Street, 4th floor, New York, NY 10036.

ICC/ ANSI A117.1, *Accessible and Usable Buildings and Facilities,*2009.

D.2 Informational References.

The following documents or portions thereof are listed here as informational resources only. They are not a part of the requirements of this document.

D.2.1 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

Fire Protection Handbook, 20th edition, 2008.

Fire and Life Safety Inspection Manual, 8th edition, 2002.

*National Fire Codes®,*2014.

D.2.2 ANSI Publications.

American National Standards Institute, Inc., 25 West 43rd Street, 4th floor, New York, NY 10036.

ANSI/**NEMA** Z535.1, *American National Standard for Safety Colors*, 2006**, reaffirmed 2011** .

ANSI/**NEMA** Z535.3, *American National Standard Criteria for Safety Symbols*, ~~2007~~ **2011** .

ANSI/**NEMA** Z535.4, *American National Standard for Product Safety Signs and Labels*, ~~2007~~ **2011** .

D.2.3 ISO Publications.

International Organization for Standardization, ~~1, ch. de la Voie Creuse, Case postale 56, CH 1211 Geneva 20~~ **ISO Central Secretariat, BIBC II, 8, Chemin de Blandonnet, CP 401, 1214 Vernier, Geneva , Switzerland** .

ISO 3864, *Safety Colors and Safety Signs*, 1984. **(Superseded by ISO 7010)**

ISO 6309, *Fire Protection — Safety Signs*, 1987. **(Superseded by ISO 7010)**

ISO 6790, *Equipment for Fire Protection and Fire Fighting Graphical Symbols for Fire Protection Plans — Specification*, 1986.

ISO 7010, Graphical Symbols - Safety Colours And Safety Signs - Registered Safety Signs, 2011, Amendment 6, 2014.

D.3 References for Extracts in Informational Sections. (Reserved)

Statement of Problem and Substantiation for Public Input

Referenced current editions.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 25-NFPA 170-2015 [Chapter 2]	Referenced current editions.

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