

MEMORANDUM

TO: NFPA Technical Committee on Fire Safety and Emergency Symbols

FROM: Joanne Goyette

DATE: September 15, 2010

SUBJECT: NFPA 170 ROP **TC** Letter Ballot (F11)

The ROP letter ballot for NFPA 170 is attached. The ballot is for formally voting on whether or not you concur with the committee's actions on the proposals. Reasons must accompany all negative and abstention ballots.

Please do not vote negatively because of editorial errors. However, please bring such errors to my attention for action.

Please complete and return your ballot as soon as possible but no later than <u>Wednesday</u>, <u>September 29, 2010</u>. As noted on the ballot form, please return the ballot to Joanne Goyette either via e-mail to <u>jgoyette@nfpa.org</u> or via fax to 617-984-7110. You may also mail your ballot to the attention of Joanne Goyette at NFPA, 1 Batterymarch Park, Quincy, MA 02169.

The return of ballots is required by the Regulations Governing Committee Projects.

Attachments: Proposals

170-1 Log #CP1 Final Action: Accept
(Entire Document)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Review entire document to: 1) Update any extracted material by preparing separate proposals to do so, and 2) review and update references to other organizations documents, by preparing proposal(s) as required.

Substantiation: To conform to the NFPA Regulations Governing Committee Projects.

Committee Meeting Action: Accept

Committee Statement: See Committee Action on Committee Proposals 170-13 (Log #CP9), 170-2 (Log #CP10), 170-14 (Log #CP12), 170-15 (Log #CP13), 170-16 (Log #CP15) and 170-17 (Log #CP16).

170-2 Log #CP10 Final Action: Accept (2.3.1, D.1.2.1)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Revise text as follows:

2.3.1 ANSI A117.1-1992 Specifications for Making Buildings and Facilities Accessible to and Useable by Physically-Handicapped People. ANSI A117.1- 2003 Accessible and Useable Buildings and Facilities.

D.1.2.1 ANSI A117.1-1992 Specifications for Making Buildings and Facilities Accessible to and Useable by Physically Handicapped People. ANSI A117.1-2003 Accessible and Useable Buildings and Facilities.

Substantiation: The current edition should be referenced.

Committee Meeting Action: Accept

170-3 Log #CP4 Final Action: Accept

170-3 Log #CP4 Final Action: Accept (Table 4.2)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Remove tornado symbol from Table 4.2.

Substantiation: This symbol does not belong in the General Use Symbols Table.

Committee Meeting Action: Accept

170.4 Log #CP11 Final Action: Accept

170-4 Log #CP11 Final Action: Accept (Table 4.2)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Revise wheelchair symbol in Table 4.2 under "Accessible Emergency Exit" and "Accessible Emergency Exit Route" to meet current ANSI A117.1.

Insert 170_CP11_Fig 703.6.3.1_R Here

Substantiation: The wheelchair symbols in NFPA 170 Table 4.2 on pages 8 and 9 are not identical to the similar ones in ANSI A117.1-2003, page 70. In the ANSI symbol the whole image has the same line thickness or width. In the NFPA symbol only the wheel is the correct thickness. This correction should be made to NFPA 170 and the change in documents should be approved.

Committee Meeting Action: Accept



International Symbol of Accessibility

170-5 Log #CP14 Final Action: Accept (Table 4.2) Submitter: Technical Committee on Fire Safety and Emergency Symbols, Recommendation: Add new symbols "No Open Flame - Flame" and "No Open Flame - Lighted match" to Table 4.2. ***Insert Open_Flame.pdf Here*** Substantiation: There are no symbols in the current edition for signs prohibiting open flames. Committee Meeting Action: Accept 170-6 Log #CP8 Final Action: Reject (Chapter 6 and New Chapters 7 and 8) Submitter: Technical Committee on Fire Safety and Emergency Symbols, Recommendation: Revise Chapter 6 to read as follows and add new Chapters 7 and 8. ***Insert 170 CP8 Chapters 6-8 R Here*** Substantiation: The proposed changes add standard symbols for sprinkler systems as well as symbols for detection and notification. Committee Meeting Action: Reject Committee Statement: The committee needs more time to clean up the proposed symbols.

(Table 6.3.4)

170-7 Log #CP2 Final Action: Accept

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Move existing Annex C to Table 6.3.4 and revise Table 6.3.4 title as follows:

Table 6.3.4 Symbols for Floor Openings, Wall Openings, Roof Openings and Their Protection, and Life Safety Plans. Substantiation: The proposed change expands the use of the hourly rating symbol in Table 6.3.3 to show the required ratings of wall openings.

Committee Meeting Action: Accept



No Open Flame - Flame



No Open Flame – Lighted Match

170-5 Log #CP14

No Open Flame Artwork

Chapter 6 Symbols for Use in Architectural Drawings and Insurance Diagrams

- 6.1* Introduction.
- **6.1.1** This chapter presents symbols that shall be used in drawings and diagrams.
- 6.1.2* Symbol Presentation.
- **6.1.2.1* Symbol Shapes.** The shape of symbols shall be as illustrated in Sections 6.2 through 6.12.
- **6.1.2.2 Screened Lines.** Screened lines in the chapter shall not be considered part of the symbol but shall be used to represent the piping, wiring, or mounting surface associated with the symbol.
- **6.1.2.3 Symbol Scale.** All scales for symbols on any one drawing shall be the same relative size.
- **6.1.2.4* Symbol Orientation.** Symbols shall be oriented to the walls, piping, electrical lines, and so forth, to which they are attached.
- 6.2 Symbols for Site Features.
- 6.2.1 Buildings.
- **6.2.1.1** The exterior walls of buildings shall be outlined in single thickness lines if other than fire rated and double thickness lines if fire rated.
- **6.2.1.2*** The perimeter of canopies, loading docks, and other open-walled structures shall be shown by broken lines.
- **6.2.2 Railroad Tracks.** Railroad tracks shall be shown by a single line with cross dashes, as shown in Figure 6.2.2.



FIGURE 6.2.2 Symbol for Railroad Tracks.

- **6.2.3* Streets.** Streets shall be shown.
- **6.2.4* Bodies of Water.** Rivers, lakes, and so forth, shall be outlined.
- **6.2.5** Fences.
- **6.2.5.1** Fences shall be shown by lines with x's evenly spaced.
- **6.2.5.2*** Gates shall be shown.
- **6.2.6 Property Lines.** The notation given in Figure 6.2.6 shall indicate property lines.

FIGURE 6.2.6 Notation Indicating Property Lines.

6.2.7 Fire Department Access. The symbol for fire department access shall be as shown in Figure 6.2.7.



FIGURE 6.2.7 Symbol for Fire Department Access.

- **6.2.8 Other Site Features.** For other fire protection site features, Section 6.4 shall be viewed.
- **6.3 Symbols for Building Construction.**

- **6.3.1* Types of Building Construction.** Types of construction shall be shown narratively.
- 6.3.2* Height. Height shall be shown to indicate number of stories above ground, number of stories below ground, and height from grade to eaves.
- 6.3.3* Symbols for Walls and Parapets. Symbols for walls and parapets shall be as given in Table 6.3.3.

Table 6.3.3	Symbols	for Walls	and Parapets

Table 6.5.5 Symbols for walls and Parapets	
Symbol	Description
	Wall — basic shape
— <u>S</u> —	Smoke barrier wall
—	½-hour fire-rated wall
→ \$	½-hour fire-rated/smoke barrier wall
—	³ / ₄ -hour fire-rated wall
→ s	3/4-hour fire-rated/smoke barrier wall
-	1-hour fire-rated wall
♦ \$	1-hour fire-rated/smoke barrier wall
	2-hour fire-rated wall
- ♦♦\$-	2-hour fire-rated/smoke barrier wall
-+++ -	3-hour fire-rated wall
- ♦♦♦ \$-	3-hour fire-rated/smoke barrier wall
++++	4-hour fire-rated wall
♦♦♦♦ \$	4-hour fire-rated/smoke barrier wall
+++	Parapet — One cross for each 150 mm (6 in.) parapet that extends above roof (Shown is plan view of symbol.)

6.3.4 Symbols for Floor Openings, Wall Openings, Roof Openings, and Their Protection. Symbols for floor openings, wall openings, roof openings, and their protection shall be as given in Table 6.3.4.

Table 6.3.4 Symbols for Floor Openings, Wall **Openings, Roof Openings, and Their Protection**

Symbol	Description
	Opening in wall
	Rated fire door in wall (less than 3 hours)
	Fire door in wall (3-hour rated)
[E]	Elevator in combustible shaft
E	Elevator in noncombustible shaft
	Open hoistway
	Escalator
	Stairs in combustible shaft
	Stairs in fire-rated shaft
	Stairs in open shaft
[SL]	Skylight

6.3.5* Special Symbols for Cross-Sections. The symbols shown in Table 6.3.5 shall be used to

indicate features of cross-sections. It is recognized that descriptive notes often are required.

Table 6.3.5 Special Symbols for Cross-Sections

Symbol	Description	Comment
	Fire-resistive floor or roof	
п	Wood-joisted floor or roof	
(Steel deck on steel joists)	Other floors or roofs	Note construction
	Floor/ceiling or roof/ceiling assembly	Details indicated, as necessary
	Floor on ground	
	Truss roof	Note construction

6.3.6 Miscellaneous Features. A number of features related to fire protection that do not fall under 6.3.1 through 6.3.5 shall be as given in Table 6.3.6.

Table 6.3.6 Miscellaneous Features

Table 0.5.0 Wilscenaneous Features		
Symbol	Description	Comment
	Boiler	
⊗	Chimney	Describe height and construction
	Fire escape	
	Horizontal aboveground tank	Indicate type, dimensions, construction, capacity, pressurization, and content
0	Vertical aboveground tank	Indicate type, dimensions, construction, capacity, pressurization, and content
	Belowground tank	Indicate type, dimensions, construction, capacity, pressurization, and content
	Class I, Division 1 or 0 Class I, Division 1 or	Hatch patterns for electrically classified locations Hatch patterns for electrically
	Zone 1 Class I, Division 2 or Zone 2	classified locations Hatch patterns for electrically classified locations
	Designates the location of automated external defibrillators (AEDs) on plans	

Chapter 7 Symbols for Use in Water Supply, Extinguishing and Sprinkler System Drawings and Insurance Diagrams

7.1* Introduction.

7.1.1 This chapter presents symbols that shall be used in drawings and diagrams.

7.1.2* Symbol Presentation.

- **7.1.2.1* Symbol Shapes.** The shape of symbols shall be as illustrated in Sections 7.2 through 7.7.
- **7.1.2.2 Screened Lines.** Screened lines in the chapter shall not be considered part of the symbol but shall be used to represent the piping, wiring, or mounting surface associated with the symbol.
- **7.1.2.3 Symbol Scale.** All scales for symbols on any one drawing shall be the same relative size.
- **7.1.2.4* Symbol Orientation.** Symbols shall be oriented to the walls, piping, electrical lines, and so forth, to which they are attached.

Table 7.2 Water Supply and Distribution Symbols

7.2* Water Supply and Distribution Symbols.

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

Description Comments **Symbol** 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 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 Indicate valve size stem) Indicating butterfly valve Indicate valve size Nonindicating valve (nonrising-stem valve) Indicate valve size Check valve Basic shape; indicate valve size,

Backflow preventer — double check type

Backflow preventer — reduced pressure

zone (RPZ) type

Pressure-regulating valve

direction of flow

assembly

Also referred to as a double check valve

\Rightarrow	Pressure relief valve	
	Float valve	
SQS	Meter	Indicate type
→	Private hydrant, one hose outlet	Indicate size, type of thread, or connection
ф.;·	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
й	Wall hydrant, two hose outlets	Indicate size, type of thread, or connection
(A)	Private housed hydrant, two hose outlets	Indicate size, type of thread, or connection
,	Siamese fire department connection	Specify type, size, and angle
86	Freestanding siamese fire department connection	Sidewalk or pit type; specify size
,	Single fire department connection	Specify type, size, thread, and angle
■•	Fire pump with drives	
3 -0	Freestanding test header	Freestanding; specify number and sizes of outlets
3	Wall-mounted test header	Wall; specify number and sizes of outlets
<i>5</i>	Screen/strainer	

7.3 Reserved

7.4 Symbols Related to Means of Egress.

Symbols related to means of egress shall be as given in Table 7.4.

Table 7.4 Symbols Related to Means of Egress

Tuble 111 Symbols Related to Media of Egless		
Symbol	Description	Comments
	Emergency light, battery-powered	Number of lamps on unit to be
V 🛆 V		indicated. Indicate whether light
		head(s) [lamp(s)] is remote from
		battery
	Illuminated exit sign, single face	Indicate direction of flow for the face
▼	Illuminated exit sign, double face	Indicate direction of flow for each face

	Combined battery-powered emergency light and illuminated exit sign	Number of lamps on unit to be indicated; indicate whether light head(s) [lamp(s)] is remote from battery; indicate direction of flow for the face
H⊗H 🕏	Exit lighting	Exit lighting fixture, arrows, and exit face as indicated on drawings (mounting heights to be determined by job specifications) — from NECA 100, symbol 2.005
	Luminaire providing emergency illumination (filled in)	From NECA 100, symbol 2.300
⊢€↑	Directional sounder — exit marking audible appliance, wall mounted	Applied from NECA 100, symbol 9.109
⟨E⟩ ↑	Directional sounder — exit marking audible appliance, ceiling mounted	Applied from NECA 100, symbol 9.110
ŀ Ĕ	Directional exit indicating strip lighting appliance	Applied from NECA 100, symbol 2.002

7.5 Symbols for indicating appliances

7.5.1 Indicating Appliances. Symbols for indicating appliances shall be as given in Table 7.5.1.

Table 7.5.1 Symbols for Indicating Appliances

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

- 7.6* Symbols for Fire Extinguishing Systems.
- 7.6.1 Various Types of Fire Extinguishing Systems.
- **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
0	Dry system — automatically actuated
0	Dry system — manually actuated
8	Foam system — automatically actuated
\otimes	Foam system — manually actuated
•	Water mist extinguishing system — automatically actuated
•	Water mist extinguishing system — manually actuated

Table 7.6.1.2 Symbols for Dry Chemical Systems

Table 7.0.1.2 Symbols for Dry Chemical Systems	
Symbol	Description
	For liquid, gas, and electrical fires — automatically actuated
	For liquid, gas, and electrical fires — manually actuated
•	For fires of all types (except metals) — automatically actuated
	For fires of all types (except metals) — manually actuated

7.6.1.3 Systems Utilizing a Gaseous Medium. Symbols for systems utilizing a gaseous medium shall be as given in Table 7.6.1.3.

Table 7.6.1.3 Symbols for Systems Utilizing a Gaseous Medium

Tuble 7:0:1:5 Symbols for Systems Cemzing a Suscous Medium	
Symbol	Description
	Carbon dioxide system — automatically actuated
	Carbon dioxide system — manually actuated
	Halon system or clean agent extinguishing system — automatically actuated
Δ	Halon system or clean agent extinguishing system — manually actuated

7.6.1.4 Supplementary Symbols. Supplementary symbols shall be as given in Table 7.6.1.4.

Table 7.6.1.4 Supplementary Symbols

Tuste 7.011.1 Supplementary Symbols				
Symbol	Description			
AS	Fully sprinklered space			
(AS)	Partially sprinklered space			
NS	Nonsprinklered space			
ws	Water spray system			

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
55	Upright sprinkler	
ff	Pendent sprinkler	Note "DP" on drawing and/or in specifications where dry pendent sprinklers are employed
ff	Upright sprinkler; on sprig	
φ	Upright sprinkler on top of riser nipple	

φ	Upright sprinkler on top of riser nipple with sprig	
ff	Pendent sprinkler; on drop nipple	Note "DP" on drawing and/or in specifications where dry pendent sprinklers are employed
<i>şş</i>	Sprinkler, with guard	Upright sprinkler head shown
Sidewall sprinkler		
,	Outside sprinkler	
\rightarrow	Open sprinkler on branch line	
	Open sprinkler on branch line with sprig	
<u> </u>	Water spray nozzle	
	Window sprinklers	

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	
55	Pipe hanger	This symbol is a diagonal stroke imposed on the pipe that it supports
1	Lateral brace	
<u></u>	Longitudinal brace	
+	Four-way brace	Only used to brace risers
<i>y</i>	Angle valve (angle hose valve)	Indicate size, type, and other required data
Ņ	Check valve (general)	
<i>ss</i>	Alarm check valve	Specify size, direction of flow
<i>ss</i>	Dry pipe valve	Specify size
s\$	Dry pipe valve with quick opening device (accelerator or exhauster)	Specify size and type
f\$	Deluge valve	Specify size and type



7.4 Symbols for Portable Fire Extinguishers.

Symbols for portable fire extinguishers shall be as given in Table 7.4.

Table 7.4 Symbols for Portable Fire Extinguishers

Symbol	Description	Comments
\triangle	Portable fire extinguisher	Basic shape
\triangle	Water extinguisher	
	Foam extinguisher	
A	Dry chemical extinguisher — for liquid, gas, or electrical fires	BC type
Â	Dry chemical extinguisher — for fires of all types (except metals)	ABC type
À	CO ₂ extinguisher	
	Halon or clean agent extinguisher	
Extinguisher for metal fires		

7.5 Symbols for Fire-Fighting Equipment.

Symbols for fire-fighting equipment shall be as given in Table 7.5.

Table 7.5 Symbols for Fire-Fighting Equipment

Symbol	Description	Comments
	Fire-fighting equipment	Basic shape
\triangle	CO ₂ reel station	
Q	Dry chemical reel station	
\otimes	Foam reel station	
6	Hose station, dry standpipe	
Hose station, wet standpipe		
-0	Monitor nozzle, dry Specify	
Monitor nozzle, charged		Specify orifice size

7.6* Miscellaneous Symbols.

Miscellaneous symbols shall be as given in Table 7.6.

Table 7.6 Miscellaneous Symbols

Table 7.0 Miscenaneous Symbols			
Symbol	Description	Comments	

		Agent storage container	Specify type of agent and mounting
ID _{FO}		Agent storage container — foam	
•	ID _{HL}	Agent storage container — Halon	
•	\mathbb{D}_{co_z}	Agent storage container — carbon dioxide	
•	ID _{CA}	Agent storage container — clean agent	
•		Agent storage container — dry chemical	
•		Agent storage container — water mist	
•	\mathbb{D}_{wc}	Agent storage container — wet chemical	
•	,t,	Special spray nozzle	Specify type, orifice, size, other required data (shown here on pipe)
	© \(\frac{1}{2} \)	Fusible link	Specify degrees
•		T 21.1 22.1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Specify degrees
	€ ₹ °) ETL	Fusible link with electrothermal feature	Specify degrees
	© Z O ETL	Solenoid valve	Specify degrees
	EOU Re		Specify degrees
	SOV He	Solenoid valve	Specify degrees
	SOV EOL Re	Solenoid valve End of line device register	Specify degrees
	SOV He	End of line device — recistor End of line device — relay End of line device — capacitor End of line device — diode	Specify degrees
	EOL RI	End of line device register End of line device — relay End of line device — capacitor	Specify degrees
	EOL RI EOL C	End of line device — recistor End of line device — relay End of line device — capacitor End of line device — diode	Specify degrees
	EOL RI EOL C EOL D ATS	End of line device register End of line device — relay End of line device — capacitor End of line device — diode Transfer switch — automatic with handle	Specify degrees
	EOL RI EOL C EOL D ATS	End of line device register End of line device — relay End of line device — capacitor End of line device — diode Transfer switch — automatic with handle	Specify degrees
	EOL RI EOL C EOL D ATS	End of line device register End of line device — relay End of line device — capacitor End of line device — diode Transfer switch — automatic with handle	Specify degrees

Chapter 8 Symbols for Use in Electronic Fire and Smoke Detection and Notification System Drawings and Insurance Diagrams

8.1* Introduction.

- **8.1.1** This chapter presents symbols that shall be used in drawings and diagrams.
- 8.1.2* Symbol Presentation.
- **8.1.2.1* Symbol Shapes.** The shape of symbols shall be as illustrated in Sections 8.2 through 8.12.
- **8.1.2.2 Screened Lines.** Screened lines in the chapter shall not be considered part of the symbol but shall be used to represent the piping, wiring, or mounting surface associated with the symbol.
- **8.1.2.3 Symbol Scale.** All scales for symbols on any one drawing shall be the same relative size.
- **8.1.2.4* Symbol Orientation.** Symbols shall be oriented to the walls, piping, electrical lines, and so forth, to which they are attached.

Table 8.2 Symbols for Control Units (Panels)		
	Symbol	Description
		Basic Shape
	FACP	Fire Alarm Control Panel
	FACU	Fire Alarm Control Unit
	TPR#	Fire Alarm Transponder n = Transponder Number
	FAA	Fire Alarm Annunciator
	LCD	LCD Annunciator
	NACn	Notification Circuit Power Booster Panel n = Unit Number
	FATC	Fire Alarm Terminal Cabinet
	BATT	Battery Cabinet
	EVAC	Voice Evacuation Control Unit
	MIC	Remote Voice Evacuation Microphone
	GAP	Graphic Annunciator Panel
•	UPS	Uninteruptale Power Supply
		Power Panel
•	CRT	CRT
•	PRN	Printer
	ECCU	Emergency Communications Control Unit
FSCP		Fire Suppression Control Panel xx Denotes Suppression Type
	FSCU _{xx}	Fire Suppression Control Unit xx Denotes Suppression Type

T 1.1	0 0 4	A 1 1512	A 1 1	,	0 1 1	11. 21
Table	8.7.1	Additional	Abbreviations	tor	Control	Units

е	8.2.1	Additio	onal A	Abbreviations for Control Units
		AMP		Amplifier Rack
		ARCM		Area of Refuge emergency communication system — Master Unit
		ARCR		Area of Refuge emergency communication system – Remote Unit
		ACU		Autonomous Control Unit
		EVACn		Remotely Located Evacuation Amplifier Cabinet
		ESR		Elevator Status/Recall
		DACR		Digital Alarm Communicator Receiver
		DACT		Digital Alarm Communicator Transmitter
		FAC		Fire Alarm Communicator
		HVA		Control Panel for Heating, Ventilation, Exhaust, Stairwell Pressurization
		PP		Purge Panel
		PRE		Pre-action System
		RP		Relay Panel
	ı	SAP		Sprinkler Alarm Panel
		WCU		Wireless Control Unit
		MFACU		Master Fire Alarm Control Unit
		PPCU		Protected Premises Control Unit (Local)
		DEFACU	l	Dedicated Function Fire Alarm Control Unit
		RSFACU	I	Releasing Service Fire Alarm Control Unit
	Tire S Jnit T	ypes: CO2 (DC [HL H FO F WC N CA (WM N	Carbo Ory C Halon Toam Wet C Clean Water	Releasing Service Control n Dioxide hemical Chemical Agent Mist e Fire Sprinkler

8.3* Symbols for Fire Alarms, Detection, and Related Equipment.

8.3.1* Signal Initiating Devices and Activation Switches. Symbols for signal initiating devices and activation switches shall be as given in Table 8.3.1.

Table 8.3.1 Sy	mbols for Initiating Devices and Activation Switches			
Symbol	Description			
	Manual Station — Basic Shape			
F	Manual Station — Pull Station/ Fire Alarm Box	Manual Station and Abort Switch Types:		
MB	Fire Alarm Master Box	CO2 Carbon Dioxide DC Dry Chemical HL Halon		
DK	Drill Key	FO Foam WC Wet Chemical CA Clean Agent		
	Abort Switch — Basic Shape	WM Water Mist DL Deluge Fire Sprinkler PRE Preaction		
A	Abort Switch			
M	Manual Releasing Station			
\bigcirc	Automatic Detection and Supervisory Devices - Basic Shape	Heat Detector/Sensor Types:		
•	Heat Detector/Sensor (Thermal Detection) Orientation not to be changed	R/F Combination Rate of Rise/Fixed Temperature RC Rate Compensation		
⊕ xx	Heat Detector/Sensor - XX = Type	F Fixed Temperate R Rate of Rise Only		
()->	Heat Detector — Line Type	Smoke Detector/Sensor Types:		
(§)	Smoke Detector/Sensor — Basic Shape Orientation not to be changed	AS Air Sampling P Photoelectric I Ionization		
(S)XX	Smoke Detector/Sensor - XX = Type	R Relay Base SS Single Station SB Sounder Base		
(2)	Smoke/Heat Detector/Sensor Combination	ID In Duct		
₽ BT	Smoke Detector/Sensor — Beam Transmitter	Gas Detector/Sensor Subscript Examples		
₽ BR	Smoke Detector/Sensor — Beam Receiver	CO Carbon Monoxide CO2 Carbon Dioxide HCL Hydrogen Chloride		
S	Smoke Detector/Sensor for Duct	CH4 Methane		
O _{XX}	Gas Detector/Sensor XX = Gas Type	Flame Detector/Sensor Types:		
⊗ _{XX}	Flame Detector XX = Detection Type	UV Ultraviolet IR Infrared		
W	Water Detector	UV/IR Combination Ultraviolet/Ifrared VR Visible Radiation		

Table 8.3.1 Continued				
Symbol	Description			
WF	Flow Detector/Switch			
PS	Pressure Detector/Switch			
Valve Supervisory Switch				
VS Valve with Valve Supervisory Switch				
LS	Level Detector/Switch			
TSS	Temperature Supervisory Switch			
HIGH Temperature Switch				
LT	Low Temperature Switch			
Addressable Input Module				
(AOM)	Addressable Output Module			
Addressable Input/Output Module # Denotes Number of Inputs and Outputs				
Non-Addressable Output Relay				

- 8.3 Notification Appliances. symbols for notification appliances shall be as given in Table 8.3.2
- 8.3.1 Notification Appliance Subscripts applied to symbols as further clarification may require.

WP Weather proof

WG

Wire Guard High Audible Setting Н

Low Audible Setting

Ceilng Mount

пW Wattage Setting n=Speaker Tap

Pendant

SL Signal Light

Remote Indicator

8.3.2 Notification Appliances. Symbols for notification appliances shall be as given in Table 8.3.2.

Table 8.3.2 Syn	nbols for Notification Appliances	
Symbol Description		
	Audible Appliance — Basic Shape	
H	Horn Only	
M	Mini-Horn	
	Chime – Electronic	
.5W	Speaker Only, Wall Mount — Denote Wattage Tap	
.5W	Speaker Only, Ceiling Mount — Denote Wattage Tap	
V	Bell — Vibrating	
SS SS	Bell — Single Stroke	
	Bell - Trouble	
G	Gong	
C	Chime	
X CD	Visible Only (Strobe)— Wall Mount CD = Candela rating/setting	
> CD	Visible Only (Strobe) — Ceiling Mount CD = Candela rating/setting	
	Rotating Beacon	
CD	Combination Horn/Visible CD = Candela rating/setting	
CD 1W	Combination Speaker/Visible — W = Wattage CD = Candela rating/setting	
RI	Remote Indicator	
▼ RTS	Remote Alarm Indicator and Test Switch	
RI	Ceiling Mount Indicator	

 $8.3.3\ Emergency$ Communications Notification Appliances. Symbols for emergency communication appliances shall be as given in Table 8.3.3.

| Table 8.3.3 Symbols for Emergency Communications Notification Appliances

Symbol	Description	
CD CD	Visible Only (Strobe)— Wall Mount CD = Candela rating/setting	
) CD	Visible Only (Strobe) — Ceiling Mount CD = Candela rating/setting	
W CD	Combination Speaker/Visible — Wall Mount CD = Candela rating/setting, W = Wattage	
w M C	Combination Speaker/Visible — Ceiling Mount CD = Candela rating/setting, W = Wattage	
<u> </u>	Emergency Textual Visible Appliance	

8.4 Related Equipment. Symbols for related equipment shall be as given in Table 8.4

as given in Table 8.4				
Table 8.4 Symbols for Related Equipment				
Symbol	Description			
DH	Door Holder			
DCL	Door Closer			
S DCT	Integral Smoke Detector and Door Closer			
	End Of Line Resistor			
	Fire Service or Emergency Phone Station — Basic Shape			
	Fire Service or Emergency Phone Station — Jack			
C _H	Fire Service or Emergency Phone Station — Handset			
C _A	Fire Service or Emergency Phone Station — Accessible			
SA	Sync Adapter Module (Strobe Synchronization)			
ISO ISO	Isolator Module (Style 6 or 7 Fault Protection)			
(JB)	Junction Box			
	Air Sampling Detector Piping			
WT	Watchman's Tour Station			

8.5 Symbols for Smoke/Pressurization Control.

Symbols for smoke/pressurization controls shall be as given in Table 8.5.

Table 8.5 Symbols for Smoke/Pressurization Control

Symbol	Description	Comments
Symbol	Purge controls — manual	Comments
<u> </u>	control	
2 L	Hand (manual)/	
HOA	off-automatic	
*	Fans — general	Arrow indicates direction of flow
\overline{C}	Fans — duct	Arrow indicates direction of flow
€b)	Fans — roof	Arrow indicates direction of flow
+8	Fans — wall	Arrow indicates direction of flow
+	Dampers — fire	
0	Dampers — smoke	
•	Dampers — fire/smoke	
• • • • • • • • • • • • • • • • • • •	Dampers — motorized fire/smoke	
	Dampers — barometric	
	Pressurized stairwell	Orient as required for base or head injection
<u>-</u> †-	Ventilation openings	Orient as required for intake or exhaust

170-8 Log #1 Final Action: Accept

Submitter: David R. Hague, Liberty Mutual Property

Recommendation: Revise description and comments for fire pump symbol as follows:

Description: Fire pump with drives r

(Table 6.4)

Comments: Specify driver type and rated capacity

Add new symbols for Freestanding test header and wall=-mounted test header as shown in Table 6.4.

Insert Table 170_L1_Tb 6.4_R Here

Substantiation: It is important to indicate the type of driver for each fire pump (such as electric, diesel or steam) and indicate on the diagram the rated capacity of the pump. The proposed symbols for the fire pump test header (both freestanding and wall-mounted) will more clearly indicate the number of outlets on the diagram.

Committee Meeting Action: Accept

170-9 Log #CP6 Final Action: Accept

(New Table 8.3.2)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Update Table 8.3.2 to match FGDC changes.

Insert 170_FGDC_changes_R Here

Substantiation: To keep up to date with changes in the government standard.

Committee Meeting Action: Accept

Log #CP3

(9.2.4)

170-10 (9.2.4)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Revise text as follows:

9.2.4 The size of text, symbols, and tactile information shall allow visibility by all occupants.

Substantiation: The term "tactile" could be misleading.

Committee Meeting Action: Accept

Final Action: Accept

Table 6.4

Symbol	Description	Comments	
	Fire pump with drives- <u>r.</u>	Specify driver type and rated capacity.	
454	Freestanding test header.	Freestanding: specify number and sizes of outlets.	
4XA	Wall-mounted test header.	Wall: specify number and sizes of outlets.	

Version 2.0 Symbology Changes

Sym	bol Types	Old (Version 1)	New (Version 2)	Key Stroke	Symbol Terms and Definitions
1.)	Civil Disturbance Incident (Theme)	(CHANGED since previous version.	A	Human activities resulting in the disrupting of services or requiring varying levels of support, law enforcement or attention.
2.)	Civil Demonstrations (Civil Disturbance Feature)	411	CHANGED since previous version.	В	A public display of group feelings toward a person or cause. (Source: Merriam-Webster Online Dictionary definition)
3.)	Civil Displaced Population (Civil Disturbance Feature)		CHANGED since previous version.	С	Persons or groups of person who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, violations of human rights, or natural or human-made disasters. (Source: United Nations Guiding Principles on Internally Displaced Persons, 1998)
4.)	Civil Rioting (Civil Disturbance Feature)	19.9.0	CHANGED since previous version.	D	A public disturbance involving (1) an act or acts of violence by one or more persons part of an assemblage of three or more persons, which act or acts shall constitute a clear and present danger of, or shall result in, damage or injury to the property of any other person or to the person of any other individual or (2) a threat or threats of the commission of an act or acts of violence by one or more persons part of an assemblage of three or more persons having, individually or collectively, the ability of immediate execution of such threat or threats, where the performance of the threatened act or acts of violence would constitute a clear and present danger of, or would result in, damage or injury to the property of any other person or to the person of any other individual. (Source: 18 USC Section 2102)
•	Bomb Threat (Criminal Activity Feature)	�	CHANGED since previous version.	F	A warning of the of the possible presence of a bomb or expression of the intention to detonate a bomb.

6.) Bomb (Criminal Activity Feature)





since previous version.

G

An explosive device fused to detonate under specific conditions. (Source: International military definition)

7.) Bomb Explosion (Criminal Activity Feature)





since previous version.

H

A violent outburst resulting from detonation of a chemical or nuclear explosive or from the loss of a high pressure vessel's integrity.

8.) Commercial Facility Fire (Fire Incident Feature)



DELETED from previous version.

M

A fire that originates at or affects a commercial facility, resulting in partial damage or total destruction of the structure and/or bodily injury, smoke inhalation or death.

9.) Grassland Fire (Fire Incident Feature)



DELETED from previous version.

0

An uncontrollable fire in areas of vegetation dominated by grasses, grass-like plants, forbs, mosses, lichens, and/or ferns. (Source: Expanded from Forest Fire definition and the Forestry Resource glossary located at http://forestry.about.com/library/glossary/)

10.) Non-Residential
Fire
(Fire Incident
Feature)



N

A fire that originates at or affects a non-residential or commercial facility, resulting in partial damage or total destruction of the structure and/or bodily injury, smoke inhalation or death.

11.) Industrial
Facility Fire
(Fire Incident
Feature)



DELETED from previous version.

version.

Q

A fire that originates at or affects an industrial facility, resulting in partial damage or total destruction of the structure and/or bodily injury, smoke inhalation or death.

12.) Origin (Fire Incident Feature)



CHANGED since previous version. \cup

Location of where the fire started. (Source: Forest Service Department of Agriculture http://www.fs.fed.us)

13.) Wild Fire (Fire Incident Feature)



 \Box

An uncontrolled fire in a wooded area. (Source: www.realdictionary.com)

14.) Avalanche (Geologic Feature)





version.

В

A large mass of snow, ice, soil, or rock, or mixtures of these materials, falling, sliding, or flowing very rapidly under the force of gravity. (Source: Dictionary of

4/201	.0	·	Emergency Symbology Re since previous version.	rerence - V	/ers Geological Terms, 3rd Ed.)
15.)	Bird Infestation (Infestation Feature)		ADDED since previous version.	U	A harassing or troublesome invasion of birds. (Source: derived from the definition of <i>infestation</i> found in the FactMonster.com dictionary)
16.)	Ambulance (Emergency Medical Feature)		ADDED since previous version.	С	A vehicle for taking sick or wounded people to and from a hospital.
17.)	Emergency Collection Evacuation Point (Emergency Operation Feature)	(****)	CHANGED since previous version.	M	A designated place where displaced persons or victims of war or disaster are assembled and/or evacuated from.
18.)	Emergency Public Information Center (Emergency Operation Feature)		CHANGED since previous version.	P	No Definition.
19.)	Emergency Water Distribution Center (Emergency Operation Feature)		CHANGED since previous version.	Т	A place where potable water is distributed to displaced persons or victims of war or disaster.
20.)	Church (Public Venues Feature)		DELETED from previous version.	R	A building for public and especially Christian worship. (Source: Merriam- Webster Online Dictionary)
21.)	Mosque (Public Venues Feature)		DELETED from previous version.	Τ	A building used for public worship by Muslims. (Source: Merriam-Webster Online Dictionary)
22.)	Synagogue (Public Venues Feature)		DELETED from previous version.	X	The house of worship and communal center of a Jewish congregation. (Source: Merriam-Webster Online Dictionary)
23.)	Temple (Public Venues Feature)	击	DELETED from previous version.	Y	A building for Mormon sacred ordinances. (Source: Merriam-Webster Online Dictionary)
24.)	Emergency Public Service Center	?	DELETED from previous version.	Р	No Definition.

version.

Center

(Emergency Operation

Feature)

25.) Forest Fire (Fire Incident Feature)



DELETED from previous version.

N

An uncontrolled fire in a wooded area. (Source: www.realdictionary.com)

170-11 Log #CP7 Final Action: Accept (9.4.1.1)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Revise text as follows:

9.4.1.1 The means of egress from the viewers' location shall be shown. This shall include all exit locations, exit access paths, stairways, elevators, elevator lobbies, areas of refuge, areas of rescue assistance, shelter areas, and exterior outside <u>evacuation</u> assembly areas.

Substantiation: To maintain consistency with government standards.

Committee Meeting Action: Accept

170-12 Log #CP5 Final Action: Accept (New A.9.3 and Figure A.9.3)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Add new text as follows:

A.9.3. See Figure A.9.3.

Insert 170_CP5_Fig A.9.3_R Here

Substantiation: The new figure provides an example of proper orientation.

Committee Meeting Action: Accept

170-13 Log #CP9 Final Action: Accept (D.1.1)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Remove NFPA 170, Standard for Firesafety Symbols, 1991 edition and NFPA 172, Standard for Fire Protection Symbols for Architectural and Engineering Drawings for D.1.1.

Substantiation: There is no reason to reference an older edition of the standard and NFPA 172 has been incorporated

into NFPA 170 in previous cycles.

Committee Meeting Action: Accept

470.44 Law #CD40

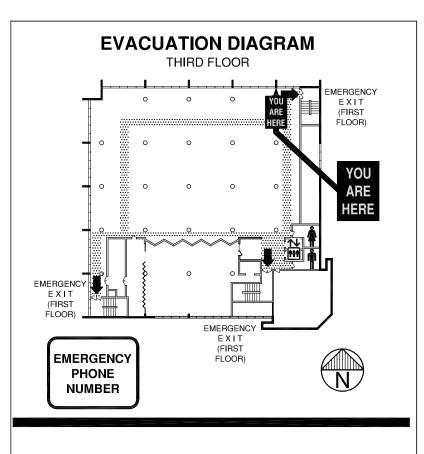
170-14 Log #CP12 Final Action: Accept (D.2.1)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Update Fire Protection Handbook from 19th edition to 20th edition and update National Fire Codes from 2006 edition to 2010 edition.

Substantiation: NFPA Publications should be updated to current editions.

Committee Meeting Action: Accept



EMERGENCY GUIDELINES SITE MAP KEY/ LEGEND 170-15 Log #CP13 Final Action: Accept

(D.2.2)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Revise text as follows:

D.2.2 ANSI Z535.1 Safety Color Code, 2002 ANSI Z535.1 American National Standard for Safety Colors, 2006. ANSI Z535.3 Criteria for Safety Symbols, 2002 ANSI Z535.3 American National Standard Criteria for Safety Symbols, 2007.

ANSI Z535.4 Production Safety Signs and Labels, 2002 ANSI Z535.4 American National Standard for Product Safety Signs and Labels, 2007.

Substantiation: The current editions should be referenced.

Committee Meeting Action: Accept

170-16 Log #CP15 Final Action: Accept

(D.2.3)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Delete D.2.3.

Substantiation: Referenced publication is no longer published or referenced in NFPA 170.

Committee Meeting Action: Accept

Final Action: Accept

170-17 Log #CP16

(D.2.4)

Submitter: Technical Committee on Fire Safety and Emergency Symbols,

Recommendation: Delete ISO 3461-1976 from D.2.4. Substantiation: ISO 3461-1976 has been withdrawn by ISO.

Committee Meeting Action: Accept