#### **Optional Information**

Name of School:	Date of Inspection:
Vocational Program/Course/Room:	Signature of Inspector:

# **General Fire Requirements**

## **Self-Inspection Checklist**

Guidelines: This checklist covers some of the regulations issued by the New Jersey Department of Community Affairs under the Uniform Fire Code (N.J.A.C. 5:70) and the U.S. Department of Labor - OSHA General Industry standards 29 CFR 1910.38 and 1910.159. The Uniform Fire Code has adopted the model code of the Building Officials and Code Administrators International, Inc., known as the "BOCA National Fire Prevention Code" by reference as well as the National Fire Protection Association (NFPA) Standard for the Installation of Sprinkler Systems (NFPA 13) and the Standard for Fire Doors and Fire Windows (Standard 80). Recommendations from the NFPA Fire Prevention Coded (Standard 1) and Code for Safety to Life from Fire in Buildings and Structures (Standard 101) have also been included. There may be additional requirements under county and/or municipal codes. The local fire code and building code official should be consulted about any additional regulations. Please note implementation of some of the regulations may not be the individual classroom teacher's responsibility. The questions that are most likely not the responsibility of the individual teacher are marked with an asterisk (\*) beside the number of the question. Any question marked with the symbol (③) indicates a history of previous violations in vocational schools.

1.	General Requirements  Does the facility have an emergency action plan in place?  [NFPA 1(60.1.5.1)]	Please Circle Y N N/A DK
2.	Is the emergency action plan consistent with available equipment and personnel able to be present and does it outline how to respond to a fire and other emergencies? [NFPA 1(60.1.5.1)]	Y N N/A DK
3.	Are dangerous conditions which are liable to cause or contribute to the spread of fire removed or remedied? [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	Y N N/A DK
4.	Are conditions which would interfere with the efficiency and use of any fire protection equipment removed or remedied? [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	Y N N/A DK
5.	Are obstructions to or on fire escapes, stairs, passageways, doors or windows, liable to interfere with the egress of occupants or the operation of the fire department in case of fire removed or remedied? [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	Y N N/A DK
6.	Are accumulations of dust or waste material in air conditioning or ventilating systems or grease in kitchen or other exhaust ducts removed or remedied? [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	Y N N/A DK

Comments/Corrective Action:

7.	Is wood dust present and can it be defined as a potential deflagration hazard?	
	Note: A deflagration hazard shall be determined to exist where the layer of accumulated fugitive deflagrable wood dust on upward-	Y N N/A DK
	facing surfaces exceeds 3.2 mm ( $^{1}/_{8}$ in.) thickness over 5.0% of	
	the area, or 93 m <sup>2</sup> (1000 ft <sup>2</sup> ), whichever is smaller. For smaller areas, a deflagration hazard shall exist where the accumulated	
	fugitive deflagrable wood dust layer is equivalent to $3.2 \text{ mm} (^{1}/8 \text{ in.})$ over 5% of the area. [NFPA 664 (4)]	
8.	Are accumulations of grease on kitchen cooking equipment, or oil grease or dirt upon, under or around any mechanical equipment removed or remedied?	Y N N/A DK
	[N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	
9.	Are accumulations of rubbish, waste, paper, boxes, shavings, or other combustible materials, or excessive storage of any combustible material removed or remedied?  [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	Y N N/A DK
10.		Y N N/A DK
10.	Are hazardous conditions arising from defective or improperly used or installed electrical wiring, equipment, or appliances removed or remedied?  [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	I N N/A DK
11.	Are hazardous conditions arising from defective or improperly	Y N N/A DK
11.	installed equipment for handling or use of combustible, explosive or otherwise hazardous materials removed or remedied? [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	
12.	Are dangerous or unlawful amounts of combustible, explosive or	Y N N/A DK
12.	otherwise hazardous materials removed or remedied? [N.J.A.C. 5:70-3.2(a)1{F-102.1.1}]	I N WA DK
13.	If students are working in a new building on a school or district campus and/or if the school itself is new and the building is three stories or greater in height, see below:	Y N N/A DK
	a) Does the building have a quality assurance (QA) program for the installation of devices and systems protecting penetration and joints?	Y N N/A DK
	Note: This QA program should be prepared and monitored by the	
	RDP responsible for the design.	
	b) Has an inspection of fire stop systems of the types tested in accordance with ASTM E 814, Standard Test Method for Fire Tests of Through-Penetration Fire Stops, or ANSI/UL 1479 been	Y N N/A DK
	conducted?	

Comments/Corrective Action:

c) Has an inspection of fire-resistive joint systems of the types tested in accordance with ASTM E 1966, Standard Test Method for Fire-Resistive Joint Systems, or ANSI/UL 2079 been completed?

Y N N/A DK

d) Does the building have an approved automatic sprinkler system in accordance with updated NFPA 1 Section <u>13.3</u>2015 standards [NFPA 1 (13.3.2.4)]?

Y N N/A DK

14. Have you conducted a physical survey of the classroom/shop area to determine necessary locations for fire extinguishers with the following criteria? [NFPA 10 (E.2)]

Y N N/A DK

- (1) Provide uniform distribution to fire extinguishers
- (2) Provide easy accessibility to fire extinguishers
- (3) Be relatively free from blocking by storage and equipment, or both
- (4) Be near normal paths of travel
- (5) Be near entrance and exit doors
- (6) Be free from the potential of physical damage
- (7) Be readily visible
- (8) Be determined on a floor-by-floor basis

Note: Consider the necessary class of fire extinguisher (A, B, C, D, K) based on materials and/or potential hazards present. *See Checklist 16* 

#### Material Storage

15. Are combustible rubbish, oily rags or waste material when kept within a building, stored in an approved metal container? [N.J.A.C. 5:70-3.2{BOCA F-2101.4}]

Y N N/A DK

16. Is the storage of combustible or flammable materials confined to only an approved storage area?

Y N N/A DK

[N.J.A.C. 5:70-3.2{BOCA F-2101.3}]

Note: If a storage cabinet is ventilated for any reason, the vent openings should be ducted directly to a safe location outdoors or to a treatment device designed to control volatile organic compounds (VOCs) and ignitable vapors in such a manner that i.) will not compromise the specified performance of the cabinet; and, ii.) is acceptable to authority having jurisdiction. [NFPA 1 (60.1.5)]

17. In sprinkler-enabled buildings, is storage maintained at least 18 inches below sprinkler head deflectors, and is protection provided for the storage height that would result in a 20 ft (6.1 m) distance between the ceiling height and top of storage? [N.J.A.C. 5:70-3.2(a)21i{F-2101.1, NFPA 13} and 29 CFR 1910.159(c)(10)]

Y N N/A DK

18. In sprinkler-enabled buildings, are sprinkler heads protected from mechanical damage? [29 CFR 1910.159(c)(8)(iii)]

Y N N/A DK

#### Comments/Corrective Action:

19.	Have you performed test scenarios to evaluate the ability of the sprinkler to protect storage fire risks? [NFPA 13 (24.1.6)]	Y N N/A DK
20.	Is storage orderly and not within two feet of the ceiling? [N.J.A.C. 5:70-3.2{BOCA F-2103.2}]	Y N N/A DK
21.	Is adequate clearance maintained between stored materials and lights and light fixtures to prevent possible ignition? [N.J.A.C. 5:70-3.2{BOCA F-2101.1}]	Y N N/A DK
22.	Is the clearance between stored materials and unit heaters, radiant space heaters, duct furnaces, and flues not less than three feet in all directions or in accordance with the clearances shown on the approval agency label?  [N.J.A.C. 5:70-3.2(a)21iv{F-2103.4}]	Y N N/A DK
23.⊗	Are accumulations of flammable or combustible waste materials and residues removed so that they would not contribute to a fire? [N.J.A.C. 5:70-3.2{BOCA F-2101.4} and 29 CFR 1910.38(b)(3)] Note: Examples of violations include: open boxes of papers stored under the stairs and stored empty cardboard boxes.	Y N N/A DK
	General Conditions	
24.	Are flammable materials prohibited for decorative purposes in such quantity to constitute a fire hazard unless such material is flame-proofed in an approved manner? [N.J.A.C. 5:70-3.2{BOCA F-306.1}] Note: Such materials include: cotton batting, straw, dry vines, leaves, trees, artificial flowers or shrubbery and foam plastic	Y N N/A DK
25.	Are child-prepared artwork and teaching materials that are attached to walls only covering a small percentage, (10-20% at most, approximately) of the wall surface area? [NFPA 1 and 101]	Y N N/A DK
26.	Are decorative materials such as curtains, draperies, streamers and fabrics noncombustible or flame proofed? [N.J.A.C. 5:70-3.2{BOCA F-306.4}]	Y N N/A DK
27.	Is decorating electric light bulbs with paper or other combustible materials prohibited unless such materials have first been rendered flameproof? [N.J.A.C. 5:70-3.2{BOCA F-306.1}]	Y N N/A DK
28.	Is the use of burlap, fish netting or other similar materials suspended from the ceiling prohibited unless approved by the local fire official? [N.J.A.C. 5:70-3.2{BOCA F-306.2}]	Y N N/A DK

### Comments/Corrective Action:

29.	Is use of an open flame, unprotected light, or heating device near highly flammable, combustible or explosive materials prohibited?	Y N N/A DK
	[N.J.A.C. 5:70-3.2{BOCA F-402.1}]  Note: All lighting appliances should be secured in a glass globe and wire mesh cage or a similar approved device.	
30.	Is the use of portable kerosene fired heaters prohibited? {N.J.A.C. 5:70-3.2(a)3xvii{F-308.5.2}]	Y N N/A DK
31.	Are openings in the walls, floors, or ceilings which would contribute to the spread of fire from one room to another repaired? [N.J.A.C. 5:70-3.2(a)3iii{F-303.2}]	Y N N/A DK
32.	In multistoried buildings, is the floor above where the information technology equipment is located reasonably watertight to avoid water damage to equipment, and are any openings including those for beams and pipes sealed to be watertight? [ NFPA 75 (A.5.3.2)]	Y N N/A DK
33.	Are sub-floor spaces where any utility or computer auxiliary cooling fluids are piped into the information technology equipment room, or are capable of entering the room from adjoining areas, provided with a leak detection system? [ NFPA 75 (A.5.3.2)]	Y N N/A DK
34.	Are wedges or devices holding fire doors open prohibited? [N.J.A.C. 5:70-3.2{BOCA F-303.4.1}]	Y N N/A DK
35.	Are fire doors tight fitting and in good operational condition to allow for full closure? [N.J.A.C. 5:70-3.2{BOCA F-303.4.1 and NFPA 80}]	Y N N/A DK
36.	Is smoking prohibited in school buildings? [N.J.A.C. 5:70-3.2{BOCA F-312.2} and N.J.S.A 26:3D-17]  Note: A New Jersey State Statute requires each board of education to make and enforce regulations that prohibit the smoking of tobacco anywhere in its buildings except as part of a classroom instruction or a theatrical production. This legislation was passed for health reasons.	Y N N/A DK
37.	Are classroom doors automatically self closing? [NFPA 80]	Y N N/A DK

#### Comments/Corrective Action:

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- 38.\* Is the school building inspected at least once every 12 months by a Y N N/A DK county or municipal fire code official and the resulting certificate of inspection posted in a conspicuous location? [N.J.A.C. 5:70-2.5(a) and (d)]
- 39. Is an evaluation process in place to evaluate spark-resistant tools to prevent the ignition of flammable vapors from the following Y N N/A DK sources: flames, lightning, hot surfaces, radiant heat, smoking, cutting and welding, spontaneous ignition, frictional heat or sparks, static electricity, electrical sparks, stray currents, ovens, furnaces, and heating equipment? [NFPA 30 (6.5.1)]
- 40. Is the number of sprinklers in the sprinkler system no less than one Y N N/A DK of the following? (Note: This is regardless of the number of sprinklers operating during a worse-case full-scale fire test) [NFPA 13 (24.1.8 and 24.1.8.1)] Y N N/A DK
  - i. Twelve sprinklers for standard coverage sprinklers

ii. Eight sprinklers for extended-coverage sprinklers based on a spacing of 12 ft  $\times$  12 ft (3.7 m  $\times$  3.7 m)

iii. Six sprinklers for extended-coverage sprinklers based on a spacing of  $14 \text{ ft} \times 14 \text{ ft} (4.3 \text{ m} \times 4.3 \text{ m})$ 

Y N N/A DK

Y N N/A DK

Y N N/A DK

41. Have standard coverage area sprinkler systems requiring up to 20 sprinklers included in the hydraulic calculation been installed in accordance with the obstruction criteria described in NFPA 13 14.2.11?

Note: This provision is not required if large-scale fire testing is conducted with a representative obstruction below the sprinkler to demonstrate equivalent performance. [NFPA 13 (24.4.1)]

42. Have standard coverage area sprinkler systems requiring up to 10 sprinklers included in the hydraulic calculation been installed in accordance with the obstruction criteria described in NFPA 11.2.5.1, 14.2.11.2, and 14.2.11.3? [NFPA 13 (24.5.3.1)]

Note: This provision is not required if large-scale fire testing is conducted with a representative obstruction below the sprinkler to demonstrate equivalent performance. [NFPA 13 (24.4.1)] Note: Once the number of sprinklers for a demand area (classroom/shop)

has been established, the minimum operating area, based on the proposed sprinkler spacing, shall not be  $< 768 \text{ ft}^2 (71 \text{ m}^2)$ . [NFPA 13 (24.1.8.2)]

43. Is the water system capable of providing at least 750 gallons per minute or gpm (2840 L/min) where protection is by means of hose streams, or 500 gpm (1890 L/min) for hose streams in excess of the automatic sprinkler system water demand?

Y N N/A DK

[NFPA 400 (15.2.5.2.2)]

Note: The duration of the water supply should be a minimum of two hours. [NFPA 400 (15.2.5.2.3)]

Y N N/A DK

Note: The minimum water supply requirements for a hydraulically designed occupancy hazard fire control sprinkler system can be determined by adding the hose stream allowance found on Table 21.4.1 of NFPA 13 to the water supply for the sprinkler system, which is obtained from the same chapter of NFPA 13. [NFPA 13 (24.4.1)]

44. Has nonmetallic piping been investigated for suitability in automatic sprinkler installation? [NFPA 13 (7.3.2)]

Y N N/A DK

45. Has nonmetallic piping been installed in accordance with its listed limitations, and the installation instructions?

[NFPA 13 (6.3.9.1- 6.3.9.3)]

Y N N/A DK

46. Have nonmetallic fittings in accordance with NFPA 13 Table 6.4.1 been investigated for suitability in automatic sprinkler system installations and listed for this service? [NFPA 13 (7.4.3)]

Y N N/A DK

47. Do rooms housing building service equipment, janitor closets, and service elevators opening directly onto exit passageways meet the following criteria?

Y N N/A DK

• (i) The required fire resistance rating between such rooms or areas and the exit passageway shall be maintained in accordance with NFPA 101, 7.1.3.2.

Y N N/A DK

• (ii) Such rooms or areas shall be protected by an approved, supervised automatic sprinkler system in accordance with NFPA 101, 9.7.1.1(1); but, the exceptions in NFPA 13 allowing the omission of sprinklers from such rooms shall not be permitted. [NFPA 13 (D.1.1.9.2)]

Y N N/A DK

48. Where required, are installations involving integrated fire protection or life safety systems, including smoke control systems, tested to verify the proper operation and function of such systems? [NFPA 101 9.11.4.1-2] Y N N/A DK

Note: When a fire protection or life safety system is tested, the response of integrated fire protection and life safety systems shall be verified. [NFPA 101 9.11.4.1.1]

Note: After repair or replacement of equipment, required retesting of integrated systems shall be limited to verifying the response of fire protection or life safety functions initiated by repaired or replaced equipment. [NFPA 101 9.11.4.1.2]

Comments/Corrective Action:

- 49. Where required, are these integrated fire protection and life safety systems tested:
  - 1. Integrated fire protection and life safety systems in high-rise buildings?
  - 2. Integrated fire protection and life safety systems with a smoke control system? [NFPA 101 9.11.4.2]

Y N N/A DK

50. For existing buildings, is integrated testing conducted at intervals not exceeding 10 years unless otherwise specified by an integrated system test plan prepared? [NFPA 101 9.11.4.2.2]

Y N N/A DK

Comments/Corrective Action

#### **Definitions:**

Antifreeze Systems require water will discharge after the antifreeze leaves the pipes. Systems with only antifreeze, including tanks of antifreeze solution that will not discharge plain water, are not true antifreeze systems. Such systems should not be used without consideration to issues such as the combustibility of the antifreeze solution and the friction loss in the piping during cold conditions. Any listing associated with an antifreeze sprinkler system should address the inability for the specific antifreeze solution tested to ignite when discharged from specific sprinklers. [NFPA 13 (A.8.6.1)]

Deflagration Hazard—flammable with high heat and intense light—is determined to exist where either of the two following conditions is present: (1) deflagrable wood dust is present as a layer on upward facing surfaces at a depth greater than that permitted in Section 4.7, or (2) deflagrable wood dust is suspended in the air at a concentration in excess of 25% of the *minimum explosive* concentration, or MEC, under normal operating conditions. [NFPA 664 (3.3.7)]

The MEC is defined as the minimum concentration of a combustible dust suspended in air, measured in mass per unit volume, which will support a deflagration. [NFPA 664 (3.3.17)]

Table 21.4.1 from NFPA 13 (2014):					
	Hose Stream Allowance and Water Supply Duration				
		Number of	Hose Stream		Warer
	Sprinkler	Sprinklers in			Supply
Sprinkler Type		Design	Allowance		Duration
	Spacing Type	Area	gpm	L/min	(minutes)
	Standard	Up to 12	250	950	60
		Over 12-15	500	1900	90
		Over 15-25	500	1900	120
Control mode		Over 25	500	1900	150
density/area and	Extended Coverage	Up to 6	250	950	60
CMSA		Up tp 8 (144 ft <sup>2</sup> )	250	950	60
		Over 6-8	500	1900	90
		Over 8-12	500	1900	120
		Over 12	500	1900	150
	Standard	Up to 12	250	950	60
ESFR		Over 12-15	500	1900	90
LOTIK		Over 15-25	500	1900	120
		Over 25	500	1900	150

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