

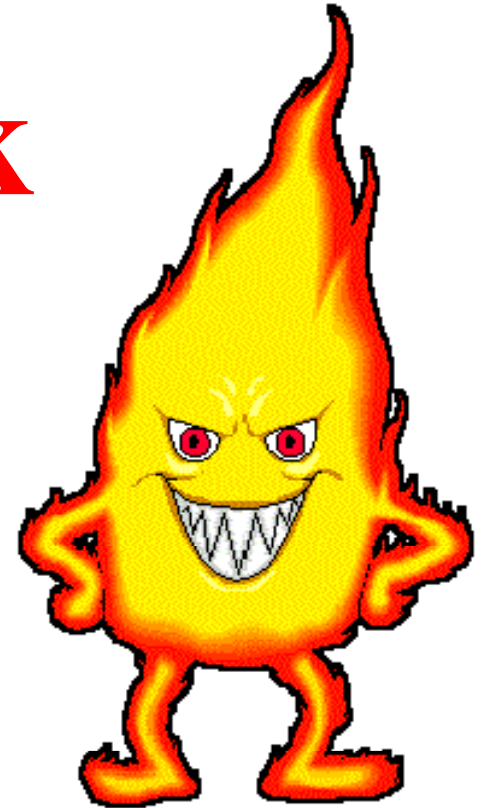
# **SAFETY CHECK, INC.**

**Frank J. Marino , CSP**

The rules and regulations that are set by the various governing bodies

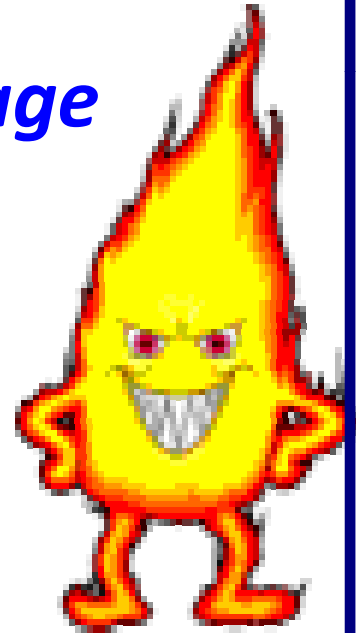
Such as OSHA and the NFPA

# Fire Safety For Roofing Work



# *Topics*

- *General OSHA Requirements*
- *Fire Extinguishing*
- *Flammable/ Combustible Liquid Storage*
- *Egress/ Ladders*
- *Emergency Evacuation*



# ***1926 Subpart F***

## ***Fire Protection & Prevention***

- ***1926.150 Fire Protection***
- ***1926.151 Fire Prevention***
- ***1926.152 Flammable and Combustible Liquids***
- ***1926.153 Liquefied Petroleum Gas (Propane)***
- ***1926.154 Temporary Heating***



# ***1926.150 Fire Protection***

- ***150(a)(1)***
  - *Employers shall develop a fire protection plan for all phases of construction*
  - *As fire hazards occur, all necessary equipment must be available without delay*
- ***150(a)(2)***
  - *Access to all available fire fighting equipment shall be maintained at all times*



# ***1926.150 Fire Protection***

- ***150(a)(3)***
  - *All fire fighting equipment shall be conspicuously located*
- ***150(a)(4)***
  - *All fire fighting equipment shall be periodically inspected and maintained*
  - *Defective Equipment shall be taken out of service*



# ***1926.150 Fire Protection***

- ***150(c)(1)(i)***
  - ***A fire extinguisher, rated not less than 2A shall be provided for each 3,000 sq. feet of the building***
  - ***The travel distance shall not be more than 100 feet.***



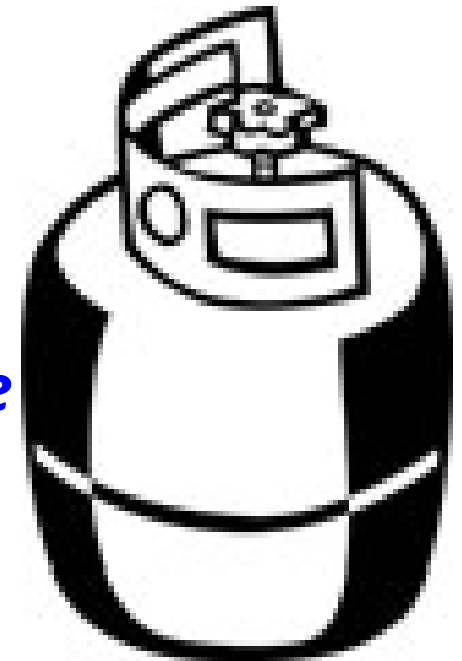
# ***1926.150 Fire Protection***

- ***150(c)(1)(ii)***
  - ***A 55 gallon open drum of water with 2 pails can substitute a fire extinguisher with a 2A rating***



# ***1926.150 Fire Protection***

- ***150(c)(1)(vi)***
  - ***A fire extinguisher, rated not less than 10B shall be provided within 50 feet of wherever more than 5 gallons of flammable/ combustible liquids are being used***



# ***1926.151 Fire Prevention***

- ***151(a)(1)***
  - ***Smoking shall be prohibited at or in the vicinity of operations that constitute a fire hazard with signs posted***



# **1926.152 Flammable & Combustible Liquids**

## **Flammable Liquids:**

- *Flammable liquids are classified as Class I Liquids and are described as any liquid that has a flash point below 100°F (37.8°C). Class I liquids are further classified as follows:*
  - *(a) Class IA Liquids — those liquids that have flash points below 73°F (22.8°C) and boiling points below 100°F (37.8°C);*
  - *(b) Class IB Liquids — those liquids that have flash points below 73°F (22.8°C) and boiling points at or above 100°F (37.8°C);*
  - *(c) Class IC Liquids — those liquids that have flash points at or above 73°F (22.8°C), but below 100°F (37.8°C).*

# **1926.152 Flammable & Combustible Liquids**

## **Combustible Liquids:**

- Combustible liquids are classified as Class II or III Liquids and are described as any liquid that has a flash point at or above 100°F (37.8°C). Combustible liquids are classified as Class II or Class III as follows:**
  - (a) Class II Liquid —any liquid that has a flash point at or above 100°F (37.8°C) and below 140°F (60°C);**
  - (b) Class IIIA — any liquid that has a flash point at or above 140°F (60°C), but below 200°F (93°C);**
  - (c) Class IIIB —any liquid that has a flash point at or above 200°F (93°C)**

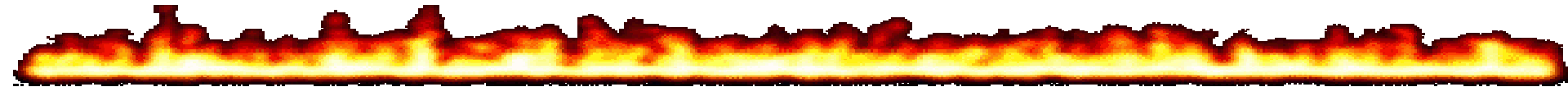
# ***1926.152 Flammable & Combustible Liquids***

- ***152(a)(1)***
  - ***Only approved containers and portable tanks may be used for storage and handling***
  - ***Approved Safety Cans or DOT approved Safety containers shall be used for flammable liquids in quantities of 5 gallons or less***
  - ***Quantities of 1 gallon or less of flammable liquids – Original container may be used***



# ***1926.152 Flammable & Combustible Liquids***

- ***152(a)(2)***
  - ***Flammable or Combustible liquids shall not be stored in areas used for exits, stairways or areas normally used for the safe passage of workers***



# ***1926.152 Flammable & Combustible Liquids***

- ***152(f)(1)***
  - ***Flammable liquids shall be kept in closed containers***
- ***152(f)(3)***
  - ***Flammable liquids may be used only when there are no open flames or other sources of ignition within 50 feet***



# ***1926.153 Liquefied Petroleum Gas***

TABLE F-3

Quantity of LP-Gas stored	Distance (feet)
500 lbs. or less.....	0
501 to 6,000 lbs.....	10
6,001 to 10,000 lbs.....	20
Over 10,000 lbs.....	25

# ***1926.153 Liquefied Petroleum Gas***

- ***153(I)***
  - ***LP Storage locations shall be provided with at least 1 fire extinguisher rated not less than 20-B-C***



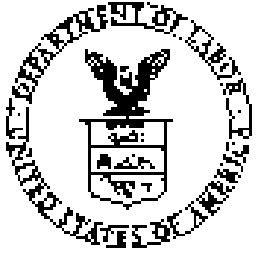









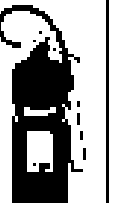




# ***1926.153 Liquefied Petroleum Gas***

- ***153(n)***
  - ***When LP gas and one or more other gases are stored together in the same area, the containers shall be marked to identify their content.***



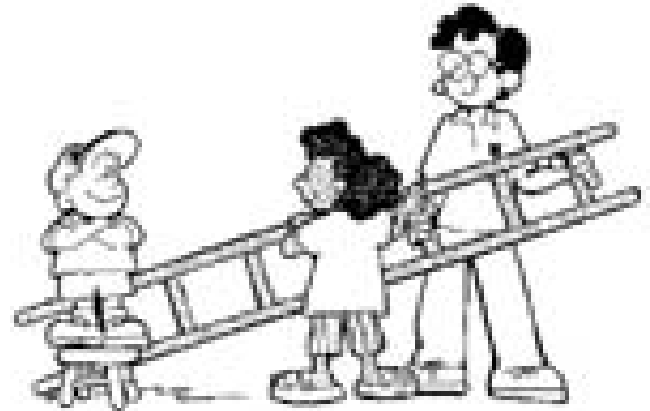
# Fire Extinguishers

Table F-1 FIRE EXTINGUISHERS DATA

	WATER TYPE				FOAM	CARBON DIOXIDE	DRY CHEMICAL			
	STORED PRESSURE	CARTRIDGE OPERATED	WATER PUMP TANK	SODA ACID			SODIUM OR POTASSIUM BICARBONATE	MULTI-PURPOSE ABC		
<b>CLASS A FIRES</b> WOOD, PAPER, TRASH HAVING GLOWING EMBERS 										
	YES	YES	YES	YES	YES	NO <small>(BUT WILL CONTROL SMALL SURFACE FIRES)</small>	NO <small>(BUT WILL CONTROL SMALL SURFACE FIRES)</small>	NO <small>(BUT WILL CONTROL SMALL SURFACE FIRES)</small>	YES	YES
<b>CLASS B FIRES</b> FLAMMABLE LIQUIDS GASOLINE, OIL, PAINTS, GREASE, ETC. 	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
<b>CLASS C FIRES</b> ELECTRICAL EQUIPMENT 	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES
<b>CLASS D FIRES</b> COMBUSTIBLE METALS 	<b>SPECIAL EXTINGUISHING AGENTS APPROVED BY RECOGNIZED TESTING</b>									
<b>METHOD OF OPERATION</b>	PULL PIN, SQUEEZE HANDLE	TURN UPSIDE DOWN AND BUMP	PUMP HANDLE	TURN UPSIDE DOWN	TURN UPSIDE DOWN	PULL PIN, SQUEEZE LEVER	RUPTURE CARTRIDGE, SQUEEZE LEVER	PULL PIN, SQUEEZE HANDLE	PULL PIN, SQUEEZE HANDLE	RUPTURE CARTRIDGE, SQUEEZE LEVER
<b>RANGE</b>	30' - 40'	30' - 40'	30' - 40'	30' - 40'	30' - 40'	3' - 8'	5' - 30'	5' - 30'	5' - 30'	5' - 30'
<b>MAINTENANCE</b>	CHECK AIR PRESSURE GAUGE MONTHLY	WEIGH GAS CARTRIDGE, ADD WATER IF REQUIRED ANNUALLY	DISCHARGE AND FILL WITH WATER ANNUALLY	DISCHARGE ANNUALLY, RECHARGE	DISCHARGE ANNUALLY, RECHARGE	WEIGH SEMI-ANNUALLY	WEIGH GAS CARTRIDGE, CHECK CONDITION OF DRY CHEMICAL ANNUALLY	CHECK GAS PRESSURE GAUGE AND CONDITION OF DRY CHEMICAL ANNUALLY	CHECK GAS PRESSURE GAUGE AND CONDITION OF DRY CHEMICAL ANNUALLY	WEIGH GAS CARTRIDGE, CHECK CONDITION OF DRY CHEMICAL ANNUALLY

# ***1926.1051 Stairways & Ladders***

- ***1051(a)(3)***
  - ***When a building or structure has only 1 point of access it must be kept clear***
- ***1051(a)(4)***
  - ***When a building or structure has 2 or more points of access, 1 must be kept clear***



# ***1926.34 Means of Egress***

- ***34(a)***
  - ***Every building or structure shall have free and unobstructed exits***
- ***34(b)***
  - ***Exits shall be marked with a readily visible sign.***

