



# Commodity and General Storage Considerations

In warehouse occupancies, the method or arrangement of commodities in storage plays a major role in the severity of a fire. Typical storage arrangements found in warehouses include bin-box, bulk storage, solid-piled, palletized, shelf, and rack storage. This checklist can be used to assess factors that should be considered in developing a fire prevention plan for storage.

	Yes	No	N/A
<b>General</b>			
Has the local fire department visited, or been invited to visit, the facility to familiarize themselves with storage arrangements, hazards, and protection equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are commodities that are not fire hazards by themselves (e.g., oxygen), but are hazardous in combination with other materials (e.g., flammable liquids), stored so they cannot be exposed to each other?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is at least a 3-ft (0.9-m) clearance maintained between stored materials and unit heaters, radiant space heaters, duct furnaces, and flues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are commodities stored in stable configurations, with no loose boxes, damaged pallets, or torn wrappings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is smoking allowed on the premises? If yes, is it restricted to certain areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the fire suppression system adequate for the commodities present?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are fire and emergency exits provided in accordance with local building and life safety code requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are standpipe systems provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the storage of commodities that expand with the absorption of water, such as roll paper, provided with at least a 24-in (61-cm) separation from walls?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are commodities that are particularly susceptible to water damage stored on skids, pallets, or elevated platforms in order to maintain at least a 4-in (10-cm) clearance from the floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pallets</b>			
Are idle pallets stored flat (e.g., not on edges)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are aisles free of unused wood pallets and other stored combustible materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are accumulations of pallets and other combustible materials minimized in storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the miscellaneous floor storage of wood pallets limited to 6 ft (1.8 m) in height, and protected as an Occupancy Hazard Group 2, in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, published by the National Fire Protection Association (NFPA)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are other inside storage arrangements of wood pallets protected in accordance with control mode density/area sprinkler protection as specified in Table 12.12.1.2(a), of NFPA 13?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Yes No N/A

Is the indoor storage of idle plastic pallets limited to miscellaneous floor storage not exceeding 10 ft (3 m) in height and protected in accordance with Section 12.12.2 of NFPA 13?

Are plastic pallets that are stored in cutoff rooms limited to 12 ft (3.7 m) in height and protected by three-hour fire rated walls and a sprinkler system with a density of at least 0.6 gpm/ft<sup>2</sup> (24.5 mm/min) or a ESFR system with a K factor of 14?

### Racks

Are storage racks on a level surface not loaded beyond their design capacity and free from physical damage?

Are fixed rack structures designed to facilitate removal or repair of damaged sections without resorting to flame cutting or welding in the storage area?

### Gases

Are compressed-gas cylinders stored in a separate area, away from ignition sources, and secured to prevent tipping and damage?

When compressed-gas cylinders are stored in multiple storage locations, are they separated by at least 300 ft (91.4 m)?

### Chemicals

Are corrosive liquids stored separately from flammables, either in corrosive-liquid cabinets or in a room specifically designed for that purpose?

Are storage areas for oxidizers, such as pool chemicals, constructed from non-combustible materials?

Are storage areas containing oxidizers, such as calcium hypochlorite, labeled with a sign that indicates the class of oxidizers stored?

Is the ambient temperature of the chemical storage area maintained below 125°F (52°C) or 25°F (14°C) below the decomposition temperature of the materials present, whichever is lower?



## Flammables

	Yes	No	N/A
Are flammable liquids stored in a protected area that is separated from the rest of the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are flammable liquids stored in approved containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are Level 2 and Level 3 aerosols stored in accordance with NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, published by the National Fire Protection Association (NFPA)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the inside storage of flammable or combustible liquids limited so that not more than 120 gal (454 L) of such liquids are stored in any one cabinet and not more than three cabinets located in the same storage area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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