

Welcome New England Roundtable Online Series

Introduction to #7005 Warehouse & Storage Safety



Disclaimer

This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others improve workplace health and safety. While we attempt to thoroughly address specific topics [or hazards], it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in this presentation. This information is a tool for addressing workplace hazards and is not an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. This document does not have the force and effect of law and is not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies. It does not create (or diminish) legal obligations under the Occupational Safety and Health Act. Finally, OSHA may modify rules and related interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA's website at www.osha.gov.

Introductory Course #7005

The OSHA Education Center offers an introductory course that covers the hazards and injuries likely to occur in warehousing and storage operations, including encounters with racking, fall protection, powered industrial trucks, material handling, lifting and ergonomics, hazard communication, walking and working surfaces, and life safety including fire protection and evacuation

Elements of the Warehouse

- ▶ Required Documents
- ▶ Employers / Employees Responsibility's
- ▶ Pallet Storage
- ▶ Racking
- ▶ Falls
- ▶ Forklift safety (PIT)
- ▶ Material Handling
- ▶ Loading Dock Safety
- ▶ Slips, Trips and Falls
- ▶ Emergency egress

Bureau of Labor Statistics

- ▶ According to 2021 data from the U.S. Bureau of Labor Statistics (BLS), the average rate of recorded injuries among warehousing employees was 5.5 for every 100 full-time workers. That represented an increase of 23% (122,700 cases) of days away from work over the 99,800 cases in 2020.
- ▶ That's why it is so important to train employees on how to correctly use and work with warehouse equipment, including the basics of rack safety.

OSHA's FY 2022 Agency Management Plan

2-2	Establish 3 Alliances and/or OSHA Strategic Partnerships with warehousing companies or trade associations to improve safety and health for workers in the industry.	
2-3	Develop an enforcement initiative focusing on targeting inspections and abatement of the hazards in the package and parcel delivery industries .	
3-5	OSHA will support a “ Struck-By ” Safety Summit.	
3-9	OSHA will develop a National Emphasis Program (NEP) focusing on preventing heat-related illnesses and deaths across major industry sectors, including general industry, construction, and agriculture.	
3-12	During FY 2022, OSHA is recommitting resources to target establishments and industries that use high numbers of temporary workers by reissuing the April 2013 memorandum, Protecting the Safety and Health of Temporary Workers . The revised memorandum will include additional instruction regarding inspections involving temporary workers at host sites including coding and compliance assistance.	

National Emphasis Program on Warehousing

▶ **DIRECTIVE NUMBER:** CPL 03-00-026

SUBJECT: National Emphasis Program on Warehousing and Distribution Center Operations
DIRECTORATE: Office of General Industry and Agricultural Enforcement
SIGNATURE DATE: June 14, 2023, **EFFECTIVE DATE:** July 13, 2023

- ▶ In the past 10 years, warehousing and distribution centers have experienced tremendous growth with more than 1.9 million people employed in the industry. The Bureau of Labor Statistics data shows injury and illness rates for these establishments are higher than in private industry overall and, in some sectors, more than twice the rate of private industry.
- ▶ Under this three-year emphasis program, OSHA will conduct comprehensive safety inspections focused on hazards related to powered industrial vehicle operations, material handling and storage, walking and working surfaces, means of egress and fire protection.

Purpose

This Emphasis Program (NEP) is intended to reduce injury / illness rates in the warehousing industry by conducting comprehensive inspections.

All inspections under this NEP will focus on workplace hazards common to the above industries including, but not limited to, powered industrial vehicle operations, material handling/storage, walking-working surfaces, means of egress, and fire protection. Heat and ergonomic hazards shall be considered during all inspections covered by this NEP and a health inspection shall be conducted if OSHA learns that heat and/or ergonomic hazards are present.

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Scope

- ▶ This Program applies to areas of federal jurisdiction Nation Wide.

This NEP will apply to warehousing, storage, and distribution yard operations with emphasis on the following NAICS codes:

Table 2. NAICS codes for Warehousing and Distribution Center Operations, Mail/Postal Processing and Distribution Centers, and Parcel Delivery/Courier Services covered under this NEP.

NAICS CODES	ESTABLISHMENTS
491110	Postal Service (Processing & Distribution Centers only)
492110	Couriers and Express Delivery Services
492210	Local Messengers and Local Delivery
493110	General Warehousing and Storage
493120	Refrigerated Warehousing and Storage
493130	Farm Product Warehousing and Storage
493190	Other Warehousing and Storage

Table 3. High Injury Rate Retail Establishments covered under this NEP.

<u>NAICS CODES</u>	<u>HIGH INJURY RATE RETAIL ESTABLISHMENTS</u>
444110	Home Centers
444130	Hardware Stores
444190	Other Building Material Dealers
445110	Supermarkets and other grocery stores
452311	Warehouse Clubs and Supercenters

Days Away Restricted or Transferred

- ▶ At the same time the warehousing and distribution center industry has experienced high occupational injuries and illness rates.
- ▶ From 2017 through 2021, the five-year average incidence rate of nonfatal occupational injuries and illnesses and the average Days Away Restricted or Transferred (DART) rate in establishments associated with warehousing and distribution center operations, mail processing and distribution centers, couriers/express delivery services, and local messengers and local delivery industries, were significantly higher than the baseline private general industry rates.

Background

- ▶ The Total Case Rate (TCR) covered by this instruction are significantly higher than industry average, according to BLS data. For 2021, the rate of total recordable case rate for all private industry was 2.8 cases per 100 full-time workers.
- ▶ The rates for the industries included in this NEP were:
 - 4.8 for Postal Servicing Processing and Distribution Centers
 - 8.1 for Couriers and Express Delivery Services
 - 4.0 for Local Messengers and Local Delivery
 - 5.2 for General Warehousing and Storage
 - 5.2 for Refrigerated Warehousing and Storage
 - 3.1 for Farm Product Warehousing and Storage
 - 2.7 for Other Warehousing and Storage





Updates to OSHA's Recordkeeping and Reporting Rule

Effective January 1, 2015, employers must report the following to OSHA with 24 Hours.



Focus of Inspection

- ▶ CSHOs will review the establishment's injury and illness records for compliance with 29 CFR 1904 including, where appropriate, compliance with electronic reporting of injury and illness information (29 CFR 1904.41).

OSHA Penalty Levels: 2023

Type of Violation	New Maximum
<ul style="list-style-type: none">• Serious and• Other-Than-Serious• Posting Requirements	\$15,625 per violation
Willful or Repeated	\$156,259 per violation
Failure to Abate	\$15,625 per day beyond the abatement date

www.osha.gov/penalties

Why a health and safety strategy is important

- ▶ As mentioned above, warehouse safety is complex, so employers' responsibilities regarding warehouse staff vary from one warehouse to another. The Health and Safety Executive (HSE) provides an example risk assessment for warehouse owners and managers, as it is vital to identify all the relevant hazards that your premises might have.

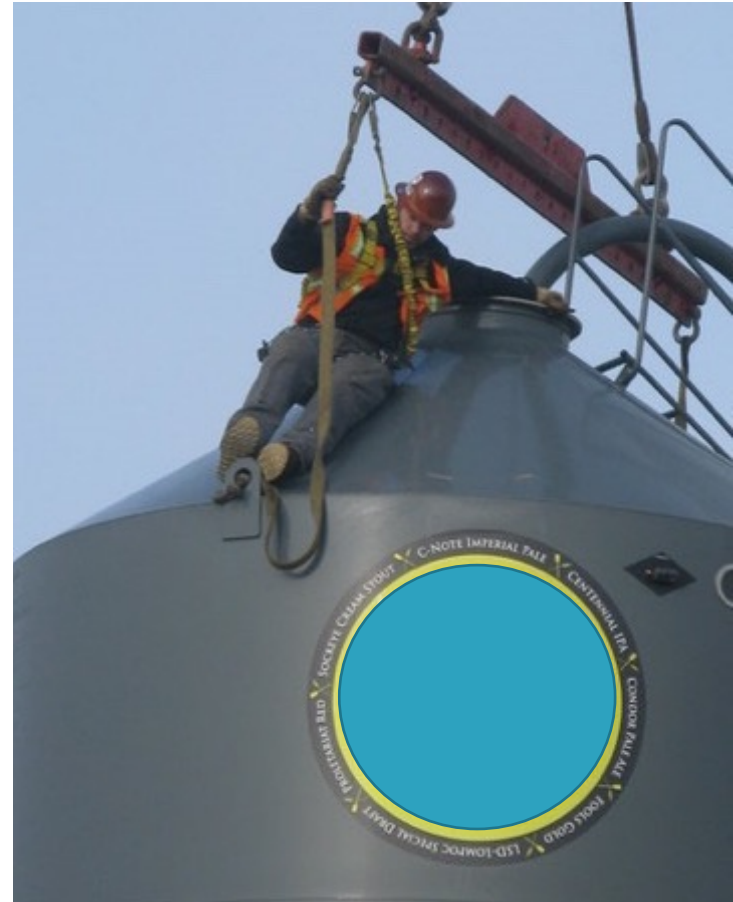


Reporting Hazards; Prevention...

**TODAY'S
NEAR MISS
COULD BECOME
TOMORROW'S
COSTLY ACCIDENT.**

- ▶ Another aspect of safety that all staff need to be trained in is reporting hazards. Develop a set procedure for this and ensure that all workers know what it is. This means that any temporary hazards, or new hazards that arise, can be quickly dealt with by the appropriate manager or staff member.

Maintenance Staff & Outside Contractors



General Duty Clause



Occupational Safety and Health Act of 1970

To assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health; and for other purposes.

Occupational Safety and Health Act of 1970, as amended through November 23, 2021

29 USC 654

SEC. 5. DUTIES

29 USC 654

(a) Each employer --

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

(2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

- ▶ OSH Act of 1970 Section (5)(a)(1): The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that, employees were exposed to...

Heat Screening



- ▶ Heat Screening. Occupational heat exposure must be assessed during review of injury and illness records, during worker interviews, and during the establishment walkthrough.
- ▶ When exposure to heat-related hazards are occurring, the inspection scope shall be expanded in accordance with the NEP for Outdoor and Indoor Heat-Related Hazards (Heat NEP) and a health inspection shall be opened.

Workplace Violence

New directive (CPL 02-01-052)
became effective September 8,
2011

Establishes general policy
guidance and procedures for
field offices when conducting
inspections in response to
incidents of workplace violence.

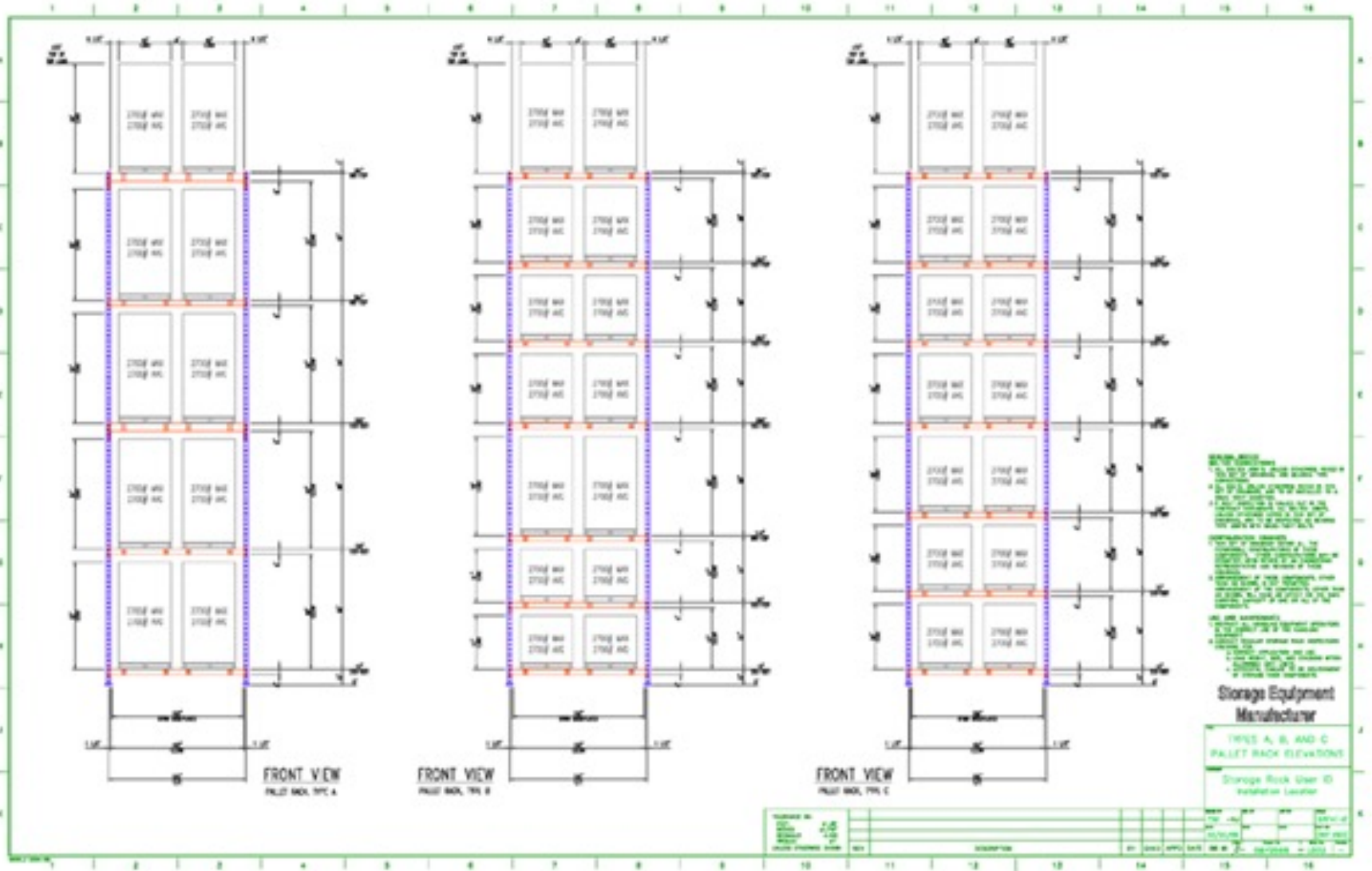


Employer Responsibility's LARC

Description; Load Application and Rack Configuration

- ▶ This standard was written specify minimum requirements for the structural design, testing, and utilization of industrial steel storage racks.
- ▶ It applies to industrial steel storage racks, movable-shelf racks, rack-supported systems, and storage racks associated with automated storage and retrieval systems (ASRSs; also known as “stacker racks”), constructed of cold formed and/or hot-rolled steel structural members.

How to Use Pallet Rack LARC Drawings



Personal Protective Equipment

- Hard hat
- Eye protection
- Hearing protection
- Dust mask
- Work gloves
- Safety shoes
- Fall protection
- Cold weather gear

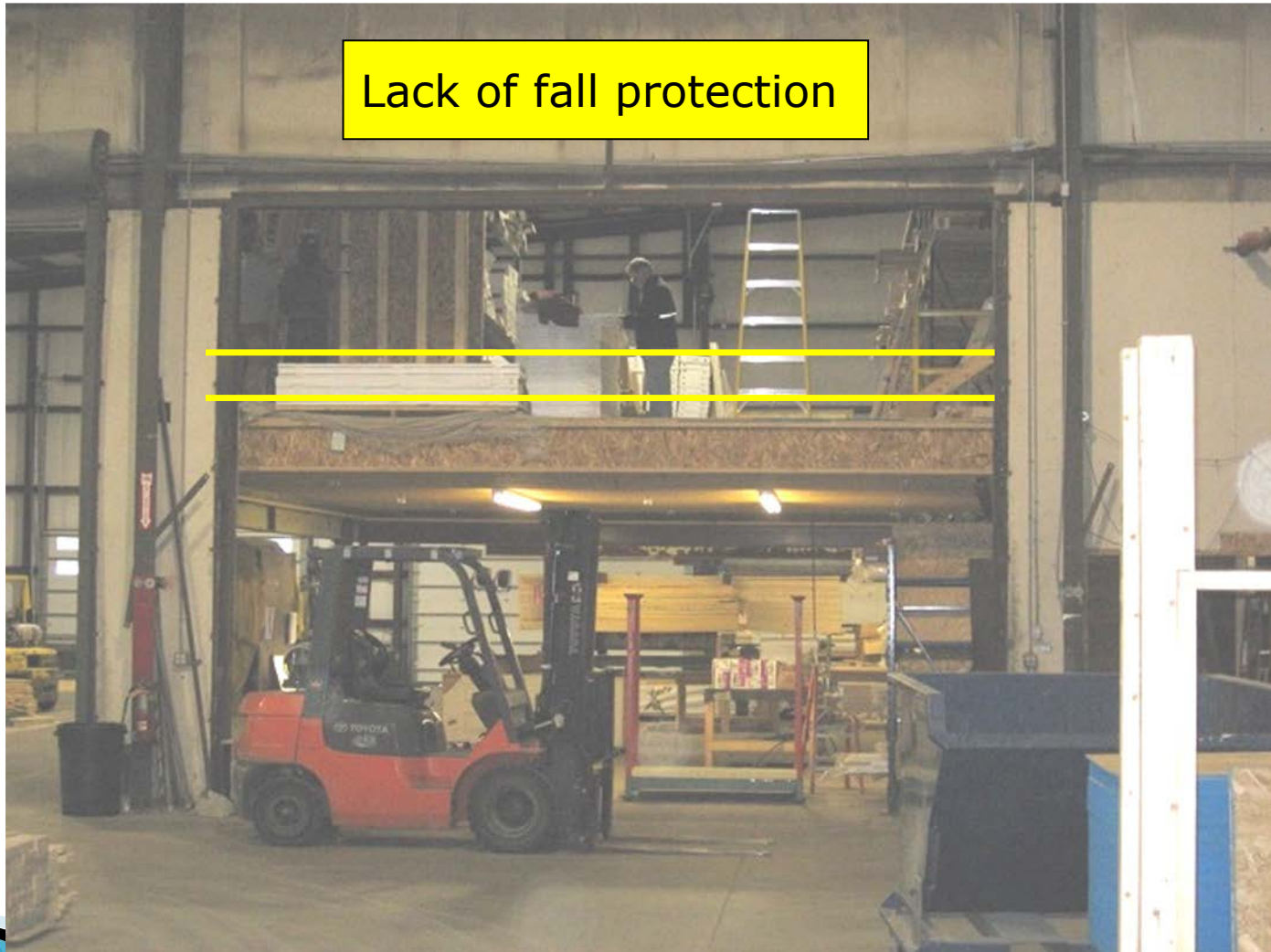


Falls from Elevation

- Ladders
- Stairs
- Shelves/racks/stacks
- Manlifts



Guarding Floor and Wall Openings



Platforms

- ▶ Platforms 4 feet or more above the adjacent floor or ground must be guarded by a standard railing

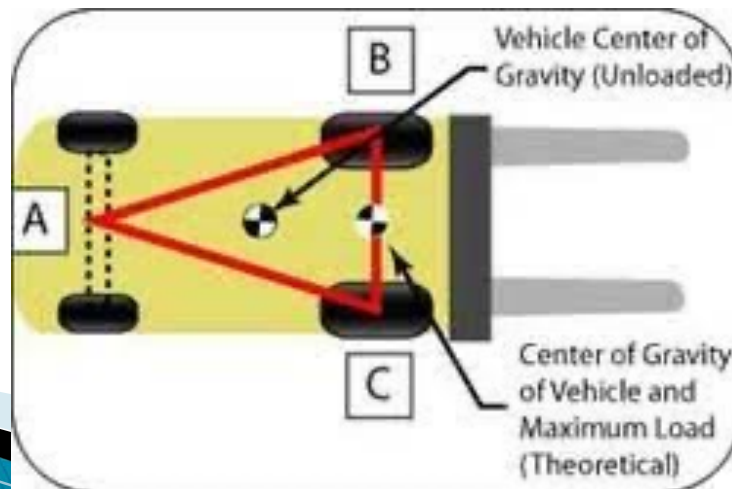






Forklift Safety: Operation

- Check weight and stability
- Inspect
- Follow traffic rules
- Accessory's ?
- Stability Triangle



Forklift Safety: Pedestrian Traffic

- Look
- Listen
- Be visible
- Keep your distance
- No rides
- Use PPE
- No horseplay



Loading Dock Safety

- Lifting
- Congestion
- Trailers
- Dock doors
- Jumping
- Early departure



Safe Operation of Forklifts On Loading Dock

- Wheels chocked
- Nose supported
- Floor safe
- Dock plate secure
- Away from edges



Stable Pallet Loads

- Stabilize
- Keep low to the ground
- Take damaged pallets out of service
- Do not use as scaffolding



For wood pallets, the pile cannot be more than 6 ft (1.8 m) in height, and for plastic pallets, the pile cannot be more than 4 ft (1.2 m) in height. In both cases, the piles must be separated by a minimum of 8 ft (2.4 m) of clear space or 25 ft (7.6 m) of stored commodity.

Safe Stacking

- Heavy items on bottom
- Big loads under small loads
- Even stacks
- Nothing sticking out; clear aisles



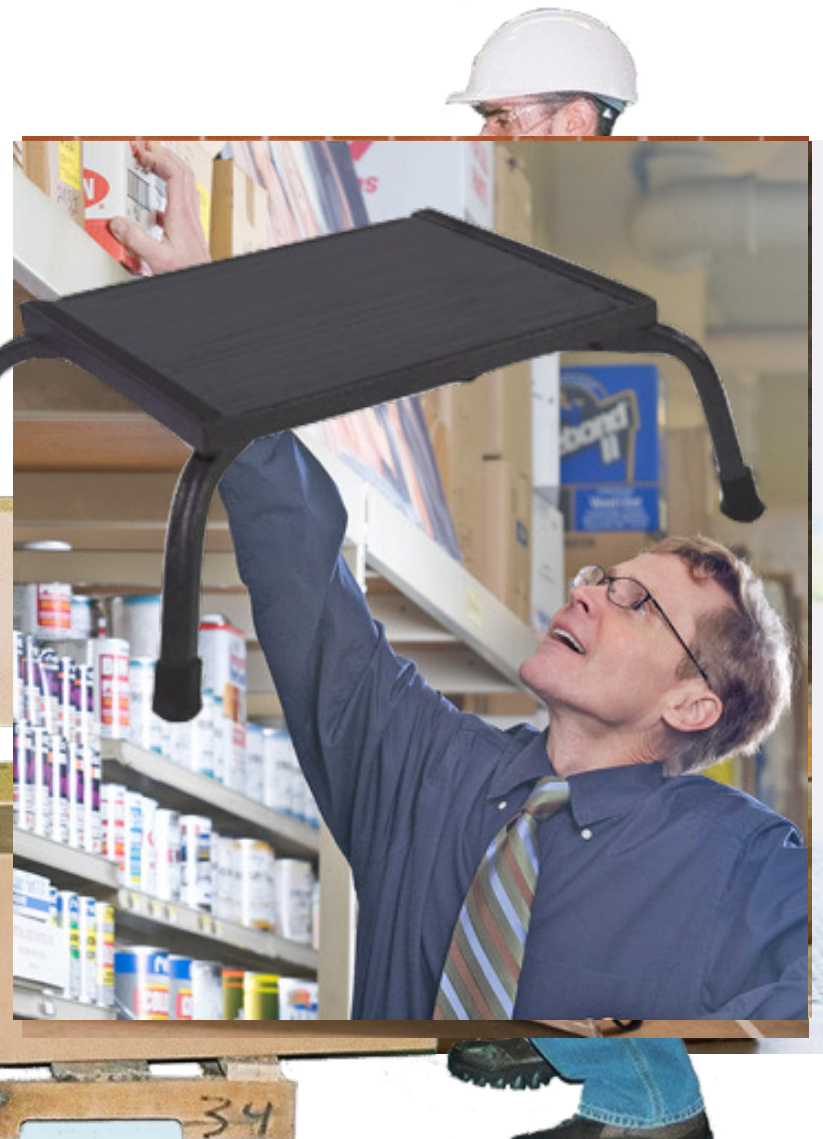
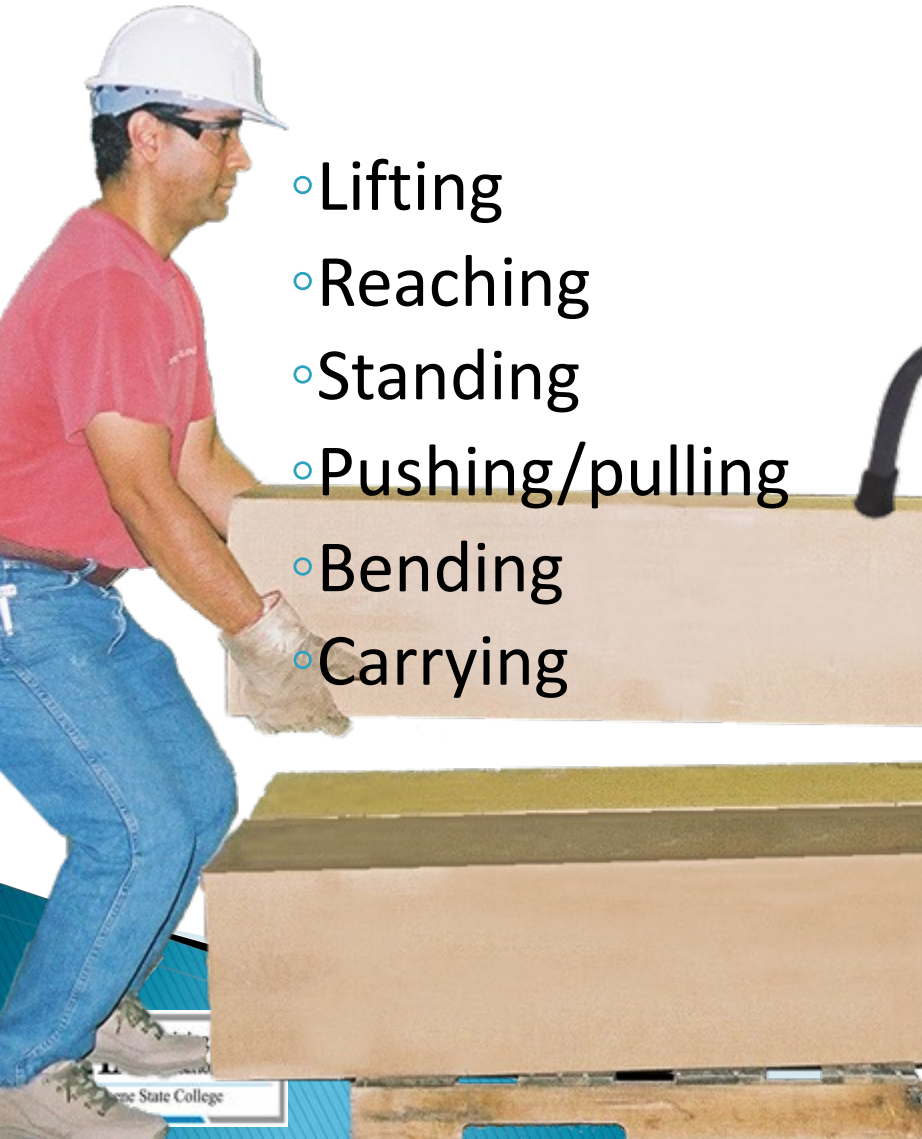
Hand Trucks

- Choose the right and truck
- Stack so you can see over the load
- Secure



Back Safety

- Lifting
- Reaching
- Standing
- Pushing/pulling
- Bending
- Carrying



Handling Drums Safely

- Use the right lifting tool
- Forklift attachments are available
- Pallets may be used
- Stack safely
- Keep incompatibles apart



BATTERY ACID – CORROSIVE

- ▶ MUST WEAR GOGGLES OR SAFETY GLASSES W FACE SHIELD
- ▶ MUST WEAR CORROSIVE-RESISTANT GLOVES AND APRON
- ▶ MUST HAVE AN ACCESSIBLE EYE WASH W/I 10 SECONDS OF UNIMPEDED TRAVEL CAPABLE OF 15 MINUTE FLUSH.



Slips , Trips and Falls

- Wrapping
- Straps
- Cords/hoses
- Boxes/pallets
- Spills
- Hights



Housekeeping

▶ Good housekeeping is good for safety.



Emergency Preparedness

- Emergency Equipment
- Sprinklers
- Fire extinguishers
- Evacuation routes
- Electrical panels
- First-aid supplies
- Alarms and phones



Portable Fire Extinguishers

When portable fire extinguishers are provided for employee use, they must be mounted, located and identified so workers can access them without subjecting themselves to possible injury.

- ▶ Readily accessible
- ▶ Employees are not required to use
- ▶ Monthly inspections
- ▶ Annual maintenance



Training and Education

▶ Where portable extinguishers are provided for employee use, employees must be provided with an educational program on the:

- Principles of fire extinguisher use
- Hazards of incipient (beginning) stage fire fighting

ANNUAL REQUIREMENT



Powered Conveyors



KEY POINTS To Remember!



- You need to be aware of the hazards in warehouses.



- Always practice safe lifting.



- Use material-handling equipment safely and watch out for forklifts.



- Stack and store materials properly.



- Practice good housekeeping, and wear required PPE.