

Fork Lift Safety



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Fork Lift Safety Guide

One of the most important aspects when it comes to operating a forklift, and unfortunately something that still is overlooked by some operators, is safety. Responsible operation of a forklift is more than just moving materials.

While OSHA, along with other governmental agencies, regulate forklift use, simple things like the proper use of forklift marking signs and forklift marking tape to designate forklift crossings can save lives.

This guide covers some of the best practices currently used in the Recycled Paperboard Technical Association's member mills. For a complete list of safety requirements as required by law, the reader should review Fork lift safety requirements on the respective governing bodies' websites.

Forklift safety is a multifaceted challenge. It includes proper training, appropriate vehicle maintenance, using the right type of machine for the job as well as inspection of vehicle parts such as tires, lights and signals. Without the proper maintenance and vehicle inspection, incidents are more likely to happen.



Forklift Safety

Forklifts and Drugs or Alcohol Don't Mix - Running a forklift is dangerous; extreme alertness is necessary. Any use of any alcohol or drugs must be avoided before operating a forklift. This includes alcohol and illegal drugs, but also any prescription drugs that cause drowsiness, or any other legal drug that alters your judgment.

Study the Manual and Nameplate - Study the manual of the forklift before operating. You want to understand it inside and out. Hitting the wrong switch at the wrong moment could lead to disaster. Know the load rating of the truck and never exceed.

Inspect Your Ride - Regularly inspect the lift top to bottom to look for anything that is out of the ordinary. This includes any loose or broken wires, loose or broken hoses, fluids on the floor, strange noises, smells, or smoke, plus anything else unusual. Complete your inspection card/form and report any issues to your supervisor.

Go Slow - Moving slowly will give you time to react without causing a catastrophe. This is one work task where you do not want to move quickly. A good guidance is not to exceed the speed of a fast-paced walk (5 mph).

Warn Forklift Drivers, Pedestrians, and Vehicles about Each Other - Use forklift marking signs and forklift marking tape to designate pedestrian and forklift lanes and areas, if appropriate. Put up warning signs such as "Forklift Crossing" to alert pedestrians and other vehicles that a forklift may cross there. A best practice is to have safety gates for pedestrian crossings of fork truck lanes.

Angle Up - Once you have the load on the forklift, angle the forks so they are tilted higher in the front and lower in the back. This allows gravity to hold the items to the back of the blades and prevents the pallet from sliding off the front. Also, if a box or the load itself slips on the pallet, then it will slide back onto the forklift where the forklift can support the load. If you tilt back too far, a load higher than the backrest can crash on top of the forklift. If the load is too high and heavy, it could tip the forklift.

Lifting and Lowering the Load – Whenever lifting the load for placing in a rack for storage, approach the rack with the load down. Stop at the rack, then raise load for placement. Reverse the process for lowering a load. Never turn or move from the rack with the load raised.

If You Can't See, Drive Backwards - If the load is too high and you cannot see where you are going; avoid the temptation to raise the load up above your line of sight. The correct thing to do if your line of sight is blocked is to go in reverse with the load low. Obviously, at the same time keep an eye to the sides and front, so you don't hit anything with the pallet or forks. A good rule of thumb is if the load is higher than the steering wheel on the truck, drive backwards.

Carry Your Load Low - If the load is too high, it will wobble more, which is riskier to the materials, the driver's safety, and the safety of those nearby. In fact, a load too high and too heavy could flip a forklift. When carrying a load on a ramp or incline, proceed with the load uphill. When proceeding down a ramp, proceed in reverse. When proceeding up a ramp, proceed forward (if the load blocks your vision, obtain a spotter to assist you).

Keep Your forks Low - Whenever possible, keep the blades low, even when there is no load. If an accident occurs involving a person when the blades are low, the person's legs will most likely be injured. If the blades are high, you could impale someone's chest or abdomen and kill them.

Watch for Overhangs - Doorframes or anything overhanging should always be in the front of your mind. A forklift has its own height, the height of its boxes, and the height of its lift, all of which could be too high and catch in a door frame or other overhanging item.

Catastrophic Failures

Overturns, collisions, and other serious failures can lead to fatalities.

- Using caution, following the rules of the road, and driving the load in the proper position can prevent serious injuries and even death.

Keep People Off Your Load and Forks

- Never use a forklift to raise a person. The forks are not designed for this and could kill someone if you accidentally moved the forks or the forklift itself.

Keep People Out from Under Your Load

- It is important to make sure no one is ever under your load.

Set Your E-Brake

- Setting the emergency brake is also critical whenever stopping. If you fail to do this, thousands of pounds could start rolling unexpectedly, causing many dangers.
- Never leave a running forklift unattended.

Forklift Safety for Pedestrians

When it comes to forklift safety, one must consider training both the forklift operators, as well as pedestrians around them. Therefore, properly training both the forklift operators, as well as pedestrians around forklift trucks needs to be emphasized to help keep everyone safe.

Training Forklift Operators for Pedestrian Safety

It is essential for operators to be trained and to recognize the importance of forklift operator safety to keep everyone around safe. They need to realize that pedestrians are probably not commonly aware that forklifts near them can be extremely dangerous. Therefore, it is important that operators are properly trained in avoiding such casualties. Here are a few things they should be aware of:

- When driving a forklift vehicle, forklift operators should be trained to consistently be on the lookout for pedestrians. Pedestrians are often unaware that dangerous forklift trucks are driving at various speeds along their designated driving routes - make sure speed limits are enforced (in the absence of speed limits, use a fast paced walk as a guide). Make sure operators are trained to keep an eye out for pedestrians around.
- When loading or unloading materials from forklift trucks, operators need to be aware that this can also be a safety hazard for pedestrians abound. Material may fall, and could possibly hurt someone nearby. Additionally, material can be dangerous because it may cause the forklift to tilt over, which is considered the number one casualty with forklifts. When loading or unloading material from racking, block off aisle access on both sides of the rack to avoid materials falling and striking pedestrians.

Forklift Safety Tips for Drivers

Only allow licensed, qualified workers to operate forklifts. Some forklifts require special training to operate, so make sure that you only allow trained and certified employees to handle each task. With the right men and women behind the wheel, you can apply these forklift safety tips for operators:

- Adjust driving speeds based on location, flooring texture, and the number of people in an area. Efficiency is important, but safety is even more important.
- Honk the horn at all intersections and at blind corners to warn people you are coming.
- Never use a cell phone while operating a forklift.
- Slow down for corners, intersections, ramps, and other areas with high collision risks.
- Watch out for spills and wet surfaces while driving, and avoid puddles of liquid when possible.
- Do not allow people to ride with you on the forklift.
- Report all forklift incidents immediately.
- If you notice any issues with the forklift's operations, report them to your supervisor so the machine can undergo maintenance and repair.
- Lower the forks to the ground before parking.
- Park the forklift in a safe area, out of the way of other machines and workers.
- Leave ample space between your machine and other forklifts while driving down the aisles. If there is not enough room for two machines, wait until the area is clear to move in.
- Should a pedestrian approach a forklift driver to interact, the forklift driver should lower forks, turn off truck, and apply emergency brakes.

If your drivers can follow these rules and other safety regulations you have in place for your business, you will be able to avoid a number of accidents in the workplace.

Forklift Safety Tips for Pedestrians

Non-operating employees need to practice safety around forklifts just as much as the drivers do.

- Make eye contact with the forklift operator before moving close to the machine. Utilize a 10' rule policy where the forklift operator must lower the forks to the ground, shut down the lift and set the parking brake before a pedestrian approaches.
- Do not assume that the driver sees you. Move with caution near the forklift – always keep a minimum of 10' of clearance from an operating lift.
- Never walk under the forks of the forklift, even if they have nothing on them.
- Listen for horns indicating that the forklift driver is coming around the corner.
- A best practice is to use convex corner mirrors to check for machines coming your way.
- Beware of the "fall zone" for the forklift. The fall zone is equal to twice the height of the carried load, going all the way around the machine in a circle.
- A safety practice which has recently gained popularity is the use of blue forklift spot lights to provide an obvious yet unobtrusive warning system for pedestrians and other forklift operators to quickly identify not only that a forklift was headed in their direction, but also precisely where it was coming from and how fast it is moving.



- When it comes to forklift awareness training, consider that some pedestrians may not be aware. These include infrequent visitors to the production area or warehouse such as office staff, sales representatives or others.

Training Pedestrian for Forklift Safety

Properly training those around forklift vehicles is important, as they need to know the proper safety precautions that need to be followed. A couple areas pedestrians need to be aware of include:

- Proper safety equipment that should be worn whenever around forklift trucks. Some of the most common safety equipment that needs to be worn includes hard hats, safety eyewear, as well as steel boots.
- There should be allocated locations pedestrians should be required to travel. Locations where pedestrians know where they are safe, there should also be areas that are clearly indicated where pedestrians can walk.

Maintenance and Forklift Safety

In addition to all the tips listed above, you must understand the importance of maintenance in the world of forklift safety. Having a well-maintained machine will help you avoid incidents that occur from faulty operations. Forklifts can last for decades with proper care, but they have to be repaired and inspected regularly for that to happen.

Other Aspects of Forklift Safety

1) Environment – It is imperative to know what type of terrain in which the forklift will be operated, especially if it must transition from the confines of a warehouse to an outdoor setting. Operating a forklift on rough terrain may require specific hardware, such as forklift tires specifically composed with higher durability and endure the elements. Certain tires are manufactured for indoor settings, while some are made for rough terrain.

- Forklift operators also should be trained in maneuvering over rough terrain and be aware of slopes, dips and narrow holes and how they might contribute to tipovers and rollovers.

2) Types of tires – There are three distinct varieties of tires, each with their own benefits: pneumatic, rubber and polyurethane.

3) Turning radius – This focuses primarily on narrow-aisle material handling. In scenarios with tight mezzanines and densely packed facilities, having a forklift with the best turning radius can be a great aid in efficiency, safety and productivity. Be aware that the rear end swings out on turns and must be accounted for to avoid striking objects causing injury or property damage.

4) Forklift controls – Staff and employees should familiarize themselves with the control panel and dashboard of your forklifts. In many instances, failing to monitor the various gauges can result in damage to a forklift and has created problems for many material handling operations.

The consequences of unsafe operations can be catastrophic. There are as many as 100,000 workplace incidents involving forklifts annually in the United States, with about 20% of those involving pedestrians. Those incidents result in upwards of 100 fatalities, with pedestrians accounting for 36% of the victims. And while forklift drivers are required by OSHA to be trained and certified in safe operation, the importance of training operators and pedestrians in basic safety precautions can be easily overlooked. In the absence of specific requirements, however, the safeguarding of worker safety is mandated under OSHA's General Duty Clause, which requires employers to maintain a place of employment "free from recognized hazards."

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