

Optimizing Loading Dock Safety

Originally Published: [Material Handling Network](#), October 2019

The Occupational Safety and Health Administration (OSHA) reports that 25% of all warehouse injuries occur on the loading dock. Given the demand for shorter order fulfillment times and the development of faster, more efficient equipment, it is easy to understand how this area of the warehouse has become synonymous with “the danger zone.” However, when loading docks are outfitted with the right safety equipment and personnel are educated about best practices, the likelihood of an accident or injury is greatly reduced. The following products and best practice suggestions offer insight into the elements that can be found in a comprehensive loading dock safety program.

Guardrail

Most loading docks measure between 48” to 52” tall. This means that these critical operational areas are subject to OSHA’s revised Walking Working Surfaces ruling for general industry and are required to have a fall protection barrier installed along the elevated ledge. OSHA requirements dictate that the guardrail be capable of withstanding, without failure, a force of at least 200 pounds. This regulation ensures that personnel and equipment are protected from a fall if/when the guardrail is struck by a piece of equipment or machinery. However, guardrail’s role in protecting the loading dock area extends far beyond fall protection.



When strategically placed throughout the loading dock area, guardrail serves as a physical and visual reminder of behavioral expectations. For instance, through the installation of guardrail, companies can create separate lanes for pedestrian and forklift traffic. In addition to the obvious safety benefits achieved by separating these two parties, efficiency is enhanced as each group is no longer encumbered by the movements of the other.

Dock Gates

Most facilities require that loading dock doors be kept closed when not being used for loading/unloading activities. While this practice greatly mitigates the potential for falls and injuries, the reality is that many warehouses rely upon open dock doors to achieve a comfortable level of ventilation for personnel. Additionally, many warehouses find that

keeping the dock doors open provides greater visibility of incoming vehicles (which is especially beneficial during busy periods) and mitigates the wear and tear associated with repeated openings and closings.

While OSHA permits the use of “visual barriers” when fall protection barriers prevent the flow of work, this course of action entirely relies upon employees seeing and appropriately responding to visual cues. Conversely, dock gates provide a durable, physical barrier that allow facilities to obtain the benefits of open dock doors. Within the safety equipment marketplace, there are a variety of dock gates (i.e. straight-rail and folding-rail gates) that are specifically designed to be easily maneuvered, ensuring that the flow of supplies and merchandise is not stymied.

Overhead Door Track Protectors

Functioning overhead doors are vital to a loading dock’s operations. However, many companies choose not to install any form of protection, electing to deal with expensive and inconvenient repairs that cripple their facility’s throughput. Overhead door track protectors, sometimes referred to as “door track guards,” are a cost-effective solution that can be quickly installed to protect door tracks from damage by forklifts or other motorized equipment.

Typically constructed with heavy-duty steel, door track guards function as both a visual and physical barrier to those operating in the loading dock area. Bolted into the floor directly in front of the overhead door track, the guards add a layer of protection that does not interfere with the facility’s productivity. Unlike other solutions available in the material handling marketplace, overhead door track protectors offer a robust level of defense at a fraction of the cost.



While the integration of safety equipment is the first step in reducing accidents and injuries on the loading dock, it is not a cure-all for every potential hazard. Companies that aim to achieve optimal levels of safety continuously modify their list of best practices. The following suggestions offer a glimpse into some best practices that can easily be incorporated into any facility:

- Provide strong lighting both inside and outside the loading dock area;
- Restrict dock access to authorized personnel only;



- Train and regularly retrain forklift drivers;
- Keep the floors clean, dry and in good condition; and
- Use a forklift spotter when operating near an elevated ledge.

GUARDS
MEZZANINES
LIFTS
ACCESS

Through a combination of loading dock safety equipment and best practices, companies can quickly turn the most hazardous area of the warehouse into a safer, more productive environment. The preventative measure taken today can eliminate the frustrations and headaches of tomorrow.