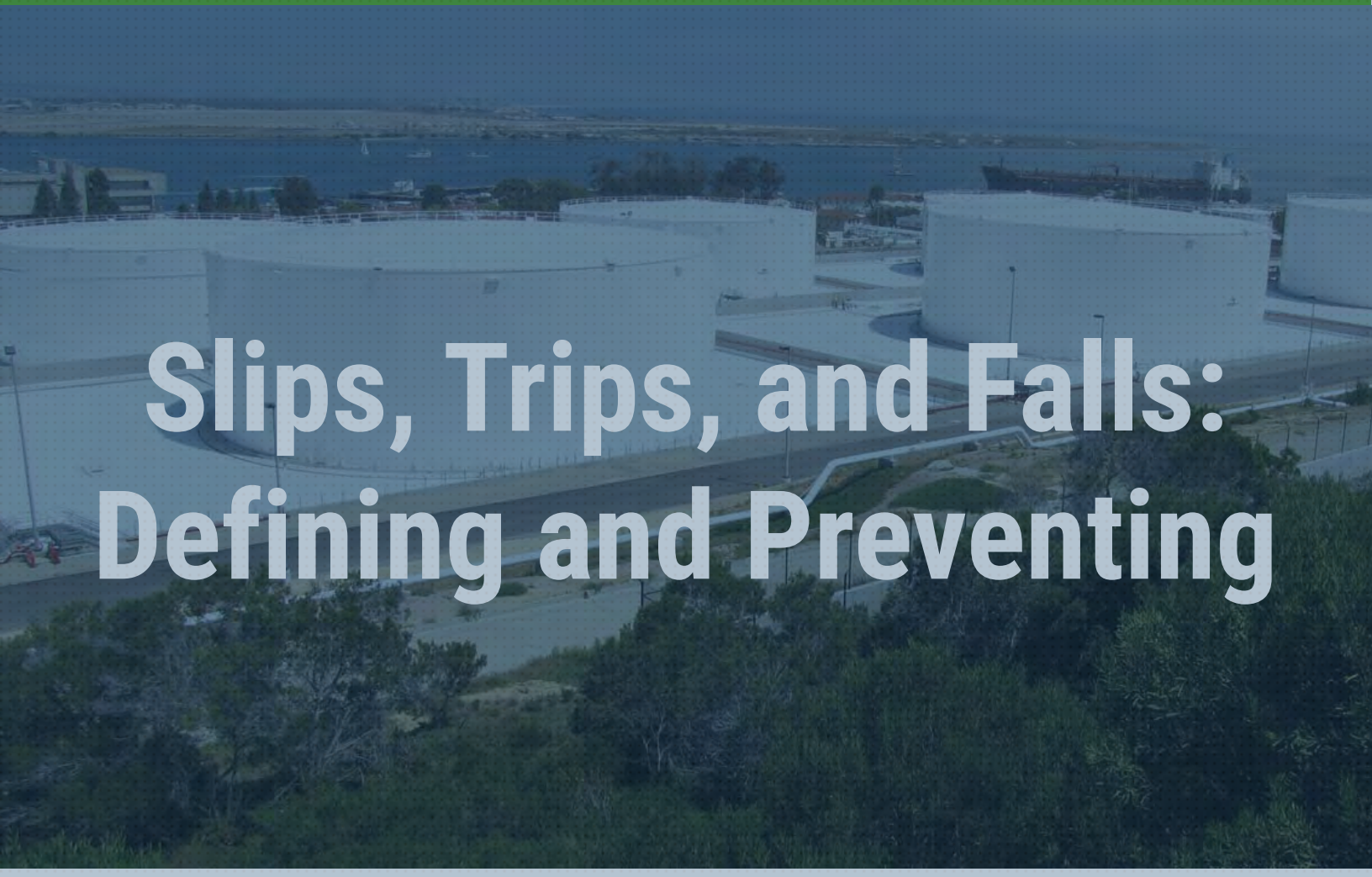
XR GEOMEMBRANES
By Seaman Corporation



Slips, Trips, and Falls: Defining and Preventing

Introduction Slips, trips, and falls are without a doubt, a major safety concern in the workplace. It has been estimated that the average claim for a slip, trip, or fall is $22,000. Roughly 12 to 15 percent or 3.8 million of workers compensation costs annually are related to slips, trips, or falls (Occupational Safety and Health Administration). One study by the National Institute for Occupational Safety and Health (NIOSH) found that the construction industry alone cost the economy $5.1 billion in costs related to slip, trip, and fall injuries between 2003 and 2006. The U.S. Bureau of Labor Statistics reported that of the 5,657 fatal work injuries in 2007, 847 were associated with falls.

This article will define slips, trips, and falls, as well as explore current options for injury prevention.

Slip Although there are a number of ways to define a slip, the most basic definition is that a slip occurs when there is too little friction or traction between your footwear and the surface of the floor. Slips usually are a result of the heel slipping forward as the individual is transferring weight, which causes the individual to fall backwards (Illinois Department of Commerce and Economic Opportunity). Either the surface of the floor itself can be the source of a slip, or the presence of either a wet or dry contaminate on the floor.

The slipperiness of a surface is measured in terms of the coefficient of friction. The coefficient of friction is measured by the weight of an object divided by the force to initiate its movement.

Trip A basic definition for a trip is when a loss of balance occurs due to an individual's foot striking an object, while the individual's momentum causes the body to continue forward. Trips most commonly occur due to the unevenness of a floor or working surface, clutter in a walkway, holes or depressions in a working surface, or an obstructed view. Trips and slips can result in falls.

Fall Falls may occur as a result of a slip or trip, or as an independent incident. A fall is defined as a "movement downward, typically rapidly and freely without control, from a higher to a lower level." According to the National Floor Safety Institute, falls account for over eight million hospital emergency room visits annually, representing the leading cause of visits (21.3%). Falls account for about 15% of accidental deaths, making falls the second most common cause of accidental deaths in the United States. Approximately $70 billion in costs annually in the United States are associated with medical and workers compensation costs due to occupational falls.

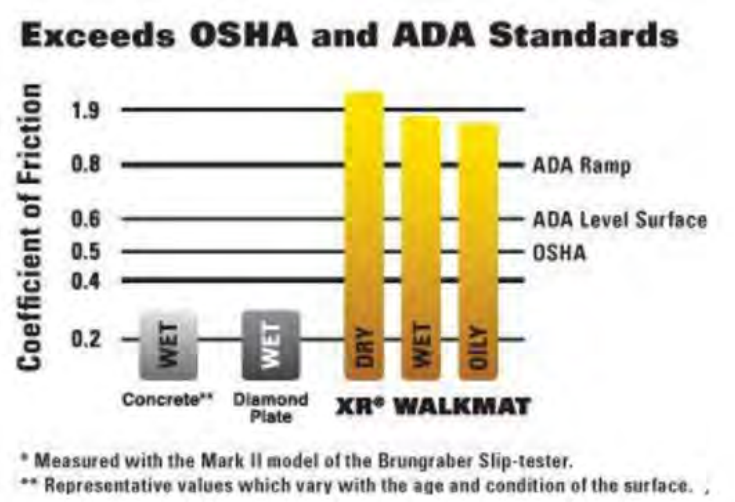
Workers installing a prefabricated cover in Dale Street, CO

Prevention Based on the location, a number of different methods can be used to prevent slips, trips, and falls on a construction site. The best recommendation for the site considers a number of factors, such as the geography and weather, the length of time at the site, the number of workers at the site, etc. The two most common areas where slip, trip, or fall prevention may be the most necessary are transition areas and uneven surfaces. Transition areas occur when there is a change in surface evenness or terrain between two areas.

Basic preventative measures can be taken to avoid any slip, trip, or fall related accidents. Current options include the following:

- Carefully monitoring walkways, looking for any leaks in drainage from downspouts, and making sure to provide adequate ice and snow removal
- Repairing surface irregularities including holes or cracks in grates, stands or other walking surfaces, uneven surfaces, mats and rugs with elevated edges, uneven floorings, etc.
- Cleaning and keeping floor and working surface free of contaminates
- Providing adequate lighting
- Providing proper footwear for workers on potentially slippery surfaces
- Clearly marking and providing warning for areas that may cause slips, trips, or falls

There are also a number of products available related specifically to the geomembrane market. One long-term, permanent option on the market is the installation of a slip resistant walk mat. If an existing XR liner has previously been installed, the XR Walkmat by Seaman Corporation can be welded directly to the XR liner system. The bright yellow XR Walkmat greatly increases the amount of friction or traction available to site workers by defining paths to increase accessibility.



Installation of a slip resistant Walkmat on a geomembrane liner

Closing Overall, slips, trips and falls cost employers thousands of dollars every year. The good news is that many of these accidents can be avoided by taking proper precautions, such as installing a walkmat on the job site. By taking a few small, basic steps, employers can remove many of the potential hazards that may cause their employees injury by slipping, tripping, or falling.

References

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