

## Four Common Transit Securement Fails and Tips to Correct Them

*The transportation of goods plays a pivotal role in our economy and ensuring that cargo arrives safely to its destination is a critical element.*

A load that is not adequately secured can shift, damaging the product, injuring employees when they unload, derail a train, or in the case of over-the-road (OTR) transport, cause an accident if the trailer becomes unstable.

Whether you are loading cargo for transport by truck, rail, or ship, voids between pallets are inevitable. These voids allow pallet movement during transport if proper securement isn't addressed. There are many products available for load securement. Determining what product or combination of products is required depends on the load, mode of transportation, and regulations. Working with a transit protection vendor that has experience with all of these will ensure nothing is overlooked.

### Common Failures and Prevention

Even though there are regulations (e.g., DOT, AAR) to prevent hazards from unsecured loads, some shippers fail to follow them correctly. Ignorance isn't an excuse for failing to secure your cargo properly. Here we share four common issues we see and a solution for each.

#### Walking and Leaners

**Challenge:** Single units in loads require lateral protection against rail and road harmonics to prevent "walking." Walking is the sideways migration and movement of those single units out of the center of the trailer or container towards the side walls. When two or more units shift out of place and onto the same side, it causes "leaners." Leaners are extremely dangerous as they can cause trains on parallel tracks to sideswipe, especially double-stack trains, and in the case of OTR loads, lead to overturned trailers on the nation's highways.

**Solution:** Corrugated "Saddle packs" and special dunnage airbags offer cost-effective solutions for preventing walking and leaning.

#### Wrap-Around Shifting

Intermodal loads often contain multiple-sized packages and pallets. This can create a variety of void spaces. Aggressive OTR braking and accelerating and hump shunting in railroad classification yards can all cause loads to shift. These forces can result in wrap-around shifting (longitudinal movement) by causing units directly behind singles to violently shift forward and fall into the unprotected wall voids on either side of the singles.

**Solution:** Side-to-side or dual void fillers, such as Saddle-Pak®, as well as custom-fitted dropdown void fillers can effectively prevent lateral movement; however, they are not effective in preventing longitudinal movement, which is seen in wrap-around shifting. A better solution is to use small (32x42) gusseted square airbags. When used correctly, they will restrain movement and prevent lading from falling into the voids

#### Lack of Rear Securement

Rear securement is imperative. When the load doesn't reach the doors, there will be a void when the doors are closed, allowing the load to shift backward during transit. This can be particularly dangerous for drivers when they open the door.

**Solution:** Airbags are a cost-effective industry standard for keeping products secured and protected from falling onto the doors.

#### Underhang Voids

Pallet underhangs can allow the product on the pallet to move during transit. A two-inch lateral underhang, for example, becomes a four-inch void when butted up against a pallet with the same size underhang. Movement during transit can cause product damage.

**Solution:** Corrugated bulkheads can be used for underhang take up and to minimize the amount of space an airbag needs to fill. This also provides solid rear gate securement.



### Why Tyoga

- ✓ You will minimize freight damage, increase load efficiency, and see a better Return on Investments.
- ✓ Your specific application design is backed by over 50 years of Tyoga Team know-how.
- ✓ No matter the mode of transportation, you have access to the industry's broadest assortments of containment turnkey systems.
- ✓ We are your partner for troubleshooting to resolve load issues with prompt and personal service.
- ✓ Our expertise becomes yours, with custom, on-site instruction and training based on best practices.