

Ergonomic Task Analysis

Tarpping Flatbed Trailers

Concern Details

Manual tarping requires drivers to lift the tarps, lay the tarps out, pull the tarps, attach straps, and climb on loads and trailers. These tasks create concerns related to falls as well as the high physical demands on the body, especially the back and shoulders as the tarps are heavy and awkward to distribute and secure to cover loads. In addition, the training and techniques not standardized or provided.

For additional information on the concerns associated with manual tarping refer to the journal article entitled “Evaluating the physical demands of three tarping systems for flat-bed transport trailers” and the consolidated version.



Countermeasures

- **Worker:**
 - Use lighter and smaller tarps when possible.
 - Ask for help for the tarping and untarpping.
 - Use a forklift to get the tarp on top of the load.
 - If a forklift is not available, get help from other workers and plan the lift. Keep the load close to the body, avoid twisting, and lift together.
 - Get a firm grip on the tarp. Do not just hold the ropes as they can slip or break.
 - Spread legs for balance before pulling tarp.
 - When conditions are windy, park close to buildings if possible so they provide some shelter to reduce the tarps from blowing.
 - Use 3-point contact when getting on and off trailers. Climb on/off the flat bed via from the rear of the trailer or the catwalk. Don't jump.
 - Wear proper shoes that are appropriate for the weather conditions.
 - Before pulling the tarp, move air under the tarp by lifting and lowering it to move air underneath.
 - Pull tarp with two hands. Keep hands close torso and about waist height. Pull towards the body.
 - Use arms, legs, and body weight to pull the tarp.
 - Wear gloves to prevent loss of grip



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- **Company:**

- Provide training on standardized techniques
- Consider automation equipment for manual tarps.



- Consider alternate tarping methods, such as sliders, rack and tarp kits, curtain side systems, and roll-ups, or automation for manual tarps.



- **Customer**

- Provide sufficient space to roll up tarps.
- Provide fall arrest systems in a dedicated tarping area

- **Policy**

- Provide restrictions to load sizes to increase ability to use alternative tarping systems

