

CONSTRUCTION HAZARD ALERT



# **Using Reach Forklifts as Cranes**

Using reach forklifts, a type of powered industrial truck (PIT), to lift and move suspended materials can be hazardous. These activities can change the capacity and handling of the PIT. Recent severe incidents include tip overs, contacting power lines, and workers struck by loads.

## **DETAILS**

REPORT #: 47-28-2020

# **REPORT DATE:** June 20, 2020

INDUSTRIES: New Single-Family Housing Construction

Industrial Building Construction

Framing Contractors

Specialty Trade Contractors

## **OCCUPATIONS:**

PIT operators and workers in the area

## **HAZARDS**:

PIT tip over Electrocution Struck-by



**EXAMPLES** 

## TASK

Using a reach forklift to place 1300lb steel trusses.

## **HAZARDS**

Workers were on foot in the fall zone while the operator picked and moved the trusses. The employer used new slings and a new beam clamp but did not realize that this method needed to be approved by the manufacturer.

#### TASK Using a rough terrain reach forklift to place 3000lb steel purlins.



## HAZARDS

The chain wrapped around the carriage, outside of the 24" load center, created a tip-over hazard. The operator's manual warned, "Do not suspend loads using slings or chains directly from the forks or fork carriage".

## **TASK**

Using a reach forklift to place 850lb wood wall sections.

## HAZARDS

Workers were directly under the sections as they were being placed. The winch attachment slid onto the forks. The manufacturer and rating of the attachment were unknown.

## TASK

Using a reach forklift boom to hoist a 1900lb sculpture.

## **HAZARDS**

With the carriage removed, they used a chain wrapped around the knuckle pin, a come-along, and a sling to rig the sculpture. Plastic zip ties were used to keep the chain on the hook while workers positioned the sculpture.

## **REQUIREMENTS**

- You must have written approval from the PIT manufacturer before making any modifications to the PIT. See <u>WAC 296-863-</u> 20010 for details.
- You must protect workers around PITs. See <u>WAC 296-863-40005</u> for details.
- PITs configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load are considered power-operated cranes. See <u>WAC 296-155-52900</u>.

## **RESOURCES**

- Forklift Safety Guide
- <u>Forklift Training for Trainers</u>
- Most manufacturers provide electronic versions of operator's manuals and lift charts online.





Developed by WA State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), WA State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 2U600H008487). For more information visit www.lni.wa.gov/safety-health/safety-research/ongoing-projects/work-related-fatalities-face.