

OR-FACE ALERT

Follow manufacturer's instructions

Multiple Oregon construction deaths have been linked to not following manufacturer's instructions for equipment or building materials. Three example cases are described below. Using manufacturer's instructions in training, and consulting them before operations, can save lives.

For complete fatality investigation reports visit the OR-FACE website.

Construction Fatal Stories

Case 1



Case 1: A 40-year old crane operator was killed when a 35-foot (5600 lb) H-beam fell crushing the crane cab and striking him in the head. During a pile driving operation, the H-beam pile had been placed in a drilled 25-foot hole. While using a vibratory hammer to force the pile further into the hole, the pile shifted. After several failed attempts to correctly position the pile it was extracted using the hydraulic clamp of the vibratory hammer and moved 12 feet from the hole. It was held in a vertical position with the bottom of the pile resting on the ground. The clamp holding the top of the pile unexpectedly released. The pile was not rigged to the clamp housing or attached to the whipline. The 5600 lb pile fell, struck and crushed the crane cab, and killed the operator.

The crew was not aware of the manufacturer instructions warning of clamp failure if the hydraulic clamp cylinder was not bled of entrained air. Pile lifting instructions in the manual required a shackle and short line attached to the hole in the pile clamp housing with the shackle fastened into the lifting hole in the pile.

Case 2



Case 2: A 40-year-old pipelayer was struck in the head by the flying rigging of a towline that failed at an excavation site, and died 2 days later. During installation of a sewer pipeline, a hydraulic excavator, commonly called a track-hoe, pulled a 14,000 lb. steel trench shield forward inside a 14.5 ft trench, using a wire rope and hook system. The pipelayer was standing inside the shield while it was being moved. A hook attached to the track-hoe failed, causing the taut rigging to snap loose, fly into the trench shield, and hit the pipelayer on the back of his hard hat. The pipelayer was air evacuated to a hospital, where he later died.

The manufacturer safety instructions warned that coupler and components should not be modified. The closed lifting eye had been removed and replaced with a latched hook.

Case 3



Case 3: A 33-year old carpenter foreman was killed when the roof truss system he and his crew were installing collapsed. The critical elements of standard practice provided in the BCSI-B1 Summary Sheet Guide to Handling, Installing, Restraining and Bracing of Trusses prior to and during truss installation were not followed. After the thirteenth truss was toenailed into its place, the victim disconnected the truss from the rigging. The truck operator and crew member on the trailer saw the truss system collapsing and yelled to warn the crew. The foreman sustained a fatal head injury when he was struck on the head by a falling truss.

The Structural Building Components Association, BCSI-B1 Summary Sheet-Guide to Handling, Installing, Restraining and Bracing of Trusses, delivered by the truck driver, contained specifications for adequate bracing during truss installation.

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