

FALLING: Truths and consequences

This issue of *Construction Depot* starts 2003 with a fresh look at fall protection. We'll explain why we need more than self-confidence to protect us from falls and describe three fall-protection strategies.

Why we need protection from falling

We're confident that we won't fall – until we hit the ground. We need protection from falling because we don't have perfect balance and because our bodies injure easily. We may think that our reflexes will protect us; that we'll have time to regain our balance when we're about to fall. But split-second reflexes don't prevent most falls. We're falling before we know it – and we don't have to fall far to get hurt.

Falling without protection

How do Oregon construction workers fall? The following table shows that falls from ladders, roofs, and scaffolds account for more than half of all disabling falls to lower levels. The cause of such falls? Loss of balance caused by slipping, tripping, and shifting or unstable ladders.

**Accepted disabling workers' compensation claims
Falls to a lower level in the construction industry, 1997-2001**

Exposure event	Number of claims	Percentage
Falls from ladders	687	33
(Falls to lower level, unspecified)	359	17
Falls from roofs	279	14
From scaffolds or staging	200	10
From nonmoving vehicles	189	9
From floor, dock, or ground level	181	9
Down stairs	132	6
From girders or structural steel	21	1
From piled or stacked material	13	1
Totals	2061	100

Source: DCBS Information Management Division, Research and Analysis Section

How should we protect ourselves from falling?

For many of us in the construction industry, fall-protection equipment is the first thing that comes to mind – personal-fall-arrest systems, safety nets, or guardrails, for example. But fall protection means more than equipment: *Fall protection is what you do to eliminate hazards that cause falls, to prevent falls from occurring, and to ensure that workers who do fall aren't injured.*

You accomplish fall protection by doing the following:

- Identifying the workplace hazards that cause falls.
- Eliminating hazards that cause falls.
- Using appropriate equipment to prevent falls or to protect workers if they do fall.
- Training workers to recognize hazards that cause falls.
- Making fall protection part of your workplace safety-and-health program.
- Understanding OR-OSHA's Subdivision 3/M fall-protection rules.

Fall-protection strategies

There are three strategies you can use to protect workers from falls: Eliminate hazards that cause falls, prevent falls from occurring, or control falls so that workers aren't injured.

Eliminate the hazard. When you eliminate a fall hazard, you ensure that the hazard cannot cause a fall – it's the most effective fall-protection strategy. Examples of ways to eliminate fall hazards:

- Install permanent stairs early in projects so that workers don't need to use ladders between floors.
- Use tool extensions to perform work from the ground.
- Install guardrails and anchorages on formwork and structural steel beams on the ground and lift them into place.

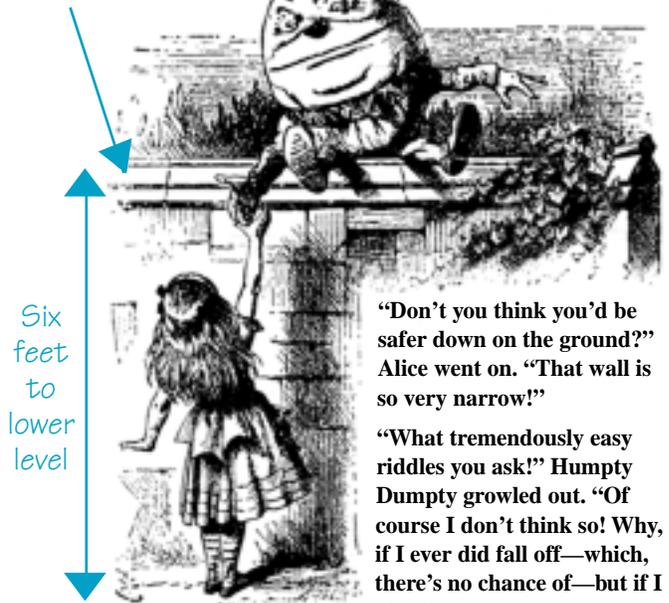
Prevent the fall from occurring. If you can't eliminate the hazard, you can still prevent the fall from occurring. Examples that prevent falls: parapet walls, covers, guardrails, handrails, perimeter cables, and personal-fall-restraint systems.

Control the fall so that it does not injure a worker. Controlling a fall is the least effective fall-prevention strategy because it doesn't eliminate the hazard and doesn't prevent a fall from occurring. However, this strategy is appropriate when the other strategies aren't feasible. Examples include personal-fall-arrest systems, positioning-device systems, and safety-net systems.

You can also protect workers from falls by influencing how they work. Examples include substituting safe work practices for risky ones, training workers how to work safely, and enforcing safe work practices by disciplining those who don't follow them.

Is Humpty safe?

Unprotected
leading edge



“Don't you think you'd be safer down on the ground?” Alice went on. “That wall is so very narrow!”

“What tremendously easy riddles you ask!” Humpty Dumpty growled out. “Of course I don't think so! Why, if I ever did fall off—which, there's no chance of—but if I did...”

(Excerpt from Lewis Carroll's Through the Looking Glass, Chapter 6. Illustration by John Tenniel)

You know the end to this story.

Humpty Dumpty was confident that he wouldn't fall – until he hit the ground. We need fall protection because our bodies injure easily.

For more information contact the OR-OSHA Standards & Technical Resources Section (503) 378-3272, or visit the OR-OSHA website, www.orosha.org.

COSHA to host Mid-Oregon Construction Safety Summit

The Central Oregon Safety and Health Association will be hosting the Mid-Oregon Construction Safety Summit in Bend on February 10. This one-day safety summit is for construction contractors and employees who want to learn more about preventing injuries and illnesses.

Where: Bend Armory

When: February 10

For more information: Contact Keilli at (541) 322-7104 or send e-mail to kelic@co.deschutes.or.us.