

## **Forming Foundations**

### **Hazards**

- Falls
- Trips
- Struck by objects or equipment
- Struck against objects
- Overexertion

You use lightweight lumber when forming foundations, so if you carry out the excavation efficiently, this stage of homebuilding should present few hazards.

- Maintain a firm level surface free from water and mud.
- If you're reusing lumber, watch for nails sticking out.
- If you're using a chipping gun or a jackhammer to excavate pad foundations, wear proper PPE including eye and hearing protection.
- The easiest way to spread stone is to use a truck with a stone slinger, but you must ensure that other workers keep away.

### **Access and material handling**

- Provide proper access to excavations.
- Cut steps out during excavation or put in cleated ramps. Ramps should have a slope no steeper than 1:3.
- Walkways can get muddy and slippery. Scrape away mud, snow, and ice from walkways and ramps.
- Ensure that ramps are at least 46 cm (18 inches) wide---that's 2 planks.
- Prevent slips and trips: cleat ramps and put up handrails.
- Pick up garbage and scrap material as you go. Distribute garbage bins around your site and empty them regularly.

### **Forming basement walls**

It's hard to handle wall forms on uneven ground. Doing so can cause back, arm, and leg injuries. You can reduce injuries by taking precautions.

- Provide good access to the work area.

Use an alternative lightweight forming system, such as Styrofoam forms, if possible.

- Use smaller sections of wall form---2 feet or 3 feet instead of 4 feet.
- Coat all form surfaces with a release agent that makes stripping easier.
- Brace all forms according to the manufacturer's instructions or engineer's drawings (this will prevent collapse or blowout when you pour the concrete; it will also prevent wind from blowing forms down).

### **Workers must**

- use mechanical means---such as a crane or boom truck---to handle the forms whenever possible
- store potentially hazardous materials---such as form oil or fuel---away from traffic routes and sources of ignition
- take care to avoid through-bolts, sharp edges, nails, and other protruding objects.