

Concrete Finishing Safety Talk

Concrete finishing, such as the smoothing, leveling, edging of surfaces, is essential work. But it also comes with real dangers if precautions aren't taken. Three areas are particularly vulnerable: the eyes, skin and lungs. It's essential to know what the risks are, when to act, and how to protect yourself and your crew when working with concrete.

Typical Challenges and Dangers

- Wet concrete is highly alkaline and can cause chemical burns or severe skin irritation if it contacts your skin or eyes.
- Dust from concrete cutting or grinding contains silica, which can damage your lungs and even lead to silicosis or cancer over time.

Good To Know

1. Personal Protective Equipment (PPE)

- Gloves must be well-fitting and alkali-resistant (e.g. nitrile or butyl) to protect skin from wet cement. Cotton or leather gloves won't work.
- Wear eye protection, like goggles or glasses with side shields, to guard against splashes or dust.
- Insert earplugs to protect hearing against loud noise on site.
- Wear waterproof boots and full-length clothing to prevent wet cement from touching or soaking the skin.
- Use respirators or masks (with an N95 filter or better) when cutting, grinding, or chipping to limit dust inhalation.
- Kneepads or kneeling boards must be used when working directly on fresh concrete.

2. Control Dust Exposure

- Use wet methods or vacuum systems (HEPA-rated) when sweeping, cutting, or cleaning up to keep silica dust under control.
- Don't sweep up dry debris or dust. Instead, use vacuums or wet sweeping.
- If visible dust is lingering, always use your respirator.

3. Ergonomics & Safe Lifting

- Use mechanical aids such as wheelbarrows or forklifts to move concrete or bags when possible.
- When lifting by hand, keep your back straight, bend at the knees, and avoid twisting your body.
- Take microbreaks, switch tasks to avoid repetition, and stretch often.

4. Be Alert to Physical & Mechanical Hazards



- Keep your distance from chutes, mixers, and heavy concrete trucks or equipment in operation.
- Watch for falling objects, sudden moves of formwork, or shifting rebar.
- Never stand under suspended loads or concrete buckets.

5. Noise & Vibration Awareness

- Use ear protection when required, as power trowels, grinders, and mixers often create high noise.
- Extended use of vibrating tools can cause hand-arm vibration syndrome (HAVS). Switch tools, rotate duties, or use anti-vibration gloves if needed.

Before & During Work Safety Check

- Are you wearing all required PPE properly?
- Is the work zone clear of debris and trip hazards?
- Are dust controls in place if cutting, grinding, or sweeping?
- Do you know where the emergency wash stations are?
- Are signals and roles clear for heavy equipment or placements?

If Something Goes Wrong

- Stop immediately if concrete splashes on your skin or eyes, or if you spot dust, hear an unusually loud noise, or experience unsafe conditions.
- Move to a safe area, wash affected skin or eyes with cool water for at least 15 minutes.
- Report near-misses or unsafe conditions promptly. This can help prevent accidents.

Summary

Concrete finishing is precise work that comes with serious chemical, dust, ergonomic, and equipment risks. To stay safe:

- Always wear proper PPE.
- Control dust.
- Use tools correctly.
- Report hazards.

Discussion Questions:

- *What PPE feels uncomfortable or hard to use and how could it be improved?*
- *Do you struggle with dust while cutting or finishing?*