



Cranes and Wind Safety

A calm blue sky morning on Colorado's Front Range can morph into 30-60mph gusts before lunch. Those bursts don't just tug at the load; a sudden gust of wind can turn a controlled lift into an uncontrolled one.

What the regulations really say:

OSHA's Construction Subpart CC stops short of prescribing a universal shutdown number. Section 1926.1417(n) simply directs the *competent person* to adjust or stop operations whenever wind threatens stability, and OSHA interpretation letters confirm there is **no single federal magic number**, the moment wind "creates a hazard," the lift must pause, and the competent person needs to make a decision if he/she needs to continue or not.

Manufacturer limits fill the gap:

Here are some speeds showing typical thresholds:

- **Mobile/crawler cranes:** 20 – 30 mph
- **Tower cranes:** 35 – 45 mph (steady)
- **Large-sail-area loads:** suspend operations above 20 mph

Treat these figures as a *first* stop sign, if the manual states lower limits, the manual wins every time. Also then refer to the Policy on site or your own company's safety policies.

Instrumentation is mandatory on tower cranes:

OSHA 1926.1435(e)(6)(v) requires a wind-speed indicator mounted above the slewing ring. The decision to keep lifting must be based on that reading, not the weather app in someone's pocket.

Consensus standards stay conservative:

ASME B30.5 (Mobile & Locomotive Cranes) instructs crews to *monitor wind at every site* and to lower, retract, and secure the boom whenever the manufacturer's limit, or site-specific limit, is met.

A Mile-High Snapshot

Jose, a seasoned operator on a hospital expansion in Denver, checks his cab anemometer at 1 p.m., steady 28 mph, gusting 38. He halts a precast panel pick, booms down, and radios the lift director. Ten minutes later a microburst twists the site fencing like foil. The



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crew rolls into break early, equipment intact, schedule preserved. Good calls feel uneventful only in hindsight.

Colorado Crane Operator School or CRC's Six-Point Wind Action Plan

- 1. Instrument every crane**
 - Calibrate jib or cab anemometers daily.
- 2. Write limits into the lift plan**
 - Use the lowest value among OSHA guidance, ASME, and the crane manual.
- 3. Watch the gust factor**
 - If gusts exceed steady wind by 10 mph, treat the *gust* as the governing limit.
- 4. Secure for shutdown**
 - Free-swing the hook, retract or lay down the boom, and park with the jib leeward.
- 5. Clear the fall zone**
 - High wind can spin a suspended load like a weathervane an option would be to barricade 360°.
- 6. Debrief after the event**
 - Log wind readings, decisions, and near-misses to sharpen the next lift plan.

Mother Nature writes her own schedule, but with clear limits, solid instruments, and empowered operators, you can keep steel flying safely, even on Colorado's windy afternoons. **Colorado Crane Operator School or CRC** stands ready to audit lift plans, train competent people, and verify wind instrumentation before the next front sweeps across the Rockies, please follow your site rules and regulations or safety policy or for more information visit our website <https://ccoschool.us/> or call 303-477-1044.



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Safety Meeting Sign-Off Sheet

Date:

Job Name:

Competent Person Name:

Competent Person Signature:

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