

ASU crane rigging and lift permit approval process

This document summarizes ASU's requirements for issuing permits for crane and rigging lift plans. ASU Environmental Health and Safety, or EHS, reviews and audits all aspects of safety and compliance related to cranes and rigging used on ASU property. These procedures apply to all site workers, employees, staff and systems that may affect components of fire protection and fire access space necessary to conduct the proposed operation. This review minimizes the impacts created by any encroachments from the project into fire and emergency access, fire department connections, fire hydrants and general emergency services.

When applying for approval for an ASU Crane and Rigging Lift Permit, the contractor must provide the following:

1. **An email sent to asuehs@asu.edu with a subject line of ASU crane lift and rigging request.** The plan must be submitted a minimum of two weeks prior to any work being performed. Emergency requests will be managed on a case-by-case basis.
2. **Fill out and attach to the email request, in its entirety, the below ASU Crane Rigging and Lift Plan.**
3. **Contractor information**
 - Crane information.
 - Crane inspection reports (annual inspection and monthly inspection).
 - Crane operator credentials (must match equipment being used).
 - Primary business contact information.
 - Site contact during operations (name and contact phone number).
4. **A clear, written summary of the work to be performed, including:**
 - Any building restrictions.
 - Evacuations and restricted floors.
 - Operational dates and times.
 - Set-up and demobilization times.
 - Streets, building names, and overall location.
 - Transport vehicles, dumpster and mobile containers, if they will remain in place or if they will be relocated after loading and unloading.
 - Type of work being performed.
5. **Submit a detailed site map identifying the following:**
 - Crane set-up location.
 - Flagger locations, if applicable.
 - Lift and rigging locations.
 - Location of building fire protection equipment and systems, including fire lanes, FDCs, fire hydrant locations and building evacuation areas. Please be aware that any impairments may result in denial of permit or additional safety requirements.
 - Operational area of work being performed.
 - Restricted areas.
 - Road Closures and Traffic Control Plan, if applicable.
 - Route from roadway to set up location, if applicable.
 - Staging areas, if applicable.
 - Tunnel locations and weight allowances—available from ASU Parking.
6. **Submit details of the site's emergency operation plan.**
 - 24-hour contractor emergency contact information, including email and emergency contact numbers.

- ASU project manager contact information, including email and emergency contact numbers.
 - Detailed onsite process for emergency personnel and vehicle access affected by project encroachment.
 - Site manager contact information, including email and emergency contact numbers.
 - Training plans for emergencies for construction staff.
7. **EHS approval is contingent on the contractor supplying complete and accurate information.**
 8. **Upon submittal, EHS will provide ASU Police and ASU Parking and Transit Services a copy of the plan for their review and approval.**
 9. **The local jurisdictional emergency responding agency will be notified.**

Upon approval, EHS will provide a permit that must be posted in an accessible, readily visible location on the job site. Failure to have the permit posted may result in operations being suspended until authorization can be confirmed. Issuance of this permit does not relieve the operator from performing any pre-operational inspections, such as daily inspections or load and rigging inspections.

There will be a fee of **\$180.00** for each ASU Crane and Rigging Lift Permit to cover the EHS facility safety review and the fire safety review and permitting. Electronic payments may be submitted using an ISD to CC0668 PG12112. Checks may be submitted to: ASU Environmental Health and Safety, P.O. Box 876412, Tempe, AZ 85287.

Crane rigging lift and landing plan

Location of lift or job name: _____ Date of lift: _____

Description of load: _____

Is a diagram of lift, CAD or computer drawing attached? Yes _____ No _____

Name of person filling out lift plan: _____

Load condition:

New _____ Old _____ | Was this confirmed?

Weight of contents attached to crane or load?
_____ Weight of rigging? _____

Weight of ancillary? _____ Weight of anything else
attached to crane or load? _____

Other _____

Add all weights to determine gross load

*Gross load _____ Type of crane _____

Radius at pick up point _____ Radius at landing if
different _____

Gross capacity at pick point _____ Gross capacity
at landing point _____

*Subtract gross load from gross capacity to calculate capacity margin.

*Capacity margin
Percentage of cranes capacity? _____

Crane configuration:

Boom length? _____ Boom angle? _____
Radius? _____ Parts of line? _____

Jib or extension used? Yes _____ No _____

Hoist used: Main _____ Aux _____ Line pull _____

Outriggers Yes _____ No _____ Crane set up consistent
with drawings? Yes _____ No _____

Rigging:

Type of slings used:
Wire _____ rope _____ synthetic chain _____

Capacity of rigging _____

Crane placement:

Is foundation capable of supporting crane and
anticipated load? Yes _____ No _____

Are there any power lines or other utilities in the
lift area? Yes _____ No _____

Are all obstruction identified? Yes _____ No _____

Has the swinging radius of the superstructure
been cleared? Yes _____ No _____

Will a dry run with no load on the hook be made?
Yes _____ No _____

Special considerations:

Is the lift greater than 75% of the cranes capacity?
Yes _____ No _____

Is the lift a multiple crane lift? Yes _____ No _____

Does the lift involve lifting of personnel?
Yes _____ No _____

Is this lift within 20-ft to a live power line?
Yes _____ No _____

Is this a lift of an object out of water
Yes _____ No _____

If **yes** to any special consideration, is additional
documentation required?
Yes _____ No _____

Pre-lift checklist:

Crane inspection performed by the operator?
Yes _____ No _____

Crane level? Yes _____ No _____

Swing area barricaded?
Yes _____ No _____

Overhead clearance checked and adequate?
Yes _____ No _____

<p>Number of slings used _____</p> <p>Shackles used _____</p> <p>Capacity of shackles _____</p> <p>Additional rigging _____</p> <p>Capacity of any additional rigging _____</p> <p>Have all sling angles been taken into account to determine capacity? Yes _____ No _____</p> <p>Travel path:</p> <p>What quadrant will lift start in? _____</p> <p>What quadrant will lift finish in? _____</p> <p>Is there a capacity reduction for landing Quadrant?</p> <p>Yes _____ No _____</p> <p>Are tagline handlers required for this lift?</p> <p>Yes _____ No _____</p> <p>Are the taglines long enough to control the load thru the entire lift?</p> <p>Yes _____ No _____</p> <p>Has the travel path for the tagline handlers been cleared?</p> <p>Yes _____ No _____</p> <p>What orientation or side does the load need to be placed? Please check all that apply.</p> <p><input type="checkbox"/> Top <input type="checkbox"/> Bottom <input type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West</p> <p>Rigging inspected? Yes _____ No _____</p> <p>Load clearance to boom and structures adequate? Yes _____ No _____</p>	<p>Signalman identified and qualified? Yes _____ No _____</p> <p>Wind...maximum allowed: _____</p> <p>Traffic controlled? Yes _____ No _____</p> <p>Weather/ lightning conditions? _____</p> <p>Other considerations:</p> <p>Is any welding required? Yes _____ No _____</p> <p>Is any blocking or shims required? Yes _____ No _____</p> <p>Does any utility, power, water or gas need to be secured from the load or attached? Yes _____ No _____</p> <p>Are there are any road closers? Yes _____ No _____</p> <p>Is there a time limit on the lift? Yes _____ No _____</p> <p>Does the job site have any special job site warnings for crane lifts such as air horns or whistles? Yes _____ No _____</p> <p>Will special PPE be required for this lift? Yes _____ No _____ if yes, has it been provided? Yes _____ No _____</p>
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Describe the emergency procedures: this is the “what-if” plan. Include emergency landing or weather. _____

Additional remarks: _____