

This reference guide applies to mobile crane usage on campus and/or UCI leased properties and it is the responsibility of the vendor/contractor to ensure that all UCI and CalOSHA requirements are followed.

The assigned Campus Project Manager (Facilities Management, D&CS or other group) will be responsible for ensuring all applicable Crane Safety requirements are followed and to ensure applicable Crane Safety documentation is available and provided to EHS.

## **Vendor/Contractor Mobile Crane Requirements**

A mobile crane is defined as a wheeled, self-propelled vehicle with either a cable-controlled or hydraulic-powered telescoping boom crane.

### **General Requirements:**

The following procedures apply when a mobile crane is utilized:

1. EHS needs be notified 72 hours prior to crane use. This can be done by sending an email to [safety@uci.edu](mailto:safety@uci.edu) or calling EHS at 949-824-6200. For emergency mobile crane usage (when a 72-hour notice is not applicable), EHS needs to be notified prior to operating the mobile crane on Campus. For afterhours emergency EHS notification, please contact the FM services desk or Police dispatch.
  - As outlined above, the UCI Project Manager is responsible for submitting the following documents prior to commencement of crane operations to EHS, please send this material to [safety@uci.edu](mailto:safety@uci.edu):
    - a. Completed Crane Pre-Lift Checklist
    - b. Certificate of Unit Test and/or Examination of Cranes and Derricks used for Lifting Service (CalOSHA Form CCAU 55, 11-01-93) (Both Annual & Quadrennial)
    - c. Hoisting Certification for the Crane Operator
    - d. Flagger and/or rigger training documents for employees working on the site (if applicable)
    - e. Crane Lift Plan (crane weight limits, planned lift weights, crane setup area, lift swing radius, diagrams)
    - f. Traffic Control Plan (if applicable)

(Once submittal is received by EHS, EHS will review the submittal within 2 business days. Submittal will either be “approved” or a request for additional information will be requested and sent back to requestor)

2. UCI employees are prohibited from directing/supervising vendor/third party contractors during actual crane lift operations.

### **Prior to Use Requirements:**

1. The contractor will draft a Crane lift plan and provide to UCI project management.
2. The UCI Project Manager and Crane Contractor will predetermine the crane operation location.

3. Entry and exit path to and from project site will be evaluated and predetermined to ensure most appropriate and safest route. Alternate access routes may be necessary depending on the size and tonnage of the crane used.
4. As necessary (depending on crane weight and area to be driven on/across), the crane travel path will be predetermined by a structural engineer to ensure the safety and integrity of underground vaults, tunnels and equipment. Depending on the size of the crane, alternative routes may be necessary.
5. During crane lift operations, building occupants and other personnel may be required to evacuate areas under the lift and swing radius. UCI Project Management will predetermine this requirement on a per project basis. If evacuation of building occupants is not feasible, it is necessary to document why relocation/evacuation is not feasible in accordance with California Code of Regulations (CCR).
6. If building or lift area are not to be evacuated, engineering calculations from a registered civil or structural engineer may be used in lieu of evacuating building occupants from areas beneath crane activities.

### **General Crane Safety Requirements:**

1. During crane lift operations, the entire swing radius is required to be barricaded using, at a minimum, safety cones, barrier tape, and/or sawhorses. When any of the swing radius will affect the flow of traffic, a Traffic Control Plan needs to be developed and reviewed with Parking and Transportation prior to the lift (as necessary).
2. During crane lift operations, the immediate area will be kept clear of all vehicles and equipment at all times. Only trucks that are supplying equipment to be lifted may be located in the immediate area.
3. Pedestrians will not be allowed to walk under the load at any time.
4. All personnel working in the lift area will wear hard hats, safety shoes, safety glasses, and safety vests.
5. Contractors are responsible for ensuring sub-contractors working adjacent to crane activities have administered "crane awareness safety" or equivalent training to their employees. The UCI Project Manager is responsible for obtaining a copy of this documentation.
6. Anytime the boom or load travels outside the perimeter of the planned lift, the crane operation is immediately subject to the additional requirements for use of cranes outside construction areas.
7. When the crane or load encroaches upon UCI streets, and barricades and warning signs cannot control moving traffic, the crane operation will use flaggers trained in accordance with CalOSHA.
8. Contractors will be responsible for supplying their own flaggers to assist with any lifts of material.
9. In accordance with CCR, a certificate will indicate that all required tests and/or examinations have been performed, including any identified defects that have been corrected, will be made available with each crane or at the project site. The certificate will verify that the equipment is in safe operating condition at the time of examination.
10. In accordance with CCR, the employer will only permit operators who have a valid certificate of competency (certificate) issued by an Accredited Certifying Entity.
11. Certificates should be valid for a maximum of five (5) years.
12. Exception to CCR: Mobile cranes having a boom length of less than 25 feet or a maximum rated load capacity of less than 15,000 pounds.

If you have any questions related to the requirements outlined in this reference guide, please contact EHS at (949) 824-6200 or email [safety@uci.edu](mailto:safety@uci.edu).

Section 1 - Information	
<b>Proposed Date and Time of Crane Operation:</b>	
<b>Location of Crane Operation:</b>	
<b>Proposed Crane Company:</b>	
<b>Type of Crane:</b>	
<b>Rated Capacity:</b>	
<b>Boom/Jib Length:</b>	
<b>Overhead Clearance:</b>	
<b>Material/Item(s) to be lifted:</b>	
<b>Crane Route on UCI campus:</b>	

Section	Item	Response and comments
<b>Section 2 - Checklist</b>		
<b>Planning the work</b>	1. Is the type of crane suitable for the lifting work that needs to be performed? (Please attached Annual & Quadrennial Certifications)	<input type="checkbox"/> Yes <input type="checkbox"/> No Comments:
	2. Has the crane location been coordinated with parking services?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Comments:
	3. Have all potential crane boom obstructions been identified?	<input type="checkbox"/> Yes <input type="checkbox"/> No Comments:
	4. Have environmental considerations been addressed? (wind, weather, lightning?)	<input type="checkbox"/> Yes <input type="checkbox"/> No Comments:

Crane Pre-lift Notification Checklist (Please submit 72 hours in advance.)