

# Standard Lift Plan

In accordance with EM 385-1-1, Section 16



New England District-Standard Lift Plan

Date: \_\_\_\_\_ Job: \_\_\_\_\_ Location: \_\_\_\_\_

Time: \_\_\_\_\_ Completed By (Competent Person): \_\_\_\_\_

Note: Applies to Cranes, Derricks, Hoists and Power-Operated equipment that can be used to hoist, lower and/or horizontally move a suspended load (includes excavators, forklifts, Rough Terrain equipment, etc., when used with rigging).

Crane Considerations		Yes	No
1	The lifts within the crane's rated capacities? (based on the boom height & radius)		
2	A copy of the load chart and operating manual will be kept in the crane's cab?		
3	Have all potential crane boom obstructions been identified?		
4	Have environmental considerations been addressed? (wind, weather, lightning)		
5	Have electrical hazards been addressed (overhead /underground) - Clearance distances established? - Is a spotter required? - Public Utility contact required?		
6	Crane swing radius properly barricaded and travel paths are cordoned off??		
Comments:			
Crane Considerations		Yes	No
1	Weights and Centers of Gravity have been determined and load contents are secured?		
2	Ground is stable and suitable for anticipated ground bearing pressures?		
3	Attachment points are rated to take load weight?		
4	Are the loads structurally capable of being lifted? (bending/twisting issues)		
5	The crane is equipped with a load weighing device or equivalent? (Example: LMI)		
6	Documentation of the wire rope's working load limit (WLL) has been submitted?		
7	The crane's specification/technical data sheets have been submitted? (PDF copy preferred.)		
8	Is a Critical Lift Plan (CLP) required per EM 385-1-1;16.H? If yes, complete attached CLP.		
Comments:			

Rigging		Yes	No
1	All rigging has been inspected by a Qualified Rigger?		
2	Have sling angles been calculated and shackles are correctly sized?		
3	Blocking or cribbing is available to set loads on, to prevent damage to the load and rigging?		
4	Rigging has been protected from all sharp edges?		
Comments:			
Personnel/Lift Preparation		Yes	No
1	The roles, responsibilities and certifications/qualifications for personnel have been submitted and approved? (Operator, Rigger, and Signal Person)		
2	A Pre-Lift meeting will be (or has been) conducted?		
3	Have employees been designated in writing by their employer? (See attached templates)		
Comments:			
Area/Crane Preparation		Yes	No
1	The locations for the load landings have been selected and prepared?		
2	Annual inspection info (or after last load bearing component repair) is posted on crane?		
3	Initial operational testing has been completed & documented per EM 385 Section 16.F.02?		
4	LHE has safety/operational equipment in accordance with EM 385-1-1, Section 16.E		
5	Shift inspections will be conducted and documented at the beginning of each shift?		
Comments:			

Crane Operator: \_\_\_\_\_

Date: \_\_\_\_\_

Rigger(s): \_\_\_\_\_

Date: \_\_\_\_\_

Signal Person: \_\_\_\_\_

Date: \_\_\_\_\_

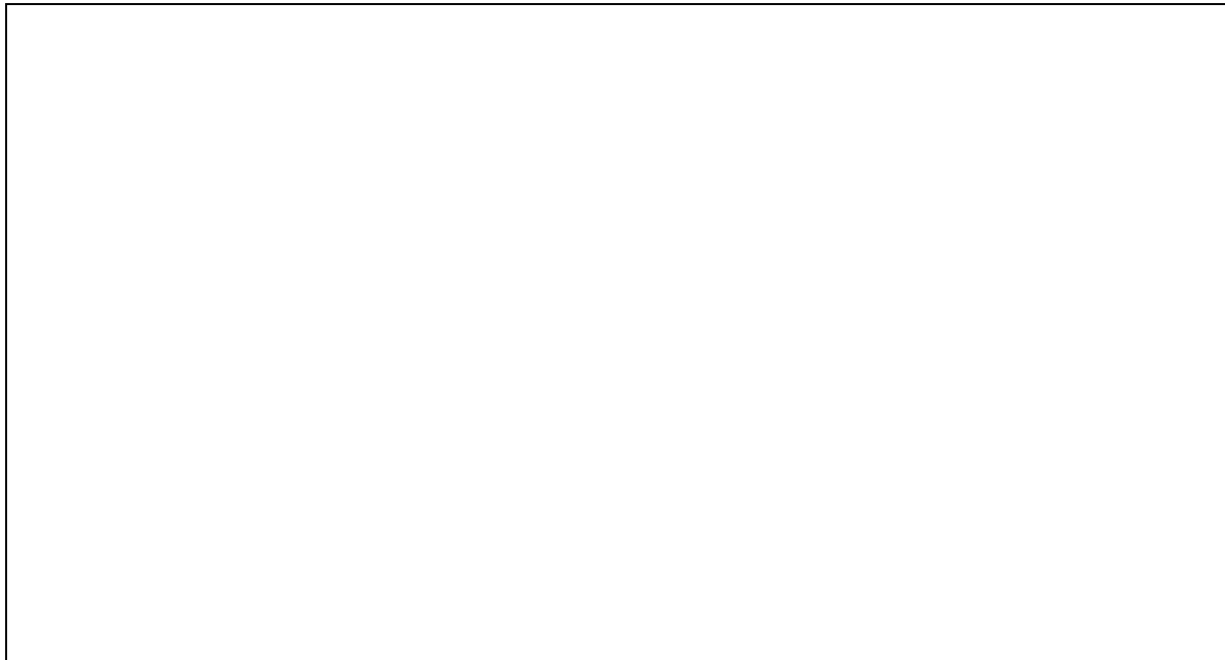
Other: \_\_\_\_\_

Date: \_\_\_\_\_

This document meets the requirements of EM 385-1-1, Section 16.B.01 for **LHE/Crane Operators**;

\_\_\_\_\_ designates \_\_\_\_\_, as a qualified crane/LHE operator. They have the necessary knowledge, certifications and medical clearances to meet the requirements of EM 385-1-1, Section 16.B and are approved to work on USACE projects.

Crane/LHE Operator Certification:



Operator is designated to operator the following LHE:

Company Official/Supervisor Signature

## Crane Operator Medical Clearance

This form provides guidance to the Physician and verification of U.S. Army Corps of Engineers crane operator physical qualification/examination requirements. It does not replace any of the crane operator requirements in EM 385-1-1.

Date of Examination: \_\_\_\_\_

Crane Company/Employer Name: \_\_\_\_\_ Phone: \_\_\_\_\_

This is to certify that \_\_\_\_\_ was administered a physical examination and meets the Crane Operator Physical Qualification/Examination Requirements set forth in the U.S. Army Corps of Engineers EM 385-1-1 (30 Nov 14), Section 16.B.05.

MD     DO

\_\_\_\_\_  
**Physician's Signature and Title** (Must be a MD or DO)

\_\_\_\_\_  
**Name (Print) and Phone No.**

*Note: A DOT Medical Examiners Certificate in accordance with the Federal Motor Carrier Regulation (49 CFR 391.41-391.49) does not meet the EM 381-1-1 crane operator physical requirements.*

### **EM 385-1-1 Crane Operator Physical Qualification/Examination Requirements:**

a. Operators shall have a current physician's certification, dated within the past 2 years, that states the operator meets the following physical qualifications:

- (1) Vision of at least 20/30 Snellen in one eye and 20/50 in the other, with or without corrective lenses;
- (2) Normal depth perception and field of vision;
- (3) Ability to distinguish colors, regardless of position;
- (4) Adequate hearing, with or without hearing aid, for the specific operation;
- (5) Sufficient strength, endurance, agility, coordination, manual dexterity, and speed of reaction to meet the demands of equipment operation;
- (6) No evidence that the operator is subject to seizures or loss of physical control. If evidence of this nature is found, it may be sufficient cause for disqualification. In such cases, specialized medical tests may be required to evaluate these conditions and determine their impact;
- (7) No evidence of physical, emotional or psychological limitations that could result in a hazard to the operator, or that in the opinion of the examiner could interfere with the operator's performance. If evidence of this nature is found, it may be sufficient cause for disqualification. Specialized medical tests may be required to determine these conditions.

b. Deviations from Physical Qualification Requirements. (See Page 2)

c. All contractor crane/derrick operators shall participate in a drug testing program and have a negative result for a substance abuse test. The level of testing will be in accordance with standard practices for industry or by the agency's random drug testing program. This test will be confirmed by a recognized laboratory service.

Note: Crane operators must refer to the EM 385-1-1 for all crane operator qualification requirements.

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### **b. Deviations from Physical Qualification Requirements.**

(1) Deviations from the physical requirements are not necessarily totally disqualifying.

(2) However, where such deviations exist, competent medical and management authorities shall give special consideration to each individual case and may recommend waivers.

(3) Waivers may be approved by the local Safety and Occupational Health office (SOHO) and must be re-issued every 2 years, based on results of operator's medical clearance examination. A copy shall be provided to HQ, SOHO.

(4) Normally, waivers shall not be granted for applicants who have never before established operator qualifications. However, an evaluation on an individual basis shall be made per the above requirements. Any limitations identified shall be noted on the operator's license and license record.

Comments:

This document meets the requirements of EM 385-1-1, Section 15.B for **Qualified Riggers**;

\_\_\_\_\_ designates \_\_\_\_\_, as a  
Qualified Rigger. He/She is over the age of 18 and has knowledge, training, and  
experience to meet the requirements listed in EM 385-1-1, Section 15.B.01 & 15.B.02

Rigger is approved for the following rigging activities:

Company Official/Supervisor Signature

This document meets the requirements of EM 385-1-1, Section 16.B.06 for a **Signal Person**;

\_\_\_\_\_ has been trained and evaluated by a Qualified Evaluator on

how to properly signal a LHE Operator with (\_\_\_\_\_) signals.

He/She has the basic understanding of crane operations/limitations and has demonstrated they meet all the requirements of Section 16.B.06 through a written and practical test.

Documentation of Signal Person's Training:

Company Official/Supervisor Signature



**FORM 16-1**

**Certificate of Compliance for LHE and Rigging**

This form is applicable to all Contractor Load Handling Equipment (LHE) and Rigging Gear being brought onto the project site and applies to all cranes, derricks and any other hoisting equipment used to lift suspended loads.

This certificate shall be signed by an official of the company that provides LHE/cranes and rigging gear for any application under this contract.

Contracting Officer's Point of Contact: (Government Designated Representative)	Phone #:
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Prime Contractor/Phone #:	Contract Number:
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SSHO/QC:	Phone #:
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LHE Manufacturer/Type/Capacity:

LHE Operator(s) Name(s):

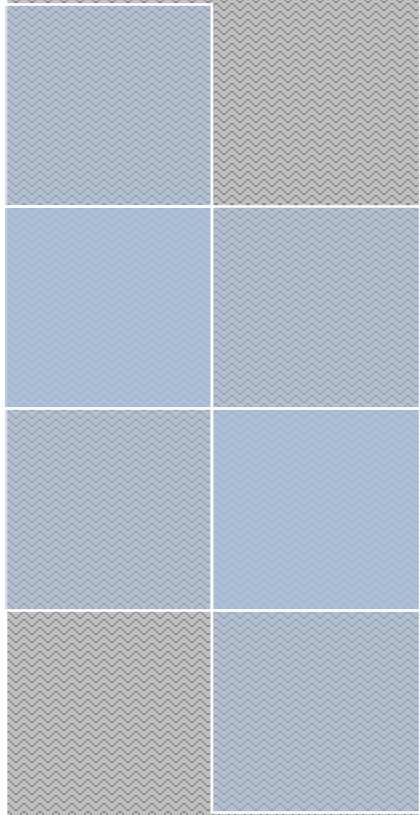
I certify that:

1. The above noted LHE and all rigging gear conform to the EM 385-1-1, applicable OSHA regulations (host country regulations in foreign countries) and applicable ASME standards.
2. The operator(s) noted above has been trained, qualified and designated in accordance with the requirements in Section 16, EM 385-1-1 for the operation of the above noted LHE.
3. The operator(s) noted above has been trained not to bypass safety devices during LHE operations.
4. The operator(s), rigger(s) and company official (staff) are aware that immediate notification to the GDA of any incident or accident involving this equipment is required.

Company Official Signature:	Date:
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Company Official Name/Title:

**Post on Crane/LHE.**  
(In Cab and Contractor's Office for each LHE brought onto USACE Project/Property)



# Critical Lift Plan

This plan is required for lifts meeting the criteria listed in EM 385-1-1, Section 16.H



New England District  
**CRITICAL LIFT PLAN**

For use of this form, see EM 385-1-1, Section 16. Proponent is Crane HHWG.

Date: _____	Prepared By: _____
Location: _____	USACE District: _____

*A "critical lift" is defined as any non-routine crane lift requiring detailed planning and additional or unusual safety precautions. Critical lifts include: lifts made where the load weight is greater than 75% of the rated capacity of the crane; lifts which require load to be lifted, swung or placed out of the operator's view ; lifts made with more than one crane; lifts involving non-routine/technically difficult rigging arrangement; hoisting personnel with a crane or derrick; or any lift which the crane operator believes should be critical.*

A. TOTAL LOAD	
1. Load Weight	_____ lbs
2. Wt. of Aux. Block	_____ lbs
3. Wt. of Main Block	_____ lbs
4. Wt. of Lifting Beam	_____ lbs
5. Wt. of Sling/Shackles	_____ lbs
6. Wt. of Jib/Ext. (erected/stowed)	_____ lbs
7. Wt. of Hoist Rope	_____ lbs
8. Other:	_____ lbs
<b>TOTAL WEIGHT</b>	_____

*Note: Source of load weight (Drawings, Calcs, etc.) must be attached on Page 2.*

E. CRANE PLACEMENT <i>(Mobile Cranes Only)</i>	
1. Maximum Bearing Pressure _____ PSF	
<i>Note: Bearing Pressure Calculations must be attached on Page 3.</i>	
2. Ground Conditions Suitable for Load? _____ YES / NO	
<i>Note: Ground Condition Calculations must be attached on Page 3.</i>	
3. High Voltage or Electrical Hazards? _____ YES / NO	
<i>Note: If Electrical Hazards are present they must be shown on Page 4.</i>	
4. Obstructions to Lift or Swing? _____ YES / NO	
<i>Note: If Obstructions are present they must be shown on Page 4.</i>	
5. Travel with Load Required? _____ YES / NO	
6. Other? _____	

B. CRANE	
1. Type of Crane _____	
2. Maximum Crane Capacity _____ lbs.	
3. Radius (Maximum) _____ ft.	
4. Radius (Minimum) _____ ft.	
5. Boom Length (Maximum) _____ ft.	
6. Boom Length (Minimum) _____ ft.	
7. Crane Capacity (Max Radius) _____ lbs.	
8. Crane Capacity (Min Radius) _____ lbs.	
9. Boom Angle (Maximum) _____ deg.	
10. Boom Angle (Minimum) _____ deg.	
11. Gross Load of Crane _____ lbs.	
12. Lift is _____ % of the Crane's rated capacity	
13. If Jib/Ext. is to be used:	
Length _____ ft.	
Offset _____ ft.	
14. Rated Capacity of Jib/Ext. _____ lbs	

F. OPERATOR QUALIFICATIONS	
1. Certified Operator? _____ YES / NO	
2. Option? _____	
3. Certified for Type, Class & Capacity? _____ YES / NO	
4. Designated in writing by employer: _____ YES / NO	

G. PRE-LIFT CHECKLIST	(YES)	N/A	(NO)
1. Crane Inspected			
2. Rigging Inspected			
3. Crane Set-up			
4. Overhead Hazard Check			
5. Swing Check			
6. Counterweight Check			
7. Operator Qualifications			
8. Signal Person Qualifications			
9. Rigger Qualifications			
10. Load Chart in Crane			
11. Load Test			
12. Tag Lines			
13. Wind Conditions			
14. Traffic Hazard Check			
15. Site Control			
16. Signatures			

C. HOIST ROPE	Main	Aux 1	Aux 2
1. # of Parts			
2. Rope Diameter			
3. Working Load Limit			

D. RIGGING	
1. Hitch Type(s) _____	
2. No. of Slings: _____ Size: _____	
3. Sling Type: _____	
4. Sling Assembly Capacity: _____ lbs.	
5. Shackle Size(s): _____	
6. Shackle Rated Capacity(s) _____ lbs.	

H. SIGNATURES	
1. Crane Operator _____	
2. Rigger _____	
3. Signal Person _____	
4. Lift Supervisor _____	
5. Other _____	
6. Other _____	

New England District  
CRITICAL LIFT PLAN

For use of this form, see EM 385-1-1, Section 16. Proponent agency is Crane HHWG.

LOAD CALCULATIONS

*Show here or attach calculations, drawings, etc.*

A large grid area for calculations and drawings, consisting of a 30x30 grid of small squares. The grid is intended for showing calculations, drawings, or other technical information related to the load calculations.

New England District  
CRITICAL LIFT PLAN

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**BEARING PRESSURES & GROUND CONDITIONS**

*Show here or attach calculations, drawings, etc.*

A large grid area for calculations and drawings, consisting of approximately 30 columns and 40 rows of small squares.

New England District  
CRITICAL LIFT PLAN

For use of this form, see EM 385-1-1, Section 16. Proponent agency is Crane HHWG.

LOAD CHART

*Show here or attach load chart*

A large grid area for drawing or attaching a load chart. The grid consists of 20 columns and 30 rows of small squares, providing a space for technical drawings or data tables.

New England District  
CRITICAL LIFT PLAN

For use of this form, see EM 385-1-1, Section 16. Proponent agency is Crane HHWG.

SITE PLAN

*Show here or attach site plan and sequencing*

A large grid area for drawing the site plan and sequencing. The grid consists of 20 columns and 30 rows of small squares, providing a space for technical drawings and diagrams.