

Quonset Development Corporation

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A Pier Loading Permit is required for all crane operations, any storage of heavy materials or equipment, any use of heavy equipment, or any other activity involving live or dead loads exceeding 10-tons occurring on any Quonset Development Corporation owned- or managed-pier.

Note: Use of QDC-owned cranes on QDC-owned piers may not always require a Pier Loading Permit. Contact the Director of Engineering and Construction to discuss.

An example Pier Loading Permit is included at the end of these instructions.

I. Required Submittals

All applicants for a Pier Loading Permit must submit the following documents to QDC via email, sent to port@quonset.com:

- 1. Completed Application Form
- 2. Operational Schematic (showing crane, vessel, and cargo movements)
- 3. A copy of a valid, appropriate Rhode Island Operator License for the person who intends to use the equipment (e.g. a Crane Operator License)
- **4.** A valid, accurate Insurance Certificate (ACORD 7/97) that meets the coverage requirements outlined in Section VI of these Instructions.
- 5. Cribbing Calculations (including worst-case outrigger reaction and mat design)

Applicants that do not intend to use a QDC-owned crane shall also submit:

- **1.** Equipment Specification Sheet (make, model, weight, boom length, outrigger footprint, etc.)
- 2. Manufacturer Load Chart (for all boom angles and radii used)

II. General Requirements

- A. The Quonset Development Corporation (QDC) reserves the right to restrict and/or direct the usage of its premises.
- B. The Applicant shall be the person or entity who will be responsible for and in charge of the proposed activity, including coordination of all operations described in the Pier Loading Permit application.
- C. No loading or offloading operation shall be conducted without a valid Pier Loading Permit, duly authorized by QDC.



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- D. Pier Loading Permit applications must be submitted to the Quonset Development Corporation (QDC) no less than five (5) business days prior to the start of any loading or offloading operations.
- E. The permit is valid only for the specific dates, equipment, and operational details stated in the application. It is non-transferable and will automatically expire upon completion of the authorized activities unless extended in writing by QDC.
- F. If the proposed operation requires a vessel to berth at a QDC pier, a separate Berth Application must also be submitted. The Berth Application must be consistent with the details provided in the Pier Loading Permit application and coordinated accordingly.
- G. All loading calculations shall be prepared by a Rhode Island–licensed Professional Engineer (P.E.) or generated using load-bearing software provided by crane manufacturers or cribbing providers, subject to QDC acceptance.
- H. The applicant is responsible for determining whether cribbing is required and must submit engineering calculations that demonstrate safe loading conditions in compliance with the designated pier's load limitations.

The Permit Application Form is provided in **Attachment A**.

Guidance for preparing loading and cribbing calculations is provided in **Attachment B**.

III. Safety Best Practice Requirements

The Applicant is responsible for ensuring that all operations conducted under the Pier Loading Permit comply with applicable safety regulations and best practices. The following minimum requirements apply to all permitted activities:

- A. Impact loading is strictly prohibited. Equipment or materials must be placed in a controlled manner that prevents sudden force or dynamic loads on the pier surface.
- B. Crane cribbing must be properly designed and deployed to distribute loads within the allowable bearing limits of the designated pier or platform, as verified by submitted engineering calculations.
- C. All activities must comply with OSHA regulations, ASME B30 standards, and applicable Rhode Island state safety codes.
- D. QDC reserves the right to suspend operations immediately if unsafe conditions are observed or reported, at its sole discretion.

On the day of the operation, the equipment operator will be required to sign the Acknowledgement of Safety Rules provided in **Attachment C**.



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IV. Allowable Loads

PIER	ALLOWABLE
	LOADS
Pier 1 – Unimproved	250 psf
Pier 1 – Improved	750 psf
Pier 2 & Pier 2 Extension	750 psf
Pier 2 – Heavy Lift Pads	2,000 psf
Terminal 5 – General Pier	750 psf
Terminal 5 – SPMT Loading Areas	2,250 psf

V. Insurance Requirements

A. Insurance Coverage and Additional Insureds:

The Applicant's and all subcontractors' commercial general liability, automobile liability, umbrella or excess, pollution and professional liability policies shall name the Quonset Development Corporation and the Rhode Island Commerce Corporation as additional insureds, including their respective officers, directors, members, partners, employees, agents, consultants, and subcontractors. These coverages shall apply on a primary and non-contributory basis for all covered claims, including those arising from both ongoing and completed operations. The Applicant and all subcontractors shall obtain and provide all endorsements necessary to support these requirements.

Insurance shall cover damage to the streets, substructures, utilities, pier deck, pier substructures, pier facing, fender systems, and appurtenances thereto.

In addition, if the Applicant will furnish or delegate professional services, they shall be responsible for securing and maintaining professional liability insurance that covers claims arising from negligent errors, omissions, or acts committed in the performance of those services. If such services are performed by a subcontractor, that subcontractor may carry the required insurance in lieu of the Applicant.

B. Proof of Insurance

- i. Proof of insurance shall be submitted no later than forty-eight (48) hours before the scheduled operation.
- ii. Before a Pier Loading Permit is issued, the Applicant shall provide proof of insurance meeting these minimums:



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Coverage Type	Minimum Coverage
General Liability (Incl. Personal Injury)	\$1M per occ./ \$2M aggregate
Property Damage	\$1M or \$2M combined GL Comprehensive
Automobile General Liability	\$500,000 GL / \$500,000 Person Injury & Property Damage
Workers Compensation	Per Rhode Island Law
Pollution Liability	\$5M per occurrence / \$5M aggregate
Umbrella Liability	\$5M per occurrence
Professional Liability	\$3M per occurrence / \$3M aggregate

VI. Fees and Tariffs

Crane Service and Hire (Per QDC Terminal Tariff No. 017, Rule 3.8.6)

All firms providing crane service at the Port of Davisville are subject to charges as outlined in the current Quonset Development Corporation Terminal Tariff Schedule. This includes a percentage of gross equipment rental fees, subject to a minimum charge, for the privilege of operating on QDC property. Firms leasing property from QDC are exempt from this charge. A monthly activity report must be submitted to QDC for billing purposes.

Use of QDC-owned cranes is limited to firms holding a valid QDC stevedoring license. All crane operators must be licensed in the State of Rhode Island and certified for the specific make and model of crane being used.

Applicants are responsible for reviewing the most current Terminal Tariff Schedule available at www.portofdavisville.com or upon request from QDC.

VII. Contact Information

Submit Applications: Port of Davisville Pier Masters – (401) 294-2639 | port@quonset.com

Questions: QDC Engineering Department – (401) 295-0044 | engineering@quonset.com

QDC Main Office: 95 Cripe Street; North Kingstown, RI 02852



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Quonset Development Corporation Pier Loading Permit

Issued to

[CRANE COMPANY NAME] [CRANE COMPANY ADDRESS] Attn: [INSERT COMPANY CONTACT]

The Pier Loading Permit Application, including calculations, submitted by [Insert Company Name] on [Insert Date Application Was Submitted] (attached hereto), demonstrates that [Insert Company Name] is able comply with the [Insert Name of Pier] vertical load limitation of [Insert Allowable Vertical for the Pier] is conditionable. The plant of the specified size and configuration per your calculations. The Quonset Development Corporation (QDC) accepts no responsibility for the accuracy of the submitted calculations or the validity of the results. You are authorized to use your specified crane on [Insert Name of Pier] assuming all other conditions of the Pier Loading Permit are satisfied, specifically the insurance requirements.

This Authorization is valid for [insert date of lift] only.

Date issued: [Insert Date]

Gregory J. Coren, P.E.

Director of Engineering and Construction

Quonset Development Corporation

Pier Loading Permit Updated 6/26/2025



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Attachment A

Pier Loading Permit Application Form

[attached]



Pier Loading Permit APPLICATION FORM

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Permit Number:	PLP	Date	e of Submission:
Assigned by QDC upon receipt of complete			
1. Application Info	rmation		
Applicant Name:			
Address:			
Contact Person:			
Title:			
Email:			
Mobile:			
Secondary - Emerg	ency Contact		
Contact Person:			
Title:			
Email:			
Mobile:			
2. Pier and Schedu	ıle Information		
Pier Requested			
OPier 1 O Pier 2	2 O Pier 2 HLP O Termi	nal 5 Pier	O Quonset Carrier Pier
Date(s) of Use (MM/D	DD/YYYY to MM/DD/YYYY):		1
Will QDC Crane Be			
Equipment Asseml		○No	
		Yes () No	
	-		
3. Crane or Equipr	nent Details		
		DC Grove Cra	ne Other (Specify)
If Other:		20 01010 014	is Genier (epeciny)
Make / Model / Ser	ial No.:		
Lifting Capacity:			
Gross Weight (As R	igged):		
Boom Length:			
Outrigger Configur	ation (L x W):		
	elected, attach specification sheet a	nd Manufactu	rer Load Chart.
4. Lift & Cargo Deta	ails		
Type of Cargo:			
Heaviest Single Ite	m (Weight & Dimensions):		
Largest Item by Vol	lume (Weight & Dimensions):		
Operation Type: () Loading \bigcirc Off-loading \bigcirc	Tempora	ary Storage
	ration* (attach additional she		

^{*}Include style and type of rigging, dunnage, duration, number of trucks or other transport equipment and other pertinent details not otherwise called for in this application.



Mobile Phone:

Pier Loading Permit APPLICATION FORM

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5. Vessel (if applicable)	
Vessel Name / Type:	
Owner / Country of Registry:	
LOA / Beam / Draft:	
Gross / Net Tonnage:	
Estimated Arrival / Departure:	
Does Vessel Have Onboard Lifting/Crane Equipment? O Yes O No	
If Yes, List Type and Capacity:	
6. Transport Details (Land)	
Mode of Transportation: ○ Overland ○ Rail	
Transport Equipment (Gross Weight, # of Wheels):	
Wheel Loading Computation (Attach):	
Overnight Parking Required? Yes No	
7. Subcontractors (if any, attach additional sheets if necessary)	
Subcontractor:	
Role:	
Name:	
Address:	
Telephone:	
Email:	
Mobile Phone:	
Subcontractor:	
Role:	
Name:	
Address:	
Telephone:	
Email:	
Mobile Phone:	
Subcontractor:	
Role:	
Name:	
Address:	
Telephone:	
Email:	



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8. Certification

By submitting this Application Form and affixing my signature below, I, on behalf of the Applicant, certify that I have read and agree to the requirements outlined in the Pier Loading Permit Application Instructions. I further agree that the information provided in this application is true and complete. I, on behalf of the Applicant, further certify that:

To the fullest extent permitted by law, and in addition to any other obligations of Applicant, Applicant shall indemnify and hold harmless QDC and the Rhode Island Commerce Corporation (RICC), along with the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them (the "QDC Indemnitees") from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Applicant's operations, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, or from actual or alleged environmental damage or violations of law or fines, penalties or costs arising therefrom, but only to the extent caused by any negligent act or omission of Applicant, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Applicant's operations or anyone for whose acts any of them may be liable regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any party's right to or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

In any and all claims against any QDC Indemnitee by any employee (or the survivor or personal representative of such employee) of Applicant, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Applicant's operations, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph above shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Applicant or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

All indemnity and defense required hereunder shall be provided by Applicant at its sole cost and expense, and Applicant shall reimburse any QDC Indemnitee for any attorneys' fees or costs incurred with respect to any such defense. Applicant shall provide such defense and



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indemnity whether such claims or actions are rightfully or wrongfully brought and irrespective of the merits or defenses with regard thereto. In the event that any insurance coverage is insufficient to ensure that no QDC Indemnitee will be exposed to damages arising from any indemnified claim, QDC may direct and Applicant shall provide evidence of its ability to pay any judgment which may arise from any such claim. In the event that QDC, in its sole discretion, determines that those assets are insufficient for the protection of the QDC Indemnitees, QDC may require Applicant to provide defense through counsel chosen and directed by QDC at the sole expense of Applicant. In that event, QDC, at its sole option, shall have sole authority for direction of the defense, and shall be sole judge of acceptability of any compromise or settlement of any claims against it.

Attacr	iments Submitt	ea with this Application:	
	Operational Schematic		
	Copy of Valid Operator's License		
	Insurance Certificate		
	Cribbing Calculations		
	Equipment Specification Sheet		
	Manufacturer Load Chart		
	Signature		
Prir	nted Name, Title		
	Date		



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Attachment B

Cribbing Calculation Guidance

[attached]



Pier Loading Permit CALCULATION GUIDANCE

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I. Purpose and Applicability

- A. This document provides guidance for applicants required to submit crane loading calculations as part of the Quonset Development Corporation (QDC) Pier Loading Permit process. These procedures apply to any crane operation that imposes point loads on QDC piers or platforms.
- B. All calculations must be prepared, signed, and sealed by a Rhode Island Licensed Professional Engineer (P.E.), or generated using load-bearing calculation software developed by crane manufacturers or cribbing suppliers, subject to QDC approval.

II. General Requirements

The total weight of the crane system, including both **dead load** (crane, rigging, attachments) and **live load** (object being lifted), must be calculated. In addition, **load moment** and **outrigger reaction forces** must be evaluated for each operational configuration.

Calculations must be performed for all expected boom angles and swing radii, including:

- Front (0°)
- Rear (180°)
- Side (90° or 270°)
- Diagonal (45°, 135°, 225°, 315°)

Note: The maximum outrigger load typically occurs between 45°–90° swing angles.

III. Crane Reaction and Cribbing Analysis

1. Load Moment Calculation

Calculate the moment generated by the live load using the equation:

 $Moment = Load \times Radius$

where the radius is the horizontal distance from the load to the crane's center of rotation.

2. Counterweight Moment

The crane's counterweight creates a moment in the opposite direction of the load moment. Include this effect to determine the net moment at each outrigger.

3. Outrigger Load Reactions

Combine:

- Dead load distribution across outriggers
- Load moment effects



Pier Loading Permit CALCULATION GUIDANCE

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Counterweight moment effects

Algebraically sum reactions for each outrigger at every swing angle.

4. Cribbing Area Calculation

- Compare maximum outrigger load with the allowable bearing pressure of the pier.
- o If exceeded, calculate required cribbing area using:

Required Area = Outrigger Load ÷ Allowable Bearing Pressure

Determine cribbing pad size:

Pad Width = $\sqrt{\text{(Required Area)}}$ (assuming square pad)

5. Transitional Pad Design

Identify need for transitional pads between outrigger foot and cribbing pad. Create a "pyramid" structure as needed to distribute load effectively.

6. Cribbing Pad Design

Provide cribbing material specifications, thickness, number of layers, and configuration to support the intended load. Submit engineering justification.

IV. Crane Calculation Process Outline

- 1. Obtain crane manufacturer specifications (model, weight, load chart, boom length, counterweight).
- 2. Determine lift weight, lift radius, and required boom configuration.
- 3. Compute total crane weight and distribute dead load across outriggers.
- 4. Calculate load moment and corresponding outrigger reactions for all swing angles.
- 5. Calculate counterweight moment and corresponding outrigger reactions.
- 6. Sum all forces per outrigger.
- 7. Compare per-outrigger loads with allowable deck bearing capacity.
- 8. If exceeded, compute minimum cribbing area and pad dimensions.
- 9. Specify transitional pads and cribbing stack-up.
- 10. Submit all calculations, crane mat sizes, and pad drawings to QDC for review.

V. Final Note

All crane operations must comply with applicable OSHA, ASME, and state regulations. Cribbing systems must be installed per the approved engineering design. QDC reserves the right to reject any plan it deems non-compliant or unsafe.

QDC accepts no responsibility for the accuracy or results of submitted calculations. Final field verification is the responsibility of the applicant.



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Attachment C

Acknowledgement of Safety Rules

[attached]



Acknowledgement of Safety Rules

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	Name:		
	Company:		
Crane Make/Model:			
RI Crane Operator License No.:			
Phone:		Email:	

Acknowledgment of Safety Rules

As a certified crane operator performing work at QDC-managed piers, I acknowledge and agree to comply with the following safety requirements:

- 1. No Impact Loading: Dropping or sudden engagement of loads is strictly prohibited.
- 2. Cribbing Requirements: All outriggers must rest on cribbing mats sized to meet load distribution requirements as reviewed by QDC Engineering.
- 3. Permitted Operations Only: Work may only occur on the dates and piers specified in the approved Pier Loading Permit.
- 4. Load Limits: Maximum allowable live and dead loads must not exceed posted limits for each pier section.
- 5. Site Awareness: I have reviewed the site plan and crane setup schematic included in the approved permit package.
- 6. Weather Conditions: I will suspend operations if wind speeds exceed manufacturer guidelines or QDC direction.
- 7. Communication: I will maintain radio or visual contact with the appointed signal person and comply with QDC Port Operations directions.
- 8. Emergency Protocols: I am aware of emergency shutdown procedures and locations of first aid and spill response equipment.
- TWIC & PPE Compliance: I will wear required PPE and maintain a valid TWIC card if accessing restricted areas.

Signature:	
Print Name:	
Date:	