SECTION 11 13 00

LOADING DOCK EQUIPMENT

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

*Copyright 2021 - 2021 ARCAT, Inc. - All rights reserved*

\*\* NOTE TO SPECIFIER \*\* Serco; Dock Equipment.  
This section is based on the products of Serco, which is located at:1612 Hutton Dr., Suite 140Carrollton, TX 75006Toll Free Tel: 800-933-4834Tel: 972-466-0707Fax: 972-323-2661Email: [request info (Serco@4frontes.com)](https://arcat.com/rfi?action=email&company=Serco&message=RE%253A%2520Spec%2520Question%2520(11160ser)%253A%2520&coid=35450&spec=11160ser&rep=&fax=972-323-2661)  
Web: <https://sercodockproducts.com>   
 [ [Click Here](https://arcat.com/company/serco-35450) ] for additional information.  
The Serco brand has been a leader in the industry for more than five decades, known for its durable and reliable loading dock equipment with a focus on hydraulic dock levelers, safety products and programmable control systems. Today you'll find a variety of Serco loading dock products to tackle challenges such as energy efficiency, cold storage, and industrial operations. Whether you're running a high-volume loading dock or simply need a better way to operate manual tasks, you'll find a product to fit your needs within the Serco product line.  
Serco's comprehensive offerings include commercial sectional doors, loading dock equipment, HVLS fans, high-performance doors, residential garage doors, pedestrian door automation and operators. Serco product brands are sold through an extensive network of trained dealers who provide superior installation and service throughout the U.S., Canada, and Mexico.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Loading Dock Equipment:
       1. Air powered dock levelers.
       2. Hydraulic dock levelers.
       3. Mechanical dock levelers.
       4. Edge of dock levelers.
       5. Power assisted dock levelers.
       6. Vertical dock levelers.
       7. Perimeter seal loading dock leveler.
       8. Dock Lifts
       9. Dock seals.
       10. Dock Accessory Items
       11. Vehicle restraints
       12. Truck levelers.
       13. HVLS Fans.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
    2. Section 05 50 00 - Metal Fabrications.
    3. Division 16 - Electrical; electrical connections to dock equipment.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data:
        1. Manufacturer's data sheets on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
    2. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.
  2. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  3. DELIVERY, STORAGE, AND HANDLING
     1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
     2. Protect from damage due to weather, excessive temperature, and construction operations.
  4. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
  5. WARRANTY
     1. Manufacturer's Warranties for Air, Hydraulic, Power Assist, and Vertical Dock Levelers.
        1. Limited Parts and Labor Base Warranty: All components under normal use for 1 year beginning on installation completion or 60th day after shipment, whichever is earlier.

\*\* NOTE TO SPECIFIER \*\* Remaining paragraphs are optional leveler warranties Delete options not required.

* + - * 1. Limited 4-Year Parts and Labor Warranty on Lifting System: Air bag, motor, hoses, gaskets, fittings, and seals.
        2. Prorated Structural 10 Year Warranty: With engineering approval.
      1. Manufacturer's Limited Edge of Dock Warranty: Warranted against defects in materials and workmanship for one year.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Serco, which is located at:1612 Hutton Dr., Suite 140Carrollton, TX 75006Toll Free Tel: 800-933-4834Tel: 972-466-0707Fax: 972-323-2661Email: [request info (Serco@4frontes.com)](https://arcat.com/rfi?action=email&company=Serco&message=RE%253A%2520Spec%2520Question%2520(11160ser)%253A%2520&coid=35450&spec=11160ser&rep=&fax=972-323-2661);Web: <https://sercodockproducts.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for Substitutions: Considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. AIR POWERED DOCK LEVELERS
     1. Basis of Design: AB series dock leveler as manufactured by Serco. Air-powered platform with automatic lip extension. Supplied assembled with platform, lip, and power unit. Ready to install in pre-formed concrete pit. Grease fittings.
        1. Standards Compliance: ANSI MH14.1-1987.
        2. Platform: High tensile steel tread-plate supported by beams welded to front header.
           1. Construction: CIR 35K lbs (15,876 kg): L-beam.
           2. Construction: CIR 40k to 50K lbs (18,144 to 22,680 kg): Split box beam.
           3. Deck: CIR 30K to 45K lbs (13,608 to 20,412 kg): 1/4 inch (6 mm) thick.
           4. Deck: CIR 50K lbs (22,680 kg): 3/8 inch (10 mm) thick.
        3. Lip: 16 inch (406 mm) high tensile steel tread-plate. Beveled leading edge.
           1. Thickness: CIR 30K to 45K lbs (13,608 to 20,412 kg): 5/8 inch (16 mm).
           2. Thickness: CIR 50K lbs (22,680 kg): 3/4 inch (19 mm).
           3. Lip Taper: 7 ft (2.13 m) to 6 ft 6 inches (2.01 m) at leading edge.
           4. Lip Taper: 7 ft (2.13 m) to 6 ft (1.83 m) at leading edge.
        4. Lip Hinge Tubes: Full width structural front header and heavy wall tubing.
           1. Wall: CIR 35K lbs (15.875 kg): 5/16 inch (406 mm)
           2. Wall: CIR 40K to 50K lbs (18,144 to 22,680 kg): 1/2 inch (12 mm).
           3. Gusseted Hinge Tubes: CIR 35K, to 50K Ibs (15,876, to 22,680 kg) units.
           4. Hinge Shaft Solid Steel: CIR 35K lbs (15.875 kg): 1 inch (25 mm).
           5. Hinge Shaft Solid Steel: CIR 40K to 50K lbs (18,144 to 22,680 kg): 1-1/4 inch (31 mm).
        5. Lip Extension: HYDRA MAX lip assist mechanism. Extends lip at top of raising cycle.
        6. Rear Subframe and Hinge: 4 vertical angles welded to 2 horizontal members. Upper Rear Angle: Longitudinal support for gussets and deck supports. Hinge: Four, 1/2 inch (13 mm) thick lugs. Allows 4 inch (100 mm) side to side deck twist.
        7. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
        8. Power Unit: 120 V one phase motor/blower on galvanized pan. Elevated off pit floor.

\*\* NOTE TO SPECIFIER \*\* Interlock capable control panel available.

* + - 1. Control Panel: Non-metallic, non-interlock capable, single push-button control panel.
      2. Clean Frame: Allows access for easy pit clean out and routine maintenance.
      3. Nite-lock: Prevents unauthorized entry beneath locked overhead door.
      4. Structural Center Beam Deck Support: CIR 40K to 50K lbs (18,144 to 22,680 kg): 5 inch (127 mm) structural channel. Reinforces leveler for 3 wheel lift truck traffic.
      5. Full Range Toe Guard Protection: On sides of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
      6. Safety Legs Emergency Support: If truck departs with load on leveler platform.
      7. Reflex Design: Incorporates cam mechanism to limit interference from truck float.
      8. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, and lockout capable. Supports lip and leveler during maintenance and pit cleaning.
      9. Below Dock Control, Endloading: Push-button control and front mounted.
      10. Out of Level Compensation: Levelers compensate for canted truck beds up to 4 inches (102 mm). Rear of deck remains flush with pit.
      11. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
      12. Operation: NEMA 4x non-metallic push-button control panel, non-interlock capable.
          1. Pressing Raise Button: Platform raises. Hinged lip extends.
          2. Release Raise button: Platform descends until lip is supported by truck bed and floats with truck movement.
          3. Restore Leveler: Press Raise button and lip retracts as platform raises.
          4. Below-Dock level operation and end loading: Push-button control and lanyard.
          5. Working Range: 12 inches (305 mm) above and below dock for 6, 8, and 10 ft (1.83, 2.44, and 3.05 m) long units. Lip extends 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
      13. Concrete Pit Construction: Per certified Serco pit detail drawings.
          1. Pit Depth: 20 inches (508 mm) for 6 to 8 ft (1.83 to 2.44 m) long units.
          2. Pit Depth: 24 inches (610 mm) for 10 ft (3.05 m) long units.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 30K lbs (13,607 kg).
      4. Capacity: CIR 35K lbs (15,875 kg).
      5. Capacity: CIR 40K lbs (18,143 kg).
      6. Capacity: CIR 45K lbs (20,411 kg).
      7. Capacity: CIR 50K lbs (22,680 kg).
      8. Width: 6 ft (1,829 mm).
      9. Width: 6.5 ft (1,981 mm).
      10. Width: 7 ft (2,134 mm).
      11. Length: 6 ft (1,829 mm).
      12. Length: 8 ft (2,438 mm).
      13. Length: 10 ft (3,048 mm).
      14. Extended Lip: 18 inches (457 mm).
      15. Extended Lip: 20 inches (508 mm).
      16. Weather Seal: Factory installed brush.
      17. Weather Seal: Factory installed neoprene
      18. Weather Seal: ENERGY GUARD perimeter system
      19. Dock Bumpers: B410-14F; standard.
      20. Dock Bumpers: \_\_\_\_\_\_\_\_
      21. Spray foam insulated deck.
      22. Galvanized Finish: Deck, lip and subframe, CIR 40K and above.
      23. Structural steel safety leg with Reflex anti-stump out system.
      24. Interlock capable control panel (non-metallic).
      25. High lip crown.
      26. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required or delete levelers and options not required.

* 1. HYDRAULIC DOCK LEVELERS
     1. Basis of Design: HD Dock Leveler as manufactured by Serco. Hinged lip, hydraulic platform, lip extension, and retraction. Supplied assembled with platform, lip, power unit, motor, pump, valves, and grease fittings. Ready to install in pre-formed concrete pit.
        1. Standards Compliance: Conforms to ANSI MH14.1-1987.
        2. Platform: 3/8 inch (10 mm) minimum high tensile steel tread plate over I-beam construction. Structural members fully welded to front header.
        3. Lip: High tensile steel tread plate with beveled leading edge.
           1. Thickness: 3/4 inch (19 mm).
           2. Lip Taper: 7 ft (2.13 m) to 6 ft 6 inches (2.01 m) at leading edge.
           3. Lip Taper: 7 ft (2.13 m) to 6 ft (1.83 m) at leading edge.
        4. Lip Hinge Tubes: Full width front header. Heavy wall tubing 3/4 inch (19 mm) thick.
           1. Hinge tubes to have gussets. Sold Steel Lip Hinge Shaft: 1-1/4 inch (31 mm).
        5. Lip Extension: HYDRA MAX lip assist mechanism. Double acting cylinder provides smooth lip activation in both directions.
        6. Rear Welded Structural Subframe and Hinge: 5 vertically supported rear hinges.
        7. Power Unit: Electric hydraulic pump and valve assembly. Mounted to unit subframe elevated off pit floor. Pre-wired to integral junction box. Remote mount required with shallow pits.
           1. Motor : 1 hp, NEMA Standard TENV/56C frame. RPM: 3450
           2. Motor Voltage: 120/208/240V single phase. Standard.
        8. Hydraulic Fluid. Viscosity of15 cSt at 100 degrees F (40 degrees C).
        9. Cylinder Bores: Main: 3-1/2 inch (89 mm). Lip: 2-1/2 inch (63 mm).
        10. Control Panels: Listed. Remote mounted and electrically interconnected by others.
            1. Single Button Activation Control: Non-metallic. Non-interlock capable, thermal overload, and built-in motor overload protection. Standard.
            2. Single Button Activation Control: Steel. Interlock capable, with motor starter, thermal overload, and control circuit breaker with reset capability.
            3. Control Buttons: Raise and Stop.

Stop Button: Maintained contact type. Activates solenoid on hydraulic system. Operator does not have to continuously hold "STOP" button to maintain leveler in a stop position.

\*\* NOTE TO SPECIFIER \*\* The following two buttons are optional. Delete if not required.

Lip Extend Button: Ensures quickest dock leveler cycle time by not fully raising leveler before extending lip onto truck. Will extend lip at any point in leveler cycle

Mushroom-Style Emergency Stop Button: Stops leveler instantly when depressed at any time. Pulling out button allows leveler to operate again.

* + - 1. Push-Button Below-Dock Control (Endloading): Extends lip beyond lip supports to handle end loads.
      2. Nite-Lock: Prevents unauthorized entry beneath locked overhead door.
      3. Full Operating Toe Guard Protection: On sides and rear of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
      4. Dual Integral Maintenance Struts: Two permanently mounted, hinged, lockout capable maintenance struts and lip support latch provided to support lip section and leveler.
      5. Clean Frame: Allows access for easy pit clean out and routine maintenance.
      6. Out of Level Compensation: Rigid deck with floating rear hinge.
      7. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
      8. Below-Dock Control, Endloading: Push-button control. Working Range: 12 inches (305 mm) above and below dock for 6, 8 and 10 ft (1.83, 2.44, and 3.05 m) long units.
         1. Working Range for 12 ft (3.66 m) Long Units:

Above Dock: 15 inches (381 mm). Below Dock: 12 inches (305 mm),

* + - 1. Lip Extensions: 11 inches (279 mm) beyond face of a 6 inch (150 mm) bumper.
      2. Operation: Platform and lip operated by hydraulic cylinders controlled by a remote push-button station.
         1. Press Raise Button: Platform raises, and lip extends.
         2. Release Raise Button: Platform descends until lip is supported by truck bed and floats with truck movement.
         3. Restore Dock Leveler: Press Raise button and lip retracts. If truck departs when lip is extended, leveler descends under hydraulic control. Lip falls to pendant position.
         4. Automatic Return-to-Dock: Restores leveler to dock level support position.
      3. Pre-Formed Concrete Pit: Depth: 24 inches (610 mm) for all dock levelers.
         1. Pit Construction: Per certified Serco pit detail drawings.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Model HDR: Automatic return-to-dock. NEMA 12 steel control panel.
      2. Model HDQ: Mushroom-style stop button. Independent hydraulic lip control. Steel NEMA 12 control panel.
      3. Model HDFC: Mushroom-style stop button. Independent hydraulic lip control. Steel NEMA 12 control panel. Automatic return-to-dock. Weatherseal; brush or neoprene.
      4. Steel NEMA 12 control panel; interlock capable.
      5. Color: Manufacturer's standard enamel gray.
      6. Color: As determined by Architect from Manufacturer's range.
      7. Capacity: CIR 60,000 lbs (27215 kg).
      8. Capacity: CIR 80,000 lbs (36287 kg).
      9. Width: 6 ft (1,829 mm).
      10. Width: 6.5 ft (1,981 mm).
      11. Width: 7 ft (2,134 mm).
      12. Length: 6 ft (1,829 mm).
      13. Length: 8 ft (2,438 mm).
      14. Length: 10 ft (3,048 mm).
      15. Length: 12 ft (3658 mm).
      16. Lip Length: 18 inch (457 mm). Standard.
      17. Lip Length: 20 inches (508 mm).
      18. Weather Seal: Factory installed brush.
      19. Weather Seal: Factory installed neoprene.
      20. Weather Seal: ENERGY GUARD perimeter system.
      21. Dock Bumpers: B410-14 Laminated; standard.
      22. Dock Bumpers: \_\_\_\_\_\_\_\_
      23. Spray foam insulated deck.
      24. Galvanized finish, deck, lip and subframe.
      25. Post office model with 2 inch (51 mm) cart guard.
      26. Interlocking with other dock equipment.
      27. Automatic Return-to-Dock: Restores leveler to dock level support position.
      28. High lip crown.
      29. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.
    1. Basis of Design: HFC series Dock Leveler as manufactured by Serco. Hinged lip, hydraulic platform, lip extension and retraction. Supplied assembled with platform, lip, power unit, motor, pump, valves, and grease fittings. Ready to install in pre-formed concrete pit.
       1. Standards Compliance: Conforms to ANSI MH14.1-1987.
       2. Platform: High tensile steel tread-plate over steel beams welded to front header.
          1. Construction: CIR 30,000 to 35,000 lbs (13,607 to 15,876 kg): L-beam.
          2. Construction: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): Split box beam.
          3. Deck: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 1/4 inch (6 mm) thick
          4. Deck: CIR 50,000 lbs (22,680 kg): 3/8 inch (10 mm) thick
       3. Lip: 16 inch (406 mm) high tensile steel tread-plate with beveled leading edge.
          1. Thickness: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 5/8 inch (16 mm).
          2. Thickness: CIR 50,000 lbs (22,680 kg): 3/4 inch (19 mm).
          3. Lip Taper: 7 ft (2.13 m) to 6 ft 6 inches (2.01 m) at leading edge.
          4. Lip Taper: 7 ft (2.13 m) to 6 ft (1.83 m) at leading edge.
       4. Lip Hinge Tubes: Full width structural front header and heavy wall tubing.
          1. Wall: CIR 30,000 to 35,000 lbs (13,607 to 15.875 kg): 5/16 inch (406 mm)
          2. Wall: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1/2 inch (12 mm).
          3. Gussets on Hinge Tubes: CIR 35,000, 45,000, and 50,000 Ibs (15,876, 20,412, and 22,680 kg) capacity units.
          4. Hinge Shaft: Sold steel.

CIR 30,000 to 35,000 lbs (13,608 to 15.875 kg): 1 inch (25 mm)

CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1-1/4 inch (31 mm)

* + - 1. Lip Extension: HYDRA MAX lip assist mechanism. Extends lip at top of raising cycle.
      2. Rear Welded Structural Subframe and Hinge: 4 vertical angle members connecting 2 horizontal members. Upper Rear Angle: Longitudinal support for gussets and deck supports. Hinge: Four 1/2 inch (13 mm) thick lugs. Allows 4 inch (100 mm) side to side deck twist.
      3. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
      4. Power Unit: Electric hydraulic pump and valve assembly. Mounted to unit subframe elevated off pit floor. Pre-wired to integral junction box. Remote mount required with shallow pits.
         1. Motor : 1 hp, NEMA Standard TENV/56C frame. RPM 3450
         2. Motor Voltage: 120/208/240V single phase. Standard.
      5. Hydraulic Fluid. Viscosity of15 cSt at 100 degrees F (40 degrees C).
      6. Cylinder Bores: Main: 3-1/2 inch (89 mm). Lip: 2-1/2 inch (63 mm).
      7. Control Panel: Steel NEMA 12 interlock capable control panel with motor starter, thermal overload, control circuit breaker with reset capability control panel. UL listed. Can be interlocked with other dock equipment.
      8. "Nite-lock": Prevents unauthorized entry beneath locked overhead door.
      9. Structural Center Beam Deck Support: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 5 inch (127 mm) structural channel. Reinforces leveler for 3-wheel lift truck traffic.
      10. Full operating range Toe Guard Protection: On sides of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
      11. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, and lockout capable. Supports lip and leveler during maintenance and pit cleaning.
      12. Quick Cycle Lip Extend Button: Extends lip before leveler is fully raised into position.
      13. Automatic Return-to-Dock: Solid state proximity switch senses when lip loses contact with trailer. Automatically retracts lip and restores leveler to dock level.
      14. Below-dock Control, Endloading: Push-button control and front mounted
      15. Out of level Compensation: Levelers compensate for canted truck beds up to 4 inches. Rear of deck remains flush with pit.
      16. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
      17. Operation: Hydraulic controlled dock leveler. Platform and lip operated by independent hydraulic cylinders controlled by a remote push-button station.
          1. Pressing Raise Button: Platform raises. Hinged lip extends.
          2. Releasing Raise button: Platform descends until lip is supported by truck bed and floats with truck movement.
          3. Lip Extend Button: Extends lip at any point in leveler cycle.
          4. Restore Dock Leveler: Press Raise button. Lip retracts as platform raises. If truck departs when lip is extended, leveler descends under hydraulic control and automatically restores to dock level support position.
          5. Pressing Mushroom-Style STOP Button: Stops leveler immediately when necessary. Pulling Out STOP Button: Allows leveler to operate again.
      18. Below-dock level operation allows for below-dock end loading with pushbutton control.
          1. Working Range for 6, to 10 ft (1.83 to 3.05 m) long units.

Above and Below-Dock: 12 inch (305 mm).

* + - * 1. Working Range for 12 ft (3.66 m) long units.

Above Dock: 15 inch (381 mm). Below Dock: 12 inch (305 mm).

* + - 1. The lip extends 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
      2. Concrete Pit Depth: 6 and 8 ft (1.83 and 2.44 m) Long Units: 20 inches (508 mm).
      3. Concrete Pit Depth: 10 and 12 ft (3.05 and 3.66 m) long Units: 24 inches (610 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 30,000 lbs (13,607 kg).
      4. Capacity: CIR 35,000 lbs (15,875 kg).
      5. Capacity: CIR 40,000 lbs (18,143 kg).
      6. Capacity: CIR 45,000 lbs (20,411 kg).
      7. Capacity: CIR 50,000 lbs (22,680 kg).
      8. Width: 6 ft (1,829 mm).
      9. Width: 6.5 ft (1,981 mm).
      10. Width: 7 ft (2,134 mm).
      11. Length: 6 ft (1,829 mm).
      12. Length: 8 ft (2,438 mm).
      13. Length: 10 ft (3,048 mm).
      14. Length: 12 ft (3,658 mm).
      15. Lip Length: 16 inch (406 mm). Standard.
      16. Lip Length: 18 inch (457 mm).
      17. Lip Length: 20 inches (508 mm).
      18. Lip taper: \_\_\_\_\_\_ (specify).
      19. Dock-Guard barrier lip. 40k-50k lbs only.
      20. Weather Seal: Factory installed brush.
      21. Weather Seal: Factory installed neoprene.
      22. Weather Seal: ENERGY GUARD perimeter system.
      23. Dock Bumpers: B410-14.
      24. Dock Bumpers: B410-14F. Standard.
      25. Dock Bumpers: B610-14.
      26. Dock Bumpers: B610-14F.
      27. Dock Bumpers: VB420-11F.
      28. Dock Bumpers: VB420-11 steel faced.
      29. Spray foam insulated deck.
      30. Galvanized finish, deck, lip and subframe.
      31. High lip crown.
      32. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.
    1. Basis of Design: HL series Dock Leveler as manufactured by Serco. Hinged lip, hydraulic platform, lip extension and retraction. Supplied assembled with platform, lip, power unit, motor, pump, valves, and grease fittings. Ready to install in pre-formed concrete pit.
       1. Standards Compliance: Conforms to ANSI MH14.1-1987.
       2. Platform: High tensile steel tread-plate over steel beams welded to front header.
          1. Construction: CIR 30,000 to 35,000 lbs (13,607 to 15,876 kg): L-beam.
          2. Construction: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): Split box beam.
          3. Deck: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 1/4 inch (6 mm) thick.
          4. Deck: CIR 50,000 lbs (22,680 kg): 3/8 inch (10 mm) thick.
       3. Lip: 16 inch (406 mm) high tensile steel tread-plate with beveled leading edge.
          1. Thickness: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 5/8 inch (16 mm).
          2. Thickness: CIR 50,000 lbs (22,680 kg): 3/4 inch (19 mm).
          3. Lip Taper: 7 ft (2.13 m) to 6 ft 6 inches (2.01 m) at leading edge.
          4. Lip Taper: 7 ft (2.13 m) to 6 ft (1.83 m) at leading edge.
       4. Lip Hinge Tubes: Full width structural front header and heavy wall tubing.
          1. Wall: CIR 30,000 to 35,000 lbs (13,607 to 15.875 kg): 5/16 inch (406 mm)
          2. Wall: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1/2 inch (12 mm).
          3. Gussets on Hinge Tubes: CIR 35,000, 45,000, and 50,000 Ibs (15,876, 20,412, and 22,680 kg) capacity units.
          4. Hinge Shaft: Sold steel.

CIR 30,000 to 35,000 lbs (13,608 to 15.875 kg): 1 inch (25 mm)

CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1-1/4 inch (31 mm)

* + - 1. Lip Extension: HYDRA MAX lip assist mechanism. Double acting cylinder provides smooth lip activation in both directions.
      2. Rear Welded Structural Subframe and Hinge: 4 vertical angle members connecting 2 horizontal members. Upper Rear Angle: Support for gussets and deck. Hinge: Four 1/2 inch (13 mm) thick lugs. Allows 4 inch (100 mm) side to side deck twist.
      3. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
      4. Power Unit: Electric hydraulic pump and valve assembly. Mounted to unit subframe elevated off pit floor. Pre-wired to integral junction box. Remote mount required with shallow pits.
         1. Motor : 1 hp, NEMA Standard TENV/56C frame. RPM 3450
         2. Motor Voltage: 120/208/240V single phase. Standard.
      5. Hydraulic Fluid. Viscosity of15 cSt at 100 degrees F (40 degrees C).
      6. Cylinder Bores: Main: 3-1/2 inch (89 mm). Lip: 2-1/2 inch (63 mm).
      7. Control Panel:
         1. Non-metallic, non-interlock capable, single push-button. Standard.
         2. Steel NEMA 12. Interlock capable, single push-button.
      8. Clean Frame: Allows access for easy pit clean out and routine maintenance.
      9. "Nite-lock": Prevents unauthorized entry beneath locked overhead door.
      10. Structural Center Beam Deck Support: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 5 inch (127 mm) structural channel. Reinforces leveler for 3-wheel lift truck traffic.
      11. Full operating range Toe Guard Protection: On sides of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
      12. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, and lockout capable. Supports lip and leveler during maintenance and pit cleaning.
      13. Below-dock Control, Endloading: Push-button control extends lip beyond lip supports.
      14. Out of level Compensation: Levelers compensate for canted truck beds up to 4 inches. Rear of deck remains flush with pit.
      15. Operation: Dock Leveler to be hydraulic controlled. Platform and lip operated by independent hydraulic cylinders controlled by a remote push-button station.
          1. Pressing Raise Button: Platform raises. Hinged lip extends.
          2. Releasing Raise button: Platform descends until lip is supported by truck bed and floats with truck movement.
          3. Restore Dock Leveler: Press "RAISE" button. Lip retracts as platform raises. If truck departs when lip is extended, leveler descends under hydraulic control and automatically restores to dock level support position.
      16. Below-dock level operation allows for below-dock end loading with pushbutton control.
          1. Working Range: Above and Below-Dock: 12 inch (305 mm).
      17. The lip extends 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
      18. Concrete Pit Depth for 6 and 8 ft (1.83 and 2.44 m) Long Units: 20 inches (508 mm)
      19. Concrete Pit Depth for 10 ft (3.05 and 3.66 m) long Units: 24 inches (610 mm)

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 30,000 lbs (13,607 kg).
      4. Capacity: CIR 35,000 lbs (15,875 kg).
      5. Capacity: CIR 40,000 lbs (18,143 kg).
      6. Capacity: CIR 45,000 lbs (20,411 kg).
      7. Capacity: CIR 50,000 lbs (22,680 kg).
      8. Width: 6 ft (1,829 mm).
      9. Width: 6.5 ft (1,981 mm).
      10. Width: 7 ft (2,134 mm).
      11. Length: 6 ft (1,829 mm).
      12. Length: 8 ft (2,438 mm).
      13. Length: 10 ft (3,048 mm).
      14. Lip Length: 16 inch (406 mm). Standard.
      15. Lip Length: 18 inch (457 mm).
      16. Lip Length: 20 inches (508 mm).
      17. Lip Taper: \_\_\_\_\_\_ .
      18. Dock-Guard barrier lip (40k-50k lbs only).
      19. Weather Seal: Factory installed brush.
      20. Weather Seal: Factory installed neoprene.
      21. Weather Seal: ENERGY GUARD perimeter system.
      22. Dock Bumpers: B410-14.
      23. Dock Bumpers: B410-14F. Standard.
      24. Dock Bumpers: B610-14.
      25. Dock Bumpers: B610-14F.
      26. Dock Bumpers: VB420-11F.
      27. Dock Bumpers: VB420-11 steel faced.
      28. Spray foam insulated deck.
      29. Galvanized finish, deck, lip and subframe only.
      30. High lip crown.
      31. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.
    1. Basis of Design: HLQ Dock Leveler as manufactured by Serco. Hinged lip, hydraulic platform, lip extension and retraction. Supplied assembled with platform, lip, power unit, motor, pump , valves, and grease fittings. Ready to install in pre-formed concrete pit.
       1. Standards Compliance: Conforms to ANSI MH14.1-1987.
       2. Platform: High tensile steel tread-plate over steel beams welded to front header.
          1. Construction: CIR 30,000 to 35,000 lbs (13,607 to 15,876 kg): L-beam.
          2. Construction: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): Split box beam.
          3. Deck: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 1/4 inch (6 mm) thick
          4. Deck: CIR 50,000 lbs (22,680 kg): 3/8 inch (10 mm) thick
       3. Lip: 16 inch (406 mm) high tensile steel tread-plate with beveled leading edge.
          1. Thickness: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 5/8 inch (16 mm).
          2. Thickness: CIR 50,000 lbs (22,680 kg): 3/4 inch (19 mm).
          3. Lip Taper: 7 ft (2.13 m) to 6 ft 6 inches (2.01 m) at leading edge.
          4. Lip Taper: 7 ft (2.13 m) to 6 ft (1.83 m) at leading edge.
       4. Lip Hinge Tubes: Full width structural front header and heavy wall tubing.
          1. Wall: CIR 30,000 to 35,000 lbs (13,607 to 15.875 kg): 5/16 inch (406 mm)
          2. Wall: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1/2 inch (12 mm).
          3. Gussets on Hinge Tubes: CIR 35,000, 45,000, and 50,000 Ibs (15,876, 20,412, and 22,680 kg) capacity units.
          4. Hinge Shaft: Sold steel.

CIR 30,000 to 35,000 lbs (13,608 to 15.875 kg): 1 inch (25 mm)

CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1-1/4 inch (31 mm)

* + - 1. Lip Extension: HYDRA MAX lip assist mechanism. Extends lip at top of raising cycle.
      2. Rear Welded Structural Subframe and Hinge: 4 vertical angle members connecting 2 horizontal members. Upper Rear Angle: Longitudinal support for gussets and deck supports. Hinge: Four 1/2 inch (13 mm) thick lugs. Allows 4 inch (100 mm) side to side deck twist.
      3. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
      4. Power Unit: Electric hydraulic pump and valve assembly. Mounted to unit subframe elevated off pit floor. Pre-wired to integral junction box. Remote mount required with shallow pits.
         1. Motor : 1 hp, NEMA Standard TENV/56C frame. RPM 3450
         2. Motor Voltage: 120/208/240V single phase. Standard.
      5. Hydraulic Fluid. Viscosity of15 cSt at 100 degrees F (40 degrees C).
      6. Cylinder Bores: Main: 3-1/2 inch (89 mm). Lip: 2-1/2 inch (63 mm).
      7. Control Panel: Steel NEMA 12 interlock capable control panel with motor starter, thermal overload, control circuit breaker with reset capability control panel. UL listed. Can be interlocked with other dock equipment.
      8. Clean Frame: Allows access for easy pit clean out and routine maintenance.
      9. "Nite-lock": Prevents unauthorized entry beneath locked overhead door.
      10. Structural Center Beam Deck Support: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 5 inch (127 mm) structural channel. Reinforces leveler for 3-wheel lift truck traffic.
      11. Full operating range Toe Guard Protection: On sides of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
      12. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, and lockout capable. Supports lip and leveler during maintenance and pit cleaning.
      13. Mushroom-Style Stop Button: Stops leveler instantly when depressed. Activates a solenoid on leveler hydraulic system. Button does not need to be continuously held to maintain leveler in a stop position.
      14. Quick Cycle Lip Extend Button: Extends lip before leveler is fully raised into position.
      15. Automatic Return-to-Dock: Solid state proximity switch senses when lip loses contact with trailer. Automatically retracts lip and restores leveler to dock level.
      16. Below-dock Control, Endloading: Push-button control and front mounted
      17. Out of level Compensation: For canted truck beds up to 4 inches. Rear of deck remains flush with pit.
      18. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
      19. Operation: Dock Leveler to be hydraulic controlled. Platform and lip operated by independent hydraulic cylinders controlled by a remote push-button station.
          1. Pressing Raise Button: Platform raises. Hinged lip extends.
          2. Releasing Raise button: Platform descends until lip is supported by truck bed and floats with truck movement.
          3. Restore Dock Leveler: Press "RAISE" button. Lip retracts as platform raises. If truck departs when lip is extended, leveler descends under hydraulic control and automatically restores to dock level support position.
          4. Pressing LIP EXTEND Button: Extends lip at any point in leveler cycle.
          5. Pressing Mushroom-Style STOP Button: Stops leveler immediately when necessary. Pulling Out STOP Button: Allows leveler to operate again.
      20. Below-dock level operation allows for below-dock end loading with pushbutton control.
          1. Working Range for 6, 8 and 10 ft (1.83, 2.44 m, and 3.05 m) long units.

Above and Below-Dock: 12 inch (305 mm).

* + - * 1. Working Range for 12 ft (3.66 m) long units.

Above Dock: 15 inch (381 mm). Below Dock: 12 inch (305 mm).

* + - 1. The lip extends 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
      2. Concrete Pit Depth for 6 and 8 ft (1.83 and 2.44 m) Long Units: 20 inches (508 mm)
      3. Concrete Pit Depth for 10 and 12 ft (3.05 and 3.66 m) long Units: 24 inches (610 mm)

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 30,000 lbs (13,607 kg).
      4. Capacity: CIR 35,000 lbs (15,875 kg).
      5. Capacity: CIR 40,000 lbs (18,143 kg).
      6. Capacity: CIR 45,000 lbs (20,411 kg).
      7. Capacity: CIR 50,000 lbs (22,680 kg).
      8. Width: 6 ft (1,829 mm).
      9. Width: 6.5 ft (1,981 mm).
      10. Width: 7 ft (2,134 mm).
      11. Length: 6 ft (1,829 mm).
      12. Length: 8 ft (2,438 mm).
      13. Length: 10 ft (3,048 mm).
      14. Length: 12 ft (3,658 mm).
      15. Lip Length: 16 inch (406 mm). Standard.
      16. Lip Length: 18 inch (457 mm).
      17. Lip Length: 20 inches (508 mm).
      18. Lip taper: \_\_\_\_\_\_ (specify)
      19. Dock-Guard barrier lip (40k-50k lbs only)
      20. Weather Seal: Factory installed brush.
      21. Weather Seal: Factory installed neoprene
      22. Weather Seal: ENERGY GUARD perimeter system
      23. Dock Bumpers: B410-14.
      24. Dock Bumpers: B410-14F. Standard.
      25. Dock Bumpers: B610-14.
      26. Dock Bumpers: B610-14F.
      27. Dock Bumpers: VB420-11F.
      28. Dock Bumpers: VB420-11 steel faced
      29. Spray foam insulated deck.
      30. Galvanized finish (deck, lip and subframe only)
      31. High lip crown
      32. Pit Conversion: 24 inch (610 mm) deep.
      33. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.
    1. Basis of Design: HLR series Dock Leveler as manufactured by Serco. Hinged lip, hydraulic platform, lip extension and retraction. Supplied assembled with platform, lip, power unit, motor, pump, valves, and grease fittings. Ready to install in pre-formed concrete pit.
       1. Standards Compliance: Conforms to ANSI MH14.1-1987.
       2. Platform: High tensile steel tread-plate over steel beams welded to front header.
          1. Construction: CIR 30,000 to 35,000 lbs (13,607 to 15,876 kg): L-beam.
          2. Construction: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): Split box beam.
          3. Deck: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 1/4 inch (6 mm) thick.
          4. Deck: CIR 50,000 lbs (22,680 kg): 3/8 inch (10 mm) thick.
       3. Lip: 16 inch (406 mm) high tensile steel tread-plate with beveled leading edge.
          1. Thickness: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 5/8 inch (16 mm).
          2. Thickness: CIR 50,000 lbs (22,680 kg): 3/4 inch (19 mm).
          3. Lip Taper: 7 ft (2.13 m) to 6 ft 6 inches (2.01 m) at leading edge.
          4. Lip Taper: 7 ft (2.13 m) to 6 ft (1.83 m) at leading edge.
       4. Lip Hinge Tubes: Full width structural front header and heavy wall tubing.
          1. Wall: CIR 30,000 to 35,000 lbs (13,607 to 15.875 kg): 5/16 inch (406 mm)
          2. Wall: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1/2 inch (12 mm).
          3. Gussets on Hinge Tubes: CIR 35,000, 45,000, and 50,000 Ibs (15,876, 20,412, and 22,680 kg) capacity units.
          4. Hinge Shaft: Sold steel.

CIR 30,000 to 35,000 lbs (13,608 to 15.875 kg): 1 inch (25 mm)

CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1-1/4 inch (31 mm)

* + - 1. Lip Extension: HYDRA MAX lip assist mechanism. Double acting cylinder provides smooth lip activation in both directions.
      2. Rear Welded Structural Subframe and Hinge: 4 vertical angle members connecting 2 horizontal members. Upper Rear Angle: Longitudinal support for gussets and deck Hinge: Four 1/2 inch (13 mm) thick lugs. Allows 4 inch (100 mm) side to side deck twist.
      3. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
      4. Power Unit: Electric hydraulic pump and valve assembly. Mounted to unit subframe elevated off pit floor. Pre-wired to integral junction box. Remote mount required with shallow pits.
         1. Motor : 1 hp, NEMA Standard TENV/56C frame. RPM 3450
         2. Motor Voltage: 120/208/240V single phase. Standard.
      5. Hydraulic Fluid. Viscosity of 15 cSt at 100 degrees F (40 degrees C).
      6. Cylinder Bores: Main: 3-1/2 inch (89 mm). Lip: 2-1/2 inch (63 mm).
      7. Control Panel: Built in motor overload protection.
         1. Non-metallic, non-interlock capable, single push-button. Standard.
         2. Steel NEMA 12. Interlock capable, single push-button.
      8. Clean Frame: Allows access for easy pit clean out and routine maintenance.
      9. "Nite-lock": Prevents unauthorized entry beneath locked overhead door.
      10. Structural Center Beam Deck Support: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 5 inch (127 mm) structural channel. Reinforces leveler for 3-wheel lift truck traffic.
      11. Full operating range Toe Guard Protection: On sides of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
      12. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, and lockout capable. Supports lip and leveler during maintenance and pit cleaning.
      13. Below-dock Control, Endloading: Push-button control extends lip beyond lip supports.
      14. Out of level Compensation: Levelers compensate for canted truck beds up to 4 inches. Rear of deck remains flush with pit.
      15. Operation: Dock Leveler to be hydraulic controlled. Platform and lip operated by independent hydraulic cylinders controlled by a remote push-button station.
          1. Pressing Raise Button: Platform raises. Hinged lip extends.
          2. Releasing Raise button: Platform descends until lip is supported by truck bed and floats with truck movement.
          3. Restore Dock Leveler: Press "RAISE" button. Lip retracts as platform raises. If truck departs when lip is extended, leveler descends under hydraulic control and automatically restores to dock level support position.
      16. Below-dock level operation allows for below-dock end loading with pushbutton control.
          1. Working Range: Above and Below-Dock: 12 inch (305 mm).
      17. The lip extends 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
      18. Concrete Pit Depth for 6 and 8 ft (1.83 and 2.44 m) Long Units: 20 inches (508 mm)
      19. Concrete Pit Depth for 10 ft (3.05 and 3.66 m) long Units: 24 inches (610 mm)

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 30,000 lbs (13,607 kg).
      4. Capacity: CIR 35,000 lbs (15,875 kg).
      5. Capacity: CIR 40,000 lbs (18,143 kg).
      6. Capacity: CIR 45,000 lbs (20,411 kg).
      7. Capacity: CIR 50,000 lbs (22,680 kg).
      8. Width: 6 ft (1,829 mm).
      9. Width: 6.5 ft (1,981 mm).
      10. Width: 7 ft (2,134 mm).
      11. Length: 6 ft (1,829 mm).
      12. Length: 8 ft (2,438 mm).
      13. Length: 10 ft (3,048 mm).
      14. Lip Length: 16 inch (406 mm). Standard.
      15. Lip Length: 18 inch (457 mm).
      16. Lip Length: 20 inches (508 mm).
      17. Lip Taper: \_\_\_\_\_\_ (specify)
      18. Dock-Guard barrier lip (40k-50k lbs only)
      19. Weather Seal: Factory installed brush.
      20. Weather Seal: Factory installed neoprene
      21. Weather Seal: ENERGY GUARD perimeter system
      22. Dock Bumpers: B410-14.
      23. Dock Bumpers: B410-14F. Standard.
      24. Dock Bumpers: B610-14.
      25. Dock Bumpers: B610-14F.
      26. Dock Bumpers: VB420-11F.
      27. Dock Bumpers: VB420-11 steel faced.
      28. Spray foam insulated deck.
      29. Galvanized finish (deck, lip and subframe only)
      30. High lip crown
      31. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.
    1. Basis of Design: LL Level Lift Dock Leveler as manufactured by Serco. Ground level access from dock height. Lip Extensions: 13 inches (330 mm) beyond face of 4 inch (102 mm) bumpers. Range: Ground to 59 inches (1500 mm). Ships assembled; platform, lip, power unit, motor, pump, valves, and grease fittings for installation in pre-formed concrete pit.
       1. Standards Compliance: Conforms to ANSI MH14.1-1987.
       2. Platform: 3/8 inch (9.5 mm) thick high tensile steel tread-plate over steel beams welded to front header.
       3. Lip Assembly: High tensile steel tread-plate. 3/4 inch (19 mm) thick.
       4. Hinge Spools: 2-3/8 inch OD x 1/2 inch (13 mm) wall.
       5. Scissor Legs: High tensile steel plate.
       6. Motors: NEMA Standard TENV/56C frame. Built in motor overload protection.
          1. Leveler Motor: 1 hp. Lift Motor: 7.5 hp.
          2. Motor Voltage: 208/240V/480V and 575V three phase.
       7. Hydraulic Leveler System: 1 hp. Platform and lip cylinders.
       8. Hydraulic Lift System: 7.5 hp. Cylinders: Two lift, two mode-change, and two lock pins.
       9. Safety Equipment: Velocity fuse valves on leveler platform cylinder and both lift cylinders prevent free-fall if hydraulics fail. Inside and outside LED communication lights. Full range toe guards. Maintenance support and scissor safety stops. Warning strobe if lift is not at dock level. Audible alarm if lift is below dock level for 10 minutes.
       10. Control Panel: NEMA 12, UL approved. Motor starter, thermal overload, control circuit breakers with reset capability. Leveler and Lift Functions: Solid state programmable controller with real-time diagnostics. Control buttons: Lip extend, Raise, and Stop. Remote NEMA 4X hand control with control panel for lift operation. For remote mount.
           1. Plug-and-Play connections to panel for raising unit during installation.
       11. System Stop Button: Stops leveler lift when depressed at any time. Button does not have to be held to maintain leveler a "Stop" position.
       12. Quick Cycle Lip Extend: "Lip Extend" button. It is not necessary to fully raise leveler before extending lip onto truck bed.
       13. Out of Level Compensation: Levelers compensate for canted truck beds up to 4 inches. Rear of deck remains flush with pit.
       14. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
       15. Below-Dock Control, End Loading: Push-button extends lip beyond lip supports to facilitate below-dock end loading.
       16. Operation: Leveler and lift are operated by independent hydraulic cylinders controlled by a remote push button station.
           1. Leveler Mode: Press leveler mode push button and press Raise button.

The leveler raises and the lip extends hydraulically.

* + - * 1. Release Button: Leveler gravity descends to truck bed and floats with truck.
        2. Lip Retraction: With truck in position by pressing Raise button and restoring lip.
        3. Lip Extend Button: Extend lip at any point in leveler cycle.
        4. Stop Button: Stops leveler immediately when necessary. Pulling out the button allows leveler to operate again.
        5. Below Dock Control: Push-button function allowing below dock end loading.
        6. Operate in Lift Mode: Press Lift Mode Push Button.

Push Raise or Lower button to position platform at desired height.

Lip Extend Button allows lip to be extended and placed on a truck when in lift mode. Lift can operate from ground level to 59 inches (1499 mm) above ground regardless of dock height.

* + - 1. Dock Bumpers: VB420-11 (4 x 20 x 11 inch (102 x 508 x 279 mm)
      2. Weather Seal: Side and rear.
      3. Protective roller curtain on front.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray over primer.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 12,000 lbs (5443 kg). 8 ft (2.44 m) units
      4. Capacity: CIR 20,000 lbs (9072 kg). 10 and 12 ft (3.05 and 3.65 m) units.
      5. Capacity: CIR 50,000 lbs (22,680 kg).
      6. Width: 6 ft (1,829 mm).
      7. Width: 6.5 ft (1,981 mm).
      8. Width: 7 ft (2,134 mm).
      9. Length: 8 ft (2,438 mm).
      10. Length: 10 ft (3,048 mm).
      11. Length: 12 ft (3658 mm).
      12. Lip Length: 18 inch (457 mm). Standard.
      13. Lip Length: 20 inches (508 mm).
      14. Biometric switch thumb reader.
      15. Internal lift powerpack with flood switch.
      16. NEMA 4 control panel.
      17. Galvanized curb steel and embeds.
    1. Basis of Design: VERSADOCK series dock leveler as manufactured by Serco. Hinged lip, hydraulic platform, lip extension and retraction. Supplied assembled with platform, lip, power unit, motor, pump, valves, and grease fittings. Ready to install in pre-formed concrete pit.
       1. Standards Compliance: Conforms to ANSI MH14.1-1987 .
       2. Platform: 3/8 inch (10 mm) high tensile steel tread plate over I-beams fully welded to front header. Structural Center Deck Support: Reinforced for 3-wheel lift truck traffic.
       3. Lip: CIR 60,000 lbs (27215 kg). 3/4 inch (19 mm) thick high tensile steel tread plate. Chamfered leading edge. Lip Hinge Tubes: Full width structural front header and heavy wall tubing. 3/4 inch (19 mm) thick
       4. Lip CIR 80,000 lbs (36287 kg).1 inch (25 mm) thick high tensile steel tread plate. Chamfered leading edge. Lip Hinge Tubes: Full width structural front header and heavy wall tubing. 1 inch (25 mm) thick
       5. Front Hinge Shaft: 1-1/4 inch (231 mm) solid steel.
       6. Welded Rear Structural Subframe and Hinge: 7 vertically supported rear hinges.
       7. Power Unit: Electric hydraulic pump and valve assembly. Mounted to unit subframe elevated off pit floor and pre-wired to integral junction box. Can be remote mounted.
          1. Motor : 1 hp, NEMA Standard TENV/56C frame. RPM: 3450
          2. Motor Voltage: 120/208/240V single phase. Standard.
       8. Hydraulic Fluid. Viscosity of15 cSt at 100 degrees F (40 degrees C).
       9. Cylinder Bores: Main: 4 inch (12 mm). Lip: 2-1/2 inch (63 mm).
       10. Control Panel: Listed. Solid state, real time diagnostics, programmable logic controller, industrial push-buttons, integral LED visual safety warning system, and printed operational instructions. Remote mounting and electrical connection by others.
           1. Size (WxHxD): 9 x 20 x 8 inch (229 x 508 x 203 mm).
       11. "Nite-lock": Prevents unauthorized entry beneath locked overhead door.
       12. Clean Frame: Allows access for easy pit clean out and routine maintenance.
       13. Full operating range Toe Guard Protection: On sides of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
       14. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, and lockout capable. Supports lip and leveler during maintenance and pit cleaning.
       15. Quick Cycle Lip Extend Button: Extends lip before leveler is fully raised into position.
       16. Below-Dock Control, Endloading: Push-button control. Extends lip beyond lip supports to handle end loads.
       17. Out of Level Compensation: Rigid deck with floating rear hinge.
       18. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
       19. Operation: Hydraulic controlled dock leveler. Platform and lip operated by independent hydraulic cylinders controlled by a remote push-button station.
           1. Pressing Raise Button: Platform raises. Hinged lip extends.
           2. Release Raise Button: Platform gravity descends until lip is supported by truck bed. Bumper extends until contact with trailer aft end. Leveler floats with truck movement.
           3. Restore Dock Leveler: Press Raise button or when truck departs, leveler descends under hydraulic control and restores to cross traffic position.
           4. Lip Extend Button: Extends lip at any point in leveler cycle.
           5. Pressing Mushroom-Style STOP Button: Stops leveler immediately when necessary. Pulling Out STOP Button: Allows leveler to operate again.
       20. Pre-Formed Concrete Pit (WxD). 109 x 24 inches (2769 x 610 mm).
       21. Leveler Width: 9 ft (2.75 m)
       22. Above Dock Range: 12 inches (300 mm)

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 60,000 lbs (27215 kg)
      4. Capacity: CIR 80,000 lbs (36287 mm)
      5. Length: 8 ft (2,438 mm). Below Dock Range: 12 inch (300 mm).
         1. Front Pit Depth: 26 inches (662 mm).
      6. Length: 10 ft (3,048 mm). Below Dock Range: 15 inch (381 mm).
         1. Front Pit Depth: 29 inches (737 mm).
      7. Length: 12 ft (3658 mm). Below Dock Range: 18 inch (457 mm).
         1. Front Pit Depth: 32 inches (82 mm).
      8. Lip Length: 18 inch (457 mm). Standard.
      9. Lip Length: 20 inches (508 mm).
      10. Lip taper: \_\_\_\_\_\_ (specify)
      11. Dock-Guard barrier lip.
      12. Pit steel.
      13. Weather Seal: Factory installed brush.
      14. Weather Seal: ENERGY GUARD perimeter system
      15. Galvanized finish, deck, lip and subframe.
      16. High lip crown

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. MECHANICAL DOCK LEVELERS
     1. Basis of Design: WS Series mechanical dock leveler as manufactured by Serco. Supplied assembled with platform, hinged lip extension spring, and counterbalance mechanism, and grease fittings. Ready for placement into pre-formed concrete pit.
        1. Standards Compliance: Conforms to ANSI MH14.1-1987.
        2. Platform: High tensile steel tread plate 1/4 inch (6 mm) thick supported by steel split box beam construction. Structural Members: Fully welded to front header.
        3. Lip: High tensile steel tread plate 5/8 inch (16 mm) thick. Beveled leading edge.
        4. Lip Hinge: Full width structural front header tubing with 1/2 inch (13 mm) wall.
           1. Gussets on Hinge Tubes: CIR 45,000 lbs (20412 Kg) capacity.
           2. Lip hinge shaft: 1-1/4 inch (31 mm) solid steel.
        5. Lip Extension: HYDRA CAM lip assist mechanism. Provides gentle lip activation and reduced walk-down loads.
        6. Rear Structural Welded Subframe and Hinge: Four structural angle vertical members connecting two horizontal members. Upper rear angle: Has longitudinal support gussets and additional deck supports.
           1. Hinge: Four 1/2 inch (13 mm) thick lugs allowing 4 inch (100 mm) of side to side deck twist.
        7. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
        8. Counterbalance: Oil-tempered chromium silicon steel extension spring with single adjustment point for high strength, durability, and easy walk-down.
        9. Clean Frame: Allows access for easy pit clean out and routine maintenance.
        10. "Nite-Lock": Prevents unauthorized entry beneath locked overhead door is standard.
        11. Structural Center Deck Support: 5 inch (127 mm) structural channel reinforcing leveler for 3 wheel lift truck traffic.
        12. Toe Guard Protection: Working range toe guard protection for sides of leveler. Yellow OSHA markings per IAW ANSI Z535.1 on sides of dock leveler.
        13. Structural Safety Legs: Emergency support should truck depart with load on leveler platform. Incorporates cam mechanism to limit interference from truck float.
        14. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, lockout capable, maintenance strut and lip support latch. Supports lip and leveler during maintenance and pit cleaning.
        15. Below-Dock Control Endloading: Front mounted pull-chain facilitates below-dock endloading.
        16. Out of Level Compensation: Compensates for canted truck beds up to 4 inches (100 mm). Rear edge remains flush with pit to eliminate pinch points.
        17. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
        18. Operation: Pull release ring at rear of ramp. Unit raises and lip extends. No manual lifting required. extension springs power unit with single adjustment point. Walk ramp down to truck bed. Posi-Trac holds unit in position. Unit floats with truck movement. After loading/unloading is complete, pull and hold release chain until lip clears truck bed. As leveler raises, lip descends in smooth, controlled manner. In stored position, ramp is supported by lip keepers.
            1. Working Range: 12 inches (305 mm) above and below dock for 6, 8, and 10 ft (1.83, 2.44, 3.05 m) long units.
            2. Lip Extension: 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
        19. Pre-Formed Concrete Pit: per certified Serco pit detail drawings.
            1. Pit Depth: 20 inches (508 mm). Leveler Length: 6, and 8 ft (1.83 and 2.44 m)
            2. Pit Depth: 24 inches (610 mm). Leveler Length: 10 ft (3.05 m)
        20. Bumpers: Two model B410-14F (4 x 14 x 10 inch) (100 x 356 x 254 mm) heavy-duty.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 40,000 lbs (18,143 kg).
      4. Capacity: CIR 45,000 lbs (20,411 kg).
      5. Width: 6 ft (1,829 mm).
      6. Width: 6.5 ft (1,981 mm).
      7. Width: 7 ft (2,134 mm).
      8. Length: 6 ft (1,829 mm).
      9. Length: 8 ft (2,438 mm).
      10. Length: 10 ft (3,048 mm).
      11. Lip: 16 inch (406 mm).
      12. Lip: 18 inch lip (457 mm).
      13. Lip: 20 inch lip (508 mm).
      14. Lip Taper: 7 ft (2.13 m) wide lip tapers to 6 ft 6 inch (2.01 m) at leading edge.
      15. Lip Taper: 7 ft (2.13 m) wide lip tapers to 6 ft (1.83 m) at leading edge.
      16. Weather Seal: Factory installed brush.
      17. Weather Seal: Factory installed neoprene.
      18. Weather Seal: ENERGY GUARD perimeter system.
      19. Dock Bumpers: B410-14F; standard.
      20. Dock Bumpers: B410-14.
      21. Dock Bumpers: B610-11F.
      22. Dock Bumpers: B610-14F.
      23. Dock Bumpers: VB420-11F.
      24. Dock Bumpers: VB420-11 Steel face.
      25. Pit conversion: 24 inch (610 mm).
      26. Spray foam insulated deck.
      27. Galvanized finish. Deck, lip and subframe only.
      28. Full operating range toe guards.
      29. High lip crown.
      30. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.
    1. Basis of Design: WL Series dock leveler as manufactured by Serco. Supplied assembled with platform, hinged lip, extension spring and counterbalance mechanism, and grease fittings. Ready for placement into pre-formed concrete pit.
       1. Standards compliance: ANSI/MH14.1-1987.
       2. Platform: High tensile steel tread plate 1/4 inch (6 mm) thick supported by "L" beam construction. Structural Members: Fully welded to front header.
       3. Lip: High tensile steel tread plate, 5/8 inch (16 mm) thick with beveled leading edge.
       4. Lip Hinge: Full width structural front header tubing with 5/16 inch (8 mm) wall.
          1. Gussets on Hinge tubes: CIR 35,000 lbs (15876 kg) capacity.
          2. Lip hinge shaft: 1 inch (25 mm) solid steel.
       5. Lip Extension: HYDRA CAM lip assist mechanism. Provides gentle lip activation and reduced walk-down loads.
       6. Rear Structural Welded Subframe and Hinge: Four structural angle vertical members connecting two horizontal members. Upper rear angle: Has longitudinal support gussets and additional deck supports. Hinge: Four 1/2 inch (13 mm) thick lugs allowing 4 inch (100 mm) of side to side deck twist.
       7. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
       8. Counterbalance: Oil-tempered chromium silicon steel extension spring with single adjustment point for high strength, durability, and easy walk-down.
       9. Clean Frame: Allows access for easy pit clean out and routine maintenance.
       10. "Nite-Lock": Prevents unauthorized entry beneath locked overhead door is standard.
       11. Structural Center Deck Support: 5 inch (127 mm) structural channel reinforcing leveler for 3 wheel lift truck traffic.
       12. Toe Guard Protection: Working range toe guard protection for sides of leveler. Yellow OSHA markings per IAW ANSI Z535.1 on sides of dock leveler.
       13. Structural Safety Legs: Emergency support should truck depart with load on leveler platform. Incorporates cam mechanism to limit interference from truck float.
       14. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, lockout capable, maintenance strut and lip support latch. Supports lip and leveler during maintenance and pit cleaning.
       15. Below-Dock Control Endloading: Front mounted pull-chain facilitates below-dock endloading.
       16. Out of Level Compensation: Compensates for canted truck beds up to 4 inches (100 mm). Rear edge remains flush with pit to eliminate pinch points.
       17. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
       18. Operation: Pull release ring at rear of ramp. Unit raises and lip extends. No manual lifting required. extension springs power unit with single adjustment point. Walk ramp down to truck bed. Posi-Trac holds unit in position. Unit floats with truck movement. After loading/unloading is complete, pull and hold release chain until lip clears truck bed. As leveler raises, lip descends in smooth, controlled manner. In stored position, ramp is supported by lip keepers.
           1. Working Range: 12 inches (305 mm) above and below dock for 6, 8, and 10 ft (1.83, 2.44, 3.05 m) long units.
           2. Lip Extension: 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
       19. Pre-Formed Concrete Pit: per certified Serco pit detail drawings.
           1. Pit Depth: 20 inches (508 mm). Leveler Length: 6, and 8 ft (1.83 and 2.44 m)
           2. Pit Depth: 24 inches (610 mm). Leveler Length: 10 ft (3.05 m)
       20. Bumpers: Two model B410-14F (4 x 14 x 10 inch) (100 x 356 x 254 mm) heavy-duty.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 30,000 lbs (kg).
      4. Capacity: CIR 35,000 lbs (kg).
      5. Width: 6 ft (1,829 mm).
      6. Width: 6.5 ft (1,981 mm).
      7. Width: 7 ft (2,134 mm).
      8. Length: 6 ft (1,829 mm).
      9. Length: 8 ft (2,438 mm).
      10. Length: 10 ft (3,048 mm).
      11. Lip: 16 inch (406 mm).
      12. Lip: 18 inch lip (457 mm).
      13. Lip: 20 inch lip (508 mm).
      14. Lip Taper: 7 ft (2.13 m) wide lip tapers to 6 ft 6 inch (2.01 m) at leading edge.
      15. Lip Taper: 7 ft (2.13 m) wide lip tapers to 6 ft (1.83 m) at leading edge.
      16. Weather Seal: Factory installed brush.
      17. Weather Seal: Factory installed neoprene.
      18. Weather Seal: ENERGY GUARD perimeter system.
      19. Dock Bumpers: B410-14F; standard.
      20. Dock Bumpers: B410-14.
      21. Dock Bumpers: B610-11F.
      22. Dock Bumpers: B610-14F.
      23. Dock Bumpers: VB420-11F.
      24. Dock Bumpers: VB420-11 Steel face.
      25. Pit conversion: 24 inch (610 mm).
      26. Spray foam insulated deck.
      27. Galvanized finish. Deck, lip and subframe only.
      28. Full operating range toe guards.
      29. High lip crown.
      30. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. EDGE-OF-DOCK LEVELERS
     1. Basis of Design: SA series air powered edge of dock leveler as manufactured by Serco. Air-powered platform and automatic lip extension supplied assembled with platform, lip, and power unit. Ready to install in pre-formed concrete pit.
        1. Standards Compliance: ANSI MH14.1-1987.
        2. Deck and Lip: 3/8 to 1/2 inch (10 mm) thick high tensile steel tread plate.
        3. Lip Leading Edge: Beveled 11 degrees.
        4. Front Lip Hinge: Self-cleaning heavy-duty lugs to ramp.
        5. Ramp Assembly: Projects 13 inches (330 mm) from dock in stored position.
        6. Lifting System: High volume, low pressure air bag. Heavy-duty PVC coated vinyl material RF welded. Capable of operating if punctured.
        7. Operating Temperature: Minus 65 to 180 degrees F (Minus 53 to 82 degrees C).
        8. Electrical Fan, Filter, and Motor: 12 amp fan with two-stage single speed, self-cleaning filter, UL approved motor. Power: 120 volt single-phase.
        9. Control Panel: NEMA 4 single button.
        10. Operation: Constant contact push button
        11. Bumpers: Two 4 x10 x12 inch (101 x 254 x 305 mm) tire laminated bumpers on steel block assemblies. Bumper Projections: 16, 17, or 18 inches (406, 432, or 457 mm).

\*\* NOTE TO SPECIFIER \*\* Due to the limited length of EOD levelers, its structure is subjected to greater dynamic load than with longer levelers. Capacity selection is based on ideal operating conditions (i.e., maximum gross load traveling at 3 mph on 10 percent grade or less); if the application exceeds this condition a higher capacity leveler must be selected.

* + - 1. Working Range: Operating range: 5 inches (127 mm) above and below dock level.
      2. Effective Working Range: 3 inch (76.2 mm) above and below dock level.
      3. Weld unit to 8 inch (203 mm) channel secured in concrete as recommended.
      4. Platform Length: 27 inches (686 mm)

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Ramp Width: 66 inches (1676 mm).
      4. Ramp Width: 72 inches (1829 mm).
      5. Ramp Width: 78 inches (1981 mm).
      6. Ramp Width: 84 inches (2134 mm).
      7. Lip Length: 15 inches (381 mm). Standard.
         1. Bumper Projection: 16 inches (406 mm). Crown: 5 degrees.
         2. Bumper Projection: 16 inches (406 mm). Crown: 8 degrees.
         3. Steel faced.
      8. Lip Length: 17 inches (432 mm). For refrigerated trailers.
         1. Bumper Projection: 16 inches (406 mm). Crown: 8 degrees.
         2. Bumper Projection: 17 inches (406 mm). Crown: 5 degrees.
         3. Bumper Projection: 18 inches (406 mm). Crown: 2.5 degrees.
         4. Steel faced.
      9. Capacity: CIR 20,000 lbs (9091 kg)
         1. Width: 66 inches (1676 mm)
         2. Width: 72 inches (1829 mm)
      10. Capacity: CIR 30,000 lbs (13,636 mm)
          1. Width: 66 inches (1676 mm)
          2. Width: 72 inches (1829 mm)
          3. Width: 78 inches (1981 mm)
          4. Width: 84 inches (2134 mm)
      11. Post office model with 2 inch (51 mm) cart guard
      12. Tapered Lip (tapered on each side).
      13. Recessed pit model.
    1. Basis of Design: SH series hydraulic edge of dock leveler as manufactured by Serco. Platform with automatic lip extension supplied assembled with platform, lip, and power unit. Ships assembled ready to install in pre-formed concrete pit.
       1. Standards Compliance: ANSI MH14.1-1987.
       2. Deck and Lip: 3/8 to 1/2 inch (9.5 to 13 mm) high tensile steel tread plate.
       3. Lip Leading Edge: Beveled 11 degrees.
       4. Front Lip Hinge: Self-cleaning heavy-duty lugs welded to ramp.
       5. Ramp Assembly: Projects 13 inch (330 mm) from dock in stored position.
       6. Hydraulics: 2 inch (51 mm) bore single acting cylinder.
       7. Electric Motor: 1 hp, NEMA standard TENV/56C frame.
          1. Motor Voltages: 120/208/240 volt single phase.
          2. Motor Voltages: 208/240/480 and 575 volt three phase.
          3. Built in motor overload protection.
       8. Bumpers: Two 4 x10 x12 inch (101 x 254 x 305 mm) tire laminated bumpers on steel block assemblies. Bumper Projections: 16, 17, or 18 inches (406, 432, or 457 mm).
       9. Operating Range: 5 inch (127 mm) above and below dock level.
       10. Effective Working Range: 3 inch (76 mm) above and below dock level.
       11. Operation: Constant contact push button.
       12. Weld unit to 8 inch (203 mm) channel secured in concrete as recommended.
       13. Unit to be welded to an 8 inch (203 mm) channel embedded in concrete and secured with anchoring hooks as recommended.
       14. Platform Length: 27 inches (686 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ramp Width: 66 inches (1676 mm).
      2. Ramp Width: 72 inches (1829 mm).
      3. Ramp Width: 78 inches (1981 mm).
      4. Ramp Width: 84 inches (2134 mm).
      5. Lip Length: 15 inches (381 mm). Standard.
         1. Bumper Projection: 16 inches (406 mm). Crown: 5 degrees.
         2. Bumper Projection: 16 inches (406 mm). Crown: 8 degrees.
         3. Steel faced.
      6. Lip Length: 17 inches (432 mm). For refrigerated trailers.
         1. Bumper Projection: 16 inches (406 mm). Crown: 8 degrees.
         2. Bumper Projection: 17 inches (406 mm). Crown: 5 degrees.
         3. Bumper Projection: 18 inches (406 mm). Crown: 2.5 degrees.
         4. Steel faced.
      7. Capacity: CIR 20,000 lbs (9091 kg).
         1. Width: 66 inches (1676 mm).
         2. Width: 72 inches (1829 mm).
      8. Capacity: CIR 30,000 lbs (13,636 mm).
         1. Width: 66 inches (1676 mm)
         2. Width: 72 inches (1829 mm).
         3. Width: 78 inches (1981 mm).
         4. Width: 84 inches (2134 mm).
      9. Post office model with 2 inch (51 mm) cart guard.
      10. Tapered Lip (tapered on each side).
      11. Recessed pit model.
    1. Basis of Design: SM series mechanical edge-of-dock leveler as manufactured by Serco. Unit ships assembled ready to install in pre-formed concrete pit.
       1. Standards Compliance: ANSI MH14.1-1987.
       2. Deck and Lip: 3/8 to 1/2 inch (9.5 to 13 mm) high tensile steel tread plate.
       3. Front Lip Hinge: Self-cleaning heavy-duty lugs welded to ramp assembly.
       4. Ramp Assembly: Projects 13 inch (330 mm) from dock in stored position .
       5. Dual extension spring lift. Handle: 1-5/16 inches (33 mm) diameter steel pipe.
       6. Bumpers: Two, 4 x 10 x 12 inch (101 x 254 x 305 mm) tire laminated bumpers on steel block assemblies. Bumper Projections: 16, 17 and 18 (406, 432 and 457 mm).
       7. Operating Range: 5 inch (127 mm) above and below dock level.
       8. Effective Working Range: 3 inch (76 mm) above and below dock level.
       9. Operation: Pulling handle raises ramp into position. Pushing handle forward extends lip into trailer. Store unit by again pulling handle to remove lip from trailer.
       10. Weld unit to 8 inch (203 mm) channel secured in concrete as recommended.
       11. Platform Length: 27 inches (686 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ramp Width: 66 inches (1676 mm).
      2. Ramp Width: 72 inches (1829 mm).
      3. Ramp Width: 78 inches (1981 mm).
      4. Ramp Width: 84 inches (2134 mm).
      5. Lip Length: 15 inches (381 mm). Standard.
         1. Steel Faced Bumper Projection: 16 inches (406 mm). Crown: 5 degrees.
         2. Bumper Projection: 16 inches (406 mm). Crown: 8 degrees.
         3. Steel faced.
      6. Lip Length: 17 inches (432 mm). For refrigerated trailers.
         1. Bumper Projection: 16 inches (406 mm). Crown: 8 degrees.
         2. Bumper Projection: 17 inches (406 mm). Crown: 5 degrees.
         3. Bumper Projection: 18 inches (406 mm). Crown: 2.5 degrees.
         4. Steel faced.
      7. Capacity: CIR 20,000 lbs (9091 kg).
         1. Width: 66 inches (1676 mm).
         2. Width: 72 inches (1829 mm).
      8. Capacity: CIR 30,000 lbs (13,636 mm).
         1. Width: 66 inches (1676 mm).
         2. Width: 72 inches (1829 mm).
         3. Width: 78 inches (1981 mm).
         4. Width: 84 inches (2134 mm).
      9. Post office model with 2 inch (51 mm) cart guard.
      10. Tapered Lip (tapered on each side).
      11. Recessed pit model.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. POWER ASSISTED DOCK LEVELER
     1. Basis of Design: PAL series dock leveler as manufactured by Serco. Power assisted platform and automatic mechanical hinged lip extension/retraction. Supplied assembled with platform, lip, power unit, including motor, pump, valves, and grease fittings. Ready for installation in pre-formed concrete pit.
        1. Standards Compliance: Conforms to ANSI MH14.1-1987 performance requirements.
        2. Platform: High tensile steel tread-plate over steel beams welded to front header.
           1. Construction: CIR 30,000 to 35,000 lbs (13,607 to 15,876 kg): L-beam.
           2. Construction: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): Split box beam.
           3. Deck: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 1/4 inch (6 mm) thick
           4. Deck: CIR 50,000 lbs (22,680 kg): 3/8 inch (10 mm) thick
        3. Lip Assembly: 16 inch (406 mm) high tensile steel tread-plate. Beveled leading edge.
           1. Thickness: CIR 30,000 to 45, 000 lbs (13,608 to 20,412 kg): 5/8 inch (16 mm).
           2. Thickness: CIR 50,000 lbs (22,680 kg): 3/4 inch (19 mm).
           3. Lip Taper: 7 ft (2.13 m) to 6 ft 6 inches (2.01 m) at leading edge.
           4. Lip Taper: 7 ft (2.13 m) to 6 ft (1.83 m) at leading edge.
        4. Lip Hinge Tubes: Full width structural front header heavy wall tubing.
           1. Wall: CIR 30,000 to 35,000 lbs (13,607 to 15.875 kg): 5/16 inch (406 mm)
           2. Wall: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1/2 inch (12 mm).
           3. Gussets on Hinge Tubes: CIR 35,000, 45,000, and 50,000 Ibs (15,876, 20,412, and 22,680 kg) capacity units.
           4. Hinge Shaft: CIR 30,000 to 35,000 lbs (13,608 to 15.875 kg): 1 inch (25 mm) solid steel.
           5. Hinge Shaft: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 1-1/4 inch (31 mm) solid steel.
        5. Lip Extension: HYDRA CAM lip assist mechanism. Extends lip at top of raising cycle.
        6. Rear Welded Structural Subframe and Hinge: 4 vertical angle members connecting 2 horizontal members. Upper Rear Angle: Longitudinal support for gussets and deck supports. Hinge System: Four 1/2 inch (13 mm) thick lugs. Allows 4 inch (100 mm) side to side deck twist.
        7. SafeTFrame: Four, independently operated vertical leveling feet. Adjustment: 1-1/2 inches (37.5 mm). Prevents gap or bump at rear transition angle and curb angle.
        8. Power Unit: Electric hydraulic pump and valves assisting a spring counterbalance.
           1. Motor: Operates on 120/208/240V single phase and draws 5 Amps.
           2. Hydraulic Fluid: Viscosity: 15 cSt at 100 degrees F (40 degrees C).
           3. Cylinder: 1-1/2 inch (38 mm) diameter rod.
        9. Control Panel: Non-metallic, non-interlock capable, single push-button control panel or steel NEMA 12 interlock with mushroom style stop button.
        10. Clean Frame: Allows access for easy pit clean out and routine maintenance.
        11. Nite-lock: Prevents unauthorized entry beneath locked overhead door.
        12. Structural Center Beam Deck Support: CIR 40,000 to 50,000 lbs (18,144 to 22,680 kg): 5 inch (127 mm) structural channel. Reinforces leveler for 3-wheel lift truck traffic.
        13. Full operating range Toe Guard Protection: On sides of leveler. Yellow OSHA required markings per IAW ANSI Z535.1 on sides of dock leveler.
        14. Integral Maintenance Strut and Lip Support Latch: Permanently mounted, hinged, and lockout capable. Supports lip and leveler during maintenance and pit cleaning.
        15. Safety Legs: Reflex Anti-Stump-out with sensor roller riding along a reinforced cam surface. Provides free float motion providing a measure of free-fall protection in event of premature trailer separation.
        16. Below-dock Control Endloading: Push-button control and front mounted lanyard. It is not necessary to pull chain to service below-dock trailers if lip is fully extended.
        17. Out of level Compensation: For canted truck beds up to 4 inches. Rear of deck remains flush with pit.
        18. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
        19. Operation:
            1. Press Raise Button: Platform raises. Hinged lip extends.
            2. Release Raise button: Platform descends until lip is supported by truck bed and floats with truck movement.
            3. Restore Dock Leveler: Press Raise button and lip retracts as platform raises.
        20. Below-dock level operation allows below-dock end loading with pushbutton control.
            1. Working Range: 12 inch (305 mm) above and below-dock for 6, 8 and 10 ft (1.83, 2.44 m, and 3.05 m) long units.
            2. Working Range: 15 inch (381 mm) above-dock and 12 inch (305 mm) below-dock for 12 ft (3.66 m) long units. The lip extends 11 inches (279 mm) beyond face of a 4 inch (100 mm) bumper.
        21. Concrete Pit Depth: 20 inches (508 mm) for 6 and 8 ft (1.83 and 2.44 m) long units. Pit Depth: 24 inches (610 mm) for 10 and 12 ft (3.05 and 3.66 m) long units.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Color: Manufacturer's standard enamel gray.
      2. Color: As determined by Architect from Manufacturer's range.
      3. Capacity: CIR 30,000 lbs (13,607 kg).
      4. Capacity: CIR 35,000 lbs (15,875 kg).
      5. Capacity: CIR 40,000 lbs (18,143 kg).
      6. Capacity: CIR 45,000 lbs (20,411 kg).
      7. Capacity: CIR 50,000 lbs (22,680 kg).
      8. Width: 6 ft (1,829 mm).
      9. Width: 6.5 ft (1,981 mm).
      10. Width: 7 ft (2,134 mm).
      11. Length: 6 ft (1,829 mm).
      12. Length: 8 ft (2,438 mm).
      13. Length: 10 ft (3,048 mm).
      14. Lip Length: 16 inch (406 mm). Standard.
      15. Lip Length: 18 inch (457 mm).
      16. Lip Length: 20 inches (508 mm).
      17. Lip Taper: \_\_\_\_\_\_ (specify).
      18. Dock-Guard barrier lip (40k-50k lbs only).
      19. Weather Seal: Factory installed brush.
      20. Weather Seal: Factory installed neoprene.
      21. Weather Seal: ENERGY GUARD perimeter system.
      22. Dock Bumpers: B410-14.
      23. Dock Bumpers: B410-14F. Standard.
      24. Dock Bumpers: B610-11F.
      25. Dock Bumpers: B610-14F.
      26. Dock Bumpers: VB420-11F.
      27. Dock Bumpers: VB420-11 steel faced.
      28. Spray foam insulated deck.
      29. Galvanized finish (deck, lip and subframe only) 40K and above
      30. High lip crown.
      31. Pit Conversion: 24 inch (610 mm) deep.
      32. Box: Dock leveler enclosed in pre-formed steel box for pour-in-place construction. Six, welded curb angles and concrete anchors. Concrete in place.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. VERTICAL DOCK LEVELER
     1. Basis of Design: VSL Series vertical storing dock leveler as manufactured by Serco. Hydraulic operated platform and hinged lip extension and retraction. Rear subframe assembly, platform and lip assembly, electrical power-pack assembly including motor, pump, hydraulic cylinders, hoses, and valves. Ships partially assembled. Rear subframe assembly to be concrete embedded by others. Assemble at site by mounting platform to hinge channel assembly and installing hydraulic power unit. Control panel furnished with unit to be electrically interconnected by others.
        1. Standards Compliance Conforms to ANSI MH14.1-1987.
        2. Platform Assembly: High tensile steel tread plate over channel beams. Structural members fully welded to front header.
           1. CIR 40,000 and 45000 (18144 and 20412 kg).

Deck Thickness: 1/4 inch (6 mm) capacity.

* + - * 1. CIR 50,000 lbs (22680 kg). Deck Thickness: 3/4 (9.5 mm).
      1. Lip Assembly: 20 inch (508 mm) high tensile steel tread plate with beveled leading edge.
         1. CIR 40,000 and 45000 (508 kg). Lip Thickness: 5/8 inch (16 mm) capacity.
         2. CIR 50,000 lbs (22680 kg). Lip Thickness: 3/4 (19 mm).
         3. Lip Hinge: Full width structural front header and wall tubing with minimum of 1/2 inch (13 mm) wall thickness.

CIR 45,000 and 50,000 (18144 and 20412 kg):

Gussets on hinge tubes. Lip Hinge Shaft: 1-1/4 inch solid steel.

* + - 1. Rear Channel and Hinge: Include five 1 inch (25 mm) diameter rear hinge pins and wear resistant bushings. Rear channel assembly eliminates horizontal structural members enabling full access to pit floor for clean out and maintenance.

\*\* NOTE TO SPECIFIER \*\* Delete channel height options not required. Contact Manufacturer for other height/length combinations.

* + - * 1. Channel Height for 5 ft (1.52 m) leveler Length: 10 inches (254 mm)
        2. Channel Height for 6 ft (1.83 m) leveler Length: 12 inches (381 mm)
        3. Channel Height for 8 ft (2.44) leveler Length: 15 inches (254 mm)
      1. Power Unit: An electric/hydraulic motor pump and valve assembly.
         1. Motor: 1 HP NEMA Standard TENV/56C frame. RPM: 3450.
         2. Motor Voltages: 120/208/240V single phase. Standard.
         3. Motor Voltages: 208/240V/480V and 575V three phase.
      2. Hydraulic Fluid. Viscosity of15 cSt at 100 degrees F (40 degrees C).
      3. Cylinder Bores: Main: 3-3/4 inch (89 mm). Lip: 2-1/2 inch (63 mm).
      4. Control Panel: Solid state. Built-in motor overload protection. Solenoid valves and power pack. Programmable logic controller, real time diagnostics, industrial push-buttons, integral LED warning system and printed operating instructions. Supplied with standard wall mount bracket. Size (WxHxD): 9 x 20 x 8 inches (229 x 508 x 203 mm).
      5. Hydraulic Velocity Fuse Safety Stop System: Stops platform free fall if truck pulls out while load is on platform. Reusable and non-adjustable.
      6. Mushroom-style Stop Button: Stops leveler when depressed at any time. The button, a maintained contact type, activates a solenoid on leveler hydraulic system. Button does not have to be continuously held to maintain leveler in a stop position.
      7. Quick Cycle Lip Extend and Retract Buttons: Reduces cycle time by not having to fully raise leveler to extend or retract lip during endloading.
      8. Below-dock Control, Endloading: Push-button control retracts lip from any deck position including stored, to handle end loads.
      9. Out of Level Compensation: For canted truck beds up to 4 inches (102 mm). Rear of deck remains flush with pit.
      10. Float Compensation: Lets vertical carrier deflect when lip is in contact with truck bed.
      11. Hinged Bottom Pad: Attaches to leveler deck for added environmental control.
      12. Operation: Platform and lip operated by independent hydraulic cylinders controlled by a remote push-button station. Pull "Stop" button on control panel. Amber light means power is on. Press and hold "Lower" button to lower leveler onto truck bed. Above operating range, while motor is running, releasing the "Lower" button will stop leveler motion. Audible alarm sounds if leveler is stopped in the operating range. Pressing Stop button at any time stops movement. When leveler lowers to near working range, approximately 18 inches (457 mm) above dock level, motor stops and platform floats down to rest on truck bed and float with truck movement. Green light illuminates to indicate leveler has reached operating range. If truck departs when lip is extended, leveler descends under hydraulic control and lip falls to pendant position. Pressing the Lip Extend/Lip Retract button will extend or retract lip at any point in leveler cycle. Below-dock level operation allows below-dock endloading with push-button control. Restore leveler by pressing Raise button and holding until platform and lip are in their vertical storing positions. Press Stop button on control panel to remove electrical power from leveler (amber light off).
      13. Working Range: 6 inches (152 mm) above and below dock for 5 and 6 ft (1.52 to 1.83 m) units. 9 inches (229 mm) above and below-dock for 8 ft (2.44 m) units.
      14. Lip extends 15 inches (381 mm) beyond face of a 4 inch (102 mm) bumper.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Capacity: CIR 40,000 lbs (18,143 kg).
      2. Capacity: CIR 45,000 lbs (20,411 kg).
      3. Capacity: CIR 50,000 lbs (22,680 kg).
      4. Width: 6 ft (1,829 mm).
      5. Width: 7 ft (2,134 mm).
      6. Length: 5 ft (1,524 mm).
      7. Length: 6 ft (1,829 mm).
      8. Length: 8 ft (2,438 mm).
      9. Lip Taper: 7 ft (2.13 m) wide to 6 ft 6 inch (2.01 m) at leading edge. Standard.
      10. Lip Taper: 7 ft (2.13 m) wide to 6 ft (1.83 m) at leading edge.
      11. Lip Taper: \_\_\_\_\_\_\_\_.
      12. Bumpers: With riser brackets and load distributing back plate.
          1. VB420-11FF steel faced with riser brackets. Standard.
          2. VB620-11FF steel faced with riser brackets.
      13. Additional hose length over 20 ft (6.1 m) standard length for remote mount power unit (includes 3 hose assemblies). Survey and dock pictures for bumper design required.
      14. Maintenance pin locking handle.
      15. Lip keepers.
      16. Hot dip galvanized rear embed.
      17. Hot dip galvanized deck, lip and embed.
      18. Door opened/closed switches.
      19. Deck mount power unit.
      20. Control panel stanchion.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. LOADING DOCK LEVELER PERIMETER SEAL
     1. Basis of Design: Energy Guard as manufactured by Serco. Forms perimeter seal on sides and rear of dock levelers. Blocks debris, insects, and energy loss. Seals gaps between leveler and pit walls. Minimizes energy transfer in and out of facility. Perimeter Seal: Up to 9 inches (229 mm) above dock level during operation. Factory installed on dock leveler.
        1. Side Seal Construction: Chemical resistant, 22 oz. PVC coated, polyester reinforced composite fabric rated to minus 30 degrees F (-1 degrees C) with UV inhibitors and anti-mildew formulation and matte finish.
           1. Foam in Assemblies: Triangular cut, 1 lbs per cu ft (16 kg per cu m), open cell polyurethane foam.
           2. Reinforcing Aluminum Bars: 1/8 x 1 inch (3 x 25 mm) cut to length of side seals for maximum support. Seal Ends: Sewn closed to reduce moisture absorption.
        2. Rear Hinge Seal Construction: Durable, resilient, and chemical resistant PVC-coated 3 ply polyester fabric. Monofilament added to weft providing inherent memory.
        3. Nylon Brush Weather Seal: 1-3/4 inch (44 mm). 1,000 bristles per inch.
        4. Nylon Brush Weather Cup Seals: Fill chain openings. Plugs provided to fill miscellaneous holes in deck assembly.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required. Or basis of design options not required.

* 1. DOCK LIFTS

\*\* NOTE TO SPECIFIER \*\* Maximum platform size is 45 x 60 inches (1143 x mm).

* + 1. Basis of Design: Airbag Tilt and Lift Tables as manufactured by Serco
       1. Standards Compliance: ANSI MH29.1 and ANSI MH29.2 standards for scissors lifts.
       2. Over pressure relief valve.
       3. Single wire braided hydraulic hose x 10 ft (3048 mm) for air bags.
       4. Unit standard with hand lever control with 10 ft (3048 mm) of hose.
       5. Male/female quick disconnect for air supply.
       6. Maintenance strut.
       7. Two safety chains with shackles at each end for tilt.
       8. Motion stabilizer for tilt to control down only using an air cylinder.

\*\* NOTE TO SPECIFIER \*\* Delete air bag table type options not required.

* + - 1. Air Bag Lift Table.
         1. Vertical Travel: 24 inches (610 mm).

\*\* NOTE TO SPECIFIER \*\* Delete capacity options not required.

* + - * 1. Capacity: 2,000 lbs (907 kg). Airbag Quantity: 1.

Base Frame and Platform Size: 36 x 48 inches (914 x 1219 mm).

Base Frame: 36 x 48 inches (314 x 1219 mm). Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm).

Operating Pressure: 85 psi (586 kPa).

* + - * 1. Capacity: 4,000 lbs (1814 kg). Airbag Quantity: 1.

Base Frame and Platform Size: 42 x 48 inches (1067 x 1219 mm).

Base Frame: 42 x 48 inches (1067 x 1219 mm). Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm).

Operating Pressure: 85 psi (586 kPa).

* + - * 1. Capacity: 6,000 lbs (2722 kg). Airbag Quantity: 2.

Base Frame and Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 10 inches (254 mm). Raised: 34 inches (864 mm).

Operating Pressure: 95 psi (655 kPa).

* + - 1. Air Bag Tilt Table as manufactured by Serco.
         1. Tilt Angle: 35 degrees. Vertical Travel: 24 inches (610 mm).

Capacity: 2,000 lbs (907 kg). Airbag Quantity: 1.

Base Frame and Platform Size: 36 x 48 inches (914 x 1219 mm).

Base Frame and Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm).

Operating Pressure: 85 psi (586 kPa).

* + - * 1. Capacity: 4,000 lbs (1814 kg). Airbag Quantity: 1.

Base Frame and Platform Size: 42 x 48 inches (1067 x 1219 mm).

Base Frame: 42 x 48 inches (1067 x 1219 mm). Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm).

Operating Pressure: 85 psi (586 kPa).

* + - * 1. Capacity: 6,000 lbs (2722 kg). Airbag Quantity: 2.

Base Frame: 46 x 48 inches (1168 x 1219 mm). Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 8 inches (203 mm). Raised: 34 inches (864 mm).

Operating Pressure: 95 psi (655 kPa).

* + - 1. Air Bag Lift Tilt Table as manufactured by Serco.
         1. Tilt Angle: 35 degrees. Vertical Travel: 24 inches (610 mm).

Capacity: 2,000 lbs (907 kg). Airbag Quantity: 1.

Base Frame and Platform Size: 36 x 48 inches (914 x 1219 mm).

Base Frame: 36 x 48 inches (314 x 1219 mm). Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 15 inches (381 mm). Raised: 39 inches (991 mm).

Operating Pressure: 85 psi (586 kPa).

* + - * 1. Capacity: 4,000 lbs (1814 kg). Airbag Quantity: 1.

Base Frame and Platform Size: 42 x 48 inches (1067 x 1219 mm).

Base Frame: 42 x 48 inches (1067 x 1219 mm). Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 15 inches (381 mm). Raised: 39 inches (991 mm).

Operating Pressure: 85 psi (586 kPa).

* + - * 1. Capacity: 6,000 lbs (2722 kg). Airbag Quantity: 2.

Base Frame: 48 x 48 inches (1219 x 1219 mm). Platform Size: 48 x 48 inches (1219 x 1219 mm).

Height: Lowered: 17 inches (432 mm). Raised: 41 inches (864 mm).

Operating Pressure: 95 psi (655 kPa).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - * 1. Oversized platforms with straight sides: \_\_\_ x \_\_\_ inches (\_\_\_ x \_\_\_ mm).
        2. Manual foot valve.
        3. Hand control valve on pedestal stand.
        4. Accordion bellows, 4 Sides
    1. Basis of Design: SDL Series Hydraulic Surface Mounted Dock Lift as manufactured by Serco.
       1. Standards Compliance: ANSI MH29.1 safety requirements. UL approved panel.
       2. Construction: High tensile strength, structural tubing.
       3. Velocity Fuses: On lift cylinders. Stops free falling due to hydraulic failure
       4. Pre-wired NEMA-4X push button control panel.
       5. Split entry plates with lifting chains and entry ramp.
       6. Removable, mandrel formed tubing handrails.
       7. Maintenance strut.
       8. Removable lifting lugs.
       9. Upper travel limit switch.
       10. Oil sight gauge in hydraulic reservoir.
       11. Self-lubricating bushings.
       12. Standard 25 ft (7620 mm) hydraulic hose
       13. Low temperature oil.
       14. Warranty: Two-year parts, one-year labor limited warranty.
       15. Vertical Travel: 52 inches (1321 mm)
       16. Lowered Height: 7 inches (178 mm) unless specified otherwise.
       17. Horsepower: 3 unless specified otherwise.
       18. Raising and Lowering Speed Range: 8 to 12 ft per min (2438 to 3658 mm) per min

\*\* NOTE TO SPECIFIER \*\* Delete capacity, end load and platform options not required.

* + - 1. Capacity: 4,000 lbs (1814 kg).
         1. End Load: 2400 lbs (1089 kg). Side Load: 2,000 lbs (907 kg).

Platform: 48 x 84 inches (1219 x 2134 mm).

Platform: 60 x 84 inches (1524 x 2134 mm).

Platform: 72 x 84 inches (1829 x 2134 mm).

* + - 1. Capacity: 5,000 lbs (2268 kg) Horsepower: 3.
         1. End Load: 3000 lbs (1361 kg). Side Load: 2,500 lbs (1134 kg).

Platform: 48 x 84 inches (1219 x 2134 mm).

Platform: 60 x 84 inches (1524 x 2134 mm).

Platform: 72 x 84 inches (1829 x 2134 mm).

* + - 1. Capacity: 5,000 lbs (2268 kg) Horsepower: 3.
         1. End Load: 2500 lbs (1134kg). Side Load: 2,500 lbs (1134 kg).

Platform: 72 x 96 inches (1829 x 2438 mm).

Platform: 72 x 120 inches (1829 x 3048 mm).

* + - 1. Capacity: 6,000 lbs (2722 kg).
         1. End Load: 3600 lbs (1633 kg). Side Load: 3000 lbs (1361kg).

Platform: 48 x 84 inches (1219 x 2134 mm).

Platform: 60 x 84 inches (1524 x 2134 mm).

* + - * 1. End Load: 6000 lbs (1814 kg). Side Load: 6000 lbs (1814kg).

Platform: 72 x 144 inches (1829 x 3658 mm).

Lowered Height: 8 inches (203 mm).

Horsepower: 10 unless specified otherwise.

* + - 1. Capacity: 8,000 lbs (3629 kg).
         1. End Load: 4000 lbs (4 kg). Side Load: 4000 lbs (2722 kg)

Platform: 72 x 96 inches (1829 x 2438 mm)

Lowered Height: 8 inches (203 mm)

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - * 1. Portability.
        2. Electric toe guard.
        3. Aluminum bridge plates.
        4. Post office option package.
        5. Hot dipped galvanized.
        6. Spring-assisted bridge.
        7. In-motion warning beeper and flashing light.
        8. Roller curtain.
        9. Accordion bellow skirting.
        10. Mechanical pop-up stop.
        11. Biodegradable oil.
        12. Special sizes.
    1. Basis of Design: SDL Series Hydraulic Pit Mounted Dock Lift as manufactured by Serco.
       1. Standards Compliance: ANSI MH29.1. UL/CSA approved panel.
       2. Construction: High tensile strength, structural tubing construction
       3. Velocity Fuses: On dual lift cylinders. Stops free fall due to hydraulic failure
       4. Pre-wired NEMA-4X push button control panel.
       5. Split entry plates with lifting chains and entry ramp.
       6. Removable handrails.
       7. Maintenance strut.
       8. Removable lifting lugs.
       9. Upper travel limit switch.
       10. Oil sight gauge in hydraulic reservoir.
       11. Self-lubricating bushings.
       12. Standard 25 ft (7620 mm) hydraulic hose
       13. Low temperature oil.
       14. Two-year parts, one-year labor limited warranty.
       15. Vertical Travel: 60 inches (1524 mm)
       16. Lowered Height: 12 inches (305 mm) unless specified otherwise.
       17. Horsepower: 5 unless specified otherwise.
       18. Raising and Lowering Speed Range: 12 to 16 ft per min (3658 to 4877 mm) per min.

\*\* NOTE TO SPECIFIER \*\* Delete capacity and platform options not required.

* + - 1. Capacity: 4,000 lbs (1814 kg).
         1. End Load: 3000 lbs (1361 kg). Side Load: 2,000 lbs (907 kg).
         2. Platform: 48 x 96 inches (1219 x 2438 mm).
         3. Platform: 60 x 96 inches (1524 x 2438 mm).
         4. Platform: 72 x 108 inches (1829 x 2743 mm).
         5. Platform: 84 x 96 inches (2134 x 2438 mm).
      2. Capacity: 5,000 lbs (2268 kg) Horsepower: 3.
         1. End Load: 3750 lbs (1701 kg). Side Load: 2,500 lbs (1134 kg).
         2. Platform: 48 x 96 inches (1219 x 2438 mm).
         3. Platform: 60 x 96 inches (1524 x 2438 mm).
         4. Platform: 72 x 96 inches (1829 x 2438 mm). Horsepower: 3.
         5. Platform: 72 x 108 inches (1829 x 2743 mm). Horsepower: 3.
         6. Platform: 72 x 120 inches (1829 x 3048 mm). Horsepower: 3.
         7. Platform: 84 x 96 inches (2134 x 2438 mm).
         8. Platform: 84 x 108 inches (2134 x 2743 mm).
         9. Platform: 84 x 120 inches (2134 x 3048 mm).
         10. Platform: 96 x 96 inches (2438 x 2438 mm). Horsepower: 3.
         11. Platform: 96 x 108 inches (2438 x 2743 mm).
         12. Platform: 96 x 120 inches (2438 x 3048 mm). Horsepower: 3.
      3. Capacity: 6,000 lbs (2722 kg).
         1. End Load: 2500 lbs (1134 kg). Side Load: 3000 lbs (1361 kg).
         2. Platform: 48 x 96 inches (1219 x 2438 mm).
         3. Platform: 60 x 96 inches (1524 x 2438 mm).
         4. Platform: 72 x 96 inches (1829 x 2438 mm).
         5. Platform: 72 x 108 inches (1829 x 2743 mm).
         6. Platform: 72 x 120 inches (1829 x 3048 mm).
         7. Platform: 84 x 96 inches (2134 x 2438 mm).
         8. Platform: 84 x 108 inches (2134 x 2743 mm).
         9. Platform: 84 x 120 inches (2134 x 3048 mm).
         10. Platform: 96 x 96 inches (2438 x 2438 mm).
         11. Platform: 96 x 108 inches (2438 x 2743 mm).
         12. Platform: 96 x 120 inches (2438 x 3048 mm).
      4. Capacity: 8,000 lbs.
         1. End Load: 6000 lbs (2122 kg). Side Load: 4000 lbs (1814 kg).
         2. Lowered Height: 14 inches (356 mm).
         3. Platform: 48 x 96 inches (1219 x 2438 mm).
         4. Platform: 60 x 96 inches (1524 x 2438 mm).
         5. Platform: 72 x 96 inches (1829 x 2438 mm).
         6. Platform: 72 x 108 inches (1829 x 2743 mm).
         7. Platform: 72 x 120 inches (1829 x 3048 mm).
         8. Platform: 84 x 96 inches (2134 x 2438 mm).
         9. Platform: 84 x 108 inches (2134 x 2743 mm).
         10. Platform: 84 x 120 inches (2134 x 3048 mm).
         11. Platform: 96 x 96 inches (2438 x 2438 mm).
         12. Platform: 96 x 108 inches (2438 x 2743 mm).
         13. Platform: 96 x 120 inches (2438 x 3048 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - * 1. Electric toe guard.
        2. Aluminum bridge plates.
        3. Post office option package.
        4. Hot dipped galvanized.
        5. Spring-assisted bridge.
        6. In-motion warning beeper and flashing light.
        7. Roller curtain.
        8. Accordion bellow skirting.
        9. Hydraulic pop-up stop.
        10. Mechanical pop-up stop.
        11. Hydraulic lip.
        12. Biodegradable oil.
        13. Special sizes.
        14. Master control panel.
    1. Basis of Design: SDHL Series Hydraulic Pit Mounted Dock Lift as manufactured by Serco.
       1. Standards Compliance: ANSI MH29.1. UL/CSA approved panel.
       2. Construction: High-tensile strength, structural tubing.
       3. Beveled toe guards.
       4. 18 inch (457 mm) full or split bridge plate.
       5. Dual lifting cylinders for optimum performance.
       6. Velocity fuses on lift cylinders prevent free falling in event of hydraulic failure.
       7. Pre-wired Nema 4x push button control with 15 ft (4.6 m) cord.
       8. Removable handrails.
       9. Maintenance safety strut.
       10. Removable lifting lugs.
       11. Upper travel limit switch.
       12. Oil sight gauge in hydraulic reservoir.
       13. Self-lubricating bushings.
       14. Standard 25 ft (7620 mm) hydraulic hose.
       15. Low temperature oil.
       16. Two-year parts, one-year labor warranty.
       17. Vertical Travel: 60 inches (1524 mm).
       18. Raising and Lowering Speed Range: 9 to 12 ft per min (2742 to 3658 mm) per min.

\*\* NOTE TO SPECIFIER \*\* Delete capacity and platform options not required.

* + - 1. Capacity: 10,000 lbs (4536 kg). Horsepower: 7.5.
         1. End Load: 7500 lbs (3402 kg). Side Load: 5000 lbs (2268 kg).
         2. Lowered Height: 14 inches (356 mm).
      2. Capacity: 12,000 lbs (5443 kg). Horsepower: 7.5.
         1. End Load: 9000 lbs (4082 kg). Side Load: 6000 lbs (2722 kg).
         2. Lowered Height: 14 inches (356 mm).
      3. Capacity: 15,000 lbs (6804 kg). Horsepower: 7.5.
         1. End Load: 11200 lbs (5080 kg). Side Load: 7500 lbs (3402 kg).
         2. Lowered Height: 14 inches (356 mm).
      4. Capacity: 20,000 lbs (kg). Horsepower: 10.
         1. End Load: 15000 lbs (6804 kg). Side Load: 10000 lbs (4536 kg).
         2. Lowered Height: 18 inches (457 mm).
      5. Platform: 72 x 96 inches (1829 x 2438 mm).
      6. Platform: 72 x 108 inches (1829 x 2743 mm).
      7. Platform: 72 x 120 inches (1829 x 3048mm).
      8. Platform: 72 x 144 inches (1829 x 3658 mm).
      9. Platform: 84 x 96 inches (2134 x 2438 mm).
      10. Platform: 84 x 108 inches (2134 x 2743 mm).
      11. Platform: 84 x 120 inches (2134 x 3048 mm).
      12. Platform: 84 x 144 inches (2134 x 3658 mm).
      13. Platform: 96 x 96 inches (2438 x 2438 mm).
      14. Platform: 96 x 108 inches (2438 x 2743 mm).
      15. Platform: 96 x 120 inches (2438 x 3048 mm).
      16. Platform: 96 x 144 inches (2438 x 3658 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Electric toe guards.
      2. Aluminum bridge plates.
      3. Post office option package.
      4. Hot dipped galvanized.
      5. Spring-assisted bridge.
      6. In-motion warning beeper and flashing light.
      7. Roller curtains.
      8. Accordion bellow skirting.
      9. Hydraulic pop-up stop.
      10. Mechanical pop-up stop.
      11. Hydraulic lip.
      12. Biodegradable oil.
      13. Special sizes and lowered heights.
      14. Master control panel.
    1. Basis of Design: SLT Series Hydraulic Lift Table as manufactured by Serco.
       1. Standards Compliance: ANSI MH29.1.
       2. Hand-held NEMA 4X push button with 10 ft (3048 mm) straight cord.
       3. Maintenance strut.
       4. Self-lubricating bushings.
       5. Wire braided hydraulic hoses.
       6. Solid steel legs with hard chromed pins.
       7. Pre-wired power unit with UL approved control panel.
       8. Velocity fuses on all cylinders to prevent uncontrolled descent.
       9. Polyethylene reservoir allows easy visual check of oil level or steel reservoir with dip stick.
       10. Control Valve: 1 HP single phase, 115 VAC.

\*\* NOTE TO SPECIFIER \*\* Delete travel, capacity, and platform options not required.

* + - 1. Travel: 24 inches (610 mm).
         1. Capacity: 2,000 lbs (907 kg).

Height: Lowered: 7 inches (178 mm). Raised: 31 inches (787 mm).

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Height: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm).

* + - * 1. Capacity: 6,000 lbs (2721 kg).

Height: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm).

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Height: Lowered: 10 inches (254 mm). Raised: 34 inches (864 mm).

* + - 1. Travel: 36 inches (914 mm).
         1. Capacity: 2,000 lbs (907 kg).

Height: Lowered: 7 inches (178 mm). Raised: 43 inches (1092 mm).

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Height: Lowered: 9 inches (229 mm). Raised: 45 inches (1143 mm).

* + - * 1. Capacity: 6,000 lbs (2721 kg).

Height: Lowered: 9 inches (229 mm). Raised: 45 inches (1143 mm).

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Height: Lowered: 12 inches (305 mm). Raised: 48 inches (1219 mm).

* + - 1. Travel: 48 inches (1219 mm).
         1. Capacity: 2,000 lbs (907 kg).

Height: Lowered: 8 inches (203 mm). Raised: 56 inches (1422 mm).

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Height: Lowered: 9 inches (229 mm). Raised: 57 inches (1448 mm).

* + - * 1. Capacity: 6,000 lbs (2721 kg).

Height: Lowered: 9 inches (229 mm). Raised: 57 inches (1448 mm).

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Height: Lowered: 12 inches (305 mm). Raised: 60 inches (1524 mm).

* + - * 1. Capacity: 10,000 lbs (4536 kg).

Height: Lowered: 12 inches (305 mm). Raised: 60 inches (1524 mm).

* + - 1. Travel: 59 inches (1499 mm).
         1. Capacity: 2,000 lbs (907 kg).

Height: Lowered: 8 inches (203 mm). Raised: 67 inches (1702 mm).

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Height: Lowered: 9 inches (229 mm). Raised: 68 inches (1727 mm).

* + - * 1. Capacity: 6,000 lbs (2721 kg).

Height: Lowered: 9 inches (229 mm). Raised: 68 inches (1727 mm).

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Height: Lowered: 12 inches (305 mm). Raised: 71 inches (1803 mm).

* + - * 1. Capacity: 10,000 lbs (4536 kg).

Height: Lowered: 12 inches (305 mm). Raised: 71 inches (1803 mm).

\*\* NOTE TO SPECIFIER \*\* The first two platforms are not available for a 10,000 lbs (kg) capacity.

* + - * 1. Platform: 48 x 56 inch (1219 x 1422 mm).
        2. Platform: 48 x 60 inch (1219 x 1524 mm).
        3. Platform: 48 x 96 inch (1219 x 2438 mm).
        4. Platform: 48 x 102 inch (1219 x 2591 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Oversized platforms with straight sides.
      2. Oversized platform with beveled toe guards. Add 8 inches (203 mm) to length and width. Lowered height increases to 8-1/2 inch (216 mm).
      3. Accordion skirting. Platform must be 6 inch (152 mm) longer and wider than standard.
      4. Remote air operated power unit. Requires 70 psi and 95cfm clean plant air; includes hand valve NEMA 4 washdown power unit and controls.
      5. Increased horsepower available.
      6. Control Valve: 1 HP three phase, 115 VAC.
      7. Up/Down Push-Button Station: NEMA 12, wall mount.
      8. Upper travel limit switch.
      9. High cycle package.
      10. Wall mount push button station.
      11. Foot Switch with Cover: NEMA 1.
      12. Portability.
    1. Basis of Design: SLT-MT Series Hydraulic Lift Turntable as manufactured by Serco.
       1. Standards Compliance: ANSI MH29.1. UL approved electrical panel
       2. Power Unit: 1 HP. 115V/1ph/60hz with 24 volt controls x 10 ft (3048 mm) of hose.
       3. Push-button control - NEMA 4X with 10 ft (3048 mm) of cable.
       4. Self-lubricating bushings with hardened chrome pins for pivot points.
       5. Velocity fuses on all cylinders to prevent uncontrolled descent.
       6. Maintenance support device.
       7. Double wire braided hydraulic hoses.

\*\* NOTE TO SPECIFIER \*\* Delete capacity and platform options not required.

* + - 1. Capacity: 2000 lbs (907 kg)
      2. Capacity: 4000 lbs (1814 kg)
      3. Platform: 24 x 36 inches (610 x 914 mm).
         1. Max Turntable Size: 36 x 36 inch (914 x 914 mm)
      4. Platform: 24 x 48 inches (610 x 1219 mm)
         1. Max Turntable Size: 48 x 48 inch (1219 x 1219 mm)
      5. Platform: 24 x 72 inches (610 x 1829 mm)
         1. Max Turntable Size: 48 x 72 inch (1219 x 1829 mm)
      6. Platform: 36 x 88 inches (914 x 2235 mm)
         1. Max Turntable Size: 48 x 88 inch (1219 x 2235 mm)

\*\* NOTE TO SPECIFIER \*\* Remaining items are options. Delete options not required. Non-standard turntables must be equal to platform size. Add extra square footage for non-standard turntable and platform.

* + - 1. Non-standard turntable sizes.
      2. Pit mount options.
      3. Special color.
    1. Basis of Design: SLT Series Hydraulic Lift and Tilt Table as manufactured by Serco.
       1. Standards Compliance: ANSI MH29.1 and ANSI MH29.2. UL approved control panel.
       2. Hand-held NEMA 4X push button with 10 ft (.3048 mm) straight cord.
       3. Hinged Maintenance strut.
       4. Self-lubricating bushings.
       5. Wire braided hydraulic hoses.
       6. Solid steel legs with hard chromed pins.
       7. Pre-wired power unit with.
       8. Velocity fuses on all cylinders to prevent uncontrolled descent.
       9. Polyethylene reservoir allows visual check of oil level or steel reservoir with dip stick.
       10. Control Valve: 1 HP single phase with 115 VAC .
       11. Tilt Angle: 45 degrees.

\*\* NOTE TO SPECIFIER \*\* Delete travel, capacity, and platform options not required.

* + - 1. Travel: 24 inches (610 mm).
         1. Capacity: 2,000 lbs (907 kg).

Heights: Lowered: 7 inches (178 mm). Raised: 31 inches (787 mm)

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Heights: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm)

* + - * 1. Capacity: 6,000 lbs (2722 kg).

Heights: Lowered: 8 inches (203 mm). Raised: 32 inches (813 mm)

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Heights: Lowered: 10 inches (254 mm). Raised: 34 inches (864 mm)

* + - 1. Travel: 36 inches (914 mm).
         1. Capacity: 2,000 lbs (907 kg).

Heights: Lowered: 7 inches (178 mm). Raised: 43 inches (1092 mm)

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Heights: Lowered: 9 inches (229 mm). Raised: 45 inches (1143 mm)

* + - * 1. Capacity: 6,000 lbs (2722 kg).

Heights: Lowered: 9 inches (229 mm). Raised: 45 inches (1143 mm)

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Heights: Lowered: 12 inches (305 mm). Raised: 48 inches (1219 mm)

* + - 1. Travel: 48 inches (1219 mm).
         1. Capacity: 2,000 lbs (907 kg).

Heights: Lowered: 8 inches (203 mm). Raised: 56 inches (1422 mm)

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Heights: Lowered: 9 inches (229 mm). Raised: 57 inches (1448 mm)

* + - * 1. Capacity: 6,000 lbs (2722 kg).

Heights: Lowered: 9 inches (229 mm). Raised: 57 inches (1448 mm)

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Heights: Lowered: 12 inches (305 mm). Raised: 60 inches (1524 mm)

* + - * 1. Capacity: 10,000 lbs (4536 kg).

Heights: Lowered: 12 inches (305 mm). Raised: 60 inches (1524 mm)

* + - 1. Travel: 59 inches (1499 mm).
         1. Capacity: 2,000 lbs (907 kg).

Heights: Lowered: 8 inches (203 mm). Raised: 67 inches (1702 mm)

* + - * 1. Capacity: 4,000 lbs (1814 kg).

Heights: Lowered: 9 inches (229 mm). Raised: 68 inches (1727 mm)

* + - * 1. Capacity: 6,000 lbs (2722 kg).

Heights: Lowered: 9 inches (229 mm). Raised: 68 inches (1727 mm)

* + - * 1. Capacity: 8,000 lbs (3629 kg).

Heights: Lowered: 12 inches (305 mm). Raised: 71 inches (1803 mm)

* + - * 1. Capacity: 10,000 lbs (4536 kg).

Heights: Lowered: 12 inches (305 mm). Raised: 71 inches (1803 mm)

\*\* NOTE TO SPECIFIER \*\* The first two platforms are not available for a 10,000 lbs (kg)capacity. Delete options not required.

* + - * 1. Platform: 24 x 36 inch (610 x 914 mm).

Max Platform Size: 48 x 58 inches (1219 x 1473 mm)

* + - * 1. Platform: 24 x 48 inch (610 x 1219 mm).

Max Platform Size: 48 x 60 inches (1219 x 1524 mm)

* + - * 1. Platform: 24 x 72 inch (610 x 1829 mm).

Max Platform Size: 48 x 96 inches (1219 x 2438 mm)

* + - * 1. Platform: 24 x 88 inch (610 x 2235 mm).

Max Platform Size: 48 x 102 inches (1219 x 2591 mm)

\*\* NOTE TO SPECIFIER \*\* The following platforms are for 6,000 lbs ( kg) capacity units only.

* + - * 1. Platform: 30 x 36 inch (762 x 914 mm).

Max Platform Size: 48 x 58 inches (1219 x 1473 mm)

* + - * 1. Platform: 30 x 48 inch (762 x 1219 mm).

Max Platform Size: 48 x 60 inches (1219 x 1524 mm)

* + - * 1. Platform: 30 x 72 inch (762 x 1829 mm).

Max Platform Size: 48 x 96 inches (1219 x 2438 mm)

* + - * 1. Platform: 30 x 88 inch (762 x 2235 mm).

Max Platform Size: 48 x 102 inches (1219 x 2591 mm)

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Up travel limit switch.
      2. Foot switch with cover - NEMA 1.
      3. In motor warning beeper and flashing light on post X 60 inches (1524 mm) high or wall mounted bracket.
      4. Increased horsepower available.
      5. Manual lowering valve located at power pack.
      6. Power Unit: 1 HP, 1 or 3 phase air/hydraulic with air lever valve or air foot valve and 10 ft ( 3048 mm) of hose.
      7. Portability with casters.
      8. Stainless steel.
      9. Accordion bellow - yellow/black.
      10. Hot dip galvanizing.
      11. Special color.
    1. Basis of Design: SRL Series Hydraulic Rail Lift as manufactured by Serco.
       1. Low profile for surface-mounted applications.
       2. No pit construction required.
       3. Three-sided platform.
       4. Heavy-duty I-beam deck understructure.
       5. Excellent end-load stability in fully raised position.
       6. Displacement style cylinder with internal stops.
       7. Self-contained power unit/control panel.
       8. Standard pre-wired control panel.
       9. NEMA 4X push-button controller with 15 ft (4572 mm) cord.
       10. Superior speed-to-horsepower ratio compared to scissor-style dock lifts.
       11. Direct thrust cylinder provide constant speed through full range of travel.
       12. Checker plate or smooth deck surface.
       13. Sealed guide bearing rollers.
       14. Fused 24 volt control circuit.
       15. Bridge: 18 inches (457 mm).
       16. Stationary Ramp: 30 inch (762 mm) with lagging angles.
       17. Bolt on handrail.
       18. Hydraulic system pressure gauge.
       19. Horsepower: 5.

\*\* NOTE TO SPECIFIER \*\* Delete capacity and platform options not required.

* + - 1. Capacity: 4000 lbs. Speed: 13 fpm (0.066 m per sec).
      2. Capacity: 6000 lbs. Speed: 12 fpm (0.061 m per sec).
      3. Platforms: 48 x 60 inches (1219 x 1524 mm).
      4. Platforms: 48 x 72 inches (1219 x 1929 mm).
      5. Platforms: 60 x 60 inches (1524 x 1524 mm).
      6. Platforms: 60 x 72 inches (1524 x 1929 mm).
      7. Platforms: 60 x 84 inches (1524 x 2134 mm).
      8. Platforms: 60 x 96 inches (1524 x 2438 mm).
      9. Platforms: 72 x 72 inches (1829 x 1829 mm).
      10. Platforms: 72 x 84 inches (1829 x 2134 mm).
      11. Platforms: 72 x 96 inches (1829 x 2438 mm).
      12. Platforms: 72 x 120 inches (1829 x 3048 mm).
      13. Platforms: 72 x 144 inches (1829 x 3658 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Upper travel limit switch.
      2. In motor warning beeper and flashing light on a post X 60" high or wall mounted on bracket.
      3. Interlocking gate.
      4. Aluminum bridges.
      5. Larger steel bridges.
      6. Power pack cover.
    1. Basis of Design: SZL Series Hydraulic Zero Lift as manufactured by Serco.
       1. Power Unit: 1 HP power unit. 115v/1ph/60hz with UL/CSA approved electrical panel.
       2. NEMA 4X hand control with 10 ft (3048 mm) of cable.
       3. Self-lubricating bushings with hardened chrome pins for pivot points.
       4. Velocity fuses on cylinders to prevent uncontrolled descent.
       5. Up travel limit switch.
       6. Maintenance blocks.
       7. Travel: 30 inches (762 mm).
       8. Travel: 40 inches (1016 mm).
       9. Deck Lowered Height: 0.5 inches (13 mm).
       10. Deck Raised Height: 30.5 inches (775 mm).

\*\* NOTE TO SPECIFIER \*\* Delete capacity options not required.

* + - 1. Capacity: 2000 lbs (907 kg).
         1. Platform (WxL): 50 x 48 inches (1270 x 1219 mm).
         2. Overall Dimensions (WxL): 72 x 54 inches (1829 x 1372 mm).
      2. Capacity: 4000 lbs (1814 kg).
         1. Platform (WxL): 50 x 60 inches (1270 x 1524).
         2. Overall Dimensions (WxL): 72 x 66 inches (1829 x 1676 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Foot switch with cover - NEMA 1.
      2. In motor warning beeper and flashing light on a post x 36 inch (914 mm) high or wall mounted bracket.
      3. Increased horsepower available.
      4. Stainless steel.
      5. Hand rails.
      6. Transition bridge.
      7. Three phase power.
      8. Accordion skirting.
    1. Basis of Design: SDS Hydraulic Double Scissor Table Dock Lift as manufactured by Serco.
       1. Standards Compliance: ANSI MH29.1 . UL approved panel.
       2. Pre-wired power unit with UL approved control panel.
       3. Self-lubricating bushings.
       4. Solid steel legs with hard chromed pins.
       5. Velocity fuses on all cylinders to prevent uncontrolled descent.
       6. Wire braided hydraulic hoses.
       7. Maintenance strut.
       8. Power Unit: 1 HP single phase with 115 VAC control valve.

\*\* NOTE TO SPECIFIER \*\* Delete travel and capacity options not required.

* + - 1. Travel: 48 inches (1219 mm). Platform: 30 x 36 inches (762 x 914 mm).
         1. Capacity: 2000 lbs (907 kg).
         2. Raise Height: 60 inches (1524 mm). Lowered Height: 12 inches (305 mm).
         3. Max. Platform Size: 40 x 48 inches (1016 x 1219 mm).
      2. Travel: 60 inches (1524 mm). Platform: 30 x 48 inches (762x 1219 mm).
         1. Capacity: 2000 lbs (907 kg).
         2. Capacity: 4000 lbs (1814 kg).
         3. Capacity: 6000 lbs (2721 kg).
         4. Raised Height: 74 inches (1880 mm). Lowered Height: 14 inches (356 mm).
         5. Max. Platform Size: 48 x 60 inches (1219 x 1524 mm).
      3. Travel: 80 inches (2032). Platform: 30 x 60 inches (762 x 1524 mm).
         1. Capacity: 2000 lbs (907 kg).
         2. Capacity: 4000 lbs (1814 kg).
         3. Raised Height: 94 inches (2388 mm). Lowered Height: 14 inches (356 mm).
         4. Max Platform Size: 48 x 72 inches (1219 x 1829 mm).
      4. Travel: 80 inches (2032). Platform: 42 x 60 inches (1067 x 1524 mm).
         1. Capacity: 6000 lbs (2721 kg).
         2. Raised Height: 98 inches (2489 mm). Lowered Height: 18 inches (457 mm).
         3. Max Platform Size: 48 x 72 inches (1219 x 1829 mm).
      5. Travel: 96 inches (2438 mm). Platform: 30 x 72 inches (762 x 1829 mm).
         1. Capacity: 2000 lbs (907 kg).
         2. Capacity: 4000 lbs (1814 kg).
         3. Raised Height: 110 inches (2794 mm). Lowered Height: 14 inches (356 mm).
         4. Max Platform Size: 48 x 96 inches (1219 x 2438 mm).
      6. Travel: 96 inches (2438). Platform: 42 x 72 inches (1067 x 1829 mm).
         1. Capacity: 6000 lbs (2721 kg).
         2. Raised Height: 114 inches (2896 mm). Lowered Height: 18 inches (457 mm).
         3. Max Platform Size: 48 x 96 inches (1219 x 2438 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Tapered toe guards.
      2. Foot switch with cover - NEMA 1.
      3. In motor warning beeper and flashing light on a post X 60 inch (1524 mm) high or wall mounted bracket.
      4. Increased horsepower available.
      5. Manual lowering valve located at power pack.
      6. Power Unit: 1 HP air/hydraulic power unit with air lever valve or air foot valve and 10 ft (3048 mm) hose.
      7. Portability with casters.
      8. Accordion bellows - yellow/black 4 sides of base.
      9. Hot dip galvanizing.
      10. Special color.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. DOCK SEALS
     1. Trucks and Trailer Serviced:
        1. Max Width: \_\_\_ inch (\_\_\_ mm). Min Width: \_\_\_ inch (\_\_\_ mm).
        2. Max Height: \_\_\_ inch (\_\_\_ mm). Min Height: \_\_\_ inch (\_\_\_ mm).
        3. Max Length: \_\_\_ inch (\_\_\_ mm). Min Length: \_\_\_ inch (\_\_\_ mm).
        4. Tailgate/Step Section Size: \_\_\_ inch (\_\_\_ mm).
        5. Hydraulic Tailgate (Yes/No): \_\_\_\_.
        6. Rear Step Section (Yes/No): \_\_\_\_.
        7. Yard Jockeys (Yes/No): \_\_\_\_.
     2. Application Data:
        1. Quantity: \_\_\_\_.
        2. Door Width: \_\_\_ ft \_\_\_in ( mm).
        3. Door Height: \_\_\_ft \_\_\_in ( mm).
        4. Dock Height: \_\_\_ft \_\_\_in ( mm).

\*\* NOTE TO SPECIFIER \*\* bumper projection includes any building wall/foundation offset or cantilever.

* + - 1. Bumper Projection: \_\_\_ in ( mm).

\*\* NOTE TO SPECIFIER \*\* Delete dock seals and shelters not required.

* + 1. Basis of Design: :BDS Blackout Dock Shelter as manufactured by Serco.
       1. DryDock: S-900DD Integral Rain Header protects dock from moisture infiltration with highly resilient foam core and automatic positioning.
       2. Hinge Guard: Seals hinge gap along opened trailer doors. High molecular Weight polyethylene (HMWPE), attached with industrial hook and loop for easy replacement.
       3. LightBlockr: Blocks air and light infiltration at side and head curtain overlaps.
       4. Framing: Roll-formed galvanized steel.
       5. Head Curtain Wear Pleats and Bottom Wear Panels: Ultra high wear resistant fabric.
       6. Canopy Style Rigid Head Frame: Increases structural integrity while translucent head member allows operating light.
       7. Impactable foam-filled side members.
       8. Raked header for moisture run-off.
       9. Foam filled draft pads.
       10. Design Attributes:

\*\* NOTE TO SPECIFIER \*\* Delete design attributes options not required.

* + - * 1. Drive Approach: Level.
        2. Drive Approach: Incline. \_\_\_ percent grade.
        3. Drive Approach: Decline. \_\_\_ percent grade.
        4. Building Wall Structure: Metal.
        5. Building Wall Structure: \_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Unit width options are 11 ft 6 inch, 11 ft 7 inch, 11 ft 10 inch, 12 ft 2 inch.

* + - * 1. Unit Width: \_\_\_ ft \_\_\_in ( mm).

\*\* NOTE TO SPECIFIER \*\* Unit height options are 11 ft, 11 ft 6 inch, 12 ft, 12 ft 6 inch.

* + - * 1. Unit Height: \_\_\_ ft \_\_\_in ( mm).
        2. Head Member Style: Raked.
        3. Head Member Style: Flat.
        4. Curtain Material: 40 oz. vinyl. Standard.
        5. Curtain Material: XL-100
        6. Color: Black.

\*\* NOTE TO SPECIFIER \*\* Head curtain drop options are 30, 36, 42, 48, and 54 inches.

* + - * 1. Head Curtain Drop: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Taper (Yes/No): \_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Top and bottom project can be from 23 to 42 inches. Delete if projections are not required.

* + - * 1. Top Projection: \_\_\_ inch (\_\_\_ mm).
        2. Bottom Projection: \_\_\_ inch (\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Full length guide stripes.
    1. Basis of Design: Ironside Dock Seal with Head Curtain as manufactured by Serco. Exclusive Encapsulated Foam Chambers Head Curtain with 1 x 3 inch (24 x 76 mm) chambers provides superior sealing on trailer top, compared to head curtains. Integrated pull rope system allows full adjustability to varying trailer heights. Exclusive heat-sealed, full length, yellow guide stripes. Exclusive roll-formed, galvanized steel framing. Endurance-tested foam core bonded to frame with flexible, nonflammable adhesive. Top of hood is tapered forward and securely fastened to building wall. Fiberglass stays add stiffness to hood top to prevent sagging. Hood curtain splits offer load relief and higher clearance. Highly resilient, open-celled polyurethane foam. Compresses easily to extend seal life. Side pad bottoms are tapered to avoid pinching and wear. Vented pads for air and moisture release.
       1. Design Attributes:

\*\* NOTE TO SPECIFIER \*\* Drop curtain options are 12, 18, 24 inches (310, 457, 610 mm. Delete if drop curtain is not required. Delete other design attributes options not required.

* + - * 1. Drop Curtain: \_\_\_ inches (\_\_\_ mm). Velcro Strips. Full width.

Side Pad Height: \_\_\_\_ inches (\_\_\_\_ mm) total.

* + - * 1. Side Pad Back/Face: 12/12.
        2. Side Pad Back/Face: 6/10.
        3. Side Pad Back/Face: 8/12.
        4. Side Pad Back/Face: 10/12.
        5. Side Pad Back/Face: 10/15.
        6. Side Pad Back/Face: 8/15.
        7. Side Pad Back/Face: 12/15.
        8. Side Pad Back/Face: 10/18.
        9. Side Pad Back/Face: 6/14.
        10. Base Material: 22 oz. black vinyl. Standard.
        11. Taper: Tapered.
        12. Taper: Non-tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are , 10, 12, 14, 16, 18, 20, 22, and 24 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 8, 10, 12, 14, 16, 18, 20, 22, and 24 inches

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Bottom Flaps: 3 inch (76 mm) inside. Standard.
        3. Blockout: None.
        4. Blockout: Top projection\_\_\_\_\_\_\_\_\_\_.
        5. Blockout: Bottom projection\_\_\_\_\_\_\_\_.
        6. Wear Face: Full height side pad, full width head pad, with UHWR fabric, black.
        7. Reinforced Inside Face: Full height side pad with UHWR fabric, black.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door Numbers.
      2. Side Pad Mounting Brackets: None.
      3. Side Pad Mounting Brackets: Flats and angles.
      4. Side Pad Mounting Brackets: Angles.
      5. Side Pad Mounting Brackets: 1-1/2 inch (38 mm) Offsets and angles.
    1. Basis of Design: Ironside Dock Seal with Head Pad as manufactured by Serco. Ultra-High Wear Resistant fabric on wear surfaces. Full height on side pads and full width on head pad. Guardian head pad defends against damage from yard spotters and air ride trailers. Roll-formed, galvanized steel framing. Heat-sealed, full length, yellow guide stripes. Endurance tested foam core bonded to frame surface with nonflammable adhesive. Highly resilient, open-celled polyurethane foam. Keeps original shape and compresses easily to extend the seal life. Side pad bottoms are tapered to avoid pinching and wear. All pads are vented for air and moisture release. Heavy-duty, galvanized steel mounting brackets included.
       1. Design Attributes:

\*\* NOTE TO SPECIFIER \*\* Drop curtain options are 12, 18, 24 inches (310, 457, 610 mm. Delete design attributes not required.

* + - * 1. Guardian Head Pad Width: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Head Pad Back/Face options are 12/12, 18/18, 24/24, 12/15, and 12/18

* + - * 1. Guardian Head Pad Back/Face: \_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Drop curtain is optional. Delete if not required. Drop curtain options are 12, 16, and 24 inches.

* + - * 1. Drop Curtain: \_\_\_\_ inches (\_\_\_\_ mm). Velcro strips. Full width.
        2. Side Pad Height: \_\_\_\_ inches (\_\_\_\_ mm) Total.
        3. Side Pad Back/Face: 12/12.
        4. Side Pad Back/Face: 6/10.
        5. Side Pad Back/Face: 8/12.
        6. Side Pad Back/Face: 10/12.
        7. Side Pad Back/Face: 10/15.
        8. Side Pad Back/Face: 8/15.
        9. Side Pad Back/Face: 12/15.
        10. Side Pad Back/Face: 10/18.
        11. Side Pad Back/Face: 6/14.
        12. Base Material: 22 oz. black vinyl. Standard.
        13. Taper: Tapered.
        14. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 8, 10, 12, 14, 16, 18, 20, 22, and 24 inches.

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 8, 10, 12, 14, 16, 18, 20, 22, and 24 inches.

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Bottom Flaps: 3 inch (76 mm) inside. Standard.
        3. Blockout: None.
        4. Blockout: Top projection\_\_\_\_\_\_\_\_\_\_.
        5. Blockout: Bottom projection\_\_\_\_\_\_\_\_.
        6. Wear Face: Full height side pad, full width head pad with UHWR fabric, black.
        7. Reinforced Inside Face: Full height side pad with UHWR fabric standard, black.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Side Pad Mounting Brackets: None.
      3. Side Pad Mounting Brackets: Flats and angles.
      4. Side Pad Mounting Brackets: Angles.
      5. Side Pad Mounting Brackets: 1-1/2 inch (38 mm) Offsets and angles.
    1. Basis of Design: S2200 Ultra Dock Shelter as manufactured by Serco. Impactable foam-filled side members. Roll-formed galvanized steel framing. Fiberglass stays inside/head curtains. Translucent head member transmits light. Raked header for moisture run-off. Foam filled draft pads. Full range of colors and fabrics.
       1. Design Attributes:

\*\* NOTE TO SPECIFIER \*\* Delete design attributes not required.

* + - * 1. Drive Approach: Level.
        2. Drive Approach: Incline. \_\_\_\_ percent grade.
        3. Drive Approach: Decline. \_\_\_\_ percent grade.
        4. Building Wall Structure: Metal.
        5. Building Wall Structure: Other.
        6. Unit Width: 11 ft 6 inches (3.5 m).
        7. Unit Width: 12 ft (3.65 m).
        8. Unit Width: 12 ft 6 inches (3.81 m).
        9. Unit Height: 11 ft (3.35 mm).
        10. Unit Height: 11 ft 6 inches (3.5 m).
        11. Unit Height: 12 ft (3.65 mm).
        12. Unit Height: 12 ft 6 inches (3.81 m).
        13. Head Member Style: Raked.
        14. Head Member Style: Flat.
        15. Curtain Material: 22 oz. vinyl.
        16. Curtain Material: 40 oz. vinyl.
        17. Curtain Material: XL-100.
        18. Color: Black, Tan, Brown, Blue, or Green.
        19. Head Curtain Drop: 30 inch (762 mm).
        20. Head Curtain Drop: 36 inch (914 mm).
        21. Head Curtain Drop: 42 inch (1067 mm).
        22. Head Curtain Drop: 48 inch (1219 mm).
        23. Head Curtain Drop: 54 inch (1372 mm).
        24. Head Curtain Drop: \_\_\_ inch (\_\_\_ mm).
        25. Taper: Tapered.
        26. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 8, 10, 12, 14, 16, 18, 20, 22, and 24 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 8, 10, 12, 14, 16, 18, 20, 22, and 24 inches.

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Full length guide stripes.
      3. Pull rope assembly.
    1. Basis of Design: S3200 SnapBack Dock Shelter as manufactured by Serco. Side frames covered with white 18 oz. coated vinyl to transmit natural light into loading area. Overlapping layers of fabric provide wear resistance against sharp corners of trailers, extending life of shelter. Raked header permits weather drainage. Flat header is used when shelter is protected by a hood or canopy. Roll-formed galvanized steel. Fiberglass stays add stiffness to shelter face curtains.
       1. Design Attributes:

\*\* NOTE TO SPECIFIER \*\* Delete design attributes not required.

* + - * 1. Drive Approach: Level.
        2. Drive Approach: Incline. \_\_\_\_ percent grade.
        3. Drive Approach: Decline. \_\_\_\_ percent grade.
        4. Building Wall Structure: Metal.
        5. Building Wall Structure: Other.
        6. Unit Width: 11 ft 6 inches (3.5 m).
        7. Unit Width: 12 ft (3.65 m).
        8. Unit Height: 11 ft (3.35 m).
        9. Unit Height: 11 ft 6 inches (3.5 m).
        10. Unit Height: 12 ft (3.65 m).
        11. Unit Height: 12 ft 6 inches (3.81 m).
        12. Head Member Style: Raked.
        13. Head Member Style: Flat.
        14. Head Member Style: 45 degrees.
        15. Curtain Material: 22 oz. vinyl.
        16. Curtain Material: 40 oz. vinyl.
        17. Curtain Material: XL-100.
        18. Color: Black, Tan, Brown, Blue, or Green.
        19. Head Curtain Drop: 30 inch (762 mm).
        20. Head Curtain Drop: 36 inch (914 mm).
        21. Head Curtain Drop: 42 inch (1067 mm).
        22. Head Curtain Drop: 48 inch (1219 mm).
        23. Head Curtain Drop: 54 inch (1372 mm).
        24. Taper Project Options (Top/Bottom): 18/24.
        25. Taper Project Options (Top/Bottom): 24/30
        26. Taper Project Options (Top/Bottom): 24/18.
        27. Taper Project Options (Top/Bottom): 30/24.
        28. Non-Tapered Projection: 18 inch (457 mm).
        29. Non-Tapered Projection: 24 inch (610 mm).
        30. Non-Tapered Projection: 30 inch (762 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Full length guide stripes.
      3. Pull rope assembly.
    1. Basis of Design: S420 Rigid Frame Dock Seal as manufactured by Serco. Raked translucent head frame protects dock from elements allowing natural light to enter dock area. Overlapping layers of fabric provide wear resistance against sharp corners of trailers. Flexible fiberglass stays ensure head and side curtain pressure is maintained on truck body while compressible neoprene cords conform to vehicle's irregular perimeter. High visibility guide stripes assist drivers with proper positioning of trailer. Frame covered with translucent fiberglass allowing natural light to enter the dock area. Steel supports protect frame from off-center trailers. Roll-formed galvanized steel framing (5-year warranty).
       1. Design Attributes:

\*\* NOTE TO SPECIFIER \*\* Delete design attributes not required.

* + - * 1. Drive Approach: Level.
        2. Drive Approach: Incline. \_\_\_\_ percent grade.
        3. Drive Approach: Decline. \_\_\_\_ percent grade.
        4. Framing: Galvanized steel.
        5. Framing: Steel tube.
        6. Building Wall Structure: Metal.
        7. Building Wall Structure: Other.
        8. Unit Width: 11 ft 6 inches (3.5 m).
        9. Unit Width: 12 ft (3.65 m).
        10. Unit Width: 12 ft 6 inches (3.81 m).
        11. Unit Width: 13 ft (3.96 m).
        12. Unit Height: 11 ft (3.35 m).
        13. Unit Height: 11 ft 6 inches (3.5 m).
        14. Unit Height: 12 ft 6 inches (3.81 m).
        15. Unit Height: 13 ft 6 inches (4.11 m).
        16. Unit Height: 14 ft 6 inches (4.42 m).
        17. Unit Height: 15 ft 6 inches (4.72 m).
        18. Head Member Style: Raked.
        19. Head Member Style: Flat.
        20. Head Member Style: Single steel tube.
        21. Curtain Material: 22 oz. vinyl.
        22. Curtain Material: 40 oz. vinyl.
        23. Curtain Material: XL-100.
        24. Color: Black, Tan, Brown, Blue, or Green.
        25. Head Curtain Drop: 30 inch (762 mm).
        26. Head Curtain Drop: 36 inch (914 mm).
        27. Head Curtain Drop: 42 inch (1067 mm).
        28. Head Curtain Drop: 48 inch (1219 mm).
        29. Head Curtain Drop: 54 inch (1372 mm).
        30. Head Curtain Drop: 60 inch (1524 mm)
        31. Head Curtain Drop: 66 inch (1676 mm)
        32. Head Curtain Drop: 72 inch (1829 mm)
        33. Taper: Tapered.
        34. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 24, 30, 36, 42, 48 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 24, 30, 36, 42, 48 inches

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 24, 30, 36, 42, 48 inches

* + - * 1. Draft Pad: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 24, 30, 36, 42, 48, and 54 inches

* + - * 1. Steel Supports: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Steel Support Extensions: None.
        3. Steel Support Front Channel Extensions: 6 inch (152 mm).
        4. Steel Support Front Channel Extensions: 12 inch (305 mm).
        5. Steel Support Back Channel Extensions: 6 inch (152 mm).
        6. Steel Support Back Channel Extensions: 12 inch (305 mm).

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Full length guide stripes.
      3. Pull rope assembly.
    1. Basis of Design: S-600 Foam Dock Seal with Head Pad as manufactured by Serco. Roll-formed, galvanized steel frame. 5 year warranty against rotting, splitting, or cracking. Endurance tested foam core bonded to frame surface with, non-flammable adhesive. Wide selection of durable coated fabrics provide maximum durability. Open-celled polyurethane foam. Keeps original shape and compresses easily. Side pad bottoms are tapered to avoid pinching and wear. Vented pads for air and moisture release. Full length yellow stripes guide drivers to the dock.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements not required.

* + - * 1. Head Pad Width: \_\_\_\_ inches (\_\_\_\_ mm) total.
        2. Head Pad Back/Face: 12/12.
        3. Head Pad Back/Face: 18/18.
        4. Head Pad Back/Face: 24/24.
        5. Head Pad Back/Face: 12/15.
        6. Head Pad Back/Face: 12/18.

\*\* NOTE TO SPECIFIER \*\* Delete drop curtain if not required. Size options are 12, 18, and 24 inches.

* + - * 1. Drop Curtain: \_\_\_\_ inches (\_\_\_\_ mm) total.

Hook-loop.

No hook-loop.

Full width.

* + - * 1. Side Pad Height: \_\_\_\_ inches (\_\_\_\_ mm) total.
        2. Side Pad Back/Face: 6/10.
        3. Side Pad Back/Face: 8/12.
        4. Side Pad Back/Face: 10/12.
        5. Side Pad Back/Face: 12/12.
        6. Side Pad Back/Face: 12/15.
        7. Side Pad Back/Face: 8/15.
        8. Side Pad Back/Face: 6/14.
        9. Side Pad Back/Face: 10/18.
        10. Side Pad Back/Face: 8/23.
        11. Base Material: 22 oz. vinyl.
        12. Base Material: 40 oz. vinyl.
        13. Base Material: XL-100.
        14. Color: Black, Tan, Brown, Blue, or Green.
        15. Taper: Tapered.
        16. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 8, 10, 12, 14, 16, 18, 20, and 22 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 8, 10, 12, 14, 16, 18, 20, and 22 inches

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Blockout is optional. Delete if not required. Sizes: 2, 4, 6, 8, 10, and 12 inch.

* + - * 1. Blockout: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Wear pleats are optional. Delete if not required or delete materials not required. Sizes: 4, 8, and6 inch. Wear Pleats: \_\_\_\_ inches (\_\_\_\_ mm).

Head and side pads.

Head pad corners only.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

\*\* NOTE TO SPECIFIER \*\* Wear face is optional. Delete if not required or delete material not required.

* + - * 1. Wear Face:

Head pad.

Side pad.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Reinforced Inside Face: None.

\*\* NOTE TO SPECIFIER \*\* Inside face is optional. Delete if not required or delete materials not required.

* + - * 1. Reinforced Inside Face:

Side pad 4 inch (102 mm).

Side full height.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Bottom Flaps: None.
        2. Bottom Flaps: 3 inch (76 mm).
        3. Bottom Flaps: 6 inch (152 mm).
        4. Bottom Flaps Location: Inside.
        5. Bottom Flaps Location: Inside front.
        6. Bottom Flaps Location: All 3 sides.
        7. Side Pad Mounting Brackets: None.
        8. Side Pad Mounting Brackets: Flats and angles.
        9. Side Pad Mounting Brackets: Angles.
        10. Side Pad Mounting Brackets: 1-1/2 inch (38 mm) offsets and angles.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. 24 inch (610 mm) guide stripes.
      3. Flame retardant fabric.
      4. Flame retardant foam.
    1. Basis of Design: S-700 Foam Dock Seal with Head Curtain as manufactured by Serco. Top of hood is tapered forward and securely fastens to building wall. Fiberglass stays add stiffness to hood top to prevent sagging. Hood curtain splits offer load relief and higher clearance. Roll-formed galvanized steel framing reduces pressure on building wall. Warranted for 5 years against rotting, splitting, or cracking. Endurance tested foam core bonded to frame surface with, non-flammable adhesive. A wide selection of durable coated fabrics provide maximum durability. Resilient, open-celled polyurethane foam. Keeps original shape; compresses easily. Side pad bottoms are tapered to avoid pinching and wear. Pads are vented for air and moisture release. Full length yellow stripes guide drivers to the dock. Hood curtain splits offer load relief and higher clearance.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements options not required.

* + - * 1. Unit Width: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Head curtain height options are 18, 24, 30, 36, 42, and 48 inches.

* + - * 1. Head Curtain Height: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Head curtain splits options are 12, 18, 24, 30, and 36 inches.

* + - * 1. Head Curtain Splits: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Head Curtain Options:

Pull-rope assembly.

O-rings.

Foam front: 2 inches (51 mm).

Sectional foam front.

* + - * 1. Side Pad Height: : \_\_\_\_ inches (\_\_\_\_ mm) total.
        2. Side Pad Back/Face: 6/10.
        3. Side Pad Back/Face: 8/12.
        4. Side Pad Back/Face: 10/12.
        5. Side Pad Back/Face: 12/12.
        6. Side Pad Back/Face: 12/15.
        7. Side Pad Back/Face: 8/15.
        8. Side Pad Back/Face: 6/14.
        9. Side Pad Back/Face: 10/18.
        10. Side Pad Back/Face: 8/23.
        11. Base Material: 22 oz. vinyl.
        12. Base Material: 40 oz. vinyl.
        13. Base Material: XL-100.
        14. Color: Black, Tan, Brown, Blue, or Green.
        15. Taper: Tapered.
        16. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 8, 10, 12, 14, 16, 18, 20, and 22 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 8, 10, 12, 14, 16, 18, 20, and 22 inches

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Blockout is optional. Delete if not required. Sizes: 2, 4, 6, 8, 10, and 12 inch.

* + - * 1. Blockout: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Wear pleats are optional. Delete if not required. Sizes: 4, 8, and 16 inches.

* + - * 1. Wear Pleats: \_\_\_\_ inches (\_\_\_\_ mm).

Head and side pads.

Head pad corners only.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

\*\* NOTE TO SPECIFIER \*\* Delete wear face if not required or delete materials not required.

* + - * 1. Wear Face:

Head pad.

Side pad.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green

\*\* NOTE TO SPECIFIER \*\* Delete reinforced inside face if not required or delete materials not required.

* + - * 1. Reinforced Inside Face:

Side pad 4 inch (102 mm).

Side full height.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Bottom Flaps: None.
        2. Bottom Flaps: 3 inch (76 mm).
        3. Bottom Flaps: 6 inch (152 mm).
        4. Bottom Flaps Location: Inside.
        5. Bottom Flaps Location: Inside front.
        6. Bottom Flaps Location: All 3 sides
        7. Side Pad Mounting Brackets: None
        8. Side Pad Mounting Brackets: Flats and angles
        9. Side Pad Mounting Brackets: Angles
        10. Side Pad Mounting Brackets: 1-1/2 inch (38 mm) Offsets and Angles

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Guide Stripes: 24 inch (610 mm).
      3. Flame retardant fabric.
      4. Flame retardant foam.
    1. Basis of Design: S-800 Foam Dock Seal with Adjustable Head Pad as manufactured by Serco. Adjustable head pad system operates with an easy-release lever and has 48 inch (1219 mm) working range. 18 inch (457 mm) high foam head pad is mounted on steel pan which travels in slide tracks. Spring-tension system provides adjustment of counterbalance and horizontal tilt for smooth, jam-free operation. Open-celled polyurethane foam keeps original shape and compresses to extend seal life. Roll-formed galvanized steel framing. 5 years warranty against rotting, splitting, or cracking. Pads are vented for air and moisture release. Full length yellow stripes guide drivers to dock.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements not required.

* + - * 1. Unit Width: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Head Pad Back Face: 18/18.
        3. Head Pad Back Face: 24/24.
        4. Head Pad Back Face: 12/18.
        5. Follower Curtains: None.
        6. Follower Curtains: 36 inch (914 mm).
        7. Follower Curtains: \_\_\_\_ inches (\_\_\_\_ mm).
        8. Side Pad Height: \_\_\_\_ inches (\_\_\_\_ mm) total.
        9. Side Pad Back Face: 6/10.
        10. Side Pad Back Face: 8/12.
        11. Side Pad Back Face: 10/12.
        12. Side Pad Back Face: 12/12.
        13. Side Pad Back Face: 8/15.
        14. Side Pad Back Face: 12/15.
        15. Side Pad Back Face: 10/18.
        16. Side Pad Back Face: 6/14.
        17. Side Pad Back Face: 8/23.
        18. Material: 22 oz. vinyl.
        19. Material: 40 oz. vinyl.
        20. Material: XL-100.
        21. Color: Black, Tan, Brown, Blue, or Green.
        22. Taper: Tapered.
        23. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 8, 10, 12, 14, 16, 18, 20, and 22 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 8, 10, 12, 14, 16, 18, 20, and 22 inches

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Delete wear pleats if not required. Size options are 4, 8, and 16 inches.

* + - * 1. Wear Pleats: \_\_\_\_ inches (\_\_\_\_ mm)

Head and side pads.

Head pad corners only.

Material: 22 oz. vinyl

Material: 40 oz. vinyl

Material: XL-100

Color: Black, Tan, Brown, Blue, or Green

\*\* NOTE TO SPECIFIER \*\* Delete wear face if not required.

* + - * 1. Wear Face:

Head pad.

Side pad.

Material: 22 oz. vinyl

Material: 40 oz. vinyl

Material: XL-100

Color: Black, Tan, Brown, Blue, or Green

\*\* NOTE TO SPECIFIER \*\* Delete reinforced inside face if not required.

* + - * 1. Reinforced Inside Face:

Side pad 4 inch (102 mm).

Side full height.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Bottom Flaps: 3 inch (76 mm).
        2. Bottom Flaps: 6 inch (152 mm).
        3. Bottom Flaps: \_\_\_\_ inches (\_\_\_\_ mm).
        4. Bottom Flaps Location: Inside.
        5. Bottom Flaps Location: Inside front.
        6. Bottom Flaps Location: All 3 sides
        7. Mounting Brackets: Flats and angles
        8. Mounting Brackets: Angles
        9. Mounting Brackets: 1-1/2 inch (38 mm) Offsets and Angles

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Guide Stripes: 24 inch (610 mm).
      3. Flame retardant fabric.
      4. Flame retardant foam.
    1. Basis of Design: S-1000 Ultra Seal Foam Dock Seal with Head Pad as manufactured by Serco. Side pad design provides improved trailer access and minimizes building wall pressure. Internal retention strap system secures fabric to inside of side pad profile minimizing possibility of pad damage. Seals the hinge air gap on trailers with swing-out doors. Dual guide stripes for 96 and 102 inch (2438 and 2591 mm) wide trailers. Bottom of side pad is reinforced. Mounts on doors up to 10 ft (3.05 m) wide and 9 ft (2.74 m) high. Roll formed galvanized steel side and head pad backing. Optional wear pleats available to extend service life of dock seal.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements not required.

* + - * 1. Head Pad Width: \_\_\_\_ inches (\_\_\_\_ mm).

Guardian Head Pad.

* + - * 1. Head Pad Back Face: 12/12.
        2. Head Pad Back Face: 18/18.
        3. Head Pad Back Face: 12/15.
        4. Head Pad Back Face: 12/18.
        5. Head Pad Back Face: 24/24.

\*\* NOTE TO SPECIFIER \*\* Drop curtain is optional. Delete if not required. Options for Drop curtain are 12, 18, and 24 inches. Delete drop curtain options not required.

* + - * 1. Drop Curtain: \_\_\_\_ inches (\_\_\_\_ mm) total.

Hook-loop.

No hook-loop.

Full width.

* + - * 1. Side Pad Height: \_\_\_\_ inches (\_\_\_\_ mm) total.
        2. Side Pad Back Face: 6/14.
        3. Side Pad Back Face: 8/15.
        4. Side Pad Back Face: 10/18.
        5. Side Pad Back Face: 8/21.
        6. Material: 22 oz. vinyl.
        7. Material: 40 oz. vinyl.
        8. Material: XL-100.
        9. Color: Black, Tan, Brown, Blue, or Green.
        10. Taper: Tapered.
        11. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 10, 12, 14, 16, 18, and 20 inches.

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 10, 12, 14, 16, 18, 20 inches.

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Blockout is optional. Size options are 2, 4, 6, 8, 10, and 12 inches.

* + - * 1. Blockout: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Wear pleats are optional. Size options are 4, 8, and 16 inches

* + - * 1. Wear Pleats: \_\_\_\_ inches (\_\_\_\_ mm).

Head and side pads.

Head pad corners only.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

\*\* NOTE TO SPECIFIER \*\* Delete wear face options not required.

* + - * 1. Wear Face:

Head pad.

Side pad.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Reinforced Inside Face: Standard.

\*\* NOTE TO SPECIFIER \*\* Delete reinforced inside face if not required.

* + - * 1. Reinforced Inside Face: Side pad full height.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Bottom Flaps: 3 inch (76 mm).
        2. Bottom Flaps: 6 inch (152 mm).
        3. Bottom Flaps: \_\_\_\_ inches (\_\_\_\_ mm).
        4. Bottom Flaps Location: Inside.
        5. Bottom Flaps Location: Inside front.
        6. Bottom Flaps Location: All sides.
        7. Side Pad Mounting Brackets: Flats and angles.
        8. Side Pad Mounting Brackets: Angles.
        9. Side Pad Mounting Brackets: 1-1/2 inch (38 mm) offsets and angles.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Guide Stripes: 24 inch (610 mm).
      3. Flame retardant fabric.
      4. Flame retardant foam,
    1. Basis of Design: S-2000 Ultra Seal Foam Dock Seal with Head Curtain as manufactured by Serco. Unique Ultra Seal side pad design provides improved trailer access and minimizes building wall pressure. Internal retention strap system secures fabric to inside of side pad profile minimizing possibility of pad damage. Seals hinge air gap on trailers with swing-out doors. Dual guide stripes for 96 and 102 inch (2438 and 2591 mm) wide trailers. Bottom of side pad is reinforced. Mounts on doors up to 10 ft (3.05 m) wide and 9 ft (2.74 m) high. Roll formed galvanized steel side and head pad backing. Optional wear pleats available.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements if not required.

* + - * 1. Unit Width: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Head curtain height options are 18, 24, 30, 36, 42, and 48 inches.

* + - * 1. Head Curtain Height: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Head curtain splits options are 12, 18, 24, 30, and 36 inches.

* + - * 1. Head Curtain Splits: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Head Curtain Options:

Pull-rope assembly.

O-rings.

Foam front: 2 inches (51 mm).

Sectional foam front.

* + - * 1. Side Pad Height: : \_\_\_\_ inches (\_\_\_\_ mm) total.
        2. Side Pad Back/Face: 6/14.
        3. Side Pad Back/Face: 8/15.
        4. Side Pad Back/Face: 8/18.
        5. Side Pad Back/Face: 10/18.
        6. Side Pad Back/Face: 8/21.
        7. Base Material: 22 oz. vinyl.
        8. Base Material: 40 oz. vinyl.
        9. Base Material: XL-100.
        10. Color: Black, Tan, Brown, Blue, or Green.
        11. Taper: Tapered.
        12. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 10, 12, 14, 16, 18, and 20 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 10, 12, 14, 16, 18, and 20 inches

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm)

\*\* NOTE TO SPECIFIER \*\* Blockout is optional. Size options are 2, 4, 6, 8, 10, and 12 inches.

* + - * 1. Blockout: \_\_\_\_ inches (\_\_\_\_ mm)

\*\* NOTE TO SPECIFIER \*\* Wear pleats are optional. Size options are 4, 8, and 16 inch.

* + - * 1. Wear Pleats: \_\_\_\_ inches (\_\_\_\_ mm)

Head and side pads.

Head pad corners only.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

\*\* NOTE TO SPECIFIER \*\* Delete wear face if not required

* + - * 1. Wear Face:

Head pad.

Side pad.

Material: 22 oz. vinyl

Material: 40 oz. vinyl

Material: XL-100

Color: Black, Tan, Brown, Blue, or Green

\*\* NOTE TO SPECIFIER \*\* Delete reinforced inside face if not required.

* + - * 1. Reinforced Inside Face: Side pad full height

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Bottom Flaps: None.
        2. Bottom Flaps: 3 inch (76 mm).
        3. Bottom Flaps: 6 inch (152 mm).
        4. Bottom Flaps: \_\_\_ inch (\_\_\_ mm).
        5. Bottom Flaps Location: Inside.
        6. Bottom Flaps Location: Inside front.
        7. Bottom Flaps Location: All 3 sides
        8. Side Pad Mounting Brackets: None
        9. Side Pad Mounting Brackets: Flats and angles
        10. Side Pad Mounting Brackets: Angles
        11. Side Pad Mounting Brackets: 1-1/2 inch (38 mm) Offsets and Angles

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers
      2. Flame retardant fabric.
      3. Flame retardant foam.
    1. Basis of Design: S3000L L-Pad Standard Dock Seal as manufactured by Serco. L-shaped sides compress around side of trailer to create a seal providing full width trailer access. Provides positive seal between internal and external environments. Endurance-tested foam core is continuously bonded to frame surface with flexible, non-flammable adhesive. Wide selection of coated fabrics provide maximum durability. Highly resilient, open-celled polyurethane foam compresses easily to extend seal life. Roll-formed galvanized steel framing reduces pressure on building wall. All pads are vented for air and moisture release. Full length yellow stripes guide. Heavy-duty, galvanized steel mounting brackets included.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements options not required.

* + - * 1. Framing: Roll-formed galvanized steel.
        2. Head Pad: Guardian.
        3. Head Pad Width: 129 inch (3277 mm) for 9 ft 3 inch (2819 mm) door widths or smaller.
        4. Head Pad Width: 135 inch (3429 mm) for 9 ft 4 inch to 10 ft (2845 to 3048 mm) door widths.
        5. Head Pad Bevel: 12/12.
        6. Head Pad Bevel: 18/18.
        7. Head Pad Bevel: 24/24.
        8. Head Pad Bevel: 12/15.
        9. Head Pad Bevel: 12/18.
        10. Drop Curtain: None.
        11. Drop Curtain: 12 inch (305 mm).

Hook-Loop.

* + - * 1. Side Pad Height: \_\_\_ inch (\_\_\_ mm) total.
        2. Side Pad Face: 18 inches for 9 ft 3 inch (2819 mm) door widths or smaller.
        3. Side Pad Face: 21 inches for 9 ft 4 inch to 10 ft (2845 to 3048 mm) door widths.
        4. Base Material: 22 oz. vinyl.
        5. Base Material: 40 oz. vinyl.
        6. Base Material: XL-100.
        7. Color: Black, Tan, Brown, Blue, or Green.
        8. Taper: Tapered.
        9. Taper: Non-tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 16, 18, 2, 22, and 24 inches

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 16, 18, 2, 22, and 24 inches

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Delete Blockout if not required. Options are 2, 4, 6, 8, 10, and 12 inches.

* + - * 1. Blockout: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Delete wear pleats if not required. Size options are 4, 8, and 16 inch.

* + - * 1. Wear Pleats: \_\_\_\_ inches (\_\_\_\_ mm).

Side pads.

Head pad corners.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

\*\* NOTE TO SPECIFIER \*\* Delete wear face if not required.

* + - * 1. Wear Face:

Head pad.

Side pad.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Mounting Brackets: Flats and angles.
        2. Mounting Brackets: Angles.
        3. Mounting Brackets: 1-1/2 inch (38 mm) Offsets and angles.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Flame retardant fabric.
      3. Flame retardant foam.
    1. Basis of Design: S3000HL L-Pad Foam Dock Seal with Head Curtain as manufactured by Serco. Provides positive seal between internal and external environments. Endurance-tested foam core continuously bonded to frame surface, non-flammable adhesive. Top of hood is tapered forward and supported with thick wall aluminum pipe. Hood curtain splits offer load relief and higher clearance. Open celled polyurethane foam compresses to extend seal life. Roll-formed galvanized steel framing. L-shaped sides compress around side of trailer creating a seal and providing full width trailer access. Pads are vented for air and moisture. Full length yellow stripes guide. Heavy-duty, galvanized steel mounting brackets included.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements options not required.

* + - * 1. Framing: Roll formed galvanized steel.
        2. Head Pad Width: 129 inch (3277 mm) for 9.5 ft (2896 mm) door widths or smaller.
        3. Head Pad Width: 135 inch (3249 mm) for 9 ft 7 inch to 10 ft (2921 to 3048 mm) door widths.

\*\* NOTE TO SPECIFIER \*\* Head curtain drop options are 18, 24, 30, 36, 42, and 48 inches.

* + - * 1. Head Curtain Drop: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Head curtain splits options are 18, 24, 30, and 36 inches.

* + - * 1. Head Curtain Splits: No split.
        2. Head Curtain Splits: \_\_\_\_ inches (\_\_\_\_ mm).
        3. Head Curtain Options:

Pull-rope assembly.

O-rings.

Foam front: 2 inches (51 mm)

Sectional foam front

* + - * 1. Total Unit Height: \_\_\_\_ inches (\_\_\_\_ mm)
        2. Side Pad Face: 18 inches (457 mm) for 9.5 ft (2896 mm) door widths or smaller
        3. Side Pad Face: 21 inches (533 mm) for 9 ft 7 inch to 10 ft (2921 to 3048 mm) door widths.
        4. Base Material: 22 oz. vinyl.
        5. Base Material: 40 oz. vinyl.
        6. Base Material: 16 oz. CSM.
        7. Base Material: 40 oz. CSM.
        8. Base Material: XL-100.
        9. Color: Black, Tan, Brown, Blue, or Green.
        10. Taper: Tapered.
        11. Taper: Non-Tapered.

\*\* NOTE TO SPECIFIER \*\* Top projection options are 16, 18, 20, 22, and 24 inches.

* + - * 1. Top Projection: \_\_\_\_ inches (\_\_\_\_ mm) total.

\*\* NOTE TO SPECIFIER \*\* Bottom projection options are 16, 18, 20, 22, and 24 inches.

* + - * 1. Bottom Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Delete blockout options not required. Projection options are 2, 4, 6, 8, 10, and 12 inches.

* + - * 1. Blockout Projection: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Delete wear pleats if not required or delete material options not required.

* + - * 1. Wear Pleats:

4 inches (102 mm).

WP8.

WP16.

Side pads.

Head pad corners.

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

\*\* NOTE TO SPECIFIER \*\* Delete wear face if not required or delete material options not required.

* + - * 1. Wear Face:

Hood.

Side pad.

Tip of "L" (XL-0100).

Material: 22 oz. vinyl.

Material: 40 oz. vinyl.

Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Mounting Brackets: None.
        2. Mounting Brackets: Flats and angles.
        3. Mounting Brackets: Angles.
        4. Mounting Brackets: 1-1/2 inch (38 mm) offsets and angles.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door numbers.
      2. Flame retardant fabric.
      3. Flame retardant foam.
    1. Basis of Design: SI 310 Inflatable Rail Shelter as manufactured by Serco. Top, side, and optional bottom air chambers constructed from durable 10 oz per sq yd vinyl-coated fabric. Provides sealing for wide variety of rail cars and rail applications. Conforms to irregularities present on side of some rail cars. Inflated by a high volume, low pressure motor. Unit retraction assisted by upward biased track-trolley support system. Can be sized to accommodate a variety of rail ramp configurations.

\*\* NOTE TO SPECIFIER \*\* Delete model option not required.

* + - 1. Model: SI-310-3. 3-Sided Cover and Frame.
      2. Model: SI-310-4. 4-Sided Cover and Frame. Size so that bottom can be mounted 24 inches (610 mm) below dock floor while maintaining top coverage range.
      3. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete design requirements options not required.

* + - * 1. Motor/Blower. None.
        2. Motor/Blower. Single. Standard.
        3. Motor/Blower. Two. Total shelter volume exceeds 275 cu ft.
        4. Standard Frame: 2 x 12 inch (51 x 305 mm) Pressure treated wood framing.
        5. Motor/Blower: 1/2 hp, 115 V, 50/60 Hz, 5.5 Amps. Switch with pilot light.
        6. Motor/Blower: 1/2 hp, 220V, 1Ph, 50/60 Hz, 2.8 Amps.
        7. Air Inlet Tube Location: Top Left. Standard.
        8. Air Inlet Tube Location: Center.
        9. Air Inlet Tube Location: Top Right.

\*\* NOTE TO SPECIFIER \*\* Unit width options are 12, 13, 14, 15, 16, 17, and 18 inches.

* + - * 1. Unit Width: \_\_\_\_ inches (\_\_\_\_ mm)

\*\* NOTE TO SPECIFIER \*\* Standard minimum unit height for 4-sided unit is 13 ft. Unit height options are 12, 13, 14, 15, and 16 inches.

* + - * 1. Unit Height: \_\_\_\_ inches (\_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Projection options are 48, 54, 60, 66, 72, 78, and 84 inches.

* + - * 1. Projection: \_\_\_\_ inches (\_\_\_\_ mm).
        2. Maximum Percent of Slope Without Tapering Shelter Frame: 3 percent.
        3. Aig Bag Fabric: 16 oz Hypalon.
        4. Aig Bag Fabric: 10 oz Vinyl.
        5. Colors: Black or Blue.

\*\* NOTE TO SPECIFIER \*\* Delete head curtain drop id not required. Head curtain drop options are 48, 54, 60, 66, 72, 78, and 84 inches.

* + - * 1. Head Curtain Drop: \_\_\_\_ inches (\_\_\_\_ mm).
    1. Basis of Design: SI 350 Inflatable Dock Seal as manufactured by Serco. Designed for sloped drive conditions for doors up to 8 ft (2.44 m) wide and 10 ft (3.05 m) high. Ideal for prefabricated buildings where excessive wall pressure could damage building structure. Tight, energy-efficient seal with minimal pressure to the building wall. Full-width adjustable header seal.
       1. Sloped Drive Condition: Slightly tapered vertical seals form a seal parallel to sides of trailer. Adjustable header inflates to seal trailer top.
       2. Standard Unit Size (WxH): 9 ft 4 inch x 11 ft 8 inch (2.84 x 3.56 m).
          1. Fits Door Openings (WxH): 8 x 10 ft (2.44 x 3.05 m) or smaller.
          2. Bottom of Head Frame: Minimum of 15 ft (4.57 mm) off ground.
          3. Minimum Projection Beyond Bumpers: 6 inches (152 mm).
       3. Front Opening Width: 7ft 6 inches. Header Curtain Drop: 48 inches (1219 mm).
          1. On a 48 inch (1219 mm) dock height this would service trailers 11 ft to 13 ft 6 inches (3.35 to 4.11 m) height.
       4. Wiring from 110 power source to switch and from switch to motor/blower by others.
       5. Design Requirements:
          1. Dock Height: \_\_\_\_ inches (\_\_\_\_ mm).
          2. Unit Size (WxHxProjection): \_\_\_\_ x \_\_\_\_ x \_\_\_\_ x inch (\_\_\_\_ x \_\_\_\_ x \_\_\_\_ x mm).
          3. Head Frame: 2 x 8 inch (51 x 203 mm).
          4. Head Frame Projection: 24 inches (610 mm) on a 14 inch (356 mm) unit.
          5. Head Frame Projection: 28 inches (712 mm) on a 18 inch (457 mm) unit.
          6. Truck Coverage (off ground): \_\_\_\_ to \_\_\_ inches (\_\_\_\_ to \_\_\_\_ mm).

\*\* NOTE TO SPECIFIER \*\* Maximum percent of slope without tapering shelter frame is 3 percent.

* + - * 1. Approach: Level.
        2. Approach: Incline: \_\_\_\_ percent.
        3. Approach: Decline \_\_\_\_ percent.
        4. Difference in 50 ft (15.24 mm): \_\_\_\_ inches (\_\_\_\_ mm).
        5. Curtain Material: 16 oz Hypalon. Color: Black, Tan, Brown, Blue, Green.
        6. Curtain Material: 14 oz Polyurethane: Black.
        7. Curtain Material: 9 oz Vinyl: Tan.
    1. Basis of Design: DRYDOCK Rain Sealing System as manufactured by Serco. Protects dock from moisture infiltration, keeping products safe from costly water damage. Covers trucks 12 ft 9 inches to 13 ft 6 inches (3.89 to 4.11 mm) high. Automatic position, no manual activation. Heavy-duty galvanized steel channel head frame. Translucent fiberglass raked head frame. High-resilient foam core protected by three layers of durable coated fabric. Seal to be easily replaceable. Support brackets for mounting over existing equipment. Weighted side covers for extra protection of dock area.
       1. Design Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete drive requirements options not required.

* + - * 1. Drive/Approach: Level.
        2. Drive/Approach: Incline.
        3. Drive/Approach: Decline.
        4. Drive/Approach: \_\_\_ percent grade.
        5. Weighted Side Covers: 22 oz. vinyl.

Color: Black, Tan, Brown, Blue, or Green.

Flame Retardant Fabric and Foam.

Flame retardant fabric only.

* + - * 1. Removable Cover Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

* + - * 1. Wear Pleat Material: XL-100.

Color: Black, Tan, Brown, Blue, or Green.

Flame Retardant Fabric and Foam.

Flame retardant fabric only.

* + - * 1. Head Frame Material: Galvanized steel.
        2. Top Projection of Dock Seal: \_\_\_\_ inches (\_\_\_\_ mm).
        3. DryDock Head Frame Projection: \_\_\_\_ inches (\_\_\_\_ mm). 18 inch (457 mm) greater than dock seal top projection.
        4. Dock Seal Overall Unit Height off Grade at Wall: \_\_\_\_ inches (\_\_\_\_ mm).
        5. Dock Seal Unit Width: \_\_\_\_ inches (\_\_\_\_ mm) total.
        6. Dock Seal Unit Width Including Mounting Brackets: \_\_\_\_ inches (\_\_\_\_ mm).
        7. DryDock Head Frame Width: \_\_\_\_ inches (\_\_\_\_ mm) total.
        8. Building Wall Construction: Metal.
        9. Building Wall Construction: Other.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. DOCK EQUIPMENT ACCESSORY ITEMS
     1. Basis of Design: ALS and MLS LED Light Communication as manufactured by Serco. Ships with inside control panel, exterior light, and sign. High visibility low profile electrical safety signaling device. Alerts drivers and dock personnel of dock condition. Red and green LED lights provide clear visual communication. Caution sign with standard and reverse lettering.
        1. Standards Compliance: UL / cUL listed.
        2. Communication Lights: LED red and green.
        3. Interlocking capable with other dock equipment.
        4. Controller: Programmable solid state.
        5. ALS: Automatic interior/exterior LED red/green communication lights and exterior caution sign. Limit switch and bracket by others.
           1. Operation: Control panel is interlocked with dock equipment so interior and exterior lights automatically switch based on leveler or door position. With "automatic" switch select and interlocked with a door open sensor, interior light will automatically switch to green "O" and exterior light to red" X" when door is open. A red "X" is present on exterior light when "override" switch is selected.
        6. MLS: Manual interior/exterior LED red/green communication lights with exterior caution sign.
           1. Operation: As trailer backs against dock bumpers, exterior light is green "O" and interior light is red "X". With trailer in proper position, manually switch control panel to "Enter Vehicle". Exterior light changes to red "X" and interior light changes to green "O". Once loading/unloading is completed switch panel to "Do Not Enter Vehicle"and interior light turns to red "X" with exterior light changing to green "O".
           2. Control Panel: Non-metallic, prewired NEMA 4X (HxWxD): 10 x 8 x 6 inch (254 x 203 x 152 mm) with clearly marked operating instructions. Field Wiring Terminations: Made to removable modular terminal connectors.

Control Panel Circuitry: 120 volt operation at 1 amp.

Control Panel Lights: 24 volt light-emitting diodes (LED).

* + - * 1. Composite Exterior Light (HxWxD): 6 x 6 x 4-1/4 inch (152 x 152 x 107 mm). Housing: Black polypropylene, prevents rust and corrosion.

Composite light LED's: 24 volt DC with a load of 150 mA.

* + - * 1. Panel mounts on interior wall near dock door opening. Exterior light mounts on building exterior wall 90 inches (2286 mm) from ground on driver's side of door opening and at safe distance from door jamb to prevent interference with dock seals or dock shelters.
        2. Limited Warranty: Free of defects in material and workmanship, under normal use, for 1 year base period beginning on completion of installation or 60th day after shipment whichever is earlier.
    1. Basis of Design: Digital Master Control Panel with HMI as manufactured by Serco.
       1. Guided sequence of operation displays only active equipment.
       2. Large clear icons and controls.
       3. Button function by shape.
       4. Available dock override password protection.
       5. Available screen saver with log-in password protection.
       6. User set password.
       7. Time at dock timer.
       8. Safely monitor PLC I/O status via touch screen.
       9. Alarm history logged on screen with time and date stamp.
       10. User set preventative maintenance thresholds.
       11. Preventative maintenance countdown values for equipment.
       12. Life cycle counts of equipment.
       13. Override event logging.
       14. Ability to reverse sequence of operations.
       15. Diagnose problems and provide actionable recommendations.
       16. Equipment Integration: Air powered levelers, Hydraulic levelers, Vehicle restraints, and Wheel restraints.
       17. Touch screen interface, and composite light.
       18. HMI Functionality: Sequence guide
           1. Password protection for override and maintenance functions
           2. Data logging capability
           3. Input/output display on HMI without opening the panel
           4. Override/alarm logs
           5. Preventive maintenance tracking
       19. Connectivity: 4Sight Connect capability when properly equipped.
       20. Enclosure Assembly: Mild steel unless specified for NEMA4 or NEMA4X.
           1. NEMA rated panels to be constructed of suitable composite materials.
       21. Composite Communications Light: LED display containing red X, amber dash, and green circle with error code functionality.
       22. Control Panel: Steel interlock capable. Automatic starter, thermal overload, control circuit breaker with reset capability.
           1. Touch Screen: Guides operator through functions displaying active equipment.

\*\* NOTE TO SPECIFIER \*\* E-stop button and/or rotary fused disconnect are optional but require the larger control panel. Delete size option not required.

* + - * 1. Size: 20-1/2 x 9-1/2 x 8 inch (521x 241 x 203 mm).
        2. Size: 24-1/2 x 9-1/2 x 8 inches (622 x 241 x 203 mm).

Mushroom-Style E-Stop Button: Stops leveler instantly when depressed. Maintained Contact Type: Activates solenoid on hydraulic system. No need to hold button to maintain leveler in "Stop" position.

Rotary fused disconnect.

* + - 1. Product Finish: Powder coated ANSI 61 Grey, textured finish.
      2. Limited Warranty: All components under normal use for 1 year beginning on installation completion or 60th day after shipment, whichever is earlier.
         1. Limited 4-Year Parts and Labor Warranty on hydraulic power unit and cylinders.
         2. Structural 10 Year Warranty: Upon engineering approval of written application.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Door Push Buttons: Push buttons only.
      2. Door Push Buttons: Push buttons plus power supply at primary panel voltage.
      3. Dock Light: Power only.
      4. Dock Light: On and off switch.
      5. Dock Light: On and off auto.
      6. Dock Fan: Power only.
      7. Dock Fan: On and off switch.
      8. Dock Fan: On and off auto.
      9. Duplex Outlet: 2 Amp (dock lights only).
      10. Duplex Outlet: 5 Amp.
      11. Duplex Outlet: 10 Amp.
      12. Duplex Outlet: 15 Amp.
      13. Inflatable Shelter: SI-400.
      14. Inflatable Shelter: SI-450.
      15. Inflatable Shelter: Voltage: \_\_\_\_.
      16. Rotary fused disconnect.
      17. 7 inch (178 mm) HMI.
      18. NEMA 4.
      19. NEMA 4X.
      20. 4Sight connect capability.
      21. Impact-A-Track LED: 2 inch (51 mm).
      22. Impact-A-Track LED: 3 inch (76 mm).
    1. Basis of Design: Dock Seal and Shelter Fabrics: Color to be determined from Manufacturer's range

\*\* NOTE TO SPECIFIER \*\* Delete fabric options not required. Not all fabrics are available in all colors. Please check with Serco to verify color availability in your choice of fabric.

* + - 1. Material: XL-100. Heavy-duty polyester based fabric, polymer blend coating on both sides. Highest puncture and tear resistance of any fabric in the industry.
         1. Tear Strength per ASTM D3776: Length: 273 lbs (123.8 kg). Width: 272 lbs (123.4 kg).
         2. Abrasion Resistance per ASTM D3884: 5,000 plus cycles.
         3. Cold Test at Minus 40 degrees F (Minus 40 degrees C) per ASTM D2136 or D751-00: Pass.
         4. Adhesion per ASTM D751: 32 lbs (14.5 kg) per 2 inches (51 mm).
      2. Material: 40 oz. Vinyl. Woven polyester base fabric with a vinyl coating on both sides.
         1. Tear Strength per ASTM D3776: Length: 192 lbs (89.1 kg). Width: 185 lbs (83.9 kg).
         2. Abrasion Resistance per ASTM D3884: 4000 plus Cycles.
         3. Cold Test at Minus 40 degrees F (Minus 40 degrees C) per ASTM D2136 or D751-00: Pass.
         4. Adhesion per ASTM D751: 26 lbs (11.9 kg) per 2 inches (51 mm).
      3. Material: 22 oz. Vinyl. Woven polyester base fabric with a vinyl coating on both sides.
         1. Tear Strength per ASTM D3776: Length: 158 lbs (71.7 kg). Width: 118 lbs (53.5 kg).
         2. Abrasion Resistance per ASTM D3884: 2250 plus Cycles.
         3. Cold Test at Minus 40 degrees F (Minus 40 degrees C) per ASTM D2136 or D751-00: Pass.
         4. Adhesion per ASTM D751: 23 lbs (10.4 kg) per 2 inches (51 mm).

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. VEHICLE RESTRAINTS
     1. Basis of Design: SL10 Vehicle Restraint as manufactured by Serco. Upward biased, mechanically actuated featuring dual locking positions. Includes locking unit, caution sign, control bar and control bar mounting bracket.
        1. Standards Compliance: NHTSA regulation for rear impact guards. OSHA standards.
        2. Mainframe: Stationary mounted. Side and rear members: 1/2 inch (13 mm) welded hot dip galvanized steel plate. Pull-Out Resistance: 32,000 lbs (14515 kg). Bushings: High strength and self-lubricating.
        3. Operation:
           1. After vehicle backs up against dock bumpers, position control bar between rear of vehicle and dock face to activate release latch and engage restraint.
           2. Dual gas springs raise locking unit, engaging the rear impact guard. Restraint maintains positive contact as vehicle moves vertically during loading/unloading operations. Dual locking positions minimize vehicle's horizontal movement. If restraint cannot engage vehicle, you must chock the vehicle wheels.
           3. Release Restraint: Apply downward force on restraint with control bar until storage latch engages.
           4. Stored Position: Restraint has integral cover protecting mechanism from damage and debris.
        4. Hooking Range: Engages rear impact guards that are 11 inches (279 mm) horizontally from 4 inch (101 mm) bumper and is compatible with NHTSA regulation rear impact guards. Dual locking positions limit vehicle movement and engage rear impact guard at 7 and 11 inches (178 and 279 mm) from 4 inch (101 mm) bumper.
        5. Communication: Interior-mounted operating instructions. Exterior-Mounted Caution Sign (WxH): 9 x 24 inch (229 x 610 mm). Standard and reversed lettering.
        6. Limited Warranty: Components to be defect free in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Begins on installation completion or 60th day after shipment, whichever is earlier.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ground mount
      2. Stand-off bracket \_\_\_\_\_\_ projection
      3. Embed mounting plate (new construction)
      4. Pit floor mounting bracket
      5. Back plate cut-down (wall or ground mount) \_\_\_\_\_\_\_\_\_\_\_
    1. Basis of Design: SL20 Vehicle Restraint as manufactured by Serco. Upward biased, mechanically actuated featuring dual locking positions. Includes locking unit, interior and exterior communication light system, exterior caution sign, control bar and control bar mounting bracket.
       1. Standards Compliance: NHTSA regulation for rear impact guards. OSHA standards.
       2. Mainframe: Stationary mounted. Side and rear members: 1/2 inch (13 mm) welded hot dip galvanized steel plate. Pull-Out Resistance: 32,000 lbs (14515 kg). Bushings: High strength and self-lubricating.
       3. Operation:
          1. After vehicle backs up against dock bumpers, position control bar between rear of vehicle and dock face to activate release latch and engage restraint.

Dual gas springs raise locking unit, engaging the rear impact guard. Turn selector switch on wall mounted control panel to "Enter" position, switching exterior lights to red and interior lights to green.

Restraint maintains positive contact with rear impact guard as vehicle moves vertically during loading/unloading. Dual locking minimizes vehicle horizontal movement.

* + - * 1. Release Restraint: Apply downward force on restraint with control bar until storage latch is engaged. Once restored, turn selector switch to "Do Not Enter" position, switching exterior light to green and interior light to red, indicating it is safe for vehicle to leave but unsafe to load/unload.
        2. If vehicle restraint cannot engage vehicle, you must chock vehicle wheels and turn control panel selector switch to "Restraint Override" position. When stored, restraint incorporates a cover protecting activation mechanism from damage and debris,
      1. Solid State Interlock Capable Control Panel (WxHxD): 8 x 10 x 5-1/2 inch (203 x 254 x 140 mm). NEMA 4X polycarbonate enclosure. Real-time diagnostic capability, integral LED red/green/amber light communication system and operating instructions. Field wiring terminations to be removable modular terminal connectors.
      2. Hooking Range: Engages rear impact guards that are 11 inches (279 mm) horizontally from 4 inch (101 mm) bumper and is compatible with NHTSA regulation rear impact guards. Dual locking positions limit vehicle movement and engage rear impact guard at 7 and 11 inches (178 and 279 mm) from 4 inch (101 mm) bumper.
      3. Exterior Lights (WxHxD): 6-3/8 x 11-3/8 x 4 inch (162 x 289 x 102 mm). Low profile flashing green and red LEDs indicate safe or unsafe conditions for vehicle movement. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm). Standard and reversed lettering.
         1. Exterior lights operate on 24 volt circuit.
      4. Control Panel: NEMA 12, 120 volt, 1-phase, 60 Hz supply. UL listed components.
      5. Limited Warranty: Components to be defect free in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Begins on installation completion or 60th day after shipment, whichever is earlier.
      6. Accessory: Control panel stanchion.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ground mount
      2. Stand-off bracket \_\_\_\_\_\_ projection
      3. Embed mounting plate (new construction)
      4. Pit floor mounting bracket
      5. Back plate cut-down (wall or ground mount) \_\_\_\_\_\_\_\_\_\_\_
    1. Basis of Design: SL40 Vehicle Restraint as manufactured by Serco. Upward biased, mechanically actuated featuring dual locking positions. Includes locking unit, interior and exterior communication light system, exterior caution sign, control bar and control bar mounting bracket.
       1. Standards Compliance: NHTSA regulation for rear impact guards. OSHA standards.
       2. Mainframe: Stationary mounted. Side and rear members: 1/2 inch (13 mm) welded hot dip galvanized steel plate. Pull-Out Resistance: 32,000 lbs (14515 kg). Bushings: High strength and self-lubricating.
       3. Operation:
          1. Engage Restraint: After vehicle backs up against dock bumpers, position a control bar between rear of vehicle and dock face to activate release latch and engage restraint. Exterior light changes to red "X", dual gas springs raise hook, engaging rear impact guard. Interior light changes to green "O" when restraint maintains positive contact with rear impact guard as vehicle moves vertically during loading and unloading operations. Dual locking positions minimize vehicle's horizontal movement.
          2. Release Restraint: Apply downward force on restraint with control bar until storage latch is engaged. Once restored, lights reverse, switching exterior light to green "O" and interior light to red "X", indicating it is safe for vehicle to leave.
          3. If restraint cannot engage trailer, manually chock vehicle wheels, and turn control panel switch to "Restraint Override" (lights only) mode of operation. Exterior light switches to red "X". The interior light switches to green "O" combined with amber bar indicating vehicle is secured by alternate means.
          4. When stored, a cover protects activation mechanism from damage and debris.
       4. Solid State Interlock Capable Control Panel (WxHxD): 8 x 10 x 5-1/2 inch (203 x 254 x 140 mm). NEMA 4X polycarbonate enclosure. Real-time diagnostics, LED red/green/amber communication system and printed operating instructions. Field wiring terminations are to removable modular terminal connectors.
       5. Hooking Range: Restraint engages a rear impact guard positioned 11 inches (279 mm) horizontally from face of a 4 inch (101 mm) bumper and is compatible with NHTSA regulation rear impact guards. Dual locking positions limit vehicle movement and engage rear impact guard at 7 and 11 inches (178 and 279 mm) from 4 inch (101 mm) bumper.
       6. Exterior Lights (WxHxD): 6 x 6 x 4-1/4 inch (152 x 152 x 108 mm). Low profile flashing green and red 24 VDC LED indicates safe or unsafe conditions. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm) with standard and reversed lettering.
       7. Control Panel: NEMA 12, 120 volt, 1-phase, 60 Hz supply. UL listed components.
       8. Limited Warranty: Components to be defect free in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Begins on completion of installation or 60th day after shipment, whichever is earlier.
       9. Accessory: Control panel stanchion.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ground mount
      2. Stand-off bracket \_\_\_\_\_\_ projection
      3. Embed mounting plate (new construction)
      4. Pit floor mounting bracket
      5. Back plate cut-down (wall or ground mount) \_\_\_\_\_\_\_\_\_\_\_
    1. Basis of Design: SL60 Vehicle Restraint as manufactured by Serco. Upward biased, mechanically actuated featuring dual locking positions. Includes locking unit, interior and exterior communication light system, exterior caution sign, control bar and control bar mounting bracket.
       1. Standards Compliance: NHTSA regulation for rear impact guards. OSHA standards.
       2. Mainframe: Stationary mounted. Side and rear members: 1/2 inch (13 mm) welded hot dip galvanized steel plate. Pull-Out Resistance: 32,000 lbs (14515 kg). Bushings: High strength and self-lubricating.
       3. Operation:
          1. As vehicle backs up against dock bumpers: Exterior light is green. Interior control light is red. With vehicle in position, Presses "Engage" button. Exterior light changes to red "X" and dual gas springs raise hook. Interior light changes to green "O" when restraint maintains positive contact with rear impact guard and as vehicle moves vertically during loading and unloading operations.

Dual locking positions minimize vehicle's horizontal movement.

* + - * 1. Release Restraint: Press "Release" button on control panel to release rear impact guard and restore restraint. Interior light switches to red "X", indicating it is unsafe to load/unload. When fully restored, exterior light switches to green "O", indicating it is safe for vehicle to leave.

If restraint raises but does not make positive contact with rear impact guard, it will automatically restore.

If restraint cannot engage vehicle, you must chock vehicle wheels and turn control panel selector switch to "Restraint Override (lights only)"Exterior light switches to red "X" and interior light switches to green "O", and amber bar indicating vehicle is secured by alternate means. When stored, restraint has a cover to protect activation mechanism from damage and debris.

* + - 1. Solid State Control Panel (WxHxD): 9 x 20 x 8 inch (229 x 508 x 203 mm) with programmable logic controller, real-time diagnostics, industrial quality push-buttons, integral LED visual safety warning system, and printed operating instructions.
      2. Hooking Range: Restraint engages a rear impact guard positioned 11 inches (279 mm) horizontally from face of a 4 inch (101 mm) bumper and is compatible with NHTSA regulation rear impact guards. Dual locking positions limit vehicle movement and engage rear impact guard at 7 and 11 inches (178 and 279 mm) from 4 inch (101 mm) bumper.
      3. Exterior Lights (WxHxD): 6 x 6 x 4-1/4 inch (152 x 152 x 114 mm). Low profile flashing green and red 24 VDC LEDs indicate safe or unsafe conditions for vehicle movement. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm). Standard and reversed lettering.
      4. Control Panel: NEMA 12, 120 volts, 1- phase, 60 Hz supply. UL listed components.
      5. Limited Warranty: Components to be free of defects in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Will begin on completion of installation or 60th day after shipment, whichever is earlier.
      6. Accessories:
         1. Control panel stanchion.
         2. Digital master or combination control panel with HMI.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ground mount.
      2. Stand-off bracket \_\_\_\_\_ projection.
      3. Embed mounting plate (new construction).
      4. Pit floor mounting bracket.
      5. Key lock switch on control panel.
      6. Audible alarm.
      7. Flood resistant package.
      8. Heater element.
      9. Back plate cut-down (wall or ground mount) \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      10. Security lock package (padlock not included).
      11. High visibility traffic-style exterior lights (120 volt only).
    1. Basis of Design: SL70 Vehicle Restraint as manufactured by Serco. Upward biased, mechanically actuated featuring dual locking positions. Includes locking unit, interior and exterior communication light system, exterior caution sign, control bar and control bar mounting bracket.
       1. Standards Compliance: NHTSA regulation for rear impact guards. OSHA standards.
       2. Mainframe: Stationary mounted. Side and rear members: 1/2 inch (13 mm) welded hot dip galvanized steel plate. Pull-Out Resistance: 32,000 lbs (14515 kg). Bushings: High strength and self-lubricating.
       3. Operation:
          1. Engage Restraint: As vehicle backs up against dock bumpers, exterior light is green "O", interior control light is red "X". As vehicle passes under vehicle sensor, interior amber light in combination with red "X" light indicates presence of a vehicle. With vehicle in position, operator presses the "Engage" button. Exterior light switches to red "X" and dual gas springs raise the hook. Interior light changes to green "O" when restraint maintains positive contact with rear impact guard and as vehicle moves vertically during loading and unloading operations. Amber inside light remains lit until vehicle is restrained. Dual locking positions minimize vehicle's horizontal movement.
          2. Release Restraint: Operator presses "Release" button on control panel to release rear impact guard and restore restraint. Interior light switches to red "X", indicating it is unsafe to load/unload. When restraint is restored, exterior light switches to green "O", indicating it is safe for vehicle to leave.
          3. If Restraint Cannot Engage Vehicle: Restraint automatically restores. Chock vehicle wheels and turn control panel selector switch to "Restraint Override"(lights only). Exterior light switches to red "X", interior light switches to green "O" combined with amber bar to show vehicle is secured by alternate means. When stored, a cover protects activation mechanism from damage and debris.
       4. Solid State Control Panel (WxHxD): 9 x 20 x 8 inch (229 x 508 x 203 mm) with programmable logic controller and real time diagnostics, industrial push-buttons, integral LED safety warning system, and printed operating instructions.
       5. Hooking Range: Restraint engages a rear impact guard positioned 11 inches (279 mm) horizontally from face of a 4 inch (101 mm) bumper and is compatible with NHTSA regulation rear impact guards. Dual locking positions limit vehicle movement and engage rear impact guard at 7 and 11 inches (178 and 279 mm) from 4 inch (101 mm) bumper.
       6. Exterior Lights (WxHxD): 6 x 6 x 4-1/4 inch (152 x 152 x 108 mm). Low profile flashing green and red 24 VDC LED signals indicate safe or unsafe conditions. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm). Standard and reversed lettering.
       7. NEMA 12 Control Panel: 120 volt, single phase, 60 Hz supply. UL listed components.
       8. Limited Warranty: Components to be free of defects in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Will begin on completion of installation or 60th day after shipment, whichever is earlier.
       9. Accessories:
          1. Control panel stanchion.
          2. Digital master or combination control panel with HMI.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ground mount
      2. Stand-off bracket \_\_\_\_\_ projection.
      3. Embed mounting plate (new construction).
      4. Pit floor mounting bracket.
      5. Key lock switch on control panel.
      6. Audible alarm.
      7. Flood resistant package.
      8. Heater element.
      9. Back plate cut-down (wall or ground mount) \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      10. Security lock package (padlock not included).
      11. High visibility traffic-style exterior lights (120 volt only).
    1. Basis of Design: SL80 Vehicle Restraint as manufactured by Serco. Upward biased, mechanically actuated featuring dual locking positions. Includes locking unit, interior and exterior communication light system, exterior caution sign, control bar and control bar mounting bracket.
       1. Standards Compliance: NHTSA regulation for rear impact guards. OSHA standards.
       2. Mainframe: Stationary mounted. Side and rear members: 1/2 inch (13 mm) welded hot dip galvanized steel plate. Pull-Out Resistance: 32,000 lbs (14515 kg). Bushings: High strength and self-lubricating.
       3. Operation:
          1. Engage Restraint: As vehicle backs up against dock bumpers, exterior light is green "O", interior light is red "X". As vehicle passes under vehicle sensor, the inside amber light and red "X" light indicates vehicle presence. A 60 second delay, enables vehicle to get into position prior to restraint engagement. If trailer leaves sensor range, timer stops and restarts at 60 seconds when a trailer is again indicated. When time delay expires, exterior light switches to red "X" and dual gas springs raise locking unit, engaging the rear impact guard. Interior light changes to green "O" when restraint maintains positive contact with rear impact guard and as vehicle moves vertically during loading/unloading operations. Dual locking positions minimize vehicle's horizontal movement.
          2. Release Restraint: Press "Release" button on control panel, to release rear impact guard, and restore vehicle restraint. Interior light switches to red "X", indicating it is unsafe to load/unload. When vehicle restraint is restored, exterior light switches to green "O" indicating it is safe for vehicle to leave. Inside light switches to red "X" indicating it is unsafe to load/unload. Amber inside light remains lit until vehicle is restrained.
          3. If restraint rises but does not make contact with rear impact guard, it will restore. If restraint cannot engage vehicle, chock vehicle wheels, and turn control panel selector switch to "Restraint Override" (lights only) mode of operation. Exterior light switches to red "X". Interior light switches to green "O" combined with amber bar shows vehicle is secured by alternate means. When stored, a cover protects activation mechanism from damage and debris.
       4. NortherSolid State Control Panel (WxHxD): 9 x 20 x 8 inch (229 x 508 x 203 mm) with programmable logic controller and real time diagnostics, industrial push-buttons, integral LED safety warning system, and printed operating instructions.
       5. Hooking Range: Restraint engages a rear impact guard positioned 11 inches (279 mm) horizontally from face of a 4 inch (101 mm) bumper and is compatible with NHTSA regulation rear impact guards. Dual locking positions limit vehicle movement and engage rear impact guard at 7 and 11 inches (178 and 279 mm) from 4 inch (101 mm) bumper.
       6. Exterior Lights (WxHxD): 6 x 6 x 4-1/4 inch (152 x 152 x 108 mm). Low profile flashing green and red 24 VDC LEDs indicate safe or unsafe conditions. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm) with standard and reversed lettering.
       7. NEMA 12 Control Panel: 120 volt, single phase, 60 Hz supply. UL listed components.
       8. Limited Warranty: Components to be free of defects in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Will begin on completion of installation or 60th day after shipment, whichever is earlier.
       9. Accessories:
          1. Control panel stanchion.
          2. Digital master or combination control panel with HMI.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ground mount
      2. Stand-off bracket \_\_\_\_\_ projection.
      3. Embed mounting plate (new construction).
      4. Pit floor mounting bracket.
      5. Key lock switch on control panel.
      6. Audible alarm.
      7. Flood resistant package.
      8. Heater element.
      9. Back plate cut-down (wall or ground mount) \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      10. Security lock package (padlock not included).
      11. High visibility traffic-style exterior lights (120 volt only).
    1. Basis of Design: SL90 Vehicle Restraint as manufactured by Serco. Upward biased, mechanically actuated featuring dual locking positions. Includes locking unit, interior and exterior communication light system, exterior caution sign, control bar and control bar mounting bracket.
       1. Standards Compliance: NHTSA regulation for rear impact guards. OSHA standards.
       2. Mainframe: Stationary mounted. Side and rear members: 1/2 inch (13 mm) welded hot dip galvanized steel plate. Pull-Out Resistance: 32,000 lbs (14515 kg). Bushings: High strength and self-lubricating.
       3. Operation:
          1. Engage Restraint: As vehicle backs up against dock bumpers, exterior light is green "O", interior light is red "X". With vehicle in position, press "Engage" button. Exterior light switches to red "X". Dual gas springs raise the hook. Interior light changes to green "X" when restraint maintains positive contact with rear impact guard and as vehicle moves vertically during loading and unloading operations. Dual locking positions minimize vehicle's horizontal movement. The amber inside light remains lit until vehicle is restrained.
          2. Release Restraint: To release rear impact guard, enter a code on Digital Multi Code Keypad on control panel, restoring the restraint. Interior light switches to red "X", indicating it is unsafe to load/unload. When restraint is restored, exterior light switches to green "O" indicating it is safe for vehicle to leave. Interior light switches to red "X" indicating it is unsafe to load/unload.
          3. If restraint does not make positive contact with rear impact guard, it will restore. If restraint cannot engage vehicle, chock vehicle wheels, and turn control panel selector switch to "Restraint Override" (lights only) mode of operation. Exterior light switches to red "X", Interior light switches to green "O" combined with amber bar indicates vehicle is secured by alternate means. When stored, a cover to protect activation mechanism from damage and debris.
       4. Solid State Control Panel (WxHxD): 9-3/4 x 20 x 8 inch (248 x 508 x 203 mm) with programmable logic controller and real time diagnostics, LED safety warning system, and touch screen interface, guiding operator through available equipment functions.
       5. NEMA 12 Control Panel: 120 volt, single phase, 60 Hz supply. UL listed components.
       6. Hooking Range: Restraint engages a rear impact guard positioned 11 inches (279 mm) horizontally from face of a 4 inch (101 mm) bumper and is compatible with NHTSA regulation rear impact guards. Dual locking positions limit vehicle movement and engage rear impact guard at 7 and 11 inches (178 and 279 mm) from 4 inch (101 mm) bumper.
       7. Exterior Lights (WxHxD): 6 x 6 x 4-1/4 inch (152 x 152 x 108 mm). Low profile flashing green and red 24 VDC LED signals indicate safe or unsafe conditions. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm). Standard and reversed lettering.
       8. Limited Warranty: Components to be free of defects in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Will begin on completion of installation or 60th day after shipment, whichever is earlier.
       9. Accessory: Control panel stanchion.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Ground mount
      2. Stand-off bracket \_\_\_\_\_ projection.
      3. Embed mounting plate (new construction).
      4. Pit floor mounting bracket.
      5. Trailer presence sensor.
      6. Automatic engagement.
      7. Flood resistant package.
      8. Heater element.
      9. Back plate cut-down (wall or ground mount) \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      10. Security lock package (padlock not included).
      11. High visibility traffic-style exterior lights (120 volt only).
    1. SLP-3000 Vehicle Restraint as manufactured by Serco. Pit-mounted, hydraulic recessed vehicle restraint featuring push-button control and rear impact guard safe engagement signaling system. Includes locking unit, LED interior and exterior communication light system, and push-button control panel. Unit conforms to OSHA standards.
       1. Steel Main Frame: Pit mounted. Pull-out Resistance: 32,000 lbs (14,515 kg).
       2. Operation:
          1. As Vehicle Backs in Position: Exterior Light: Green "O". Interior light: Red "X".
          2. When Vehicle is in Position, Operator presses "Engage" button.

Exterior Light: Changes to red "X". Interior Light: Red "X".

Hydraulic Hook: Lowers and extends from pit. Hook then raises to make contact with rear impact guard. Hook retracts until sensing positive engagement with rear impact guard.

* + - * 1. Hydraulic Hook is Positively Engaged: Inside light: Switches to green "O " and maintains engagement during loading/unloading, preventing horizontal movement away from dock.
        2. To Release Vehicle: Press "Restraint Release" button on control panel. Restraint returns to storage position in pit.

Interior Light: Changes to red "X " signaling it is unsafe to load/unload.

* + - * 1. When restraint is fully restored.

Exterior light: Changes to green "O ", signaling vehicle it is safe to leave.

* + - * 1. If Restraint is Unable to Engage Rear Impact Guard: Restraint returns to stored position, sounds an optional audible alarm, and flashes Interior red "X" and amber light. Exterior Light: Remains red "X ".

If Vehicle is Not Engaged: You must manually chock wheels and rotate control panel selector switch to "Restraint Override".Exterior Light: Is red "X ". Interior Light: Switches to green "O ". Amber light indicates vehicle is secured by alternate means.

To release vehicle: Press "Restraint Release" button on control panel, switching exterior light to green "O " and interior light to red "X " showing it is safe for vehicle to leave.

* + - 1. Solid State Control Panel (WxHxD): 9 x 20 x 8 inches (229 x 508 x 203 mm). Programmable logic controller, "real time" diagnostic capability, industrial quality push-buttons, integral LED visual safety warning system, and printed operating instructions.
      2. Hooking Range: Vehicle restraint engages rear impact guards 9 to 28 inch (229 to 711 mm) vertically from driveway. Hydraulic system limits vehicle movement and engages rear impact guards positioned up to 14 inches (356 mm) from dock face and is compatible with NHTSA regulation rear impact guards.
      3. Exterior Lights (WxHxD): 6 x 6 x 4-1/4 inch (152 x 152 x 108 mm). Indicate safe or unsafe conditions for vehicle movement. Low profile flashing green and red 24 VDC LED lights. Caution Sign (WxH): 9 x 24 inches (229 x 610 mm), standard and reversed lettering.
      4. Control panel for locking unit. Available in single and three phase voltages. Interior and exterior LED lights operate on 24 volt circuit. All Components: UL approved.
      5. Limited Warranty: Components to be free of defects in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Will begin on completion of installation or 60th day after shipment, whichever is earlier.
      6. Accessories:
         1. Control panel stanchion
         2. Digital master or combination control panel with HMI

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Single phase power
      2. Audible alarm
      3. Key lock switch on control panel
      4. Pit cover \_\_\_\_\_\_\_\_\_ ( specify VSL or pit leveler)
      5. 120 V high visibility traffic light
    1. Manual Safety-Chock Wheel Restraint as manufactured by Serco. Surface mounted devise to chock wheel of truck or trailer and restrain it at loading dock. Manually activated. Mounted within 4 inches (102 mm) ground clearance. Operates in extreme weather conditions including snow and flooding. Interior/exterior visual communication system and exterior audible alarm.
       1. Welded and hot dip galvanized steel. Tubular steel guide rail mounted to driveway. Pull-Out Resistance: 32,000 Ibs (142 kN). High strength, sealed bushings.
       2. Operation:
          1. Truck backs into position against dock bumpers and sets brakes.

Exterior Light: Green. Interior Light: Red. Selector Switch: "Automatic" position.

* + - * 1. Move restraint carriage along guide rail using activation handle to position chock in front of trailer wheel. Extend restraining arms out by pushing handle toward trailer until it locks into position on guide rail.
        2. As restraining arm begins to extend toward trailer: Exterior Light: Becomes red.
        3. Operator moves restraining arm backward to make contact with trailer wheel. When restraint has fully engaged the wheel: Interior Light: Becomes green.
        4. When Loading/Unloading is Complete: Press "Restraint Release" button on control panel. Interior Light: Changes to red. Exterior Light: Changes to flashing red and green.
        5. Push foot pedal, allowing restraining arm to retract to stored position. Interior Light: Remains red. Exterior Light: Changes to green. It is now safe for vehicle to leave.
      1. Solid State Interlock Capable Control Panel (WxHxD): 8 x 10 x 5-1/2 inch (203 x 254 x 140 mm). Real-time diagnostics, integral LED red/green/amber light communication system and printed operating instructions.
         1. Field Wiring Terminations: Removable modular terminal connectors.
      2. Capture Range: 10 ft (3 m) guide rail. Engagement range of 6 ft (1.8 m). Captures rear wheel of transport vehicle for any axle position from 59-7/8 to 133-7/8 inches (1.5 to 3.4 m) from dock face. Extended engagement range available.
      3. Communication System: Printed operating instructions on control panel, an outside mounted instruction sign for truck driver, and internal and external visual communication lights and external audible alarm.
      4. Exterior Lights (WxHxD): 6-3/8 x 11-3/8 x 4 inch (162 x 289 x 102 mm). Low profile flashing green and red LEDs indicate safe or unsafe conditions for vehicle movement. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm). Standard and reversed lettering.
         1. Exterior lights operate on 24 volt circuit.
      5. Exterior Audible Alarm (WxHxD): 4 x 2-1/2 x 1-1/2 inch (102 x 64 x 38 mm) 102 dB(A) solid state alarm. 180 degree sound dispersion; 10 pulses per second. Encapsulated dust resistant.
      6. Electrical: Exterior Lights: 24 volt circuit. Control Panel: NEMA 12, 120 volts, single phase, 60 Hz supply. UL listed components. Conduct Guard: 28 inch (711 mm) long. Included Angle Iron: 2 x 2 x 1/4 inch (50 x 50 x 6 mm).
      7. Limited Warranty: Components to be defect free in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Begins on installation completion or 60th day after shipment, whichever is earlier.
      8. Accessories:
         1. Master or combo control panel.
         2. Control panel stanchion.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Electric de-icing system (heater kit).
      2. Passenger side mount.
      3. Extended guide rail.
      4. Length: 13 ft (4 m). Engagement Range: 9 ft (2.7 m).
      5. Length: 16 ft (4.9 m). Engagement Range: 12 ft (3.7n m).
      6. Interlock switched (specify door open/closed or leveler stored)
    1. SAFETY-CHOCK Wheel Restraint as manufactured by Serco. Surface mounted hydraulic device to chock wheel of truck or trailer holding it at loading dock. NEMA 12 control panel. Single and three phase voltages. Drive mounted. 4 inch (101 mm) ground clearance. Extreme weather operation. Remote-mounted power pack located inside building. Interior and exterior visual communication system.
       1. Welded tubular steel guide rail mounted to driveway. Finish: Hot dip galvanized, entire unit.
       2. Operation:
          1. Truck backs into position against dock bumpers and sets brakes.

Push "Chock Engage" button on control panel to activate.

* + - * 1. When Activated: Exterior Lights: Change from green "O" to red "X".
        2. When Sensing Roller Contacts Rear Truck Wheel: Chock arm extends out of housing until placed in front of rear wheel. Chock housing then reverses and moves the chock arm back to firmly engage wheel.

Interior Lights: Change from red "X" to green "O".

* + - * 1. If configuration of vehicle wheels prevents proper engagement of wheel chock:

Carriage returns to home position and reports a Vehicle Not Found condition. Interior Lights: Flash red "X" and amber.

* + - * 1. Manually chock vehicle wheels and rotate "Override" selector switch to initiate lights override condition.

Exterior Lights: Red "X". Interior Lights: Green "O" and amber.

* + - * 1. When Loading and Unloading is Complete: Push "Release" button on control panel to disengage "Safety-Chock".

Interior Light: Changes from green "O" to red "X".

Chock arm retracts. Housing begins to reverse back toward dock wall.

* + - * 1. When "Safety Chock" reaches stored position:

Exterior Lights: Change from red "X" to green "O".

* + - * 1. Press "release"button: Stops restraint in any position.
      1. Solid State Control Panel (WxHxD): 9 x 20 x 8 inch (229 x 508 x 203 mm). Programmable logic controls, "real time" diagnostics, industrial push buttons, integral LED safety light warning system, and printed operating instructions.
      2. Capture Range: Captures rear wheel of transport vehicle for any axle position from 32 inches (813 mm) to 14 ft (4.27 m) from dock face.
      3. Communication System: Printed operating instructions on control panel. Outside instruction sign for truck driver, and internal and external communication lights.
      4. Exterior Lights (WxHxD): 6 x 6 x 4-1/4 inch (152 x 152 x 106 mm). Low profile flashing green and red LEDs. Indicate safe or unsafe conditions for vehicle movement. Caution Sign (WxH): 9 x 24 inch (229 x 610 mm). Standard and reverse lettering.
      5. Control Panel for Safety-Chock: Available in single and three phase voltages. Interior and exterior LED communication lights operate on a 24V circuit.
      6. Hydraulics: 3/2 GPM pump (two speed) and 1 HP motor, single and three phase voltages, double-acting PLC controlled cylinder with 144 inch (3658 mm) stroke and hydraulic reservoir with 3 gallon capacity. Hydraulic hoses and fittings.
      7. Limited Warranty: Components to be free of defects in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Will begin on completion of installation or 60th day after shipment, whichever is earlier.
      8. Accessories:
         1. Digital master or combination control panel with HMI.
         2. Control panel stanchion.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Keyed override switch selector.
      2. Audible alarm.
      3. Digital cycle counter.
      4. Electric de-icing system (heater kit).
      5. Exterior wall mounted emergency stop.
      6. Additional guide rail system.
      7. Additional hydraulic hose lengths.
    1. Universal Truck Chock Wheel Restraint as manufactured by Serco. Automatic hydraulic device to chock wheel of truck or trailer holding it at loading dock, NEMA 12 control panel. Selectable Voltages: 208V, 230V, 460V or 575V; all 3 phase. In-ground mounted housing. Selectable chock height of 12 or 16 inches (305 or 406 mm). Stores In-ground and raises to operating position when activated. Operating controls and hydraulic power system mounted inside building along with interior and exterior visual communication system.
       1. Weldment of 1/4 inch (6 mm) steel plate, 12 inches (305 mm) wide with 21 inch (533 mm) engagement radius. Housing: 3/16 inch (5 mm) with 3/8 inch (9.5 mm) steel chock track and guide rails. Heat Tracing Cables: 120V temperature activated to prevent ice in housing. Finish: Yellow, acting as a guide strip to align trucks with the dock.
       2. Operation:
          1. Truck backs into position against dock bumpers and sets brakes. Push "Restraint Engage" button on control panel. Exterior Lights: Change from green "O" to red "X". Interior Lights: Change from red "X" to flashing red "X".
          2. Truck chock rises from stored position and moves toward dock until snug against truck tire. When Chock is moving in either direction, a motion alarm sounds. Interior Lights: Changes from flashing red "X" to green "O".
          3. When Loading/Unloading is Complete: Operator, pushes "Restraint Release"button on control panel to disengage truck chock. Interior Light: Changes to flashing red "X".
          4. When Truck Chock Reaches Stored Position: Exterior Lights: Change to green "O". Interior Lights: Change to solid red "X".
       3. Communication System: Printed operating instructions on control panel. Outside instruction sign for truck drivers. Interior LED Lights: Red/amber/green. Exterior LED Lights: Red/green. Operating and installation instructions in Owner's manual.
       4. Composite Exterior Light (HxWxD): 6 x 6 x 4-1/4 inch (152 x 152 x 108 mm). Black polypropylene housing.
       5. Solid State Control Panel (WxHxD): 9 x 20 x 8 inch (229 x 508 x 203 mm). Programmable logic controller, real time diagnostic capability, industrial push-buttons, integral LED visual safety warning system lights, and printed operating instructions.
       6. Hydraulic Specifications: 5 GPM pump and 3 HP motor. 208, 230, 460 or 575 V, 3 phase; double-acting PLC controlled cylinder with 144 in (3658 mm) stroke, and hydraulic reservoir with 10.5 gallon capacity. Hydraulic hoses and fittings.
       7. Mounting of Truck Chock Housing: In a 30 x 384 x 16 inch (762 x 9754 x 406 mm) pit. Provisions for drainage are required. Concrete is poured securing housing in place. Install lights, caution signs, control panel and hydraulic system per instructions.
       8. Warranty: Components to be defect free in material and workmanship, under normal use. Base Warranty Period: Begins on completion of installation or 60th day after shipment, whichever is earlier.
       9. Accessories:
          1. Digital master or combination control panel with HMI.
          2. Control panel stanchion.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Chock Height: 12 inches (305 mm).
      2. Chock Height: 16 inches (406 mm).
      3. Dual pump and motor.
      4. Extension hose kit.
      5. Wall mount bracket for power unit.
      6. Interior audible alarm.
      7. Electric de-icing system (heater kit).
    1. VERSACHOCK Wheel Chock Restraint as manufactured by Serco. Vehicle restraint system with wireless engagement detection. Accommodates trailers and vehicles regardless of condition or presence of ICC bar.
       1. Extruded aluminum with clear hard anodized finish. Chock Cradle: 1/4 inch (6 mm) zinc coated steel.
       2. Electrical: Exterior Power: 24 VDC. Control Panel: 120 VDC.
       3. Control Panel: Nema 4X interlock capable. Communication Lights: Red/green. Over-ride switch for manual operation.
       4. Operation: Control Panel Switch: "Automatic" position.
          1. Remove wheel chock from cradle. Place directly in front of wheel. Exterior Lights: Changes from green "O" to red "X").
          2. Slide wheel chock towards wheel until firmly seated, aligned, and engaged. Maintain a vertical attitude on the handle. Interior Lights: Change from red "X" to green "O".
          3. Release Vehicle: Remove wheel chock from vehicle wheel. Store in chock cradle. Exterior Light: Changes from red "X" to green "O". Vehicle is safe to leave.
       5. When Override Switch is Selected: Exterior Light communicates a red "X".
       6. Chock and cradle must be assembled before installation.
       7. Limited Warranty: Components to be free of defects in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Begins on installation completion or 60th day after shipment, whichever is earlier.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required or delete truck levelers not required.

* 1. TRUCK LEVELERS
     1. Basis of Design: TL Series Hydraulic Truck Leveler as manufactured by Serco. Push-button operated electrohydraulic system. Raises and lowers trailers at loading dock for transfer of materials.
        1. Capacity: 60,000 lbs (287215 kg).
        2. Deck Width: 120 inches (3058 mm).
        3. Deck Length: 14, 16, 18, or 20 ft (4.27, 4.88, 5.49, and 6096 mm).
        4. Approach Ramp (WxL): 120 x 36 inches (3048 x 914 mm)
        5. Lowered Height: 6 to 1/2 inches (165 mm).
        6. Operation:
           1. Truck is backed into position against dock bumpers and brakes are set.

Truck must be properly restrained by a suitable truck restraint system.

Press Constant-Pressure Up button to raise truck leveler.

* + - * 1. When loading and unloading is complete:

Press Lower button to return leveler to stored position.

* + - 1. Deck: Welded construction. 3/8 inch (9.5 mm) thick tread plate over I beam structure.
         1. Removable plate to access pit for maintenance.
      2. Heavy Duty Hydraulic Cylinders: Two, single speed, displacement type, seamless tube, micro-honed cylinder walls, piston seals, and chrome plated rods. Synchronized to eliminate deflection during operation. Velocity Fuses: At cylinders base preventing collapse if supply line fails.
      3. Electrical: Steel NEMA 12, push-button. Supplied in 208V, 230V, 460V, 600V; all 3 phase, 60 Hz. 5 HP motor/pump.
      4. Surface Mounted: On driveway centered in front of dock.
      5. Shallow Pit Mounting: Centered in front of dock accommodates higher trailers.
      6. Push-Button Control Panel: Nema 12. Hydraulic system
      7. Limited Warranty: Components to be defect free in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Begins on installation completion or 60th day after shipment, whichever is earlier.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Length: 14 ft (4.27 mm).
      2. Length: 16 ft (4.88 mm).
      3. Length: 18 ft (5.49 mm).
      4. Length: 20 ft (6.1 mm).
      5. Vertical Travel: 24 inches (610 mm).
      6. Vertical Travel: 36 inches (914 mm).
      7. Biometric switch thumb reader.
      8. Deep pit style (lift cylinders under deck).
      9. Truck positioner guides - internal 5 inches (27 mm) high.
      10. Truck positioner guides - external 12 inches high (305 mm).
      11. Fused disconnect on control panel.
      12. NEMA 4 control.
      13. Special paint color: \_\_\_\_\_\_\_\_.
    1. Basis of Design: Hydraulic Truck Leveler with Universal TruckChock as manufactured by Serco. Push-button control for raising, lowering, and chocking trailers at loading dock. Powered wheel chocking device chocks wheel and holds truck at loading dock. Surface mounted housing includes hydraulic Universal Truck Chock, 14 inches (356 mm) high. Stores below truck leveler deck and raises operating position when activated. Operating Controls and Hydraulics: Mount inside building with red/green light communication system.
       1. Capacity: 60,000 lbs ( kg).
       2. Deck Width: 120 inches (3048 mm). Deck Length: 18 or 20 ft (5.49 or 6.1 m).
       3. Approach Ramp (WxL): 120 x 48 inches (3048 x 1219 mm)
       4. Lowered Height: 8-1/2 inches (216 mm).
       5. Spherical bearings in cylinders allow for trailer misalignment
       6. Operation:
          1. Truck backs into position against dock bumpers and sets brakes.
          2. Turn switch on control panel to activate Universal Truck Chock.

Exterior Light: Changes from green to red.

* + - * 1. Truck chock rises and moves toward dock until snug against truck tire.

Interior Light: Changes from red to green.

* + - * 1. Press Raise button to raise trailer to appropriate position.
        2. Once loading/unloading is complete: Pressing Lower button returns leveler to stored position.
        3. When leveler is lowered, turn switch to release chocks.

Interior Lights: Change from green to red.

* + - * 1. After chocks are released:

Exterior Light: Changes from red to green indicating truck may depart.

* + - 1. Deck: Welded construction. 3/8 inch (9.5 mm) thick tread plate over I beam structure.
         1. Removable plate to access pit for maintenance.
      2. Heavy Duty Hydraulic Cylinders: Two, single speed, displacement type, seamless tube, micro-honed cylinder walls, piston seals, and chrome plated rods. Synchronized to eliminate deflection during operation. Velocity Fuses: At cylinders base preventing collapse if supply line fails.
      3. Universal Truck Chocks: Heavy-duty weldment of 1/4 inch (6 mm) steel plate. Height: 12 inches (305 mm). Engagement Radius: 21 inches (533 mm). Two double-acting heavy duty cylinders with chrome plated cylinder rods.
      4. Electrical: Steel NEMA 12, push-button. Supplied in 208V, 230V, 460V, 600V; all 3 phase, 60 Hz. 5 HP motor/pump.
      5. Surface Mounted: On driveway centered in front of dock.
      6. Shallow Pit Mounting: Centered in front of dock accommodates higher trailers.
      7. Limited Warranty: Components to be defect free in material and workmanship, under normal use, for 1 year from date of shipment. Base Warranty Period: Begins on installation completion or 60th day after shipment, whichever is earlier.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Length: 18 ft (5.49 m).
      2. Length: 20 ft (6.1 m).
      3. Vertical Travel: 24 inches (610 mm)
      4. Vertical Travel: 36 inches (914 mm)
      5. Surface mounted.
      6. Shallow pit.
      7. Deep pit style (lift cylinders under deck).
      8. Truck positioner guides. Internal 5 inches (27 mm) high.
      9. Truck positioner guides. External 12 inches high (305 mm).
      10. Fused disconnect on control panel.
      11. Special paint color: \_\_\_\_\_\_\_\_.
  1. HVLS FANS
     1. Commercial HVLS Fans manufactured by Serco. 5 blade low speed rotary airfoil application and near ground effect and reverse capable.
        1. Standards Compliance: ETL and UL 507 Certified. ANSI / AMCA 230-15 HVLs.
        2. Size: 6 ft (1.8 m). Motor: 1/3 hp. Hang Weight: 50 lbs (22.7 kg). RPM: 200.
        3. Size: 8 ft (2.4 m). Motor: 1/3 hp. Hang Weight: 54.5 lbs (24.7 kg). RPM: 165.
        4. Size: 10 ft (30.m). Motor: 1/3 hp. Hang Weight: 59 lbs (26.8 kg). RPM: 110.
        5. Size: 12 ft (3.78 m). Motor: 1/3 hp. Hang Weight: 63 lbs (28.6 kg). RPM: 80.
        6. Size: 14 ft (4.3 m). Motor: 1/3 hp. Hang Weight: 65 lbs (29.5 kg). RPM: 60.
        7. Capability to shut down with fire system.
        8. Minimum Ceiling Height: 12 ft (3.7 m).
        9. Sound Pressure: 35 dBA.
        10. Components:
            1. Hub Assembly: High tensile steel. 50,000 lbs yield strength.
            2. Motor (AC): Gearless, direct drive. Housing: 0.050 3003 Aluminum.
            3. Blades: 6063-T6 Aluminum. Powder coated. NACA optimized blade profile.

Blade End Winglets 6061-T6 Aluminum, Powder coated.

Blade Attachment Retainers 50,000 lbs Yield High Tensile Steel.

* + - 1. Mounting Hardware: Standard Mount Versatile 45 degree mounting bracket.

\*\* NOTE TO SPECIFIER \*\* Delete drop extensions if not required.

* + - * 1. Drop Extensions: Up to 15 ft (4572 mm) at 1 ft (305 mm) increments
      1. Standard Power 120 to 230 V single phase, or 230 V three phase.
      2. Controls Module: Remote.
      3. Enclosure: IP 66 / 0 to 122 degrees F (Minus 18 to 50 degrees C)
      4. Fan Controller: Wired touch screen
      5. Finish: Powder coated. Color: Stardust Silver: RAL 9006
      6. Finish: Powder coated. Color: Gloss Black: RAL 9017
      7. Finish: Powder coated. Color: Reflective White: RAL 9003
      8. Finish: Powder coated. Color: Red Baron: RAL 3002
      9. Finish: Powder coated. Color: Cobalt Blue: RAL 5013
      10. Finish: Powder coated. Color: Safety Green: RAL 6016
      11. Finish: Powder coated. Color: Safety Orange: RAL 2004
      12. Warranty: 10-Year Parts, 1 Year Labor. Warranty: 10-Year Mechanical. Warranty: 5-Year Electrical. Warranty: 1-Year Control.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Networked Multi-Fan Controller (2-6 Fans).
      2. iFan 4.3.
      3. iFan 7.0.
      4. iFan 10.0.
      5. BMS Integration.
    1. Direct Drive HVLS Fans as manufactured by Serco. High volume low speed fans. 5-blade low speed rotary airfoil application and near ground effect. No gearbox.
       1. Standards Compliance: ETL and UL/ULc 507 Certified. ANSI / AMCA 230-15 HVLS.
       2. Acoustic Level: 45 dBA. Air Current Depth: Horizontal floor jet of 3 to 9 ft (1 to 3 m).
       3. Frame: Black powder coat / welded steel fabrication.
       4. Hub Assembly: 6061-T6 Aluminum. Steel hub plate.
       5. Blade Struts (Invertible): Clear zinc / high tensile steel.
       6. Blades: Black or clear anodized / 6063-T6 aluminum. NACA optimized blade profile.
       7. Blade End Aerodynamic Winglets: Aluminum 3003-H14.
       8. Safety Cable Galvanized: 1/4 inch x 7 x 19 steel aircraft grade cable.
       9. Guy Wires Galvanized: 1/8 inch x 7 x 19 steel aircraft grade cable.
       10. Rotor Retaining Ring: Zinc plated 3/16 inch A569 steel.
       11. Size: 8 ft (2.4 m). Motor: 1 hp. Hang Weight: 166 lbs. (75 kg). RPM 198.
           1. Normal Industrial Spacing: 55 ft (16.76 m).
       12. Size: 10 ft (30. m). Motor: 1 hp. Hang Weight: 174 lbs. (79 kg). RPM: 154.
           1. Normal Industrial Spacing: 60 ft (18.29 m).
       13. Size: 12 ft (3.8 m). Motor: 1 hp. Hang Weight: 183 lbs. (83 kg). RPM: 125.
           1. Normal Industrial Spacing: 65 ft (19.381 m).
       14. Size: 14 ft (4.3 m). Motor: 1 hp. Hang Weight: 191 lbs. (86 kg). RPM: 106.
           1. Normal Industrial Spacing: 70 ft ( m).
       15. Size: 16 ft (4.9 m). Motor: 2 hp. Hang Weight: 216 lbs. (97 kg). RPM: 92.
           1. Normal Industrial Spacing: 90 ft (21.34 m).
       16. Size: 18 ft (5.5 m). Motor: 2 hp. Hang Weight: 224 lbs. (101 kg). RPM: 81.
           1. Normal Industrial Spacing: 95 ft (27.43 m).
       17. Size: 20 ft (6.1 m). Motor: 2 hp. Hang Weight: 232 lbs. (105 kg). RPM: 72.
           1. Normal Industrial Spacing: 100 ft (30.48 m).
       18. Size: 24 ft (7.3 m). Motor: 2 hp. Hang Weight: 249 lbs. (112 kg). RPM: 60.
           1. Normal Industrial Spacing: 110 ft (33.53 m).
       19. Mounting Hardware:
           1. Universal I-beam clamp with swivel joint and 7 inch (178 mm) drop. Standard.

\*\* NOTE TO SPECIFIER \*\* Remaining hardware items are optional. Delete if not required.

* + - * 1. Extra wide and thick I-beam mount. Consult factory.
        2. Laminated Wood Beam Clamp: Brackets.
        3. Additional Drop Extensions: Up to 10 ft in 1 ft Increments.
        4. Power: 120 V 1 phase, 208-230 V single phase, 208-230 V 3 phase, 460-480 V 3 Phase, or 575 V 3 phase.
      1. Motor: DC brushless. Enclosure / Insulation Class / Efficiency Class: IP65.
         1. Temperature Range: 0 to 122 degrees F (Minus 17.78 to 50 degrees C).
         2. Motor Size: 1 hp (85 Nm). 8 to 14 ft (2.4 to 4.9 m).
         3. Motor Size: 2 hp (188 Nm). 16 to 24 ft (5.5 to 7.3 m).
      2. VFD Assembly: Enclosure: NEMA 1. Remote CAT 5E Cable: 1 to 100 Ft (30.48 Meters). Communication Protocol: Modbus RTU. Disconnect: Panel Mount, UL/CE. UL Certified: 50 hz Operation.
      3. Fan Control Station: Touchscreen LCD. Forward/off/reverse, self-diagnostics, and 4 digit pass code protection. Connection: CAT 5E. Mounting: Standard wall J-Box
      4. Warranty: Lifetime on blades, hub, and frame. Mechanical: 15 years. Non Pro Rated: 15 year. Electrical: 7 year. Labor: 1 year. Controls: 1 year.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Mounting Extension: \_\_\_ ft (\_\_\_ m).
      2. Extra Wide Beam Plate: \_\_\_ ft (\_\_\_ m).
      3. Powder Coated Blades: \_\_\_\_\_\_\_\_\_\_\_.
      4. Powder Coated Frame and Mount: \_\_\_\_\_\_\_\_.
      5. Fire Control Panel: Standard and networked fans.
      6. Multiple Fan Remote: 2 to 6.
      7. BAS Integration.
      8. iFan 4.3. 12 fans maximum.
      9. iFan 7.0. 24 fans maximum.
      10. iFan 10.0. 30 fans maximum.
    1. Industrial HVLS Fans as manufactured by Serco. High volume low speed. 5-blade low speed rotary airfoil application and near ground effect.
       1. Standards Compliance: ETL and UL/ULc 507 Certified. ANSI / AMCA 230-15 HVLS.
       2. Acoustic Level: 55 dBA. Air Current Depth: Horizontal floor jet of 3 to 9 ft (1 to 3 m).
       3. Frame: Black Powder Coat / Welded Steel Fabrication.
       4. Hub Assembly: 6061-T6 Aluminum. Steel hub plate.
       5. Blade Struts (Invertible): Clear zinc / high tensile steel.
       6. Blades: Clear corrosion-resistant anodized / 6063-T6 aluminum.
       7. Blade End Aerodynamic Winglets: Aluminum 3003-H14. NACA airfoil profile.
       8. Safety Cable Galvanized: 1/4 inch x 7 x 19 steel aircraft grade cable.
       9. Guy Wires Galvanized: 1/8 inch x 7 x 19 steel aircraft grade cable.
       10. Rotor Retaining Ring: Zinc plated 3/16 inch A569 steel.
       11. Size: 8 ft (2.4 m). Motor: 1.5 hp. Hang Weight: 164 lbs. (73 kg). RPM 198.
           1. Normal Industrial Spacing: 55 ft (16.76 m).
       12. Size: 10 ft (30. m). Motor: 1.5 hp. Hang Weight: 173 lbs. (82 kg). RPM: 154.
           1. Normal Industrial Spacing: 60 ft (18.29 m).
       13. Size: 12 ft (3.8 m). Motor: 1.5 hp. Hang Weight: 181 lbs. (86 kg). RPM: 125.
           1. Normal Industrial Spacing: 65 ft (19.81 m).
       14. Size: 14 ft (4.3 m). Motor: 1.5 hp. Hang Weight: 189 lbs. (86 kg). RPM: 106.
           1. Normal Industrial Spacing: 70 ft (21.34 m).
       15. Size: 16 ft (4.9 m). Motor: 1.5 hp. Hang Weight: 198 lbs. (94 kg). RPM: 92.
           1. Normal Industrial Spacing: 90 ft ( m).
       16. Size: 18 ft (5.5 m). Motor: 1.5 hp. Hang Weight: 206 lbs. (101 kg). RPM: 81.
           1. Normal Industrial Spacing: 95 ft (27.43 m).
       17. Size: 20 ft (6.1 m). Motor: 1.5 hp. Hang Weight: 214 lbs. (105 kg). RPM: 72.
           1. Normal Industrial Spacing: 100 ft (30.48 m).
       18. Size: 24 ft (7.3 m). Motor: 2 hp. Hang Weight: 231 lbs. (107 kg). RPM: 60.
           1. Normal Industrial Spacing: 110 ft (33.53 m).
       19. Mounting Hardware:
           1. Universal I-beam clamp, swivel joint and 7 inch (178 mm) drop. Standard.

\*\* NOTE TO SPECIFIER \*\* Remaining hardware items are optional. Delete if not required.

* + - * 1. Extra wide and thick I-beam mount. Consult factory.
        2. Laminated Wood Beam Clamp: Brackets.
        3. Additional Drop Extensions: Up to 10 ft in 1 ft Increments.
      1. Power Cable: 25 ft (7.62 m) wired to motor. Source connection by others.
      2. Power: 208-230 V single phase, 208-230 V three phase, 460-480 V three phase, or 575 V three phase.
      3. Gearbox and Motor: DC brushless motor. 2-stage helical gearbox. Lubed for life.
         1. Enclosure / Insulation Class / Efficiency Class: IP55 / F /IE3.
      4. VFD Assembly: Enclosure: NEMA 1. Remote CAT 5E Cable: 1 to 100 Ft (30.48 Meters). Disconnect: Panel Mount, UL/CE. UL certified.

\*\* NOTE TO SPECIFIER \*\* 50 hz is optional. Not included with iFAN options Delete if not required.

* + - * 1. 50 hz Operation.
      1. Fan Control Station: Touchscreen LCD. Forward/off/reverse, self-diagnostics, and 4 digit pass code protection. Connection: CAT 5E. Mounting: Standard wall J-Box. Fused disconnect.
      2. Warranty: Lifetime on blades, hub, and frame. Mechanical: 15 year. Non Pro Rated: 15 year. Electrical: 7 year. Labor: 1 year. Controls: 1 year.

\*\* NOTE TO SPECIFIER \*\* The remaining items are options. Delete options not required.

* + - 1. Mounting Extension: \_\_\_ ft (\_\_\_ m).
      2. Extra Wide Beam Plate: \_\_\_ ft (\_\_\_ m).
      3. Powder Coated Blades: \_\_\_\_\_\_\_\_\_\_\_.
      4. Powder Coated Frame and Mount: \_\_\_\_\_\_\_\_.
      5. Fire Control Panel: Standard and networked fans.
      6. Multiple Fan Remote: 2 to 6.
      7. BAS Integration.
      8. Slave remote.
      9. iFan 4.3. 12 fans maximum.
      10. iFan 7.0. 24 fans maximum.
      11. iFan 10.0. 30 fans maximum.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly constructed and prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
   4. FIELD QUALITY CONTROL
      1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection, or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. CLEANING AND PROTECTION
     1. Clean products in accordance with the manufacturers recommendations.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION