



LOADING DOCK EQUIPMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Loading dock equipment of the following types:
 - 1. Dock lifts.
 - 2. Control stations.

1.2 RELATED SECTIONS

- A. Section 03100 - Concrete Forms and Accessories: Placement of anchors into concrete.
- B. Section 03300 - Cast-In-Place Concrete: Docks and pits.
- C. Section 05500 - Metal Fabrications: Metal angles for edge of dock.

1.3 REFERENCES

- A. American National Standards Institute (ANSI):
 - 1. ANSI MH30.1- Industrial Loading Dock Boards (Ramps).
 - 2. ANSI MH29.1- Industrial Scissor Lifts.
 - 3. ANSI MH30.3- Vehicle Restraining Devices (Safety, Performance, and Testing)

1.4 SUBMITTALS

- A. Section 01330 - Submittals Procedures: Procedures for submittals.
- B. Product Data: For each product specified.
 - 1. Bumpers: Indicate unit dimensions, method of anchorage, and details of construction.
 - 2. Levelers: Indicate materials and finish, installation details, roughing-in measurements, and operation of unit.
- C. Shop Drawings:
 - 1. Indicate required opening dimensions, tolerances of opening dimensions, placement dimensions, and perimeter conditions of construction.
 - 2. Wiring diagrams including location of control stations and disconnect switches.
- D. Assurance/Control Submittals:
 - 1. Certificates: Manufacturer's certificate that Products meet or exceed specified requirements.
 - 2. Qualification Documentation: Submit documentation of experience indicating compliance with specified qualification requirements.

1.5 QUALITY ASSURANCE

- A. Dock Levelers: Conform to requirements of ANSI MH30.1.

- B. Vehicle Restraining Devices: Conform to requirements of ANSI MH30.3.
- C. Manufacturer Qualifications:
 - 1. Manufacturer specializing in manufacturing Products specified with minimum 30 years' experience.
 - 2. Manufacturer to have quality assurance improvement programs.
 - 3. Manufacturer shall be associated with Loading Dock Equipment Manufacturers (LODEM) setting ANSI standards.
 - 4. Manufacturers welding procedure compliant with A.W.S.D1 .1 specifications.
- D. Installer Qualifications: Company specializing in performing the Work of this Section with minimum 5 years' experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01600 - Product Requirements: Transporting, handling, storage, installation and protection of products.

1.7 WARRANTY

- A. Warranty: Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Blue Giant Equipment Corp., which is located at:
85 Heart Lake Rd. S., Brampton, ON, Canada L6W 3K2
Toll Free Tel: 800-668-7078 Tel: 905-457-3900
Email: marketing@bluegiant.com
Web: www.BlueGiant.com

2.2 HYDRAULIC DOCK LIFTS

- A. Scissor Dock Lifts: Stationary type LoMaster Series Model ED - Stationary Hydraulic as manufactured by BLUE GIANT.
 - 1. **Type:** Floor or pit installed, single scissor dock lift. Electro-hydraulic operated. Lift speed based on evenly distributed loads. Single axle rolling load capacity 80 percent across ends and 50 percent across sides. Other lowered heights available. Consult factory.
 - 1. Model ED4/60x96-10S3: Deck Size - 60 inches (1524 mm) W by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 16.5 fpm (5 mpm).
 - 2. Model ED4/72x96-10S3: Deck Size - 72 inches (1829 mm) W by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 16.5 fpm (5 mpm).
 - 3. Model ED4/84x96-10S3: Deck Size - 84 inches (2134 mm) W by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 16.5 fpm (5 mpm).
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 - 5. Model ED4/60x108-14S3: Deck Size - 60 inches (1524 mm) W

- by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 11.5 fpm (3.5 mpm).
6. Model ED4/72x108-14S3: Deck Size - 72 inches (1829 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 11.5 fpm (3.5 mpm).
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 9. Model ED4/60x120-14S3: Deck Size - 60 inches (1524 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 10.8 fpm (3.3 mpm).
 10. Model ED4/72x120-14S3: Deck Size - 72 inches (1829 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 10.8 fpm (3.3 mpm).
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 12. Model ED4/96x120-14S3: Deck Size - 96 inches (2438 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 10.8 fpm (3.3 mpm).
 13. Model ED4/60x144-14S3: Deck Size - 60 inches (1524 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 10.3 fpm (3.1 mpm).
 14. Model ED4/72x144-14S3: Deck Size - 72 inches (1829 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 10.3 fpm (3.1 mpm).
 15. Model ED4/84x144-14S3: Deck Size - 84 inches (2134 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 10.3 fpm (3.1 mpm).
 16. Model ED4/96x144-14S3: Deck Size - 96 inches (2438 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 10.3 fpm (3.1 mpm).
 17. Model ED5/60x96-10S3: Deck Size - 60 inches (1524 mm) W by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 14.0 fpm (4.25 mpm).
 18. Model ED5/72x96-10S3: Deck Size - 72 inches (1829 mm) W by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 14.0 fpm (4.25 mpm).
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- by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 14.0 fpm (4.25 mpm).
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 21. Model ED5/60x108-14S3: Deck Size - 60 inches (1524 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 11.5 fpm (3.5 mpm).
 22. Model ED5/72x108-14S3: Deck Size - 72 inches (1829 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 11.5 fpm (3.5 mpm).
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 25. Model ED5/60x120-14S3: Deck Size - 60 inches (1524 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.2 fpm (2.2 mpm).
 26. Model ED5/72x120-14S3: Deck Size - 72 inches (1829 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.2 fpm (2.2 mpm).
 27. Model ED5/84x120-14S3: Deck Size - 84 inches (2134 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.2 fpm (2.2 mpm).
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 29. Model ED5/60x144-14S3: Deck Size - 60 inches (1524 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.9 fpm (2.1 mpm).
 30. Model ED5/72x144-14S3: Deck Size - 72 inches (1829 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.9 fpm (2.1 mpm).
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 33. Model ED6/60x96-10S3: Deck Size - 60 inches (1524 mm) W

- by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 12.2 fpm (3.7 mpm).
34. Model ED6/72x96-10S3: Deck Size - 72 inches (1829 mm) W by 96 inches (2438 mm) L. Lowered height - 10 inches (254 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 12.2 fpm (3.7 mpm).
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 37. Model ED6/60x108-14S3: Deck Size - 60 inches (1524 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.6 fpm (2.3 mpm).
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 69. Model ED10/60x108-14S3: Deck Size - 60 inches (1524 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
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77. Model ED10/60x144-14S3: Deck Size - 60 inches (1524 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
78. Model ED10/72x144-14S3: Deck Size - 72 inches (1829 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
79. Model ED10/84x144-14S3: Deck Size - 84 inches (2134 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
80. Model ED10/96x144-14S3: Deck Size - 96 inches (2438 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
81. Model ED12/60x96-14S3: Deck Size - 60 inches (1524 mm) W by 96 inches (2438 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
82. Model ED12/72x96-14S3: Deck Size - 72 inches (1829 mm) W by 96 inches (2438 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
83. Model ED12/84x96-14S3: Deck Size - 84 inches (2134 mm) W by 96 inches (2438 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
84. Model ED12/96x96-14S3: Deck Size - 96 inches (2438 mm) W by 96 inches (2438 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
85. Model ED12/60x108-14S3: Deck Size - 60 inches (1524 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
86. Model ED12/72x108-14S3: Deck Size - 72 inches (1829 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
87. Model ED12/84x108-14S3: Deck Size - 84 inches (2134 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
88. Model ED12/96x108-14S3: Deck Size - 96 inches (2438 mm) W by 108 inches (2743 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
89. Model ED12/60x120-14S3: Deck Size - 60 inches (1524 mm)

- W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
90. Model ED12/72x120-14S3: Deck Size - 72 inches (1829 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
 91. Model ED12/84x120-14S3: Deck Size - 84 inches (2134 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
 92. Model ED12/96x120-14S3: Deck Size - 96 inches (2438 mm) W by 120 inches (3048 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.4 fpm (2.3 mpm).
 93. Model ED12/60x144-14S3: Deck Size - 60 inches (1524 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.5 fpm (2.0 mpm).
 94. Model ED12/72x144-14S3: Deck Size - 72 inches (1829 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.5 fpm (2.0 mpm).
 95. Model ED12/84x144-14S3: Deck Size - 84 inches (2134 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.5 fpm (2.0 mpm).
 96. Model ED12/96x144-14S3: Deck Size - 96 inches (2438 mm) W by 144 inches (3658 mm) L. Lowered height - 14 inches (356 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.5 fpm (2.0 mpm).
 97. Model ED15/60x96-21S3: Deck Size - 60 inches (1524 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
 98. Model ED15/72x96-21S3: Deck Size - 72 inches (1829 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
 99. Model ED15/84x96-21S3: Deck Size - 84 inches (2134 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
 100. Model ED15/96x96-21S3: Deck Size - 96 inches (2438 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
 101. Model ED15/60x108-21S3: Deck Size - 60 inches (1524 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).
 102. Model ED15/72x108-21S3: Deck Size - 72 inches (1829 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).
 103. Model ED15/84x108-21S3: Deck Size - 84 inches

- (2134 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).
104. Model ED15/96x108-21S3: Deck Size - 96 inches (2438 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).
105. Model ED15/60x120-21S3: Deck Size - 60 inches (1524 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
106. Model ED15/72x120-21S3: Deck Size - 72 inches (1829 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
107. Model ED15/84x120-21S3: Deck Size - 84 inches (2134 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
108. Model ED15/96x120-21S3: Deck Size - 96 inches (2438 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
109. Model ED15/60x144-21S3: Deck Size - 60 inches (1524 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
110. Model ED15/72x144-21S3: Deck Size - 72 inches (1829 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
111. Model ED15/84x144-21S3: Deck Size - 84 inches (2134 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
112. Model ED15/96x144-21S3: Deck Size - 96 inches (2438 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
113. Model ED20/60x96-21S3: Deck Size - 60 inches (1524 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
114. Model ED20/72x96-21S3: Deck Size - 72 inches (1829 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
115. Model ED20/84x96-21S3: Deck Size - 84 inches (2134 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
116. Model ED20/96x96-21S3: Deck Size - 96 inches (2438 mm) W by 96 inches (2438 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 7.7 fpm (2.3 mpm).
117. Model ED20/60x108-21S3: Deck Size - 60 inches

(1524 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).

118. Model ED20/72x108-21S3: Deck Size - 72 inches (1829 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).
119. Model ED20/84x108-21S3: Deck Size - 84 inches (2134 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).
120. Model ED20/96x108-21S3: Deck Size - 96 inches (2438 mm) W by 108 inches (2743 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.7 fpm (2.0 mpm).
121. Model ED20/60x120-21S3: Deck Size - 60 inches (1524 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
122. Model ED20/72x120-21S3: Deck Size - 72 inches (1829 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
123. Model ED20/84x120-21S3: Deck Size - 84 inches (2134 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
124. Model ED20/96x120-21S3: Deck Size - 96 inches (2438 mm) W by 120 inches (3048 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 6.3 fpm (1.9 mpm).
125. Model ED20/60x144-21S3: Deck Size - 60 inches (1524 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
126. Model ED20/72x144-21S3: Deck Size - 72 inches (1829 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
127. Model ED20/84x144-21S3: Deck Size - 84 inches (2134 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).
128. Model ED20/96x144-21S3: Deck Size - 96 inches (2438 mm) W by 144 inches (3658 mm) L. Lowered height - 21 inches (533 mm). Vertical Travel - 59 inches (1499 mm), Lift Speed - 5.8 fpm (1.8 mpm).

2. **Function:**

- a. **Lowered Height:** _____.
- b. **Vertical Travel:** Standard available 59 inch (1499 mm).
- c. **Travel Speed:** As indicated by model number. Lowering speed is factory preset for safe lowering with rated load.

3. **Operation:**

- a. **Power Unit:** Remote 5HP (up to 12,000 lb (5443 kg) capacity models) or 7-1/2 HP (15,000 to 20,000 lb (6804 to 9072 kg) capacity models) power pack on 12 feet (3,657 mm) hydraulic hose. Includes all major

components, motor, high-pressure gear pump, manifold, oil filters and oil reservoir. Power unit includes a pressure relief valve, load holding check valve, fixed pressure compensated flow control valve and poppet-type lowering solenoid valve. Oil filter located in the valve manifold (oil reservoir).

- b. **Remote push-button control station:** Remote on 12 feet (3,657 mm) electrical cord. NEMA4 rated dual button control station, constant pressure type, complete with 'UP' and 'DOWN' buttons, 2-1/4 inches W by 4 inches H by 2-1/2 inches D (57 by 102 by 64 mm) in size. Controller includes a three pole magnetic motor starter with adjustable overload and a fuse protected 120-volt control transformer. Terminals provided for incoming power connection. Controller components are installed in NEMA12 rated enclosure, pre-wired and dielectric tested.

4. **Construction:**

- a. **Platform:** Fabricated of heavy non-skid high tensile steel checker plate and reinforced with steel beams for maximum strength and rigidity. Platform sides have 8 inch (203 mm) beveled toe guard protection.
- b. **Hinged Bridge:** Standard lip is piano-hinge type, 18 inches long by 60 inches wide (457 mm by 1,524 mm), and is fabricated of non-skid high tensile steel checker plate. Lip edge is Beveled. Plated lifting chain is provided.
- c. **Removable Handrails:** Steel pipe 1.5 inches (38 mm) construction, 42 inches (1,067 mm) high, with mid-rail and 4 inches (102 mm) high kick plate. Handrail sockets are flush with platform surface. Chains are provided at both open ends between the rails.
- d. **Scissor Mechanism:** Legs are fabricated of solid steel sections.
- e. **Cylinders:** Minimum two piston type hydraulic cylinders. Rods constructed of hard-chrome steel and include self-adjusting polyurethane seals, positive internal stops, and fitted with vent lines. Hydraulic velocity fuse "fall safe" to prevent platform free fall is attached to each cylinder.
- f. **Bearings:** All pivot points fitted with permanently lubricated Teflon impregnated bushings. Pivot pins made of hard-chrome plated steel.

5. **Rated Capacity:**

- a. Welding procedure compliant with A.W.S.D1.1 specifications. All units are constructed in compliance with ANSI MH29.1-1994. UL approved electrical components. All units are rated for evenly distributed loads. Single axle rolling load capacities are 80 percent across the ends and 50 percent across the sides.

6. Power: __ V, __ Amps, __ Phase.

7. **Safety Devices:**

- a. Built-in, maintenance stop hinged to frame.
- b. Safety velocity fuses on each cylinder.
- c. Tapered toe guard protection and safety striping.
- d. Warning labels.
- e. Handrails and safety chain.

8. **Finish and Color:**

- a. Toe guards supplied with high visibility yellow/black warning striping. Handrails painted safety yellow.
- b. Unit painted blue.

9. **Warranty:** Warranties are subject to standard limitations on liability. Consult manufacturer for full details on warranty information and product registration.

10. **Optional Accessories:**

- a. Custom lip size and configuration.

- b. Spring-assisted lips for ease of handling on heavier capacity.
- c. Aluminum lips.
- d. Hydraulically actuated lip
- e. Portable dolly (makes unit portable).
- f. Warning bell (to indicate lift in motion).
- g. Warning horn with adjustable volume control mounted on power unit (to indicate lift in motion).
- h. Flashing amber warning beacon mounted on power pack.
- i. 24 VAC control.
- j. Up travel limit switch.
- k. Return line oil filter.
- l. Accordion safety skirting
- m. 3 HP remote power packs.
- n. 10 HP remote power packs.
- o. Mechanical roll-off barrier
- p. Electric trip bars (to stop unit in case of down travel obstruction).

B. EXECUTION

2.3 EXAMINATION

- A. Section 01700 - Execution Requirements: Verification of existing conditions before starting work.
- B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.

2.4 INSTALLATION

- A. Install dock leveler and/or dock lift unit in prepared opening in accordance with manufacturer's instructions.
- B. Set square and level.
- C. Anchor unit securely, flush with dock. Weld back of dock leveler to pit frame. Touch-up welds with matching paint.
- D. Install dock bumpers in accordance with manufacturer's instructions.

2.5 ADJUSTING

- A. Adjust installed unit for smooth and balanced operation.

END OF SECTION