



**MODEL “HDD”
Heavy Duty Dock
Doors**

200 Fairview Road, Unit #2, Barrie, Ontario L4N 8X8

Tel: 866-792-9968 or 705-792-9968

Fax: 705-735-9564

TNRdoors.com

email: info@tnrdoors.com

PART 1 - General

1.1 SECTION INCLUDES:

.01 Steel channel door frames and reinforcing steel. Section 05500.

1.2 DESIGN CRITERIA

.01 Rolling door to have NEWGEN® Guide and Curtain Lok™ system to provide a near airtight seal and knock-away feature for easy reassembly upon impact.

.02 After accidental impact, door must be capable of reset from ground level without the use of ladders, tools or lift equipment.

.03 Rolling door SBR curtain for service temperature range of -40°F to +180°F (-40°C to +85°C).

.04 Counterbalance springs to be outboard 25,000 cycle.

1.3 SAMPLES

.01 Submit shop drawing in accordance with Section 01340 [Division 1 - General Requirements] - Shop Drawings, Product Data, Samples and Mock-Ups.

1.4 SHOP DRAWINGS

.01 Submit shop drawing in accordance with Section 01340 [Division 1 - General Requirements] - Shop Drawings, Product Data, Samples and Mock-Ups.

.02 Indicate each type of door arrangement of hardware and required clearances.

.03 Indicate assembly details and dimensions of fabrication and required clearances.

1.5 MAINTENANCE DATA

.01 Provide operation and maintenance data for the Model "HDD" door and hardware for incorporation into manual specified in Section 01730 [Division 1 - General Requirements] - Operation and Maintenance Manual.

.02 Maintenance data shall include:

- a complete description of operation in order of task
- a list of parts requiring replacement
- a parts list with illustrations and identifications
- identification numbers for each door

PART 1 – General

1.6 QUALITY ASSURANCE

- .01 Installer with Factory-Approved qualifications.

PART 2 - PRODUCTS

2.1 PRODUCTS

- .01 The acceptable rubber roll-up door is to be the Model "HDD" as manufactured by TNR Industrial Doors.
- .02 Substitutions will not be acceptable.

2.2 CURTAIN

- .01 Two (2) layers of Styrene Butadiene Rubber (SBR) each 3.2mm (1/8") thick, 70 durometer; sandwiched with 1-ply, 50kg (110 lbs.) polyester cord centre. Material provides normal resiliency and flexibility at temperatures ranging from -40° F to +180°F (-40°C to +85°C).
- .02 Complete with molded NEWGEN® Curtain Loks™ that are mechanically attached to the vertical edges of the curtain material. This retention system maintains and holds the curtain in guides under extreme windload conditions. Continuous glued SBR windlock or molded-in place Teflon windlock designs will not be accepted.
- .03 Standard Color: Black
Also available in blue or gray EPDM, Black nitrile, flame-retardant self-extinguishing black MSHA rated.

2.3 GUIDES

- .01 Side curtain retention: NEWGEN® Guides shall be one-piece extruded aluminum to form a slot of sufficient depth to allow the NEWGEN® Curtain Lok™ to move freely in the guides at all times. Aluminum members are to be of sufficient thickness and rigidity to maintain the NEWGEN® Curtain Lok™ within the guides during normal operation while enabling the NEWGEN® Curtain Lok™ to release during impacts.
- .02 Steel guides (bolted or spring-loaded) will not be accepted.
- .03 Side frame: Mounting steel angle is provided for installation directly onto concrete or steel door framing. Additional customization of door frame is not required.

PART 2 - PRODUCTS

2.4 BOTTOM RAIL

- .01 Bottom bar shall extend the full width of the curtain, sufficient to maintain the bottom edge of the curtain parallel to the door threshold at all times. The bottom bar shall be constructed of two steel angles bolted together and shall have a knock-away section to reduce risk of damage during accidental impacts. A 1/8" thick EPDM rubber loop shall be attached to the knock-away bottom bar and act as a weather seal. The rubber loop must be replaceable without removing the bottom bar from the curtain.
- .02 Knock-away bottom bar to be reset without the need to open side frames. Single angle design will not be accepted.

2.5 ROLL-UP DOOR SYSTEM

- .01 The curtain is to be rolled on a barrel of sufficient size to carry the door load with a deflection of not more than 2.5 mm/m (.03" per foot) of opening width and is to be evenly balance by 25,000 cycle oil-tempered, helical inboard torsion springs. Both the drive barrel shafts are to be constructed of minimum 32mm (1 1/4") C1018 Cold Rolled steel shafts.
- .02 End brackets are constructed of 5mm (3/16") hot-rolled steel plate c/w sealed heavy-duty, self-aligning bearings with cast iron housings to support the drive barrel. Bearings shall be load-rated at 2032 kg (4470 lbs.) dynamic and 1404 kg (3090lbs.) static.

2.6 ACCESSORIES

- .01 Various accessories are available i.e.: guide guards, hoods.

2.7 CONSTRUCTION

- .01 Doors: constructed of steel, aluminum and SBR rubber/woven curtain.
- .02 Structural elements: assembled by welding or by mechanical fasteners.

2.8 OPERATION OF DOOR

- .01 Doors shall be equipped for operation by a direct drive manual chain hoist. Manual chain hoists with sprockets and chains to connect to the drive barrel are not acceptable.

2.9 MANUAL OPERATION

- .01 Chain hoist shall be of sufficient capacity to operate a door at a maximum pull requirement of 9 to 14 kg (20 to 30 lbs.). The static load on the hand chain to hold the door in any position must not exceed 5 kg (11 lbs.).

PART 3 - EXECUTION

3.1 INSTALLATION

- .01 Install doors in accordance with manufacturer's instructions.
- .02 Upon completion of the door, the door installer must make necessary adjustments to the door to ensure smooth operation.