



1. Product Name

NOVA Dock Sentinel™ Safety Gate

2. Manufacturer

NOVA Technology International, LLC
N90 W14507 Commerce Drive
Menomonee Falls, WI 53051

3. Product Description

General Description

In a busy loading dock, an open, unprotected dock opening is an accident waiting to happen. The safety barrier gates are placed in front of the dock door to protect the dock door and door tracks from collisions with forklifts and pallet jacks, and to prevent pedestrians from walking off the dock.

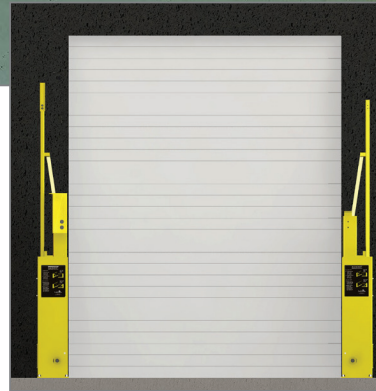
The NOVA Dock Sentinel Safety Gate improves dock safety and prevents the occurrence of dock accidents resulting from fork trucks, pallet jacks and pedestrians falling off the dock when the overhead door is open. The flex hinge design dissipates impact energy to withstand multiple impacts from forklifts, pallet jacks, or pallets.

Operation

The NOVA Dock Sentinel Safety Gate is a manually operated gate style barrier. When dock use is required, the NOVA Dock Safety Gate is opened by simply lifting the gate into an upright position until latched with very little effort. When dock use is finished, each side of the gate is unlatched and lowered back to the closed position.

Structural

The uprights are constructed from $\frac{1}{4}$ inch thick A-36 steel, formed and welded into a custom $6\frac{1}{2}$ inch web \times $10\frac{3}{4}$ inch flanged channel for maximum door track protection. The channels are welded to $\frac{3}{8}$ inch thick A-36 steel base plates and anchored to the floor with a total of (8) $\frac{5}{8}$ -11 \times 4 $\frac{1}{2}$



inch long anchor bolts, included. Both arms of lower barrier are made from A-500 Grade B rectangular steel tubing, 5 \times 2 \times $\frac{1}{4}$ inches thick, and joined in the middle when the gate is closed with a 14-inch long saddle. The saddle is a formed and welded channel made with gussets $\frac{1}{4}$ inch thick A-36 steel. In addition to the saddle, there are also interlocking glad hands made from $\frac{1}{4}$ inch thick A-36 steel to provide additional impact resistance. The hinges for the lower barrier are contained within an energy absorbing polymer for maximum impact protection with minimal damage to the barriers, material handling equipment and product. An upper barrier constructed from A-500 Grade B square steel tubing, $1\frac{1}{2}$ \times $\frac{3}{16}$ inches thick, is provided for status at a glance visual indication when the gate is closed and to keep pedestrians from tripping over the lower barrier. Both sides of the gate are independently powered with a total of (4) gas springs resulting in minimal manual lifting force to raise or lower the gate and latches are provided on each side to positively retain the gate in the open condition. The entire gate is powder coated safety yellow for optimal visibility and durability.

Safety Features

The NOVA Dock Sentinel Safety Gate, in a closed position, protects personnel, goods and equipment from inadvertently falling off the loading dock through an open dock door.

Table 1—Technical Information

	Model DS-080F	Model DS-086F	Model DS-090F
Part Number	DG-048-000	DG-109-000	DG-108-000
Gate Opening Width	8'0"	8'6"	9'0"
Vertical Clearance	8'8"	8'8"	9'2"
Load Stopping Capability Withstands repetitive impacts without need for repair	Up to 100 impacts of 2000 pound load at 3 mph	Up to 100 impacts of 1900 pound load at 3 mph	Up to 100 impacts of 1800 pound load at 3 mph
Dock Door Protection	■ Lower impact barrier with shock absorbing flex bushings and flexible center interlock		
Door Track Protection	■ Vertical stanchions provide protection to 42' off floor; yellow gate arms provide visible alert to 98"		
Pedestrian Protection	■ Upper barrier is 42" high and supports 200 lb. weight in any direction per OSHA Standard 1910		
Activation	■ 4 x gas spring balanced arms meet NIOSH requirements for operator force less than 50 pounds		

- Stops pallet jacks from colliding with the loading dock door
- Prevents pedestrians from walking off the edge of the dock
- Powder coated in highly visible safety yellow paint

Standard Features

- Flex hinge design dissipates impact energy to withstand multiple impacts from pallets or pallet jacks
- Easy manual operation with controlled descent
- Gate provides full door width pass-through clearance
- Barriers secure in the upward position with self-engaging latches
- Lower barrier construction of 1/4 inch wall ASTM A500 structural steel tubing
- Upper barrier is 42 inches high (above floor level) when closed
- Durable highly visible safety yellow powder coat finish
- One-year warranty against manufacturer's defects
- Available in lengths from 8–9 feet

Benefits

- Designed to withstand an impact force of over 3,000 pounds at 3 mph, and dozens of impacts of up to 2,000 pounds at 3 mph
- Extremely low maintenance
- Prevents damage to overhead door tracks
- Easy installation—simply anchors to floor
- Economical—priced lower than other gates providing similar or lesser protection
- Upper barrier meets the OSHA 1910.23(e)(5)(iv) load force protection requirement

4. Technical Data

Applicable Standards

American Society for Testing Materials (ASTM)

- ASTM A6/A6M—Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling
- ASTM A36/A36M—Standard Specification for Carbon Structural Steel
- ASTM A370—Standard Test Methods and Definitions for Mechanical Testing of Steel products
- ASTM A500/A500M—Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes

Occupational Safety and Health Administration (OSHA)

- 29 CFR 1910.23(e)(3)(v)(b)—Occupational Safety and Health Standards, Walking-Working Surfaces, Guarding Floor and Wall Openings and Holes

Environmental Considerations

NOVA Technology uses environmentally friendly material in its packaging where available.

5. Installation

Product installation instructions are available online at www.novalocks.com.

6. Availability and Cost

Availability

NOVA Technology products and services are sold entirely through the NOVA Nationwide Dealer Network.

For a dealer in your area, routine service, preventative maintenance, product questions, or to request a quote, contact NOVA Technology

Cost

Pricing information may be obtained from an authorized NOVA dealer.

7. Warranty

NOVA Technology warrants all of its manufactured products shall remain free of defects in material and workmanship under normal use for a period of one year from the date of shipment.

8. Maintenance

Product maintenance and operation are specific to product types and are available online at www.novalocks.com.

9. Technical Services

Technical assistance, including more detailed information, product literature, test results, project lists or assistance in preparing project specifications is available by contacting NOVA Technology.

10. Filing Systems

- SmartBuilding Index (SBI)
- ARCAT®
- Additional product information is available from the manufacturer upon request