



1. Product Name

■ NOVA Dock Seals

- FP Series
- FPH Series
- FPU Series
- FPHU Series

■ NOVA Dock Shelters

- RF Series
- SS Series
- GS Series

2. Manufacturer

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3. Product Description

General Description



FP Series

Rugged NOVA dock seals and shelters provide maximum energy savings with features such as weather-tight enclosures and head pad models available for significant protection from the elements.

Cost effective NOVA dock seals and shelters provide exceptional versatility and can accommodate any type of truck, providing a wide choice of fabric types, weights and colors.

FP Series Dock Seal—the foam-filled head pad and side pads provide a tight, energy-efficient seal between the trailer



FPH Series



FPU Series



FPHU Series

and dock wall providing protection from inclement weather, dirt and insect infiltration. Designed for door openings up to 9 feet wide \times 9 feet high.

FPH Series Dock Seal—features a hood-style head curtain in place of a head pad with fiberglass stays and metal pipe in the fabric hood to maintain support and serviceability. Designed for door openings up to 9 feet wide \times 12 feet high.

FPU Series Dock Seal—accommodates larger doors and provides a positive foam seal and wiping action against truck sides. Provides full access side-to-side with this model. Designed for door openings up to 10 feet wide \times 9 feet high.

FPHU Series Dock Seal—features a fabric hood-style head curtain to accommodate larger doors and provide a positive foam seal and wiping action against truck sides. Provides full access side-to-side with this model. Designed for door openings up to 10 feet wide \times 12 feet high and higher doors.

RF Series Dock Shelter—provides maximum dock protection and full access to trailers while minimizing pressure on the building wall. The RF Series features high wear-resistant fabric with double lock-stitched seams, bottom corner draft pads and standard 36 inch drop head curtain with fiberglass stays, protective corner reinforcement pleats and wind retention straps. The raked header with a translucent fiberglass top provides natural light, permits water drainage, and provides snow load support. Designed for door openings up to 12 feet wide \times 12 feet high and higher doors.

SS Series Soft-Sided Dock Shelter—provides maximum dock protection and full access to trailers while minimizing pressure on the building wall. The SS Dock Shelter has a much greater tolerance to off-center impacts from trucks. Utilizing foam

side pads in its construction, it is capable of compressing and bending out of the way of a truck which fails to properly align with the doorway, preventing costly repairs. Designed for door openings up to 12 feet wide \times 12 feet high doors.

GS Series Dock Shelter—engineered for use with swing-door trailers, the GS Dock Shelter seals the air and light gaps through door hinges while still allowing full access into the trailer. Provides maximum dock protection while minimizing pressure on the building wall. Utilizing foam side pads in its construction, it is capable of compressing and bending out of the way of a truck which fails to properly align with the doorway, preventing costly repairs. Designed for door openings up to 12 feet wide \times 12 feet high.

Operation

Dock seals and shelters can significantly improve the energy efficiency and environment control of buildings, reducing costs. They provide an effective barrier against the elements, keeping loading docks safe and efficient.

Dock seals and shelters also provide a positive seal between internal and external environments. They prevent the passage of dust, insects, exhaust fumes and other airborne particulate matter while the loading dock is in use.

Structural

NOVA dock seals are constructed from high density polyurethane foam and solid wood. Cover material and wear pleats are top-grade fabrics providing superior performance and maximum durability.

The RF Series dock shelter is constructed from solid wood frames which reduce costs, while the SS and GS Series dock shelter



RF Series



SS Series



GS Series

side pads are constructed from high density polyurethane foam for impressive resilience to damage, with solid wood backings and head frame. All series of dock shelters include top-grade, abrasion-resistant fabric and translucent fiberglass panels.

Safety Features

Dock seals and shelters help avoid safety and productivity problems associated with unprotected openings, such as:

- Employee discomfort
- Energy loss
- Theft or security concerns
- Product damage or contamination
- Insect infiltration
- Slippery or dangerous dock conditions

Table 1—Dock Seal Features and Options

Features	Series			
	FP	FPH	FPU	FPHU
Brass grommets and spur washers allow air and moisture to be released	Yes	Yes	Yes	Yes
Bottom skirt to seal transition from dock seal to the dock bumper	Yes	Yes	Yes	Yes
Velcro® fasteners	Yes	Yes	Yes	Yes
Lock-stitched seams with high tensile strength polyester filament thread provides excellent weather resistance	Yes	Yes	Yes	Yes
Fiberglass support stays maintain a proper head curtain slope for adequate drainage	—	Yes	—	Yes
Metal pipe inserted into top of hood provides support to resist rain/snow build-up	—	Yes	—	Yes
Standard 24-inch drop on hood	—	Yes	—	Yes
Standard side pad projection is 10 inches	Yes	Yes	—	—
Standard side penetration is 12 inches	—	—	Yes	Yes
Standard head pad projection is 10 inches	Yes	—	Yes	—
Options				
Multi-layer, reinforced wear pleats the full height of side pads and corners of head pad provides maximum protection to extend life of the seal	Yes	Yes	Yes	Yes
Top corner pleats on head pad only	Yes	—	Yes	—
Wear face reinforces the entire contact surface of the side pad for greater durability	Yes	Yes	Yes	Yes
Scuff guards protect the inside of side pads from freight	Yes	Yes	Yes	Yes
Bottom door flaps (one to three sides)	Yes	Yes	Yes	Yes
Weighted drop curtain to enable a more effective seal for lower trailers	Yes	Yes	Yes	Yes
Pull rope system enables the curtains to be adjusted to effectively service varying trailer heights	Yes	Yes	Yes	Yes
Tapered units provide a uniform seal when accommodating an inclined or declined drive approach	Yes	Yes	Yes	Yes
2-inch foam-filled drop curtains	Yes	—	Yes	—
Flame-retardant foam and fabric meets the California State Title 19 and NFPA-701 standards	Yes	Yes	Yes	Yes
24-inch high yellow guide stripes for accurate truck positioning	Yes	Yes	Yes	Yes
Blockouts for extra protection when full projection foam is not achieved	Yes	Yes	Yes	Yes
Galvanized steel backing	Yes	Yes	Yes	Yes
Weighted hood to enable a more effective seal for lower trailers	—	Yes	—	Yes
2-inch foam-filled hood seals between side pads	—	Yes	—	Yes
Top corner pleats on hood only	—	Yes	—	Yes

Standard Features

Dock Seals

- Cover material and wear pleats are top-grade fabrics providing superior performance and maximum durability
- High density polyurethane foam provides long life and excellent resiliency characteristics
- Select grade pressure-treated, kiln-dried lumber framing
- Foam is bonded to the entire contact area of the frame to ensure maximum structural integrity
- Mounting brackets are protected with a heavy-duty galvanized, rust-resistant coating; bolts are included
- Full-height, yellow guide stripes assist driver with proper vehicle positioning

Additional standard features and options available in Table 1.

Dock Shelters

- Cover material and wear pleats are top-grade fabrics providing superior performance and maximum durability
- Raked header with translucent fiberglass top provides natural light, permits water drainage, and provides snow load support
- Flexible fiberglass stays add stiffness to shelter face curtains
- Aluminum angle face edging
- Protective wear pleats on head curtain extends life of unit
- Wind straps on head curtain keep the head curtain from being blown out of position
- Select grade pressure-treated, kiln-dried wood side (RF Series) and head frame
- Mounting brackets are protected with a heavy-duty galvanized, rust-resistant coating; bolts are included
- Lock-stitched seams with high-tensile polyester filament thread provide excellent weather resistance
- 15-inch yellow guide stripes assist driver with proper vehicle position
- High density polyurethane foam sides for impressive impact resistance (SS & GS Series)
- Easy to remove Velcro® attached front curtains and bottom draft pads (SS & GS Series)

Optional Features (Shelters)

- RF Shelter projection—24 inch standard, customizable to any projection
- SS & GS Shelter projection—18 inch standard, customizable to any projection
- 2-inch foam front head curtain

- Hook and loop splits on head curtain
- Head curtain drop over 54 inches
- Frame cut-outs for obstructions
- Non projecting frame (RF Series Model Only)
- Common member units
- Ground level units
- 18 oz. white vinyl on frames (RF Series)
- Various fabric colors available (All Series)
- Tapered units for inclined/declined approaches
- Pull rope system enables the head curtain to be adjusted to effectively service varying trailer heights
- Flame-retardant foam and fabric meets the California State Title 19 and NFPA-701 standards
- Full-height yellow guide stripes for accurate truck positioning
- Clear roof panels for extra lighting
- Chain weighted drop curtain
- Steel frames (RF Series) and backings (SS & GS Series)
- False header option for doors over 12 feet wide x 12 feet high
- Spring steel stays instead of fiberglass stays

Table 2—Properties of Fabrics

Fabric	Abrasion Resistance Cycles		Tensile Strength (lbs./inch)		Tear Strength (lbs. width × length)		Cold Resistance at 40 degrees F	
	FS 5306	ASTM D3384	FS 5100	ASTM D5034	FS 5134	ASTM D2261	FS 5874	ASTM D2136
NOVA MAX-1000™		10000		1000 × 1000		200 × 200		Pass
NOVA MAX-60™		3000		950 × 850		160 × 130		Pass
40 oz. NOVALON™*		1500		400 × 350		50 × 40		Pass
16 oz. NOVALON™*		100		400 × 350		50 × 40		Pass
40 oz. Vinyl		3000		950 × 850		160 × 130		Pass
22 oz. Vinyl		1850		695 × 650		120 × 100		Pass

Available Fabrics

- NOVA MAX-1000™—heavy-duty polyester-based fabric with a polymer blend coating, featuring ultra-high abrasion resistance for the toughest environments; resulting in the highest puncture and tear resistance and abrasion resistance of any fabric in the industry
- NOVA MAX-60™—heavy-duty polyester-based fabric with a polymer blend coating on both sides, with 60 percent of the coating on the outside surface for greater wear resistance
- 40 oz. NOVALON™*—nylon woven base with a synthetic elastomer coating on both sides
- 16 oz. NOVALON™*—nylon woven base with a synthetic elastomer coating on both sides
- 40 oz. Vinyl—woven polyester-based fabric with a vinyl coating on both sides
- 22 oz. Vinyl—woven polyester-based fabric with a vinyl coating on both sides

Additional information about fabrics is available in Table 2.

*NOVALON is the equivalent replacement for Hypalon®. Hypalon® is a trade name used by DuPont and is no longer available.

Flame-Retardant Fabrics

Many of our fabrics offer optional flame-retardant designs. These fabrics are engineered or tested to the strict standards of the California State Title 19 and NFPA-701. These flame-retardant fabrics are designed to self-extinguish a flame in two seconds or less once the source is removed.

Recommended Safety Equipment for Dock Seals and Shelters

NOVA Truck Lock and Lock & Load vehicle restraint systems help prevent unexpected trailer departure from the loading dock and minimize trailer creep during the loading/unloading process.

4. Technical Data**Applicable Standards****Aerospace Materials Specification (AMS)**

- AMS-QQ-A-200/16—Aluminum Alloy T6—Extruded Structural Shapes

American Society for Testing Materials (ASTM)

- ASTM A53—Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
- ASTM D751—Standard Test Methods for Coated Fabrics
- ASTM A879—Standard Specification for Steel Sheet, Zinc Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface
- ASTM D2136—Standard Test Method for Coated Fabrics—Low Temperature Bend Test
- ASTM D2261—Standard Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine)
- ASTM D3574—Standard Test Methods for Flexible Cellular Materials—Slab, Bonded and Molded Urethane Foams
- ASTM D3884—Standard Test Method for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method)
- ASTM D5034—Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)
- ASTM D5035—Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
- ASTM D5512—Standard Practice for Exposing Plastics to a Simulated Compost Environment Using an Externally Heated Reactor

Consumer Products Safety Commission (CPSC)

- CA Bulletin 117—Requirements, Test Procedure and Apparatus for Testing the Flame Retardance of Resilient Filling Materials Used in Upholstered Furniture

International Code Council

- ESR-2240 UC3B, ICC-ES Evaluation Report—Exterior construction, above ground, uncoated and poor water runoff

Motor Vehicle Safety Standards

- MVSS302—Flammability of Interior Materials

National Fire Protection Association (NFPA)

- NFPA 255—Standard Method of Test of Surface Burning Characteristics of Building Materials
- NFPA701—Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

Environmental Considerations

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

5. Installation

Product installation instructions are available on-line at www.novalocks.com.

6. Availability and Cost**Availability**

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

Cost

Pricing information may be obtained from an authorized NOVA dealer.

7. Warranty

NOVA Technology warrants that all of its manufactured product shall remain free of defects in material and workmanship under normal use for a period of one year from the date of delivery to the purchaser.

8. Maintenance

No regular maintenance is required to keep the Dock Seals and Shelters operating efficiently. At times, it may be necessary to remove excess snow buildup from on top of the header.

All dock seal or shelter headers should be inspected periodically for damage and replaced when appropriate.

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

- ARCAT®
- Additional product information is available from the manufacturer upon request