NOVA
SEALING SYSTEMS

At NOVA, our expert production team combines pride in workmanship with superior design and select grade raw materials to manufacture products of optimal quality. We offer a wide variety of seals and shelters to fit your facility's needs for vehicle type, door size, dock height, driveway grade, dock traffic and weather conditions. NOVA works with our nationwide network of dealers to ensure that you receive the model most suited to your needs — custom fit to your loading dock.

MAXIMUM ENERGY SAVINGS:

- Weather tight enclosures
- Head curtain models available for extra protection from the elements

EXCEPTIONAL VERSATILITY:

- Models are available to accommodate any kind of truck
- Wide choice of fabric type, weight and color

EXTREMELY COST EFFECTIVE:

- Energy savings
- Safety and productivity
- Freight protection
- Security
- Storage

ROBUST PERFORMANCE & DURABILITY:

- Rugged construction designed to withstand heavy traffic
- Cover material and wear pleats are top grade fabrics providing superior performance and weather resistance
- NOVA's MAX-1000 heavy-duty polyester-based fabric
- High density urethane foam provides long life and excellent resiliency characteristics
- Select grade pressure treated kiln dried lumber
- Shelters include steel support bumpers
- Heavy-duty galvanized mounting hardware
- Seals feature brass grommets with spur washers for venting
- Velcro® brand fasteners
- All sew lines are backtacked with locked stitching
- Heavy bonded polyester multifilament thread with UV protectant

SEALING SYSTEMS

Sealing systems seal off the space between a parked trailer and the building (Figure 1). They help to maintain the internal climate, and they protect the freight against damage.

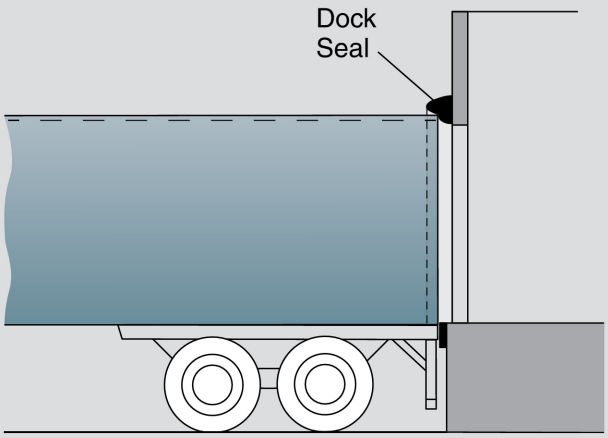


Figure 1

SEALING SYSTEMS HAVE MANY BENEFITS:

- **Energy savings**—the system can quickly pay for itself in reduced heating and cooling costs by maintaining the building's interior temperature.
- **Safety and productivity**—eliminates dangerous precipitation from the loading areas. Worker productivity correlates to the workplace environment and its safety.
- **Freight protection**—protects freight against harmful weather and minimizes entry of vermin.
- **Security**—prevents product theft and unauthorized entry.
- **Storage**—docked trailers become secure, climate-controlled extensions of the building.

THERE ARE TWO TYPES OF SEALING SYSTEMS:

- **Compression foam dock seals**—the seals are made of foam covered with fabric. They are mounted to the wall at the loading door and seal against the back of the truck.
- **Truck shelters**—truck shelters have a rigid frame equipped with curtains. The frame is installed to the building wall. The curtains extend and seal against the wall and the side of the truck (Figure 2).

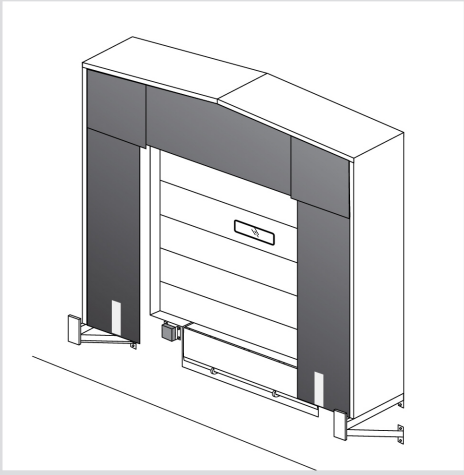


Figure 2

Both seals and shelters use abrasion-resistant industrial fabrics on their sealing surfaces due to the trailer movement during loading and unloading.

The building wall construction may determine the most suitable type of sealing system. Dock shelters are most suitable where walls are not designed to handle the high compression forces of traditional seals.

NOVA
SEALING SYSTEMS

SELECTION CRITERIA

Proper selection is the most important aspect of sealing system installation. Improper selection can result in not only a poor installation, but also product damage and decreased productivity. When selecting a sealing system, choose a system that is the most effective at sealing the majority of vehicles being serviced.

Grade of Approach
The grade of approach might be level, declined or inclined.

If necessary, seals can be tapered to ensure parallel compression along the entire face of the side pads, which creates an effective seal.

Overhead Door Dimensions
The size of the door opening determines the most suitable sealing systems.

Dock Bumper Projection
The dock bumper projection is the distance between the wall and the front face of the bumper. On declined driveways, the bumper must project far enough to prevent trucks from impacting the upper wall.

Dock Height
The dock height is the distance between the grade and the top of the dock floor.

Mounting Surface
The wall construction may determine the most suitable type of sealing system. Dock shelters are most suitable where walls are not designed to handle the high compression forces of traditional seals.

COMPRESSION FOAM DOCK SEALS

Compression foam dock seals are more effective for sealing than using a shelter system.

- Can be used on doors up to 9 ft wide
- To optimize contact with the truck, seals can be tapered to match the drive approach
- Do not work well with trucks with rear loading platforms (Figure 3)
- Must be sized appropriately for the best access to the interior of the truck
- Seals the building to conserve energy
- Economical—provides payback in energy savings
- Some states offer energy rebates

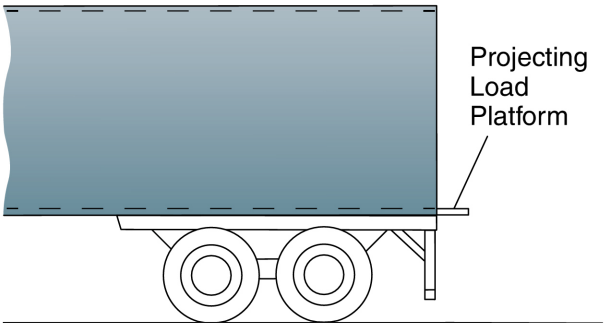


Figure 3

Install the seals with an opening between 7’4” and 7’8” (Figure 4). Use bevel seals for a loading door wider than 7’8” (Figure 5).

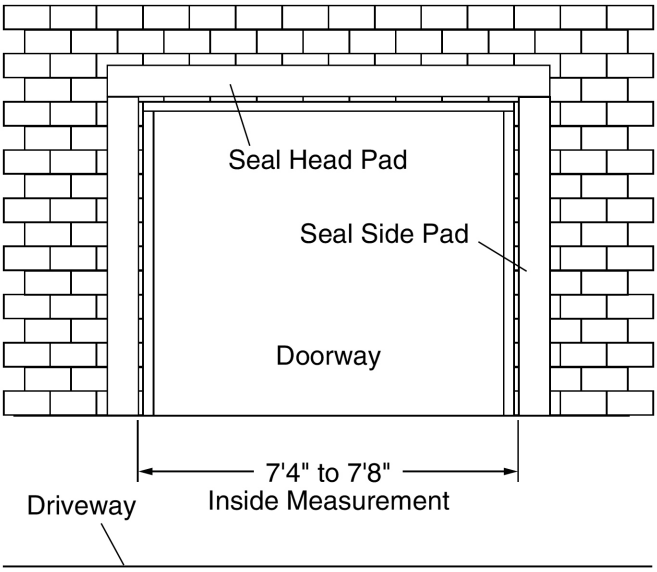


Figure 4

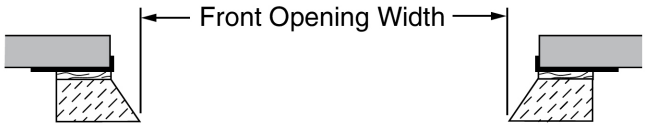


Figure 5

Maintain a minimum of 3 in. between the bottom edge of the head pad and the top of the truck (Figure 6). Various head pad heights are available. Use a fixed head curtain instead of head pads for tall doorways and a wider range of trailer heights (Figure 7).

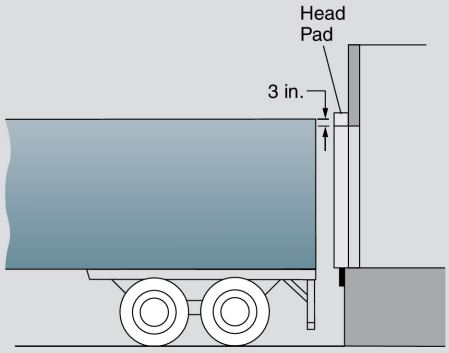


Figure 6

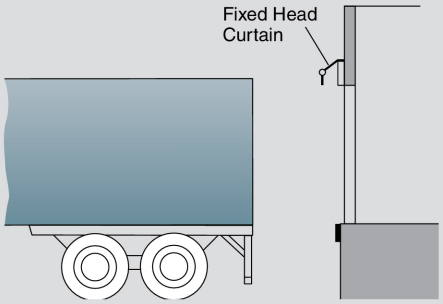


Figure 7

Guidelines for compression foam dock seals installation:

- Per square foot of pad length—approximately 80 lb of compression force on building
- Distance from wall to the face of the dock bumper—minimum of 4 in.
- Pad projection beyond the bumper—minimum of 4 in., maximum of 8 in.; 6 in. is nominal
- For recessed driveways with a slope of more than 2%—specify a taper seal; for every 1% of driveway grade, taper the seal 1 in. for overall length (Figure 8)

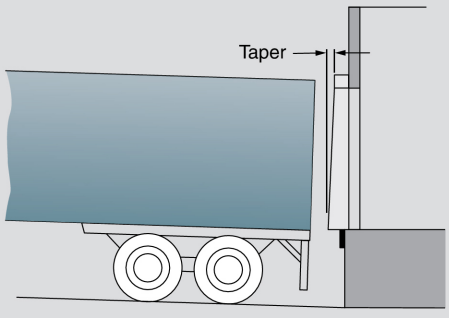


Figure 8

TRUCK SHELTERS:

A truck shelter allows for full access to the interior of the truck. An air gap may still be present around the hinge area of the truck's door.

Dock shelters can be installed on nearly any door, but are usually installed on doors between 9 ft wide x 9 ft high and 12 ft wide x 12 ft high.

Use truck shelters for:

- Loading doors wider than 9 ft or higher than 10 ft
- Trucks with extended tailgates
- Trucks with rear platforms (Figure 3)
- Full access of truck's interior

Guidelines for truck shelter installation:

- Minimum shelter width – 11'6" (O.D.) measured across the side frames
- Standard opening width – 7' measured between the insides of the side curtains

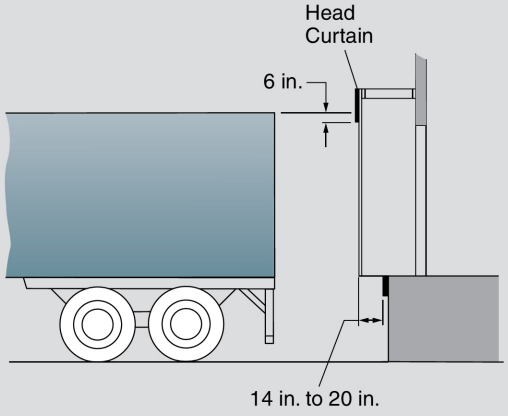


Figure 9

- Position of bottom edge of head curtain – 6 in. below height of the lowest expected truck (Figure 9)
- Top of shelter—minimum of 18 in. above top of highest expected truck. Commonly 15 ft off top of grade
- Shelter extension in front of dock bumpers – 14 to 20 in. Increase the extension to 20 in. minimum for shelters wider than 12'0"
- Install the support brackets for a rigid shelter on the building foundation, flush with the dock floor; the support brackets should project past the shelter frame by 3 to 6 in.

NOVA
FP SERIES

DESIGNED FOR DOOR OPENINGS UP TO 9′ WIDE X 9′ HIGH

FP Series Dock Seal—the foam-filled head pad and side pads provide a tight, energy-efficient seal between the trailer and the dock wall providing protection from inclement weather, dirt and insect infiltration.

- Cover material and wear pleats are top grade fabrics providing superior performance and weather resistance
- High density urethane foam provides long life and excellent resiliency characteristics
- Select grade pressure treated kiln dried wood framing
- Heavy duty galvanized mounting hardware
- Brass grommets with spur washers for venting
- Velcro® brand fasteners
- Full height yellow guide stripe standard

OPTIONS:

- Wear pleats
- Wear face
- Scuff guards
- Bottom door flaps (1 to 3 sides)
- Drop curtains
- Pull rope system for drop curtains
- 2″ foam filled drop curtains
- Flame retardant foam & fabric
- Top corner pleats only
- 24″ high yellow guide stripe
- Blockouts
- Galvanized metal backs
- Chain weighted drop curtain

NOVA
FPH SERIES

DESIGNED FOR DOOR OPENINGS UP TO 9′ WIDE X 12′ HIGH

FPH Series Dock Seal—they feature 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.

- High density urethane foam provides long life and excellent resiliency characteristics
- Select grade pressure treated kiln dried wood framing
- Heavy duty galvanized mounting hardware
- Brass grommets with spur washers for venting
- Velcro® brand fasteners
- Full height yellow guide stripe standard
- Hood length can be customized to accommodate the truck heights at your dock

OPTIONS:

- Wear pleats
- Wear face
- Scuff guards
- Bottom door flaps
- Pull rope system
- Flame retardant foam & fabric
- Top corner pleats only
- 24″ high yellow guide stripe
- Blockouts
- Galvanized metal backs
- 2″ foam filled front on hoods
- Chain weighted drop curtain

NOVA
FPU SERIES

DESIGNED FOR DOOR OPENINGS UP TO 10′ WIDE X 9′ HIGH

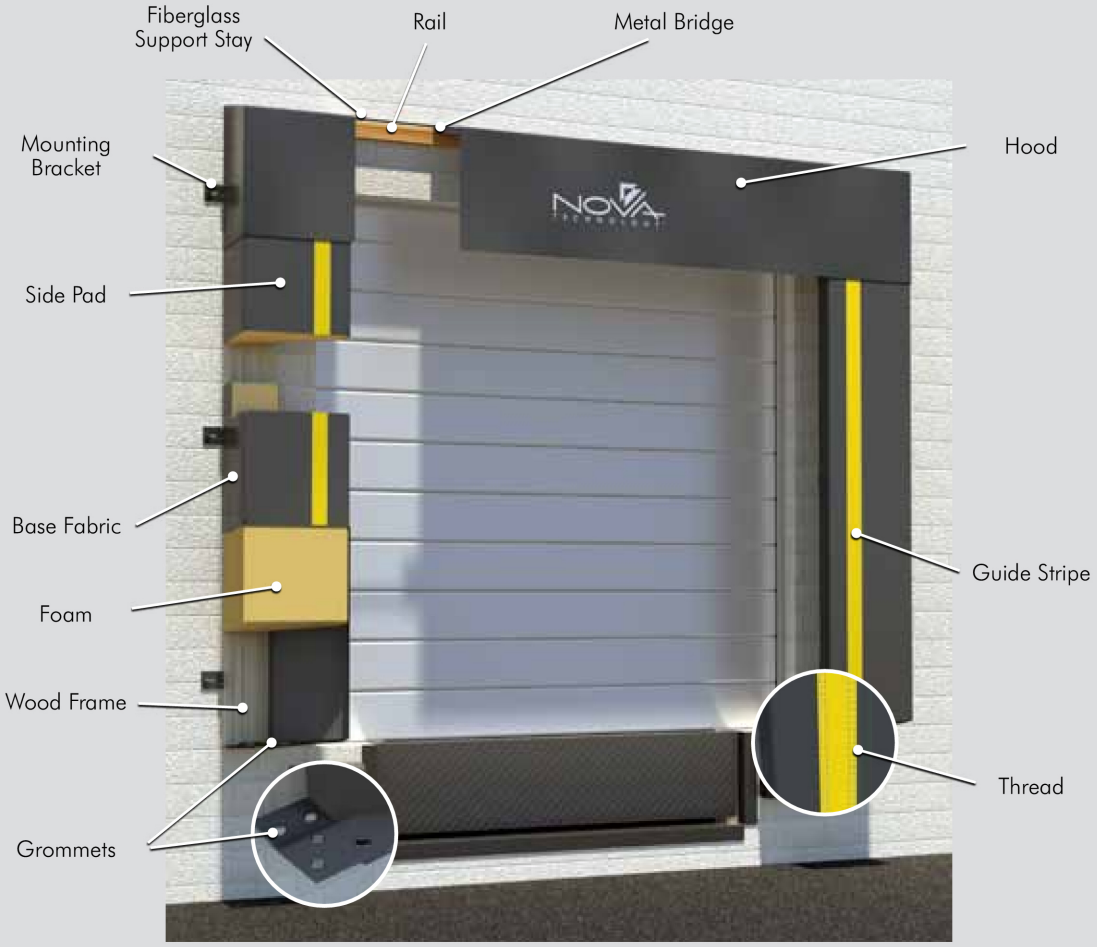
FPU Series Dock Seal—accommodates larger doors and provides positive foam seal and wiping action against truck sides. Will give full access side-to-side with this model.

- Cover material and wear pleats are top grade fabrics providing superior performance and weather resistance
- High density urethane foam provides long life and excellent resiliency characteristics
- Select grade pressure treated kiln dried wood framing
- Standard side pad projection of 16″—max is 24″
- Standard head pad projection of 10″
- Standard side pad penetration of 12″
- Heavy duty galvanized mounting hardware
- Full height yellow guide stripe standard

OPTIONS:

- Wear pleats
- Wear face
- Scuff guards
- Bottom door flaps (1 to 3 sides)
- Drop curtains
- Pull rope system for drop curtains
- Chain weighted drop curtain
- 2″ foam filled drop curtain
- Flame retardant foam & fabric
- Top corner pleats only
- 24″ high yellow guide stripe
- Blockouts
- Galvanized metal backs

NOVA
FPHU SERIES



DESIGNED FOR DOOR OPENINGS UP TO 10′ WIDE X 12′ HIGH AND HIGHER DOORS

FPHU Series Dock Seal— they feature a fabric hood-style head curtain—accommodates larger doors and provides positive foam seal and wiping action against truck sides. Will give full access side-to-side with this model.

- Cover material and wear pleats are top grade fabrics providing superior performance and weather resistance
- High density urethane foam provides long life and excellent resiliency characteristics
- Select grade pressure treated kiln dried wood framing
- Standard side pad projection of 16″—max is 24″
- Standard drop on hood is 24″
- Standard side pad penetration of 12″
- Heavy duty galvanized mounting hardware
- Full height yellow guide stripe standard
- Hood length can be customized to accommodate the truck heights at your dock

OPTIONS:

- Wear pleats
- Wear face
- Scuff guards
- Bottom door flaps
- Pull rope system
- Chain weighted drop curtain
- Flame retardant foam & fabric
- Top corner pleats only
- 24″ high yellow guide stripe
- Blockouts
- Galvanized metal backs
- 2″ foam filled front on hoods

NOVA
RF SERIES

DESIGNED FOR DOOR OPENINGS UP TO 12′ WIDE X 12′ HIGH AND HIGHER DOORS

RF Series Dock Shelter—provides maximum dock protection and full access to trailers for loading and unloading 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 and allows for water drainage.

- Select grade pressure treated kiln dried wood side and head frame
- Frames covered with translucent fiberglass
- Aluminum angle face edging
- Top grade fabrics utilized for superior performance and weather resistance
- Vinyl covered foam “drop in” style draft pads
- Steel support bumpers (black)
- Heavy duty galvanized mounting hardware
- 15″ yellow guide stripe standard

OPTIONS:

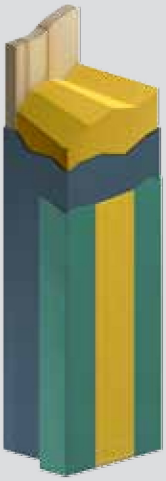
- Full length guide stripes
- Shelter projection 24″—customizable to any length
- 2″ foam front head curtain
- Pull rope system
- Hook and loop splits on head curtain
- Head curtain drop over 54″
- Frame cut-outs for obstructions
- Non projecting frame
- Common member units
- Ground level units
- 18 oz. white vinyl on frames
- Galvanized steel channel frame
- Clear roof panels for extra lighting
- Chain weighted drop curtain

NOVA
OPTIONS AND ACCESSORIES

WEAR PLEAT
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. This option is available in 4", 8" or 16" exposure.

SCUFF GUARD
Scuff guards protect the inside of side pads from freight and can be full height or 48" height.

WEAR FACE
Wear face reinforces the entire contact surface of the side pad or head pad for greater durability.



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% of the coating on the outside surface for greater wear resistance.

40 Oz. Hypalon®
Nylon woven base with a Hypalon coating on both sides.

40 Oz. Vinyl
Woven polyester base fabric with a vinyl coating on both sides.

22 Oz. Vinyl
Woven polyester-based fabric with a vinyl coating on both sides.

16 Oz. Hyaplon®
Nylon woven base with a Hypalon coating on both sides.

FABRIC PROPERTIES & COLORS					
Fabric	Abrasion Resistance (cycles) Fed Std 5306 ASTM D3884	Tensile Strength (lbs./in.) Fed Std 5100 ASTM D751	Tear Strength (lbs., WxL) Fed Std 5134 ASTM D2261	Cold Resistance (at -40°F) Fed Std 5874 ASTM D2136	Colors
NOVA MAX-1000	10000	1000 x 1000	200 x 200	Pass	
NOVA MAX-60	3000	950 x 850	160 x 130	Pass	
40 oz. Hypalon	1500	400 x 350	50 x 50	Pass	
16 oz. Hypalon	100	400 x 350	50 x 40	Pass	
40 oz. Vinyl	3000	950 x 850	160 x 130	Pass	
22 oz. Vinyl	1850	695 x 650	120 x 100	Pass	

FLAME RETARDANT FABRIC
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.