SECTION 11 13 00

LOADING DOCK EQUIPMENT

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Perma Tech Inc.; Loading Dock Equipment, Dock Seals, Dock Shelters, Inflatable Seals, Levelers and Traffic Doors.
This section is based on products of Perma Tech Inc., which is located at:
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Buffalo, NY 14204
Toll Free Tel: (800) 362-7325
Tel: (716) 854-0707
Fax: (716) 854-0774
Email: Info@PermaTechInc.com
Web: HYPERLINK "http://www.permatechinc.com/"www.permatechinc.com
[ HYPERLINK "http://www.arcat.com/arcatcos/cos34/arc34545.html?src=spec" HYPERLINK "http://www.arcat.com/arcatcos/cos9551/arc51419.html?src=spec"Click Here] for additional information.
Perma Tech Inc. was founded in 1984 and is located in Buffalo, NY. Perma Tech has adopted the principles of lean manufacturing and use of Kanban control and standardization to improve lead times and quality on products that were previously considered custom. Perma Tech continues to have proven craftsmanship and quality construction that providing safe and energy efficient dock seals, shelters, traffic doors and Perma Pits.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Loading Dock Seals:
			1. Dock seal with head pad or head curtain. (Perma Original Dock Seal)
			2. Dock seal with head pad or head curtain. (Perma FIREguard Seal)
			3. Dock seal with head pad or head curtain. (Perma Protector Anti-Theft Seal)
			4. Dock seal with head pad or head curtain. (Reducer Series Seal)
			5. Dock seal with head pad or head curtain. (Weather Shield Series Seal)
			6. Dock seal "L" shape with head pad or head curtain. (P90 Series Seal)
		2. Dock Shelters:
			1. Rigid dock shelter. (PS Series)
			2. Rigid ground dock shelter. (PS Series)
			3. Collapsible X-frame dock shelter. (PCS-5000)
			4. Collapsible X-frame rolling dock shelter. (PCS-5000 Rolling)
			5. Soft sided shelter. (PS90 - Ultra Dark)
			6. Soft sided shelter. (PS90 - The Diverter)
			7. Soft side shelter. (PS90 - Warrior)
			8. Soft sided shelter. (PS90 - Commander)
			9. Soft sided shelter. (PS90 - Sentinel)
			10. Seal/shelter. (Perma Rain Dam)
		3. Rail Car Shelter:
			1. Mechanical rail shelter. (PRS)
			2. Inflatable rail shelter. (Series 3600 Perma Air Rail)
		4. MRI Shelter: (Medical Series):
			1. MRI air shelter.
		5. Bumpers:
			1. Steel faced.
			2. Laminated.
			3. Molded.
		6. Loading Dock Safety Products:
			1. Wheel chocks.
			2. Loading dock communication lights.
			3. Trailer stands.
		7. Pit/Curb Angle:
			1. Perma pit.
			2. Perma pit, galvanized.
			3. E.O.D. pit.
			4. Galvanized curb angle set.
			5. Galvanized Perma Pit
		8. Metal Hoods:
			1. Galvanized.
			2. Galvannealed.
			3. Powder coated.
		9. Guarding Systems:
			1. Guardrails.
			2. Bollards.
			3. Column guards.
			4. Racking guards.
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
		2. Section 05 50 00 - Metal Fabrications.
		3. Section 26 05 48 - Vibration and Seismic Controls for Electrical Systems.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. American National Standards Institute (ANSI):
			1. ANSI MH29.1 - Industrial Scissor Lifts.
			2. ANSI MH30.1 - Industrial Loading Dock Boards (Ramps).
			3. ANSI MH30.3 - Vehicle Restraining Devices (Safety, Performance, and Testing).
		2. National Fire Prevention Association (NFPA): NFPA- 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.
		3. US Green Building Council (USGBC): LEED Rating System.
	1. SUBMITTAL
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data: Manufacturer's data sheets on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation methods.
		3. Shop Drawings: Showing overall dimensions and location of electrical service panels and motor locations. Supporting construction requirements and equipment structural attachment. Operating range and required clearances.
		4. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
		5. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
		6. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic checking and adjustment and periodic cleaning and maintenance of all components.
	2. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company providing sole source design, engineering, manufacturing and specializing in manufacturing products specified with a minimum 10 years experience.
		2. Installer Qualifications: Installer trained, certified and approved by manufacturer, with documented experience on similar projects.
	3. PRE-INSTALLATION CONFERENCE
		1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
	4. DELIVERY, STORAGE, AND HANDLING
		1. Store products in manufacturer's unopened packaging until ready for installation.
		2. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
	5. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
	6. SEQUENCING
		1. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
		2. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
	7. WARRANTY
		1. Warranty: Submit manufacturer's standard limited warranty for product, materials and workmanship.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Perma Tech, Inc., which is located at:363 Hamburg St.Buffalo, NY 14204Toll Free Tel: 800-362-7325Tel: 716-854-0707Fax: 716-854-0774Email: [request info (Info@PermaTechInc.com)](https://arcat.com/rfi?action=email&company=Perma%252BTech%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(11160pti)%253A%2520&coid=51419&spec=11160pti&rep=&fax=716-854-0774);Web: <http://www.permatechinc.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Perma Tech Dock Seals are constructed with the highest quality components to ensure the most effective seal possible at the loading dock door. All lumber backboards are pressure treated to prevent rotting, and our polyurethane foam is the ideal density to form an airtight seal against the trailer. The foam's high resiliency prevents foam "sag", maintaining the seal's neat appearance and performance over time. The most critical component in determining the useful life of a dock seal is the covering material. Perma Tech's products are constructed with high tear vinyl fabrics, available in all varieties of weights and colors. A tight dock seal reduces heating and cooling costs, improves loading safety, security, and will protect your products from the elements. Our custom designed seals are built to suit every dock situation - from light volume traffic to the heaviest traffic. Delete article if not required.

* 1. LOADING DOCK SEALS

\*\* NOTE TO SPECIFIER \*\* Generally, dock doors up to 9 ft (2743 mm) in height utilize foam head pads and dock doors larger than 9 ft (2743 mm) in height utilize F-Series head curtains. Doors that are 9 ft (2743 mm) can have either a foam head pad or F-Series head curtain. Delete basis of design paragraphs not required.

* + 1. Basis of Design: Perma Original Dock Seal with Head Pad or Head Curtain as manufactured by Perma Tech Incorporated. Fabric covered foam perimeter seals at trailer dock openings.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Dock seals are supplied with either head pads or head curtains. Delete the fabric type options that do not apply.

* + - 1. Fabric Type for Side Pads and Head Pads: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Pads and Head Pads: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Pads and Head Pads: HTA vinyl.
			4. Fabric Type for Side Pads and Head Curtains: 22 oz (0.62 kg) vinyl.
			5. Fabric Type for Side Pads and Head Curtains: 40 oz (1.13 kg) vinyl.
			6. Fabric Type for Side Pads and Head Curtains: HTA vinyl.

\*\* NOTE TO SPECIFIER \*\* For additional protection and to extend dock seal life, wear faces or wear pleats may be specified. Delete the wear faces paragraph and options or the wear pleats paragraph and options not required. If no additional protection is required delete both paragraphs.

* + - 1. Wear Faces: Second layer of material sewn over the base fabric to provide additional protection over the face of the doc seal.
				1. Fabric Type for Wear Faces: Same as side and head fabric.
				2. Fabric Type for Wear Faces: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Faces: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Faces: HTA vinyl.
			2. Wear Pleats: Header wear pleats mount at corners of the F-Series curtains. Side wear pleats run down the face of the side pads.
				1. Fabric Type for Wear Pleats: Same as side and head fabric.
				2. Fabric Type for Wear Pleats: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Pleats: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Pleats: HTA vinyl.
				5. Fabric Side Wear Pleat Exposure: 4 inches (102 mm).
				6. Fabric Side Wear Pleat Exposure: 8 inches (203 mm).
				7. Fabric Side Wear Pleat Exposure: 16 inches (406 mm).
			3. Vertical Side Pads: Beveled to provide a tight seal between the trailer back end and the building wall.

\*\* NOTE TO SPECIFIER \*\* Delete backer board option not required.

* + - * 1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Side Pads: 16 ga. Galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer boards and fabric.
				4. Fabric: 2 inch (50 mm) hemmed fabric sides attach to backer boards with screws and washers.
				5. Brass Grommet Breathers: Located in fabric on bottom of side pads to release air and moisture.
				6. Guide Stripes: 4 inch (102 mm) wide 18 oz (0.51 kg) safety yellow vinyl running the vertical length of the side pads.

\*\* NOTE TO SPECIFIER \*\* Delete the stationary foam head pads paragraph if specifying a head curtain.

* + - 1. Stationary Foam Head Pads:
				1. Height: May vary from 12 to 30 inches (305 to 762 mm) in height depending on the door opening height, and truck heights serviced.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Board for Mounting Head Pad: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Head Pad: 16 ga. galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer board and fabric.
				4. Fabric: 2 inch (51 mm) hemmed fabric header Attaches to backer board with screws and washers
				5. Grommet Breathers: Located in fabric on bottom of head pad.

\*\* NOTE TO SPECIFIER \*\* Drop flaps are optional. Generally required for ' high' doors that service low trucks. Delete if not required.

* + - * 1. Drop Flap: Chain-weighted. Sewn to head pad. Retained with Velcro. For use with lower height trailers.

\*\* NOTE TO SPECIFIER \*\* Delete head curtains paragraph if specifying stationary foam head pad.

* + - 1. Head Curtains: Includes 8 inch (203 mm) exposure corner wear pleats, of single ply vinyl facing fabric.

\*\* NOTE TO SPECIFIER \*\* Delete style options not required.

* + - * 1. Style NF: No foam vinyl fabric facing. Most adjustable.
				2. Style EF: 1 inch (25 mm) foam filled vinyl fabric facing. For increased sealing capabilities with adjustability.
				3. Style F: 4 inch (102 mm) foam filled vinyl fabric facing. For extra sealing ability, least adjustable.
			1. Hardware: Galvanized steel.

\*\* NOTE TO SPECIFIER \*\* Perma Tech FIREguard dock seal components can keep your dock safer and avoid costly fire damage

* + 1. Basis of Design: Perma FIREguard Dock Seal with Head Pad or Head Curtain as manufactured by Perma Tech Incorporated. FIREguard dock seals are comprised of fire retardant vinyl fabric covering fire retardant foam. Perma Tech's Fireguard Dock Seal is the perfect seal to help prevent fires at the loading dock due to the heat buildup of compressed trailer marker lights against the seal.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: Black.

\*\* NOTE TO SPECIFIER \*\* Dock seals are supplied with either head pads or head curtains. Delete the fabric type option that does not apply.

* + - 1. Fabric Type for Side Pads and Head Pads: 40 oz (1.13 kg) fire retardant vinyl.
			2. Fabric Type for Side Pads and Head Curtains: 40 oz (1.13 kg) fire retardant vinyl.

\*\* NOTE TO SPECIFIER \*\* For additional protection and to extend dock seal life, wear faces or wear pleats may be specified. Delete the wear faces or the wear pleats paragraph and options, whichever is not required. If no additional protection is required delete both paragraphs.

* + - 1. Wear Faces: Second layer of 40 oz, fire retardant black vinyl over the base fabric to provide additional protection over the face of the doc seal.
			2. Wear Pleats: Header wear pleats mount at corners of the F-Series curtain. Side wear pleats run down the face of the side pads.
				1. Fabric Type for Wear Pleats: 40 oz (1.13 kg) fire retardant vinyl.
				2. Fabric Side Wear Pleat Exposure: 4 inches (102 mm).
				3. Fabric Side Wear Pleat Exposure: 8 inches (203 mm).
				4. Fabric Side Wear Pleat Exposure: 16 inches (406 mm).
			3. Vertical Side Pads: Beveled to provide a tight seal between the trailer back end and the building wall.
				1. Backer Board for Mounting Side Pads: 16 ga. galvanized steel.
				2. Foam Core: Fire retardant polyurethane foam glued to steel backer boards.
				3. Fabric: 2 inch (50 mm) hemmed fabric sides attaches to steel backer boards with self-tapping screws.
				4. Brass Grommet Breathers: Located in fabric on bottom of side pads to release air and moisture.
				5. Guide Stripes: 4 inch (102 mm) wide 18 oz (0.51 kg) safety yellow vinyl running the vertical length of the side pads.

\*\* NOTE TO SPECIFIER \*\* Delete the stationary foam head pads paragraph if specifying a head curtain.

* + - 1. Stationary Foam Head Pads:
				1. Height: May vary from 12 to 30 inches (305 to 762 mm) in height depending on the door opening height, and truck heights serviced.
				2. Backer Board for Mounting Head Pad: 16 ga. galvanized steel.
				3. Foam Core: Fire retardant polyurethane foam glued to backer board.
				4. Fabric: Attaches to backer board with self-tapping screws.
				5. Grommet Breathers: Located in fabric on bottom of head pad.

\*\* NOTE TO SPECIFIER \*\* Drop flaps are optional. They are generally required for ' high' doors that service low trucks Delete if not required.

* + - * 1. Drop Flap: Chain-weighted. Sewn to head pad. Retained with Velcro. For use with lower height trailers.

\*\* NOTE TO SPECIFIER \*\* Delete head curtains paragraph if specifying stationary foam head pad.

* + - 1. Head Curtains: Includes 8 inch (203 mm) exposure corner wear pleats, of single ply vinyl facing fabric.

\*\* NOTE TO SPECIFIER \*\* Delete style options not required.

* + - * 1. Style NF: No foam vinyl fabric facing. Most adjustable.
				2. Style EF: 1 inch (25 mm) foam filled vinyl fabric facing. For increased sealing capabilities with adjustability.
				3. Style F: 4 inch (102 mm) foam filled vinyl fabric facing. For extra sealing ability, least adjustable.
			1. Hardware: Galvanized steel.
		1. Basis of Design: Anti-Theft Perma Protector Dock Seal with Head Pad or Head Curtain as manufactured by Perma Tech Incorporated. Secured vinyl fabric covered foam perimeter seals at trailer dock openings.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* The dock seal is supplied with either head pads or head curtains. Delete the fabric type options that do not apply.

* + - 1. Fabric Type for Side Pads and Head Pads: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Pads and Head Pads: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Pads and Head Pads: HTA vinyl.
			4. Fabric Type for Side Pads and Head Curtains: 22 oz (0.62 kg) vinyl.
			5. Fabric Type for Side Pads and Head Curtains: 40 oz (1.13 kg) vinyl.
			6. Fabric Type for Side Pads and Head Curtains: HTA vinyl.

\*\* NOTE TO SPECIFIER \*\* For additional protection and to extend dock seal life, wear faces or wear pleats may be specified. Delete the wear faces paragraph and options or the wear pleats paragraph and options not required. If no additional protection is required delete both paragraphs.

* + - 1. Wear Faces: Second layer of material sewn over the base fabric to provide additional protection over the face of the doc seal.
				1. Fabric Type for Wear Faces: Same as side and head fabric.
				2. Fabric Type for Wear Faces: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Faces: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Faces: HTA vinyl.
			2. Wear Pleats: Header wear pleats mount at corners of the F-Series curtains. Side wear pleats run down the face of the side pads.
				1. Fabric Type for Wear Pleats: Same as side and head fabric.
				2. Fabric Type for Wear Pleats: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Pleats: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Pleats: HTA vinyl.
				5. Fabric Side Wear Pleat Exposure: 4 inches (102 mm).
				6. Fabric Side Wear Pleat Exposure: 8 inches (203 mm).
				7. Fabric Side Wear Pleat Exposure: 16 inches (406 mm).
			3. Vertical Side Pads: Beveled to provide a tight seal between the trailer back end and the building wall.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Side Pads: 16 ga. galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer boards.
				4. Vinyl Coated Chain-Link Fencing: The back boards and foam cores are wrapped with fencing impeding pass-through openings from being cut into and through the foam side pads.
				5. Fabric: Wraps around the foam cores, backerboards and fencing.
				6. Brass Grommet Breathers: Located in fabric on bottom of side pads to release air and moisture.
				7. Guide Stripes: 4 inch (102 mm) wide 18 oz (0.51 kg) safety yellow vinyl running the vertical length of the side pads.

\*\* NOTE TO SPECIFIER \*\* Delete the stationary foam head pads paragraph if specifying a head curtain.

* + - 1. Stationary Foam Head Pads:
				1. Height: May vary from 12 to 30 inches (305 to 762 mm) in height depending on the door opening height, and truck heights serviced.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Head Pad: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Head Pad: 16 ga. galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer board.
				4. Fabric: Attaches to backer board with screws and washers.
				5. Grommet Breathers: Located in fabric on bottom of head pad.

\*\* NOTE TO SPECIFIER \*\* Drop flaps are optional. They are generally required for ' high' doors that service low trucks Delete if not required.

* + - * 1. Drop Flap: Chain-weighted. Sewn to head pad. Retained with Velcro. For use with lower height trailers.

\*\* NOTE TO SPECIFIER \*\* Delete head curtains paragraph if specifying stationary foam head pad.

* + - 1. Head Curtains: Includes 8 inch (203 mm) exposure corner wear pleats, of single ply vinyl facing fabric.

\*\* NOTE TO SPECIFIER \*\* Delete style options not required.

* + - * 1. Style NF: No foam vinyl fabric facing. Most adjustable.
				2. Style EF: 1 inch (25 mm) foam filled vinyl fabric facing. For increased sealing capabilities with adjustability.
				3. Style F: 4 inch (102 mm) foam filled vinyl fabric facing. For extra sealing ability, least adjustable.
			1. Hardware: Galvanized steel.
		1. Basis of Design: Perma Reducer Series Dock Seal with Head Pad or Head Curtain as manufactured by Perma Tech Incorporated. Fabric covered foam perimeter seals at trailer dock openings. Reversed wedge side seals extend less foam into the door opening.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* The dock seal is supplied with either head pads or head curtains. Delete the fabric type options that do not apply.

* + - 1. Fabric Type for Side Pads and Head Pads: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Pads and Head Pads: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Pads and Head Pads: HTA vinyl.
			4. Fabric Type for Side Pads and Head Curtains: 22 oz (0.62 kg) vinyl.
			5. Fabric Type for Side Pads and Head Curtains: 40 oz (1.13 kg) vinyl.
			6. Fabric Type for Side Pads and Head Curtains: HTA vinyl.

\*\* NOTE TO SPECIFIER \*\* For additional protection and to extend dock seal life, wear faces or wear pleats may be specified. Delete the wear faces paragraph and options or the wear pleats paragraph and options not required. If no additional protection is required delete both paragraphs.

* + - 1. Wear Faces: Second layer of material sewn over the base fabric to provide additional protection over the face of the doc seal.
				1. Fabric Type for Wear Faces: Same as side and head fabric.
				2. Fabric Type for Wear Faces: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Faces: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Faces: HTA vinyl.
			2. Wear Pleats: Header wear pleats mount at corners of the F-Series curtains. Side wear pleats run down the face of the side pads.
				1. Fabric Type for Wear Pleats: Same as side and head fabric.
				2. Fabric Type for Wear Pleats: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Pleats: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Pleats: HTA vinyl.
				5. Fabric Side Wear Pleat Exposure: 4 inches (102 mm).
				6. Fabric Side Wear Pleat Exposure: 8 inches (203 mm).
				7. Fabric Side Wear Pleat Exposure: 16 inches (406 mm).
			3. Vertical Side Pads: Side Pads have a canted face to reduce the amount of foam that protrudes into the door opening.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Side Pads: 16 ga. galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer boards.
				4. Fabric: Attaches to backer boards with screws and washers.
				5. Brass Grommet Breathers: Located in fabric on bottom of side pads.
				6. Guide Stripes: 4 inch (102 mm) wide 18 oz (0.51 kg) safety yellow vinyl running the vertical length of the side pads.

\*\* NOTE TO SPECIFIER \*\* Delete the stationary foam head pads paragraph if specifying a head curtain.

* + - 1. Stationary Foam Head Pads: Up to 16 inch (406 mm) projection.
				1. Height: May vary from 12 to 30 inches (305 to 762 mm) in height depending on the door opening height, and truck heights serviced.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Head Pad: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Head Pad: 16 ga. galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer board.
				4. Fabric: Attaches to backer board with screws and washers.
				5. Grommet Breathers: Located in fabric on bottom of head pad.

\*\* NOTE TO SPECIFIER \*\* Drop flaps are optional. They are generally required for ' high' doors that service low trucks Delete if not required.

* + - * 1. Drop Flap: Chain-weighted. Sewn to head pad. Retained with Velcro. For use with lower height trailers.

\*\* NOTE TO SPECIFIER \*\* Delete head curtains paragraph if specifying stationary foam head pad.

* + - 1. Head Curtains: Includes 8 inch (203 mm) exposure corner wear pleats, of single ply vinyl facing fabric.

\*\* NOTE TO SPECIFIER \*\* Delete style options not required.

* + - * 1. Style NF: No foam vinyl fabric facing. Most adjustable.
				2. Style EF: 1 inch (25 mm) foam filled vinyl fabric facing. For increased sealing capabilities with adjustability.
				3. Style F: 4 inch (102 mm) foam filled vinyl fabric facing. For extra sealing ability, least adjustable.
			1. Hardware: Galvanized steel.

\*\* NOTE TO SPECIFIER \*\* Weather Shield is an effective and efficient dock seal that meets budget requirements and industry standards. The fabric on the vertical side pads is wrapped and stapled in lieu of being hemmed and bolted. This design requires breather slits to relieve air pressure when trucks are making contact with the dock seal.

* + 1. Basis of Design: Perma Weather Shield Dock Seal with Head Pad or Head Curtain as manufactured by Perma Tech Incorporated. Fabric covered foam perimeter seals at trailer dock openings.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* The dock seal is supplied with either head pads or head curtains. Delete the fabric type options that do not apply.

* + - 1. Fabric Type for Side Pads and Head Pads: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Pads and Head Pads: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Pads and Head Pads: HTA vinyl.
			4. Fabric Type for Side Pad and Head Curtains: 22 oz (0.62 kg) vinyl.
			5. Fabric Type for Side Pad and Head Curtains: 40 oz (1.13 kg) vinyl.
			6. Fabric Type for Side Pad and Head Curtains: HTA vinyl.

\*\* NOTE TO SPECIFIER \*\* For additional protection and to extend dock seal life, wear faces or wear pleats may be specified. Delete the wear face paragraph and options or the wear pleats paragraph and options not required. If no additional protection is required delete both paragraphs.

* + - 1. Wear Faces: Second layer of material sewn over the base fabric to provide additional protection over the face of the doc seal.
				1. Fabric Type for Wear Faces: Same as side and head fabric.
				2. Fabric Type for Wear Faces: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Faces: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Faces: HTA vinyl.
			2. Wear Pleats: Header wear pleats mount at corners of the F-Series curtains. Side wear pleats run down the face of the side pads.
				1. Fabric Type for e Wear Pleats: Same as side and head fabric.
				2. Fabric Type for Wear Pleats: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Pleats: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Pleats: HTA vinyl.
				5. Fabric Side Wear Pleat Exposure: 4 inches (102 mm).
				6. Fabric Side Wear Pleat Exposure: 8 inches (203 mm).
				7. Fabric Side Wear Pleat Exposure: 16 inches (406 mm).
			3. Vertical Side Pads: Beveled to provide a tight seal between the trailer back end and the building wall.
				1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative.
				2. Foam Core: Polyurethane foam glued to backer boards and fabric.
				3. Fabric: Wraps the foam cores and is stapled to the building side of the backer boards.
				4. Breather Slits: Located in fabric to equalize air pressure in the pads.
				5. Guide Stripes: 4 inch (102 mm) wide by 24 inch (305 mm) high 18 oz (0.51 kg) safety yellow vinyl. 9 ft 0 inches (2743 mm) on center, out board.

\*\* NOTE TO SPECIFIER \*\* Delete the stationary foam head pads paragraph if specifying a head curtain. Head pads will come with pleats only when side pads have pleats.

* + - 1. Stationary Foam Head Pads:
				1. Height: May vary from 12 to 30 inches (305 to 762 mm) in height depending on the door opening height, and truck heights serviced.
				2. Backer Board for Mounting Head Pad: Wood; pressure treated with preservative.
				3. Foam Core: Polyurethane foam glued to backer board and fabric.
				4. Fabric: Wraps the foam core and is stapled to the building side of the backer board.
				5. Breather Slits: Located in fabric to equalize air pressure in the pads.

\*\* NOTE TO SPECIFIER \*\* Drop flaps are optional they are required for higher doors that occasionally service lower trucks. Delete if not required.

* + - * 1. Drop Flap: Chain-weighted. Sewn to head pad. Retained with Velcro. For use with lower height trailers.

\*\* NOTE TO SPECIFIER \*\* Delete head curtains paragraph if specifying stationary foam head pad.

* + - 1. Head Curtains: Includes 8 inch (203 mm) exposure corner wear pleats, of single ply vinyl facing fabric.

\*\* NOTE TO SPECIFIER \*\* Delete style options not required.

* + - * 1. Style NF: No foam vinyl fabric facing. Most adjustable.
				2. Style EF: 1 inch (25 mm) foam filled vinyl fabric facing. For increased sealing capabilities with adjustability.
				3. Style F: 4 inch (102 mm) foam filled vinyl fabric facing. For extra sealing ability, least adjustable.
			1. Hardware: Galvanized steel.
		1. Basis of Design: P90 "L" Shaped Dock Seal with Head Pad as manufactured by Perma Tech Incorporated. Perma Tech's P90 dock seal is an "L" shape design that allows the truck to pass through the side pads to form a tight seal top to bottom and allows full unobstructed access to the truck interior, exerting less pressure on the building wall. This unit is ideal for servicing both 8 ft (2438 mm) and 8 ft 6 in (2591 mm) wide trucks. The "P90" Dock Seal comes with a Foam Head Pad or F series curtain depending on door height.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* The dock seal is supplied with either head pads or head curtains. Delete the fabric type options that do not apply.

* + - 1. Fabric Type for Side Pads: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Pads: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Pads: HTA vinyl.
			4. Fabric Type for Head Pads: 40 oz (1.13 kg) vinyl.
			5. Fabric Type for Head Pads: HTA vinyl.
			6. Fabric Type for Side Pad and Head Curtains: 22 oz (0.62 kg) vinyl.
			7. Fabric Type for Side Pad and Head Curtains: 40 oz (1.13 kg) vinyl.
			8. Fabric Type for Side Pad and Head Curtains: HTA vinyl.

\*\* NOTE TO SPECIFIER \*\* For additional protection and to extend dock seal life, wear faces or wear pleats may be specified. Delete the wear face paragraph and options or the wear pleats paragraph and options not required. If no additional protection is required delete both paragraphs.

* + - 1. Wear Faces: Second layer of material sewn over the base fabric to provide additional protection over the face of the doc seal.
				1. Fabric Type for Wear Faces: Same as side and head fabric.
				2. Fabric Type for Wear Faces: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Faces: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Faces: HTA vinyl.
			2. Wear Pleats: Header wear pleats mount at corners of the F-Series curtains. Side wear pleats run down the face of the side pads.
				1. Fabric Type for Wear Pleats: Same as side and head fabric.
				2. Fabric Type for Wear Pleats: 22 oz (0.62 kg) vinyl.
				3. Fabric Type for Wear Pleats: 40 oz (1.13 kg) vinyl.
				4. Fabric Type for Wear Pleats: HTA vinyl.
				5. Fabric Side Wear Pleat Exposure: 4 inches (102 mm).
				6. Fabric Side Wear Pleat Exposure: 8 inches (203 mm).
				7. Fabric Side Wear Pleat Exposure: 16 inches (406 mm).
			3. Vertical Side Pads: "L" shaped to provide a tight seal between the trailer back end and the building wall.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Side Pads: Galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer boards and fabric.
				4. Fabric: 2 inch (51 mm) Hemmed. Attaches to backer boards with screws and washers.
				5. Brass Grommet Breathers: Located in fabric on bottom outside edge of side pads.
				6. Guide Stripes: 4 inch (102 mm) wide 18 oz (0.51 kg) safety yellow, vinyl.

\*\* NOTE TO SPECIFIER \*\* Delete height option not required.

Height: 24 inches (610 mm). (Standard)

Height: Full height.

\*\* NOTE TO SPECIFIER \*\* Delete the stationary foam head pads paragraph if specifying a head curtain.

* + - 1. Stationary Foam Head Pads:
				1. Height: May vary from 12 to 30 inches (305 to 762 mm) in height depending on the door opening height, and truck heights serviced.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Head Pad: Wood; pressure treated with preservative.
				2. Backer Board for Mounting Head Pad: 16 ga. galvanized steel.
				3. Foam Core: Polyurethane foam glued to backer board and fabric.
				4. Fabric: Attaches to backer board with screws and washers.
				5. Grommet Breathers: Located in fabric on bottom of head pad.

\*\* NOTE TO SPECIFIER \*\* Drop flaps are optional. They are generally required for ' high' doors that service low trucks Delete if not required.

* + - * 1. Drop Flap: Chain-weighted. Sewn to head pad. Retained with Velcro. For use with lower height trailers.

\*\* NOTE TO SPECIFIER \*\* Delete head curtains paragraph if specifying stationary foam head pad.

* + - 1. Head Curtains: Includes 8 inch (203 mm) exposure corner wear pleats, of single ply vinyl facing fabric.

\*\* NOTE TO SPECIFIER \*\* Delete style options not required.

* + - * 1. Style NF: No foam vinyl fabric facing. Most adjustable.
				2. Style EF: 1 inch (25 mm) foam filled vinyl fabric facing. For increased sealing capabilities with adjustability.
				3. Style F: 4 inch (102 mm) foam filled vinyl fabric facing. For extra sealing ability, least adjustable.
			1. Hardware: Galvanized steel.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. DOCK SHELTERS

\*\* NOTE TO SPECIFIER \*\* Perma Tech's Rigid Dock Shelter is designed to service a variety of truck sizes and types, regardless of dock door size or bumper protection. Delete basis of design paragraphs not required.

* + 1. Basis of Design: Rigid Dock Shelter PS as manufactured by Perma Tech Incorporated. As trucks back into the shelter, face curtains wrap around truck sides and top for positive weather protection, loading safety, and product protection. The full trailer opening remains accessible for unrestricted loading and unloading.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock shelter shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_ based on dock height.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains and Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains and Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains and Head Curtains: HTA vinyl.
			4. Head Curtains: Include fiberglass stays, and wear flaps at corners.
			5. Side Curtains: Include fiberglass stays. Extra wear area on bottom of curtains at critical truck contact points.
				1. Foam Edges: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Guide Patches: 18 oz (0.51 kg) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.
			6. Head Frames: 2 x 6 inches (102 x 152 mm) pressure treated lumber, peaked at center to prevent snow and water build-up, and covered with a translucent fiberglass paneling to allow a lighted loading area.

\*\* NOTE TO SPECIFIER \*\* 1-1/2 x 1-1/2 inch (38 x 38 mm) steel tube side frames are available. Contact manufacturer for details.

* + - 1. Side Frames: 2 x 4 inches (51 x 102 mm) pressure treated lumber covered with a translucent vinyl panel for a safe, lighted loading area.
			2. Protective Steel Bumpers: Factory painted steel channel bumpers to protect shelter frame. 6 inch (152 mm) channel construction. 6 inches (152 mm) beyond projection.
			3. Bottom Draft Cushions: Vinyl covered, and foam filled. Supported by 2 x 8 inch (51 x 203 mm) wood backer. Cushions attach to wood with galvanized "J" brackets and wood screws. Seals off bottom of shelter independent of side curtains for easy and economical replacement. "NO STEP" printed on cushion for safety. Attaches to foam side frames with Velcro.

\*\* NOTE TO SPECIFIER \*\* Perma Tech's Ground Rigid Dock Shelter is designed to service a variety of truck sizes and types, regardless of dock door size or bumper protection.

* + 1. Basis of Design: Rigid Ground Dock Shelter PSG as manufactured by Perma Tech Incorporated. Designed to seal a trailer at ground level openings. The shelter assist forms a ground level canopy to protect personnel and loads from the elements when loading and unloading.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock shelter shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains and Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains and Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains and Head Curtains: HTA vinyl.
			4. Head Curtains: Include fiberglass stays, and wear flaps at corners.
			5. Side Curtains: Include fiberglass stays. Extra wear area on bottom of curtains at critical truck contact points.
				1. Foam Edges: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Guide Patches: 18 oz (0.51 kg) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.
			6. Head Frame: 2 x 6 inches (102 x 152 mm) pressure treated lumber, peaked at center to prevent snow and water build-up, and covered with a translucent fiberglass paneling to allow a lighted loading area.

\*\* NOTE TO SPECIFIER \*\* 1-1/2 x 1-1/2 inch (38 x 38 mm) steel tube side frames are available. Contact manufacturer for details.

* + - 1. Side Frames: 2 x 4 inches (51 x 102 mm) pressure treated lumber covered with a translucent vinyl panel for a safe, lighted loading area.

\*\* NOTE TO SPECIFIER \*\* The bottom curtain is optional. Delete if not required.

* + - 1. Bottom Curtains: 40 oz (1134 grams) black vinyl. Unit width by 48 inches (1219 mm) high.
		1. Basis of Design: Perma Collapsible X-Frame Dock Shelter, as manufactured by Perma Tech Incorporated. The Collapsible X-Frame Dock Shelter is comprised of a spring-loaded tubular steel frame and can accommodate various trucks regardless of dock door size or bumper projection. Designed to withstand off centered trailers without suffering permanent damage.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_ based on dock height.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains and Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains and Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains and Head Curtains: HTA vinyl.
			4. Head Curtains: Include fiberglass stays, and Perma wear flaps at corners.
			5. Side Curtains: Include fiberglass stays. Extra wear area on bottom of curtains at critical truck contact points.
				1. Foam Edges: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Guide Patches: 18 oz (0.51 kg) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.
			6. Head Frames: 1.5 inch (38 mm) square steel tube top frame connects the side "X" frames at the front of the unit. A 2 x 4 inch (51 mm x 102 mm) treated wood mounting board connects the side "X" frames at the back.
			7. Side Frames: Spring loaded, 1.5 inch (38 mm) square steel tube "X" frames are secured to pressure treated 2 x 6 inch (51 x 152 mm) mounting boards.

\*\* NOTE TO SPECIFIER \*\* Limit stops are optional. Delete if not required.

* + - 1. Limit Stops: 8 inch (203 mm) I-beam.
		1. Basis of Design: Perma Collapsible X-Frame Rolling Dock Shelter as manufactured by Perma Tech Incorporated. The Collapsible Shelter is designed to withstand off centered trailers without suffering permanent damage. A spring loaded tubular steel frame along with 6 inch (152 mm) rubber wheels to roll on cement or ground due to extended dock. Secured by cane bolts. Works with cantilever docks where larger projections are required.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains and Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains and Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains and Head Curtains: HTA vinyl.
			4. Head Curtains: Include fiberglass stays, and Perma Pleat wear flaps on each side at truck contact areas.
			5. Side Curtains: Include fiberglass stays. Extra wear area on bottom of curtains at critical truck contact points.
				1. Foam Edge: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Guide Patches: 18 oz (0.51 kg) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.

\*\* NOTE TO SPECIFIER \*\* Delete head frame option not required.

* + - 1. Head Frame: 1.5 inch (38 mm) square steel frame covered with translucent vinyl fabric to allow for a lighted loading area. (Standard)
			2. Head Frame: Peaked, 1.5 inch (38 mm) square steel tube frame covered with translucent vinyl fabric to allow for a lighted loading area.
			3. Side Frames: Spring loaded; 1.5 inch (38 mm) square steel tube "X" frames are secured to pressure treated 2 x 4 inch (51 x 102 mm) mounting boards.
			4. Casters: 6 inch (152 mm) rubber wheel assemblies.

\*\* NOTE TO SPECIFIER \*\* Limit stops are optional. Delete if required.

* + - 1. Limit Stops: 8 inch (203 mm) I-beam.

\*\* NOTE TO SPECIFIER \*\* Ultra Dark loading dock shelter made for blocking out light and weather. The Ultra Dark is engineered to create a tight and consistent seal for effective environmental control around the trailer opening at the loading dock. Delete if not required.

* + 1. Basis of Design: Ultra Dark Soft Sided Dock Shelter as manufactured by Perma Tech Incorporated. This product is often used in the pharmaceutical and food industries to meet FDA regulations.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains, Head Curtains: 22 oz (0.062 kg) vinyl.
			2. Fabric Type for Side Curtains, Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains, Head Curtains: HTA vinyl.
			4. Shelter Head Curtains: Perma wear flaps on each end of head curtain at truck contact points along with light reducing wear pleats. Head curtain drop lengths vary from 18-48 inches (457 to 1219 mm) and are determined by the manufacturer based on the drop required, given dimensions, and truck heights.
			5. Head Frames: Self-supporting heavy duty steel tube frame. Supports a rain dam header and a head curtain equipped with light reducing wear pleats.
			6. Rain Dam Headers: Keeps moisture out of the loading/unloading area with a wiper pad seal that engages the top of the trailer.
				1. Trailer Height Coverage: From 12 feet 8 inches (3861 mm) and higher. Lower truck coverage available with "XL" units.
				2. Peaked Head Frame: 1-1/2 x 1-1/2 inch (38 x 38 mm) steel tubing frame.

Head Frame Cover: 20 ga. galvanized steel, peaked. (standard)

Head frame Cover: Translucent fiberglass, peaked.

* + - * 1. Reinforced Foam Pad: 4 inch (102 mm) thick pad reinforced with armor clad belting provides wearability while creating a downward pressure for a consistent seal across entire width of trailer top within standard range.
				2. Rain Guard Pad Position: 18 inches (457 mm) in front of the dock seal or shelter providing full height access to trailer opening.
				3. Rugged side support brackets for mounting over existing equipment.
				4. Metal Mounting Plate: 12 ga. steel. Adds stiffness to the wiper pad.
			1. Side Frames: Foam filled side pads. High density full memory foam glued to backer boards. Foam and frames wrapped in 22 oz vinyl fabric.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards: Wood; pressure treated with preservative. 2 x 6 inches (51 x 152 mm) or 2 x 8 inch (51 x 2013 mm).
				2. Backer Boards: 16 ga. galvanized steel.
			1. Side Curtains: Include fiberglass stays and extra wear area on bottom of curtains at critical truck contact points.
				1. Foam Edge: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Attaches to foam side frames with Velcro.
				3. Gap Hooks: Extruded plastic hooks attached along the exposed vertical edge of the side curtains. Reduces air filtration and light around truck doors.
				4. Guide Patches: 18 oz (0.51 kg) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.
			2. Bottom Draft Cushions: 2 inch (50 mm) thick vinyl covered, and foam filled. Seals off bottom of shelter independent of side curtains for easy and economical replacement. "NO STEP" printed on cushion for safety. Attaches to foam side pads with Velcro.
		1. Basis of Design: Diverter Soft Sided Dock Shelter as manufactured by Perma Tech Incorporated. This soft-side shelter comes with a Rain Dam header to divert rain and snow to the sides of the shelter to keep the loading area dry.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains, Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains, Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains, Head Curtains: HTA vinyl.
			4. Head Curtains: Perma wear flaps on each end of head curtain at truck contact points. Head curtain drop lengths vary from 18 to 48 inches (457 to 1219 mm) and are determined by the manufacturer based on the drop required, given dimensions and truck heights.
			5. Head Frames: Self-supporting heavy duty steel tube frame, capable of withstanding heavy traffic and snow loads. Supports a rain dam header.
			6. Rain Dam Headers: Keeps moisture out of the loading/unloading area with a wiper pad seal that engages the top of the trailer.
				1. Trailer Height Coverage: From 12 feet 8 inches (3861 mm) and higher. Lower truck coverage available with "XL" units.
				2. Peaked Head Frame: 1-1/2 x 1-1/2 inch (38 x 38 mm) steel tubing frame.

Head Frame Cover: 20 ga. galvanized steel, peaked. (standard)

Head frame Cover: Translucent fiberglass, peaked.

* + - * 1. Reinforced Foam Pad: 4 inch (102 mm) thick pad reinforced with armor clad belting provides wearability while creating a downward pressure for a consistent seal across entire width of trailer top with standard range.
				2. Rain Guard Pad Position: 18 inches (457 mm) in front of the dock seal or shelter providing full height access to trailer opening.
				3. Rugged side support brackets for mounting over existing equipment.
				4. Metal Mounting Plate: 12 ga. steel. Adds stiffness to the wiper pad.
			1. Side Frames: Foam filled side pads. High density full memory foam glued to backer boards. Foam frames wrapped in 22 oz vinyl fabric.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative. 2 x 6 inches (51 x 152 mm) or 2 x 8 inch (51 x 2013 mm).
				2. Backer Board for Mounting Side Pads: 16 ga. galvanized steel.
			1. Side Curtains: With fiberglass stays and extra wear area on bottom of curtains at critical truck contact points.
				1. Foam Edge: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Attaches to foam side frames with Velcro.
				3. Guide Patches: 18 oz (0.51 kg) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.
			2. Bottom Draft Cushions: 2 inch (50 mm) thick vinyl covered, and foam filled. Seals off bottom of shelter independent of side curtains for easy and economical replacement. "NO STEP" printed on cushion for safety. Attaches to foam side pads with Velcro.
		1. Basis of Design: Warrior Soft Sided Dock Shelter as manufactured by Perma Tech Incorporated. The Warrior is a soft-side shelter constructed with a unique spring action flex head curtain system to move with the extreme up and down motion of air ride suspension. Can accommodate up to 6 inches (152 mm) of movement.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains, Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains, Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains, Head Curtains: HTA vinyl.
			4. Head Frame: Self-supporting with heavy duty Flexible Fiberglass stays, 2 x 6 inch (50 x 152 mm) treated wood, and 1-1/2 x 1-1/2 inch (38 x 38 mm) steel front tube. Fabric covered. Moves down 6 inches (152 mm)
			5. Head Curtain: Perma wear flaps on each end of head curtain at truck contact points.
			6. Side Frames: Foam filled side pads. High density full memory foam glued to backer boards. Foam and frames wrapped in 22 oz vinyl fabric.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative. 2 x 6 inches (51 x 152 mm) or 2 x 8 inch (51 x 2013 mm).
				2. Backer Board for Mounting Side Pads: 16 ga. galvanized steel.
			1. Side Curtains: Include fiberglass stays and extra wear area on bottom of curtains at critical truck contact points.
				1. Foam Edge: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Side curtains attach to foam side frames with Velcro.
				3. Guide Patches: 18 oz (0.51 kg) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.

\*\* NOTE TO SPECIFIER \*\* Gap hooks are optional. Delete if not required.

* + - * 1. Gap Hooks: Extruded plastic hooks attached along the exposed vertical edge of the side curtains. Reduces air filtration and light around truck doors.
			1. Bottom Draft Cushions: 2 inch (50 mm) thick vinyl covered, and foam filled. Seals off bottom of shelter independent of side curtains for easy and economical replacement. "NO STEP" printed on cushion for safety. Attaches to foam side frames with Velcro.
		1. Basis of Design: Commander Soft Sided Dock Shelter, as manufactured by Perma Tech Incorporated. The Commander has a rigid wood frame header covered with translucent fiberglass and fully impactable side frames which allows for full access to the trailer.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains, Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains, Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains, Head Curtains: HTA vinyl.
			4. Head Curtains: Perma wear flaps on each end of head curtain at truck contact points.
			5. Header Frame: Rigid self-supporting heavy duty wood frame, peaked to prevent snow and water build-up. Covered with translucent fiberglass to allow light in.
				1. Framing: 2 x 6 inches (102 x 152 mm) pressure treated lumber.
			6. Side Frame: Foam filled side pads. High density full memory foam glued to backer boards. Foam and frames wrapped in 22 oz vinyl fabric.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards: Wood; pressure treated with preservative. 2 x 6 inches (51 x 152 mm) or 2 x 8 inch (51 x 2013 mm).
				2. Backer Boards: 16 ga. galvanized steel.
			1. Side Curtains: Extra wear area on bottom of curtains at critical truck contact areas. Easily removed in summer (to reduce wear) or to replace.
				1. Foam Edge: Fabric covered foam strip on leading edge of side curtains for a snug fit against trailer sides.
				2. Side curtains attach to foam side frames with Velcro.
				3. Guide Patches: 18 oz (0.51 kg ) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.

\*\* NOTE TO SPECIFIER \*\* Gap hooks are optional. Delete if not required.

* + - * 1. Gap Hooks: Extruded plastic hooks attached along the exposed vertical edge of the side curtains. Reduces air filtration and light around truck doors.
			1. Bottom Draft Cushions: 2 inch (50 mm) thick vinyl covered, and foam filled. Seals off bottom of shelter independent of side curtains for easy and economical replacement. "NO STEP" printed on cushion for safety. Attaches to foam side frames with Velcro.
		1. Basis of Design: Sentinel Soft Sided Dock Shelter as manufactured by Perma Tech Incorporated. No Foam (NF) Style Head Curtain. Vinyl with fiberglass stay stiffeners on top head curtain and Perma wear flaps on each end at truck contact points.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Range of truck heights to be serviced shall be from \_\_\_\_ to \_\_\_\_.
			3. Projection Angle: Accommodates grade of dock approach.

\*\* NOTE TO SPECIFIER \*\* Insert dock approach angle; level, inclining or declining angle.

* + - * 1. Dock Approach: \_\_\_\_\_\_\_\_ degrees.

\*\* NOTE TO SPECIFIER \*\* Delete fabric color options not required. Black is standard.

* + - 1. Fabric Color: \_\_\_\_\_\_\_\_.
			2. Fabric Color: Black. (Standard)
			3. Fabric Color: As determined by Architect from manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Delete the fabric type options not required.

* + - 1. Fabric Type for Side Curtains, Head Curtains: 22 oz (0.62 kg) vinyl.
			2. Fabric Type for Side Curtains, Head Curtains: 40 oz (1.13 kg) vinyl.
			3. Fabric Type for Side Curtains, Head Curtains: HTA vinyl.
			4. NF Head Curtain: Perma wear flaps on each end of head curtain at critical truck contact points.
			5. Side Frames: Foam filled side pads. High density full memory foam glued to backer boards. Foam and frames wrapped in 22 oz vinyl fabric.

\*\* NOTE TO SPECIFIER \*\* Delete back board option not required.

* + - * 1. Backer Boards for Mounting Side Pads: Wood; pressure treated with preservative. 2 x 6 inches (51 x 152 mm) or 2 x 8 inch (51 x 2013 mm).
				2. Backer Board for Mounting Side Pads: Galvanized steel.
			1. Side Curtains: Extra wear area on bottom of curtains at critical truck contact areas.

\*\* NOTE TO SPECIFIER \*\* Removable side curtains are optional. Delete if not required.

* + - * 1. Removable for the summer (to reduce wear) or to replace.
				2. Side curtains attach to foam side frames with Velcro.
				3. Guide Patches: 18 oz (0.51 kg ) safety yellow vinyl. Height is 12 inch (305 mm), placed 9 feet (2743 mm) on center.

\*\* NOTE TO SPECIFIER \*\* Gap hooks are optional. Delete if not required.

* + - * 1. Gap Hooks: Extruded plastic hooks attached along the exposed vertical edge of the side curtains. Reduces air filtration and light around truck doors.
			1. Bottom Draft Cushions: 2 inch (50 mm) thick vinyl covered, and foam filled. Seals off bottom of shelter independent of side curtains for easy and economical replacement. "NO STEP" printed on cushion for safety. Attaches to foam side frames with Velcro.

\*\* NOTE TO SPECIFIER \*\* The Perma Tech Rain Dam is designed to stop the weather from raining down the trailer roof and infiltrating the dock area. Upgrade can be added as an accessory to other shelter products. Delete if not required.

* + 1. Basis of Design: Rain Dam as manufactured by Perma Tech Incorporated. Keeps moisture out of the loading/unloading area with a "wiper" pad seal that engages the trailer's top. It requires virtually no maintenance.
			1. Trailer Height Coverage: From 12 feet 8 inches (3861 mm) and higher. Lower truck coverage available with "XL" units.
			2. Peaked Head Frame: 1-1/2 x 1-1/2 inch (38 x 38 mm) steel tubing frame.
				1. Head Frame Cover: 20 ga. galvanized steel, peaked.
				2. Head frame Cover: Translucent fiberglass, peaked.
			3. Reinforced Foam Pad: 4 inch (102 mm) thick pad reinforced with armor clad belting provides wearability while creating a downward pressure for a consistent seal across entire width of trailer top with standard range.
			4. Rain Guard Pad Position: 18 inches (457 mm) in front of the dock seal or shelter providing full height access to trailer opening.
			5. Rugged side support brackets for mounting over existing equipment.
			6. Metal Mounting Plate: 12 ga. steel. Adds stiffness to the wiper pad.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. RAIL CAR SHELTERS

\*\* NOTE TO SPECIFIER \*\* Perma Tech's Rail Dock Shelter provides a weather protected enclosure between the rail car and dock door. Delete if not required.

* + 1. Basis of Design: Mechanical Rail Car Shelter, PRS as manufactured by Perma Tech Incorporated. For doors up to 16 feet (4877 mm) wide and 15 feet (4572 mm) height. In the extended position, flexible spring tension holds the shelter firmly against the rail car.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Extension and retraction: One person rope and pulley system. Unit can be retracted against the building, out of the way of moving railcars.
			3. Head Curtain: Variable lengths can be specified to any dimension required. Standard head curtain length is 42 inches (1067 mm). Shock cords and tie-back straps are standard.
			4. Side Frames: Spring loaded, 1.5 inch (38 mm) square steel tube "X" frames are secured to pressure treated 2 x 6 inch (51 x 152 mm) mounting boards. Frames are covered with rugged polyester reinforced flexible vinyl fabric.
			5. Head Frame: 1.5 inch (38 mm) square steel tube top frame connects the side "X" frames at the front of the unit. A 2 x 4 inch (51 mm x 102 mm) treated wood mounting board connects the side "X" frames at the back.
			6. Foam Edge: Fabric covered foam cube on front face of shelter provides for a good seal against the side and top of the rail car.

\*\* NOTE TO SPECIFIER \*\* Delete number of side option not required.

* + - 1. Number of Sides: Three.
			2. Number of Sides: Four.
		1. Basis of Design: Perma Rail Car Inflatable Air Shelter as manufactured by Perma Tech Incorporated. Works for any size door opening.

\*\* NOTE TO SPECIFIER \*\* Insert measurements required.

* + - 1. Dock seal shall be \_\_\_ overall width by \_\_\_ overall height by \_\_\_ projection.
			2. Shock Cords: Anchored to wall at 45 degree angle and attached to outer corners of shelter. Cords hold unit in place while deflated. The number of cords depends on size of the unit.

\*\* NOTE TO SPECIFIER \*\* The heavy duty track and trolley system is optional Delete if not required.

* + - 1. Heavy duty track and trolley system utilizes an enclosed "U" shaped zinc-plated steel track and steel wheeled trolleys with permanently lubricated stainless steel wheel bearings to suspend and support the inflated shelter.
			2. Air Chamber Fabric: 14 oz (397 grams) vinyl coated polyester.
			3. Color: Black.
			4. Fabric Hem: 2 inch (51 mm) hem to nail and secure the inflatable fabric to the 2 x 12 inch (21 x 305 mm) support frame.

\*\* NOTE TO SPECIFIER \*\* Delete wall framing not required.

* + - 1. Wall Support Frame: 2 x 12 inch (51 x 305 mm) pressure treated wood.
			2. Wall Support Frame: 16 ga. galvanized steel.
			3. High Volume Blower Motor: 1/2 hp (373 W), 1200 cfm (34 cu m per min) 115 V - 60 Hz, 7.3 Full-load amps, 1390 rpm. Maximum Inlet Temperature: 104 degrees F (40 degrees C).

\*\* NOTE TO SPECIFIER \*\* Top center, top right, top left, left side, or right side or elsewhere.

* + - * 1. Blower Placement Option: \_\_\_\_\_\_\_\_.
				2. Galvanized steel canopy over blower included.
				3. Overall Dimensions (H x W x D): 15 x 12 x 13-1/8 inches (381 x 305 x 333 mm).
			1. When Retracted: Secured with tie-back straps that are hooked through eyebolts attached to sides of the support frame.

\*\* NOTE TO SPECIFIER \*\* Delete number of sides option not required.

* + - 1. Number of Sides: Three.
			2. Number of Sides: Four. Additional bottom piece.
			3. Controls: Available Leviton 15/20 amp heavy duty switch with a 3 hole 1/2 or 3/4 inch (13 or 19 mm) plastic wet location outlet box with toggle switch cover and toggle switch cover.

\*\* NOTE TO SPECIFIER \*\* Perma Tech Inflatable MRI AIR Shelter is designed to provide a weather protected enclosure between the MRI trailer and the building. In the extended position our high volume blowers hold the shelter firmly inflated against the trailer.

* 1. MRI INFLATABLE SHELTERS
		1. Basis of Design: Perma MRI Air Shelter as manufactured by Perma Tech Incorporated. Unit provides a seal between the medical facility and mobile MRI trailer. It seals around the doorway so patients being transported in and out of trailer are not exposed to weather and outside elements.
			1. Shelter Overall Dimensions:
				1. Width: \_\_\_\_ inches (\_\_\_\_ mm).
				2. Height: 13 ft 6 inches (4115 mm).
				3. Projection: \_\_\_\_ inches (\_\_\_\_ mm).
			2. Heavy duty track and trolley 12 point support system utilizes an enclosed "U" shaped zinc-plated steel track and steel wheeled trolleys with permanently lubricated stainless steel wheel bearings to suspend and support the inflated shelter. When retracted and secured with the tie-back straps the unit only projects several inches from the building wall.
				1. Track and Trolley System: To be mounted 18 to 30 inches (457 to 762 mm) above MRI inflatable shelter.

\*\* NOTE TO SPECIFIER \*\* Delete tracks options not required.

* + - * 1. Tracks: Welded to underside of metal hood.
				2. Tracks: Mounted to building wall using "L" bracket design.
				3. Tracks: Mounted to underside of integrated building overhang.
			1. Air Chamber Fabric: 18 oz (510 grams) fire retardant vinyl. Color: Black.

\*\* NOTE TO SPECIFIER \*\* Delete wall support frame not required.

* + - 1. Wall Support Frame: Pressure treated wood.
			2. Wall Support Frame: 16 ga. galvanized steel.
			3. High Volume Blower Motor: 1/2 hp (373 W), 1200 cfm 115 V - 60 Hz, 7.3 Full-load amps, 1390 rpm. Maximum Inlet Temperature: 104 degrees F (40 degrees C).
				1. Blower Placement : Top of shelter, on inside or outside wall.
				2. Galvanized steel canopy over blower included.
				3. Blower Dimensions (H x W x D): 15 x 12 x 13-1/8 inches (381 x 305 x 333 mm).
			4. When Retracted: Secured with tie-back straps.

\*\* NOTE TO SPECIFIER \*\* Delete number of sides option not required.

* + - 1. Number of Sides: Three.
			2. Number of Sides: Four. Additional Velcro mounted bottom piece.
	1. BUMPERS
		1. Basis of Design: Steel-Faced Bumpers as manufactured by Perma Tech Incorporated. For heavy use dock positions.
			1. Strong steel face, cushioned by durable rubber laminates.
			2. Steel Face: 3/8 inch (9 mm) free-floating absorbs maximum impact.

\*\* NOTE TO SPECIFIER \*\* Larger projections are available by adding steel extension brackets. Delete projection options not required.

* + - 1. Projection: 4 inch (102 mm).
			2. Projection: 5-1/4 inch (133 mm).
			3. Projection: 6 inch (152 mm).
			4. Projection: 6-3/4 inch (171 mm).
			5. Projection: 8 inch (203 mm).
			6. Projection: 9 inch (229 mm).
			7. Vertical Protection: From 10 to 36 inch (254 x 914 mm).
			8. Horizontal Protection: From 12 to 34 inch (305 x 864 mm).
			9. Bumper Size: as determined by the Architect.
			10. Mounting Styles:
				1. Standard: 3/8 inch (9 mm) steel mounting angle on both sides for anchoring.
				2. P1 Style: 3/8 inch (9 mm) steel mounting angle one side for anchoring. Flat plate one side for welding.
				3. P2 Style: Flat plate on both sides for welding.
				4. Wall mounting hole size is 7/8 inch (22 mm) diameter. 3/4 inch (19 mm) anchor bolts or welding to dock steel are typical installation techniques.

\*\* NOTE TO SPECIFIER \*\* Vertical and horizontal bumper extensions and bumper plates available to suit any application

* + - 1. Vertical and horizontal bumper extensions: Restraint extensions available in a wide range of sizes to suit edge-of-dock levelers and stepped-out dock pits.
		1. Basis of Design: Laminated Bumpers as manufactured by Perma Tech Incorporated.
			1. Vertical, Horizontal, Extra-Wide and L-Shaped models on hand to guard against any trailer impact locations.
			2. Reclaimed, bias-ply truck tire rubber pads laminated between steel angles and secured with 3/4 inch (19 mm) rods.

\*\* NOTE TO SPECIFIER \*\* Larger projections are available by adding steel extension brackets. Delete projection options not required.

* + - 1. Projection: 4 inch (102 mm).
			2. Projection: 6 inch (152 mm).
			3. Projection: 8 inch (203 mm).
			4. Projection: 9 inch (229 mm).
			5. Projection: 10 inch (254 mm).
			6. Projection: 12 inch (305 mm).
			7. Vertical Protection: From 6 to 36 inch (152 x 914 mm).
			8. Horizontal Protection: From 12 to 10 ft 5 inch (305 to 3175 mm).
			9. Bumper Size: As determined by the Architect.
			10. Mounting Styles:
				1. Standard: 3/8 inch (9 mm) steel mounting angle on both sides for anchoring.
				2. P1 Style: 3/8 inch (9 mm) steel mounting angle one side for anchoring. Flat plate one side for welding.
				3. P2 Style: Flat plate on both sides for welding.
				4. Wall mounting hole size is 7/8 inch (22 mm) diameter. 3/4 inch (19 mm) anchor bolts or welding to dock steel are typical installation techniques.

\*\* NOTE TO SPECIFIER \*\* Vertical and horizontal bumper extensions and bumper plates available to suit any application

* + - 1. Vertical and horizontal bumper extensions: Restraint extensions available in a wide range of sizes to suit edge-of-dock levelers and stepped-out dock pits.
		1. Basis of Design: Molded Bumpers as manufactured by Perma Tech Incorporated. Ideal for low-traffic, low-impact applications.
			1. Tough rubber composite formed to meet many needs.

\*\* NOTE TO SPECIFIER \*\* Larger projections are available by adding steel extension brackets. Delete projection options not required.

* + - 1. Projection: 2 inch (51 mm).
			2. Projection: 3 inch (76 mm).
			3. Projection: 3.5 inch (89 mm).
			4. Projection: 4 inch (102 mm).
			5. Projection: 6 inch (152 mm).
			6. Widths: 3.5 to 22 inch (89 to 559 mm).
			7. Heights: 4.5 to 30 inch (114 to 762 mm).
			8. Pre-drilled, countersunk mounting holes for easy installation, sized to accept 3/4 inch (19 mm) diameter anchor.
			9. Specific Model: As determined by the Architect.

\*\* NOTE TO SPECIFIER \*\* Vertical and horizontal bumper extensions and bumper plates available to suit any application

* + - 1. Vertical and horizontal bumper extensions: Restraint extensions available in a wide range of sizes to suit edge-of-dock levelers and stepped-out dock pits.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. LOADING DOCK SAFETY PRODUCTS

\*\* NOTE TO SPECIFIER \*\* Wheel chocks are the most economical way to prevent trucks from unscheduled departures. Delete paragraphs and basis of design subparagraphs not required.

* + 1. Wheel Chocks:
			1. Basis of Design: SC-8 Aluminum Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Available in a complete safety system with chain, wall bracket and caution sign. For the best protection, use two wheel chocks per loading dock position.
				2. Material: Extruded aluminum.
				3. Claw-like bottom assures dependable grip on any ground surface conditions.
				4. Fits snug against tire contour for maximum holding power.
				5. Size (W x L x H): 7 x 11-1/2 x 8 inch (178 x 292 x 203 mm).
				6. Weight: 6 lbs (2.721 kg).
			2. Basis of Design: IC-10 Ice Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Material: Formed steel.
				2. Tooth-like bottom assures reliable grip on icy slippery ground surfaces.
				3. Lightweight and dependable.
				4. Powder coated safety yellow for high visibility.
				5. Size (W x L x H): 8 x 10-1/2 x 9-1/4 inch (203 x 267 x 235 mm).
				6. Weight: 9 lbs (4.082 kg).
			3. Basis of Design: SC-6 Aluminum Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Lightweight.
				2. Excellent surface grip on tire and ground.
				3. Material: Aluminum.
				4. Size (W x L x H): 6 x 6.8 x 6 inch (152 x 173 x 152 mm).
				5. Weight: 3.5 lbs (1.701 kg).
			4. Basis of Design: CBI-29 Cast Iron Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Completely reversible for simple use.
				2. Material: Cast ductile iron.
				3. Painted blue for good visibility.
				4. Size (W x L x H): 8 x 12 x 9 inch (203 x 305 x 229 mm).
				5. Weight: 28 lbs (12.701 kg).
			5. Basis of Design: CBI-087 Cast Iron Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Material: Cast ductile iron.
				2. Painted yellow for high visibility.
				3. Size (W x L x H): 8-1/2 x 7-1/4 x 8-1/2 inch (216 x 184 x 216 mm).
				4. Weight: 14 lbs (6.350 kg).
			6. Basis of Design: 88-8 Laminated Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Material: Recycled rubber laminates compressed and fastened under high pressure.
				2. Galvanized steel sides.
				3. Size (W x L x H): 8 x 8 x 8 inch (203 x 203 x 203 mm).
				4. Weight: 14 lbs (6.350 kg).
				5. Basis of Design: 88-8XL Laminated Wheel Chocks as manufactured by Perma Tech Incorporated.
				6. Material: Recycled rubber laminates compressed and fastened under high pressure.
				7. Galvanized steel sides.
				8. Size (W x L x H): 11-1/4 x 14 x 14 inch (286 x 356 x 356 mm).
				9. Weight: 50 lbs (22.680 kg).
			7. Basis of Design: CMH-94 Rubber Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Material: One piece solid 80 durometer rubber.
				2. Integral handle.
				3. Size (W x L x H) : 7 x 9 x 7 inch (178 x 229 x 178 mm).
				4. Weight: 13 lbs (5.897 kg).
			8. Basis of Design: WC-5810 Rubber Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Material: One piece solid 80 durometer rubber.
				2. Hook for chain fastening.
				3. Size (W x L x H): 8 x 10 x 5 inch (203 x 254 x 127 mm).
				4. Weight: 12 lbs (5.443 kg).
			9. Basis of Design: 68-9 Pyramid Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Handles for chain fastening.
				2. Material: 80 durometer rubber.
				3. Size (W x L x H): 8 x 9 x 6 inch (203 x 229 x 152 mm).
				4. Weight: 9 lbs (4.082 kg).
			10. Basis of Design: 811-11 Urethane Wheel Chocks as manufactured by Perma Tech Incorporated. Not recommended for use on ice.
				1. Material: Orange urethane.
				2. Size (W x L x H): 11 x 8 x 7 inch (279 x 203 x 178 mm).
				3. Weight: 3.2 lbs (1.452 kg).
			11. Basis of Design: MWC-32 Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Material: 80 durometer rubber.
				2. Size (W x L x H): 6 x 9 x 8 inch (152 x 229 x 203 mm).
				3. Weight: 13 lbs (5.897 mm).
			12. Basis of Design: CC-07 Century Wheel Chocks as manufactured by Perma Tech Incorporated.
				1. Reversible chock design.
				2. Material: Cast aluminum alloy. One-piece cast construction.
				3. Size (W x L x H): 6 x 10 x 9 inch (152 x 254 x 229 mm).
				4. Weight: 7.5 lbs (3.402 mm).

\*\* NOTE TO SPECIFIER \*\* Dock lights help increase safety by providing soft bright light to illuminate trailer interiors.

* + 1. Loading Dock Communication Lights:
			1. Basis of Design: HD LED Dock Lights as manufactured by Perma Tech Incorporated.
				1. Energy Efficient Green: 94 percent less energy than traditional incandescent fixtures. Can outlast 25 incandescent bulbs. Energy rebate potential.
				2. Optimum brightness throughout the entire length of the trailer
				3. Emits cool white light.
				4. Always cool to the touch.
				5. Impact resistant, cast aluminum cover.
				6. Clear acrylic cover ideal for use in food warehouses.
				7. Meets food facility requirements for "no glass."
				8. Light is completely sealed for "Wet Locations" IP66, NEMA 4.
				9. Eliminates light bulb replacement and/or clean-up.
				10. Upgrade kit minimizes installation time by reusing existing arms.
				11. HD LED Specifications:

Standards Certification: UL, cUL, CE, and RoHs.

Illumination exceeds a 300 watt incandescent bulb while using only 18 watts

Minimum life of 60,000 hours at 90 percent lumen maintenance (over 10 years).

Constant current IP66 LED driver rated for 100,000 hours of operation at 77 degrees F (25 degrees C).

LED Emitters: Seven. Heavy Duty 14 gauge, 1-1/2 inch (38 mm) square steel arms.

Safety yellow, powder coated finish for high visibility.

Noncorrosive.

Voltage input: 100 to 240 VAC, 50/60 Hz, single phase.

Available as complete dock light with light head and arms or just the light head.

Reach: 40 and 60 inch (1016 mm and 1524 mm).

* + - * 1. Heavy-duty on/off switch and strain relief are located in the recessed back plate, reducing the chances of being damaged by moving equipment in the loading dock area.
			1. Basis of Design: Gooseneck Industrial Lights as manufactured by Perma Tech Incorporated. The Ideal Solution for Both Dock and Task Lighting Applications
				1. Robust light fixture with flexible stainless steel arm that will not sag.
				2. Rugged arm assembly incorporates flexible conduit with a steel elbow that simplifies positioning.
				3. Models available with LED bulb or with user supplied incandescent bulb.
				4. No internal cooling fan required, reducing energy consumption.
				5. Impact and heat resistant polycarbonate light head remains cool to the touch.
				6. UL and cUL certified for safe operation.
				7. All components field replaceable.
				8. Fast and easy to install on any vertical surface.
				9. Unique Flexible Stainless Steel Arm Features:

Low profile and easy positioning.

Will not sag.

Can be rotated 180 degrees for use in any direction.

Extends 27 inch (686 mm) above housing, easily bending around most dock door tracks.

Conduit: 2 inch (51 mm) industrial grade stainless steel.

Bendable over the entire length.

All steel elbow to simplify positioning.

* + - * 1. Impact and Heat Resistant Polycarbonate Light Head:

DLGN-120-PLED model supplied with PAR38 LED bulb; uses 18 watts of power, but provides as much light as 150 watt incandescent bulb. 3 year warranty on bulb.

DLGN-120 model is used with customer supplied PAR38 bulb (150 watt maximum).

Cool to the touch and vented to increase bulb life

Lamp housing uses durable UV stabilized polycarbonate material.

Supplied with wire guard that can be fastened to the light head for bulb security.

Field replaceable heavy duty lamp socket.

* + - * 1. All Steel Housing Includes:

Conveniently placed on/off switch.

Six foot power cord with strain relief and NEMA 5-15 plug.

Four key slots for easy mounting.

EMT knockout on back of housing for hardwire mounting.

Corrosion resistant mounting box with powder coated safety yellow cover.

Storage clip for unique wrench used to secure wire guard.

* + - 1. Basis of Design: Standard LED Dock Lights as manufactured by Perma Tech Incorporated.
				1. Standards Certification: UL, cUL, CE, and RoHs.
				2. Energy Efficient: 80 percent less energy than incandescent or halogen bulbs.
				3. Achieves maximum light intensity instantly.
				4. No fragile filament to break.
				5. No shattered glass to sweep up.
				6. Light is optimized for trailer illumination.
				7. Ideal for use in food warehouses.
				8. Voltage range for use worldwide.
				9. Arms: 14 gauge, 1-1/2 inch (38 mm) square steel.
				10. Wire guard with security clips protect bulb from abusive contact and keeps it locked in place.
				11. Available as complete dock light with light head and arms, just the bulb, or just the head.
				12. Voltage input: 100 to 240 VAC, 50/60 Hz, single phase.
				13. Reach: 40 and 60 inches (1016 and 1524 mm).
			2. Basis of Design: Incandescent Dock Lights as manufactured by Perma Tech Incorporated.
				1. Standards Certification: UL, cUL, CE.
				2. High impact resistant polycarbonate head.
				3. Weighs 50 percent less than conventional metal head dock lights.
				4. Always cool to touch head.
				5. Wire guard with security clips protect bulb from abusive contact and keeps it locked in place.
				6. Arms: 14 gauge, 1-1/2 inch (38 mm) square steel.
				7. Available as complete dock light with light head and arms, just the bulb, or just the head.
				8. Voltage input: 100 to 240 VAC, 50/60 Hz, single phase.
				9. Reach: 40 and 60 inches (1016 and 1524 mm).
		1. Trailer Stand:
			1. Basis of Design: AutoStand as manufactured by Perma Tech Incorporated for low traffic docks.
				1. Static Load Capacity: 100,000 lbs (45,359 kg).
				2. Large Weight Distributing Base: 17 x 18-1/2 inch (432 x 470 mm).
				3. Large Trailer Contact Pad: 5 x 30 x 1/4 inch (127 x 762 x 6 mm).
				4. Diameter Wheels: 10 inch (254 mm).
				5. Gas shock, self-leveling system with security pin.
				6. Working Range: 42-1/2 to 52-1/2 inch (1080 to 1334 mm).
			2. Basis of Design: AutoStand PLUS as manufactured by Perma Tech Incorporated for high traffic docks.
				1. Static Load Capacity: 100,000 lbs (45,359 kg).
				2. Large Weight Distributing Base: 17 x 18-1/2 inch (432 x 470 mm).
				3. Large Trailer Contact Pad: 5 x 30 x 1/4 inch (127 x 762 x 6 mm).
				4. Solid Rubber Wheel Diameter: 16 inch (406 mm).
				5. Gas shock, self-leveling system with security pin.
				6. Working Range: 37 to 48 inches (940 to 1219 mm).
			3. Basis of Design: Ratchet Top Stabilizing Jack as manufactured by Perma Tech Incorporated for low traffic docks. Recommended use is two jacks per dock position. One for each side of trailer.
				1. Static Load Capacity: 100,000 lbs (45,359 kg).
				2. Support Pad Diameter: 8 inch (203 mm).
				3. Diameter Wheels: 8 inch (203 mm).
				4. Gas shock, self-leveling system with security pin.
				5. Working Range: 39-1/2 to 51 inches (1003 to 1295 mm).
			4. Basis of Design: Two-Post Trailer Stand as manufactured by Perma Tech Incorporated for low traffic docks. Recommended use is two jacks per dock position. One for each side of trailer.
				1. Static Load Capacity: 100,000 lbs (45,359 kg). 50,000 (22,678 kg ) per post.
				2. Support Pad Diameter: 6 inch (152 mm).
				3. Diameter Wheels: 10 inch (254 mm).
				4. Twin-spin levelling system.
				5. Comes with self-contained transportation cart.
				6. Working Range: 38-1/2 to 49-1/2 inch (978 to 1257 mm).

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. PERMA PIT/CURB ANGLE

\*\* NOTE TO SPECIFIER \*\* The Perma Pit has two sides, a back and a front curb angle that act as a concrete form. The Perma Pit also replaces the need to purchase any curb angle. Everything is there to form the pit to the right size which eliminates costly mistakes. The Perma Pit bolts together using six bolts which makes it quick and easy to set up, saving time and money.
No time is wasted returning to the site to strip wood forms. The Perma Pit system is inexpensive as compared to the materials and labor required to form a conventional pit for a dock leveler.

* + 1. Basis of Design: Perma Pit as manufactured by Perma Tech Incorporated.
			1. Two sides, a back, and a front curb angle that acts as a concrete form.
			2. Additional curb angles are not required.
			3. Material: 12 ga. sheet metal with 3 x 3 x 3/16 inch (76 x 76 x 4.5 mm) front and back angles.
			4. Sides Reinforcement: 1 x 1 inch (25 x 25 mm) vertical angles, a vertical 1 x 2 x 1/8 inch (25 x 51 x 3 mm) angle at the back, a 3/16 inch (4.5 mm) plate at the front for attaching the dock bumpers, and 3 x 6 inch (76 x 152 mm) 12 ga. concrete anchors.
			5. Back Reinforcement: Two 1 x 1 inch (25 x 25 mm) vertical angles, and a 3 x 3 x 3/16 inch (76 x 76 x 4.5 mm) angle with rebar anchors to attach the dock leveler.
			6. Front Steel Curb Angle: 3 x 3 x 3/16 inch (76 x 76 x 4.5 mm) angle with 3 x 6 x 5/8 (76 x 152 x 16 mm) rebar anchors.
			7. Back and sides bolt together using hex head bolts 5/16 x 1 inch (8 x 25 mm). Three per side.
			8. Prime painted on exposed side.

\*\* NOTE TO SPECIFIER \*\* The following four subparagraphs are optional. Delete options not required.

* + - 1. Heavy Duty Unit: Add 3 x 3 inch (76 x 76 mm) angle to top edge of sides and 3/16 inch (4.5 mm) steel to front edge.
			2. Front Curb Angle Size: In place of 3 x 3 x 3/16 inch (76 x 76 x 4.5 mm) on front use 4 x 4 x 1/4 inch (102 x 102 x 6 mm).
			3. Finish: Hot-dipped galvanized.
			4. Hydraulic Hole 1 inch (25 mm) or 4 x 4 inch (102 x 102 mm) cut out (need manufacture to determine hole position).

\*\* NOTE TO SPECIFIER \*\* Contact manufacturer for more information.

* + 1. Basis of Design: Edge of Dock Pit (EOD) as manufactured by Perma Tech Incorporated.
			1. Overall Dimensions: Make EOD pit to meet specifications of leveler.
			2. Two sides, bottom, and back, with front curb angle. 1 inch (25 mm) slope from from back to front along the pit bottom.
			3. Material: 12 ga. sheet metal.
				1. Front Curb Angle and End Support Angles: 3 x 3 x 3/16 inch (76 x 76 x 4.5 mm) front and back angles.
				2. Back Support Channel: 8 inch () channel.
			4. Concrete Anchors: 1/2 x 6 inch (13 x 152 mm). Attached on all angles.
			5. Prime painted.

\*\* NOTE TO SPECIFIER \*\* Delete leveler type option not required.

* + - 1. Leveler Type: Mechanical.
			2. Leveler Type: Hydraulic.

\*\* NOTE TO SPECIFIER \*\* For all leveler manufacturers, the Curb Angle

* + 1. Basis of Design: Curb Angle Set as manufactured by Perma Tech Incorporated.
			1. A set is a six or eight piece, 3 x 3 x 3/16 inch (76 x 76 x 4.5 mm) angle set that makes the edging of the pour of concrete forms more complete with a clean appearance.
			2. Front Curb Angle Size: 3 x 3 x 3/16 inch (76 x 76 x 4.5 mm).
			3. Front Curb Angle Size: 4 x 4 x 1/4 inch (102 x 102 x 6 mm).
			4. Front vertical angles.
			5. Concrete rebar anchors attached to each piece.
			6. One side painted gray primer.

\*\* NOTE TO SPECIFIER \*\* The following two subparagraphs are optional. Delete options not required.

* + - 1. Bumper Mounting Plates in place of vertical or horizontal curb angles.
			2. Finish: Hot-dipped galvanized.

\*\* NOTE TO SPECIFIER \*\* Metal Hoods can be used in a variety of ways, the most common is to be mounted over a Dock Seal to keep snow or moisture off the header. Metal hoods can also be used alone without a dock seal at a dock door or even over a man door to shelter the area from rain and snow. Longer Hoods over 12 feet (3658 mm) require splice plate. Delete if not required.

* 1. METAL HOODS
		1. Basis of Design: Perma Metal Hoods as manufactured by Perma Tech Incorporated.

\*\* NOTE TO SPECIFIER \*\* Delete projection not required.

* + - 1. Length (inch/mm): \_\_\_\_\_\_\_\_.
			2. Length: As shown on Drawings.
			3. Length: As determined by the Architect.
			4. Splice Plates: for hoods over 12 ft (3658 mm) in length.

\*\* NOTE TO SPECIFIER \*\* Delete projection options not required.

* + - 1. Projection x Height: 18 x 6 inches (457 x 152 mm). 16 ga. galvannealed steel.
			2. Projection x Height: 24 x 8 inches (610 x 203 mm) 16 ga. galvannealed steel.
			3. Projection x Height: 30 x 10 inches (762 x 254 mm) 16 ga. galvannealed steel.
			4. Projection x Height: 36 x 12 inches (914 x 305 mm) 16 ga. galvannealed steel.
			5. Projection x Height: 42 to 48 x 16 inches (1067 to 1219 x 406 mm). 16 ga. steel. Refer to Drawings. Requires guide wires or turnbuckles for stability.

\*\* NOTE TO SPECIFIER \*\* Delete material option not required.

* + - 1. Material: Galvannealed steel. Ready to paint.
			2. Material: Powder coated galvannealed steel.

\*\* NOTE TO SPECIFIER \*\* For wider door coverage, two hoods can be connected together with an overlap splice plate. Delete splice plates option not required.

* + - 1. Splice Plates: Bolt both sections together through field drilled holes in end gussets.
				1. Calk: Entire length of seam to seal hood. splice plate edges, full perimeter.
			2. Splice Plates: Self-drilling both sides w/ bonded NEO EPMD washer.
				1. Calk: Entire length of seam to seal hood. splice plate edges, full perimeter.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. GUARDING SYSTEMS

\*\* NOTE TO SPECIFIER \*\* Delete paragraphs and basis of design subparagraphs not required.

* + 1. Guardrails:
			1. Basis of Design: Guardrail Systems as manufactured by Perma Tech Incorporated.
				1. Flexible Rails: Polycarbonate. Can withstand repeated impacts without need for repair or replacement.

Length: 13 ft (4 m) that can be cut to measure.

* + - * 1. Rebounding Posts: Steel bollard posts. Removable black caps.

\*\* NOTE TO SPECIFIER \*\* Delete post size option not required.

Post Size: 4 inch (102 mm) diameter.

Post Size: 6 inch (152 mm) diameter.

\*\* NOTE TO SPECIFIER \*\* Delete height options not required.

Height: 15 inch (381 mm). One rail.

Height: 30 inch (762 mm). One or two rails.

Height: 44 inch (1118 mm). Up to three rails.

* + - * 1. High-visibility safety yellow.
		1. Bollards:
			1. Basis of Design: Round Slowstop Bollards with Bounce as manufactured by Perma Tech Incorporated.
				1. Strong steel column attached to patented elastomer base can withstand repeated impacts without need for repair or replacement.

\*\* NOTE TO SPECIFIER \*\* Delete post size option not required.

* + - * 1. Post Size: 4 inch (102 mm) diameter.
				2. Post Size: 6 inch (152 mm) diameter. Can withstand the impact of a 15,000 lbs (6.804 kg) forklift travelling at 4.4 mph (6.44 km per hr).
				3. High-visibility safety yellow.
				4. Removable black cap.
			1. Basis of Design: Square Bollards as manufactured by Perma Tech Incorporated.
				1. Anchored to the warehouse concrete slab.
				2. Solid steel welded construction.

\*\* NOTE TO SPECIFIER \*\* Delete height options not required.

* + - * 1. Height: 24 inch (610 mm).
				2. Height: 36 inch (914 mm).
				3. Height: 48 inch (1219 mm).
				4. High-visibility safety yellow.
				5. Bollard Size: 4 x 4 x 1/4 inch (102 x 102 x 6.4 mm) thick upright.
				6. Base Plate: 8 x 8 x 3/8 inch (203 x 203 x 9.5 mm).
				7. Removable black cap.
				8. Fill with concrete for extra strength.
		1. Column Guards:
			1. Basis of Design: Structural Column Guard as manufactured by Perma Tech Incorporated 360 degree protection from accidental impact with building supports, our column guards offer a simple solution to a serious risk.
				1. Prevent impact while reversing and accidental fork impact as the guards rise above the recommended travel height of forks for moving forklifts.
				2. Built in quarter sections to allow for easy adjustment around column obstructions or for locations needing less than 360 degree protection.
		2. Racking Guards.
			1. Basis of Design: Racking Guards as manufactured by Perma Tech Incorporated Prevent racking collapse, potential injury and inventory loss with a structural steel solution that offers all around protection.
				1. Prevent reversing impact and accidental fork contact with uprights or angle members of racking at the most critical load-supporting levels.

Standard and Heavy-Duty environments.

Protects uprights and angle racking members.

Bright visual presence reduces chance of accident.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required. Delete any accessories not required.

* 1. ACCESSORIES

\*\* NOTE TO SPECIFIER \*\* Restraint extensions available in a wide range of sizes to suit Edge-of-Dock Levelers and Stepped-Out Dock Pits.

* + 1. Extension Plates: Manufacturer's standard extension plates as manufactured by Perma Tech Incorporated.
		2. Portable Insulation Inserts:
			1. Product: Dock Stuffer as manufactured by Perma Tech Incorporated.
			2. Cubes of foam in a vinyl bag with handle.

\*\* NOTE TO SPECIFIER \*\* Delete length options not required.

* + - 1. Length: 18 inch (457 mm).
			2. Length: 24 inch (610 mm).
			3. Length: 30 inch (762 mm).
			4. Length: 36 inch (914 mm).

\*\* NOTE TO SPECIFIER \*\* Improve both productivity and safety with one of Blue Giant's versatile control stations. From single push-button units to multi-faceted, microprocessor-based control systems, there is a solution available for every application. The Blue Genius TM Touch Control Panel is available in a variety of configurations, from stand-alone dock. Leveler or vehicle restraint control station to customized, multi-unit integration. Its versatility and safety-enhancing features raise the standards for future docking technology. Standard when ordered in combination with Perma Tech Hydraulic Dock Leveler and the Hydraulic Vehicle Restraint

* + 1. Controls
			1. Basis of Design: Automatic Combination Control Panel as manufactured by Perma Tech Incorporated.
				1. A single control station for both Hydraulic Dock Leveler and 5RL85 Hydraulic Vehicle Restraint.
				2. Leveler operation is prevented until truck restraint is secured for operator safety.
				3. Standard when ordered in combination with Perma Tech Hydraulic Dock Leveler and the Hydraulic Vehicle Restraint.
1. EXECUTION
	1. EXAMINATION
		1. Installer shall examine the opening and conditions under which dock equipment is to be installed and notify the Architect and Contractor in writing of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.
	2. PREPARATION
		1. Clean and prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
		2. Before acceptance, a demonstration shall be conducted in the presence of the Owner's representative that all equipment operates properly in every aspect. Conduct a detailed user/operator training session at time and place agreed upon by Owner's representative.
	4. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION