Division 8
Section 083000
Thermally broken, wash down ready frame

I. Part 1 – General

A. Section Includes

1. Weiland Inc wash down ready, thermally broken fixed window for complete installation

B. Related Sections

1. Division 16 – Electrical, if glass is heated

C. Submittals

1. Product Data: Completely describing components.
2. Shop Drawings: Showing details of fabrication, installation and dimensions.
3. Installation Instructions: For window.
4. Operating and Maintenance Data: For window.

D. Quality Assurance

1. Installer Qualification: Trained, approved, and licensed window installer. See installation instructions.
2. Manufacturer Qualification: Must have a minimum of 35 years of experience providing industrial and cold storage solutions.

E. Delivery, Storage, and Handling

1. Unless otherwise stated, windows shall be package and shipped in a manner that is best for the manufacturer's process and standards.
2. Manufacturer shall do everything in power to ensure product arrives in a timely, safe manner that minimizes damages.
3. Windows shall be uncrated upon arrival at job site by job site personnel to ensure product is not damaged.

F. Warranty

1. Manufacturer shall offer a limited lifetime warranty on the craftsmanship of the stainless steel frame. Scratches that cannot be felt by fingernail are not warranted.
2. Poly-coating shall be warranted by the manufacturer of the product. Poly-coated clear, tempered glass can have small (1/4" or less) bubbles that persist. If there are more than 10 bubbles per 6 inch square, manufacturer will warrant the poly-coating to be replaced.
3. Clear, tempered insulated glass units shall be warranted by manufacturer's warranty.

II. Part 2 – Products

A. Manufacturers

1. Weiland Inc wash down ready, thermally broken fixed window manufactured by Weiland, Inc.

2. Substitutions: No substitution will be considered unless written request for approval has been submitted by the bidder and has been received by the architect at least ten (10) days prior to the date for receipt of bids.

B. Window Frames

1. Fixed windows shall be constructed of 16 ga., 304-4 finish stainless steel. The frames shall be in two parts, a "front" and a "back". Both sides shall be sloped. The glazing shall be set back from the wall 1-1/2" on the front side. The slope on the front side shall be 45°. The slope on the back side shall vary depending on wall thickness and glazing thickness but to be no more than 60° and no less than 39°. There shall be no ledge along the walls for liquids or dust to settle.

2. Viewable dimensions shall be 1" smaller on all sides than the "in-clear" dimensions. Rough opening dimensions shall be ½" larger on all sides than the "in-clear" dimensions. Out-to-Out dimensions shall be 3-1/2" larger than the "in-clear" dimensions on all sides. "In-clear" dimensions will be assumed on all orders unless otherwise stated.

C. Glazing Options

1. For "in-clear" dimensions 48"W x 48"H or less glazing can range from ¼" to 1-9/16" thick.

2. For "in-clear" dimensions larger than 48"W x 48"H the glazing cannot be ¼" thick.

3. No fixed windows shall have "in-clear" dimensions larger than 96"W x 48"H.

4. Glazing may be Polycarbonate, Abrasion Resistant Polycarbonate, clear, tempered heated (120V) insulated double pane glass, laminated two sheet plate glass, clear, tempered double pane insulated glass, or clear, tempered triple pane insulated glass. Any of the clear, tempered glass can be poly-coated by Weiland with a 7-mil safety film so that in the event the glass breaks it cannot fall out of the frame.

D. For Heated windows only

1. Heated windows can be no bigger than 36" in one of the dimensions
2. They can be ½" thick to 1" thick
3. They can be poly-coated
4. They require 120V power & 14 watts/square foot

III. Part 3 - Execution

A. Installation Conditions

1. Prior to installing, ensure the walls are properly prepared to receive the window. Rough opening is ½" larger than the "in-clear" dimension on all sides.

2. Ensure wall depth is as ordered

B. Installation Instructions

1. Using the sizes provided on the approved submittal drawing, prepare the correct size rough opening.

2. Depending on many factors (wall type, fastener type, window size and weight, and application), HDPE bucking material may be called for. The use of bucking is discretionary. Owners and installation contractors can determine if the extra reinforcement from the bucking is more important than the loss of R-value from removing foam from the IMP panel.

3. Some models of windows have heated glazing and call for a jamb-mounted or face-mounted power connection. If this is the case, coordinate with your electrician to make sure the appropriate wiring is present so the connections can be made. Face-mounted power connection has approximately 8 ft SJO cord running through cable gland on face frame (not back trim). Jamb mounted power sources require flex conduit run through the wall to integrate with the liquid tight factory installed fitting.

4. Be aware that if you add a vapor seal membrane to the rough opening, you are changing the actual wall thickness and that the frame may not fit as designed. Use vapor seal membrane only if planned/discussed up front with Weiland.

5. Once rough opening is prepared, apply a large bed of silicone sealant approximately 1" from the rough opening on the front trim side of the wall.

6. Be sure to note which side of the frame is intended for the warm side and which is intended for the cold / production side. In many cases windows come with heated glass or safety film, and it is critical that the frame is oriented correctly. This will be indicated on both the submittal drawing and the actual window.

7. Install the front trim over the bed of sealant and ensure frame is level and supported on shims, then fasten into place.

8. From the opposite side of the wall, completely fill the void between the frame and the wall with a quality two-component foam (such as Froth-Pak). This is the most critical step. Any voids or exposed metal on the backside of the front trim may lead to condensation issues down the road. Be careful not to get any foam on the glazing, as it will be nearly impossible to remove.

9. Once the foam is cured and trimmed as needed, proceed with installing the back trim. Install the back trim into a bed of sealant just like was done on the opposite side. Screw into place with appropriate fasteners.

10. IMPORTANT! Apply a bead of clear silicone sealant between the frame and the glazing on both sides. This will ensure that moisture / vapor doesn't enter the frame cavity from either side.

11. For heated units, turn on power and check to make sure the glass is warm. Failure to turn on heated unit before the room has been lowered to temperature may result in buildup of condensation and may damage the window.

12. Do not install drywall over or on top of window frame or back trim. In the event you need to gain access to inside the frame for troubleshooting, you don't want to have to tear off finished dry wall.

C. Maintenance and Operations

1. Do not spray directly with high pressure stream washer
2. Wash weekly or as needed with mild detergent and rags
3. Remove and replace caulking as required
4. Check electrical connections on heated window units