

Existing Structures Engineering, Inc.
**Specifications for the Installation of Storm Shutters / Sliders / railings at
CASUARINA CLUB CONDOMINIUM, MELBOURNE BEACH, FL**

IMPORTANT NOTE: This building contains post-tension (PT) reinforcement! Drawings with approximate PT locations are attached.

REMOVAL OF EXISTING SHUTTERS / SLIDERS / RAILINGS ASSEMBLIES

- Where above items have been previously installed, all existing fasteners shall be removed from the deck surface; the use of pneumatic hammers or other equipment that may damage the deck is prohibited.
- Holes shall be filled with a two-part epoxy compound, or hard setting urethane caulk.
- The deck coating and/or wall coating shall be repaired to seal all penetrations.

INSTALLATION OF SHUTTER / SLIDERS / RAILINGS ASSEMBLIES

- The shutter contractor is responsible for confirming the soundness of the substrate where the shutter will be attached.
- The bottom track of accordion type shutter assemblies shall be raised 1/8" – 1/4" above the concrete floor for drainage. Shim the track with an aluminum plate, non-absorbing plastic (ie. Delrin, PVC, ABS), or other suitable weather resistant material. Shims shall be the width of the shutter track and shall be located beneath each anchor bolt.
- The flanges and brackets of vertical guides for roll-up type shutters do not require drainage shims; however, if shimming is necessary for proper fit, it shall be done with an aluminum plate or non-absorbing plastic.
- **Prior to drilling: This building is reinforced with post tension cables, essentially high strength wire ropes under tremendous tension. These PT cables can be damaged with a mason drill and this can be dangerous and expensive. At the edge of the balcony the PT cables are at mid depth (say 3") so limiting drill depth is crucial. The cables and anchors are also covered with black, red or blue vinyl so in the unlikely event that you hit metal, retract the drill bit and inspect. If you see colored plastic STOP DRILLING IMMEDIATELY and repair the hole.**
- **Fastener holes shall be pre-drilled, debris blown out, and holes filled with urethane caulk sealant. Anchor bolts shall be (410) 1 3/4 stainless steel, expansion type or "tapcon" self threading type and of the diameter and quantity recommended by the shutter manufacturer. Fasteners should be the minimum length allowed by Code or NOA. Non-metallic washers must be used to minimize galvanic corrosion. Shims and bolts shall be generously coated with Sikaflex 1a, or equal, polyurethane sealant. After installing the track or bracket, fastener heads shall be caulked with sealant.**
- Where shutters require reworking to allow for the raised track, such work shall be done in accordance with the shutter manufacturer recommendations.

The manufacturer's NOA must be provided as well as product approval labels installed on product as required by law.

New shutter / slider / railing installation must conform to latest Florida Building Code and Brevard County requirements. 2016 FBC Section 1609.1.2 Protection of openings: "In wind-borne debris regions, glazed openings in buildings shall be impact resistant or protected with an impact-resistant covering meeting the requirements of SSTD 12, ANSI/DASMA 115 (for garage doors and rolling doors) or TAS 201, 202 and 203, AAMA 506, ASTM E 1996 and ASTM E 1886 referenced herein, or an approved impact resistant standard as follows:"

1. Glazed openings located within 30 feet (9.1 m) of grade shall meet the requirements of the large missile test of ASTM E 1996.
2. Glazed openings located more than 30 feet (9.1 m) above grade shall meet the provisions of the small missile test of ASTM E 1996.

Contractor's signature & print name: _____ Date: _____.

Company name and phone #: _____

Owner's signature: _____ Date: _____

Board Member signature: _____ Version 2, March 27, 2017