



Glass Slider (and Other Impact Resistant Glass) Installation Requirements

Note: These specifications were developed by Structural Engineering Professionals, Inc., and reviewed by Regency Island Dunes' legal counsel. Items 8. and 9. on page 2 were added per the advice of legal counsel.

Florida Building Code Requirements

1. **Impact Loads:** All new glass sliding doors must meet current Florida Building Code requirements and have either a Florida Product Approval (FPA) or Miami Notice of Acceptance (NOA), as evidenced by their paperwork. (All units must have impact resistance either by way of approved shutters or by the new door system). Such FPA or NOA will indicate whether the door system meets **small missile** or **large missile impact** requirements. Units above 30 feet are not required to meet Large Missile impact requirements; units below 30 feet must meet both.
2. **Wind Loads:** Wind load requirements are spelled out in ASCE7-16 which was incorporated into the FBC on January 1, 2021. Requirements for the building (wind pressures) are divided into several zones depending on where the door system is being installed. The contractor will provide signed and sealed paperwork from a Florida professional engineer showing the maximum calculated wind pressures (+/-) at the location on the building and a comparison of that **required pressure** to the door system **allowable** as indicated on the NOA or FPA for the door system.

Installation Requirements

1. **Post Tension Cables:** The Regency Island Dunes condominium utilizes post tension (PT) construction. PT cables are usually stressed to 30,000 lbs. tension each and possess a large amount of energy stored in these cables. They are also high strength steel with a high carbon content and are *brittle*. Because of this, they can be extremely dangerous if hit by a drill bit or fastener and broken. In most cases, it only takes hitting one strand of the cable to have the whole cable fracture.
 - a. No drilling of any type shall take place on any deck of the building without first having located and marked the PT cables present. These cables are usually 18 to 24" apart but can also be in bundles with little to no separation. Ground Penetrating Radar (GPR) is the accepted method of locating cables in most instances.
 - b. Cables must be clearly marked and avoided. When possible, PT cables must be marked with one color and re-bar with another.
2. **Waterproofing Membrane:** The bottom track is to have a waterproofing membrane applied before the mortar bed is installed, extending down over the $\frac{3}{4}$ " step down. The waterproofing membrane shall be either a cementitious type such as Flextight, Sto Watertight, or Siks 107 OR an aliphatic urethane such as Sonogard.
3. **Grout Bed:** The bottom track is to be set into the mortar material after the waterproofing membrane is in place as shown in the FPA or NOA. The bottom track is to be straight and level.
4. **Old Fasteners:** It is often the case that old fasteners such as old Tapcons will break when removal is attempted, leaving part of the old fastener in the concrete. Or, even if the old fastener comes out, you may have a situation where a new fastener needs to be placed in the same location. In either case, the old fastener hole needs to be cored out using a 1" concrete hole saw, removing the cracked concrete and the old fastener. Once the hole is cored out to the desired depth (usually 1 $\frac{1}{2}$ "), the hole should be filled with an epoxy grout such as Sonopost and allowed to set before a new fastener is installed.

5. **New Fasteners (STAINLESS ONLY):** Sliding glass door installations shall be executed as in the sliding glass door detail, (usually as shown in the FPA or NOA). Hole pattern of new door track must be followed. Any deviation due to post tension cable must be approved by window manufacturer engineer or engineer of record for the permit. *Unless otherwise specified*, all exterior driven concrete fasteners shall be **Elco Aggre-Gator 300 series fasteners**. (Elco has their own NOA allowing this substitution). For non-structural applications, metal to metal, 316 stainless steel fasteners shall be utilized. Concrete fasteners are to have a minimum of 1 ¼" of embedment into the existing concrete OR as required by the FPA or NOA.
6. **Fastener Sealant:** The fastener holes are to be filled with polyurethane sealant as the fastener is installed. Sealant should clearly show at the fastener head after installation.
7. **Glass:** Impact resistant glass must be 9/16" laminated, non-insulated, PGT-manufactured clear LoE 340 "L4" glass (green/blue hue with .39 light transmittance from inside to outside in order to comply with the Sea Turtle ordinance), or Grey LoE366 or manufacturer equivalent.
8. **Inspections:** No photos to inspector for approval. Installation must be inspected by licensed inspector in person. St. Lucie County permit must be on site and at unit for inspector signature.
9. **Plans review:** The plans must be reviewed and approved by Regency Island Dunes Association in advance.
10. **Marking of PT Cables Inspection:** The marking of the PT cables must be inspected and approved by Regency Island Dunes Association in advance – BEFORE any drilling is done.
11. **Responsibility for Damages to Common Elements including post tension cable, concrete, and rebar, will be borne by the unit owner directly and immediately to RID. It is up to the unit owner to see relief from their contractor and/or insurance carrier.**

Window Specs Approved by the Board of Directors on March 18, 2022, minutes approved on April 6, 2022

Thomas Harrington, President, Regency Island Dunes Association, Inc./ Architectural Comm. Chair

Date

I acknowledge these requirements and agree to comply.

Owner's Signature

Unit #

Owner's Contact Number

Print

Owner's Contact Email

Owner's Signature

Date: _____

Print

Contractor's Signature

Contractor's Contact Number

Print

Contractor's Email

Date: _____