

When In Doubt, Scan It Out! Post Tension Cables (PTC) at the Dunes



Dunes Community:

Dunes Tower X-Ray Scanning Requirements

All tower construction applications list the requirement to 'scan' ceilings or floors if any penetrations are being done in unit projects. As we enter 'quiet work' time of the year, this is a reminder since it relates to window treatments or any attachments to ceilings, lanai shutters, etc. For notification purposes, additional details are below for all unit owners. **Please note all contractors are used to scanning so this is a healthy reminder – when in doubt, scan it out!**

The construction applications have been assimilated across the property, so the contractors have the same construction requirements in every tower. These applications are **critically important**, so Management and staff know what is happening in the buildings and can assist getting renovations done according to tower compliancy.

"What are you talking about?"... A Few Words About Post Tension Cables

The towers at the Dunes were all built with post tension cables (PTC) poured into the concrete slabs. The PTC are bundled 'tendons' spanning the concrete floors – which are **ceilings to your neighbor downstairs**. These tendons are under very high pressure, and are a structural component of each building.

This is why the construction packets require to have the floors or ceilings 'scanned' prior to any unit work penetrations. **This includes, but is not limited to, flooring work, shutter installation or repairs, hanging chandeliers, etc. and any plumbing or electrical changes, (where needed).**

One area under-discussed is **window treatments**. Many installers penetrate the ceiling when drilling anchors for window products. It's important to understand this and it is crucial for construction and renovation projects.

"What can go wrong?"... Glad you asked! What's the issue if scanning is not completed?

The tendons are bound together in a tight bundle under incredible tension. **If a tendon under pressure is hit, it can release the tendon(s) and it will snap, literally shooting out of the exterior wall of the building.** It cannot be overstated how dangerous this break can be, as the end of the tendon and concrete chunk take flight. This also does not consider the replacement damage to the floor where the other end terminates.

The cost to scan a typical area typically begins around \$500+ and it provides a very detailed report as well markings by the scanner for contractor to use safely. In contrast, **the cost of a tendon repair in the past has cost between \$20k-\$50k and would be borne by the contractor or unit owner.** This is another reason to use a qualified vendor and why the contractor insurances are critical and verified for each project.

The concrete structure radar professionals use high resolution geophysical ground penetrating radar (GPR) aka concrete radar scanning, as well ultrasonic pulse array radar – the terms are shortened in the applications to "X-Ray".

Too technical and we lost some of you? Not a problem because we love questions! Do you need the professional scanner that Management prefers? Please contact Site Management or Grande Preserve offices!

Thank you.

Dunes Property Management