

PTI LAUNCHES STRONGER STANDARDS, EXCEPTIONAL STRUCTURES CAMPAIGN AHEAD OF 2024 INTERNATIONAL RESIDENTIAL CODE



Stronger Standards, Exceptional Structures

The construction industry is on the brink of a transformative change with the imminent release of the 2024 International Residential Code (IRC), heralding significant updates in post-tensioned (PT) slab-on-ground design and construction standards. In preparation for this milestone, PTI has unveiled its Stronger Standards, Exceptional Structures campaign, aimed at promoting the adoption of higher-quality materials and improved workmanship in residential construction.

BACKGROUND

IRC 2021 and preceding included a section titled Section R506, “Concrete Floors (On Ground),” and Section R506.1, “General” that, until now, has only referred to ACI 332 when it comes to the design of concrete slab-on-ground floors. With the 2024 IRC code change, a new section titled Section R506.2, “Post-Tensioned Slab-on-Ground Floors,” has been added. This includes an additional requirement stating that “post-tensioned concrete slabs-on-ground floors placed on expansive or stable soils shall be designed in accordance with PTI DC10.5.” The code will also include DC10.5-19 as a reference. This pivotal code change reflects a collective effort to enhance the quality, safety, and durability of PT slab-on-ground (PT-SOG) structures.

CAMPAIGN OBJECTIVES

The Stronger Standards, Exceptional Structures campaign spearheaded by PTI serves as a platform to educate stakeholders about the implications of the

revised IRC requirements. Central to the code change are initiatives to ensure that post-tensioning materials are sourced from PTI-certified plants and that installation and stressing are carried out by PTI-certified field personnel. “This code change will benefit stakeholders across the residential design and construction spectrum by improving the quality of materials and workmanship for post-tensioned slab-on-ground floors,” said Tim Christle, Executive Vice President for PTI. The goal is to educate the following groups of individuals:

- Licensed designed professionals (LDPs), architects, and designers/builders on the importance of the updated code and how to incorporate it into their contract documents for PT-SOG builds.
- Building inspectors and others so they can enforce these updated guidelines in the inspection and permitting processes.
- Homebuilders, contractors, and suppliers on how this code will affect project quality, schedule, safety, and efficiency positively. This includes educating them on how to obtain PT materials from certified plants and use certified field personnel.
- Home sellers, homeowners, and real estate agents on the importance of higher-quality PT concrete SOG floor foundations so they can vouch for these benefits in the market.

By emphasizing the importance of superior materials and skilled labor, the campaign aims to elevate construction standards and promote exceptional structures.

KEY BENEFITS

There are numerous benefits to this code change and adhering to the updated standards:

- **Higher quality materials:** PT system materials manufactured by certified plants offer superior quality and durability, enhancing the longevity of structures.
- **Skilled labor force:** Installation, stressing, and finishing of materials by PTI-certified field personnel improves quality and safety during construction, reducing the risk of errors and enhancing structural integrity and durability.
- **Efficiency gains:** Streamlining the construction process through certified personnel and higher-quality materials leads to schedule savings and improved project coordination.
- **Risk mitigation:** By further minimizing troubleshooting incidents that may be encountered with non-certified personnel, the code change aims to reduce warranty issues for homebuilders and enhance risk management.

The 2024 IRC is scheduled to be released in the first quarter of 2024. The effective date of implementation, however, will vary depending on your location, as it is determined by your authority having jurisdiction (AHJ), state, or local government. Different AHJ's may use the IRC differently, adopt different editions of the IRC, or amend it to suit their local needs and preferences, so interested parties should check with their local building officials to find out what version of the IRC is in effect.

Once the AHJ adopts IRC 2024, the new code requirement for PT-SOG goes into effect. Meanwhile, there is nothing standing in the way for owners, architects, and licensed design professionals to incorporate

these requirements into their PT-SOG contract documents now to start realizing the benefits as soon as possible.

Adopting IRC 2024 results in a better foundation, improved efficiencies, and reduced liability. Elevated, multi-story PT structures have had similar code requirements for certified plants and certified field personnel for some time now, and they have realized many benefits. PT-SOG is essentially catching up with elevated PT structures.

CONCLUSION

As the construction industry adapts to evolving standards, PTI's Stronger Standards, Exceptional Structures campaign emerges as a beacon for stakeholders committed to excellence in PT-SOG. By advocating for the adoption of higher-quality materials plus skilled, trained, and certified labor, the code change spotlighted by this campaign aims to usher in a new era defined by superior construction standards and exceptional structures for PT-SOGs.

For more information and to stay updated on PTI's initiatives, visit www.ptistrongerstandards.com and www.post-tensioning.org or scan the QR code.

