## 713.8.1

## Membrane Penetrations of Shaft Enclosures

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** Membrane penetrations not related to the purpose of a shaft enclosure are no longer prohibited from penetrating the outside of the enclosure.

**2018 CODE: 713.8.1 Prohibited penetrations.** Penetrations other than those necessary for the purpose of the shaft shall not be permitted in shaft enclosures.

**Exception:** Membrane penetrations shall be permitted on the outside of shaft enclosures. Such penetrations shall be protected in accordance with Section 714.4.2.

**CHANGE SIGNIFICANCE:** Unless specifically permitted, penetrations have historically been prohibited at the fire-resistance-rated enclosure around a shaft. The strict limitations have been deemed necessary to ensure that the fire-resistive integrity of the shaft enclosure was not compromised by penetrations of the protective enclosure. Penetrations of the exterior membrane of the fire-resistance-rated assembly are now permitted provided they are in compliance with the membrane penetration provisions of Section 714.4.2.

Virtually all penetrations have been prohibited in the past, regardless of purpose with very limited exceptions. The prohibition applied to any penetration that was not necessary for the purpose of the shaft, such as electrical boxes. The new exception will no longer limit the type of or purpose for the penetration but will simply limit the location to the exterior membrane and require the proper protection.

The provisions are now consistent for both shaft enclosures and interior exit stairways. A similar allowance was added in the 2012 edition of the IBC that provides for membrane penetrations on the exterior side of enclosures for interior exit stairways.



This excerpt is taken from Significant Changes to the International Building Code®, 2018 Edition.

Significant Changes publications take you directly to the most important changes that impact projects. Key changes are identified then followed by in-depth discussion of how the change affects real-world application. Photos, tables and illustrations are included to further clarify application. Available for the IBC, IRC, IFC and IPC/IMC/IFGC, the Significant Changes publications are very useful training and review tools for transitioning to a new code edition.

