



TIF White Paper Release – Reliability of Telecommunications Structures

Telecommunications Structures have received undue scrutiny over the years regarding the standards that they are designed and analyzed under, as well as what risk they pose to the general public as compared to Commercial Structures. This has often presented in the idea that these structures have a “fall zone” from jurisdictions, zoning boards, etc. This TIF White Paper is meant to help these entities and their broader communities obtain a level of comfort and understanding that the reliability of Telecommunications Structures is equivalent to what they have with Commercial Structures.

This TIF White Paper dives into the hierarchy and inter-operability of the four cornerstone standards within our industry; the IBC, ANSI/TIA-222, ANSI/TIA-322, and ANSI/ASSP A10.48, and the similarities and differences in how these standards are applied to Commercial Structures and Telecommunications Structures. For example, ANSI/TIA-222 expands upon the IBC’s definition of a significant change, deeming almost all loading changes a “changed condition” requiring an analysis be completed under the latest building codes and standards. This leads to frequent reanalysis of Telecommunications Structures which creates certainty regarding the current structural conditions and reliability targets.

The working group of the Telecommunications Industry Foundation (“**TIF**”) that developed this TIF White Paper included members from across our industry, with sole the intent of bringing a spotlight to the standards we use every day. To achieve this, the TIF White Paper was drafted with the following objectives:

- To provide the industry with a high-level overview of the standards used in our industry today.
- Provide an overview of risk and how it is mitigated through effective use of the standards.
- Outline the differences and similarities in how Telecommunication Structures and Commercial Structures are designed and analyzed.
- Touch on how maintenance and condition assessment as well as construction activities play a role in the reliability of Telecommunication Structures.

“The wireless engineering community is dedicated to ensuring the reliable structural backbone needed to support 5G and beyond. We have taken significant strides to ensure telecommunications structures of all types are reliable and structurally sound. This paper outlines that reliability to allow confidence by jurisdictions without additional onerous requirements such as tower fall zones.” Chris Ply – Engineered Tower Solutions, PLLC.

This TIF White Paper is available for download from the [TIF Website](#).

The Board of Directors for TIF will be supporting feedback through a portal and email communication via its website, tifonline.org.