



# Special Design Features

All structures are designed to meet the most current TIA/EIA-222, the approved national standard for communications structures. ERI realizes that rapid change in the communications industry is creating a need for quality tower construction of the most specialized design. That is why ERI designs towers to meet specific customer needs. ERI backs its products with a fully trained staff of licensed professionals, who possess the specific knowledge and commitment to excellence you need to get the results that you desire.

## Professional Engineering Staff

Quality construction begins with engineering competence. ERI's in-house engineering staff is comprised of Registered Professional Degreed and Graduate Engineers. Our engineers are always available for telephone consultations or site visits.

## Solid Steel Construction

ERI employs all solid steel members in each tower design, which reduces surface area exposure to destructive elements when compared to steel pipe members.

## Modular, All-Welded Construction

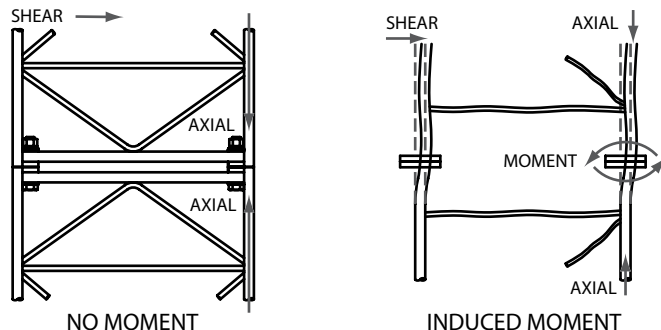
The ERI guyed tower design minimizes the need for bolted inner member connections, which in turn decreases both hardware cost and installation time. Welded connections are achieved under factory-controlled conditions, and every weld exceeds the strength of the attached member. To facilitate transportation and installation, welded modular sections can vary in length.

## ERI Inner-Lock Section Connection Design

The lack of diagonal bracing at section connections can result in an undesirable combination of axial and moment loadings on tower members. ERI's section connection design properly transfers axial loads from section to section without creating additional torque loads on tower frame members.



INNER-LOCK™ Connections Comparison



## Internal Ring Flange

Tower section attachment for the GWZ series tower is made by a machined ring flange. The combination of a thick, steel flange and the closeness of the bolt to the tower leg virtually eliminates common prying action of typical bolted flange connections. ERI can utilize the full capacity of each bolt to resist tension forces. This allows a properly sized, single-bolted connection to have the strength of typical multiple-bolted flange connections. ERI's design creates a smooth, flush outer leg easily adaptable to transmission line runs and AM tower applications.