Piercing the cloudy heights of the Miami sky, the Candelabra communications tower is the tallest structure in the city at 1,042 feet. The structured tangle of more than 460 tons of tubular members, solid bar leg structures, fasteners, anchor bolts, and angle bracing was so impressive, it was featured in the October 2009 issue of Modern Steel Construction highlighting the challenging size and design of the project. A structure of this size had to slip-fit and all bolted holes needed to align and be clean and useful at the extreme height the material was to be assembled (more than 1,000 feet).

With the height of Candelabra, corrosion could be structurally devastating – and the highly corrosive saltwater environment of Miami meant every precaution must be taken to protect the steel from the potential threat. For more than a decade, the owner has chosen to hot-dip galvanize their radio and communication towers because of the consistently proven durability for this application. Given this experience, the owner felt there was no better way to combat the corrosive sea air and seasonal storms typical to the city than to hot-dip galvanize all of the critical structural components.

Galvanized steel is the most effective means of protection against the harsh sun, rain, and salty sea air of Miami. Specifiers in southern Florida now have a structure to inspect and examine in the future when determining what corrosion protection system to utilize, as the Candelabra will stand head and shoulders above the rest, corrosion-free, for generations to come.