Osmose NeighborPlate Transmission Pole Restoration Solution

Over time, corrosion can have a deleterious effect on steel transmission poles, especially when occurring near the groundline area. Groundline corrosion, or localized corrosion at any elevation on the pole, shortens the performance life of the steel poles. Mitigating localized corrosion of the steel pole walls generally requires restoration or costly pole replacement.

The cross-sectional geometry at every pole elevation is unique due to specific characteristics such as pole taper and installation embedment depth. In many cases, common repair techniques are not properly engineered to consider this unique pole geometry at the localized corrosion, leading to fabrication errors or improper installation. Faulty repairs can lead to pole restoration failure and subsequently pose unacceptable risks to structural reliability and safety.

Part of the OsmoPlate® Utility Pole Restoration System, the NeighborPlate solution (U.S. Patent Nos. 9,611,666 and 10,081,963) overcomes issues common in other pole repairs and provides an unparalleled, true pole restoration system. NeighborPlates are designed to be adaptable to varying pole geometry and have the unique ability to accommodate variations in pole characteristics to enable an exact fit-up to the pole.

The NeighborPlate system is engineered to restore strength and fully encase the deteriorated area of the pole. In addition, NeighborPlate:

- Provides universal restoration for tapered polygonal steel poles
- Restores strength loss from corrosion and some other types of pole damage
- Is capable of restoring pole design variations, including direct-embedded and base plate-mounted poles
- Restoration can be performed without service interruption



Other NeighborPlate Applications

While the NeighborPlate system is often utilized to restore poles with localized corrosion deterioration, it can also be used for other applications involving undamaged poles including:

- Increasing pole capacity at strategic locations
- Hardening areas of a pole vulnerable to mechanical or other damage
- Creating a ground sleeve for additional corrosion protection

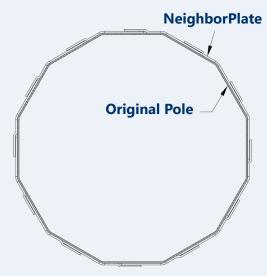
NeighborPlate Advantages

- ✓ Limited field measurements are required
- ✓ NeighborPlates are made from the same high-strength structural steels used for new pole fabrication
- ✓ NeighborPlate lap joints accommodate variations in pole flat width due to pole taper
- ✓ Consistent "fit-up" to the pole
- ✓ Engineered for load path and force transfer between the pole and restoration
- ✓ Ideal for challenging restorations, including those higher on the structure
- ✓ The NeighborPlate solution restores original pole strength at the location of pole deterioration



About the Restoration

The NeighborPlate system is a welded restoration consisting of specially formed plates, made from high-strength structural steels, with lap joints that adjust to the variable flat widths of a pole. These lap joints enable the NeighborPlates to consistently fit-up to each tapered pole, which minimizes gaps for quality weld joints. The ends of the NeighborPlates have a special profile to provide the necessary weld strength for load path and force transfer between the pole and the restoration.





To learn more about NeighborPlate, contact your local Osmose professional, call 770.631.6995, or email steel@osmose.com.

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