



- Set the Pole
- Protect the Pole
- Ground the Pole



Direct Buried Metal Pole Set. Protect. Ground.

SAE has engineered a method to streamline the installation of direct buried metal poles. Structural stability, grounding and corrosion protection using **Conducrete®** greatly simplifies installation and ensures asset protection while avoiding conventional corrosion protection solutions and the need for additional grounding. Using this solution offers many advantages:

- Set and backfill the pole with high strength conductive materials
- Simultaneously ground the pole by creating a ground rod greater than the diameter of the pole
- Prevent corrosion due to the impermeable nature of the conductive materials

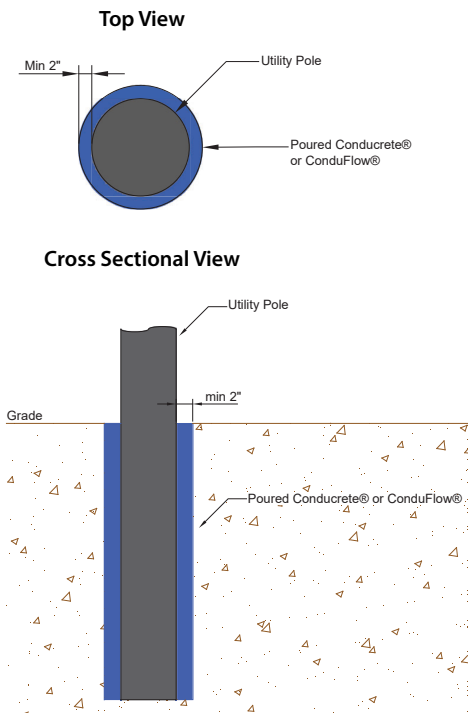
By setting, grounding and protecting the pole in one application, no additional construction is required to install grounding at a later date. Conventional insulating coatings are commonly damaged during installation and can increase the risk of rapid corrosion, rather than prevent it. The insulating coating may be removed from the pole manufacturing process, saving both time and money.



Efficient Construction

- **Set the Pole** – **Conducrete®** meets civil design strength requirements to ensure a strong structure foundation. Depending on the structure type and size, **Conducrete®** may be used to meet compressive strength requirements. SAE ConduBlocks are used to brace the pole while the backfill cures, ensuring construction can proceed to the next structure without delay.
- **Protect the Pole** – **Conducrete®** offer a very low permeability to water. This ensures water does not come into contact with the metal, greatly reducing the risk of corrosion.
- **Ground the Pole** – **Conducrete®** are both highly conductive materials. By encapsulating the metal pole, a large surface area electrode is created, eliminating the need for additional or separate grounding.

Installation Specifications



| Material Properties | Typical Value | |
|--|-------------------------------|----------------------------|
| Appearance | Grey | |
| Odor | None | |
| Dry Density (dependent on compaction) | 1307 kg/m ³ | 81.40 lbs./ft ³ |
| Wet Density (hardened state) | 1730 kg/m ³ | 108 lbs./ft ³ |
| Slurry Density (mixed with 3 US gallons/bag) | 1648 kg/m ³ | 102.9 lbs./ft ³ |
| Shrinkage (28 days) | 0.015% | |
| Permeability to Water | 2.0 x 10 ⁻⁸ cm/sec | |
| Hygroscopic Property (water absorption) | 25.40% | |
| Resistivity (ASTM G187-05) | 2.8 to 5.0 ohm·cm | |
| Electrolytic Corrosion Resistance Eliminated | Eliminated (95% - 100%) | |
| High Fault Current Test Withstand | 1682 V/688 amps for 500 ms | |
| Environmental Impact/pH in situ | Neutral | |
| Dry Volume (per 25 lb. pail) | 0.009 m ³ | 0.312 m ³ |
| Slurry Volume (per 25 lb. pail) | 0.010 m ³ | 0.358 m ³ |

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