

Model US - SlimLineTM Reference

Typical Applications:

- Underground and aboveground storage tanks, buried pipelines, elevator shafts

Featuring:

- 30 year design life with EDI's LongLifeTM gelled element
- Can be installed in a 2 inch (5 cm) diameter hole
- Proprietary backfill mix to retain moisture and minimize migration of contaminants from the surrounding soil
- 50 feet (15 m) of #14 AWG HMW/PE lead wire is standard



Housing Specifications

Size – 1 5/8 inch dia. x 18 inch long
(4.2 cm dia. x 45 cm long)
Shipping weight – 5 lb (2.3 kg)

Element Specifications

Design life – 30 years
Shelf life – 1 year minimum
Stability - ± 5 mV

Element Types

AGG - saturated gelled Ag/AgCl
CUG - saturated gelled Cu/CuSO₄

Design Compatibility

The **Model US** is designed for installation in a 2 inch (5 cm) diameter hole. It is ideal for retrofit through asphalt or concrete where it is difficult or costly to drill a larger diameter hole. This electrode can be used between storage tanks at service stations or between the primary and secondary containment of an aboveground storage tank. Also, the **Model US** weighs far less than the industry standard bagged electrode, which reduces shipping costs where this is a consideration. Also see Model US50 which has been optimized for a 50 year design life.

Installation

Drill a 2 inch (5 cm) dia. hole, lower the electrode into place and slurry in backfill.

Terminations

SW – 50 feet (15 m) of #14 AWG HMW/PE
LW_{nnn} - nnn feet #14 AWG HMW/PE
CW_{nnn} - nnn feet of custom wire
(#12 HMWPE is the largest size wire that can be used on this model)

Model Designation

Specify as EDI Model US-xxx-yy
xxx = Element type
yy = Termination type

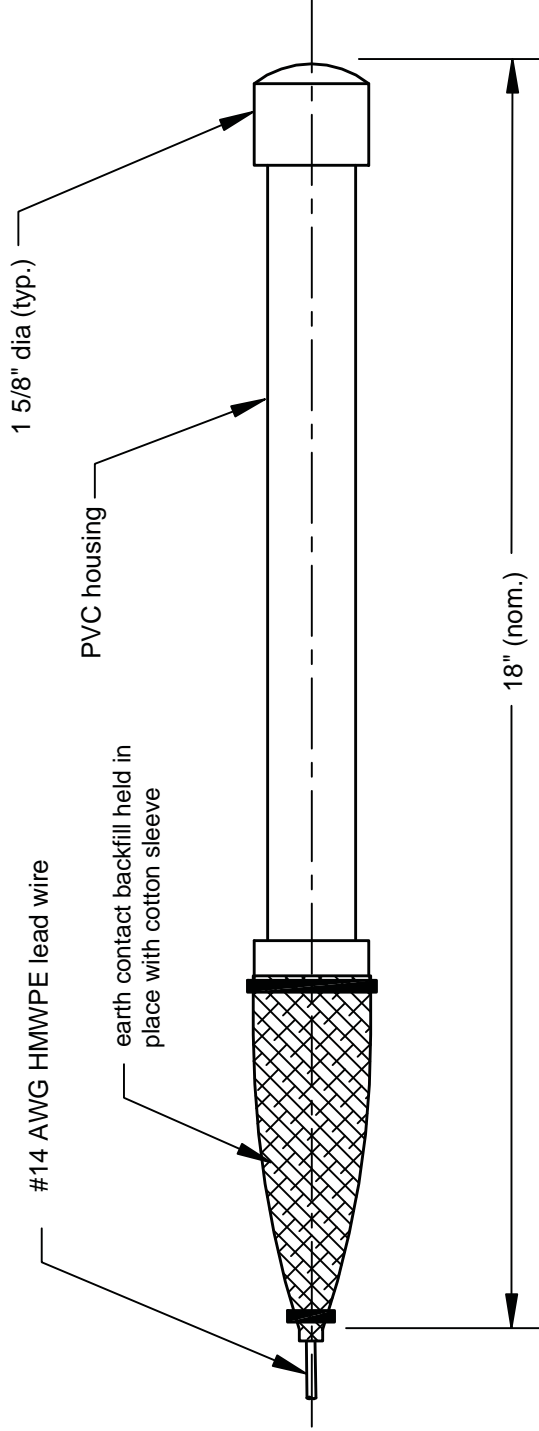
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***U Series
Underground
Reference
Electrodes***



Model US - 30 year (nom.) design life



Specify as Model US-xxx-yy where
xxx is element type and
yy is termination type

Element Types

AGG = Ag/AgCl (saturated, gelled)
CUG = Cu/CuSO₄ (saturated, gelled)

Termination Types

SW - 50' #14AWG HMWPE lead wire
LWnnn - nnn' #14 AWG HMWPE lead wire

Refer to the following EDI drawings for installation guidance:
USAPP1 - Installation in a bore hole
USAPP2 - Installation beneath an above ground storage tank
USAPP3 - Installation in a test station riser

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SlimLine™ Underground Reference

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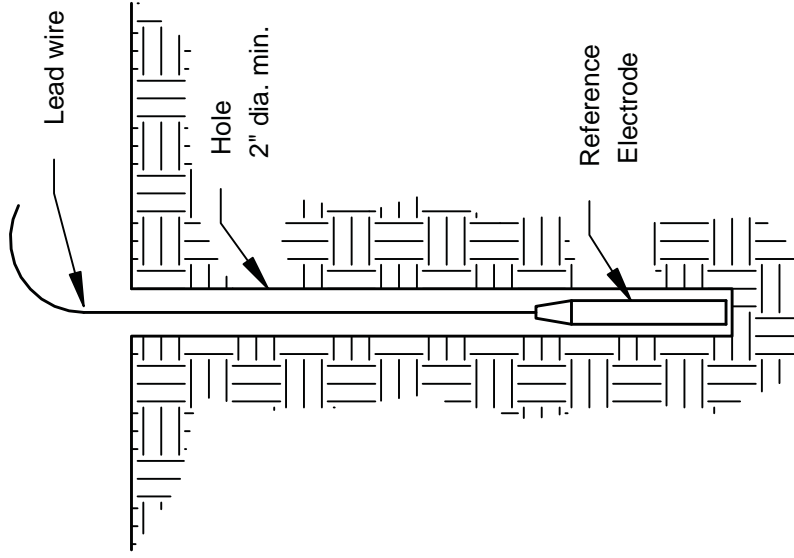
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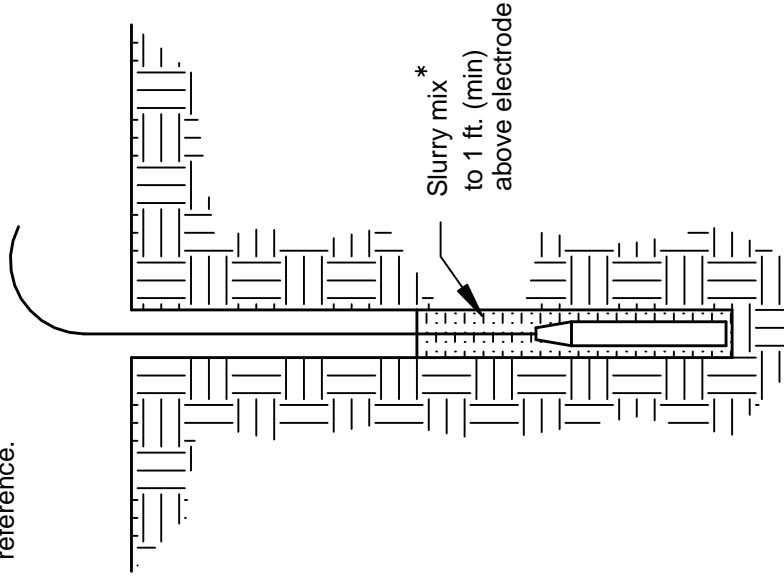
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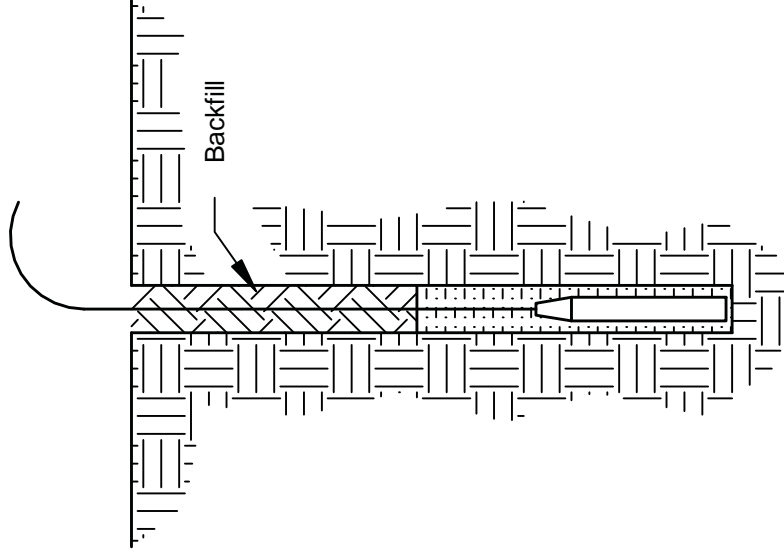
1. Drill hole 2" dia. min.
Lower reference electrode
into hole.



2. Pour or pump slurry mix into hole.*
Fill to at least 1 foot above electrode.
Measure and record potential of permanent
reference using a calibrated portable
reference.



3. Fill balance of hole
with suitable backfill.



Slurry mix*
75% sand plus 25% bentonite clay
Add water to make pourable consistency

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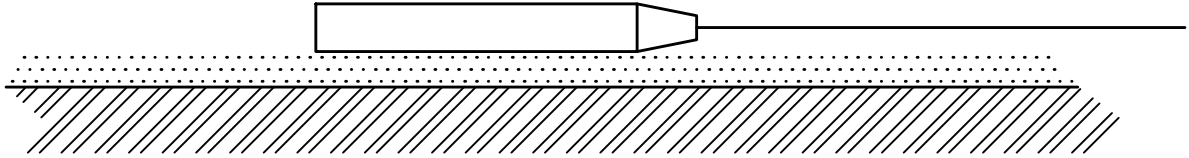


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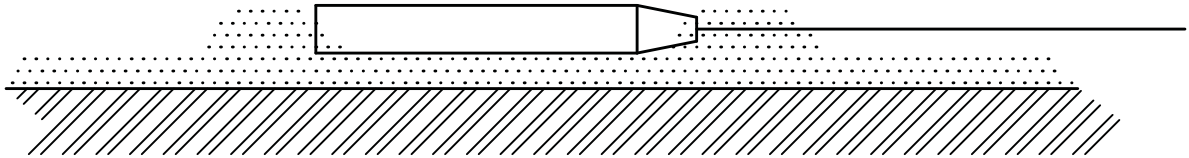
Model US - SlimLine™ Installation

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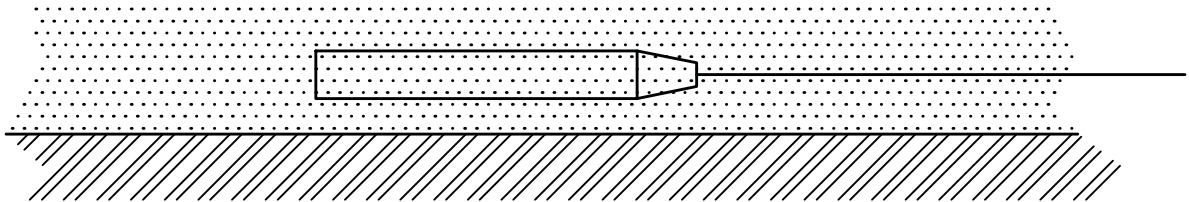
1. Place reference electrode on a bed of sand approximately 1/2" to 1" thick.



2. Build a dam of sand around the electrode. Thoroughly saturate bag with potable water. Measure and record potential of permanent electrode using a calibrated portable reference electrode.



3. Cover electrode with at least 1" of sand. From this point on, the electrode must not be disturbed or moved.



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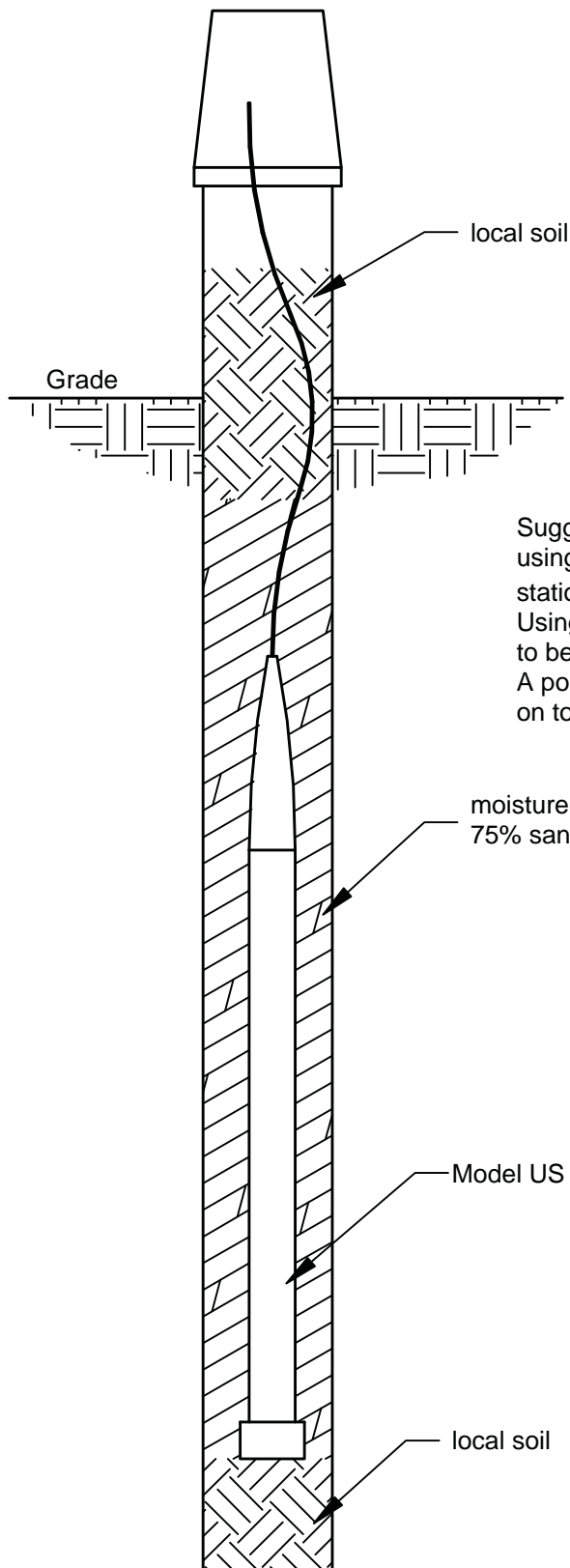
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Model US - Undertank Installation



Suggested installation method for a test station using a 2 inch pipe size or larger riser, including stations with attached cathodic protection coupons. Using a permanent reference allows measurements to be made with data loggers or remote monitors. A portable reference may be placed in the opening on top to confirm or calibrate readings.

moisture retaining backfill
75% sand, 25% bentonite

Model US reference

local soil

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SCALE	NONE	DATE	11/27/02
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Installing Model US in a Test Station