# Insulation Resistance Testing

Recommended Tester – 2500 Vdc

Test 1 - Measure the resistance between the heating cable bus wires and the braid. The buss wires can be brought together (connected). Test 2 - Next, measure the resistance between the braid and the metal pipe. Be sure to isolate the braid from the ground before performing Test 2. Perform test before any sealing material is poured (as in CI D1 applications).

Test 1 and Test 2 should be performed at three voltages (for example – 500, 1000, and 2500 Vdc. Record the 6 insulation resistance values at each voltage.

Pass / Fail Criteria:

A properly installed circuit should measure thousands of mega ohms, regardless of heating cable length or measuring voltage.

1 – All recorded resistance values should be greater than or equal to 1000 mega ohms

2 – Resistance values from Test 1 (for any circuit) should not vary more than 25% as a function of the measuring voltage.

3 - Resistance values from Test 2 (for any circuit) should not vary more than 25% as a function of the measuring voltage.