

Technical drawing of a road surface cross-section. The drawing shows a road surface with a lead attachment and brackets. The lead attachment is shown as a thick black line, and the brackets are shown as hatched rectangular blocks. The road surface is labeled "ROAD SURFACE". The brackets are labeled "BRACKETS". The lead attachment is labeled "LEAD ATTACHMENT". The drawing includes a 15° angle, a 30° MAX angle, and a 2" dimension. A note "6" TYP" indicates a typical bracket width. A note "5 END" indicates the end of the lead attachment. A note "11" indicates a dimension from the left edge to the start of the lead attachment.

SINGLE PASS CONCRETE SAW CUT WITH MULTIPLE BLADES. SLOT IS CLEAN & DRY BEFORE SENSOR IS INSTALLED

SENSOR ENCAPSULANT

SENSOR ELEMENT

BRACKET (SUPPLIED WITH SENSOR)

Dimensions:
 Slot Width: 0.75" NOM
 1" MAX
 Depth: 0.75" TO 2"
 Top Offset: 0.313" TO 0.375"

Callouts: 3, 9, 4

Diagram 6: Loop Sealant Detail. This cross-sectional diagram shows a lead-in cable passing through a wall. The cable is encased in a loop sealant. The vertical dimension of the sealant is labeled "2" MIN" and "3" MAX". The horizontal dimension of the sealant is labeled "0.375"". The diagram is labeled "6" in a triangle in the top right corner.

- 1 CRACKS OR SAW CUTS IN THE ROADWAY MUST NOT BE LOCATED CLOSER THAN 18" UPSTREAM AND 18" DOWNSTREAM OF THE QUARTZ SENSOR.
- 2 SLOT LENGTH IS 6" LONGER THAN SENSOR.
- 3 USE THE DEPTH GAGE SUPPLIED WITH EACH SENSOR TO SET THE SENSOR AT THE CORRECT DEPTH. CHECK DEPTH ALONG THE ENTIRE LENGTH OF THE SENSOR.
- 4 SPACE THE BRACKETS EVENLY OVER THE LENGTH OF THE SENSOR, USING ALL SUPPLIED BRACKETS. ONE EXTRA BRACKET IS SUPPLIED WITH EACH PIEZO SENSOR. USE ONLY IF THE SLOT IS CUT TOO WIDE.
- 5 PUT A SLIGHT BEND AT THE END OF THE SENSOR TO LOWER THE HEIGHT OF THE END CAP TO THE SAME HEIGHT AS THE SENSOR TO ENSURE SUFFICIENT DEPTH OF ENCAPSULANT ABOVE THE SENSOR.
- 6 DO NOT USE HOT TAR AS HOMERUN SEALANT.
- 7 CHECK THE RESISTANCE OF THE SENSOR BY PLACING A DIGITAL MULTIMETER ACROSS THE CENTER CONDUCTOR OF THE BNC CONNECTOR AND THE OUTER BODY. THE READING SHOULD BE INFINITY.
- 8 AFTER INSTALLATION, USE OSCILLOSCOPE OR WIM ELECTRONICS TO CONFIRM SIGNAL OUTPUT IS AS EXPECTED WHEN VEHICLE PASSES OVER.
- 9 FOR ADDITIONAL PROTECTION OF THE SENSOR, INSTALLATION DEPTH MAY BE INCREASED WITH CORRESPONDING INCREASE IN CUT DEPTH AND GROUT.
- 10 LOCATE AND ORIENT SENSOR AND CABLING ACCORDING TO THE PLANS.
- 11 ALLOW MINIMUM 3" BETWEEN LEAD ATTACHMENT AND BEGINNING OF CONDUIT.
- 12 NON-METALLIC FLEX OR PVC CONDUIT.

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