## Procedure for Checking In-place Silicone Sealant for Bonding, Width, Thickness, Shape, and Non-Adherence to Backer Rod

## 1. Scope:

This test is for checking the bonding, width, thickness, shape and non-adherence to backer rod of in-place cured silicone sealant.

## 2. Apparatus:

- 2.1 Knife.
- 2.2 Ruler with 1/16" divisions.
- 2.3 Marking pen.
- 2.4 Tube of silicone sealant.

#### 3. Procedure:

- 3.1 Select the test sites in accordance with SD 311, paragraphs 3.3 A. through 3.3 C. Record the locations.
- 3.2 At each test site, cut an approximate 3" lineal strip of sealant on 3 sides to full depth. Leave the 4<sup>th</sup> side attached to the in-place sealant. When cutting along the sawed joint, make the cut next to the concrete.
- 3.3 Mark 2 lines with a marking pen 1" apart on the 3" cut piece.
- 3.4 Check the bonding by pulling the 3" strip straight up until the marked lines are 2" apart. If the sealant is properly bonded, it should not pull away from the sides beyond the original cut. Verify sealant has not bonded to the backer rod.
- 3.5 Cut the 4<sup>th</sup> side of the 3" specimen and remove for checking width, thickness and shape.
- 3.6 Repair the sealant, where the specimen was removed with the same material used on the project.

### 4. Report:

- 4.1 Report the measurements to the nearest 1/16".
- 4.2 Report the results of the bonding check.

### 5. References:

SD 311 DOT-10 Sample ID 2229844 File No.

# In-Place Silicone Sealant Checks for Bonding, Width, Depth, and Shape on PCC Pavements

DOT - 10 9-14

PROJECT PH 0066(00)15		COUNTY Aurora, Ziebach	PCN B015
Date	06/14/2016	Tested By Tester, One	
Plans Joint Width 3/8"			

	Test No.	Station	Distance From CL	R/L	Sealant Depth	Bond Check	Bond Check to Rod
$\checkmark$	1	83+53	5	LT	3/16	PASS	PASS
$\checkmark$	2	78+25	6	RT	5/16	PASS	PASS
$\checkmark$	3	72+97	8	LT	4/16	PASS	PASS
1	4	67+69	7	RT	3/16	PASS	PASS
1	5	62+41	5	LT	5/16	PASS	PASS
1	6	51+85	6	LT	4/16	PASS	PASS
1	7	46+57	5	RT	3/16	PASS	PASS
$\checkmark$	8	41+29	4	RT	5/16	PASS	PASS
1	9	38+69	6	LT	5/16	PASS	PASS
1	10	36+01	8	RT	4/16	PASS	PASS
1	11	34+25	2	LT	3/16	PASS	PASS
1	12	34+22	3	LT	4/16	PASS	PASS
1	13	27+90	5	LT	5/16	PASS	PASS
1	14	22+15	8	LT	3/16	PASS	PASS
1	15	10+15	9	RT	3/16	PASS	PASS

Figure 1