

Standard Guidelines for Product Review

## **PCC Repair, High Performance; Section 02015.40**

January 2016

### DEPARTMENT OF TRANSPORTATION

Construction Section  
800 Airport Road  
Salem, OR 97301-4798  
503/986-3059

### **02015.40 – PCC Repair, High Performance**

High Performance PCC repair is for partial, shallow or full-depth concrete repairs. These products are cementitious structural materials that are pump-able with conventional grout/line pumps.

- Products incorporating metallic particles will not be allowed.
- Products including magnesium phosphates or added gypsum will not be allowed.
- Polymer modified materials will not be allowed.
- Epoxies, urethanes, polyesters, or other types will not be considered.

**PROCESS** - Submit the following:

- [Preliminary Information for Product Evaluation Form](#).
- Independent Test Results showing compliance with Specs listed below.
- Legible copy of the MSDS.
- Spec Data Sheet.
- Detailed Installation Instructions.
- List of Limitations and Precautions.

**SPECIFICATIONS** - We require PCC Repair Materials to comply with the following:

#### 1. COMPRESSIVE STRENGTH

- ASTM C39, (AASHTO T22), Using 4"x 8" cylinders when possible.  
For aggregates 3/8" and larger.
- ASTM C109, (AASHTO T106), Using 2" cubes.  
For aggregates smaller than 3/8".

<u>Cure Time</u>	<u>Compressive Strength</u>
24 Hours	3000 psi
28 Days	4500 psi

#### 2. LENGTH CHANGE

– High Performance PCC Repair material length change shall meet requirements in ASTM C928, Table 1.

#### 3. RESTRAINED SHRINKAGE (RING TEST) – ASTM C1581

Modified as follows: Section 8.6 Cure -Time-72 Hours.

Report data per Section 11

Appendix: X1.1

Potential for Cracking Classification: Low No Cracking at 28 days.

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4. SET TIME - Manufacturer's recommendations for actual working time @ 70 degrees F.

Standard Set: >25 minutes.

5. ELECTRICAL RESISTIVITY

Within the range of 2,000 to 20,000 ohm-cm.

6. MODULUS OF ELASTICITY ASTM C469

Minimum 4,000 ksi @ 28 days.

SUBMIT DOCUMENTATION TO:

Oregon DOT – Materials Lab  
Product Evaluation Coordinator  
800 Airport Road SE  
Salem OR 97301-4798  
503-986-3059

<http://www.oregon.gov/ODOT/HWY/CONSTRUCTION/QPL/QPIndex.shtml>