COLORADO DEPARTMENT OF TRANSPORTATION

# PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No. 3521-12

Product Evaluation Coordinator
Colorado Department of Transportation
4670 North Holly Street, Unit A
Denver, Colorado 80216

Material code: 712.10.02.00

FOR INTERNAL CDOT USE

Material code description full name: Adhesive, Concrete Anchoring Agent

## PART 1

Product name: Pure110+

Product category: Adhesive\Anchoring, Lateral\Epoxy

Product representative (name & address):
Attn: Robert Antoinette
Powers Fasteners, Inc
2 Powers Lane
Brewster, NY 10509
Phone: (914) 235-6300 FAX: (914) 576-6483

Manufacturer (name & address):
Attn: Robert Antoinette
Powers Fasteners, Inc.
2 Powers Lane
Brewster, NY 10509
Phone: (914) 235-6300 FAX: (914) 576-6483

Web-site address: www.powers.com

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**Description of the product:** (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)
The Pure110+ is a two-component, 1:1 high strength epoxy injection adhesive anchoring system. The system is designed for anchoring and bonding threaded rod and reinforcing bar hardware into drilled holes in solid concrete base materials. It is evaluated and recognized for freeze/thaw performance. The cartridge design allows for multiple uses using extra mixing nozzles. The mixing nozzles proportions the adhesive and provide a simple delivery method into drilled holes. It is evaluated and recognized for long term and short term loading. Independently tested to meet ASTM C881 Types I, II, IV, and V, Grade 3, Classes B and C. Tested in accordance with ICC-ES AC308 and AC58 for use in structural concrete. The product is available in 9 and 21 ounce cartridges.

**Restrictions,** (installation and/or use):
Minimum base material temperature of 50° F for installation.

**Use of the product**, (be specific to CDOT highway activities only):
Bonding of threaded rod or reinforcing bar hardware into drilled holes in solid concrete base materials.

**Benefits to CDOT**, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
Pure110+ has a 1:1 mix ratio. It can be installed into dry or water saturated holes. Partially used cartridges may be used at a later date if stored properly and within shelf life. Two year shelf life. High strength developing epoxy. Available in 21oz. cartridges for ease of use.

**Specifications**, (listing those applicable is required) **& Certificate of Compliance** (required to certify compliance with listed specifications):

- ☐ CDOT :
- ☒ ASTM : C 881, Type I, II, IV, & V, Grade 3, Classes B and C
- ☒ AASHTO : M 235
- ☐ FHWA :
- ☐ other :

**Product testing,** (from national/independent laboratories or universities) **& Certified Test Report** (CTR required to validate all claims):

- ☐ NTPEP-AASHTO :
- ☐ FHWA :
- ☐ other :
- ☒ other : SOR Testing Laboratories, Inc. (10-22-2010)

**State DOT Approvals**, (current documentation required):
Maine, Tennessee

Sample submitted: ☒ yes ☐ no ☐ n/a | Materials Safety Data Sheets (MSDS): ☒ yes ☐ no ☐ n/a

Notes/Additional Comments
Powers has many distributors throughout Colorado which make the product readily available when needed on a project.