COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No. 3233-15

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: HTE 50

Product category: Adhesive\Anchoring, Lateral\Epoxy

Product representative (name & address):
Attn: Nick Laing
Hilti, Inc.
5400 South 122nd East Ave.
Tulsa, OK 74146
Phone: (303) 638-3831 FAX: (918) 459-1814

Manufacturer (name & address):
Attn: Richard Boland
Adhesives Technology Corp.
450 East Copans Rd.
Pompano Beach, FL 33064
Phone: (800) 892-1880 FAX: (954) 782-2776

Web-site address: www.us.hilti.com

Web-site address: www.atc.ws

Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)

HTE 50 is a high-strength transportation epoxy, two component 100% solids, high modulus, structural epoxy paste. It is a solvent free, high strength, high modulus, moisture insensitive non-sag paste epoxy system. Base material temperature range from 41° F to 110° F. Technical data available for both rebar and threaded rod installations. Bond strength 4,230 psi @ 14 days (for Class C at 75° F). Compressive Strength 15,500 psi @ 7 days (for Class B at 50° F). Gel Time 60 minutes @ 41° F, 20 minutes @ 75° F, and 6 minutes @ 110° F.

Product is available in 16 oz. and 31.8 oz. cartridges, and also in 15 gallon bulk kits. The 16 oz. cartridge uses a manual dispenser. The 31.8 oz. cartridge uses a manual or pneumatic dispenser. The 15 gallon bulk kit is used in conjunction with the AST PCH RMP-624 Brute Pneumatic Dispenser.

Restrictions, (installation and/or use):
Base material temperature from 41° F to 110° F.

Use of the product, (be specific to CDOT highway activities only):
Primary uses: rebar dowels for concrete repair, road widening and renovations. Secondary uses: safety barriers, sound barriers, and safety railings.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
HTE-50 is an economical and versatile adhesive anchoring system. Using the 15 gallon kits with the AST Brute Dispenser gives the installer extremely high productivity at the lowest cost. The Brute Dispenser is the most reliable bulk dispenser utilizing very few moving parts and dispenses well in cold ambient temperatures. The 31.8 oz. cartridge using a pneumatic dispenser is also an economic and productive method for high volume rebar installations when the bulk dispenser is not needed. And the 16 oz. cartridge is a great economical solution for a variety of anchoring applications such as temporary concrete forming and threaded rod applications.

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

- ☐ CDOT :
- ☒ ASTM : C 881 (Types I, II, IV, & V, Grade 3, Classes B & C)
- ☐ AASHTO :
- ☐ FHWA :
- ☐ other :

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

- ☐ NTPEP-AASHTO :
- ☐ FHWA :
- ☒ other : Element Materials Technology (September 1, 2015)
- ☐ other :

State DOT Approvals, (current documentation required):
Arizona, California, Nevada, New Mexico, Texas, Utah

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

Notes/Additional Comments

Hilti has over 10 manufacturer representatives in the state of Colorado that are available for job site installation training of the HTE 50 adhesive system. Hilti is the only manufacturer that will train and certify installer with a Hilti certification card after completion of the training. In addition, a Hilti field engineer available in the state of Colorado that can be available for job site technical assistance and can assist with any technical anchoring questions. Contact the Product Representative above or call (800) 879-8000 to request job site training or assistance.