# AMPP

# AMPP-CCI1

## Concrete Coating Inspector (Level 1) - CBT

# Latest Version: 6.0

## Question: 1

A wastewater lift station concrete dome applies 100% solids polyurea hybrid (1:1 ratio, <30-second pot life) via heated plural spray at 160°F. PDS requires 80 mils WFT for 80 mils DFT, no thinning. Inspector notes WFT gauge teeth unable to penetrate fully on first pass due to instant tack-free surface after 3 seconds. Applicator requests 2% thinner approval. What is the mandated inspector response?

A. Accept DFT verification post-cure only
B. Reduce heat to 140°F extending gel time
C. Approve thinning to improve gauge readability
D. Reject thinning and enforce 1.5-second maximum pass intervals

**Answer: D**

Explanation:
100% solids polyureas react exothermically without solvents; thinning introduces bubbles/voids compromising elongation/impermeability critical for H2S dome exposure—rapid passes prevent inter-pass cure, ensuring monolithic film build measurable by gauge timing technique.

## Question: 2

A heavily reinforced beam supporting coated equipment is detailed to have 40 mm clear spacing between parallel bars, with a 20 mm nominal maximum aggregate size. Field measurement shows about 15 mm clearance in some locations due to bar misplacement. Which inspector instruction best addresses both consolidation and long-term durability beneath coatings on the beam soffit?

A. Require adjustment of bar positions to restore at least the specified minimum clear spacing before placement
B. Accept the reduced spacing because the beam soffit will be coated, limiting moisture ingress
C. Approve the condition if slump is increased to improve flow around the closely spaced bars
D. Only require the contractor to use internal vibrators of smaller head diameter without moving the bars

**Answer: A**

Explanation:
Clear spacing less than recommended minimums relative to nominal aggregate size impedes concrete flow and consolidation, leading to potential voids, trapped air, and poor-quality cover concrete at the surface. Adjusting bar positions to restore specified spacing reduces the risk of honeycombing and weak cover on the soffit, which is important for both structural durability and the performance of the coating applied to the underside.

## Question: 3

ASTM D7234 testing on 800-micron glass-flake reinforced vinyl coating over concrete shows all failures at 2.3 MPa within flakes layer despite full scoring. What ASTM D7234 reporting nuance applies for thick, multi-layer systems?

A. Report >2.3 MPa adhesion
B. Average with substrate tests
C. Report as 2.3 MPa coating failure
D. Invalid - rescore deeper

**Answer: A**

Explanation:
ASTM D7234 interprets consistent cohesive failure within coating layers (even thick/flakefilled) after proper scoring as adhesion exceeding coating cohesive strength (> observed value). Report conservatively as ">2.3 MPa" indicating substrate bond adequate; distinguishes from adhesive failure defining true minimums.

## Question: 4

Using IR thermometer, concrete wall ambient 24°C (75°F), RH 80%, surface reads 26°C, DP 19°C. Reflective coating nearby skews IR to 28°C false. True spread?

A. RH violation
B. Verify contact thermometer
C. 7°C safe
D. Proceed on IR

**Answer: B**

Explanation:
IR inaccurate on reflective/low-emissivity surfaces; use magnetic contact for true 26°C surface. Spread 26-19=7°C ok, RH<85%. Verify to avoid errors.

## Question: 5

Scenario: Coating inspector enters permit space alone to verify DFT on concrete floor. Permit requires attendant and retrieval. Violation?

A. Yes; no lone entry without communication and monitoring
B. Allow if short duration
C. No; inspector qualified
D. Permit overrides

**Answer: A**

Explanation:
PRCS entry requires attendant outside, continuous communication, no unauthorized solo entry.

## Question: 6

Rheology modifier additive at 0.5% HEC in waterborne acrylic concrete sealer causes 25% sag at 10 mil WFT on vertical wall. What HEUR associative thickener loading provides KU viscosity 120 with ICI>1.5?

A. 0.5% fumed silica
B. 0.3% HEUR for shear thinning
C. 1.0% HEC increase
D. 0.2% organoclay

**Answer: B**

Explanation:
HEUR at 0.3% provides pseudoplastic flow (ICI/KU>1.5) for brush/roll sag resistance via hydrophobic association, unlike HEC Newtonian viscosity prone to drain.

## Question: 7

An inspector observes orange peel texture predominantly in a 100% solids epoxy topcoat applied via roller on horizontal concrete. The base coats were smooth. Primary contributing factor?

A. Substrate outgassing
B. Roller nap imprint and insufficient back-rolling for leveling
C. Thick single coat application
D. Rapid curing from exothermic reaction

**Answer: B**

Explanation:
Roller application of high-viscosity epoxies imparts stipple from nap fibers; without thorough back-rolling or cross-rolling, the texture remains as orange peel. Thin topcoats exacerbate this as limited material mass hinders self-leveling. Airless spray or specialized low-nap rollers minimize this defect.

## Question: 8

A project specification section titled “Informative Notes” explains that “in many cases, profile ranges of CSP 2–3 will be adequate,” while the normative section explicitly specifies CSP 4–5 for traffic-bearing coating areas. During submittals review, the contractor selects a blast process that yields CSP 2–3 for all areas, citing the informative note. How should the inspector respond?

A. Average the values and use CSP 3–4
B. Let the contractor decide which text to follow
C. Enforce CSP 4–5 for traffic-bearing areas as mandated in the normative section and treat the informative note as general background not overriding the stricter requirement
D. Accept CSP 2–3 for all areas based on the note

**Answer: C**

Explanation:
Normative specification text specifying CSP 4–5 for a defined service condition takes precedence over generalized, non-binding commentary; inspectors must apply the specific requirement for the actual service category rather than generalizations in informative notes. Using a lower profile than specified could compromise adhesion under traffic and would not comply with the contract documents.

## Question: 9

Pavement with high sulfate deicing alternative shows pitting spalling. Mechanism?

A. Chemical pitting from acid
B. Abrasion
C. Localized high crystallization in surface depressions
D. Thermal shock

**Answer: C**

Explanation:
Uneven surface traps solution; localized mirabilite crystallization causes pit-like spalling distinct from uniform scaling per alternative deicer damage reports.

## Question: 10

Electronic auto-log vs manual sling: Hygrometer logs 83% peak unnoticed, sling spots during check. Protocol integration?

A. Electronic primary
B. Ignore peaks
C. Sling verification every 3 hours
D. Wind sync

**Answer: C**

Explanation:
Electronics trend, sling validates absolutes; periodic cross-check catches drifts, ensuring that the <85% compliance on concrete projects.

# Thank You for Trying Our Product

For More Information – Visit link below:

https://www.examsboost.com/

**15 USD Discount Coupon Code:**

**G74JA8UF**

# FEATURES

- ✓ 90 Days Free Updates
- ✓ Money Back Pass Guarantee
- ✓ Instant Download or Email Attachment
- ✓ 24/7 Live Chat Support
- ✓ PDF file could be used at any Platform
- ✓ 50,000 Happy Customer