Concrete Coating Inspector - Level 1 Theory Exam

Exam Preparation Guide

Table of Contents

Introduction

The Concrete Coating Inspector Theory Exam Level 1 is designed to assess whether a candidate has the requisite knowledge and skills that a minimally qualified Concrete Coating Inspector (Level 1) must possess. A candidate should have entry-level knowledge in the proper methods of inspecting surface preparation and installation of protective coatings on industrial concrete structures and facilities.

Test Name	Concrete Coating Inspector Level 1 Theory Exam
Test Code	ConcreteCtgsIn1
Total Seat Time[+]	1.5 Hours (90 minutes)
Number of Questions	50
Format	Computer-Based Testing (CBT)

NOTE: A **Pass/Fail** result is provided at the end of the exam.

[+]Total Seat Time includes 10 minutes for a Tutorial & Non-Disclosure Agreement and 80 minutes for the Exam.

Requirements

Requirements for Concrete Coating Inspector Level 1

- Prerequisites
- Certification Exams
- Additional Requirements

Prerequisites
Concrete Coating Inspector (CCI) **Level 1 Course** **Ethics** for the Corrosion Professional Course **or** an **equivalent training**
CCI Level 1 Certification Exam Requirements
Practical Exam
Theory Exam (CBT)
Additional Requirements
Complete the AMPP Terms of Service, Candidate Agreement, and Code of Professional Conduct (in **My Certification Portal**)

Certification renewal requirements

- Recertification application***** required every 3 years
- 1.5 years (18 months) of concrete work experience in coating inspections
- 8 Professional Development Hours (PDHs) since last renewal
- Must have satisfied Ethics requirements

Upon successful completion of requirements, the candidate will be awarded an **AMPP Concrete Coating Inspector Level 1 Certification**.

****Approval required***

Exam Blueprint

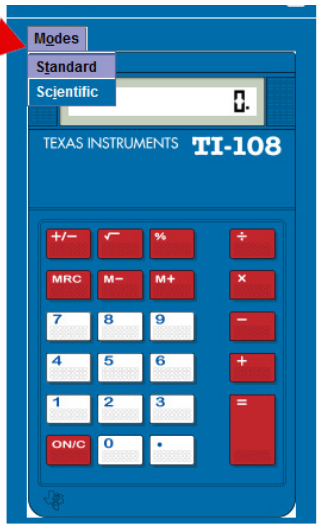
NOTE: At the end of the computer-based exam, candidates will receive a bar chart of strengths and weaknesses that correspond to these Domains.

1. **Ambient Condition (1% - 5%)**
2. **Coating Application (5% - 10%)**
3. **Coating Defect (1% - 5%)**
4. **Coating Inspection (25% - 30%)**
5. **Coating Material (1% - 5%)**
6. **Concrete Construction (1% - 5%)**
7. **Concrete Failure (10% - 15%)**
8. **Health & Safety (1% - 5%)**
9. **Project Specification (15% - 20%)**
10. **Standards (5% - 10%)**
11. **Surface Preparation (10% - 15%)**

Calculators

Candidates will have access to either a TI Standard or TI Scientific calculator for use during the CBT Exam.

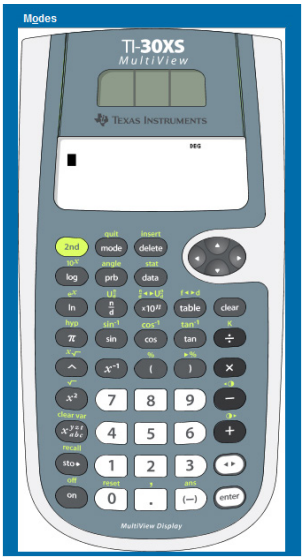
Standard Calculator



Standard Mode Functions

Add	+	
Subtract	-	
Multiply	X	
Divide	÷	
Negative	(-)	
Percentage	%	
Square Root	√	Example: 4 √
Reciprocal (Inverse)	x	Example: 1 ÷ 2 =
Store value to variable	M+	Example: 3 * 5 = M+
Access variable	MRC	Example: 7 + MRC =
Clear variable	M- MRC	

Scientific Calculator



Scientific Mode Functions

Add	+	
Subtract	-	
Multiply	X	
Divide	÷	
Negative	(-)	
Percentage	2nd [%]	
Square Root	√	Example: 2nd √ 4 enter
Reciprocal (Inverse)	X^{-1}	Example: 2 X^{-1} enter
Store value to variable	sto▶ X^{yzt}	Example: 3 * 5 enter sto▶ X^{yzt} enter
Access variable	X^{yzt} or 2nd [recall]	Example: 7 + 2nd [recall] enter enter

Numeric Notation

Standard (Floating Decimal) Notation (digits to the left and right of decimal	mode menu options **NORM** SCI ENG FLOAT 0 1 2 3 **4** 5 …	 e.g. 123456.78 e.g. 123456.7800
Scientific Notation (1 digit to the left of decimal and appropriate power of 10)	mode menu options NORM **SCI** ENG	e.g. 1.2345678*105
Engineering Notation (number from 1 to 999 times 10 to an integer power that is a multiple of 3)	mode menu options NORM **SCI** ENG	e.g. 123.45678*103

Fractions

Simple fractions	n/d
Mixed numbers	2nd [Un/d]
Conversion b/w simple fraction and mixed number	2nd [n/d ◄► Un/d]
Conversion b/w fraction and decimal	2nd [f ◄► d]

Powers, roots, and inverses

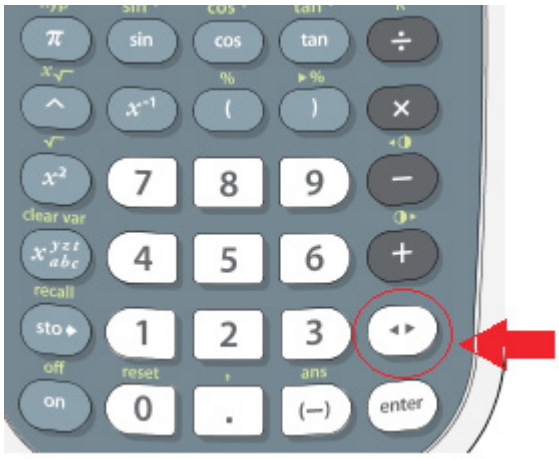
Square a value	x^2	
Cube a value	^	
Raise value to specified power	^	Example (2^4) 2 ^ 4
Square root	2nd [√]	Example (√16): 2nd [√] 16
Reciprocal	x^{-1}	Example (n^{th} root): 5^{th} root of 8: 5 2nd [^{x}√] 8

Pi

PI (π)	π

Toggle

The scientific calculator might show the results of certain calculations as a fraction - possibly involving pi or a square root. To convert this kind of result to a single number with a decimal point, you will need to use the "toggle answer" button circled in the picture below. Pressing this button will change the display from a fractional to a decimal format.



Answer Toggle

◄►

Press the ◄► key to toggle the display result between fraction and decimal answers, exact square root and decimal, and exact pi and decimal.

Example

Answer toggle	2nd [√] 8 enter	√8 2√2
	◄►	√8 / 2√2 2√2 2.828427125

If you find this on-screen calculator difficult to use, raise your hand and ask the Test Administrator to provide you with a hand-held scientific calculator. If available, you will be provided with a scientific or non-scientific calculator. Candidates are not permitted to bring their own calculator into the testing room.