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[CompanyName]

Concrete Quality Assurance/Quality Control Plan

[ProjectName] [ProjectNumber]

Management acceptance

This Construction Quality Assurance/Quality Control Plan has been reviewed and accepted.

Endorsed By: (Name / Title)	[QualityManagerName], Quality Manager				
Signature:	[QualityManagerName]	Date:	[Date]		
Version	1.0	Notes	Initial Issue		

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SIGNATURE SHEET

Plan Preparer

This [CompanyName] Project Quality Control Plan was prepared in accordance with the contract specifications and requirements of the [CompanyName] quality system and approved by:

H Mar

[QualityManagerName] / [Date]

[QualityManagerName], Quality Manager /Date

Approval by Company Officer

This [CompanyName] Project Quality Control Plan is approved by:

[SeníorManagerName] / [Date]

[SeniorManagerName] Senior Manager /Date

Plan Concurrence

[CompanyName] Project Quality Control Plan concurrence by:

[ProjectManagerName] / [Date]

[ProjectManagerName], Project Manager /Date

[SuperintendentName] / [Date]

[SuperintendentName], Superintendent /Date

PROJECT-SPECIFIC QUALITY PLAN

TABLE OF CONTENTS

Background Information	6
Customer	6
Project Name	6
Project Number	6
Project Location	6
Overall Project Description	6
[CompanyName] Scope of Work	
A. Project Quality Coordination and Communication	7
B. Project QC Personnel	13
Project QC Job Position Assignments	13
Project UC Organization Chart	14
C. Duties, Responsibilities, and Authority of QC Personnel	15
D. Personnel Qualifications and Technical Certifications	21
Personnel Certification Requirements	21
E. Qualification of Third-Party Inspection/Testing Companies and Subcontractors and Suppliers	23
Concrete Inspection/Testing Laboratory Qualification Requirements	
Qualification of Outside Organizations	. 23
Purchase Order Approval	. 24
F. Submittals	26
Submittals	26
Submittal Schedule and Log	. 28
Submittal Review and Approval	. 28
Submission to Customer	. 28
Customer Approved Submittals	
G. Quality Training	
H. Project Quality Standards and Specifications	35
Needs and expectations of interested parties	. 35
Contract Specifications	. 35
Contract Drawings	. 36
Material Specifications	36
Equipment Specifications	. 37
Work Process Specifications	
[CompanyName] Quality Standards	
Compliance with Industry Concrete Standards	
Application of Multiple Sources of Specifications	38
I. Material Inspection Traceability and Quality Controls	39

Identification of Lot Controlled Materials	39
Concrete Placement Traceability	39
Concrete Waste and Materials Management	39
Material Receiving and Inspection	40
Equipment Inspections	40
Preservation of Product and Work-in-Progress	40
Material and Equipment Storage	41
Calibration of Inspection, Measuring, and Test Equipment	42
J. Concrete Inspection and Test Plan	
Required Inspections and Tests	46
Hold Points and Notifications	
Inspection Records and Logs	
Nonconformance Criteria and Action	47
Technician and Laboratory Documentation	47
Coordination and Oversight	47
K. Work Task Quality Inspections	52
Identification of Quality Inspected Work Tasks	52
Required Inspections For Each Work Task Inspection Tools and Methods	52
Inspection Tools and Methods	52
Inspection Traceability	53
Nonconformance Handling	53
Documentation and Records	53
Daily Quality Control Report.	53
L. Control of Corrections and Nonconformances	66
Types of Nonconformances	66
Control the Continuation of Work	66
Marking and Containment	
Nonconformance Reports (NCRs)	
Quality Manager Disposition of Nonconformance Reports	
Corrective Actions	
Preventive Actions	
Customer Notification	
Records and Logs	
M. Concrete Crack Repair Procedures	
Crack Repair Protocol	
N. Project Completion Inspections	75
Punch-Out QC Inspection	75
Pre-Final Customer Inspection	
Final Acceptance Customer Inspection	
O. Project Quality Records and Documents	
P. Quality Assurance Surveillance	82

Q	Appendix: Concrete Operating Procedures	84
	Project Addit Requirements	02
	Project Audit Requirements	งว
	Project Audit Plan	82
	Project Quality Performance Surveillance	82

Not a complete plan or Manual

F. SUBMITTALS

SUBMITTALS

Lists of documents and records that will be submitted to the customer appear on the Submittal Schedule and Log form. The Submittal Schedule and Log Form exhibit is included in this subsection.

SHOP DRAWING SUBMITTALS

The Project Manager or Purchasing and Estimating Manager prepare shop drawing submittals that supplement contract drawings. Shop drawings are required when additional details are necessary for fabrication or installation. The following information is included, as applicable: Jes or Mani

- Dimensions established by field measurement
- Relationships to adjoining construction •
- Identification of products and materials
- Fabrication and installation drawings •
- Diagrams showing locations of field-installations
- Shop fabricated manufacturing instructions •
- Templates and patterns •
- **Design calculations**
- Compliance with specified standards
- Seal and signature of professional engineer if required •
- Additional requirements as specified in the contract, contract technical requirements, or contract drawings.

[CompanyName] extends contract specifications to include customer approved shop drawings.

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ALLOWANCES AND UNIT PRICES SUBMITTALS

When customer contracts specify allowances and unit prices that the customer will select after the contract is awarded, the Project Manager prepares an allowance and unit price submittal for customer approval.

When a customer selects or approves allowances and unit prices, the customer indicates the allowance and unit price selection on the signed submission return.

[CompanyName] extends compliance to contract specifications to customer approved allowances and unit prices.

REQUEST FOR INFORMATION (RFI) SUBMITTALS

The Project Manager submits a request for additional information to the customer when errors are found or when required information is not contained in the contract, contract technical specifications, or contract drawings.

Should any number of contract technical specifications or contract drawings result in conflicting requirements, the Quality Manager submits a request for information to the customer to select the standard that applies.

[CompanyName] extends compliance to contract specifications to customer requests for information.

CHANGE ORDER SUBMITTALS

Contract requirements or contract technical specifications may require a change after the contract is awarded. The Project Manager submits the change order to the customer for approval, including any contract price adjustments.

When a customer approves a change order, the customer signs the submission return.

[CompanyName] extends contract specifications to include customer approved change orders.

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WEATHER-SPECIFIC PLANS - REQUIRED SUBMITTALS

A detailed Hot Weather Plan and Cold Weather Plan shall be submitted as part of the preconstruction submittals in accordance with the project specification. These plans shall describe:

- Materials, equipment, and methods for preventing excessive temperature gain, evaporation, or freezing
- Control measures for aggregate temperature and moisture
- Procedures for heating, insulation, fogging, windbreaks, and temperature monitoring

Plans must demonstrate conformance with ACI 305R (hot) and ACI 306R (cold) and shall be approved by the Contracting Officer prior to commencement of applicable work. Implementation shall be logged daily in the Daily Quality Control Report.

MIX DESIGN - REQUIRED SUBMITTALS

All concrete mix designs shall be submitted for approval no later than 60 days prior to the scheduled start of concrete placement, as required by the contract specifications. Each submittal shall include:

- A full list of materials including cement type, brand, source, and content
- Supplementary cementitious materials and admixtures
- Water-cementitious material ratio data and trial batch strength test results

In lieu of trial batches, the Contractor may submit:

- Previously approved mix designs used within the last twelve (12) months, accompanied by material test data not older than six (6) months, or
- An MnDOT mix design known to perform well under similar project conditions.
- All mix designs and supporting documentation must be submitted for review and approval by the Contracting Officer.

H. PROJECT QUALITY STANDARDS AND SPECIFICATIONS

Inspections and tests assess conformance to project quality specifications. Clearly defined specifications are essential for an effective inspection and test plan.

[CompanyName] personnel and subcontractors and suppliers are accountable for compliance to standards-based written specifications.

To achieve expectations reliably and consistently, specifications are clearly spelled out, not only for results but also for processes. Specifications apply to materials, work steps, qualified personnel and subcontractors and suppliers, safe work rules, and environmental work conditions.

Standards ensure that results are specified rather than left to discretionary practices.

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For each specific contract, The Senior Manager identifies supplemental technical specifications on the Trade-specific Quality Management Plan when they are not otherwise specified by the contract or the approved drawings. Superintendents have jobsite access to contract technical specifications for the construction activities they supervise.

All [CompanyName] activities comply with the contract technical specifications including:

- Mix Design Requirements
- Placement and Finishing
- Curing and Protection
- Testing and Inspection
- Weather-Specific Plans

MIX DESIGN REQUIREMENTS

The Quality Manager shall ensure concrete mix designs are submitted and approved in accordance with contract specifications. Each mix design shall:

- Be submitted at least 60 days before concrete placement.
- Include water-cementitious ratio, compressive strength target, and slump range not exceeding 4 inches unless otherwise approved.
- Be supported by trial batch data or historical data per ASTM C94/C94M.
- Be reviewed for compliance with exposure category F2 and durability requirements (e.g., air content 4–7%, w/cm ratio ≤ 0.45).

PLACEMENT AND FINISHING

Concrete placement shall follow **ACI 304R**, including control of concrete delivery timing, vibration, and segregation. The Superintendent shall document:

- Time from batching to placement.
- Vibration procedures and acceptance criteria.

Slab finishing shall comply with **ACI 117** flatness and levelness tolerances. Finishing tolerances shall be measured using approved devices as per the Finishing Plan and recorded.

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TESTING AND INSPECTION

All sampling and testing shall be performed by independent laboratories accredited under **ASTM C1077** (for concrete) and **ASTM E329** (for reinforcement testing). Testing frequency and reporting shall include:

- Slump and air content: Every 20 CY or batch
- Temperature: At each test point
- Strength: Cylinders tested at 7 and 28 days

The Quality Manager shall verify and log all test results and initiate Nonconformance Reports (NCRs) as required.

CONTRACT DRAWINGS

The Project Manager obtains customer supplied drawings that have been approved by local government regulators. Superintendents have jobsite access to approved architectural drawings for the construction they supervise.

All [CompanyName] activities comply with the drawing details and specifications cited in the drawings.

AS-BUILT RED-LINE DRAWINGS

As the project progresses, the Superintendent will mark the original design drawings to indicate as-built conditions including changes to specified materials, dimensions, locations, or other features.

MATERIAL SPECIFICATIONS

The Quality Manager ensures that all types of materials and equipment that affect quality are identified and controlled.

All [CompanyName] activities conform to the company quality standards.

COMPLIANCE WITH INDUSTRY CONCRETE STANDARDS

Codes that may apply to this project include those listed below.

Reference Standard No.	Reference Standard Title				
ACI 117	Specifications for Tolerances for Concrete Construction and Materials				
ACI 121R	Guide for Concrete Construction Quality Systems in Conformance with ISO 9001				
ACI 301	Specifications for Structural Concrete				
ACI 302.1R	Guide for Concrete Floor and Slab Construction				
ACI 304R	Guide for Measuring, Mixing, Transporting, and Placing Concrete				
ACI 305R	Guide to Hot Weather Concreting				
ACI 306R	Guide to Cold Weather Concreting				
ACI 308.1	Specification for Curing Concrete				
ASTM C94/C94M	Ready-Mixed Concrete				
ASTM C1077 / ASTM E329	Testing Agency Accreditation				

All project quality inspection and test plans shall include acceptance criteria and testing methods conforming to these references.

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J. CONCRETE INSPECTION AND TEST PLAN

The Quality Manager shall develop and maintain a Concrete Inspection and Test Plan (CITP) that ensures compliance with the contract and applicable industry standards. The plan outlines all inspection points, test frequencies, responsible parties, and acceptance criteria. All testing must be performed by qualified technicians and laboratories accredited under **ASTM C1077** and **ASTM E329**.

REQUIRED INSPECTIONS AND TESTS

All inspections and tests shall be conducted in accordance with the following standards:

Test	ASTM Standard	Frequency	Acceptance Criteria
Slump Test	C143/C143M	Each batch or every 20 CY	≤ 4 in. (unless otherwise approved); no segregation
Air Content	C231/C231M	Each batch or every 20 CY	4% – 7% (Exposure Class F2)
Concrete Temperature	C1064/C1064M	Each test point or 20 CY	≤ 95°F at placement
Compressive Strength	C39/C39M & C31/C31M	6 cylinders/set: 7-day (2), 28-day (2), reserve (2); 1 set/100 CY, min 5 sets total	≥ 4500 psi (slabs-on-ground)
Unit Weight / Density	C138/C138M & C567/C567M	Every 20 CY	Per design specifications
Concrete Sampling	С172/С172М	Per above test frequencies	Representative samples at discharge point
Core Testing (if needed)	C42/C42M	If strength is in doubt	Average ≥ 85% of f'c per ACI 301
Alkali-Aggregate Reactivity	C1293 or C1567	Prior to mix approval if required	≤ 0.10% expansion at 16 days

HOLD POINTS AND NOTIFICATIONS

Work must be stopped at defined *hold points* until inspections and/or approvals are completed by the Quality Manager or Contracting Officer. Hold points include:

- Pre-pour readiness inspections
- First article placements
- Placement of mass concrete or weather-sensitive concrete
- Concrete form removal based on strength

INSPECTION RECORDS AND LOGS

All inspections shall be recorded using the **Inspection and Test Plan and Log** form and must include:

- Inspection/Test type and location
- Date and time

- Sampling technician and lab ID
- Results and conformance status
- Any corrective action or NCR initiated

NONCONFORMANCE CRITERIA AND ACTION

A Nonconformance Report (NCR) shall be issued by the Quality Manager for any result that does not meet specified requirements, including:

Nanua

- Test failure (e.g., compressive strength below required f'c)
- Excessive slump or temperature
- Missing documentation or technician certification
- Improper lab procedures

NCRs must document:

- Description and impact of the deviation
- Disposition: repair, rework, replacement, or use-as-is (if approved)
- Required customer approvals for any deviation
- Corrective and preventive actions taken

TECHNICIAN AND LABORATORY DOCUMENTATION

Before testing begins, the following must be submitted and approved:

- ACI Concrete Field-Testing Technician Grade I certifications (or equivalent)
- Current laboratory accreditation certificates for ASTM C1077, C78, C1260, C231, C31, C39
- Equipment calibration certificates
- Sampling procedures and equipment descriptions

No testing shall be conducted by unapproved personnel or agencies.

COORDINATION AND OVERSIGHT

The Superintendent is responsible for ensuring work readiness before testing begins. The Quality Manager:

- Coordinates all inspection and testing activities
- Maintains and reviews inspection/test records
- Submits test results to the Contracting Officer and Concrete Supplier
- Initiates and tracks NCRs to closure

	Inspec	[CompanyName] tion and Test Plan and Log					
Project Number Project Name							
[ProjectNumber] [ProjectName] (All tests verified by Superintendent and/or QC Manager)							

-	ec Section mber and Title	Applicable Standard	Inspections & Tests Description	Test and Inspection Methods	Number required	Time Schedule/ Frequency	Inspection/ Test By	Sample Reqd. Yes/No	Unique characteristics of QC Service
3.2	Subgrade Preparation	ACI 301	Inspect subgrade condition and compaction	Visual, field density test if required	Each placement area	Superintendent / QC		No	Stable, moisture- conditioned base
3.3	Formwork Installation	ACI 301 / 117	Inspect alignment, cleanliness, release agent	Visual and measurement	Each pour	Superintendent / QC		No	Form tightness and chamfers at corners
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3.12.3.4	Air Content Testing	ASTM C231	Measure air content of fresh concrete	Pressure meter	Every 20 CY or each batch	Testing Technician		Yes	Target 4–7% for Exposure F2
3.12.3.4 3.12.3.2		ASTM C231 ASTM C1064		Pressure meter Thermometer	· ·			Yes	-

-	ec Section mber and Title	Applicable Standard	Inspections & Tests Description	Test and Inspection Methods	Number required	Time Schedule/ Frequency	Inspection/ Test By	Sample Reqd. Yes/No	Unique characteristics of QC Service
3.12.3.3	Compressive Strength Testing	ASTM C39	Test concrete cylinders at 7 and 28 days	Lab compression test	2 @ 7 days, 2 @ 28 days	Lab Technician		Yes	f'c ≥ 4500 psi for slabs
3.9	Surface Finishing Inspection	ACI 117 / 302.1R	Verify finish type, FF/FL tolerances	Visual and profiler/dipstick	Each slab placement	QC Inspector		No	As specified and broom/steel trowel as required
3.11	Curing Verification	ACI 308.1	Confirm curing method, timing, temperature	Observation, curing log	Daily for 3–7 days	QC / Superintendent		No	Start immediately after finishing
3.12.3.8	Core Testing (if required)	ASTM C42	Extract and test cores if strength is in doubt	Core drill and lab test	As needed	Independent Lab		Yes	Average ≥ 85% of design strength

core drill and lab test days As needed As need

[CompanyName] Testing & Inspection Results Log									
Project ID	Project Name		Date						
[ProjectNumber]	[ProjectName]								
Report ID /Date of Issue	Description of Inspection / Test	Report Date	Resu	1	Type of Corrective Action				
			Approved	Rejecte	d				
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K. WORK TASK QUALITY INSPECTIONS

[CompanyName] shall implement systematic quality inspections for each concrete-related work task in accordance with contract specifications and referenced industry standards. Each work task is subject to a series of inspections—before, during, and after execution—to verify compliance with:

- Contract Sections
- ACI 301, 304R, 305R, 306R
- ASTM standards including C31, C39, C143, C172, C231, and C94

Inspection results shall be documented and retained in the project quality records

IDENTIFICATION OF QUALITY INSPECTED WORK TASKS

A listing of project work tasks is included on the Quality Control work task List and included as an exhibit in this subsection.

REQUIRED INSPECTIONS FOR EACH WORK TASK

Each work task is subject to a series of inspections before, during, and at completion as described below. Results of inspections are recorded.

Inspection Type	Performed By	Purpose / Focus
Preparatory Inspection	Superintendent	Verify readiness (prior work complete, materials staged, field measurements verified)
Job-Ready Inspection	Superintendent or QC Inspector	Confirm conditions meet spec requirements; authorize work start
First Article Inspection	Superintendent or QC Inspector	Inspect the first representative portion of work (e.g., initial rebar mat, initial concrete pour)
In-Process Inspection	Superintendent	Monitor for conformance during placement, finishing, vibration
Completion Inspection	Quality Manager or QC Inspector	Verify all work has been completed to specifications prior to covering or advancing work
Post-Curing Inspection (as applicable)	Quality Manager	Verify final surface, durability, tolerance, curing logs

INSPECTION TOOLS AND METHODS

- Inspection checklists with heightened awareness items from pre-task meetings
- Measurement tools for tolerances (e.g., laser levels, flatness profilers)
- Cylinders for strength testing, sampled per ASTM C31/C172
- Concrete temperature gauges and air content meters

Inspections shall be logged using the standardized Work Task Inspection Form, which includes space for:

- Conformance checklists
- Inspector initials and sign-off

- Notes on nonconformances
- Quality ratings for each task

INSPECTION TRACEABILITY

All materials, forms, reinforcement, and concrete used in a work task must be traceable to:

- Delivery tickets (e.g., ASTM C94-compliant)
- Material certifications
- Lot numbers (where applicable)
- Daily Quality Control Reports

NONCONFORMANCE HANDLING

If a deficiency is discovered during any phase:

- The item shall be marked or flagged
- A Nonconformance Report (NCR) shall be initiated by the inspector
- Corrective actions must be verified by the Quality Manager before proceeding

Work may not continue in the affected area until the NCR is resolved or isolated per the Control the Continuation of Work policy.

DOCUMENTATION AND RECORDS

Each work task inspection will be recorded in:

- Work Task Inspection Forms
- Daily Quality Control Reports
- NCR Logs (if applicable)

All forms shall be maintained in the Project Field Office and available for review by the Contracting Officer.

DAILY QUALITY CONTROL REPORT

The Superintendent records a summary of daily work activities. The report will include:

- Schedule Activities Completed
- General description of work activities in progress.
- Problems encountered, actions taken, problems, and delays
- Meetings held, participants, and decisions made
- Subcontractor and Supplier and Company Crews on site
- Visitors and purpose
- General Remarks
- Improvement Ideas
- Weather conditions

[CompanyName] Quality Controlled Work Task List							
Project ID	Project ID Project Name Preparer Date						
[ProjectNumber] [ProjectName]							

Project Work Tasks / Contract Section	Quality Controlled work taskA series of inspections will be performed for the following work tasks including:• Work-ready Inspection• First Work Installation Inspection• Work In-process Inspection• Work Task Completion Inspection	Indicate if First Work Installation is expected	Method for identification of Approved Inspection Status (i.e., Inspection Checklist, Third-party Inspection, etc.)
	Subgrade preparation for slabs and footings		Subgrade and Vapor Barrier Inspection Form
	Formwork construction and release agent application		Formwork and Edge Preparation Inspection Form
	Reinforcement installation (bars, wire, supports, waterstops)		Waterstop and Joint Preparation Inspection Form
	Embedded item placement (anchors, dowels, sleeves)		Reinforcement and Embedded Items Inspection Form
	Concrete delivery and placement		Concrete Delivery and Fresh Property Testing Inspection Form
	Vibration and consolidation		Concrete Placement and Vibration Inspection Form
	Finishing operations		Surface Finishing and Tolerance Verification Inspection Form
	Curing and protection		Curing and Protection Inspection Form

[CompanyName] Concrete Delivery and Fresh Property Testing Work Task Inspection Form

Project: Id#	Project Name:	Subcontractor and Supplier Company
[ProjectNumber]	[ProjectName]	ID/Name:
Location/Area:	Reference drawing version #:	Crew ID/Name

Checkpoints/Inspection Items	Reference	Acceptance Criteria	Pass	Fail	N/A
Delivery ticket matches approved mix	ASTM C94 / SOP 01	Correct mix ID, slump, air content, and admixtures listed			
Time from batching is within limit	ASTM C94	Placed within 90 min or per approved plan			
Slump test performed	ASTM C143 / SOP 03	Measured, recorded, and within specified range			
Air content test performed	ASTM C231 / SOP 03	Measured, recorded, 4–7% for Exposure F2			
Concrete temperature measured	ASTM C1064	Within 50–95°F range at delivery			
Unit weight (density) tested (if required)	ASTM C138 / C567	Test performed if specified by spec or ITP			
Cylinders molded and labeled	ASTM C31	Set of 6, marked with location, mix, date, and ID			
Cylinders stored in curing box	ASTM C31	Curing temp maintained 60–80°F for 24±8 hours			
Field test results documented	SOP 03 / Field Log	Slump, air, temp, time, location recorded in log			
Field technician certified	ACI Grade I / ASTM C1077	ACI Grade I or equivalent certification on file			

Production Notes:

Reported Nonconformances:

10

Verification of Work Task Completion (sign and date)			
Inspector Name	Date of Inspection:		
Signature	Time:		
* On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used, and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.			

M. CONCRETE CRACK REPAIR PROCEDURES

CRACK REPAIR PROTOCOL

[CompanyName] will inspect, document, and repair all concrete cracks in accordance with the requirements of the contract specification and ACI guidelines. All cracks greater than 0.02 inches in width will be addressed prior to final acceptance of the structure.

CRACK INSPECTION AND DOCUMENTATION

- All concrete surfaces will be visually inspected after curing and again before final acceptance.
- Cracks will be measured using crack gauges or feeler gauges calibrated to 0.01-inch increments.
- A Crack Log will be maintained that includes:
 - Crack ID and location (drawing or photo reference)
 - Measured width and length
 - Time and environmental conditions observed
 - Preliminary assessment of crack type (plastic shrinkage, drying shrinkage, structural, settlement, etc.)
- Crack logs will be included in the project quality records and submitted with the final Quality Control Report.

REPAIR METHOD SELECTION

Repair method will depend on:

- Crack width and depth
- Whether movement is anticipated (temperature, loading, shrinkage)
- Structural impact

Repair methods may include:

- Routing and sealing (non-moving cracks ≥ 0.02")
- Epoxy injection (structural cracks)
- Polyurethane injection (wet or active leaks)
- Overlays or surface sealers (surface crazing or multiple fine cracks)
- Removal and replacement (for delaminated or crushed concrete)
- The proposed method must be submitted to the Contracting Officer for approval prior to implementation.

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CRACK REPAIR DOCUMENTATION

Each repair will be recorded and include:

• Crack ID and repair type

- Product(s) used and batch number
- Ambient conditions during repair
- Photos before, during, and after repair
- Signature of responsible QC personnel and date of repair

Repaired areas will be re-inspected after 7 days and again at 28 days to confirm performance and verify no propagation or movement has occurred.

Not a complete plan or Manual

[CompanyName] Crack Log			
Project ID	Project Name	Preparer	Date
ProjectNumber]	[ProjectName]		
Crack ID And Location (Drawing or Photo Reference)	Measured Width and Length	Time and Environmental Conditions Observed	Preliminary Assessment (Plastic Shrinkage, Drying Shrinkage, Structural, Settlement, Etc.)
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		des of	
		80.00	<u> </u>
		<u>e</u>	
	Soft		
	<u>o</u>		

[CompanyName] Crack Repair Record					
Crack ID and repair type		Project ID	Project Name		
	[ProjectI	Number]	[ProjectName]		
Signatu	ire of Res	ponsible QC Person	nel	Date of Repair	
				\sim	
Product(s) used and batch	number	Product(s) used a	nd batch number	Ambient conditions during repair	
				131	
	I	Photos Before, Durin	ng, and After Repai	r	
	×	ected e	eplan		

Q. APPENDIX: CONCRETE OPERATING PROCEDURES

TABLE OF CONTENTS

SOP 01 – Concrete Mix Design Review and Approval	. 85
SOP 02 – Pre-Pour Inspection and Readiness Checklist	. 88
SOP 03 – Concrete Sampling and Testing (Slump, Air, Cylinders)	. 90
SOP 04 – Hot and Cold Weather Concreting	. 93
SOP 05 – Concrete Placement and Vibration Procedures	. 96
SOP 06 – Concrete Curing Method Selection and Monitoring	
SOP 07 – Joint Treatment and Waterstop Installation	102
SOP 08 – Nonconformance Reporting and Corrective Actions	105
SOP 09 – Concrete Surface Finishing and Tolerance Verification	108
SOP 10 – Quality Records Management and Submittal Tracking	110

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SOP 02 – Pre-Pour Inspection and Readiness Checklist

1. Purpose

To ensure all conditions necessary for quality concrete placement are verified and documented prior to pourinG. This SOP standardizes pre-pour inspections to prevent defects, schedule delays, and rework.

2. Scope

This procedure applies to every concrete pour including:

- Slabs-on-grade
- Walls and footings
- Repairs and structural placements
- ade of Manua glan • Any element with formwork, reinforcement, or embedded items

3. References

- Section 03 30 00: •
 - 3.1–3.2.5 (Examination and Preparation),
 - 3.5 (Reinforcement), _
 - 3.7 (Placement)
- ACI 301 Structural Concrete Specifications
- ACI 304R Placement and Transportation
- ACI 305R / 306R Hot and Cold Weather Concreting

4. Responsibilities

Role	Responsibilities
Superintendent	Leads site inspection and verifies readiness
Quality Manager	Confirms checklist is completed and signs pour authorization
QC Inspector	Performs inspections, measurements, and photo documentation
Formwork and Rebar Leads	Confirm their scopes are ready for pour

5. Required Materials and Tools

- Pre-Pour Inspection Checklist
- Approved submittals (mix design, reinforcement, joint treatment, etc.)
- Measuring tape, laser level, and form alignment tools
- Weather meter or max-min thermometer
- Digital camera or mobile device for photos

6. Procedure

A. Administrative Readiness

- Approved mix design is on file and matches pour plan
- Pre-pour conference is completed (if required)
- Hot or Cold Weather Plan is activated if forecasted temperatures exceed spec limits
- Required submittals are approved: joint treatment, waterstop, curing, form release

anue

B. Site Condition Verification

- Subgrade is compacted, stable, and moisture-conditioned
- Vapor retarder is in place and sealed (if applicable)
- Formwork is clean, aligned, oiled, and braced per ACI 301
- Screed guides and elevation controls are set

C. Reinforcement and Embedded Items

- Rebar is correctly spaced, tied, and supported (per CRSI and shop drawings)
- Rebar is free from visible contamination (rust scale, mud, oil)
- Waterstops are positioned and secured
- Dowels, sleeves, and anchors are aligned, supported, and fixed
- Mechanical/electrical embeds are in the correct locations

D. Access, Utilities, and Equipment

- Safe access paths and platforms are provided for crew and inspector
- Pump or chute route is clear and ready
- Backup vibrator and pump are on-site and functional
- Water and power are available for curing

E. Environmental Controls

- Ambient temperature is documented
- Evaporation rate is calculated if temperatures exceed 80°F (per ACI 305R)
- Windbreaks, shading, or heaters are staged as needed
- Curing blankets or compounds are on hand

F. Test Station Prepared

- Testing equipment is calibrated (slump cone, thermometer, air meter)
- Field curing box is operational (60–80°F)
- Sampling location is designated and marked
- Field technician with ACI Grade I certification is assigned

7. Acceptance and Authorization

- QC Inspector completes the checklist
- Superintendent and Quality Manager verify all items and sign off
- No concrete shall be placed without full authorization
- Pour details are logged in the Daily Quality Control Report

8. Documentation

- Completed Pre-Pour Inspection Checklist
- Photos of rebar, waterstop, form alignment, and staged curing materials
- Weather and evaporation rate records
- Any punch list items resolved and re-inspected

All records are retained in the project Concrete Pour File and included in final closeout documentation.