

EVALUATION RESEARCH CORPORATION

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CONTROL NO. DF-001

COMANCHE PEAK RESPONSE TEAM

QUALITY INSTRUCTION FOR ISSUE-SPECIFIC ACTION PLAN ISAP VII.c

INSTRUCTION NO: QI-068

REVISION NO: 2

ISSUE DATE: 4/14/86

DOCUMENTATION REVIEW OF CEMENT GROUT

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Issue Coordinator

Approved by: E. C. Baiada Date: 4/10/86  
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Approved by: [Signature] Date: 4/10/86  
QA/QC Review Team Leader

## 1.0 PURPOSE

This procedure provides the methods and the accept/reject criteria for performing Documentation Review of Cement Grout.

## 2.0 APPLICABILITY

This procedure applies to the samples selected from the Cement Grout population which includes grout placements made in Unit 1, Unit 2, and Common areas that are safety related, construction complete, and QC accepted.

## 3.0 REFERENCES

- 3.1 CPP-009, "Performance of Reinspections and Documentation Reviews."
- 3.2 Description Memorandum QA/QC-RT-1162, Documentation Review of Cement Grout delineating documents used in development of procedures including specific sources for attributes and exclusions.

## 4.0 GENERAL

Documentation Reviews are to be performed and documented in accordance with established CPRT procedures and instructions. This procedure establishes the instructions, attributes, and accept/reject criteria to perform the Documentation Review of Cement Grout. Reference 3.1 addresses the method to perform, document, and process the results.

## 5.0 PROCEDURE

Using the information below, perform the documentation reviews of each sample selected and document the results on the checklist (Attachment 6.1). The Cement Grout Inspection Records to be reviewed are located in the TUGCO Records Vault or the Brown & Root Interim Records Vault. If the records are not located Inspector shall contact the QA/QC Discipline Engineer. The Inspector shall review the Grout Placement package to determine which attributes are applicable. Where no inspection verification exists for applicable attributes, DRs will be initiated.

### 1. Preplacement

Verify that the following preplacement requirements were satisfactorily noted as accepted on the checklist.

5.0 PROCEDURE (Cont'd)

1. Preplacement (Cont'd)

- a. Surfaces to receive grout are free of oil, grease, loose concrete, and laitance. (This includes the underside of baseplates.)
- b. Area to be grouted is vibration free.
- c. Attribute Deleted
- d. Concrete surfaces to be grouted shall be kept wet continuously and excess water removed prior to placement or a bonding agent is applied to the concrete surface.

2. Placement

Verify that the following placement requirements were satisfactorily noted as accepted on the checklist.

- a. Grout proportions, mix time, and mix temperature are per requirements.
- b. Grout is placed continuously and properly consolidated.
- c. Surface temperature of the area to be grouted meets requirements.

3. Post-Placement

Verify that the following post-placement requirements were satisfactorily noted as accepted on the checklist for curing and on the test results data sheet (form 11.1-44 or similar form) for compressive strength.

- a. Grout Surfaces protected from premature drying. (If moist curing was used, verify it was maintained for seven days.)
- b. Compressive strength test cubes meet 28 day compressive strength requirement of 6,000 PSI. (5,000 PSI is acceptable for base plates with a least dimension of 36" or less, non-vibratory base plate, or shimmed baseplate utilizing a minimum 45° slope from the edge of the baseplate. Verify it was noted on the test results data sheet if this criteria was used to accept the test results. Dry Pack does not require compressive strength test.)

## 5.0 PROCEDURE (Cont'd)

### 4. Inspector and Test Personnel Certification

Verify that each inspector who signed any item on an Inspection Report was certified as follows:

- a. The certification was valid at the time of inspection, i.e., the date that the inspector initialed/signed must be on or after his certification date and prior to his certification expiration date.
- b. The inspector was certified to the procedure used at the time of signature.
  - ° If this attribute is rejected determine if the person that signed as QC inspector was ever certified to the procedure used. If the inspector was ever certified to the procedure record the time period of certification, otherwise state in the remarks column that the person was never certified.

NOTES: Inspector's name shall be recorded on the checklist when a deviation occurs.

If any initials and/or signatures are illegible, an attempt shall be made to determine the inspector's name by checking the signature cards located in the Permanent Plant Records Vault. If identification cannot be made the inspector shall reject this attribute.

See Attachment 6.2 for a list of certification documents to be reviewed to determine certification.

## 6.0 ATTACHMENTS

- 6.1 Comanche Peak Response Team Checklist
- 6.2 List of Certification Documents

COMANCHE PEAK RESPONSE TEAM  
CHECKLIST

Attachment 6.1  
QI-068  
Rev. 2

POPULATION DESC CEMENT GROUT	VERIFICATION PKG NO. R-S-GRTC-	PAGE 1 OF <u>1</u>		
QUALITY INSTRUCTION QI-068	<input type="checkbox"/> REINSPECTION <input checked="" type="checkbox"/> DOCUMENTATION REVIEW	<input type="checkbox"/> UNIT 1 <input type="checkbox"/> UNIT 2 <input type="checkbox"/> COMMON		
EQUIPMENT MARK/TAG NO.				
ATTRIBUTE	VERIFICATION			REMARKS
	ACCEPT	REJECT	DATE	
1. PREPLACEMENT/PLACEMENT				
a. Cleanliness				
b. Area Free of Vibration				
c. Attribute Deleted				
d. Prewetting				
2. PLACEMENT				
a. Grout Proportions, Mix Time & Temperature				
b. Placing and Consolidation				
c. Surface Temperature				
3. POST-PLACEMENT				
a. Curing				
b. Compressive Strength Test				
4. PERSONNEL CERTIFICATION				
a. Valid Certification				
b. Certified to Procedures				
PREPARED BY: _____			APPROVED BY: _____	
DISCIPLINE ENGR. _____ DATE _____			LEAD DISCIPLINE ENGR. _____ DATE _____	
INSPECTED BY: _____			APPROVED BY: _____	
INSPECTOR _____ DATE _____			LEAD INSPECTOR _____ DATE _____	

CERTIFICATION DOCUMENTS

R.W. Hunt Personnel

R. W. Hunt Certificate, that states inspector is certified to Hunt Procedure EI028.

Brown & Root Personnel

Brown & Root Certification Summary Record.

TUGCO Personnel

TUGCO Inspection Certification Form, that states certification is for the appropriate TUGCO procedure for task performed.