

NTTA Projects	Original Issue Date: 04/28/2011	VQ-01
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Title: Precast Manufacturing Plant Visual Quality Inspection		

1.0 PURPOSE:

The purpose of this procedure is to describe the Visual Quality inspection, documentation and reporting required for precast manufacturing plant inspection when NTTA Special Specification 850 is a contractual requirement.

2.0 RESPONSIBILITIES

2.1 Plant Visual Quality Manager/Inspector (PVQMI) - shall be a qualified individual with experience in concrete construction on transportation or architectural building projects, knowledgeable of heavy construction materials and techniques, in particular concrete materials and concrete work with aesthetic requirements and successfully complete visual quality training. Although, not required but beneficial, if the PVQMI possesses field testing certification from the Precast/Prestressed Concrete Institute (PCI), American Concrete Institute (ACI) or allied groups. The PVQMI shall:

- Serve as the primary point-of-contact with precast concrete product supplier and is responsible for daily visual quality inspection and documentation of manufactured precast concrete products, including architectural precast, structural wall panels and trim units.
- Be responsible for performing, documenting and submitting plant visual quality inspections daily on form (VQ-01-F1) and that the reports are technically accurate.
- Be responsible for the review of precast concrete products to ensure cast concrete color is within the prescribed approved tolerance.
- Be responsible for conducting forensic investigation activities to help improve processes for casting, curing, repair of precast concrete related to color, quality of surface finishes and other appearance characteristics, should this be necessary.
- Review all Visual Quality nonconforming conditions to determine if an NCR should be created.
- Open new NCR when required and Approve / Reject all Visual Quality NCR in accordance with VQ-03.

3.0 SCOPE/APPLICABILITY:

- All NTTA projects shall comply with the NTTA Design Guidelines (DG) unless otherwise directed by the NTTA.
- All NTTA projects shall comply with NTTA Special Specification Item 850 Gray Concrete Color and Finish.

4.0 REFERENCES:

- NTTA Design Guidelines Manual
 - NTTA Special Specification 850 for Gray Concrete Color and Finish
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- DM-02 Project Delivery Records Management Requirements
- VQ-03 Visual Quality Control of Nonconforming Elements

5.0 DEFINITIONS & ACRONYMS:

- N/A

6.0 PROCEDURES:

- 6.1 All concrete pre-cast plants supplying structural concrete that are required to meet NTTA Special Specification Item 850 Gray Concrete Color and Finish will be subject to inspection in advance of the shipment date and performed in a timely manner allowing for on time shipment of concrete for use in structures. This inspection is to ensure that the plant is complying with quality requirements for production and delivery of uniform product in terms of color and formed surface characteristics.
- 6.2 In advance of scheduled concrete placement, a visual quality pre-cast plant inspection shall be scheduled and performed.
- 6.3 The PVQMI will conduct required visual quality checks and inspections of the concrete pre-cast plant to ensure conformance with plans, specifications and approved mockup. In addition, to the completion of the visual quality precast plant inspection form, the visual quality check and/or inspection will be verified as having been accomplished by submitting a completed Form (VQ-01-F1).
- 6.4 In accordance with VQ-03 procedure, any corrective action deemed necessary to bring pre-cast plant into conformance with plans, specifications and approved mockup will need to be satisfactorily complete and approved by the PVQMI prior to shipment of concrete pre-cast product and recorded on form (VQ-01-F1).

7 REGULATORY REQUIREMENTS:

N/A

8 RELATED BOARD POLICY:

N/A

9 COMPONENT DOCUMENTS:

- VQ-01-F1 Precast Manufacturing Plant Visual Quality Inspection Report

10 FLOWCHART:

N/A

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11 REVISION HISTORY:

Revision	Revised by:	Date Issued	DRN NO.	Reason for Revision
0	Bryan Dennis	04/28/2011	10257	Original Release
1	Bryan Dennis	10/10/2011	10338 & 10363	Replaced QM-09 with VQ-03 in this procedure. QM-09 became obsolete and was split into two separate procedures, VQ-03 and CON-07. Updated 1.0 Purpose, 2.0 Responsibilities, and 6.0 Procedures. Deleted irrelevant references from 4.0 References. Changed "PMO" to "PD", and included "Inter Local Agreement" in Scope/Applicability section.
2	Bryan Dennis	09/19/2016	10605	Change 850.1 to 850. This change would eliminate the need to update this procedure every time a newer version of 850 is issued.
3	Bryan Dennis	04/3/2017	10641	Updated title of SS 850 to reflect spec title revision.
4	Tony Lucido	07/09/2025	11127	Updated Titles and Procedures.