
PROCEDURE: REQUEST FOR EXEMPTING MORTAR SAMPLING AND TESTING

Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Forms](#) or [DSA Publications](#) webpages.

PURPOSE

This procedure (PR) describes required steps to exempt mortar sampling and testing in accordance with the second exception to the California Building Code (CBC), Section 2105A.3 for projects under DSA jurisdiction.

BACKGROUND

Factory pre-blended mortar is becoming more common in masonry construction. Pre-blending provides improved quality control and is consistent with accepted industry standards, such as the American Society of Testing and Materials International (ASTM) C270 and ASTM C1714. The field-sampling, testing, packaging, and traceability of ingredients utilized in pre-blended dry mortar mix differ from job-site mixed mortars. Testing and special inspection of masonry construction shall be in accordance with CBC Section 1705A.4, Chapter 21A, and referenced standards.

SCOPE

This procedure outlines the requirements for submitting a request to exempt mortar sampling and testing in masonry construction for projects submitted to DSA. For other exemptions to DSA masonry special inspection and testing, see *DSA IR 21-1: Non-bearing Non-shear Masonry Walls*.

PROCEDURE

1. PROCESS STEPS FOR EXEMPTING MORTAR SAMPLING AND TESTING

1.1 Prior to DSA project approval

If the design professional determines through consultation with the school district that the contractor will request exempting mortar sampling and testing, the following shall occur:

1.1.1 Indicate in the appendix of form *DSA 103: List of Required Structural Tests and Special Inspections* that pre-blended mortar will be an exempted item.

1.1.2 In accordance with requirements associated with exempting structural tests identified on form DSA 103, clearly designate on project construction documents submitted to DSA for review and approval that pre-blended mortar will be utilized and on which masonry walls.

1.1.3 Requirements when specifying a valid evaluation report

If there is a valid evaluation report (in accordance with *IR A-5: Acceptance of Products, Materials, and Evaluation Reports*) for the pre-blended mortar, specify the following in the construction documents:

1.1.3.1 The applicable evaluation report number.

1.1.3.2 Documentation in accordance with section 2.3 below shall be provided to and accepted by individuals noted in section 1.2.1 below.

1.1.4 Requirements when no valid evaluation report is specified

If no valid evaluation report is specified, specify the following in the construction documents:

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1.1.4.1 Documentation in accordance with sections 2.1 and 2.2 below shall be submitted to DSA for exemption request review and approval in accordance with section 1.2 of this PR.

1.1.4.2 Documentation in accordance with section 2.3 of this PR shall be provided to and accepted by individuals noted in section 1.2.2 of this PR.

1.2 After DSA project approval

NOTE: If prior DSA approval in accordance with section 1.1 above did not occur, a construction change document (CCD) to modify the form DSA 103 and applicable construction documents shall be submitted to DSA for review and approval in accordance with *IR A-6: Construction Change Document Submittal and Approval Process*. Once approved, the design professional shall replace the previous version with the revised DSA 103 in DSAbox.

1.2.1 Requirements when specifying a valid evaluation report

If a valid evaluation report was specified on the DSA-approved construction documents in accordance with section 1.1 above, the following shall occur:

1.2.1.1 The evaluation report and delivery ticket described in section 2.3 below shall be provided to and accepted by the project inspector (PI) and DSA certified masonry special inspector and/or laboratory of record (LOR).

1.2.1.2 The PI shall include in their job file the evaluation report and delivery ticket described in section 2.1.3 below.

1.2.2 Requirements when no valid evaluation report is specified

If no valid evaluation report was specified on the DSA-approved construction documents in accordance with section 1.1 above, the following shall occur:

1.2.3 The contractor shall provide items listed in sections 2.1 and 2.2 below to the design professional in general responsible charge for review and acceptance. A conformance report by the LOR engineering manager shall be provided to the design professional in general responsible charge.

1.2.4 The design professional in general responsible charge or delegated design professional shall indicate their acceptance of the contractor's submittal and shall submit that, along with the conformance report by the LOR engineering manager (via Bluebeam Studio in accordance with *PR 18-04: Electronic Plan Review for Design Professionals of Record Using Bluebeam*) to request approval from DSA to waive mortar sampling and testing. DSA will not review documents lacking either the design professional's notation of acceptance or conformance report by the LOR engineering manager.

1.2.5 Upon exemption request approval by DSA, DSA will upload the exemption request documentation to DSAbox.

1.2.6 The design professional in responsible charge shall distribute copies of the DSA-approved documents to the contractor, PI, LOR, DSA certified masonry special inspector, and school district. The approved documents and delivery ticket described in section 2.3 below shall be provided to and accepted by the PI and DSA certified masonry special inspector and/or laboratory of record (LOR).

1.2.7 The PI shall include in their job file the DSA exemption request approval documents and delivery ticket described in section 2.3 below.

Pre-blended mortar shall not be used on the project until the acceptance/approval described above occurs. If mortar quality appears questionable as construction progresses, mortar sampling and testing may be required as determined by the design professional or DSA field staff.

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2. MORTAR SAMPLING AND TESTING EXEMPTION DOCUMENTATION

NOTE: If a valid evaluation report is provided and accepted by DSA, documentation identified in sections 2.1 and 2.2 below is not required.

2.1 Manufacturer or producer supplied certificate of compliance per ASTM C1714

Certificates of compliance from the manufacturer or producer per ASTM C1714 shall include the following information:

2.1.1 Identification of the manufacturer or producer issuing the certificate of compliance.

2.1.2 Compliance with project specific requirements, with reference to the DSA application number and applicable DSA-approved construction documents associated with mortar (e.g., project specification section[s]).

2.1.3 Date.

2.1.4 Contractor address.

2.1.5 List of mortar constituent products for Type S or M.

2.1.6 Packaging information, including any labeling.

2.1.7 Indicates whether the material complies with the proportion or property requirements of ASTM C270.

2.1.8 Signature of the producer's authorized representative.

2.2 Certification of materials

Material certificates shall include the following information:

2.2.1 Cement/lime mill test reports:

2.2.1.1 Indicate cement complies with ASTM C150.

2.2.1.2 Indicate lime complies with ASTM C207.

2.2.2 Aggregate gradation certificate of compliance:

2.2.2.1 Indicate aggregate complies with ASTM C144.

2.2.3 Quality control test report:

2.2.3.1 Dated within 12 months prior to the exemption request submittal.

2.2.3.2 Required tests per ASTM C 1714 and indicating the following:

2.2.3.2.1 Compressive strength complies with ASTM C109.

Exception: This is not required if the mortar is based on proportion Table 2 in ASTM C270.

2.2.3.2.2 Air content complies with ASTM C185.

2.2.3.2.3 Water retention complies with ASTM C1506.

2.3 Delivery ticket information

The delivery ticket for the pre-blended mortar shall include the following information:

2.3.1 Serial number of the ticket.

2.3.2 Truck or silo number for unpackaged mortar.

2.3.3 Name of purchaser.

2.3.4 Job name, location, and DSA application A#.

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2.3.5 Mortar type.

2.3.6 Quantity of mortar delivered.

2.3.7 Signature or initials of purchaser.

ADDITIONAL RESOURCES:

- ASTM C270 Standard Specification for Mortar for Unit Masonry
- ASTM C1714 / C1714 M Standard Specification for Preblended Dry Mortar Mix for Unit Masonry

REFERENCES:

California Code of Regulations (CCR) Title 24
Part 2: California Building Code (CBC), Sections 2105A.3

A DSA Procedure documents a process or series of steps that DSA staff and/or external stakeholders must complete in order to fulfill one or more administrative requirements of DSA's review and approval of plans and specifications and construction oversight programs.