

# PROJECT SPECIFICATION FOR QUALITY ASSURANCE OBSERVATION

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*This document outlines the requirements needed to achieve proper Quality Assurance Observation. These requirements are to be understood as a minimal guideline specific to the processes and protocols that shall be followed. Said requirements shall not be construed to supersede or replace contract documents, specific installation requirements, or manufacturers and product recommendations.*

## SECTION 01410 – QUALITY ASSURANCE OBSERVATION

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Sections, apply to this Section.

#### 1.2 RESPONSIBILITY

- A. Owner shall engage an independent third party Certified Quality Assurance agency, whose onsite personnel meet the qualifications to perform related services described throughout this Section.

#### 1.3 SUMMARY

- A. This Section includes administrative and procedural requirements for Quality Assurance Observation (QAO).
  - 1. Certified Quality Assurance Practitioner (CQAP).
  - 2. Kick-off Meeting.
  - 3. Pre-Installation Conferences.
  - 4. Quality Assurance Observation Ready Orientation Training.
  - 5. Frequency of Quality Assurance Observation Verification.
  - 6. Quality Assurance Observation Audit.
  - 7. Quality Assurance Observation Documentation and Reporting.
- B. Quality Assurance Observation services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.
- C. Related Sections include those assemblies that are identified as high risk assemblies and could allow water, air, and sound infiltration through the building envelope or between party walls. Owner may also include Quality Assurance Observation on those Sections related to earthwork and compaction at building foundations and walk-ways.
  - 1. Division 1 Section “Cutting and Patching” for repair and restoration of construction disturbed by testing and inspection activities.
  - 2. Division 2 “Site Construction”.
  - 3. Division 6 “Wood and Plastics”.
  - 4. Division 7 “Thermal and Moisture Protection”.
  - 5. Division 8 “Doors and Windows”.
  - 6. Division 9 “Finishes” (i.e. Stucco / EIFS / Cladding, et al)

#### 1.4 DEFINITIONS

- A. Quality Assurance Observation (QAO) – The act of verifying, at pre-determined incremental stages, that the condition of a particular assembly meets or exceeds the distinctive characteristics, properties, or attributes that have been specified and defined by the contract

documents and manufacturer's requirements.

- B. Certified Quality Assurance Observation Practitioner (CQAP) – A designation given to an individual who has successfully completed a 2-day training course and demonstrated their proficiency by passing a written examination.
- C. Kick-off Meeting – A meeting conducted by an independent third party Certified Quality Assurance Practitioner (CQAP) with the Owner, Lender, Insurer, Architect, Engineers, General Contractor, Manufacturers Representatives, Subcontractors, and a representative from the local authority having jurisdiction over the project to discuss the Purpose, Goals, Objectives, Expectations and Assumptions, Qualifications, and other administrative and procedural requirements necessary to effectively verify and document the Quality Assurance Observation process.
- D. Pre-Installation Conferences – A meeting held between the Certified Quality Assurance Practitioner, General Contractor, manufacturer's representative, subcontractor, foreman, and other related trades people that are a part of, involved with, or privy to information that will aid in a proper installation of a particular assembly.
- E. Quality Assurance Observation Ready Orientation Training (QAO Ready) – A one hour training course in Quality Assurance Observation for all craftsmen. Training is specific to each assembly where Quality Assurance Observation verification is required.
- F. Quality Assurance Observation Audit (QAO Audit) – A thorough review of Quality Assurance Observation practices performed by an independent third party Certified Quality Assurance Practitioner.
- G. High Risk Assembly – “High Risk” in this Section shall mean those assemblies that are most commonly identified in a typical construction defect claim. These include assemblies that could allow moisture or water, air, and sound infiltration through the building envelope or between party walls. Said assemblies can also include those Sections related to earthwork and compaction at building foundations and walk-ways.
- H. Low Risk Assembly – “Low Risk” in this Section shall mean those assemblies that are not typically identified in a typical construction defect claim. This shall not be implied that other assemblies identified outside of “high risk” are not important, as these too should have a Quality Assurance Observation verification program, but that they are not commonly listed in a construction defect claim.
- I. Action Item – A specific assembly item identified by a Certified Quality Assurance Practitioner found to be non-compliant with the contract documents and/or manufacturer's product requirements. Said “Action Items” shall be included on an Action Item Log and reviewed on a periodic basis to make certain necessary protocols are followed to remedy said Action Item.
- J. Observation Item – A specific assembly item that may, or may not be, either non-compliant or “work in progress”. Said “Observation Items” shall be included on an Action Item Log and reviewed periodically to make certain that either progress is being made or necessary steps are followed to remedy said Observation Item.

## 1.5 SUBMITTALS

- A. **Qualifications:** An independent third party Certified Quality Assurance Practitioner or agency, or equal. Include proof of qualifications and certification in the form of a resume on the designated person, or persons, who will be performing Quality Assurance Observation. Said person, or persons, shall also show proof of their certification as a Certified Quality Assurance Practitioner (CQAP), or equal, from an agency that provides Quality Assurance Observation Certification training.
- B. **Schedule of Quality Assurance Observation (QAO) Verifications:** Prepare in tabular form related verifications that are to occur and include the following:
1. Specification Section number and title. These Sections shall include but are not limited to:
    - a. Earthwork compaction (if required).
    - b. Foundation waterproofing.
    - c. Building wrap &/or air barrier.
    - d. Exterior cladding.
    - e. Windows & Doors.
    - f. Flashings.
    - g. Exterior sealants.
    - h. Roofing.
    - i. Interior vapor barriers.
    - j. STC rated walls.
    - k. Waterproofing decks, flatwork, walls, low roofs, et al.
  2. Description of QAO verification process.
  3. Identification of applicable standards that include:
    - a. Substrate requirements.
    - b. Manufacturer's recommendations.
    - c. Application &/or attachment requirements.
    - d. Temperature requirements.
    - e. Cure period.
    - f. Protection requirements.
    - g. Post installation requirements.
  4. Entity responsible for performing QAO verifications.
  5. Identification of person(s) who will be performing QAO verifications.
  6. Frequency of verifications required for each assembly.
  7. Requirements for any special inspection or unique characteristics.
- C. **Schedule of QAO Ready Orientation Training:** Prepare in tabular form those QAO Ready Orientation Training sessions for all craftsmen who will perform work on those designated sections requiring QAO. Schedule to include the following:
1. Specification Section number and title. These Sections shall include but not limited to:
    - a. Earthwork compaction (if required).
    - b. Foundation waterproofing.
    - c. Building wrap &/or air barrier.
    - d. Exterior cladding.
    - e. Windows & Doors.
    - f. Flashings.
    - g. Exterior sealants.

- h. Roofing.
    - i. Interior vapor barriers.
    - j. STC rated walls.
    - k. Waterproofing decks, flatwork, walls, roofs, et al.
  - 2. Project title.
  - 3. Date training is to occur.
  - 4. Entity responsible for QAO Ready Orientation Training.
  - 5. Description of training to occur for each assembly.
  
- D. **QAO Ready Orientation Training Verification:** Prepare and submit craftsmen rosters of those certain craftsmen who will attend QAO Ready Orientation and be performing work on those designated sections requiring QAO.
  - 1. Roster shall include:
    - a. Date training occurred.
    - b. Name of company.
    - c. Name of craftsman.
    - d. Trade (i.e. type of craftsmen).
    - e. Entity who conducted training.
    - f. Name of Certified Quality Assurance Practitioner who conducted training.
  - 2. Each craftsman shall be given a QAO Ready hard hat sticker after completing QAO Ready Orientation. Said sticker shall be affixed to their hard hat in a manner and location that can be easily identified.
  - 3. No Craftsmen shall be allowed on-site who has not completed QAO Ready Orientation Training within one week of arriving at the site.
  
- E. **Reports:** Prepare and submit reports on those assemblies required to have Quality Assurance Observation. Reports shall be produced by an independent third party Certified Quality Assurance Practitioner (CQAP).
  - 1. Field Observation Reports (FOR): Shall be conducted daily and include the following:
    - a. Project Title.
    - b. Client name.
    - c. Date of issue.
    - d. Entity conducting daily verifications.
    - e. Name of individual making verification.
    - f. Type of verification being conducted.
    - g. Temperature and weather conditions at time of verification.
    - h. General description of verifications that were made at time of verification.
    - i. Include photographs of work performed at time of verification.
    - j. Report any non-compliant issues that in the professional opinion of the CQAP do not comply with specifications or manufacturer's requirements.
  - 2. Progress Update Reports: Shall be submitted monthly and include the following:
    - a. Executive Summary – provides a general summary of work activity that occurred.
    - b. Quality Assurance Observation – broken down by CSI format providing a brief narrative on verifications that occurred over the previous month's activities.

- c. Open Issues / Concerns / Recommendations – lists any and all issues that in the professional opinion of the CQAP need to be addressed.
  - d. Action Item Log – a log generated as a result of non-compliant issues being found during the previous months activities.
  - e. Construction Photo Index – a series of properly labeled photos of each of the assemblies as they were captured during the previous months activities.
3. Quality Assurance Observation Audit (QAO Audit): Shall be prepared and submitted monthly by an independent Third Party Certified Quality Assurance Practitioner, or equal, and shall include the following:
- a. Project Title.
  - b. Client name.
  - c. Date of issue.
  - d. Entity conducting QAO audit.
  - e. Name of individual making audit.
  - f. Evaluation of the following:
    - i. Daily FOR's.
    - ii. Weekly QAO Meetings & Logs.
    - iii. Monthly QAO Reporting & Meeting.
    - iv. General QA Verifications.
    - v. Special QAO Reporting (as needed).
    - vi. Special QAO Meetings (as needed).
    - vii. Documentation & Photo records.
  - g. Evaluations shall be scored on a scale from 1 to 5:
    - i. na = Not applicable for current evaluation.
    - ii. 1 = Meets none of the QAO Program Requirements.
    - iii. 2 = Meets some QAO Program Requirements with major improvements needed.
    - iv. 3 = Meets some QAO Program Requirements with minor improvements needed.
    - v. 4 = Meets most QAO Program Requirements.
    - vi. 5 = Meets all QAO Program Requirements.
    - vii. In order for a project to meet the "QAO Certified" designation, a comprehensive score of "4" or greater shall be achieved. On any given item that receives a "3" or less, the project team will be allowed a one month cure period within which all items scoring "3" or less can be corrected, cured, modified, or improved to achieve a higher score.

## 1.6 ADMINISTRATION

- A. Meetings: An independent third party Certified Quality Assurance Practitioner (CQAP), or equal, shall conduct all meetings listed below with the appropriate parties present so as to assure proper coordination, administration, and communication between Owner, Architect, Contractor, and other related parties to assure quality installations.
1. **Kick-off Meeting:** A meeting conducted by an independent third party Certified Quality Assurance Practitioner (CQAP) with the Owner, Lender, Insurer, Architect, Engineers, General Contractor, Manufacturers Representatives, Subcontractors, and a representative from the local authority having jurisdiction over the project to discuss the Purpose, Goals, Objectives, Expectations and Assumptions, Qualifications, and other administrative and procedural

requirements necessary to effectively verify and document the Quality Assurance Observation process.

2. **Pre-Installation Conferences:** A meeting held between the Certified Quality Assurance Practitioner, General Contractor, manufacturer's representative, subcontractor, foreman, and other related trades people that are a part of, involved with, or privy to information that will aid in a proper installation of a particular assembly.
3. **Weekly QAO Meeting:** A meeting conducted by the Certified Quality Assurance Practitioner with the Architect and Contractor to review, discuss, and resolve non-compliant issues that have been identified by the CQAP.
4. **Monthly Progress Update Meeting:** A meeting held one time per month with the Owner, Architect, Contractor, and Certified Quality Assurance Observation Practitioner to review the Progress Update Report and discuss the past months activities, outstanding issues, and upcoming scopes of work.

## PART 2 – PRODUCTS (Not Used)

## PART 3 – EXECUTION

### 3.1 ACCEPTABLE VERIFICATION AGENCIES

- A. OAC Management Incorporated  
P.O. Box 2399  
Edwards, Colorado 81632  
(970) 926-0290 office  
(970) 926-0490 fax
- B. Or equal

### 3.2 ACTION ITEM LOG

- A. Prepare a record of those items that have been found to be non-compliant. The following shall be included:
  1. Issue number.
  2. Issue description.
  3. Action/Observation Item.
  4. Issue date.
  5. Issue closed with explanation on how it was closed.
  6. Additional Comments.
- B. Action Item Log shall be maintained and kept on the Project premise. Access shall be granted to Owner, Architect, and Contractor at all times and issued to the project team weekly.

### 3.3 DOCUMENTATION

- A. Records: A complete record of all documents created throughout the Quality Assurance Observation process shall be kept. Documentation shall include:
1. Kick-off Meeting Minutes.
  2. Pre-installation Conference Minutes.
  3. QAO Ready Orientation Training Rosters.
  4. Field Observation Reports.
  5. Weekly QAO Meeting Minutes
  6. Action Item Logs.
  7. Monthly Progress Updates.
  8. Photo library.
- B. An electronic copy of all records shall be provided to the Owner and Architect when the project is complete.

END OF SECTION 01410