

SECTION 07 08 00

COMMISSIONING OF THERMAL AND MOISTURE PROTECTION

PART 1 – GENERAL

1.1 PURPOSE

- A. This guideline is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. PSP is to apply the principles of this section such that the University of Texas at Arlington (UTA) may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be approved by UTA and may require justification through Life Cycle Cost (LCC) analysis and submitted to UTA for approval.

1.2 LESSONS LEARNED AND DESIGN CONSIDERATIONS

- A. **UTA may elect to hire Third Party for Envelope Consulting for commissioning and as a design consultant.**

1.3 DESCRIPTION

- A. The requirements of this Section apply to all sections of Division 07.
- B. This project will have selected building systems commissioned. The complete list of equipment and systems to be commissioned is specified in the General Commissioning Requirements and Building Enclosure Commissioning sections of Division 01. The commissioning process, which the Contractor is responsible to execute, is defined in the General Commissioning Requirements section.

1.4 RELATED WORK

- A. General Commissioning Requirements in Division 01.
- B. Building Enclosure Commissioning in Division 01.

1.5 SUMMARY

- A. This Section includes requirements for commissioning the exterior closure, related subsystems and related equipment. This Section supplements the general requirements specified in Division 01.
- B. Refer to Division 01 for more details regarding commissioning processes and procedures, as well as roles and responsibilities for all Commissioning Team members.

1.6 DEFINITIONS

- A. Refer to General Commissioning Requirements section in Division 01 for definitions.
- B. Refer to Building Enclosure Commissioning sections in Division 01 for procedures.

1.7 COMMISSIONED SYSTEMS

- A. Commissioning of a system or systems specified in Division 07 is part of the construction process. Documentation and testing of these systems, as well as training of the Owner's personnel in accordance with the requirements of Divisions 01 and 07, is required in cooperation with the Owner and the BECxC.

1.8 SUBMITTALS

- A. The exterior envelope commissioning process requires review of selected Submittals that pertain to the systems to be commissioned.
- B. The commissioning process requires Submittal review simultaneously with Architectural/engineering review. The following list, including but not limited to the following, will be reviewed.
 - 1. 03 30 50 – Underslab Vapor Retarder
 - 2. 04 20 00 – Unit Masonry
 - 3. 04 42 00 – Stone Cladding
 - 4. 06 10 00 – Rough Carpentry
 - 5. 07 13 00 – Sheet Waterproofing
 - 6. 07 21 00 – Thermal Insulation
 - 7. 07 21 29 – Sprayed Insulation
 - 8. 07 25 00 – Weather Barriers
 - 9. 07 41 13 – Metal Roof Panels

GUIDE SPECIFICATIONS FOR DESIGN AND CONSTRUCTION DOCUMENTS

10. 07 42 13 – Metal Wall Siding
11. 07 42 44 – Composite Wall Panels
12. 07 52 00 – Modified Bitumen (SBS) Membrane Roofing
13. 07 62 00 – Sheet Metal Flashing and Trim
14. 07 65 00 – Flexible Flashing
15. 07 72 00 – Roof Accessories
16. 07 90 05 – Joint Sealers
17. 08 42 29 – Automatic Entrances
18. 08 43 13 – Aluminum-Framed Storefronts
19. 08 44 13 – Glazed Aluminum Curtain Walls
20. 08 91 00 – Louvers

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 CONSTRUCTION INSPECTIONS

- A. Commissioning of the building envelope systems will require inspection of individual elements of the envelope construction throughout the construction period. The Contractor shall coordinate with the BECxC in accordance with Division 01 and the Commissioning plan to schedule envelope inspections as required to support the Commissioning Process.

3.2 PRE-FUNCTIONAL CHECKLISTS

- A. The Contractor shall complete Pre-Functional Checklists to verify systems, subsystems, and equipment installation is complete and systems are ready for Systems Functional Performance Testing. The BECxC will prepare Pre-Functional Checklists to be used to document equipment installation. The Contractor shall complete the checklists. Completed checklists shall be submitted to the Architect, Owner and to the BECxC for review. The BECxC may spot check a sample of completed checklists. If the BECxC determines that the information provided on the checklist is not accurate, the BECxC will return the marked-up checklist to the Contractor for re-verification and re-submission. Refer to the Building Envelope Commissioning section for submittal requirements for Functional Checklists and other commissioning documents.

3.3 CONTRACTORS TESTS

- A. Contractor tests as required by other sections of Division 07 shall be scheduled and documented in accordance with the Building Envelope Commissioning section. All testing shall be incorporated into the project schedule. Contractor shall provide no less than 7 calendar days' notice of testing. The BECxC will witness selected Contractor tests at the sole discretion of the BECxC. Contractor tests shall be completed prior to scheduling Systems Functional Performance Testing as indicated in the Building Envelope Commissioning section.

3.4 EXTERIOR ENVELOPE COMMISSIONING:

- A. Verification:
 1. Certify that the building exterior enclosure systems, subsystems and construction have been completed in accordance with the Contract Documents.
- B. Pre-Functional Commissioning: The following system will be included in pre-functional commissioning:
 1. Sealant Performance mock-up.
 2. Roof mock-up.
 3. Shop visits on selected components as appropriate.
- C. Functional Performance Commissioning:
 1. Plaza deck waterproofing and below grade waterproofing.
 2. Weather barrier.
 3. Modified bitumen membrane roofing.
 4. Joint sealers.
 5. Interface conditions between each of the above listed elements.

END OF SECTION