

EFFECTIVE: FEBRUARY 1, 2020

CITY OF MCKINNEY

COMMERCIAL PROJECTS REQUIRED PAPERWORK/FORMS FOR CERTIFICATE OF OCCUPANCY



BUILDING
INSPECTIONS

WWW.MCKINNEYTEXAS.ORG



221 N. TENNESSEE STREET, MCKINNEY, TEXAS 75069



Building Inspections Required Reports at Finals “Commercial”

February 1, 2020

Commercial Projects:

- 3rd party photometric compliance letter (Page 3)
- 3rd party energy compliance letter (Page 4)
- Special Inspection final paper work per International Building Code, Chapter 17. (See City of McKinney Special Inspection Manual). **Note:** We will need the qualifications for the inspector that is inspecting the Fire-resistant penetrations and Joints assemblies. (Page 5)
- State elevator inspection report
- Backflow reports (Backflow prevention device test) for all device, including the Fire Sprinkler system will be Picked up by the Plumbing Inspector.
- Spray Foam Letter: Ignition Barrier (Page 6)
- Engineer letter for retaining walls (Page 7)
- Emergency generators – Startup & Load bank test report
- Selective Coordination Study Report for the entire emergency system.
- Fabricator’s Certificate of Compliance (Page 8)
- 2021 IECC Commissioning Form – Commissioning Checklist for Certificate of Occupancy (Page 9 - 12)
- Provide report of the acceptance and testing of the pressurization for stairways and elevators hoistways.
- Med. Gas Certification
- Report for Noise Ords.
- Operating Room in Hospitals - Report on Isolated Transformer

Notes:

1. Addresses shall be on all required paper work.
2. Leave all reports on job site – your field inspector will pick them up.

{COMPANY LETTERHEAD}

Chief Building Official
City of McKinney
P.O. Box 517
McKinney, TX 75070

RE: Photometric Compliance Letter per Chapter 150 Article 5 – Exterior Lighting
“Exterior Lighting Design Compliance”

[Project Name]
[Site Address]
[Permit Number]

Dear Chief Building Official:

This letter is to verify the work associated with the construction of the above referenced construction project was completed per design.

A representative of this firm made onsite visits on the following dates to review the construction of the above referenced construction project:

Information Required:

Date and time of the inspection

Type of metering device used

Meets or exceeds the requirements of Chapter 150 Article 5 – Exterior Lighting regulations.

Please contact me at [phone number] or [email address] if you have any questions or need additional information.

Sincerely,

[Stamped by a certified testing Lab or Engineering Firm]

[Engineer of Record], P.E.

{P.E. SEAL}

[Firm Name]

Texas Registered Engineering Firm #F-[0000]



COMMERCIAL ENERGY INSPECTION FORM

Date: _____

Project Name: _____

Address: _____

Permit Number: _____

To the Chief Building Official:

I have inspected the above project and hereby declare that the work is in compliance with the 2021 International Energy Conservation Code, City of McKinney Ordinances, local amendments to this code and Reference Standards.

____ C402 BUILDING ENVELOPE REQUIREMENTS

____ C403 BUILDING MECHANICAL SYSTEM

____ C405 ELECTRICAL POWER AND LIGHTING SYSTEMS

Certified Energy Inspector (Print Name)

Certified Energy Inspector (Signature)

ICC Certification Number

Phone Number

Final Report of Required Special Inspections

Date: _____ Permit #: _____

Project Name: _____

Project Address: _____

The appropriate Agency or RDPIRC prepared and submitted a list of required inspections per International Building Code Sec. 1704 for this project.

Owner or Owner's Representative

Name: _____ Phone No: _____

Mailing Address: _____

E-mail Address: _____

Checked below is a list of completed inspections for this project with names of each special inspector/agency:

Please check all that apply	Inspections Required		Special Inspector / Agency
	1705.1.1	Special cases	
	1705.2	Steel Construction	
	1705.3	Concrete construction	
	1705.4	Masonry construction	
	1705.5	Wood construction	
	1705.5.3	Mass timber construction	
	1705.6	Soils	
	1705.7	Driven deep foundation	
	1705.8	Cast-in-place deep foundations	
	1705.9	Helical pile foundations	
	1705.10	Structural integrity of deep foundation elements	
	1705.11	Fabricated items	
	1705.12	Special inspections for wind resistance	
	1705.15	Sprayed fire-resistant materials	
	1705.16	Mastic and intumescent fire-resistant coatings	
	1705.17	Exterior insulation and finish systems (EIFS)	
	1705.18	Fire-resistant penetrations and joints	
	1705.19	Testing for smoke control	
	1705.20	Sealing of mass timber	
		Other:	
		Other:	

As the approved agency or registered design professional in responsible charge for all of the inspections checked above and to the best of my information and knowledge the listed required inspections and tests for this project have been performed and all discovered discrepancies have been resolved.

Name of Approved Agent or RDPIRC

Firm Name

Signature of Approved Agent or RDPIRC

Date

cc: General Contractor

Design Professional Seal

(Company Letter Head)

RE: Exposed Spray Foam and Foam Board Insulation
“Ignition Barrier”

Project Information: (Builder)
(Project Address)
(Permit Number)

Dear Chief Building Official;

The above project above meets or exceeds the requirements for ignition barriers for foam plastic insulation set forth in the 2021 International Building Code.

The insulation has been tested in accordance with (Check One) and the above ignition barrier is not required per *Section 2603.9 – Special Approval*

_____ NFPA 286 with acceptance criteria of Section 803.2

_____ UL 1040 _____ FM4880 _____ UL 1715

Name of Installer (Company): _____

Installer Signage _____

Date: _____

{COMPANY LETTERHEAD}

Chief Building Official
City of McKinney
P.O. Box 517
McKinney, TX 75070

RE: Retaining Wall Certification
[Project Name]
[Location]
[Permit Number]

Dear Chief Building Official:

This letter is to verify the work associated with the construction of the above referenced retaining wall project was completed per the design prepared under my supervision. A representative of this firm made onsite visits on the following dates to review the construction of the above referenced retaining wall project:

[date] [describe observations]

Provide an entry for all critical elements e.g. verification of in-situ / fill soils conditions versus design assumptions, pier depth and reinforcement for piers, placement of retaining wall footings, verification of wall heights and/or slopes, wall reinforcement, weep hole and drainage conduit placement, rock and filter fabric, compaction of backfill, final grading at surface, control joints.

Please contact me at *[phone number]* or *[email address]* if you have any questions or need additional information.

Sincerely,

[Engineer of Record], P.E.
[Firm Name]
Texas Registered Engineering Firm #F-*[0000]*

{P.E. SEAL}

Fabricator's Certificate of Compliance Form

Each approved fabricator that is exempt from Special Inspection of shop fabrication and implementation procedures per section 1704.2.5 of the 2018 International Building Code must submit this Fabricator's Certificate of Compliance Form at the completion of fabrication.

Project: _____

Fabricator's Name: _____

Address: _____

Certification or Approval Agency: _____

Certification Number: _____

Date of Last Audit or Approval: _____

Description of structural members and assemblies that have been fabricated:

I hereby certify that items described above were fabricated in strict accordance with the approved construction documents.

Name and Title (type or print)

Signature

Date

Attach copies of fabricator's certification or building code evaluation service report and fabricator's quality control manual

City of McKinney Texas Commissioning Process Guide

2021 International Energy Conservation Code

The application of the Commissioning Process starts at the beginning of the project inception and goes through building occupancy. Each project phase has required activities that need to be completed during that phase. During the planning and design process, the Commissioning Provider is retained, the systems to be commissioned are selected, the Owner's Project Requirements are developed, the Basis of Design documents are developed and reviewed, the preliminary commissioning plan is written, and commissioning specifications are included in the construction documents. While the code required building systems must be on the list of selected systems to be commissioned, the owner or designer may also select additional systems.

NOTE - The City needs assurance that these activities are completed before a permit is issued. The City can request a copy of all the documents for review or rely on the approval by the Commissioning Provider and Owner or owner's representative. The following is the process explained and City required reports.

1. IECC 2021 REQUIREMENTS – PERMIT

1.1 COMMISSIONING PROVIDER: The approved commissioning provider is selected by the owner and the selection is shown on the permit application.

1.2 DESIGN DOCUMENTS-COMMISSIONED SYSTEMS: The 2018 IECC requires that mechanical systems, service water heating systems and lighting control systems be completed and commissioned. The construction documents including notes and specifications shall clearly indicate provisions for commissioning and completion requirements. These construction document requirements convey the owner's requirements and the designer's criteria for the performance and commissioning process for the designated systems.

1.3 COMMISSIONING PLAN: The following is an outline of the contents of a typical commissioning plan. The Commissioning Plan shall be developed by an approved provider for all systems to be commissioned and/or tested and shall include the following items:

- a. A narrative of the commissioning process developed specifically for the project.
- b. The roles and responsibilities for the commissioning providers and the commissioning team through final commissioning activities.
- c. Documentation of communication channels and processes including the distribution of the commissioning plan, logs, testing documents and reports during the design and construction process.
- d. A detailed description of conditions and schedules of the commissioning process activities, and the list of operations, functions, systems, and assemblies that will be commissioned. Measurable performance criteria shall be included where not shown on the construction documents.
- e. The project design documentation and submittal review procedures and reports.
- f. Inspection checklists and testing forms, issues and resolution log, and commissioning progress reports to be used during the project to communicate and track commissioning and inspection process information, including format, approvals and distribution.
- g. The procedures to follow for resolution where the commissioning evaluation does not meet the Owner's Project Requirements or design documents.

2. IECC 2021 COMMISSIONING DOCUMENTATION for FINAL INSPECTION and CERTIFICATE OF OCCUPANCY

2.1. INTRODUCTION:

The commissioning process starts at the beginning of project planning and continues through initial building operation. Some of the commissioning testing is often done after the certificate of occupancy inspections. Environmental and seasonal condition may not provide adequate testing condition, particularly for mechanical equipment. Construction schedules may not allow testing of incomplete systems. Thus, it is necessary to verify the required commissioning performance up to the point of final City inspection. This can be done by having the revised commissioning and project documents collected along with the testing results up to that time. The preliminary commissioning report and issue logs need to include the project open items including future testing and equipment and systems currently not meeting requirements.

The preliminary commissioning report is reviewed by the City on a form approved by the Commissioning Provider and/or Owner or owner's representative that is submitted to the City.

2.2 FUNCTIONAL and PERFORMANCE TESTING: Equipment functional performance testing shall demonstrate the installation and operation of components, systems, and system-to-system interfacing relationships in accordance with approved plans and specifications such that operation, function and maintenance serviceability for each commissioned system is confirmed in all modes of operation.

2.3 TESTING and BALANCING REPORT: HVAC systems shall be balanced in accordance with generally accepted engineering standards, and the project documents. A written report shall be submitted describing the activities and measurements completed.

2.4 OPERATIONS and MAINTENANCE MANUALS: An operations and maintenance manual (also called a systems manual) shall be provided and include:

- a. Submittal data and intended operation
- b. Manufacturer's operations manuals and maintenance manuals
- c. Listing of at least one service agency
- d. Controls maintenance and calibration information
- e. Verified sequence of operation with set points
- f. Schedule for inspecting and recalibrating

2.5 COMMISSIONING REPORTS: The following are outlines of typical contents for the preliminary and final commissioning reports. Due to project scheduling, it may be necessary to provide a preliminary commissioning report on project commissioning status and equipment operation to obtain a certificate of occupancy. IECC 2021 requires that the design professional or approved agency provide the preliminary report to the owner. The owner then provides a letter of receipt for the preliminary report to the City to proceed with final inspection.

2.5.1 Preliminary Commissioning Report

The commissioning provider shall provide a Preliminary Commissioning Report that includes the following information:

- a. Performance of commissioned equipment, systems, and assemblies, including a review of the HVAC test and balance report.
- b. Issue and resolution logs including itemization of deficiencies found during testing and commissioning that have not been corrected at the time of report preparation.
- c. Deferred tests that cannot be performed at the time of preliminary report.
- d. A plan for the completion of commissioning including climatic and other conditions required for performance of the deferred tests.

2.5.2 Final Commissioning Report

The commissioning provider shall provide a final commissioning report to the owner prior to project completion that includes the following information:

- a. A copy of the final commissioning plan including functional and performance test procedures used during the commissioning process including measurable criteria for test acceptance.
- b. A copy of the design and submittal reviews as required by the commissioning plan
- c. Results of all evaluations, startup data, functional and performance tests, reports and checklists by suppliers, contractors, observers, and commissioning providers.
- d. Issue logs and disposition of all deficiencies found during testing, including details of corrective measures used or proposed.
- e. Equipment, systems, and assemblies repaired and adjustments to calibration.
- f. Equipment and systems sequences and settings shall be documented and submitted in the final sequence of operation with set points and in the O&M or systems manual.
- g. A resolution plan identifying all the issues unresolved and incomplete at the end of the project.

3. FORMS REQUIRED BY THE CITY OF MCKINNEY, TEXAS

3.1 - COMMERCIAL ENERGY COMMISSIONING SUBMITTAL FORM

3.2 - COMMERCIAL ENERGY COMPLIANCE COMMISSIONING FORM



COMMERCIAL ENERGY COMPLIANCE COMMISSIONING FORM

Date: _____

Project Name: _____

Address: _____

Permit Number: _____

To the Chief Building Official:

I hereby declare that the work is in compliance with the 2021 International Energy Conservation Code, City of McKinney Ordinances, local amendments to this code and Reference Standards.

____ The owner has received the Preliminary Commissioning Report for the Mechanical System.

____ The lighting control systems have been tested to ensure that control hardware and software are calibrated, adjusted, programmed and in prior working condition in accordance with construction documents and manufacturer's instructions.

Owner / Owner authorized agent (Print Name)

Owner / Owner authorized agent (Signature)