EFFECTIVE: FEBRUARY 1, 2020

CITY OF MCKINNEY

# COMMERCIAL PROJECTS REQUIRED PAPERWORK/FORMS FOR CERTIFICATE OF OCCUPANCY











BUILDING INSPECTIONS

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221 N. TENNESSEE STREET, McKINNEY, TEXAS 75069



## Building Inspections Required Reports at Finals "Commercial"

February 1, 2020

Commercial Projects:
3 <sup>rd</sup> party photometric compliance letter (Page 3)
3 <sup>rd</sup> party energy compliance letter (Page 4)
Special Inspection final paper work per International Building Code, Chapter 17. (See City of McKinney Special Inspection Manual). <b>Note:</b> We will need the qualifications for the inspector that is inspecting the Fireresistant 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)
2018 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 58 – Lighting and Glare Ordinances. "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 58 – Lighting and Glare 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 declar International Energy Conservation Code, City of McK and Reference Standards.	•
C402 BUILDING ENVELOPE REQUIREMENTS	
C403 BUILDING MECHANICAL SYSTEM	
C405 ELECTRICAL POWER AND LIGHTING SYS	TEMS
Certified Energy Inspector (Print Name)	
Certified Energy Inspector (Signature)	
ICC Certification Number	
Phone Number	



### Final Report of Special Inspections

Date:		Permit #:			
Project Name:					
Project Address:					
	ropriate RDP this project.	IRC prepared and submitted	a list of required inspec	ctions per 2018 Intern	ational Building Code Sec.
Owner o	or Owner's R	Representative			
Name:_				Phone No:	
Mailing A	Address:				
-					
		st of completed inspections fo			pector/agency:
Please check all that	Inspections Required			Special Inspector / A	gency
apply	1705.1.1	Special cases			
	1705.1.1	Steel Construction			
	1705.3	Concrete construction			
	1705.4	Masonry construction			
	1705.5	Wood construction			
	1705.6	Soils			
	1705.7	Driven deep foundation			
	1705.8	Cast-in-place deep foundati	ions		
	1705.9	Helical pile foundations			
	1705.10	Fabricated items			
	1705.11	Special inspections for wind	l resistance		
	1705.14	Sprayed fire-resistant mater	rials		
	1705.15	Mastic and intumescent fire-resistant coating			
	1705.16	Exterior insulation and finish	h systems (EIFS)		
	1705.17	Fire-resistant penetrations and joints			
	1705.18	Testing for smoke control			
		Other :			
informatio		gn professional in responsible vledge the listed inspections en resolved.			
Name o	FRDEIRG (T)	ype or Print Name)	Firm Name & Numbe	er	
Signature of RDPIRC		Date			
cc: Gen	eral Contract	or			Design Professional Seal
January 20	020				

### (Company Letter Head)

RE:	Exposed Spray Foam and Foam Board Insulation "Ignition Barrier"
Project Information:	(Builder) (Project Address) (Permit Number)
Dear Chief Building Office	cial;
1 0	re meets or exceeds the requirements for ignition barriers for foam plastic ne 2018 International Building Code.
	tested in accordance with (Check One) and the above ignition barrier is a 2603.9 – Special Approval
NFPA 286 with acco	eptance criteria of Section 803.2
UL 1040 _	FM4880 UL 1715
Name of Installer (Com	npany):
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.	<b>;</b>
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 2018 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 2018 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 2018 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 2018 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 2018 Internatively of McKinney Ordinances, local amendments to this code and Reference	<u> </u>
The owner has received the Preliminary Commissioning Report	for the Mechanical System.
The lighting control systems have been tested to ensure that co calibrated, adjusted, programmed and in prior working condition construction documents and manufacturer's instructions.	
Owner / Owner authorized agent (Print Name)	
Owner / Owner authorized agent (Signature)	