



CLARK COUNTY DEPARTMENT OF BUILDING & FIRE PREVENTION

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SUBJECT: TG-92-2014 SYSTEM COMMISSIONING

1.0 PURPOSE: 22.02.500 Other Inspections. The Building Official may require other inspections of any work to ascertain compliance with this Chapter and the technical codes. System Commissioning is required in the International Energy Conservation Code.

2.0 SCOPE: This guideline provides information for the listing of approved system commissioning agencies. This guideline also provides information for the testing, reporting, submittal, review and acceptance of system commissioning performed by the approved agencies.

3.0 ABBREVIATIONS & ACRONYMS:

- BAC:** Building Administrative Code of Clark County
- CCBD:** Clark County Building Department
- FIG:** Field Inspection Guideline
- IECC:** International Energy Conservation Code
- SC:** System Commissioning
- TG:** Technical Guideline

DEFINITIONS: For the purposes of this technical guideline, certain terms, phrases, words and their derivatives shall be construed as specified in this section and the Building Administrative Code of Clark County.

Approved Agency: An agency that is approved by the Building Official to perform inspections.

4.0 REFERENCES:

- International Energy Conservation Code
- Building Administrative Code of Clark County
- Southern Nevada Building Code Amendments

5.0 RESPONSIBILITIES:

5.1 Permit Holder:

- 5.1.1 The permit holder shall engage an approved agency with the SC approval to perform all required testing services.
- 5.1.2 The permit holder shall coordinate testing services with the approved agency.
- 5.1.3 The permit holder shall schedule required inspections with CCBD.

APPROVED DATE: JUNE 13, 2014

EFFECTIVE DATE: JULY 1, 2014

Written By:	Concurred By:	Approved By:
<i>Brian Lenihan</i>	<i>Kevin McOsker</i>	<i>Brenda Thompson</i>
Brian Lenihan, P.E. Senior Engineer	Kevin McOsker, P.E. Manager of Plans Examination	Brenda Thompson Manager of Inspections

5.2 Clark County Building Department – Plans Examination

- 5.2.1 Staff will confirm that a commission plan is submitted in accordance with the requirements of the IECC.
- 5.2.2 Staff shall ensure that the commission plan is submitted by a Nevada registered design professional or an approved agency with the SC approval.
- 5.2.3 Staff will add a commission testing requirement to the permit.
- 5.2.4 Three copies of the commissioning plan shall be approved, one copy shall be included in the permit drawings, one copy shall be included in the records, drawings, and one copy shall be forwarded to the inspection division.

5.3 Clark County Building Department – Green Construction

- 5.3.1 Staff will use the commissioning plan to add mechanical and/or electrical system commissioning clearances as required inspections to the appropriate permits.
- 5.3.2 Staff shall review the final commissioning report and disposition the commissioning clearance.

5.4 Approved Agency:

- 5.4.1 The agency designated to perform the system commissioning services shall be approved by Clark County with the SC approval.
- 5.4.2 Only Clark County approved inspectors shall perform the system commissioning.
- 5.4.3 The agency and inspectors shall comply with all applicable technical guidelines.
- 5.4.4 An agency seeking approval status shall apply for approval using forms available for that purpose. Forms are available at CCBD website @ http://www.clarkcountynv.gov/depts/development_services/engineering/Pages/HowToGuides.aspx. In order to obtain approval, an agency must comply with BAC and TG-15, 16, 17, 20, 22, 50, 80, and 100.
- 5.4.5 The agency shall not submit preliminary commissioning reports.
- 5.4.6 The agency shall submit the final commissioning report to CCBD by email (greenst@clarkcountynv.gov) for each permit that commissioning is required.

6.0 PROCEDURES:**6.1 Testing Procedures**

- 6.1.1 The inspector shall utilize the approved construction documents while performing their duties.
- 6.1.2 The inspector shall perform and document the testing as required in the approved commissioning plan, IECC, technical guidelines, BAC and all other applicable code and standards.

6.2 Final Commissioning Report

- 6.2.1 The report shall contain the following information:
 - 6.2.1.1 Form 845 Certificate of Compliance Commissioning
 - 6.2.1.2 A list of the inspectors who performed the testing on the project.
 - 6.2.1.3 Results of systems adjusting and balancing testing.
 - 6.2.1.4 Results of functional performance testing.
 - 6.2.1.4.1 Functional performance test procedures used during the commissioning process including measureable criteria for test acceptance.
 - 6.2.1.5 Results of lighting system functional testing.
 - 6.2.1.6 Noncompliance reports and record of corrections that show that deficiencies found during testing has been corrected.
- 6.2.2 The agency shall submit the final commissioning report to CCBD by email (greenst@clarkcountynv.gov) for each permit that commissioning is required.

6.2.3 Acceptance of the final commissioning report by CCBD personnel will result in an entry of an approval of the required clearance of the permit.

7.0 RECORDS:

The final commissioning report is a record maintained by CCBD.

8.0 ATTACHMENTS:

Appendix A: Form 845 Certificate of Compliance

Appendix B: Field Inspection Guideline FIG-B-024

9.0 REVISION HISTORY:

Title	Revision/Approved Date	Effective Date
TG-92-2014	June 13, 2014	July 1, 2014

**COMPANY LETTERHEAD
ADDRESS, TELEPHONE & FAX #**

CERTIFICATE OF COMPLIANCE

CLIENT INFO

DATE

Final Commissioning Report

Project Name:

Project Address:

Permit No.

Project No.

COMPANY NAME performed and completed the (**MECHANICAL/ELECTRICAL**) system commissioning for the **PROJECT NAME** project and is in compliance with the Clark County Department of Building approved construction documents, the approved commissioning plan, and IECC Section C408.

COMPANY NAME has verified that the owner has been issued operation and maintenance manuals that complies with C408.2.5.2.

Only CCDB approved inspectors were utilized to perform those specific inspections as required by the commissioning plan. Any items that were found to be in noncompliance with the approved construction documents were repaired or replaced, and re-inspected for acceptance.

Attached for your review are the results of the testing.

CCDB REVIEW STAMP

AGENCY QM SIGNATURE





CLARK COUNTY DEPARTMENT OF BUILDING Field Inspection Guideline



SUBJECT:	System Commissioning	FIG-B-024
<i>Effective Date:</i>	July 1, 2014	<i>Revised: New</i>
<i>Code Chapter:</i>	2012 IECC Section C408	Page 1 of 1

Interpretation: Only approved agencies with the SC approval are allowed to perform the system commissioning inspection. Mechanical and Electrical permits will not be finalized until the commissioning is complete and approved by CCBD.

Field Application: During plans examination projects that will require system commissioning will be identified. A commissioning plan will be required to approve the permit. Inspection staff will use the commissioning plan to add mechanical and/or electrical system commissioning clearances as required inspections to the appropriate permits.

The owner shall hire a Clark County approved agency with the SC approval to perform the system commissioning per the 2012 IECC Section C408 and the commissioning plan. Preliminary commissioning reports will not be accepted.

The final commissioning report shall be submitted electronically to Clark County Inspection Division Green Construction Section by email (greenst@clarkcountynv.gov) for each permit that commissioning is required. The report shall comply with TG-92. Clark County inspection staff shall review the final commissioning report and disposition the commissioning clearance.