



Department of Building & Fire Prevention

4701 W. Russell Road • Las Vegas, NV 89118
(702) 455-3000 • Fax (702) 221-0630

Ronald L. Lynn, Director/Building & Fire Official
Samuel D. Palmer, P.E., Assistant Director • Girard W. Page, Fire Marshal

SUBJECT: TG-11-2014 APPROVAL PROCESS FOR ENGINEERED WOOD PRODUCTS

- 1.0 **PURPOSE:** This guideline sets forth the minimum procedures and standards for fabricators/manufacturers of engineered wood products. Products shall be subject to the requirements of the Clark County Department of Building and all pertinent standards for inspection and analysis of procedures and products both at the fabrication shop and at the construction site. Approval and listing with Clark County is a public indication of the fabricator's/ manufacturer's dedication to produce a quality product.
- 2.0 **SCOPE:** Approved fabricator/manufacturer distinguishes an organization qualified to produce structural wood components at a location remote from the job site. Fabricators /manufacturers facilities, procedures and personnel shall be subject to periodic unannounced inspection and shall meet the requirements of this Technical Guideline and the requirements of the International Building Code, Chapter 23.

3.0 ABBREVIATIONS & ACRONYMS:

- CCBD:** Clark County Department of Building
- BAC:** Clark County Building Administrative Code
- IBC:** International Building Code
- ICC:** International Code Council
- QA:** Quality Agency
- QC:** Quality Control
- TG:** Technical Guideline

4.0 DEFINITIONS: The definitions below are specific to this document and are supplemental to those contained in the Building Administrative Code of Clark County.

Fabricator/manufacturer: An organization devoted to the development of drawings and specifications depicting the requirements of engineered wood products, as well as, the operations necessary for the wood products manufacturer.

Quality Control: A managerial process which consists of the following steps: (1) evaluates actual quality performance; (2) compare actual performance to quality goals; and (3) take action on the difference.

Quality Assurance: An independent evaluation of quality-related performance, conducted primarily for the information of those not directly involved in conduct of operations but who have a need to know.

Recognized Agency: A QA that maintains an accreditation through a nationally recognized body.

APPROVED DATE: December 10, 2014
EFFECTIVE DATE: December 22, 2014

Revised by:	Concurred by:	Approved by:
<i>Brian Lenihan</i>	<i>David Durkee</i>	<i>Theodore Droessler</i>
Brian Lenihan, P.E. Senior Engineer	David L. Durkee, P.E. Principal Engineer	Theodore Droessler, P.E. Manager of Engineering

Recognized Fabricator/Manufacturer: A fabricator/manufacturer listed or maintains an evaluation report through a nationally recognized body. The evaluation report or listing is used to determine the acceptability of the quality control and quality assurance operations at the facility. The listing or report is subject to acceptance by the Building Official.

5.0 REFERENCES:

Clark County Building Administrative Code
International Building Code
Southern Nevada Amendments to the International Building and Residential Code
ANSI/TPI 1, National Design Standard for Metal Plate Connected Wood Truss Construction

6.0 RESPONSIBILITIES:

6.1 Building Division

- 6.1.1 Maintain an approved fabricator/manufacturer list.
- 6.1.2 Review requests from fabricators/manufacturers in accordance with this TG.
- 6.1.3 Determine the acceptance of recognized fabricators based on the applicability of the report issued by a nationally recognized body.

6.2 Fabricator/manufacturer

- 6.2.1 Fabricator/manufacturer shall apply for approval per BAC.
- 6.2.2 Select a QA from CCBD approved list or a recognized agency to perform quarterly audits of facility and operation.
- 6.2.3 Keep all fabrication drawings current.
- 6.2.4 Approved fabricator/manufacturer shall provide all information when requested.

6.3 QA

- 6.3.1 QA shall perform all duties per BAC.
- 6.3.2 Conduct on-site observation of the fabricator/manufacturer's operations to assure the final product will meet reference standards.
- 6.3.3 Notify CCBD of any operational procedures, methods or final products that are non-compliance with reference standards.
- 6.3.4 QA shall respond to CCBD representative when deficiencies in reporting procedures are noted.

7.0 PROCEDURE: Fabricator/manufacturer organizations shall make a written request for approval. All approved organizations must have a comprehensive third party inspection program in place to monitor product quality. Only a QA organization approved and/or recognized by CCBD shall perform the inspection program. The fabricator/manufacturer may select the QA for its ongoing plant and process certification from the CCBD-approved list.

7.1 General

- 7.1.1 The approved fabricator/manufacturer shall pay initial listing and annual renewal fees as required by BAC, Section 22.02.385.
- 7.1.2 Fabricator/manufacturer procedures and QC policy shall:
 - 7.1.2.1 Be available at the plant and identify the individual who is carrying out this document.
 - 7.1.2.2 Provide basic inspection and control of workmanship at the manufacturer's plant.
 - 7.1.2.3 Organize all manufacturing activities such that a quality product will meet the requirements of the technical codes.
- 7.1.3 The management team must have an effective method of monitoring production which allows for special quality requirement information to flow to the responsible personnel.

7.2 Procurement

- 7.2.1 The fabricator/manufacturer shall make a policy statement indicating that all materials and services are purchased based on the current adopted technical codes and reference standards and meet material specifications, including parts or components manufactured by others that will be used in the production or assembly of the finished product.
- 7.2.2 The fabricator/manufacturer must check all certification of compliance documents against received materials for compliance; and shall retain the documents on file.

7.3 Engineering and Drafting

- 7.3.1 The F/M shall furnish engineer-approved drawings to production and QC personnel. A policy must exist regarding; revision, replacement and removal of drawings to and from the production line.

7.4 Production

- 7.4.1 Wood truss manufacturing operations shall be in accordance with the ANSI/TPI-1 standard and the engineer's sealed drawings.
- 7.4.2 Production operations must include written procedures for identifying and removing defective materials from production.
- 7.4.3 The fabricator/manufacturer shall display the operations manager on the organization chart.

7.5 Audits

- 7.5.1 The QA shall perform an initial audit of the manufacturer. The audit must confirm that the manufacturer has the policy, procedures, and personnel in place and be operating as described in their Production and QC Plan. The number of audit personnel depends on the capabilities and complexity of the organization being evaluated. The QA will provide a written statement to CCBD certifying that the audit was performed and the results are factual.
- 7.5.2 The fabricator/manufacturer must include a provision for periodic plant audits in the manufacturing procedural plan. The provision must state the number of inspections per approval period; unless otherwise specified by an evaluation report.
- 7.5.3 Excluding ES Reports, it is the responsibility of the QA performing the required audits to notify CCBD in writing of any change in quality status of the approved organization. The QA is responsible to provide CCBD with the quarterly plant audit results within one month of the end of the calendar quarter.
- 7.5.4 CCBD may perform periodic audits to evaluate compliance with the Technical codes, reference standards, or conditions of use specified in third party listings or evaluation reports.

7.6 Initial Approval Process:

7.6.1 Fabricator Types

- 7.6.1.1 Fabricator/manufacturer may be recognized by their active listing through a nationally recognized body.
- 7.6.1.2 Wood truss products and components:
 - 7.6.1.2.1 Listing as an approved wood truss fabricator/manufacturer will be contingent upon providing satisfactory in-plant inspections which are performed by a CCBD-approved/recognized QA.
 - 7.6.1.2.2 Inspection results shall be furnished to the CCBD Inspection Division.
- 7.6.1.3 Engineered wood products other than wood truss products and components:
 - 7.6.1.3.1 Wood products in this category are subject to the requirements of the Clark County Code.
 - 7.6.1.3.2 Products must be stamped with the producer's trademark. The top or bottom of the member shall be identified.

7.6.2 Application Process.

- 7.6.2.1** Provide the completed form 831. The form is contained in Appendix A.
- 7.6.2.2** Provide fees as detailed in the Clark County Building Administrative Code.
- 7.6.2.3** Provide the last four quarterly audits by a recognized or listed quality agency.
- 7.6.2.4** Fabricator/manufacturer shall be listed in either renewal group A or B. The agency is responsible for submitting the annual renewal application on the date listed in the table below.

Annual Renewal Deadlines			
Annual Renewal Group	Submit By (Renewal Date)	Removal Date (Failure to Submit)	Removal Date (Failure to Respond)
A	April 1	May 16	June 30
B	October 1	November 15	December 31

7.7 Annual Renewal Process.

- 7.7.1.1** Provide the completed and submit form 831. Form 831 is contained in Appendix A.
- 7.7.1.2** Provide fees as detailed in the Clark County Building Administrative Code.
- 7.7.1.3** Provide the last four quarterly audits by a recognized or listed quality agency.

8.0 RECORDS:

- 8.1** The fabricator/manufacturer operations manager must maintain certification records, operational history, and QA audit reports.
- 8.2** Excluding ES Reports, CCBBD will maintain copies of reports pertaining to the performance of the fabricator/manufacturer for a period of two years.

9.0 ATTACHMENTS:

Application 831

10.0 REVISION HISTORY:

Title	Revision/Approved Date	Effective Date
TG-11-2014	December 10, 2014	December 22, 2014
TG-11-2007	September 28, 2007	October 28, 2007
TG-11-2006	August 25, 2006	September 25, 2006
TG-11-2004	October 1, 2004	October 31, 2004
TG-11-1998	September 1, 1998	September 1, 1998



Clark County Department Of Building & Fire Prevention

4701 W Russell Road ~ Las Vegas NV 89118

(702) 455-3000 ~ Fax (702) 221-0630

Wood/Light-Gauge Trusses (Screwed) Fabricator/Manufacturer Request for Initial or Renewal of Clark County Approval

Ronald L. Lynn, Director/Building Official • Samuel D. Palmer, PE., Assistant Director

COMPANY NAME _____

CONTACT NAME/TITLE _____

CONTACT E-MAIL ADDRESS _____

PLANT LOCATION ADDRESS _____

MAILING ADDRESS _____

TELEPHONE _____ FAX _____

THIRD PARTY AUDIT AGENCY _____

CHECK FABRICATION TYPE (ONLY ONE)

WOOD TRUSS

LIGHT-GAUGE (Screwed)

FEES REQUIRED TO BE SUBMITTED WITH APPLICATION

Initial Listing or Reinstatement (\$800.00) \$ _____	Annual Agency Renewal (\$575.00) \$ _____
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DOCUMENTATION REQUIRED TO BE SUBMITTED WITH APPLICATION

INITIAL AGENCY LISTING:	ANNUAL RENEWAL:
<u>ALL Fabricators Provide</u> - Controlled copy of Company's Quality Control Manual (Latest Edition)	<u>ALL Fabricators Provide</u> - Latest Revisions to the Quality Control Manual. If no revision in the past year, provide the current revision number and date.
<u>ALL Fabricators Provide</u> - Copy of Latest In-Plant Audit by Third Party Audit Agency	<u>ALL Fabricators Provide</u> - Quarterly Audits by Third Party Audit Agency
<u>ALL Fabricators</u> - TG-11 Approval process	<u>ALL Fabricators</u> - TG-11 Approval process

RETURN THIS APPLICATION FORM WITH YOUR CHECK TO THE FOLLOWING ADDRESS:

Clark County Department of Building
Attn: David A. Chancey
4701 W. Russell Rd.
Las Vegas, Nevada 89118

David A. Chancey - 702-455-2883 Email: dac@clarkcountynv.gov

Please submit a check or money order, along with the required documentation, with each application.
Please make check payable to: Clark County Department of Building

Applicant Signature: _____ Date: _____