

**NATIONAL
STANDARDS OF APPRENTICESHIP
DEVELOPED BY THE
TIMBER FRAMERS GUILD**

FOR THE OCCUPATION

**TIMBER FRAMER
(ROUGH CARPENTER)**

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Approved by the
U.S. Department of Labor
Office of Apprenticeship

***Registered as part of the National Apprenticeship Program in accordance with the
basic Standards of Apprenticeship established by the Secretary of Labor***

BY: _____ /s/ _____
John V. Ladd, Administrator
Office of Apprenticeship

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FOREWORD

These Timber Framers Guild (the Sponsor) Apprenticeship Standards have as their objective, the training of timber framers skilled in all phases of the industry. The Sponsor recognizes that in order to accomplish this, there must be well-developed on-the-job learning combined with related instruction.

This recognition has resulted in the development of these Standards of Apprenticeship. They were developed in accordance with the basic standards recommended by the U.S. Department of Labor, Office of Apprenticeship, as a basis from which the Sponsor can work to establish apprenticeship training program that meets the particular needs of the timber frame industry.

Because timber framing is a small industry, the Sponsor hereby assumes the role of coordinating and administering this Apprenticeship program since individual shops spread across the country do not have the collective resources to do so. Also, the nature of the industry will require a mobile workforce that will benefit most from training at a variety of shops with different specialties and work environments. The Standards set forth here form the overall structure for the Apprenticeship, and have the following purposes:

- A. To encourage careful selection of persons entering the trade with due regard to health, physical fitness, aptitude, attitudes and personal characteristics.
- B. To provide an approved plan of training which will equip such persons for profitable employment
- C. To relate the future supply of skilled workers to profitable employment demands.
- D. To assure that the employer may obtain the services of proficient crafts workers.
- E. To provide the public with the highest possible grade of products and services in conformity with approved practices of safety and job skills.

DEFINITIONS

APPRENTICE: Any individual employed by the employer meeting the qualifications described in the Standards of Apprenticeship who has signed an Apprenticeship Agreement with the Sponsor for training and related instruction under these Standards, and who is registered with the Registration Agency.

APPRENTICE ELECTRONIC REGISTRATION (AER): Is an electronic tool that allows for instantaneous transmission of apprentice data for more efficient registration of apprentices and provides Program Sponsors with a faster turnaround on their submissions and access to their apprenticeship program data.

APPRENTICESHIP AGREEMENT: The written agreement between the apprentice and the Sponsor setting forth the responsibilities and obligations of all parties to the Apprenticeship Agreement with respect to the Apprentice's employment and training under these Standards. Each Apprenticeship Agreement must be registered with the Registration Agency.

CERTIFICATE OF COMPLETION OF APPRENTICESHIP: The Certificate of Completion of Apprenticeship issued by the Registration Agency to those registered apprentices certified and documented as successfully completing the apprentice training requirements outlined in these Standards of Apprenticeship.

ELECTRONIC MEDIA: media that utilize electronics or electromechanical energy for the end user (audience) to access the content; and includes, but is not limited to, electronic storage media, transmission media, the Internet, extranet, lease lines, dial-up lines, private networks, and the physical movement of removable/transportable electronic media and/or interactive distance learning.

EMPLOYER: Means any person or organization employing an apprentice whether or not such person or organization is a party to an Apprenticeship Agreement with the apprentice.

HYBRID OCCUPATION: In addition to time-based occupations which have a fixed set time for completion and competency/performance-based occupations, a third alternative has evolved which, in effect, is a "hybrid" of the two types of occupations previously mentioned. This third type of training method is basically a combination of time and performance considerations whereby work processes are developed with a minimum - maximum time/hours for each task or job requirement.

INDIRECT SUPERVISION: "Indirect supervision" means that the apprentice's work must be physically examined on a daily basis by a journeyworker or master for correctness, and that a journeyworker is always within close enough physical proximity to the apprentice to address any questions or problems that might occur. This supervision must be maintained in both a shop and on-site work environment.

JOURNEYWORKER: A worker who has attained a level of skill, abilities and competencies recognized within an industry as having mastered the skills and competencies required for the occupation. (Use of the term may also refer to a mentor, technician, specialist or other skilled worker who has documented sufficient skills and knowledge of an occupation, either through formal apprenticeship or through practical on-the-job experience and formal training.

O*NET-SOC CODE: The Occupational Information Network (O*NET) codes and titles are based on the new Standard Occupational Classification (SOC) system mandated by the federal Office of Management and Budget for use in collecting statistical information on occupations. The O*NET classification uses an 8-digit O*NET-SOC code. Use of the SOC classification as a basis for the O*NET codes ensures that O*NET information can be readily linked to labor market information such as occupational employment and wage data at the national, State, and local levels.

ON-THE-JOB LEARNING (OJL): Tasks learned on-the-job in which the apprentice must become proficient before a completion certificate is awarded. The learning must be through structured, supervised work experience.

REGISTERED APPRENTICESHIP PARTNERS INFORMATION DATA SYSTEM (RAPIDS): The Federal system which provides for the automated collection, retention, updating, retrieval and summarization of information related to apprentices and apprenticeship programs.

REGISTRATION AGENCY: Means the U.S. Department of Labor, Office of Apprenticeship or a recognized State Apprenticeship Agency that has responsibility for registering apprenticeship programs and apprentices; providing technical assistance; conducting reviews for compliance with Title 29, CFR parts 29 and 30 and quality assurance assessments.

RELATED INSTRUCTION: An organized and systematic form of instruction designed to provide the apprentice with the knowledge of the theoretical and technical subjects related to the apprentice's occupation. Such instruction may be given in a classroom, through occupational or industrial courses, or by correspondence courses of equivalent value, electronic media, or other forms of self-study approved by the Registration Agency.

SPONSOR: The Timber Framers Guild, in whose name the Standards of Apprenticeship will be registered, and which will have the full responsibility for administration and operation of the apprenticeship program.

STANDARDS OF APPRENTICESHIP: This entire document including all appendices and attachments hereto, and any future modifications or additions approved by the Registration Agency.

SUPERVISOR OF APPRENTICE(S): An individual designated by the employer to supervise or have charge and direction of an apprentice.

TRANSFER: A shift of apprenticeship agreement from one program to another or from one employer within a program to another employer within that same program, where there is agreement between the apprentice and the affected apprenticeship committee or program sponsor.

SECTION I – PROGRAM ADMINISTRATION

An Apprenticeship Training Committee (ATC) will carry out the responsibilities and duties required of the Sponsor as described in these Standards of Apprenticeship. A list of the membership and the areas of expertise they represent must be provided to the Registration Agency. While the Office of Apprenticeship recommends that Program Sponsors utilize the services of an ATC, a sponsor may also elect to administer the program without the services of an ATC.

Structure of the Apprenticeship Program

- A. Membership will be composed of representatives appointed by the Sponsor. A minimum of two members must be journeyworkers in the timber framing trade.
- B. Technical Assistance - such as that from the U.S. Department of Labor, Office of Apprenticeship, State Apprenticeship Agencies, and vocational schools - may be requested to advise the sponsor.

Administrative Procedures:

- A. The sponsor will elect a Chairperson and a Secretary, and will determine the time and place of regular meetings which will take place every 6 (six) month(s).
- B. The Chairperson and Secretary will have the power to vote on all questions affecting apprenticeship

Responsibilities of the Sponsor:

- A. Cooperate in the selection of apprentices as outlined in this program.
- B. Ensure that apprentices are under written Apprenticeship Agreements and register the local apprenticeship standards and agreements with the appropriate Registration Agency.
- C. Review and recommend apprenticeship activities in accordance with this program.

- D. Establish the minimum standards of education and experience required of apprentices.
- E. Meet in person at least every 6 (six) month(s), and by conference call every two months, to review records and progress of each apprentice in training and recommend improvement or modification in training schedules, schooling and other training activities. Written minutes of the meeting will be kept.
- F. Determine the quality and quantity of experience on the job which apprentices should have and to make every effort toward their obtaining it.
- G. Hear and resolve all complaints of violation of Apprenticeship Agreements.
- H. Arrange tests or evaluations for determining the apprentice's progress in manipulative skills and technical knowledge.
- I. Maintain a record of all apprentices, showing their education, experience, and progress in learning the occupation.
- J. Determine the physical fitness of qualified applicants to perform the work of the occupation that may require a medical examination prior to their employment as apprentices.
- K. Advise apprentices on the need for accident prevention and provide instruction with respect to safety in the workplace.
- L. Certify that apprentices have successfully completed their apprenticeship program.
- M. Notify the appropriate Registration Agency of all new apprentices to be registered, credit granted, suspensions for any reason, reinstatements, extensions, completions and cancellations with explanation of causes and notice of completions of Apprenticeship Agreements.
- N. Supervise all the provisions of the standards and be responsible, in general, for the successful operation of the standards by performing the duties here listed by cooperating with public and private agencies which can be of assistance by obtaining publicity to develop public support of apprenticeship and by keeping in constant touch with all parties concerned; apprentices, employers and journeyworkers.

SECTION II - EQUAL OPPORTUNITY PLEDGE – Title 29 CFR 29.5(b)(21) and 30.3(b)

The recruitment, selection, employment, and training of apprentices during their apprenticeship, shall be without discrimination because of race, color, religion, national origin, or sex. The Sponsor will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under Title 29 of the Code of Federal Regulations (CFR), part 30, as amended (insert state regulations here, if applicable).

SECTION III - AFFIRMATIVE ACTION PLAN – Title 29 CFR 29.5(b)(21) and 30.4

If the Timber Framers Guild (The Guild) employs five or more apprentices, the Guild will adopt an Affirmative Action Plan and Selection Procedures as required under Title 29, CFR part 30. It will be attached as Appendix C.

SECTION IV- QUALIFICATIONS FOR APPRENTICESHIP – Title 29 CFR 29.5(b)(10) (EXAMPLES)

Applicants will meet the following minimum qualifications:

A. Age

Apprentices must not be less than 18 years of age.

B. Education

Applicants shall be high school graduates or provide proof of equivalent educational attainment such as successful completion of the General Education Development (GED) tests. Each applicant shall submit, with the completed application, a high school transcript or an official report of GED test results.

C. Physical

Applicants will be physically capable of performing the essential functions of the apprenticeship program, with or without a reasonable accommodation, and without posing a direct threat to the health and safety of the individual or others.

Applicants will pass a physical exam and pass a valid drug test upon acceptance into the program and prior to being employed. These tests will be paid for by the employer.

D. Aptitude Test

All applicants shall pass an examination designed to test the applicant's reading and math skills and aptitude for employment in the Timber Framing industry.

E. Resume'

All applicants must submit a resume'.

F. Interview

Applicants not eligible for Direct Entry are required to interview with the sponsor. This requirement may be waived at the sponsor's discretion.

G. Guild Membership

Applicants will be members in good standing of the Timber Framers Guild.

SECTION V - SELECTION OF APPRENTICES – Title 29 CFR 30.5

Selection into the apprenticeship program will be in accordance with the selection procedures made a part of these Standards (Appendix D).

SECTION VI - APPRENTICESHIP AGREEMENT – Title 29 CFR 29.5(b)(11)

After an applicant for apprenticeship has been selected, but before employment as an apprentice or enrollment in related instruction, the apprentice will be covered by a written Apprenticeship Agreement (Appendix B) signed by the Sponsor and the apprentice and approved by and registered with the Registration Agency. Such agreement will contain a statement making the terms and conditions of these standards a part of the agreement as though expressly written therein. A copy of each Apprenticeship Agreement will be furnished to the apprentice, the Sponsor, the Registration Agency, and the employer.

Prior to signing the Apprenticeship Agreement, each selected applicant will be given an opportunity to read and review these Standards, the Sponsor's written rules and policies and the Apprenticeship Agreement.

The Registration Agency will be advised promptly of the execution of each Apprenticeship Agreement and will be given all the information required for registering the apprentice.

SECTION VII - RATIO OF APPRENTICES TO JOURNEYWORKERS – Title 29 CFR 29.5(b)(7)

Consistent with proper supervision, training, safety, and continuity of employment throughout the apprenticeship, the ratio of apprentices to journeyworkers will be one (1) apprentice to one (1) journeyworker. Only that number of apprentices will be employed as can be given proper supervision, training, and safe working conditions and can be assured of reasonable opportunity for employment on the completion of the apprenticeship.

SECTION VIII - TERM OF APPRENTICESHIP – Title 29 CFR 29.5(b)(2)

The term of the occupation will be three (3) years with an (OJL) attainment of 5000-7000 hours supplemented by the required hours of related instruction as stated on the Sample Work Process Schedule and Related Instruction Outline (Appendix A). Full credit will be given for the probationary period.

SECTION IX - PROBATIONARY PERIOD – Title 29 CFR 29.5(b)(8), (b)(19)

All applicants selected for apprenticeship will serve a probationary period of not less than six (6) months 1000 hours of OJL.

During the probationary period either the apprentice or the Sponsor may terminate the Apprenticeship Agreement, without stated cause, by notifying the other party in writing. The records for each probationary apprentice will be reviewed prior to the end of the probationary period. Records may consist of periodic reports regarding progression made in both the OJL and related instruction, and any disciplinary action taken during the probationary period.

Any probationary apprentice evaluated as satisfactory after a review of the probationary period will be given full credit for the probationary period and continue in the program.

After the probationary period the Apprenticeship Agreement may be canceled at the request of the apprentice, or may be suspended or canceled by the Sponsor for reasonable cause after documented due notice to the apprentice and a reasonable opportunity for corrective action. In such cases, the Sponsor will provide written notice to the apprentice and to the Registration Agency of the final action taken.

SECTION X - HOURS OF WORK

Apprentices will generally work the same hours as journeyworkers, except that no apprentice will be allowed to work overtime if it interferes with attendance in related instruction classes.

Apprentices who do not complete the required hours of OJL during a given segment will have the term of that segment extended until the required number of hours of training are accrued.

SECTION XI - APPRENTICE WAGE PROGRESSION – Title 29 CFR 29.5(b)(5)

Apprentices will be paid a progressively increasing schedule of wages during their apprenticeship based on the acquisition of increased skill and competence on-the-job and in related instruction. Before an apprentice is advanced to the next segment of training or to journeyworker status, the Sponsor will evaluate all progress to determine whether advancement has been earned by satisfactory performance in their OJL and in related instruction courses. In determining whether satisfactory progress has been made, the Sponsor will be guided by the work experience and related instruction records and reports.

The progressive wage schedule will be an increasing percentage of the journeyworker wage rate. The percentages that will be applied to the applicable journeyworker rate are shown on the attached Sample Work Process Schedule and Related Instruction Outline (Appendix A). In no case will the starting wages of apprentices be less than that required by any minimum wage law which may be applicable. In no case will the starting wages of apprentices be less than that required by any minimum wage law which may be applicable.

SECTION XII - CREDIT FOR PREVIOUS EXPERIENCE – Title 29 CFR 29.5(b)(12) and 30.4(c)(8)

The Sponsor may grant credit towards the term of apprenticeship to new apprentices who demonstrate previous acquisition of skills or knowledge equivalent to that which would be received under these Standards.

Apprentice applicants seeking credit for previous experience gained outside the supervision of the Sponsor must submit the request at the time of application and furnish such records, affidavits, and other information deemed appropriate by the Sponsor to substantiate the claim. Applicants requesting such credit who are selected into the apprenticeship program will start at the beginning wage rate. The request for credit will be evaluated and a determination made by the Sponsor during the probationary period when actual on-the-job and related instruction performance can be examined. Prior to completion of the probationary period, the amount of credit to be awarded will be determined after review of the apprentice's previous work and training/education record and evaluation of the apprentice's performance and demonstrated skill and knowledge during the probationary period.

An apprentice granted credit will be advanced to the wage rate designated for the period to which such credit accrues. The Registration Agency will be advised of any credit granted and the wage rate to which the apprentice is advanced.

The granting of advanced standing will be uniformly applied to all apprentices.

SECTION XIII - WORK EXPERIENCE – Title 29 CFR 29.5(b)(3) and 30.8

During the apprenticeship the apprentice will receive such OJL and related instruction in all phases of the occupation necessary to develop the skill and proficiency of a skilled journeyworker. The OJL will be under the direction and guidance of the supervisor of the apprentice(s).

The amount of time recommended for each phase is shown in the Work Process Schedule in Appendix A. The order in which this training is given will be determined by the workflow on the job and will not necessarily be in the order listed. The times allotted to these various processes are estimated times that the average Apprentice will require to learn each phase of the trade. If the training required is not part of the expertise of the journeyworker or employer the Apprentices currently works with, then the Apprentice will be allowed to obtain that training at another company or under another journeyworker, provided that journeyworker is recognized as qualified by the Sponsor. The Apprentice will be paid at the appropriate scale as mentioned above in Section XI as it relates to the journeyworker rate at the new company.

Given the widely dispersed nature of the timber framing industry, the variety of timber framing work that shops specialize in, and the goal of transferring knowledge among shops, Apprentices will not be required to fulfill their Apprenticeship requirements under the same journeyworker or at the same employer.

Apprentices will be assessed as successfully completing each phase of the Work Processes by both completion of the required hours of training and also by achieving the Goals as outlined in the Apprenticeship Curriculum published by the Timber Framers Guild.

SECTION XIV - RELATED INSTRUCTION – Title 29 CFR 29.5(b)(4)

During each segment of training each apprentice is required to participate in coursework related to the job as outlined in Appendix A. For each occupation, the recommended term of apprenticeship will include no less than 144 hours of related instruction for the Timber Framer for each year of the apprenticeship. Apprentices agree to take such courses as the Sponsor deems advisable. The Sponsor will secure the instructional aids and equipment it deems necessary to provide quality instruction. In cities, towns or areas having no vocational school or other schools that can furnish related instruction; the apprentice may be required to take an alternate form of instruction that meets the approval of the Sponsor and the Registration Agency.

Such related and supplemental instruction may be given by classroom instruction, correspondence course, home study, or other form of approved self-study. Apprentices will not be paid for hours spent in classes of related instruction, but this time shall be considered as hours of work except where classes are held during regular working hours. Safety shall also be taught in related classes.

Any apprentice who is absent from related instruction classes, unless officially excused, will satisfactorily complete all course work missed before being advanced to the next period of training. In cases of failure of an apprentice to fulfill the obligations regarding related instruction (or OJL) without due cause, the Sponsor will take appropriate disciplinary action and may terminate the Apprenticeship Agreement after due notice to the apprentice and opportunity for corrective action.

To the extent possible, related instruction will be closely correlated with the practical experience and training received on-the-job. The Sponsor will monitor and document the apprentice's progress in related instruction classes.

The Sponsor will secure competent instructors whose knowledge, experience, and ability to teach will be carefully examined and monitored.

Apprentices will be assessed as successfully completing each module of Related Training by both completion of the required hours and also by achieving the Goals as outlined in the Apprenticeship Curriculum published by the Timber Framers Guild.

SECTION XV - SAFETY AND HEALTH TRAINING – Title 29 CFR 29.5(b)(9)

All apprentices will receive instruction in safe and healthful work practices both on-the-job and in related instruction that are in compliance with the Occupational Safety and Health Standards promulgated by the Secretary of Labor under 29 U.S.C. 651 et seq., as amended, dated December 29, 1970, and subsequent amendments to that law, or State Standards that have been found to be at least as effective as the Federal Standards

Apprentices will be taught that accident prevention is very largely a matter of education, vigilance, and cooperation and that they should strive at all times to conduct themselves in their work to ensure their own safety and that of their fellow workers.

SECTION XVI - SUPERVISION OF APPRENTICES – Title 29 CFR 29.5(b)(14)

To assure complete all around training at the trade apprentices shall be assigned to competent journeyworker recognized by the Sponsor who will be responsible for the direct supervision and instruction of the apprentice's on-the-job learning consistent with the following practices:

Supervision Required

1. A qualified journeyworker must supervise the work of an apprentice in the proper ratio prescribed in this standard. Supervision means the following: A journeyworker or master must be assigned to the job site and be able to give direction and check the work of the apprentice except during absences as required in the scope of business and otherwise provided in this section.
2. Except as otherwise provided in this section, an apprentice may not work without supervision of a journeyworker while engaging in an activity covered by the apprenticeship agreement or registered apprenticeship standards of the Sponsor.
3. Employers may work an apprentice in areas of experience with indirect supervision based on prior performance and a demonstration of competency. "Indirect supervision" means that the apprentice's work must be physically examined on a daily basis by a journeyworker or master for correctness, and that a journeyworker is always within close enough physical proximity to the apprentice to address any questions or problems that might occur. This supervision must be maintained in both a shop and on-site work environment.
4. An apprentice who has completed no less than 70% (4000-5000 hours) of the apprentice's required term and is completely current with related instruction may work with indirect supervision, as defined in the previous clause (Section XVI – 3).

SECTION XVII - RECORDS AND EXAMINATIONS – Title 29 CFR 29.5(b)(6)

Each apprentice may be responsible for maintaining a record of his/her work experience/training on-the-job and in related instruction and for having this record verified by his/her supervisor at the end of each week. The apprentice will authorize an effective release of their completed related instruction records from authorities at the source of said instruction to the Sponsor. The record cards and all data, written records of progress evaluations, corrective and final actions pertaining to the apprenticeship, will be maintained by and will be the property of the Sponsor. This record will be included in each apprentice's record file maintained by the Sponsor.

Before each period of advancement, or at any other time when conditions warrant, the Sponsor will evaluate the apprentice's record to determine whether he/she has made satisfactory progress. If an apprentice's related instruction or on-the-job progress is found to be unsatisfactory, the Sponsor may determine whether the apprentice will continue in a probationary status, or require the apprentice to repeat a process or series of processes before advancing to the next wage classification. In such cases, the Sponsor will initiate a performance improvement plan with the apprentice.

Should it be found that the apprentice does not have the ability or desire to continue the training to become a journeyworker, the Sponsor will, after the apprentice has been given adequate assistance and opportunity for corrective action, terminate the Apprenticeship Agreement.

SECTION XVIII - MAINTENANCE OF RECORDS – Title 29 CFR 29.5(b)(23)

The Sponsor will maintain for a period of five (5) years from the date of last action, all records relating to apprentice applications (whether selected or not), the employment and training of apprentices, and any other information relevant to the operation of the program. This includes, but is not limited to, records on the recruitment, application and selection of apprentices, and records on the apprentice's job assignments, promotions, demotions, layoffs, terminations, rate of pay, or other forms of compensation, hours of work and training, evaluations, and other relevant data. The records will permit identification of minority and female (minority and non-minority) participants. These records will be made available on request to the Registration Agency.

SECTION XIX. - CERTIFICATE OF COMPLETION OF APPRENTICESHIP – Title 29 CFR 29.5(b)(15)

Upon satisfactory completion of the requirements of the apprenticeship program as established in these Standards, the Sponsor will so certify in writing to the Registration Agency and request that a Certificate of Completion of Apprenticeship be awarded to the completing apprentice(s).

SECTION XX - NOTICE TO REGISTRATION AGENCY – Title 29 CFR 29.3(2)(d) and (e) and 29.5(b)(19)

The Registration Agency will be notified within 45 days of all new apprentices to be registered, credit granted, suspensions for any reason, reinstatements, extensions, modifications, completions, cancellations, and terminations of Apprenticeship Agreements and causes.

SECTION XXI - CANCELLATION AND DEREGISTRATION – Title 29 CFR 29.5(b)(18)

These Standards will, upon adoption by the Sponsor be submitted to the Registration Agency for approval. Such approval will be acquired before implementation of the program.

The Timber Framers Guild reserves the right to discontinue at any time the apprenticeship program set forth herein. The Registration Agency will be notified promptly in writing of any decision to cancel the program.

Deregistration of these Standards may be initiated by the Registration Agency for failure of the Sponsor to abide by the provisions herein. Such deregistration will be in accordance with the Registration Agency's regulations and procedures.

Within fifteen (15) days of cancellation of the apprenticeship program (whether voluntary or involuntary), the *Sponsor* will notify each apprentice of the cancellation and the effect of same. This notification will conform to the requirements of Title 29, CFR part 29.7.

SECTION XXII - AMENDMENTS OR MODIFICATIONS – Title 29 CFR 29.5(b)(18)

These Standards may be amended or modified at any time by the Sponsor provided that no amendment or modification adopted will alter any Apprenticeship Agreement in force at the time without the consent of all parties. Such amendment or modification will be submitted to the Registration Agency for approval and registration prior to being placed in effect. A copy of each amendment or modification adopted will be furnished to each apprentice to whom the amendment or modification applies.

SECTION XXIII - ADJUSTING DIFFERENCES/COMPLAINT PROCEDURE – Title 29 CFR 29.5(b)(22) and 30(11)

The Sponsor will have full authority to supervise the enforcement of these Standards. Its decision will be final and binding on the employer, the sponsor, and the apprentice, unless otherwise noted below.

If an applicant or an apprentice believes an issue exists that adversely affects his/her participation in the apprenticeship program or violates the provisions of the Apprenticeship Agreement or Standards, relief may be sought through one or more of the following avenues, based on the nature of the issue:

Title 29 CFR 29.7 (k)

The Sponsor will hear and resolve all complaints of violations concerning the Apprenticeship Agreement and the registered Apprenticeship Standards, for which written notification is received within fifteen (15) days of violations. The Sponsor will make such rulings as it deems necessary in each individual case and within thirty (30) days of receiving the written notification. Either party to the Apprenticeship Agreement may consult with the Registration Agency for an interpretation of any provision of these Standards over which differences occur. The name and address of the appropriate authority to receive, process and make disposition of complaints is: Apprenticeship Training Committee, Timber Framers Guild, P.O. Box 60, Becket, MA 01223. Fax: 888-453-0879.

Title 29 CFR 30.11

Any apprentice or applicant for apprenticeship who believes that he/she has been discriminated against on the basis of race, color, religion, national origin, or sex, with regard to apprenticeship, or that the equal opportunity standards with respect to his/her selection have not been followed in the operation of the apprenticeship program, may contact directly the Federal Equal Employment Opportunity Commission (EEOC), and/or the Registration Agency.

The complaint will be in writing and will be signed by the complainant. It must include the name, address, and telephone number of the person allegedly discriminated against, the Program Sponsor involved, and a brief description of the circumstances of the failure to apply equal opportunity standards.

The complaint must be filed not later than one hundred eighty (180) days from the date of the alleged discrimination or specified failure to follow the equal opportunity standards, and in the case of complaints filed directly with the review body designated by the Program Sponsor to review such complaints, any referral of such complaint by the complainant to the Registration Agency must occur within the time limitation stated above or thirty (30) days from the final decision of such review body, whichever is later. The time may be extended by the Registration Agency for good cause shown.

Complaints of discrimination in the apprenticeship program may be filed and processed under Title 29, CFR part 30, and the procedures as set forth above.

The Sponsor will provide written notice of its complaint procedure to all applicants for apprenticeship and all apprentices.

SECTION XXIV - TRANSFER OF AN APPRENTICE AND TRAINING OBLIGATION – Title 29 CFR 29.5(13)

The transfer of an apprentice between apprenticeship programs and within an apprenticeship program must be based on agreement between the apprentice and the affected apprenticeship committee or program sponsors, and must comply with the following requirements:

- i. The transferring apprentice must be provided a transcript of related instruction and on-the-job learning by the committee or program sponsor;
- ii. Transfer must be to the same occupation; and
- iii. New apprenticeship agreement must be executed when the transfer occurs between the program sponsors.

The Sponsor may transfer an apprentice from one employer to another to provide continuous employment and to assure the apprentice more complete OJL experience in all aspects of the trade.

If a Sponsor is unable to fulfill its training obligation due to lack of work or failure to conform to the standards of apprenticeship, the Sponsor, with the consent of the apprentice, may move the affected apprentice(s) to other participating employers. This will provide the apprentice an opportunity for continuous employment and completion of their apprenticeship program. The Sponsor will also make available to the apprentice and the receiving employer the apprentice's training record. The apprentice must receive credit from the new employer for the training already satisfactorily completed.

If for any reason a layoff of an apprentice occurs, the Apprenticeship Agreement shall remain in effect unless cancelled by the Sponsor or the apprentice. Credit for related instruction shall be given when the apprentice continues such instruction during the layoff.

SECTION XXV - RESPONSIBILITIES OF THE APPRENTICE

Apprentices, having read these Standards formulated by the Sponsor and signed an Apprenticeship Agreement with the Sponsor agree to all the terms and conditions contained therein and agree to abide by the Sponsor's rules and policies, including any amendments, serve such time, perform such manual training, and study such subjects as the Sponsor may deem necessary to become a skilled Timber Framer.

In signing the Apprenticeship Agreement, apprentices assume the following responsibilities and obligations under the apprenticeship program:

- A. Perform diligently and faithfully the work of the occupation and other pertinent duties assigned by the Sponsor and the employer in accordance with the provisions of these Standards.
- B. Respect the property of the employer and abide by the working rules and regulations of the employer.
- C. Attend and satisfactorily complete the required hours in the OJL and in related instruction in subjects related to the occupation as provided under these Standards.
- D. Maintain and make available such records of work experience and training received on-the-job and in related instruction as may be required by the Sponsor.
- E. Develop and practice safe working habits and work in such a manner as to assure his/her personal safety and that of other fellow workers.
- F. Conduct him/herself at all times in a creditable and ethical manner.

SECTION XXVI - TECHNICAL ASSISTANCE

Technical Assistance such as that from the U.S. Department of Labor, Office of Apprenticeship, State Apprenticeship Agencies, and vocational schools—may be requested to advise the Sponsor.

The Sponsor is encouraged to invite representatives from industry, education, business, private and/or public agencies to provide consultation and advice for the successful operation of their training program.

SECTION XXVII - OFFICIAL ADOPTION OF APPRENTICESHIP STANDARDS:

The Timber Framers Guild hereby adopts these Standards of Apprenticeship on this 1st day of June, 2009.

A handwritten signature in cursive script that reads "Will Beemer". The signature is written in black ink and has a long, sweeping tail that extends to the right.

Signature of Sponsor

Will Beemer

Printed Name

Sponsor(s) may designate the appropriate person(s) to sign the Standards on their behalf

Appendix A

TIMBER FRAMER
(Rough Carpenter)

O*NET-SOC CODE: 47-2031.02 RAPIDS CODE: 0069HY

This schedule is attached to and a part of these Standards for the above identified occupation.

1. TERM OF APPRENTICESHIP

The term of the occupation shall be 3 years with an OJL attainment of 5000-7000 hours supplemented by the required hours of related instruction.

2. RATIO OF APPRENTICES TO JOURNEYWORKERS

One (1) apprentice may be employed in each shop department, and/or jobsite employing a qualified journeyworker.

3. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate.

2 ½ Year Term Example:

1 st	0-6 months - 0-1000 hours = 50% of journeyworker wage
2 nd	6 months - 1000 – 2000 hours = 55% of journeyworker wage
3 rd	2 nd year, 2000 - 4000 hours = 65% of journeyworker wage
4 th	3 rd year, 4000 hours - completion, (5000 hours minimum) = 75% of journeyworker wage

3 ½ Year Term Example:

1 st	0-6 months - 0-1000 hours = 50% of journeyworker wage
2 nd	6 months - 1000 – 2000 hours = 55% of journeyworker wage
3 rd	2 nd year, 2000 - 4000 hours = 65% of journeyworker wage
4 th	3 rd year, 4000 hours - 6000 hours (5000 hours minimum) = 75% of journeyworker wage
5 th	4 th year, 6000 hours - completion, (7000 hours maximum) = 85% of journeyworker wage

4. SCHEDULE OF WORK EXPERIENCE (See attached Work Process Schedule)

The Sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

5. SCHEDULE OF RELATED INSTRUCTION (See attached Related Instruction Outline)

Appendix A

WORK PROCESS SCHEDULE

TIMBER FRAMER

(Rough Carpenter)

O*NET-SOC CODE: 47-2031.02 RAPIDS CODE: 0069HY

DESCRIPTION: Build finished wooden frame structures of heavy timber, such as residential and commercial buildings, according to blueprints and specifications. Study drawings to determine lengths of timbers and location of wooden or metal joinery. Procure timbers from sawmills and visually grade materials to meet engineering specifications. Understand the behavior of green (unseasoned) timber in a structure and know how to minimize undesirable effects. Efficiently move and manipulate heavy timber in a production shop environment using specialized equipment. Measure and mark materials using squares, measuring tapes and pencils. Use layout techniques that account for variability in nominal size and shape of timber; incorporate round and crooked timber in finished frames. Cut timbers and joinery using specialized equipments such as chain mortisers and large portable circular saws. Finish timbers using portable electric planers and suitable coatings. Assemble timber frames using wooden, pegged joinery and specialized equipment such as come-alongs and clamps. Bore peg holes using electric or hand drill and offset to draw joinery tight during assembly. Erect timber frames on-site using cranes, hoists, ladders, temporary bracing and appropriate fall prevention and protection equipment. Build rough and finished stairs. Install enclosure systems, particularly Structural Insulated Panels (SIPs). Examine, repair and install defective timbers in existing timber framed buildings. Survey and apply sound structural and conservation standards to historic timber structures in need of repair, such as barns, steeples and covered bridges. Employ sound small business practices and project management skills.

The Program is Hybrid, 3-year Apprenticeship with an estimated minimum of 5000 hours and a maximum of 7000 of work experience. However, the apprentice is required to meet the competency standards as established by the sponsor. During the term of Apprenticeship, Timber Frame Apprentices will be given training in the various on-the-job (OJL) work experiences listed below. The order in which this training is given will be determined by the workflow on the job and will not necessarily be in the order listed. The times allotted to these various processes are estimated times that the average Apprentice will require to learn each phase of the trade. They are intended only as a guide to indicate the quality of the training being provided and the ability of the apprentice to absorb this training in an average amount of time. The total term of apprenticeship is indicated below.

WORK PROCESS SCHEDULE
TIMBER FRAMER
(Rough Carpenter)
O*NET-SOC CODE: 47-2031.02 RAPIDS CODE: 0069HY

Competencies

Hours Min.-Max.

DRAWINGS AND SPECIFICATIONS

300-500

- Identify, read and interpret essential information provided in construction documents.
- Sketch shop drawings & joinery details
- Make technical drawings and details for timber-framed buildings.
- Identify and describe the information required for building codes, estimating, planning, permits, engineering and sub trades.
- Identify and describe various methods for assigning locations of timbers within frames.
- Identify common frame components.

TIMBER CONVERSION

50-100

- Identify and demonstrate techniques for safely and accurately hewing logs and timbers
- Identify and describe timber milling equipment and procedures
- Identify and describe special considerations for the milling of salvaged timber.
- Demonstrate milling with portable sawmill.

TRADE PRACTICES

50-100

- Identify and describe the general processes and practices necessary to manage a small timber frame project effectively.
- Demonstrate effective communication with colleagues and co-workers.
- Identify, describe and demonstrate the good work habits necessary to being a responsible and productive member of a timber framing crew.
- Identify and describe effective techniques for yard management.
- Demonstrate the effective care and management of stock, tools and inventory.
- Demonstrate basic instructional techniques for the teaching of hard and soft skills to timber framers.
- Document all timber framing projects that Apprentice has been involved in throughout the period of their apprenticeship.

TIMBER FRAMING TECHNIQUES

1200-1600

- Select timbers for framing.
- Describe how to safely and effectively store and protect timbers during all timber framing operations from initial delivery to site assembly.
- Demonstrate safe timber handling.

- Describe common work sequences and processes for timber framing shops.
- Describe efficient shop layout.
- Describe the tools and equipment necessary to perform common work sequences for timber framing shops.
- Demonstrate the use of Square Rule Layout, Mill Rule Layout and Mapping for joinery and frame sections.
- Demonstrate the safe and accurate layout and cutting of common joinery.
- Describe, construct and use jigs and templates for timber framing.

TOOLS & EQUIPMENT

1000-1400

- Demonstrate the safe care, use and storage of hand and power tools used for timber framing.
- Demonstrate the sharpening of edge tools.
- Identify historic hand tools used for timber framing.
- Identify and describe appropriate PPE for use with hand and power tools.
- Demonstrate the safe care, use and storage of chainsaws for timber framing.
- Identify and describe Computer Numeric Control (CNC) and other machines that are used for timber framing.
- Demonstrate the safe care and use of lifting and hoisting equipment for timber framing.
- Identify, describe and demonstrate the use of survey instruments.
- Demonstrate the safe care and use of forklifts for timber framing.
- Demonstrate the safe care and use of access equipment, including Mobile Elevated Work Platforms (MEWP) for timber framing.

RELATED MATERIALS

150-200

- Identify and describe the glues and fasteners and related tools that are commonly used in timber frame construction.
- Identify and describe the general properties and appropriate applications of glues and fasteners that are commonly used in timber frame construction.
- Identify and describe the types of enclosure systems that are commonly used in timber frame construction.

RELATED TRADES

50-100

- Identify and describe common general carpentry, finish carpentry and sub-trade (plumbing, electrical, mechanical) processes and practices.
- Identify and describe constructive measures for ensuring an effective interface between general carpenters, finish carpenters, sub-trades and timber framers.
- Identify and describe constructive measures for ensuring a smooth handover between timber frame contractors and general carpenters, finish carpenters and sub-trades.
- Identify and describe common sub-trade (plumbing, electrical, mechanical) processes and practices.

RELATED SKILLS

200-400

- Identify and define stair building and handrailing terms.
- Identify and describe common stair building and handrailing details.
- Calculate the angles and dimensions necessary to construct basic straight and winding stairs to satisfy building code requirements.
- Make straight stairs and handrails for timber framed buildings.

FINISHING TIMBERS

500-600

- Identify and describe various chamfering tools, techniques and profiles.
- Demonstrate the safe and effective cutting of common chamfers and stops with hand and power tools.
- Identify and describe various planning tools and techniques used in timber framing.
- Demonstrate the safe and effective planning of timbers with hand and power tools.
- Identify and describe the general properties and appropriate applications of finishes that are commonly used in timber frame construction.
- Describe common work sequences, tools, equipment and processes for applying surface finishes to timbers.
- Describe common work sequences, tools, equipment and processes for applying surface protection to timbers.

RAISING & RIGGING

1000-1400

- Identify and describe procedures for preparing a job site for the erection of a timber-framed building.
- Identify and describe procedures for checking foundations and floors in preparation for the erection of a timber-framed building.
- Identify and describe procedures for the safe and efficient loading / unloading of timber frames on trucks.
- Identify the various types of vehicles commonly used for frame deliveries, and describe appropriate and economical uses for each.
- Calculate the weights and centers of gravity of timbers and frame assemblies.
- Determine appropriate rigging points for frame assemblies.
- Identify and describe hazards associated with using cranes to raise timber buildings.
- Identify and describe common crane types and their applications for timber framing.
- Demonstrate correct hand signals for communicating with crane operators.
- Determine appropriate sling angles for lifting with cranes.
- Demonstrate safe and correct inspection of lifting tackle.
- Demonstrate safe slinging / rigging of loads for cranes.
- Demonstrate how to plan, organize and run a safe and efficient frame raising.
- Demonstrate pre-work planning and perform raising briefings.
- Demonstrate the correct tying of common knots and hitches and describe their uses for timber framing.
- Identify and describe hazards associated with installing structural insulated panels (SIP's).
- Demonstrate safe and correct installation of SIPs.
- Identify and describe tools for cutting and modifying SIPs.
- Identify and describe safe and correct methods for cutting and modifying SIPs.

CONSERVATION TECHNIQUES**500-600**

- Demonstrate how to plan and organize a safe frame dismantling.
- Demonstrate pre-work planning and perform dismantling briefings.
- Demonstrate how to safely and effectively dismantle a timber-framed building.
- Identify and describe common types of repairs for timber structures.
- Demonstrate simple timber repairs.
- Demonstrate simple metalwork repairs.
- Demonstrate simple chemical repairs.
- Describe the effects of shrinkage on various repair types.
- Describe the effects of water / moisture on various repair types.

TOTAL**5000-7000**

RELATED INSTRUCTION OUTLINE
TIMBER FRAMER
(Rough Carpenter)
O*NET-SOC CODE: 47-2031.02 RAPIDS CODE: 0069HY

Hours

YEAR 1

SAFE WORK PRACTICES

24

- Identify pertinent legislation and regulations
- Identify and describe common shop and site hazards
- Identify and describe shop and site safety equipment and practices
- Identify and describe safety committees
- Identify and describe procedures for reporting an injury at the shop and at the site
- Identify and describe safe shoring and bracing of timber frames
- Demonstrate inspection and safe use of ladders, scaffolds and access equipment
- Identify and describe Personal Protective Equipment (PPE)
- Describe and demonstrate safe lifting and manual handling
- Identify and describe basic first aid requirements for timber framing.
- Complete basic first aid training and demonstrate basic first aid techniques.
- Identify and describe common controlled products used and stored at a commercial timber framing operation.
- Use Material Safety Data Sheets (MSDS) to identify and describe safety precautions for storage and handling of hazardous materials.
- Use MSDS to identify appropriate PPE for use of common hazardous materials.

HISTORIC TIMBER FRAMING

12

- Identify and describe the history and evolutionary progress of timber framing and joinery techniques.
- Identify and describe the key historic periods of development in timber framing style and form.
- Identify the general types and forms of timber buildings.
- Determine the age of a building by examining details of its construction.
- Identify and describe historic timber framing tools and the markings that they make.

TIMBER MANAGEMENT

12

- Identify and describe the environmental and economic impacts of non-sustainable forestry.
- Identify and describe the environmental and economic benefits of sustainable forestry.
- Identify and describe the 'value added' concept.
- Identify and describe the principals behind sustainable-yield forest management for timber production.
- Identify and describe standards and certification for sustainable forest management and timber production.
- Describe the process of timber harvesting, shipping and seasoning.

- Identify common tree species used by timber framers.
- Identify general characteristics and properties of common tree species used by timber framers.
- Demonstrate the correct method of determining the timber volume and quality of living trees.

TIMBER GRADING 16

- Identify natural-growth, manufacturing and seasoning defects in timbers
- Demonstrate the correct use of visual grading rules to grade timbers.
- Identify design values for timbers.

TRADE SCIENCES 40

- Demonstrate the use of common mathematical formulas and measurement systems used for construction.
- Demonstrate the use of geometry to solve problems that are commonly found in construction.
- Demonstrate the use of developed drawing to illustrate roof planes and joinery.
- Demonstrate the use of trigonometry for solving common construction problems.
- Use ratio and proportion to solve common construction problems.
- Identify and describe the full range of terms that are commonly used by timber framers to describe their frames, frame components and joinery.

TRADITIONAL RAISING AND RIGGING 40

- Identify and describe hazards associated with using traditional rigging and raising equipment to erect timber buildings.
- Identify and describe common types of traditional raising and rigging equipment and their applications for timber framing.
- Identify and describe design and specification issues for traditional lifting systems.
- Demonstrate safe and correct communication with lifting crew.
- Determine appropriate sling angles for lifting.
- Demonstrate safe and correct inspection of lifting tackle.
- Demonstrate safe and effective raising and down-rigging of Gin Poles, A-Frames and Derricks.
- Demonstrate safe slinging / rigging of loads with traditional raising and rigging equipment.
- Demonstrate the correct method for reeving blocks and tackle.
- Identify and describe hazards associated with hand-raising timber frames without lifting tackle.
- Demonstrate safe and correct communication with hand-raising lifting crew.

TOTAL YEAR 1 144

YEAR 2

TRADE PRACTICES

48

PROJECT MANAGEMENT

- Identify and describe the general processes and practices necessary to manage a small timber frame project effectively.
- Identify and describe record keeping, and the use of site journals for project management.
- Identify and describe protocols and procedures for effectively managing and issuing drawings, details and specifications.
- Identify and describe protocols and procedures for effectively managing and issuing correspondence relating to the construction of timber frames.
- Identify and describe protocols and procedures for effectively tracking costs and quantities.

SMALL BUSINESS BASICS

- Identify and describe employer and employee obligations.
- Identify and describe basic client agreements.
- Identify and describe basic contracts of employment.
- Identify and describe the general processes and practices necessary to promote and operate a small, successful, timber frame business.
- Identify and describe the principals of good business practice for timber framing companies.

ESTIMATING

- Identify and quantify the materials, labor and equipment necessary to construct timber-framed buildings.
- Demonstrate the calculation of board measurements and timber volume for estimating.
- Compile and organize estimates of material, labor and equipment quantities.
- Calculate the costs and times associated with material, labor and equipment quantities.
- Identify and describe the various common factors that have an effect on the cost of timber frame construction.

OFFICE SYSTEMS

- Identify and describe the basic office systems that are necessary to operate an effective timber framing businesses.
- Identify and describe commonly available computer hardware and software for timber frame offices.
- Demonstrate the effective use of computers to perform basic tasks.

TIMBER FRAMING TECHNIQUES**80**

- Demonstrate the use of Scribe Rule for joinery and frame sections.
- Demonstrate the layout and cutting of joinery in round log work.
- Demonstrate the use of various tools for the development of compound joinery layout and member angles.

RELATED SKILLS**16**

- Demonstrate the safe and effective making of riven pegs with hand tools.
- Demonstrate the safe and effective making of handles for common woodworking tools.
- Identify and describe the hazards that are commonly associated with falling trees and bucking logs.
- Correctly identify tension and compression wood in trees and logs.
- Identify and describe the principles of best practice for the safe and effective falling of trees and bucking of logs under a variety of common woodland conditions.
- Demonstrate the safe and effective felling of small diameter trees and bucking of logs.
- Demonstrate the correct layout and chip carving of letters and numerals.

TOTAL YEAR 2**144****YEAR 3****TRADE SCIENCES****124****MECHANICAL PROPERTIES OF TIMBER FRAMES**

- Identify and describe the various loads that effect timber framed structures and the causes of these loads.
- Identify and describe the various load conditions of timber posts and beams.
- Identify and describe how and why timber framed structures fail.

FORCES & STRESSES IN TIMBER FRAMES

- Identify and describe the various forces and stresses that act upon a timber framed building and it's individual timber components.
- Identify tension joinery.

PROPERTIES & REACTIONS OF WOOD

- Identify and describe the parts and properties of hardwood and softwood.
- Describe the various types of shrinkage that effect timbers.
- Describe the effects of timber shrinkage on timber shapes and dimensions.
- Identify and describe the processes of rot, decay and insect attack in timber.

FORCES & STRESSES IN FASTENERS

- Describe how loads are transmitted through connections and how various fasteners resist these loads.
- Identify and describe the various properties and issues of common timber fasteners.
- Identify connection types that require specialized and expert design.

CALCULATE LOADS

- Demonstrate how to calculate simple loads for timbers and frames.
- Demonstrate how to calculate simple loads for timber connections.
- Identify and describe when a professional engineer is required.

DESIGN TIMBER FRAMES

- Identify and describe the general principals of frame design.
- Identify and describe the various processes that are necessary for generating frame designs.
- Identify cost-effective frame designs.
- Identify and select appropriate frame and truss types for specific applications.
- Identify and describe when a professional engineer is required.
- Identify and describe when a professional architect is required.

COMPUTER AIDED DESIGN (CAD)

- Identify and describe commonly available CAD packages and their uses for timber frame design.
- Compare and distinguish between commonly available CAD packages and their applications and limitations for timber frame design.
- Demonstrate the use of CAD for the production of simple frame drawings.

COMPUTER AIDED ENGINEERING (CAE)

- Identify and describe commonly available CAE packages and their uses for timber frame design.
- Compare and distinguish between commonly available CAE packages and their applications and limitations for timber frame design.

CONSERVATION TECHNIQUES

20

- Identify and describe the national and international bodies that govern the conservation of historic timber buildings.
- Identify and describe current standards and guidelines for the conservation of historic timber buildings.
- Identify and describe preservation ethics as they pertain to the conservation of historic timber buildings.
- Identify, describe and discuss issues of timber supply related to the conservation of historic timber buildings.
- Identify, describe and discuss the significance of preserving historic craft techniques and how this relates to the conservation of historic timber buildings.

- Identify and describe common practices used to conserve and preserve historic timber buildings.
- Identify and describe the tools and techniques that are commonly used for investigating, quantifying and documenting historic timber buildings.
- Demonstrate how to document, measure and label a historic timber building in accordance with the recommendations of the Traditional Timberframe Research and Advisory Group (TTRAG).
- Create a survey report for an historic timber building.
- Identify and quantify the materials, labor and equipment necessary to repair timber-framed buildings.
- Compile and organize estimates of material, labor and equipment quantities for repairs of timber buildings.
- Calculate the costs and times associated with material, labor and equipment quantities for repairs of timber buildings.
- Identify and describe the various common factors that have an effect on the cost of timber frame restoration and repair work.

TOTAL YEAR 3	144
Total hours of Related Instruction	432