

Office of the Labor Commissioner Nevada State Apprenticeship Council

APPLICATION FOR APPROVAL ON THE JOB TRAINING & APPRENTICESHIP

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Contact Person Jason Lamberth			Title_Coor	rdinator	Type of	Prog	gram:	Glazing			_Sic	Code_ <u>17</u>	793_
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Standards of Apprenticeship

Developed By

The

AND ALLIED TRADES, DISTRICT COUNCIL #15 GLAZIERS UNION LOCAL #2001 FINISHING TRADES INSTITUTE

Of

NEVADA GLAZIERS JOINT APPRENTICESHIP AND TRAINING COMMITTEE

And the Independent Signatory Contractors Of

Glaziers Union Local #2001 For the Occupation of

Architectural Glazier

D.O.T. #865.381-010

Developed in Cooperation with the U.S. Department Of Labor,

Office of Apprenticeship, and approved by the

Nevada State Apprenticeship Council

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FOREWORD

These International Union of Painters and Allied Trades Finishing Trades Institute Apprenticeship Standards have as their objective, the training of all occupations listed in these Standards skilled in all phases of the industry. The JATC 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 an apprenticeship training program that meets the particular needs of the area.

DEFINITIONS

<u>Apprentice:</u> Any individual meeting the qualifications described in the Standards of Apprenticeship who has signed an Apprenticeship Agreement with the JATC for training and related instruction under these Standards, and who is registered with the Nevada State Apprenticeship Council.

<u>Apprentice Electronic Registration (AER):</u> 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.

<u>Apprenticeship Agreement:</u> The written agreement between the apprentice and the Joint Apprenticeship and Training Committee (JATC), which sets forth the responsibilities and obligations of all parties with respect to the Apprentice's employment and training. Each Apprenticeship Agreement must be filed with the Nevada State Apprenticeship Council.

<u>Certificate of Completion of Apprenticeship:</u> The Certificate of Completion of Apprenticeship issued by the Nevada State Apprenticeship Council to those registered apprentices certified and documented as successfully completing the apprentice training requirements outlined in these Standards of Apprenticeship.

<u>Collective Bargaining Agreement (CBA):</u> The negotiated agreement between the Union and signatory Employers that sets forth the terms and conditions of employment.

<u>Consultants:</u> The JATC may request interested agencies or organizations to designate a representative to serve as a consultant. Consultants may be asked to participate without vote in conferences on special problems affecting the agencies or organizations they represent.

<u>Coordinator of Training:</u> An individual designated by the JATC to oversee the day to day operations of the apprenticeship and training program, as well as, but not limited to the program's training records, apprentice and program compliance.

<u>Cooperating Agencies:</u> US Department of Labor, Nevada State Apprenticeship Council, Public Schools, Vocational Institutes, and College of Southern Nevada

<u>Director of Training:</u> An individual who will work as the liaison to the IUPAT FTI and the Joint Apprenticeship Committee. The Director will inform the committee of changes and recommendations of the IUPAT FTI to be implemented into programs with JATC recommendations.

<u>Electronic Media:</u> 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.

<u>Employer:</u> 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.

<u>Employer Group:</u> Any number of employers who are considered as approved training agents under these Apprenticeship Standards through a negotiated labor agreement, jointly or individually.

<u>Finishing Trades Institute of Nevada Glaziers JATC:</u> May also be known in this document as The FTI of Nevada Glaziers JATC and/or JATC

<u>Hybrid Occupation:</u> The hybrid approach measures the individual apprentice's skill acquisition through a combination of specified minimum number of hours of on-the-job learning and the successful demonstration of competency as described in a work process schedule.

<u>Interim Credential</u>: Means a credential issued by Registration Agency, upon request of the appropriate sponsor, as certification of competency attainment by an apprentice.

Joint Apprenticeship and Training Committee (JATC): Those persons designated by the sponsor to act as an agent for the sponsor in the administration of the program. The Committee comprised of an equal number of representatives appointed by the IUPAT District Council #15, Local #2001, a known entity of the International Union of Painters and Allied Trades and the signatory Contractors of the Glaziers Local 2001 in whose name these Standards of Apprenticeship will be registered. May also be referred to in this document as The FTI of Nevada Glaziers JATC and/or JATC.

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.)

<u>O*NET-SOC Code</u>: 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.

<u>On-The-Job Learning (OJL):</u> 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.

<u>Performance Improvement Plan:</u> A document created by the JATC, with input from the apprentice, to identify the corrective actions necessary for an apprentice to demonstrate satisfactory progress in his or her apprenticeship training program.

<u>Probationary Period</u>: A defined period of time during which the apprenticeship agreement may be terminated by either party of the agreement upon written notice to the Nevada State Apprenticeship Council.

<u>Program Sponsor:</u> The FTI of Nevada Glaziers JATC in whose name the local Standards of Apprenticeship will be registered, and which will have the full responsibility for administration and operation of the apprenticeship program.

<u>Registered Apprenticeship Partners Information Data System (RAPIDS):</u> The Federal System which provides for the automated collection, retention, updating, retrieval and summarization of information related to Apprenticeship programs.

<u>Registration Agency:</u> The Nevada State Apprenticeship Council (N.S.A.C.) recognized by the U.S. Department of Labor, Apprenticeship Training, Employer and Labor Services.

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 Nevada State Apprenticeship Council.

<u>Standards Of Apprenticeship:</u> This entire document including all appendices and attachments hereto, and any future modifications or additions approved by the Nevada State Apprenticeship Council.

<u>Supervisor of Apprentice(s):</u> An individual designated by the program sponsor to supervise or have charge and direction of an apprentice. May also be known in this document as the Apprenticeship Coordinator.

<u>Transfer:</u> 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.

<u>Union:</u> The FTI of Nevada Glaziers JATC and/or DC 15 Local Union #2001 and The International Union of Painters and Allied Trades. May also be referred to as 'Labor'.

<u>Work Processes:</u> Tasks in which the apprentice must demonstrate proficiency before a completion certificate is granted.

I. PROGRAM ADMINISTRATION

Structure of the Joint Apprenticeship and Training Committee

The International Union of Painters and Allied Trades (IUPAT) Finishing Trades Institute (FTI) of Nevada Glaziers Joint Apprenticeship and Training Committee (JATC), in whose name these Standards of Apprenticeship are registered, shall be composed of an equal number of representatives appointed by management and the union. The JATC shall be comprised of three (3) representatives and one (1) alternate appointed by management and three (3) representatives and one (1) alternate appointed by the union. A Quorum shall consist of no less than one (1) representative of the employers and one (1) representative of the union.

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 JATC.

Geographic Area

These Standards of Apprenticeship shall apply to the following geographical area: The counties of Clark, Lincoln, Nye, and Esmerelda, State of Nevada, Kingman, Arizona, Bullhead City, Needles, Ely, St. George and Cedar City, Utah and such cities and other locales as defined by their charter.

Administrative Procedures:

- A. The JATC will elect a Chairperson and a Co-Chairperson, and will determine the time and place of regular meetings which will take place every month.
- B. The Chairperson and Co-Chairperson will have the power to vote on all questions affecting apprenticeship.
- C. The Chairperson and Co-Chairperson should rotate among members of the JATC.

Responsibilities of the Joint Apprenticeship and Training Committee:

- A. Establishing and registering Standards of Apprenticeship with the Registration Agency, and ensure adherence thereto
- B. Coordinate development of Standards of Apprenticeship with IUPAT/FTI and follow IUPAT/FTI prescribed procedures for approval and recognition of Standards of Apprenticeship prior to submittal to the Registration Agency.
- C. Establishing and maintaining rules and requirements governing the policies, administration, supervision, and training of apprentices. The rules and requirements shall be in conformity with the collective bargaining agreement and with these

- Apprenticeship Standards. A copy of the standards, rules and requirements, and any changes to them, shall be provided to the Registration Agency and the apprentice.
- D. Determining the need for new apprentices, including when apprenticeship openings will be available and selecting apprentices in accordance with the Selection Procedures attached hereto and made a part of the Apprenticeship Standards.
- E. Initiating and signing Apprenticeship Agreements for apprentices and forwarding them to the Registration Agency for approval and registration. In addition, The FTI of Nevada Glaziers JATC will notify the Registration Agency, IUPAT/FTI, and other appropriate parties of the cancellation, suspension, extension, reinstatement, or completion of apprentices.
- F. Arranging for apprentices to get the required on-the-job learning (OJL) and the Related Technical Instruction (RTI) that will provide them with the diversity of training delineated in the attached Work Process Schedule and Related Instruction Outline.
- G. Monitoring and evaluating apprentice's progress, including the review of apprentice's records to insure apprentices are fulfilling their responsibilities under the program. The FTI of Nevada Glaziers JATC will review, approve and document all apprentice actions including hours, content, and progress of training on-the-job and in related instruction; wage progressions; disciplinary actions; evaluations; corrective action plans; successful completions; cancellations; and any other performance or attendance-related issues.
- H. Hearing and adjusting complaints regarding Apprenticeship Agreement violations.
- Certifying the apprentice has completed both the required OJL and RTI, and submitting such certification to the Registration Agency and the IUPAT/FTI with the request for issuance of the Certificate of Completion of Apprenticeship.
- J. Annually review the Affirmative Action Plan, good faith efforts, and Selection Procedures. Updating the Affirmative Action Plan and goals/timetables, and modifying the Affirmative Action Plan and Selection Procedures as a result of the review, when appropriate. Such review will include an analysis of the JATC's success in meeting its goals, and the good faith effort made, and the impact each element of the Affirmative Action Plan and Selection Procedure had on meeting its goal.
- K. Maintaining all records relating to the recruitment, selection, employment and training of apprentices for a minimum of five years from the last date of action.
- L. Administering and operating a continuing education program for Journeyworkers
- M. Ensuring that all funds for the operation of the apprenticeship and training programs are held in a jointly administered Trust Fund established by the local Collective Bargaining Agreement and operated as set forth in the Declaration of Trust and in accordance with applicable law.
- N. Providing the apprentices with a copy of written rules and policies and the apprentice will sign an acknowledgement receipt of same. This procedure will be followed whenever revisions or modifications are made to the rules and policies.

II. <u>EQUAL OPPORTUNITY PLEDGE</u>

The recruitment, selection, employment, and training of apprentices during their apprenticeship, shall be written without discrimination because of race, color, religion, national origin, disability, sex, age, or sexual orientation. 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, Part 30, and the Nevada EEO plan.

III. AFFIRMATIVE ACTION PLAN

If the sponsor registers five or more apprentices, the JATC will adopt an Affirmative Action Plan and Selection Procedures as required under Title 29 CFR Part 30 and the Nevada EEO Plan. It will be attached as Appendix C.

IV. QUALIFICATIONS FOR APPRENTICESHIP

Applicants shall meet the following minimum qualifications:

A. Age

All applicants must be at least eighteen (18) years of age *except as noted below. Applicants are required to submit reliable proof of age (e.g., a driver's license, birth certificate or other acceptable documentation.

*An applicant who is seventeen (17) years of age and is participating in a school-to-work program or equivalent and who otherwise meets all qualifications may be rated and ranked and placed on the Pool of Eligible's list. Such an applicant must provide proof that a high school diploma or GED has been awarded and must be (18) years of age prior to being registered by the sponsor.

B. Education

All applicants shall possess sufficient educational knowledge to satisfactorily complete the on-the-job training and related technical instruction. Applicants must provide proof that a high school diploma or GED has been awarded at the time of application.

C. Physical

All applicants shall be physically capable of performing the essential functions of the Glazing Trade without posing a direct threat to the health and safety of themselves or any other individuals, with reasonable accommodations.

D. Citizen

All applicants must be a Legal Citizen of the USA or Legal Alien authorized to work in the USA by the U.S. Citizenship and Immigration Services (USCIS). Proof must be shown at the time of application.

E. Transportation

All applicants must have adequate transportation to attend OJL and RTI classes.

F. Ability

All applicants must satisfy the Committee that they have the ability and aptitude to master the rudiments of the trade based on oral interview, written documentation submitted by the applicant, and evaluation rankings.

G. Military Experience

All applicants must submit a DD-214 to verify military training and/or experience if they are a veteran and wish to receive consideration for such training/experience and/or VA benefits.

V. SELECTION OF APPRENTICES

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

VI. APPRENTICESHIP AGREEMENT

After an applicant for apprenticeship has been selected, but before employment as an apprentice or enrollment in related instruction, the Apprentice shall be covered by a written apprenticeship agreement (Appendix B) signed by The FTI of Nevada Glaziers JATC and the apprentice, and approved by and registered with the Registration Agency. Such agreement shall 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 JATC, the Registration Agency, the employer and the Union, if appropriate.

An additional copy of the Apprenticeship Agreement will be provided to the Veterans State Approving Agency for those veteran apprentices desiring access to any benefits to which they may be entitled.

Prior to signing the Apprenticeship Agreement, each selected applicant will be given an opportunity to read and view the Standards, the JATC's written rules and policies, the Apprenticeship Agreement, and the sections of the Collective Bargaining Agreement (CBA) that pertain to apprenticeship.

The Registration Agency will be notified within ten (10) days of the execution of each Apprenticeship Agreement and will be given all of the information required for registering the apprentice

VII. RATIO OF APPRENTICES TO JOURNEYWORKERS

A numeric ratio of apprentices to journeyworkers consistent with proper supervision, training, safety, and continuity of employment and applicable provisions in collective bargaining agreements, except where such ratios are expressly prohibited by the collective bargaining agreements. The ratio of apprentices to journeyworkers will be one (1) apprentice to three (3) journeyworkers or a fraction thereof.*

*Fraction thereof is defined as "The employer may place one apprentice on the jobsite for one, two or three glazier journey workers; two apprentices for four, five or six journey workers; three apprentices for seven, eight and nine journey workers, and follow this procedure thereafter." The ratio of apprentices to journeymen employed in any occupation on a job site must not be greater than the ratio approved for the employer as to the entire work force pursuant to program registered with the Council. (NAC 610.438)

VIII. TERM OF APPRENTICESHIP

The term of the apprenticeship shall be a period of reasonably continuous employment, including the probationary period, as prescribed in the OJL schedule found within Appendix A of these Standards. The Architectural Glazier Apprenticeship shall be a combination of 4000 hours of OJL and a minimum of 288 hours of RI. In the event the apprentice is required to work overtime, he/she shall receive credit on his term of apprenticeship for only the actual hours worked.

An apprentice, who by exceptional aptitude or as a result of past education and/or practical experience achieves the desired level of competency in a phase of the apprenticeship program in less than the time designated, may be advanced to the next phase with the formal approval of the JATC. The determination of such advancement is outlined in the competencies for Architectural Glazier. It is the responsibility of the FTI

of Nevada Glaziers JATC to confirm that all competencies have been satisfactorily met, within the guidelines of these standards.

IX. PROBATIONARY PERIOD

Each applicant selected for apprenticeship shall serve a probationary period of no less than the first ninety (90) calendar days from the commencement of OJL.

During the probationary period either the apprentice or the JATC may terminate the Apprenticeship Agreement, without stated cause, by notifying the other party in writing.

The records for each probationary apprentice shall be reviewed by the JATC prior to the end of the probationary period. Records may consist of periodic reports regarding progression made in both the OJL and RI and any disciplinary action taken during the probationary period. Any probationary apprentice evaluated as satisfactory after such review shall be given full credit for the probationary period and continue in the program.

Prior to the end of the probationary period, the JATC must act on each probationary apprentice to end the probation, extend the probation, or cancel the apprenticeship agreement. All interested parties shall be notified of such action.

After the probationary period, the apprenticeship agreement may be canceled at the request of the apprentice, or may be suspended or canceled by the JATC for reasonable cause after documented due notice to the apprentice and a reasonable opportunity for corrective action. In such cases, the JATC will provide written notice to the apprentice and to the registration agency of the final action taken.

X. HOURS OF WORK

Apprentices will generally work the same hours as journeyworkers except that no apprentice will be allowed to work overtime or out of town 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.

XI. APPRENTICE WAGE PROGRESSION

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

The progress wage schedule shall be an increasing percentage of the journey worker wage rate as established in the collective bargaining agreement, but never less than the federal minimum wage for the beginning apprentice.

XII. CREDIT FOR PREVIOUS EXPERIENCE

The FTI of Nevada Glaziers JATC 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 of Apprenticeship.

Apprentice applicants seeking credit for previous experience gained outside the supervision of the JATC must submit the request at the time of application and furnish such records, affidavits, and other such materials as may be required to document their previous employment, training, and experience. Such applicants will be required to demonstrate their hands-on proficiencies as well as be subject to a formal written and/or electronic assessment(s) to substantiate the claim. The FTI of Nevada Glaziers JATC will utilize standardized assessment instruments provided by the IUPAT/FTI to determine the knowledge, skills, and competencies of apprentice applicants seeking credit for previous experience.

Applicants requesting such credit who are selected into the apprenticeship program shall start at the beginning wage rate. The request for credit will be evaluated and a determination made by the JATC 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 shall be advanced to the wage rate designated for the level to which such credit accrues. The granting of advanced standing will be uniformly applied to all apprentices. The Registration Agency will be advised of any credit granted and the wage rate to which the apprentice is advanced.

Applicants who successfully complete the application process for apprenticeship and have successfully completed the Glazier Job Corps Program or are entering through recognized preparatory programs (including Helmets to Hardhats Program, and other Veteran Programs, and Native American Programs) shall be evaluated in terms of their prior experience through hands-on assessments as well as be subject to a formal written and/or electronic assessment(s). They will then be placed within the program at the point that corresponds with their proven experience.

XIII. WORK EXPERIENCE

During the apprenticeship the apprentice shall receive such OJL and RI in all phases of the chosen occupation necessary to develop the skill and proficiency of a skilled journeyworker. The OJL shall be under the direction and guidance of the supervisor's of the apprentice.

XIV. RELATED INSTRUCTION

During each segment of training, apprentices are required to attend classes in subjects related to their chosen occupation as outlined in Appendix A. A minimum of 144 hours of RI is required annually during the term of apprenticeship. Apprentices agree to take such courses as the JATC deems advisable. The JATC will secure the instructional aids and equipment it deems necessary to provide quality instruction. Apprentices will not be paid for hours spent attending RI classes unless approved for payment by the FTI of Nevada Glaziers JATC.

If applicable, the JATC will inform each apprentice of the availability of college credit through the College of Southern Nevada.

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 JATC 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 JATC will monitor and document the apprentice's progression in related instruction classes.

INSTRUCTOR QUALIFICATION

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

- A. Instructors shall be journeyworkers or equivalent subject matter experts who possess advanced levels of knowledge about the crafts and/or topics for all subjects to be taught.
- B. Instructors shall have been trained in teaching techniques and adult learning styles, as evidenced by at least one of the following:
 - 1. Instructors shall have successfully completed IUPAT/FTI training in teaching techniques and adult learning styles;
 - Instructors shall have successfully completed course(s) equivalent to the IUPAT/FTI programs cited in paragraph (1) above provided by an accredited institution; or National Labor College; or Marshall Community and Technical College; or
 - 3. An instructor who has not completed either the IUPAT/FTI training cited in paragraph (1) above or equivalent training cited in paragraph (2) above shall be allowed a period not to exceed 18 consecutive months from the effective date of these standards or the beginning of his or her duties to instruct apprentices, whichever is later, to meet these requirements.
- C. Instructors shall remain current in their industry knowledge and adult education knowledge referenced in A and B of this section. Industry recognized certification programs may satisfy this requirement.

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

All applicants shall receive instruction in safe and healthful work practices both on-the-job and in related technical instruction that are in compliance with the Occupational Safety and Health Standards promulgated by the Secretary of Labor under Public Law 91-596, dated December 29, 1970, as amended, by Public Law 101-552, Section 3101, November 5, 1990 as amended, by Public Law 105-198, July 16, 1998 as amended, by Public Law 105-241 September 29, 1998 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.

XVI. SUPERVISION OF APPRENTICES

The JATC will be responsible for the training of the apprentice on the job. Apprentices will be under the general supervision of the JATC and under the direct supervision of the journeyworker to whom they are assigned. The supervisor of apprentice(s) designated by the employer will be responsible for the apprentice's work assignments, and will ensure the apprentice is working under the supervision of a skilled journeyworker, evaluation of performance, and completion and submittal of progress reports to the JATC. No apprentice will be allowed to work without direct journeyworker supervision.

XVII. RECORDS AND EXAMINATIONS

Each apprentice shall be responsible for maintaining a record of his/her work experience/training on the job (OJL) and in related technical instruction (RI) 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 the local school authorities to the JATC. 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 JATC. This record will be included in each apprentice's record file maintained be the JATC.

Before each period of advancement, or at any other time when conditions warrant, the JATC shall evaluate the apprentice's to determine whether he/she has made satisfactory progress. If the apprentice's related instruction or on-the-job progress is found to be unsatisfactory, the JATC 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 JATC 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 of the chosen trade, the FTI of Nevada Glaziers JATC will, after the apprentice has been given adequate assistance and opportunity for corrective action, terminate the Apprenticeship Agreement.

XVIII. MAINTENANCE OF RECORDS

The FTI of Nevada Glaziers JATC, in whose name these Standards of Apprenticeship are registered, shall maintain for a period of five (5) years from the date of last action, whether it be Disciplinary, Suspension, Cancellation or Completion, 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, rates of pay and other forms of compensation, hours of work and training, evaluations, and other relevant data.

The records will permit the identification of minority and female (minority and non-minority) participants. These records will be made available upon request to the Nevada State Apprenticeship Council.

XIX. CERTIFICATE OF COMPLETION OF APPRENTICESHIP

Upon satisfactory completion of the requirements of the apprenticeship program as established in these Standards, the FTI of Nevada Glaziers JATC shall so certify in writing to the Nevada State Apprenticeship Council and the Department of Labor Office of Apprenticeship requesting that a Certificate of Completion of Apprenticeship be awarded to the completing apprentice(s). Such requests shall be accompanied by the appropriate documentation for both the on-the-job training and the related instruction as may be requires by the Registration Agency.

XX. NOTICE TO REGISTRATION AGENCY

The Nevada State Apprenticeship Council will be notified within ten (10) 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.

XXI. CANCELLATION AND DEREGISTRATION

These Apprenticeship Standards will, upon adoption by the FTI of Nevada Glaziers JATC, be submitted to the Registration Agency for approval. Such approval will be required before implementation of the program.

The FTI of Nevada Glaziers JATC reserves the right to discontinue at any time the apprenticeship program set forth herein. The Nevada State Apprenticeship Council and the IUPAT/FTI shall be notified promptly in writing of any decision to cancel the program.

Deregistration of these Standards of Apprenticeship may be initiated by the Nevada State Apprenticeship Council for failure of the FTI of Nevada Glaziers JATC to abide by the provisions herein. Such deregistration will be in accordance with the Nevada State Apprenticeship Council regulations and procedures.

Within fifteen days of cancellation of the apprenticeship program (whether voluntary or involuntary), the FTI of Nevada Glaziers JATC will notify the IUPAT/FTI and each apprentice of the cancellation and the effect of same. This notification will conform to the requirements of **Title 29 CFR Part 29.8 and NAC 610.365.**

XXII. AMENDMENTS OR MODIFICATIONS

These Standards of Apprenticeship may be amended at any time by the FTI of Nevada Glaziers JATC provided that no amendment or modification adopted shall alter any Apprenticeship Agreement in force at the time without the consent of all parties. Such amendment shall be submitted to the Registration Agency for approval and registration prior to being placed in effect. Such submission shall include an explanation of the reason for the amendment, be it regulatory, programmatic, or other. A copy of each amendment or modification adopted will be furnished to each apprentice to whom the amendment or modification applies.

XXIII. ADJUSTING DIFFERENCES/COMPLAINT PROCEDURE

The FTI of Nevada Glaziers JATC shall have full authority to supervise the enforcement of these Apprenticeship Standards. Its decision will be final and binding on the employer, the Local Union, 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:

- A. For issues regarding wages, hours, working conditions, and other issues covered by the collective bargaining agreement (CBA), apprentices may seek resolution through the applicable Grievance and Arbitration procedures contained in the Articles of the CBA.
- B. The FTI of Nevada Glaziers JATC shall 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 JATC shall 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 the Standards over which differences occur. The name and address of the appropriate authority to receive, process and make disposition of complaints is:

Glaziers Apprenticeship Coordinator

Local Union #2001

1701 Whitney Mesa #106

Henderson, NV 89014

If the apprentice believes the JATC did not resolve the issue to his/her satisfaction, the apprentice may appeal to the Registration Agency

C. Any apprentice or applicant for apprenticeship who believes he or she has been discriminated against on the basis of race, color, religion, national origin, disability, sex or sexual orientation with regard to apprenticeship or that the equal opportunity standards with respect to his or her selection have not been followed in the operation of the apprenticeship program, may personally or through an authorized representative contact the Federal Equal Employment Opportunity Commission (EEOC), or the Nevada State Apprenticeship Council at Nevada Dept of Labor State Apprenticeship Council 555 E Washington Ave. Suite 4100 Las Vegas, NV 89101.

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

The complaint must be filed no 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 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 (3) 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 JATC will provide written notice of its complaint procedure to all applicants for apprenticeship and all apprentices.

XXIV. COLLECTIVE BARGAINING AGREEMENTS

Nothing in this part or in any apprenticeship agreement will operate to invalidate:

- A. Any apprenticeship provision in any collective bargaining agreement between employers and employees establishing higher apprenticeship standards; or
- B. Any special provision for veterans, minority persons, or women in the standards, apprentice qualifications or operation of the program, or in the apprenticeship agreement, which is not otherwise prohibited by law, Executive Order, or authorized regulation.

XXV. TRANSFER OF AN APPRENTICE AND TRAINING OBLIGATION

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:

A. The transferring apprentice must be provided a transcript of related instruction and on-the-job learning by the committee or program sponsor;

- B. Transfer must be to the same occupation; and
- C. A new apprenticeship agreement must be executed when the transfer occurs between the program sponsors.

In the event the Sponsor is unable to fulfill its obligation under the Apprenticeship Agreement due to lack of work or failure to conform to these standards, the Sponsor will make every effort to refer the apprentice with his/her consent to another employer, Registration Agency, or One Stop for placement into another registered apprenticeship program. This will provide the apprentice an opportunity for continuous employment and completion of his/her apprenticeship program. The apprentice must receive credit for the training already satisfactorily completed.

In the event an employer is unable to fulfill his/her obligation under the Apprenticeship Agreement, the apprentice may be transferred to another same-occupation Approved Training Agent operating within this same program. Such transfers are subject to the consent of the apprentice and of the JATC. The JATC has the authority to transfer any apprentice from one employer to another to insure that all OJL processes and competencies in all aspects of the chosen trade are adequately covered as listed in the attached Occupational Schedules (Appendix A).

XXVI. RESPONSIBILITIES OF THE APPRENTICE

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

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

- A. Keep the Director of Training/Apprenticeship Coordinator and/or training office, as designated by the JATC, informed of his/her current contact information, including but not limited to, address, phone number(s), and name changes.
- B. Perform diligently and faithfully the work of the occupation and such other duties as may be assigned by the employer and the JATC in accordance with the provisions of these Standards
- C. Respect the property of the employer and not waste, damage, or injure such property
- D. Abide by all working rules and regulations of the employer, the Union, and the JATC, including but not limited to drug and alcohol policies.

- E. Attend and satisfactorily complete the required hours in OJL and in related instruction in subjects related to the occupation, as provided under these Standards.
- F. 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.
- G. Develop and practice safe working habits and work in such a manner as to assure his/her personal safety and that of other workers.
- H. Work safely at all times and comply with all company and legislative requirements.
- I. Maintain a professional, credible, ethical, and moral manner at all times.
- J. Work for the employer to whom the apprentice is assigned for the completion of apprenticeship, unless reassigned to another employer or the Apprenticeship Agreement is terminated by the JATC.

XXVII. 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 JATC.

The JATC 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.

Advice and assistance in the successful operation and implementation of these apprenticeship standards will be available at any time, upon request, from: the FTI trustees and staff; the IUPAT; and the Finishing Contractors Association.

XXVIII. OFFICIAL ADOPTION OF APPRENTICESHIP STANDARDS

The International Union of Painters and Allied Trades District Council 15 Glaziers Local #2001 and the Signatory Contractors of Local #2001 known as the FTI of Nevada Glaziers JATC hereby adopts these Standards of Apprenticeship on this 28^{th} day of 4004

Lung J. V Joy /
Signature of Management
TERRY SIMAYFIERD
Printed Name
Mat 09
Signature of Management
Robert Camplell
Printed Name
Ans Dhoth
Signature of Management

Munchester

Printed Name

Signature of Labor

Jack J Maury

Signature of Labor

Signature of Labor

Printed Name

APPENDIX A

WORK PROCESS SCHEDULE AND RELATED INSTRUCTION OUTLINE

ADOPTED BY

THE FINISHING TRADES INSTITUTE OF NEVADA GLAZIERS JOINT APPRENTICESHIP AND TRAINING COMMITTEE

INTERNATIONAL UNION OF PAINTERS AND ALLIED TRADES FINISHING TRADES INSTITUTE

DEVELOPED IN COOPERATION WITH THE

U.S. DEPARTMENT OF LABOR

OFFICE OF APPRENTICESHIP

AND THE

NEVADA STATE APPRENTICESHIP COUNCIL

WORK PROCESS SCHEDULE RELATED INSTRUCTION OUTLINE Glazier

O*NET-SOC CODE: 47-2121.00 RAPIDS CODE: 0221HY

Glazier Apprenticeship Program

The Glazier Apprenticeship Program is co-sponsored by the IUPAT/FTI to meet the ever-changing needs of the industry and the affiliates it serves. The apprenticeship program ensures that apprentices will learn the theoretical knowledge and the practical skills necessary to be a successful Glazier. During this program of study, apprentices will successfully complete the IUPAT/FTI core curriculum and integrate it into the Glazier occupation specific training. Apprentices successfully completing this program apply their skills and abilities as a Glazier.

Training/Skill Set

Skills needed to become a Glazier include manual dexterity, eye-hand coordination, physical fitness, and a good sense of balance. The ability to solve arithmetic problems quickly and accurately also is required. A good work history or military service is viewed favorably by employers.

The Glazier's curriculum and training will provide the skills, knowledge, and abilities needed to meet the needs of the industry and to ensure that each worker is equipped to use the technology, materials, and applicable methods of glazing as well as adhering to all quality and safety standards on the job. Glaziers use hand tools such as glasscutters, suction cups, and glazing knives, as well as power tools such as saws, drills, cutters, and grinders. An increasing number of Glaziers use computers in the shop or at the job site to improve their layout work and reduce the amount of glass that is wasted.

Due to improvements in the thermo capacity of modern glass, as well as increased demand for more natural light, the industry has seen an increase in the use of larger and heavier glass panels. The increased trend toward using factory glazed units means that the Glazier must increase his/her knowledge and abilities to use hoisting and rigging equipment.

Also, due to an increase in environmental concerns, there is a tendency for new structures to meet Leadership in Energy and Environmental Design (LEED) guidelines. The Glazier needs to have knowledge of high performance glazing products, solar trends, and building envelope integrity.

Glaziers learn through OJL and by working as an apprentice alongside an experienced journeyworker. This is accomplished through a combination of related instruction as delineated in these Standards.

IUPAT/FTI Core Curriculum Program of Study

The Core Curriculum program of the IUPAT/Finishing Trades Institute is designed to provide a foundation on which apprentices in multiple crafts will be exposed to a uniform body of theoretical knowledge and practical skills needed to be a successful crafts person in the finishing trades.

While participating in the core curriculum program of study, apprentices will be exposed to On-the-Job Learning (OJL) and Related Instruction (RI) in the following disciplines:

- 1.0 Introduction to the Union and Construction Trades
- 2.0 Health and Safety in the Construction Trades
- 3.0 Leadership and Professional Development

Apprentices will be assessed on their acquisition of knowledge, skills and abilities in the core curriculum through hands-on and written tests as well as On-the-Job Learning (OJL) performance measures.

Additionally, the apprentices will integrate their Core knowledge, skills and abilities into the pursuit of specific occupational training throughout the term of their apprenticeship. This program specific training is designed to build the technical and professional skills needed by the apprentice to successfully perform his/her occupation.

The occupations represented in the Finishing Trades Apprenticeship Program are:

7.0 Glazier

IUPAT/FTI Glazier Course Competencies

The Program level curriculum builds upon the foundation of the core curriculum skills, knowledge, and abilities. At the program level, occupation-specific standardized curriculum is designed by an ad-hoc committee comprised of the FTI Curriculum Department, IUPAT/FTI subject matter experts, employers, manufacturers, and associations.

Apprentices will be assessed on their acquisition of knowledge, skills and abilities in the core curriculum through hands-on and written tests as well as the OJL performance measures.

Additionally, the apprentices will integrate their core knowledge, skills and abilities into the pursuit of specific craft training throughout the term of their apprenticeship. This program specific training is designed to build the technical and professional skills needed by the apprentice to successfully perform his/her trade profession.

Core Curriculum Program Competencies

Apprentices successfully completing an apprenticeship program will be proficient in the following competencies identified in the Core Curriculum:

1.0 Introduction to the Union and Finishing Trades

- Analyze the IUPAT's role in the labor movement from 1887 to the Present.
- Identify the organizational responsibilities of the IUPAT to its members.
- Demonstrate the individual's responsibilities as an IUPAT member.
- Recognize the structure of the IUPAT at the International, District Council, and Local Union levels.
- Display good character and ethical behavior in all matters personal and professional.
- Demonstrate effective skills and knowledge using computers and related technology and applications.
- Utilize trade-related tools and equipment.
- Interpret drawings related to the finishing trades.
- Apply trade math calculations on the job.
- Demonstrate sustainable/green building design awareness on all construction sites and in all trade practices.

2.0 Health and Safety

- Recognize and apply the fundamentals of worker and jobsite safety (OSHA) on the construction site.
- Perform the proper application of First Aid, CPR, and AED on the job.

Display healthy ergonomic practices in the workplace and on the construction site.

Demonstrate awareness and lead-safe work practices on the jobsite.

3.0 Leadership and Professional Development

 Clearly and appropriately express ideas and other information through good oral, listening and writing skills to all levels of personnel.

Demonstrate creativity, integrity and other influential qualities and characteristics necessary to successfully lead as a foreman, project manager or jobsite supervisor.

 Execute planning and organizational skills necessary to successfully complete a job on time and on budget.

Recognize and apply emerging technologies in the occupation in order to elevate the industry.

Suggested Program of Study for the Core Curriculum Competencies

The IUPAT/FTI Program of Study for the Core Competencies OJL and Related Instruction is outlined below. Under this hybrid approach an apprentice must participate in the indicated minimum number of hours of OJL for each category of the program.

CATEGORY #	CATEGORY NAME	OJL Hours	RI Hours
1.1	History of IUPAT		4
1.2	Survival of the Fittest	16	2
1.3	Green Building Awareness		4
1.4	Sexual Harassment		2
1.5	Math for the Construction Trades		12
1.6	Basic Computing		4
1.7	Architectural Drawings/Blueprint Reading		16
2.1	Introduction to Health and Safety	16	10
2.2	First Aid/CPR/AED		8
2.3	Ergonomics		4
2.4	Respiratory Protection		4
2.5	Lead Abatement Awareness for the Lead Worker		8
2.6	Hand and Power Tool Safety Awareness		6
3.1	Communication Skills		4
3.2	Foreman Training		2
3.3	Project Management		4
3.4	Supervisor Training Program (STP)		2
		32	96

Core Curriculum Course Competencies

This table identifies the Core curriculum course competencies which the apprentices will successfully complete during their apprenticeship.

Module 1.0 – Introduction to the Union and Construction Trades

1.0		INTRODUCTION TO THE UNION AND CONSTRUCTION TRADES
1:		HISTORY OF IUPAT (LABOR HISTORY)
	On-the-Job Learning (OJL)	Related Instruction (RI) – 4 hours
	This is a classroom-based	 Identify the historical reasons for unionization.
	module, there is no OJL	 Describe the strengths and weaknesses of the labor movement in the U.S.
	assessment.	 Describe the union structure and its activities.
		 Explain how unions promote the trade and serve its members
		 Understand the union's impact on economic issues, corporation, productivity, and distribution of
		wealth.
		 Identify and explain the most significant labor laws of the 1900s.
		 Analyze the impact the labor movement has had on social and political reform.
		 Evaluate the IUPAT's role in the labor movement from 1887 to the Present.
1.2		SURVIVAL OF THE FITTEST (SOF)
	On-the-Job Learning (OJL) - 16	Related Instruction (RI) – 2 hours
	hours	
	Demonstrate the characteristics of a craft	 Investigate the current state of the union's market share. Discuss the personal rewards and consequences associated with the union's market share.
	professional	 Describe successful strategies for unions to regain a market share in the construction industry.
	Participate in union-related	 Identify and describe what the union provides on an ongoing basis to its members and affiliates.
	activities.	• Identify the roles and responsibilities of the end users, contractors, union, and raily me.
		• Articulate the value that the union provides its members and animates.
		 Describe the impact the IUPAT's Top Workplace Performance (TWP) program has on shaping
		attitudes and performance.
		 Discuss the generational changes in rank and file attitudes and benaviors.
1.3		GREEN BUILDING AWARENESS
	On-the-Job Learning (OJL)	Related Instruction (RI) – 4 hours
	 This is a classroom-based 	 Describe sustainability and the social, environmental, and economic impact.
	module, there is no OJL	 Identify the benefits of sustainability.
	assessment.	 Explain the purpose of sustainability in commercial and residential buildings.
		 Identify professional 'green' organizations.
		 Identify elements of sustainability.
		 Explain the importance of green practices.

		 Define green bid specifications. Identify and interpret a green specification in a project manual. Source and cost out green products. Create a bid incorporating green products and practices. Describe the elements involved with sustainable sites. Describe water efficiency practices. Determine energy and atmospheric requirements. Identify and describe effective materials and resources. Discuss the 'green' innovation and design process. Identify and discuss the LEED-NC Process.
1.4		SEXUAL HARASSMENT
	On-the-Job Learning (OJL) This is a classroom-based module, there is no OJL assessment.	 Related Instruction (RI) – 2 hours Define sexual harassment. Identify the law sexual harassment violates. Identify characteristics of quid pro quo sexual harassment. Identify characteristics of hostile environment sexual harassment. Cite factors that contribute to the determination of whether behavior is sexual harassment. Explain legal and other consequences of sexual harassment. Identify effects of sexual harassment. Identify costs associated with sexual harassment. Discuss employer liability in harassment cases. Identify United States' Supreme Court Landmark Cases.
7		MATH FOR CONSTRUCTION TRADES
3	On-the-lob Learning (OJL)	Related Instruction (RI) – 12 hours
	This is a classroom-based module, there is no OJL assessment.	 Add, subtract, multiply, and divide whole numbers, with and without a calculator. Use a standard ruler, a metric ruler, and a measuring tape to measure. Add, subtract, multiply, and divide fractions. Add, subtract, multiply, and divide decimals, with and without a calculator. Convert decimals to percentages and percentages to decimals. Convert fractions to decimals and decimals to fractions. Explain what the metric system is and how it is important in the construction trade. Recognize and use metric units of length, weight, volume, and temperature. Recognize some of the basic shapes used in the construction industry and apply basic geometry to measure them.
1.6		BASIC COMPUTING
	On-the-Job Learning (OJL)	Related Instruction (RI) – 4 hours

	 This is a classroom-based 	 Describe the components of a computer system.
	module, there is no OJL	 Define microcomputer hardware in terms of its functions: input, output, processing, and storage.
	assessment.	 Describe how peripheral devices are connected to a microcomputer.
	AD Securior of Contract of Con	 Identify types of software and their functions and describe the difference between system
		software and application software.
		 Navigate and use the Windows XP environment to open and use applications, manage
		documents, and identify and maintain resources.
		 Access and navigate the World Wide Web to find information.
		 Create, format, and edit documents using Microsoft® Word.
		 Create, revise, and enhance business presentations using Microsoft® PowerPoint.
		 Create, revise, and enhance spreadsheets using Microsoft® Excel.
1.7		ARCHITECTURAL DRAWINGS/BLUEPRINT READING
	On-the-Job Learning (OJL)	Related Instruction (RI) – 16 hours
	 Locate trade information using 	 Define blueprint and blueprint reading.
	blueprints	 Define plans and specifications.
	 Answer basic construction 	 Describe how plans and specifications are prepared.
	questions related to the layout	 Describe the purpose and importance of a set of plans.
	and installation of materials at	 Identify and define various parts of a set of plans.
	the jobsite.	 Identify the various views of a drawing that are included in a set of plans and their relationship to
		each other.
		 Identify and define material symbols, abbreviations, and lines used in drawings.
		 Define the meaning of scale.
		 Use fractional rule to calculate measurements.
		 Explain how an architect's scale is used to measure lines.
		 Use the architect's scale to determine the actual length of a scaled line.
		 Recognize, locate, and determine missing dimensions.
		 Describe proper handling procedures for plans and drawings.

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7.0	new management of the second o	HEALTH AND SAFETY
2.1	INTRODUCTION	SAFE
	On-the-Job Learning (OJL) – 16 hours	Related Instruction (RI) – 10 hours
	 Inspect PPE to determine if it is safe to use (PPE should include 	 Explain the idea of a safety culture and its importance in the construction
	safety goggles, hard hat, gloves, safety harness, and safety	crafts.
	shoes).	 Identify causes of accidents and the impact of accident costs.
	 Properly don and doff PPE (safety goggles, hard hat, and 	 Explain the role of OSHA in job-site safety.
	personal fall protection).	 Locate OSHA Standards references applicable to specific hazardous
	 Demonstrate safe lifting procedures. 	conditions and practices.
	 Set up an extension ladder properly. 	 Recognize the aspects of 1926 Subpart C (General Safety and Health
	 Demonstrate three-point contact on a ladder. 	Provisions).
		 State the purpose of the OSHA Act and list the functions of OSHA.
		 List the OSHA inspection priorities and describe the inspection process.
		 Describe the rights and responsibilities of employers and employees under
		the OSHA Act.
		 Recognize hazard recognition and risk assessment techniques.
		 Explain fall protection, ladder, stair, and scaffold procedures and
		requirements.
		 Identify struck-by hazards and demonstrate safe working procedures and
		requirements.
		 Identify caught-in-between hazards and demonstrate safe working
		procedures and requirements.
		 Define safe work procedures to use around electrical hazards.
		 Demonstrate the use and care of appropriate personal protective equipment
		(PPE).
		 Explain the importance of hazard communications (Haz Com) and Material
		Safety Data Sheets (MSDSs).
		 Identify other construction hazards on your job site, including hazardous
		material exposures, environmental elements, welding and cutting nazards,
	45	confined spaces, and fires.
2.2		FIRST AID/CPR/AED
	On-the-Job Learning (OJL)	Related Instruction (RI) – 8 hours
	 This is a classroom-based module, there is no OJL assessment. 	 Demonstrate how to minimize the risk of disease transmission when giving
		care.
¥.		 Demonstrate how to check an unconscious person for life-threatening and
		non-life threatening conditions.
		 Demonstrate how to give cardiopulmonary resuscitation (CPR) to a person.

		Demonstrate how to care for a person who is not breathing and/or chocking.
	• Desc	Describe when and now to use all AED.
2.3	ERGONOMICS	
	On-the-Job Learning (OJL)	Related Instruction (RI) – 4 hours
	o OJL assessment.	Describe ergonomics and its importance in the workplace.
		Describe the benefits of implementing an ergonomic program.
	• Iden	Identify and describe ergonomic related injuries and related musculoskeletal
	osib disc	disorders that can occur in an office setting.
	o lden o lden	Identify and describe ergonomic related injuries and related musculoskeletal
	disc	disorders that can occur in a construction workplace.
	• Rec	Recognize and describe risk factors that can cause musculoskeletal
	disc	disorders or related injuries.
	• Des	Describe healthy ergonomics in an office setting.
	• Des	Describe healthy ergonomics in a construction workplace.
	• Dem	Demonstrate proper stretching techniques.
	• Iden	Identify employee and employer rights and responsibilities.
10	RESPIRATORY PROTECTION	ROTECTION
1	On-the-lob Learning (OJL)	Related Instruction (RI) – 4 hours
	-	aib bout the recairetery evetem works
	 This is a classroom-based module, there is no OJL assessment. Iden 	Describe now the respiratory system works. Identify the different types of respirators and their purposes.
	• Den	Demonstrate the proper fit, inspection, cleaning, disinfection, and storage of
	les les	respirators.
	• Sum	Summarize how the human respiratory system works.
	• Ider	Identify respiratory hazards and describe how they affect the respiratory
	sks	system.
	• Ider	Identify work activities that can create airborne hazards.
	• Den	Demonstrate how to perform proper negative and positive fit-checks.
	• Deu	Demonstrate proper inspection of respirators.
	• Den	Demonstrate safe cleaning, disinfection, and storage procedures for
	res	respirators.
25	LEAD ABATEMENT AWARENESS (WORKER)	RENESS (WORKER)
2	On-the-lob Learning (OJL)	Related Instruction (RI) – 8 hours
	• OJL assessment.	Explain his/her roles and responsibilities as a Lead Abatement worker.
	•	Recall and describe basics facts in the history of lead and lead abatement.
	• Ider	Identify and describe the health effects of lead exposure and protection
	302	against lead exposure and poisoning.
	• Desc	Describe and demonstrate safe work practices writin working with or around lead
	321	

		 Describe general work safety and health hazards.
		 Identify and describe the federal, state and local regulations for lead
		workers.
		 Explain and demonstrate the pre-abatement set-up and containment
		procedures for residential buildings.
ų.		 Recognize and describe residential lead-based paint hazards and control
		factors.
		 Describe and explain interior dust abatement procedures, clean-up and final
		clearance inspections.
		 Describe and explain the procedures for soil and exterior dust abatement
		with waste disposal.
		 Explain and demonstrate the pre-abatement set-up and containment
		procedures for industrial buildings.
		 Recognize and describe industrial lead-based paint hazards and control
		factors.
		 Describe and demonstrate lead safe work practices in compliance with the
		EPA Renovation, Repair, and Painting (RRP) Rule, and HUD's Lead Sale
		Housing Rule.
5.6	HAND & POWER	HAND & POWER TOOL SAFETY AWARENESS
	On-the-Job Learning (OJL)	Related Instruction (RI) – 6 hours
	 This is a classroom-based module, there is no OJL assessment. 	 Recognize and identify some of the basic hand tools and their proper uses
		in the construction trade.
		 Visually inspect hand tools to determine if they are safe to use.
		 Safely use hand tools.
		 Identify power tools commonly used in the construction trades.
		 Demonstrate and describe all general safety rules for power tools and
		follow them.
	8	 Explain the importance of using guards during the operation of power tools.
		 Explain the importance of using a properly rated extension cord.
		 Demonstrate and describe how to properly ground a power tool.
		 Explain how to maintain power tools properly.

Module 3.0 – Leadership and Professional Development

4		DOCTORIONAL DEVEL DESCRIP
3.0	LEADERS	LEADERSHIP AND TROTESSIONAL DEVELORMEN
3.1		COMMUNICATION SKILLS
	On-the-Job Learning (OJL)	Related Instruction (RI) – 4 hours
	 This is a classroom-based module, there is no OJL 	 Interpret information and instructions presented in both verbal and written form.
	assessment.	 Communicate effectively in on-the-job situations using verbal and written skills.
		 Communicate effectively on the job using electronic communication devices.
3.5		FOREMAN I RAINING
	On-the-Job Learning (OJL)	Related Instruction (R – 2 hoursl)
	 This is a classroom-based module, there is no OJL 	 Describe the role of the foreman.
	assessment.	 State the key role of the foreman in maintaining safety rules and regulations.
		 Describe how to establish and maintain good relationships with co-workers,
		supervisors and other trades.
		 Describe productive motivational techniques.
		 Explain the importance of properly performing personnel functions in accordance
		with the union agreement and company policies.
		 Explain the importance of developing and using effective communications skills.
		 Describe the proper planning and organizational skills needed to successfully
		complete a job.
		 Describe the "leadership" qualities needed to be an effective foreman.
3.3		PROJECT MANAGEMENT
	On-the-Job Learning (OJL)	Related Instruction (RI) – 4 hours
	 This is a classroom-based module, there is no OJL 	 Achieve predicted and desired results in the execution of projects through
	assessment.	implementation of consistent methodologies.
		 Advance the skill level and knowledge of IUPAT Project Managers.
		 Emphasize the depth and breadth of roles and responsibilities that a Project
		Manager may be relied upon to manage, to contribute to, or to perform.
3.4	SUPE	SUPERVISOR TRAINING PROGRAM (STP)
	On-the-Job Learning (OJL)	Related Instruction (RI) – 2 hours
	 This is a classroom-based module, there is no OJL 	 Define the role of the supervisor.
	assessment.	 Define the scope and importance of verbal communication.
		 Refine written communication skills.
		 Describe various job site personnel issues.
		 Identify the supervisor's role in safety.
		 Manage and estimate the cost of tools and materials.
		Describe the importance of leadership in effective supervision.

Program Level Competencies

With reference to each of the respective areas of the Glazing trade, apprentices successfully completing this program will be able to:

Glazier

- Explore trade options as they pertain to the glazing industry.
- Examine principles of glass.
- Identify trade-related materials and applications.
- Utilize trade-related tools and equipment.
- Interpret drawings related to the glazing trade.
- Apply trade math calculations.
- Apply building controls and layout techniques.
- Demonstrate the proper fabrication, assembly, and installation methods of the glazing industry.
- Apply the standards of quality control and quality assurance in the glazing industry.
- Apply green technology as appropriate in the glazing trade.

Suggested Program of Study for the Glazier Curriculum

The IUPAT/FTI Program of Study for the Glazier OJL and RI is outlined below. Under this hybrid approach, an apprentice must participate in the indicated minimum number of hours of OJL for each category of the program.

CATEGORY #	CATEGORY NAME	OJL ¹ Hours	RTI ² Hours
1.1-3.4	Core Curriculum	32	96
7.1	Health and Safety for the Glazing Trade	400	100
7.2	Introduction to the Glazing Trade	640	40
7.3	Sealants	120	40
7.4	Architectural Drawings	400	40
7.5	Glazing Systems, Installation and Layout	1200	120
7.6	Replacement Work, Retro-Fit and Weatherization	400	20
7.7	Skylights and Sloped Glazing	400	20
7.8	Energy Glazing Systems	400	20
7.9	Welding Applications	400	80
NOTE OF THE PARTY OF THE		8000	576

The above chart and totals include all OJL and RTI for both the Architectural Glazier Program and the Master Glazier Program. Each of the respective Programs includes minimum requirements of 4000 hours of OJL and 288 hours of RTI.

¹ Refers to a minimum of OJL hours that an apprentice must participate in during the specific apprenticeship program. An apprentice can take hands-on assessments in order to be awarded credit for these hours as determined by the JATC.

² Refers to the minimum number of RTI hours that an apprentice must participate in. The minimum requirement for each year of the program is 144 hours of RTI.

WORK PROCESS SCHEDULE

RELATED INSTRUCTION OUTLINE

O*NET-SOC CODE: 47-2121.00 RAPIDS CODE: 0221HY

This table identifies the course competencies that the Glazier apprentice will successfully complete.

Module 7.0 - Glazier

7.1	HEALTH AND SAFETY	HEALTH AND SAFETY AWARENESS FOR THE GLAZIER
	ON-THE-JOB LEARNING (OJL) - 400 hours	RELATED INSTRUCTION (RI) - 100 hours
	 Don (put on), doff (remove), inspect, and maintain the proper 	 Recognize the important areas of OSHA in general terms.
- 177	PPE that should be worn during glazing including, but not	 Describe the role of employer, supplier, and worker in the education of
	limited to:	safety for workers.
	• Head	 Identify site and job specific hazards and policies of OSHA
	• Face	29CFR1926 and 29CFR1910 regulations, including:
	• Eyes	 Swing Stage Safety
	Ears	 Scaffold Erector and Dismantler
	• Hands	 Shop Safety
	Body	 Crane Safety and Hand Signals
	• Feet	 Rigging and Hoisting
	 Respiratory 	 Identify the Safety Regulations as they apply to safe work practices in
	 Perform a job analysis for safe working conditions, including: 	the glazing trade with emphasis on the importance of :
	 Attend pre-job safety meetings. 	 Identifying safety hazards (unsafe conditions)
	 Adhere to site specific safety rules and federal 	 Handling of materials, including hazardous materials
	regulations.	 Maintenance and safe operation of tools
	 Observe Vessel Entry/Confined Space regulations. 	 Selecting and using PPE
	 Read and interpret MSDS. 	 Explain the use of Material Safety Data Sheets (MSDS) for following
	 Establish and maintain a safe working perimeter. 	precautions when using chemicals in the glazing trade.
	 Maintain clean work areas (housekeeping). 	 Describe the precautions that must be followed when using sealants
	 Demonstrate proper and safe handling of materials and 	and other chemicals.
	glass.	 Describe the process for handling, cleaning, and storing anodized or
	 Identify the locations of First Aid and Fire Equipment. 	painted aluminum finishes.
	 Demonstrate basic safety awareness practices. 	 Recognize and explain the set-up and dismantling of a scaffolding
	 Demonstrate the process by which to erect and dismantle a 	system.
	scaffolding system.	 Recognize welder safety and working conditions and apply acceptable
	 Don and doff a personal fall arrest body harness and lanyard 	safety preventive measures.
	system.	 Outline emergency procedures and how to obtain assistance for
	 Recognize dangerous situations that pertain to damaged 	Injured workers.

	equipment of unsale work practices and follow proper protocol for reporting and correcting the situation.	
7.2	INTRODUCTION	INTRODUCTION TO THE GLAZING TRADE
	ON-THE-JOB LEARNING (OJL) - 640 hours	RELATED INSTRUCTION (RI) - 40 hours
	 Demonstrate the characteristics of a professional Glazier, 	 Identify and explain basic terminology used in glazing.
	including:	 Identify the historical events of the modern glazing trade.
	 Exhibit suitable appearance and personal hygiene. 	 Describe working conditions in the glazing trade.
	 Exhibit proper attitude and behavior on job sites 	 Identify the career options and advancement opportunities in the
	including private residences and other occupied	glazing trade.
	buildings.	 Describe at least three purposes for including windows in a building's
	 Deal with difficult customers in a professional and 	design.
	courteous manner.	 Identity the appropriate PPE needed when nandling glass.
	 Interpret written and verbal instructions. 	 Identify hand tools used in the glazing trade.
	 Recognize the importance of cooperation and 	 Describe custody, care, and maintenance, of tools and equipment.
	interaction with related occupations on a job site.	 Identify symbols used in the glazing trade.
	 Demonstrate the use of glazing hand tools, including but not 	 Describe the types of glass used in building construction and where
	limited to:	they are used.
	 General Tools (rules, straight edges, protractor, 	 Describe the importance of load placement when moving and storing
	dividers)	materials on a construction site.
	Squares	 Describe the proper technique (ergonomics) for lifting and transporting
	 Levels and Transits 	glazing materials.
	 Glass/Plastic Cutters 	 Recognize the processes used on anodized or painted finishes.
	 Screwdrivers 	 Describe the purpose of the extrusion process on various types of
	 Specialty/Drill Bits and Fasteners 	materials (glass, aluminum, plastic, etc.).
	 Caulking Guns 	 Identify good welding applications on various joint designs and glazing
	 Knives (utility, putty, hackout) and Chisels 	finishes.
	 Glass Pliers 	 Describe the hazards associated with broken glass and its disposal.
	Metal Cutters	 Discuss the importance of quality workmanship when glazing
	Hacksaws	aquariums, shower doors or tub enclosures.
	Glass Holders	 Describe the tools, materials and safety precautions when creating art
	 Hammers and Mallets 	glass projects.
	 Pry Bars 	 Discuss the importance of ensuring proper ventilation and using
	 Rivet Guns 	safety equipment when working with nazardous chemicals and
	 Tap and die 	materials in art glass projects.
	• Wrenches	

	•	Demonstrate the proper use of glass handling tools,	
		materials and machinery.	
	9	Select the proper tools to safely and correctly open a case of	
	•	glass. Demonstrate the techniques used to remove. lift. carry.	
)	transport, roll and place a lite of glass on a vertical or	
		horizontal plane.	
	•	Demonstrate the process for disposing of broken glass.	
	•	Demonstrate the process for cleaning anodized or painted	
	•	Demonstrate auto glass replacement and repair procedures.	
	•	Demonstrate tile proper use of tools, materials and sarety equipment during an art glass project.	
7.3			Sealants
		ON-THE-JOB LEARNING (OJL) - 120 hours	RELATED INSTRUCTION (RI) – 40 hours
	•	0	 Use sealant terminology in sealant selection during course
		design	discussions and experiences.
	•	Point out the qualities of good joint design and a properly	 Describe sealant forms, classifications and properties.
		prepared surface for sealant application.	 Describe the factors of good joint design including the basic principles
	0	Demonstrate methods for applying sealant on various	of joint width and depth.
		structural glazing systems.	 Distinguish between techniques for substrate preparations used with
	0	Demonstrate methods for sealing expansion joints.	a variety of commonly used construction surfaces.
	•	Demonstrate knowledge of compatibility and application of	 Describe the components, methods and applications of structural
		membranes.	glazing systems.
			 Describe manufacturer's specifications for printers, solverits, and sealants used in structural glazing applications.
			 Describe compatibility and application of various membranes.
7.4		ARCHITE	Architectural Drawings
		ON-THE-JOB LEARNING (OJL) - 400 hours	RELATED INSTRUCTION (RI) – 40 hours
	•	Interpret and apply architectural drawings and their	 Describe the parts, purpose and importance of using the following on
		associated components on the job, including:	a glazing job:
		 Blueprints 	 Blueprints
		Scale rulers	 Shop drawings
		 Symbols and terminology 	 Specifications and schedules
		 Shop drawings 	Finish schedules
		 Materials lists 	 Contract specifications
		 Cutting schedules 	• Change notices
		 Perimeter sheets 	Site Instructions
		 Optimization schedules 	Kequest for information

Contract specifications Demonstrate the ability to make freehand sketches in a quick and effective the details of blueprints, shop drawings, and perspective the details of blueprints, shop drawings, and effective train and effective the difference between an oblique drawing, an isometric and efficient manner without using a compass straight edge. Demonstrate the ability to make freehand sketches in a quick and effective train maner and effective training and a perspective drawing and a perspective drawing and a perspective drawing and a perspective drawing and a perspective sketches drawing and a perspective sketches of personal drawings and relate the information on it to an experience as section diagrams of architectural metal sections to identify the following: Read cas shop drawing and relate the information on it to an extra section diagrams of architectural metal extrusions to identify the following: Read cas shop drawing and relate the information on it to an extra section diagrams of architectural metal extrusions to identify the following: Read cas specified and relate the information on it to an extra section diagrams of architectural metal extrusions to identify the following: Read cas specified and relate the information on it to an extra section diagrams of architectural metal extrusions to identify the following: Bullions Sills, bulkheads, and sill flashing in a section of a section of a stored that in the proper of a proper parts and architectural metal in the meaning of scale. Bullions Sills, bulkheads, and sill flashing in consideration and on-sills and consideration and on-sills and prove the proper handling procedures for plan and adelermine missing dimensions. Corner metal in the shop drawing. Glazs Cutting Glazs Cutting Glazs Cutting Glass Cutting Massuce mark, and score glass to specified dimensions. Glass Cutting Glass Cutting Glass Cutting Benefit the proper handling procedures for cutting glass and procedures for cutting glass and procedures for cutting glass			
Demonstrate the ability to make freehand sketches in a quick and efficient manner without using a compass, straight edge, or protractor. Demonstrate how to make the following sketches:		• Details	 Request for Quotation
Demonstrate the ability to make freehand sketches in a quick and efficient manner without using a compass, straight edge, or protractor. Demonstrate how to make the following sketches:		Contract specifications	 Read and interpret the details of blueprints, shop drawings, and
or profitacion to ability to make the following sketches: • Demonstrate how to make the following sketches: • Demonstrate how to make the following sketches: • Demonstrate how to make the following sketches: • A section of a storefront installation • A section of a storefront installation • A complex storefront with returns • Read a shop drawing and relate the information on it to an actual structure. • Read cross section diagrams of architectural metal extrusions to identify the following: • Headers • Sills, bulkheads, and sill flashing • Jambs • Mullions • Door jambs • Intermediate horizontals • Corner metal • Make a list of materials based on the shop drawing. • Corner metal • Make a list of materials based on the shop drawing. • Corner metal • Maximing and socre glass to specified dimensions glass. • Weasure, mark, and score glass to specified dimensions • Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. • Measure the wall and transfer measurements onto a mirror. • Cut and perform edgework to various levels on glass and		Voillo o di addatasia bandanat asiam at stillida adt attattament	nerimeter sheets for the alazing trade
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Demonstrate how to make the following sketches:		or protractor.	drawing, and a perspective drawing.
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Jambs Jambs Mullions Door jambs Intermediate horizontals Corner metal Corner metal Make a list of materials based on the shop drawing. ON-THE-JOB LEARNING (OJL) – 1200 hours Glass Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Measure the wall and transfer measurements onto a mirror. Cut and perform edgework to various levels on glass and Cut and perform edgework to various levels on glass and			• 11se the architect's scale to determine the actual length of a scaled
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Intermediate horizontals Corner metal Corner metal Corner metal Corner metal Corner metal Corner metal Constant of materials based on the shop drawing. Constant of materials based on the shop drawing. Colass Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Measure the wall and transfer measurements onto a mirror. Cut and perform edgework to various levels on glass and		admei noon	 Describe proper handling procedures for plans and drawings.
Corner metal Corner metal Corner metal Conner metal C			and interpretation of the second of the seco
Corner metal Make a list of materials based on the shop drawing. ON-THE-JOB LEARNING (OJL) – 1200 hours Glass Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Measure the wall and transfer measurements onto a mirror. Cut and perform edgework to various levels on glass and Cut and perform edgework to various levels on glass and		 Intermediate horizontals 	Limb hological probabilities and setting blocks
Make a list of materials based on the shop drawing. ON-THE-JOB LEARNING (OJL) – 1200 hours Glass Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Measure the wall and transfer measurements onto a mirror. Cut and perform edgework to various levels on glass and Cut and perform edgework to various levels on glass and		Corner metal	Snims, backer rod, arichors, caurally, and setting brocks.
CLAZING SYSTEMS INSTITUTE CONTRIBUTED CON			 Explain the difference between in-shop fabrication and on-site
ON-THE-JOB LEARNING (OJL) – 1200 hours Glass Cutting: • Demonstrate the basic principles and procedures for cutting glass. • Measure, mark, and score glass to specified dimensions using a glass cutter. • Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: • Measure the wall and transfer measurements onto a mirror. • Cut and perform edgework to various levels on glass and			fabrication.
Class Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Measure the wall and transfer measurements onto a mirror. Cut and perform edgework to various levels on glass and			 Determine final measurements, taking into consideration materials
CLAZING SYSTEMS INSTAND COLL) - 1200 hours Glass Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Measure the wall and transfer measurements onto a mirror. Cut and perform edgework to various levels on glass and			used thermal expansion and the required coverage of the glass.
CLAZING SYSTEMS INSTACTOR LEARNING (OJL) – 1200 hours Glass Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Mirrors: Cut and perform edgework to various levels on glass and			Table to the suppose of cutting and materials lists and how they are
GLAZING SYSTEMS INS ON-THE-JOB LEARNING (OJL) — 1200 hours Glass Cutting: • Demonstrate the basic principles and procedures for cutting eglass. • Measure, mark, and score glass to specified dimensions eusing a glass cutter. • Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: • Measure the wall and transfer measurements onto a mirror. • Cut and perform edgework to various levels on glass and			Explain the purpose of cutting and materials lists and now uney and Explain the purpose of cutting and expenses.
Glass Cutting: • Demonstrate the basic principles and procedures for cutting glass. • Measure, mark, and score glass to specified dimensions using a glass cutter. • Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. • Measure the wall and transfer measurements onto a mirror. • Cut and perform edgework to various levels on glass and			created based on snop drawings and sketches.
ON-THE-JOB LEARNING (OJL) — 1200 hours Glass Cutting: Demonstrate the basic principles and procedures for cutting glass. Measure, mark, and score glass to specified dimensions using a glass cutter. Demonstrate basic fabrication techniques including: edging, removing scratches, drilling and cut outs. Mirrors: Measure the wall and transfer measurements onto a mirror. Cut and perform edgework to various levels on glass and	7.5	GLAZING SYSTEM:	INSTALLATION AND LAYOUT
te the basic principles and procedures for cutting enark, and score glass to specified dimensions ss cutter. It is basic fabrication techniques including: edging, cratches, drilling and cut outs.		1	RELATED INSTRUCTION (RI) – 120 hours
te the basic principles and procedures for cutting enark, and score glass to specified dimensions ss cutter. It is basic fabrication techniques including: edging, cratches, drilling and cut outs.		Glass Cutting:	Glass Cutting:
sure, mark, and score glass to specified dimensions g a glass cutter. onstrate basic fabrication techniques including: edging, oving scratches, drilling and cut outs. sure the wall and transfer measurements onto a mirror. and perform edgework to various levels on glass and		 Demonstrate the basic principles and procedures for cutting 	 Identify the principles and procedures for cutting glass and plastics.
sure, mark, and score glass to specified dimensions g a glass cutter. onstrate basic fabrication techniques including: edging, oving scratches, drilling and cut outs. sure the wall and transfer measurements onto a mirror. and perform edgework to various levels on glass and		SSED	 Identify the various tools, materials and machinery for cutting glass.
 g a glass cutter. onstrate basic fabrication techniques including: edging, oving scratches, drilling and cut outs. sure the wall and transfer measurements onto a mirror. and perform edgework to various levels on glass and 			 Describe various principles and techniques for cutting glass on the job
onstrate basic fabrication techniques including: edging, onstrate basic fabrication techniques including: edging, wing scratches, drilling and cut outs. Sure the wall and transfer measurements onto a mirror. and perform edgework to various levels on glass and			ejis
wing scratches, drilling and cut outs. Sure the wall and transfer measurements onto a mirror. and perform edgework to various levels on glass and		Using a glass carrel: Domonetrate basic fabrication techniques including:	
sure the wall and transfer measurements onto a mirror. and perform edgework to various levels on glass and		removing constribes drilling and cut outs	Mirrors
sure the wall and transfer measurements onto a mirror. and perform edgework to various levels on glass and		Mirrors:	Describe the principles and procedures for light metal fabrications and
Cut and perform edgework to various levels on glass and		Mooning the wall and transfer measurements onto a mirror	
כתו מות הפווסווו פתפפייסות וס אמווסמט וכייסו פוימים מות			 Explain the importance and use of mirrors in the marketplace.
		. 1	

mirrors using upright wet belt sanders and hand held belt

- Drill small and large holes using the proper drill for each.
- Demonstrate the following glass and mirror cutouts: corner, wall outlet, peninsula notch, island circle and outside circle.
 - Recognize problems and apply solutions to imperfect wall surfaces to be used for mirror mounting.
- Demonstrate the layout, fabrication, and installation procedures for mirror mounting.
- Properly store and handle mirrors.

Shower Doors and Tub Enclosures:

Demonstrate the use of hardware for shower and tub enclosures.

- Measure and layout a shower and tub enclosure.
- Demonstrate fabrication and installation techniques for shower and tub enclosures.

Doors and Locks:

- Perform a reliability test on installed panic hardware.
- Demonstrate the construction and installation of aluminum doors and other entrances.

Handrail Systems:

 Fabricate and install a handrail system using various anchoring and securing methods.

Break Metal:

- Accurately measure the corners and radius walls prior to cutting the metal to insure proper fitting during installation
 - Determine layout and positioning of break metal prior to
- Demonstrate accurate fabrication of break metal on the job. Glazing Systems (General):

Demonstrate the ability to locate the manufacturer's

- installation manuals for any glazing system.

 Demonstrate the ability to work with a team to fabricate and
 - install glazing systems.

 Demonstrate safe work practices and selection and use of
- PPE on all glazing systems.

 Select and safely use the appropriate tools to install all
 - glazing systems.
 Demonstrate the proper techniques for welding various

 Describe and choose the best method for installing mirrors for each job.

- Identify and describe the use of hardware used for mirror mounting.
 - Identify different types of drills used for creating holes in glass and mirror.

Shower and Tub Enclosures:

Describe the basic types of shower and tub enclosures.

Doors and Locks:

- Identify various types of locks and their components.
- Recognize the terminology used with the function and installation of locks and bolts.
- Name the basic types of panic hardware, its purpose, terminology and general installation procedures.
 - Discuss the requirements for door installation and construction and the effects of the environment on aluminum entrances.
 - Discuss the effects of positive and negative air pressure and stack effect on entrances.

Discuss the different types of automatic doors and the hardware

- associated.
 Describe measures that can be taken to prevent the effects of
 - temperature extremes on aluminum entrances.
- Describe door size, construction and allowable clearances.
- Explain the importance of following hardware guidelines on proper door installation, adjustment methods and glazing techniques. Handrail Systems:
 - Describe the different components of various types of handrail systems.
- Describe handrail system fabrication and its anchoring and securing methods.
- List the safety codes that relate to the installation of handrail systems.
 Define "tolerance" as it relates to general glazing systems layout and measurements.

Break Metal:

 Describe the importance of measuring corners and radius walls when installing break metal.

Glazing Systems:

- Describe the different design qualities of Curtain wall, Unitized, Pressure Wall, Ribbon Windows, Pre-Glazed systems.
- Describe the layout procedures for each of the glazing systems.

glazing systems.

Curtain wall System:

- Measure and layout precise Curtain wall control lines and reference points.
 - Demonstrate the proper calculation of "tolerances" for building dimensions.
 - Conduct a field inspection prior to Curtain wall layout.
- Demonstrate the assembly and installation of Curtain wall, including corner seals, glazing the wall and applying Curtain wall trim.

Ribbon Window and Pre-Glazed Systems:

- Calculate glass sizes for framed openings using elevation drawings and details.
 - Demonstrate the assembly and installation of Ribbon Window systems.
- Demonstrate the procedures for glazing the Ribbon Window system.
- Demonstrate the installation of Pre-Glazed systems.
 Unitized System:
- Measure and layout materials needed for the installation of unitized systems.
- Demonstrate the installation procedures to properly install manufacturer's unitized system materials.
- Select and safely use the appropriate tools to install all glazing systems.

Pressure Wall:

- Demonstrate Pressure Wall fabrication techniques.
- Demonstrate the Pressure Wall erection process for single span and multi-span buildings.
- Apply the steps to prepare the Pressure Wall openings for glazing.
- Install glass, pressure plates, and covers on a Pressure Wall
- Perform the procedures for internal sealants, zone damming, and water diversion.

Storefront Layout and Installation:

- Measure a rough opening.
- Fabricate and assemble a Storefront frame that uses shear block joinery.

- Describe the fabrication techniques for each of the glazing systems.
- Describe the installation procedures for each of the glazing systems.
 - List and describe the different types of tests used to determine the correct installation of glazing systems.
- Describe proper handling procedures and window material storage of each glazing system.
 - Compare and contrast the differences between modular, single and multiple ribbon window system units.
- Identify the problems that are caused by inaccurate measurements of ribbon window systems.
 - Read and interpret manufacturer's directions and architectural drawings showing placement of Ribbon Window units.
 - Discuss the benefits of using pre-glazed systems. Recognize Pressure Wall terminology and components.
- Identify the steps for preparing the Pressure Wall openings for

glazing. Storefront:

- Describe the procedures associated with internal sealants, zone damming, and water diversion.
- Describe components and materials of a Storefront including headers, sills, vinyl gaskets, shims, backer rods, anchors, sealants and setting blocks.
- Explain the critical importance of proper sealant selection and application in Storefront installations.
 - Explain the importance of accurate field measurements.
 - Spandrel Glass and Architectural Panels:
- Identify the uses of Spandrel Glass and Architectural Panels.
- Describe the components of Architectural Panel systems including layout, fabrication, and installation.
- Describe the components of Louver Systems including layout and installation.
 Describe the different types, colors, finishes and patterns of Spandrel
- Glass and Architectural Panel systems.Describe thermal stress and its causes.
 - Describe Architectural Panel fabrication.

	-	Storofront motal and alass for new installations	
	•	Tabella of the control of the contro	
	•	rapricate and assemble a camed otolemont system.	
	•	Install, level, and plumb a given Storefront frame.	
	0	Drill holes in masonry with a hammer drill or pistol drill for a	
		given masonry anchor.	
	•	Shim and anchor a given Storefront frame.	
	Sp	Spandrel Glass and Architectural Panels:	
	•	Demonstrate the proper fabrication of an Architectural	
		Panel.	
	•	Demonstrate the installation of Spandrel Glass,	
1		Architectural Panels, and Louver Systems. Debi Acement Detail	DEDIACEMENT RETED-EIT AND WEATHERIZATION
0.		NEPLACEMENI, NEIN	O-11, AND WEATHERIZATION
		On-THE-JOB LEARNING (OJL) - 400 hours	RELATED INSTRUCTION (RI) - 20 hours
	•	Demonstrate the safe removal and disposal of broken	 Identify and use the proper safety equipment and procedures.
		glass.	 Identify and describe the various types of replacement and retro-fit
	•	Demonstrate the techniques for re-glazing various window	windows.
		systems.	
7.7		SKYLIGHTS A	SKYLIGHTS AND SLOPED GLAZING
		ON-THE-JOB LEARNING (OJL) - 400 hours	RELATED INSTRUCTION (RI) – 20 hours
	•	Demonstrate self-flashing curb and curb mount skylight	 Describe the use and purpose of skylights in both residential and
		mountings.	commercial architecture.
	•	Demonstrate the use and installation of various kinds of fall	 Identify the types of loads to which skylights may be exposed and
		protection.	explain the importance of adhering to the design of a sky lighting
	•	Demonstrate safe handling practices for skylights.	system.
	0	Compare the dimensions and tolerances of the skylight	 Discuss the various types of glass and their strength and response to
		support structure with dimensions on skylight shop	impact, thermal stress and movement, breakage and water or
	_	drawings.	moisture.
	•	Demonstrate the assembly of skylight components.	 Discuss fall protection, including anchor points, hardware options,
	•	Demonstrate the use of various glazing and skylight hand	٠, -
		tools.	Describe safe practices for nandling skylights and inlaterials including
	0	Troubleshoot and repair problems with tools, materials,	scissor and boorn lints. Describe safe installation methods inclinding how to avoid walking on
		layout, leaks and other installation inefficiencies.	- +
	•	Demonstrate caulking and anchoring techniques.	 Describe the use of shop drawings for identifying components and
			materials for installation.
			 Describe the assembly procedures and considerations for a given
			skylight.
			 Identify skylight hand tools and materials.
7.8		ENERGY GLA	ENERGY GLAZING SYSTEMS (EGS)

_		ON-THE-JOB LEARNING (OJL) - 400 hours	RELATED INSTRUCTION (RI) - 20 hours
		Demonstrate the proper fabrication of various EGS.	 Explain how EGS gather, store, and re-produce energy.
		Demonstrate the proper installation of various EGS.	 Explain how EGS benefit property owners in regard to sustainability
		Demonstrate safe work practices and appropriate PPE	and the green initiative.
		when working with EGS.	 List and identify parts and components of various EGS.
	•	Demonstrate proper material handling and installation with	 Identify various EGS manufacturers' specifications for fabrication and installation.
			 Define and discuss a pigtail and its care and handling. Describe how to handle and store photovoltaic (PV) panels.
7.9		WELDIN	WELDING APPLICATIONS
		ON-THE-JOB LEARNING (OJL) - 400 hours	RELATED INSTRUCTION (RI) – 80 hours
	•	Operate the shielded metal arc welding process in all	 Define welding and list common welding processes. Identify industries and applications where welding processes are
	•	Demonstrate how to manipulate the electrode to produce	performed.
		certain weld characteristics.	 Recognize welder safety and working conditions and apply
	•	Operate the oxy fuel cutting process.	acceptable safety preventative measures.
	•	Operate the plasma arc cutting process	 List personal protective equipment and identify attire that is sufficient
	•	Tack up weldments.	in coverage and materials known to minimize skin burns caused by
	•	Weld single and multipass fillet welds in all positions using	sparks, spatter, or radiation.
		the Shielded Metal Arc Welding process.	Identity weiging types, joint design, and positions used in weiged
	•	Weld Groove welds in the flat, horizontal, vertical and	construction. Interpret common welding symbols as established by the American
		overhead positions using the shielded metal arc welding process to diven specifications.	Welding Society.
	•	Use Shielded Metal Arc Welding to produce stringer beads	 Identify arc welding procedures, equipment, and materials with
		and weave beads in the flat and vertical positions.	safety.
	•	Repair faulty fillet weld areas containing undercut, overlap,	 Define basic terminology associated with the welding trade.
		uneven fillet weld legs and undersized fillet welds.	
	•	Produce stringer beads and weave beads in the flat and vertical positions.	
	•	Demonstrate oxygen fuel cutting techniques to sever	
		metals.	

Appendix A

Architectural Glazier Apprentice

D.O.T 865.381-010

Related Instruction

First Year

Safety and Health Training

The committee shall instruct the apprentices in safe and healthful work practices and shall insure that the apprentices are trained in facilities and other environment that are in compliance with either the occupational safety and health standards promulgated by the secretary of labor under public law 91-596, dated December 29, 1970 or state standards that have been found to be at least as effective as the federal standards.

First Year

Sexual Harassment First Aid/ CPR/ AED Safe Work Practices Shop Machinery Safety Safety Glazing Codes Respiratory Protection Hand and Power Tool Safety Awareness Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 8 Hours Hou	of IUPAT 4 Hours
First Aid/ CPR/ AED Safe Work Practices Shop Machinery Safety 4 Hours Safety Glazing Codes Respiratory Protection 4 Hours Hand and Power Tool Safety Awareness Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 8 Hours 8 Hours 8 Hours 8 Hours 8 Hours 9 Hours	10 10 Hours
Safe Work Practices Shop Machinery Safety 4 Hours Safety Glazing Codes Respiratory Protection 4 Hours Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 4 Hours 4 Hours 4 Hours 8 Hours 8 Hours 8 Hours 8 Hours 8 Hours 9 Hours	Harassment 2 Hours
Shop Machinery Safety Safety Glazing Codes Respiratory Protection Hand and Power Tool Safety Awareness Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 4 Hours H	d/ CPR/ AED 8 Hours
Safety Glazing Codes Respiratory Protection Hand and Power Tool Safety Awareness Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 4 Hours	ork Practices 4 Hours
Respiratory Protection Hand and Power Tool Safety Awareness Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 4 Hours 4 Hours 8 Hours 8 Hours 8 Hours 9 Hours	lachinery Safety 4 Hours
Hand and Power Tool Safety Awareness Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 6 Hours 6 Hours 7 Hours 8 Hours 8 Hours 8 Hours 8 Hours 9 Hours	Glazing Codes 4 Hours
Ergonomics in the Workplace Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 4 Hours 8 Hours 8 Hours 8 Hours 9 Hours	atory Protection 4 Hours
Ladder Safety Training Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 2 Hours 8 Hours 8 Hours 8 Hours 8 Hours 8 Hours 8 Hours	nd Power Tool Safety Awareness 6 Hours
Math for the Glazing Trade Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 8 Hours 8 Hours 8 Hours 8 Hours 8 Hours 8 Hours	mics in the Workplace 4 Hours
Hand Tools for the Glazier Master Fire Stopping Anodized and Painted Finishes Glass Cutting and Fabrication Mirror Job Layout, Measuring, and Mounting 8 Hours	Safety Training 2 Hours
Master Fire Stopping 4 Hours Anodized and Painted Finishes 8 Hours Glass Cutting and Fabrication 8 Hours Mirror Job Layout, Measuring, and Mounting 8 Hours	r the Glazing Trade 8 Hours
Anodized and Painted Finishes 8 Hours Glass Cutting and Fabrication 8 Hours Mirror Job Layout, Measuring, and Mounting 8 Hours	ools for the Glazier 8 Hours
Glass Cutting and Fabrication 8 Hours Mirror Job Layout, Measuring, and Mounting 8 Hours	Fire Stopping 4 Hours
Mirror Job Layout, Measuring, and Mounting 8 Hours	ed and Painted Finishes 8 Hours
Will of box Layout, Mododing, and Modified	Cutting and Fabrication 8 Hours
Scaffold 12 Hours	lob Layout, Measuring, and Mounting 8 Hours
Codifold	
Rigging/ Aerial/ Scissor Lifts 36 Hours	y/ Aerial/ Scissor Lifts 36 Hours

144 Hours total minimum

Second Year

Survival of the Fittest	2 Hours
Basic Math and Measurements	4 Hours
Fractions, Decimals, Percentages, and Angles	8 Hours
Introduction to Green Building	4 Hours
Lead Abatement	8 Hours
Glass Replacement and Putty Glazing	10 Hours
Transits and Leveling Instruments	8 Hours
Sealants and Compatibility	20 Hours
Entrances and Related Hardware	14 Hours
Plans and Drawings	5 Hours
Scales and Dimensions	5 Hours
Basics of Sketching	5 Hours
Blueprint Reading: Perimeter Sheets, Shop & Architectural Drawings	15 Hours
OSHA 30	30 Hours
Glass Fabrication	<u> 6 Hours</u>

144 Hours Total Minimum

Upon completion of the Architectural Glazier Apprenticeship, all apprentices will be required to take and pass the Architectural Glazier Competency Exam consisting of a written exam and demonstration and knowledge of parts and hardware and the ability to fabricate glass. Upon passing the Architectural Glazier Competency Exam with a minimum score of 70%, the apprentice will then earn the designation of Architectural Glazier.

Total minimum hours of classroom instruction are as follows:

First Year-

144 Hours minimum

Second Year-

144 Hours minimum

288 total hours minimum RI



STATE OF NEVADA NEVADA STATE APPRENTICESHIP COUNCIL 555 EAST WASHINGTON AVENUE, 4100 LAS VEGAS NV 89101 (702) 486-2650

APPRENTICESHIP OJT AND RELATED TRAINING INSTRUCTION (RTI) INFORMATION CHECK LIST

APPRENTICESHIP TITLE:	Nevada Glaziers JATO	C Arch	itectu	ral Glazier	
CURRICULUM TITLE:	Architectural Glazier	1			
DOT NUMBER:	865.381-010				
OJT HOURS:	4000				
144 Total Hours of Re	elated Instruction Per Year				
Type of Related Instruction:					
Correspondence			Outs	ide Contract Instruction	
Regular College Course			Othe	r (Please explain in summary comments)	
X Course Taught by Trade	Instruction				
Subjects to be Taught During Prog	ram:				
1. Please see attached		6			
2.		7			
3.					
4.					
		10.			
SOURCE(S) OF TRAINING MATE		_			
II IDAT ETI					
Instruction Location:					
X Apprenticeship Training	Center		Colle	ege Campus	
Worksite After Hours			Hom	e	
Other (Please explain in sur	nmary comments)				
	Please Designate Length of Related Instruction Program 2 Years				
				(Example: 3 Yrs., 4 Yrs.)	
Submitted by: Jason W. Lami	berth Apprenticeship and Tra	ining Co	ordinat	or	

RELATED TRAINING INSTRUCTION (RTI) CHECK LIST

CURRICI NO	JLUM CO YES	ONTE	NI:
	X	1.	Does the curriculum outline meet the required 144 hours minimum of related instruction per year?
-	X	2.	Does the curriculum provide learning experience representing competencies expected of employees in the occupation represented by this program?
	Χ	3.	Are the course goals, objectives, and activities clearly stated and related directly to a current task analysis for this occupation?
Militaria	X	4. -	Are the activities arranged in a logical sequence for maximum attainment of the required industrial skills?
	X	5.	Is there criteria for measuring student achievement?
	X	6.	Does the curriculum satisfy the requirements defined in the DOT?
	toto Cus	7	Trade & Industrial Education Date DISAPPROVED:
51	tate Supe	ervisor	
			SUMMARY COMMENTS:

APPENDIX B

Apprenticeship Agreement



STATE OF NEVADA
NEVADA STATE APPRENTICESHIP COUNCIL
555 EAST WASHINGTON AVENUE # 4100
LAS VEGAS NV 89101

			APPRENT	ICESHIP AG	REEMENT	FOR OFFICE USE	E ONLY I.D. NO		
This agreement er	ntered into this		lay of				, 2012_ t	etween,	
					Glazier Local 20	01 JATC			
Apprentice Name	(PLEASE PRINT)				Program Sponsor	Name esa Dr. Ste.106	Hender	son, NV 89014	
Address			City, S	itate, Zip	Program Address		City, State, Zip	55H 144 555 14	-
Apprentice Signatu	ire				Officer's Name (P	LEASE PRINT)			
Parent or Guardian	n if Apprentice is a M	linor			Officer's Signature	е			
D. O B		Soc. Sec	<u></u>		Program No	NV003090052			
VETERAN STA	TUS: E	THNIC DERIVAT				SEX:	EDUCA		
Yes No		Black (Not Hispa American Indian Asian or Pacific I		e Hispani White (non Hispanic)	- Male Female	High None	School Diploma grade or less	GFD 12thgrad
	REVIOUS EXPER	IENCE: ates Previously in	Program N/	Α		CREDIT FO	R RELATED INS	TRUCTION:	
IF CREDIT IS O	VER 50% CREDI	T PLEASE INFOR	RMATION BELOV	V:					
Transfer (State)_			Other Employs	ment: N/A					
Trade Glazio	er	Term (H	rs)			Probation Period	90 days		
	/AGES: The appre				•	worked by apprent ne apprentice rate		of the journeyman:	≕s rate unless
60% Arch	70%	80%	90%	100%Arch	60%Mast	70%	80%	90%	100% Mast
Terms (hours) Pe	ercent					,			
Major Work Proc	ess: See Standa	rds on file							
Special Provision	is: None								
		Diago otto	ah a liat of any n	vaulda anu anaaa	ial avaulaiona as	anneauad by the	Council		
probationary peri	od, the reason for	eement by submitt termination shall t	ing written notifica be given. Due no	ation of termination tice thereof must	n to the approving be given to the Al	s approved by the g agency; but, if so PPRENTICE, as wagreement by the	uch notifications a vell as an opportu	re submitted after nity to be heard an	completion of th d reasonable
The terms of the and	Nevada State App	orenticeship statut	es, regulations an	d standards are i	ncorporated as a	binding part of this	s Agreement and	are acknowledged	by the signators
		e discriminated ag origin or ancestry				ion or other terms, irements.	conditions or priv	ileges of employm	ent because of
N WITNESS WH	EREOF, the parti	es hereto have se	t their hands on th	ne dates indicated	above:				
Registered by the	Nevada State Ap	prenticeship Cour	ncil on			. ,,			
					Secretary - Direct	ctor of Apprentices	snip		

'Warning: this agreement does not constitute a certification under NRS \$10 or Title 29, CFR, Part 5 for the employment on the apprentice on Federal or State financed projects. Current certification must be obtained from the Nevada State Apprenticeship Council or Bureau of Apprenticeship & Training.

APPENDIX C

AFFIRMATIVE ACTION PLAN

ADOPTED BY

THE FINISHING TRADES INSTITUTE OF NEVADA GLAZIERS JOINT APPRENTICESHIP AND TRAINING COMMITTEE

INTERNATIONAL UNION OF PAINTERS AND ALLIED TRADES FINISHING TRADES INSTITUTE

AS REQUIRED UNDER TITLE 29, CODE OF FEDERAL REGULATIONS, PART 30

AMENDED MAY12, 1978

U.S. DEPARTMENT OF LABOR

OFFICE OF APPRENTICESHIP

AND THE

NEVADA STATE APPRENTICESHIP COUNCIL

APPROVED BY:		
DATE APPROVED:		_

Section I - Introduction

The FTI of Nevada Glazier JATC enters this plan with good faith for the purpose of promoting equality of opportunity into its registered apprenticeship program. The JATC seeks to increase the recruitment of qualified women and minorities for possible selection into the apprenticeship program in the event females and /or minorities are underutilized in the apprenticeship program. The JATC herby adopts the following nondiscriminatory pledge and Affirmative Action Plan.

This AAP is a supplement to the Apprenticeship Standards. Any Changes made by the JATC shall become part of this written AAP, once approved by the Office of Apprenticeship, U. S. Department of Labor and the Nevada State Apprenticeship Council.

Section II - Equal Opportunity Pledge

The FTI of Nevada Glazier JATC commits to the following Equal Opportunity Pledge:

"The recruitment, selection, employment, and training of apprentices during their apprenticeship, shall be without discrimination because of race, color, religion, national origin, disability, sex or sexual orientation. 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, Part 30 and the Nevada EEO Plan."

Section III – Utilization and Analysis, Goals and Timetables

In order to allow positive recruitment and full utilization of minorities and women in the apprenticeship program, JATC pledges to identify outreach efforts under Section IV, which will be undertaken. The purpose of the analysis is to determine the minority and women's labor force in the JATC's labor market area.

Once the labor force is determined the JATC can determine if deficiencies exist in terms of underutilization of minorities and /or women in the occupations registered with the Registration Agency. (See attached Affirmative Action Plan Workforce Analysis Worksheet) If underutilization exists, the JATC will develop goals and a timetable to the best of their ability to increase the selection of minority and/or women applicants into the apprenticeship program.

Section IV - Outreach and Positive Recruitment

The JATC pledges to engage in various outreach and positive recruitment activities by employing the following approach:

When the program is accepting applications, application information will be disseminated 30 days in advance of the application acceptance date. The information will include the place of application, the minimum qualifications, the documentation required and the equal opportunity policy of the local JATC.

The JATC's AAP includes the following outreach and positive recruitment efforts that would reasonably be expected to increase minority and women's participation in apprenticeship by expanding the opportunity of minorities and women to become eligible for apprenticeship selection. Once those efforts have been selected, the JATC will set forth the specific steps they intend to take under each identified effort. The JATC will identify a significant number of activities in order to enable it to meet its obligation under Title 29, CFR part 30.4©. At a minimum, the application information should be disseminated to the following organizations via an announcement of specific apprenticeship openings that must be disseminated thirty (30) days in advance of the earliest date for application at each interval to the following agencies/organizations:

- Registration Agency
- Minority Organizations
- Women's Organizations/Centers
- Job Corps Centers
- Local Schools
- Employment Service Centers
- One Stop Centers
- Vocational Education Schools
- Veterans Organizations
- Native American Organizations/Tribes
- Media/Virtual Organization (Facebook, Carerrbuilder.com, etc.)
- Newspapers (which are circulated in the minority community or are directed at women)

The JATC will also undertake the following positive recruitment activities:

 Participation in annual workshops conducted by employment service agencies for the purpose of familiarizing school, employment service and other appropriate personnel with the apprenticeship program and current opportunities.

- Cooperation with local school boards and vocational educational systems to develop programs for preparing students to meet the standards and criteria required to qualify for entry into the apprenticeship program.
- Internal communication of the JATC's equal opportunity policy should be conducted in such a manner to foster understanding, acceptance, and support among the sponsor's various officers, supervisors, employees, and members and to encourage such persons to take the necessary action to aid the JATC in meeting its obligation under Title 29, CFR Part 30 and the Nevada State plan for Equal Opportunity.
- Engagement in programs such as outreach for the positive recruitment and preparation of potential applicants for apprenticeships; where appropriate and feasible, such programs shall provide for pre-testing experience and training. In initiating and conducting these programs, the JATC may be required to work with other sponsors and appropriate community organizations. The JATC will also initiate programs to prepare women and encourage women to enter traditionally male programs.
- Use same craft journeyworkers to assist in the implementation of affirmative action in the apprenticeship program.
- Grant advance standing or credit on the basis of previously acquired experience, training skills, or aptitude for all applicants equally.
- Other appropriate action to ensure that the recruitment, selection, employment, and training of apprentices during their apprenticeship shall be without discrimination because of age, disability, sexual orientation, race, color, religion, national origin, or sex (e.g., general publication of apprenticeship opportunities and advantages in advertisements, industry reports, articles, etc.; use of present minority and female apprentices and journey workers as recruiters; career counseling; development of reasonable procedures to ensure employment opportunity, including reporting systems, on-site reviews, briefing sessions).

SECTION V – ANNUAL REVIEW OF AFFIRMATIVE ACTION PLAN

The JATC will make an annual review of its current Affirmative Action Plan and its overall effectiveness and institute any revisions or modifications warranted. The review shall analyze (independently and collectively) the affirmative action steps taken by the JATC for evaluating the positive impact, as well as the adverse impact in the areas of Outreach and Recruitment, Selection, Employment, and Training. They will work diligently to identify the cause and effect that result from their affirmative action measures. The JATC will continually monitor these processes in order to identify the need for a new affirmative action effort and/or deletion of ineffective existing activity(ies). All changes to the Affirmative Action Plan must

be submitted to the Registration Agency for registration. The JATC will continually monitor the participation rates of minorities and women in the apprenticeship program in an effort to identify any type of underutilization. If underutilization exists, corrective action will be immediately implemented. The goals and timetables also will be reviewed annually and updated where necessary.

FTI of Nevada Glaziers Local #2001 JATC Affirmative Action Plan

FTI of Nevada Glaziers Local 2001 JATC will take the following actions in regards to the proposed action plan:

- A. Provide notice in community newspapers including the Review Journal and targeted publications. Notice will also be provided to employment centers, schools, women's organizations and centers, and minority centers and organizations.
- B. Take advantage of training offered in affirmative action through Federal Government and State of Nevada.
- C. Participate in Career Days and Counselors Information Events with local schools.
- D. Conduct recruitment training for staff and internal organizational personnel.
- E. Participate in programs such as Helmets to Hardhats and Build Nevada that offer preapplication assistance to applicants.
- F. Work with Job Corps pre-apprentice training programs
- G. Offer credit for previous training or on-the-job experience to all applicants on a uniform basis.
- H. Inform all participants of the possible opportunities available to assist in the implementation of affirmative action.

All items to be on going throughout the year and to be reviewed on a regular basis to determine their success.

SECTION VI – OFFICIAL ADOPTION

The foregoing Affirmative Action Plan is hereby officially adopted by the International Union of Painters and Allied Trades District Council 15 Glaziers Local Union #2001, and the Signatory Contractors of Glaziers Local Union #2001 known as The FTI of Nevada Glaziers JATC in this document on this 28th the Day of January, 2014.

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APPENDIX D

QUALIFICATIONS AND SELECTION PROCEDURES

ADOPTED BY

THE FINISHING TRADES INSTITUTE OF NEVADA GLAZIERS JOINT APPRENTICESHIP AND TRAINING COMMITTEE

INTERNATIONAL UNION OF PAINTERS AND ALLIED TRADES FINISHING TRADES INSTITUTE

DEVELOPED IN COOPERATION WITH THE

U.S. DEPARTMENT OF LABOR

OFFICE OF APPRENTICESHIP

AND THE

NEVADA STATE APPRENTICESHIP COUNCIL

APPROVED BY:	
DATE APPROVED:	

The certification of this selection procedure is not a determination that, when implemented, the selection procedure meets the requirements of the Uniform Guidelines on Employee Selection Procedures (41 CFR part 60-3) or Title 29 CFR Part 30

SECTION I – MINIMUM QUALIFICATIONS

Apprentice applications will be accepted on the basis that applications have met and shown documented proof of all required minimum qualifications at the time of application.

Applicants shall meet the following minimum qualifications:

A. Age

All applicants must be at least eighteen (18) years of age *except as noted below. Applicants are required to submit reliable proof of age (e.g., a driver's license, birth certificate or other acceptable documentation.

*An applicant who is seventeen (17) years of age and is participating in a school-to-work program or equivalent and who otherwise meets all qualifications may be rated and ranked and placed on the Pool of Eligible's list. Such an applicant must provide proof that a high school diploma or GED has been awarded and must be (18) years of age prior to being registered by the sponsor.

B. Education

All applicants shall possess sufficient educational knowledge to satisfactorily complete the on-the-job training and related technical instruction. Applicants must provide proof that a high school diploma or GED has been awarded at the time of application.

C. Physical

All applicants shall be physically capable of performing the essential functions of the Glazing Trade without posing a direct threat to the health and safety of themselves or any other individuals, with reasonable accommodations.

D. Citizen

All applicants must be a Legal Citizen of the USA or Legal Alien authorized to work in the USA by the U.S. Citizenship and Immigration Services (USCIS). Proof must be shown at the time of application.

E. Transportation

All applicants must have adequate transportation to attend OJL and RTI classes.

F. Ability

All applicants must satisfy the Committee that they have the ability and aptitude to master the rudiments of the trade based on oral interview, written documentation submitted by the applicant, and evaluation rankings.

G. Military Experience

All applicants must submit a DD-214 to verify military training and/or experience if they are a veteran and wish to receive consideration for such training/experience and/or VA benefits.

SECTION II – APPLICATION PROCEDURES

- A. Applications will be made available to anyone who is interested at specific periods of time throughout the year as deemed necessary by the JATC.

 Announcements will be made 30 days prior to the opening of the application period.
- B. The fact that applications and apprenticeship opportunities are available shall be made known as specified in the Affirmative Action Plan.
- C. All applications will be identical in form and requirement. The application form shall be numbered in sequence corresponding with the number appearing on the applicant log in order to account for all applications. Applications will be tracked to show race/ethnicity and sex identification and the progress by dates and final disposition of each application.
- D. Before completing the full application process, each applicant will be required to review the Apprenticeship Standards and be given a copy of the complaint procedure. If the applicant has any additional questions on the qualifications or needs additional information to complete the application, it will be provided by the JATC.
- E. Receipt of the properly completed application form, along with required supporting documents (proof of age, driver's license, birth certificate or other acceptable documentation; copy of high school diploma, GED certificate or other acceptable documentation) will constitute a completed application.
- F. Completed applications will be reviewed to insure that all of the minimum qualifications have been met. Applicants deficient in one or more qualifications or requirements or making false statements on their application will be notified in writing of their disqualification. The applicant will also be notified of the right to appeal his/her disqualification. Once the application has been disqualified, no further processing will be conducted.
- G. Applicants meeting all of the minimum qualifications and submitting the required supporting documents will be eligible to participate in the math evaluation.
- H. Only those candidates scoring 70% or higher on the math evaluation will be scheduled for interviews.

- I. Should the number of applicants scoring over 70% on the math evaluation significantly exceed the number of projected openings, the JATC reserves the right to raise or lower the eligible math evaluation score as deemed necessary.
- J. Should the JATC find they have enough applications to meet the future labor needs for the Counties, Cities, and Municipalities governed by these standards, the JATC retains the authority to stop accepting applications at any time.
- K. Application procedures which utilize electronic processes to accomplish any or all of the relevant steps A. through H. above shall be deemed consistent with these procedures, provided such procedures meet all the requirements that apply to non-electronic procedures (e.g. maintenance of records).

SECTION III – INTERVIEW PROCEDURES

- A. The JATC will schedule the interview and evaluation session. All applicants who have met the basic qualifications and have submitted the required documents and scored accordingly on the math evaluation will be notified of the date, time, and place to appear.
- B. The Interview Committee will have in its possession for review with regard to each applicant: application form, education verification and proof of age.
- C. After a brief introduction, the committee will ask questions of the applicant with the purpose of finding out as much as possible about the individual and about the capacity to participate in the apprenticeship program.
- D. Questions for the interview and for purposes of evaluation will be on topics related to job performance such as: work experience, school record, mechanical ability, motivation, and vocational training.
- E. Evaluation should be based on a standard of industry needs and not by a comparison with other applicants.
- F. The same questions should be asked of each applicant.
- G. The interviewer(s) will rate each applicant during the interview on each of the factors on the applicant rating form.

SECTION IV – SELECTION FROM THE COMMITTEE

A. The number of new apprentices to be accepted will be determined before starting interviews. The number will be based on the needs of the industry areas governed by these standards.

- B. Selection of individuals from the list of interviewed applicants will not be made until all interview sessions are complete and all applicants have been evaluated.
- C. The interviewer(s) will rate each applicant during the interview on each of the factors on the applicant rating form taking into account the information on the application and required documents, if applicable. The interviewer will record the questions asked and the general nature of the applicant's answers. The interviewer will then prepare a written summary of his/her judgment of the applicant derived from the interview. After completing the interview and evaluation of the applicants, the individual rating scores of the interviewer(s) will be added together and averaged to determine the applicant's final rating.
- D. Applicants will be placed on a "Ranking List of Eligible Applicants" according to their scores at the evaluation session, with the applicant having the highest score being at the top of the list, and all applicants then listed in descending order based on score.
- E. As openings for the registration of new apprentices occur, the highest ranked applicant will be notified of selection by telephone. It will be the responsibility of the applicant to keep the JATC informed of their current mailing address and telephone number.
- F. Selected applicants must respond to the notice of selection within forty-eight (48) hours of notice. If applicants cannot be reached by telephone, their names will be passed and notice sent to their address "Certified Mail-Return Receipt Requested" to determine if the applicants are still interested. If no response is received in fifteen (15) working days from the written notice, the applicants name will be removed from the list. Only one certified notice will be mailed.
- G. Qualified applicants remaining on a preceding ranking list and slotted in wherever their rating score placed them for a period of two (2) years, unless the applicant has been removed from the list by their own written request or following failure to respond to an apprentice opening. Applicants who were not placed during the two (2) year period that were on the ranking list will be required to reapply.
- H. During the two (2) year period, applicants who feel that their qualifications have improved since their original rating may submit documented evidence of such additional experience or training and request reevaluation and rating at the next regular processing cycle.
- I. Any applicant who feels that he/she was wrongfully denied entry to the apprenticeship program may appeal the decision using the applicant appeals procedure described below in Section VIII.

SECTION V – DIRECT ENTRY FOR JOB CORPS GRADUATES AND APPLICANTS FROM RECOGNIZED PREPARATORY PROGRAMS

The JATC encourages preparatory/pre-apprenticeship craft training to facilitate entry into apprenticeship. Youth who complete a Job Corps training program in any occupation covered in these Standards, who meet the minimum qualifications of the apprenticeship program, may be admitted directly into the program, or if no apprentice opening is available, the Job Corps graduate may be placed at the top of the current applicant ranking list and given first opportunity for placement. The JATC will evaluate the Job Corps training received for granting appropriate credit on the term of apprenticeship. Entry of Job Corps graduates will be done without regard to race, color, religion, national origin, or sex. (Note: This is a method of direct entry into the apprenticeship program.)

Consequently, applicants who successfully complete the application process for apprenticeship and are entering through a recognized preparatory program (such as the Helmets to Hardhats Program and recognized Native American programs) shall be evaluated, in terms of their prior experience, through hands on proficiencies as well as be subject to a written General Knowledge questionnaire. They will then be placed within the program at the point that corresponds with their proven experience. Entry of applicants from Helmets to Hardhats and other recognized preparatory programs shall be done without regard to race, color, religion, national origin, or sex.

An employee of a non-signatory employer not qualifying as a journeyworker when the employer becomes signatory shall be evaluated by the JATC using consistent, standard, nondiscriminatory means and indentured at the appropriate period of apprenticeship based on the skill and knowledge of the applicant.

An individual who signs an authorization card during an organizing effort wherein fifty percent (50%) plus one of the employees have signed the authorization cards, whether or not the employer becomes signatory, and is an employee of the non-signatory employer and does not qualify as a journeyworker, shall be evaluated by the JATC using consisten, standard, nondiscriminatory means, and indentured at the appropriate period of apprenticeship based on previous work experience and related training.

SECTION VI - COMPLAINT PROCEDURE

- A. 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 an apprenticeship program, may personally or through an authorized representative, file a complaint with the Registration Agency or, at the apprentice or applicant's election, with the private review body established by the JATC (if applicable).
- B. 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 JATC involved, and a brief description of the circumstances of the failure to apply equal opportunity standards.

- C. The complaint must be filed not later than 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 bodies designated by the JATC 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 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.
- D. Complaints of discrimination in the apprenticeship program may be filed and processed under Title 29, CFR part 30, the Nevada State Plan for EEO, and the procedures as set forth above.
- E. The JATC will provide written notice of their complaint procedure to all applicants for apprenticeship and all apprentices.

SECTION VII – MAINTENANCE OF RECORDS

The JATC will keep adequate records including a summary of the qualifications of each applicant, the basis for evaluation and for selection or rejection of each applicant, the records pertaining to interviews of applicants, the original application for each applicant, information relative to the operation of the apprenticeship program, including, but not limited to, job assignment, promotion, demotion, layoff, or termination, rates of pay or other forms of compensation or conditions of work, hours including hours of work and, separately, hours of training provided, and any other records pertinent to a determination of compliance with the regulations at Title 29, CFR part 30, as may be required by the U.S. Department of Labor. The records pertaining to individual applicants, selected or rejected, will be maintained in such manner as to permit the identification of minority and women (minority and non-minority) participants.

The JATC must retain a statement of its AAP for the prompt achievement of full and equal opportunity in apprenticeship, including all data and analysis made pursuant to the requirements of Title 29, CFR part 30.4. The JATC also must maintain evidence that its qualification standards have been validated in accordance with the requirements set forth in Title 29, CFR part 30.5(b).

In addition to the above requirements, adequate records will include a brief summary of each interview and the conclusions on each of the specific factors, e.g., motivation, ambition, and willingness to accept direction which are part of the total judgment. Records will be maintained for five (5) years from the date of last action and made available upon request to the U.S. Department of Labor or other authorized representative.

SECTION VIII - APPRENTICE APPLICANT APPEALS PROCEDURE

An appeals committee will be established composed of one member appointed by labor and one member appointed by management. Each organization shall appoint its own representative on the appeals committee in any matter that they choose, as long as that individual is not serving on the apprenticeship committee. The authority of the appeals committee shall be limited to rendering a decision on cases involving unjust treatment of applicants for the apprenticeship program. The process for appeal includes the following:

- A. An appeal must be submitted in writing to the local JATC within fifteen (15) days of the date of receipt of notification of rejection to the apprenticeship program.
- B. The local JATC shall submit the appeal and the materials regarding the disposition of the applicant to the appeals committee.
- C. The Appeals Committee will consider the written evidence and a hearing will be granted.
- D. A final decision shall be rendered within thirty (30) days of the hearing and all parties concerned shall be notified in writing by the Appeals Committee.
- E. Decisions of the Appeals Committee shall be final and binding upon both the JATC and the applicant.
- F. A copy of the appeal and the disposition will be kept on file for a period of at least five (5) years.

SECTION IX - OFFICIAL ADOPTION OF SELECTION PROCEDURES

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The foregoing Selection Procedures are hereby officially adopted by the International Union of Painters and Allied Trades District Council 15 Glaziers Local Union #2001, and the Signatory Contractors of Glaziers Local Union #2001 known as The FTI of Nevada Glaziers JATC in this document on this 28 th Day of 1900 the Union #2001 known as The FTI of Nevada Glaziers JATC in this document on this 28 th Day of 1900 the Day of 1900

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The foregoing Apprenticeship Standards, being in conformity with the rules, regulations and laws, and applicable federal regulations are hereby approved by the Nevada State Apprenticeship Council for IUPAT District Council 15 Nevada Glazier Architectural JATC.

Approved at registered with the Nevada State Apprenticeship Council

this 7th day of February, 2014

February 7, 2014 Date

Thoran Towler, Secretary Director

PROGRAM # NV003720001

AFFIRMATIVE ACTION PLAN WORKFORCE ANALYSIS WORKSHEET

A. SPONSOR INFORMATION

Program Number:	NV00372001	
Name of Sponsor:	Nevada Glaziers JATC	
Address:	1701 Whitney Mesa Dr. #106	
City/State/Zip Code:	Henderson, NV 89014	
Contact Person:	Jason Lamberth	
Phone Number: (702)	438-2611	FAX Number: (702)438-4452
E-Mail Address:	Jlamberth.dc15@msn.com	

B. OCCUPATIONAL INFORMATION

Occupational Little: *	Glazier	
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RAPIDS Code: 0221 O*NET/SOC Code: 47-2121.00

Type of selection method used: Las Vegas MSA Labor Market Area description: Southern Nevada

C. LABOR MARKET AREA & OCCUPATIONAL PARTICIPATION DATA

C. LABOR MARKET AREA & OCCUPATIONAL	PARTICIPATI	ONDATA		
C.1 Total Labor Force in Labor Market Area *				
Number of Women:	330,667	44% of labor force		
Number of Minorities:	304,320	40.6% of labor force		
C.2 Working Age Population in Labor Market Area	*			
Number of Women:	330,667	44% of labor force		
Number of Minorities:	304,320	40.6% of labor force		
C.3 Apprentice Participation in Craft/Occupation in	National App	renticeship System **		
Number of Women:	2	2.1% of apprentices		
Number of Minorities:	39	42.3% of apprentices		
C.4 The General Availability of Minorities and Women with the Present or Potential				
Capacity for Apprenticeship in Program Sponsor's Labor Market Area. ***				
Number of Women:	44%			
Number of Minorities:	40.6%			

Resources for obtaining labor market information.

*** Program Sponsors may use any reasonable method for determining the general availability of minorities and women with the present or potential capacity for apprenticeship, including relying on the data recorded in Section C.1 for "Total Labor Force", C.2 for "Working Age Population", and C.3 "Apprentice Participation in Particular Craft/Occupation" to propose the entries for "The General Availability of Minorities and Women."

D. SPONSOR'S WORKFORCE DATA

^{*} http://www.census.gov/hhes/www/eeoindex/page_c.html

^{**} RAPIDS Data available from Registration Agency.

D.1	Total Number of Journey/Craft Workers Employed:		
	Number of Women:		% of work force
	Number of Minorities:		% of work force
D.2	Total Percentage of Apprentices or of Applicant Pool (d	lepending on	selection method used)
	Numerical percentage of Women apprentices or women in applicant pool:	0	0%
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L	minorities in applicant pool:		37.7%

ADDITIONAL RESOURCE DATA FOR CONSIDERATION IN ESTABLISHING GOALS

ik.	Industry Source Data	Minority rate of participation	Female rate of participation
E.1	Registered Apprenticeship Partners Information Data System (RAPIDS): *	39-42.3%	2-2.1%
E.2	EEOC Occupational Employment Data: **	80-18%	15-3.4%

Data available from Registration Agency

F. **DETERMINATION OF UTILIZATION**

Analysis	Yes	No
Minority Underutilization:	©.	
Female Underutilization:		

SPONSOR'S GOALS: G.

The program sponsor proposes and agrees to make a good faith effort to attain the goal of selecting 40.6 % minorities and 4.1 % women during the next EEO Review cycle. These goals will not be used to discriminate against any qualified applicant on the basis or race, color, religion, national origin or sex.

The number of new apprentices to be hired during the next year (or selection period) is estimated to be:

H. REGISTRATION AGENCY APPROVA Sponsor Losen W. Jonnson	L: Registration Agency
Sponsor's Signature	Registration Agency Signature
JASONI LAMBERTH	Thoran Towler
Typed Name	Typed Name
APPRENTICESHIP COORSINGATOR	NSDC Sec Dector
Title /	Title
5/15/2014	LED A 1 Sail
Date Signed	Date Signed

^{**} http://www.eeoc.gov/stats/jobpat/jobpat.html