

Tony Evers, Governor Caleb Frostman, Secretary Michele Carter, Division Administrator

September 9, 2020

- TO: State Carpentry Apprenticeship Advisory Committee Members & Consultants
- FROM: Owen Smith, Bureau of Apprenticeship Standards 608-266-2491; <u>Owen.Smith@dwd.wisconsin.gov</u>

SUBJECT: State Carpentry Apprenticeship Advisory Committee meeting

- DATE: Tuesday, September 15, 2020
- TIME: 10:00 AM

Place:<a href="https://dwdwi.webex.com/dwdwi/j.php?MTID=m6f3242665489ad8f1ff8fd0bb6d25c90">https://dwdwi.webex.com/dwdwi/j.php?MTID=m6f3242665489ad8f1ff8fd0bb6d25c90</a>Meeting number:145 679 7839Password:CeAwJKXR434Join by phone:1-855-282-6330 US TOLL FREEAccess code:145 679 7839

# **TENTATIVE AGENDA**

- 1. Call the meeting to order.
- 2. Introduce attendees.
- 3. Review the current roster.
- 4. For action: review proposed program by National Wood Flooring Association

# 5. Old Business

- a. Approve minutes from the prior meeting.
- b. Registered apprenticeship during COVID-19
- c. Implementing revisions to CFR 29.30
- d. Federal grants to expand registered apprenticeship
- e. Industry-Recognized Apprenticeship Programs
- f. Applicant outreach campaign and revisions to www.WisconsinApprenticeship.org
- g. Apprenticeship Completion Award Program
- h. Other

# 6. New Business

- a. Mandatory registration in BASERS
- b. For action: revising state standards, including applicant assessment requirements and ASVAB
- c. 2020 Meeting of National Association of State and Territorial Apprenticeship Directors (NASTAD)
- d. 2020 National Apprenticeship Week
- e. 2021 Biennial Apprenticeship Conference
- f. Revising Transition to Trainer and Teaching Transition to Trainer

- g. BAS leadership and personnel changes
- h. Other
- 7. WTCS update
- 8. Review the program participants.
- 9. Schedule the next meeting.
- 10. Adjourn.





# Draft Minutes of the Carpentry State Apprenticeship Advisory Committee

March 24, 2020 Webinar

Members Present	Organization/Employer
Adamavich, Michael	NCSRCC
Bialcik, Corey	NCSRCC
Macejkovic, Jim	Building Service, Inc.
Rodriguez, Pat (Co-Chair)	NCSRCC
Schmidt, Mark	C.G. Schmidt
Schwengels, Joe	J.P. Cullen & Sons, Inc.
Strub, Matt	Fowler & Hammer
Zacharias, Roger	NCSRCC
Members Absent	Organization/Employer
Basten, Rob	NCSRCC
Coates, Shaun	NCSRCC
Scholz, Barry (Co-Chair)	Associated General Contractors
Consultants & Guests	Organization/Employer
Badger, Richard	Bureau of Apprenticeship Standards
Emrick, Leigh	Associated Builders & Contractors
Melissa from Carpenters	
Giese, Rob	NCSRCC
Horvath, Steve	Moraine Park Technical College
Johnson, Joshua	Bureau of Apprenticeship Standards
Kasper, Andrew	Bureau of Apprenticeship Standards
Kendhammer, Melissa	Bureau of Apprenticeship Standards
Mayek, Mandy	Mid-State Technical College
Myles, Tommy	Bureau of Apprenticeship Standards
Neddef, Brandon	Carpentry Training Institute
Smith, Owen	Bureau of Apprenticeship Standards
Tourdot, Kelly	Associated Builders & Contractors

- 1. The meeting was called to order at 10:05 a.m. by Co-Chair Pat Rodriguez, in conformance with the Wisconsin open meeting laws.
- 2. A roll call was conducted. A quorum was present.
- 3. The committee reviewed the current roster. No revisions or updates were needed. One employer seat will be filled by a representative of Associated Builders & Contractors.

### 4. Old Business

a. Follow-up items from previous meeting

## i. For action: approve the minutes

The minutes were approved as revised: the meeting was held at ABC and Leigh Emrick was present.

ii. For action: assessing applicants using Accuplacer Next Generation

Both local committees that assess applicants with Accuplacer Next Generation agreed that the scores are working well. The local committees noted, though, that they have future concerns about how to administer the text due to COVID-19.

iii. For action: assessing applicants using Armed Services Vocational Aptitude Battery The state committee agreed it preferred to accept ASVAB scores from applicants. The Bureau will research a crosswalk and timeframe in which scores would be valid this summer. The Bureau will present a recommendation at the fall meeting.

### b. Implementing revisions to CFR 29.30

Mr. Kasper updated attendees on the Bureau's progress:

- The Bureau's overall approach is to educate and assist sponsors, not punish them.
- BAS plans to meet with sponsors this spring and summer to discuss diversity and inclusivity activities and expectations. Those meetings will likely be held via webinar.
- BAS updated the apprentice application to include the opportunity to disclose disabilities.
- BAS is updating its policy and procedures manual, too.
- More information on the revisions, including links to the law and the anti-harassment video provided by the U.S. Department of Labor, is available on the Bureau website.
- Sponsors should email their questions to Mr. Kasper.

The state committee asked whether local committees will be audited by the Bureau of the U.S. Department of Labor. Mr. Kasper replied that compliance reviews will be conducted by BAS. He reiterated that the Bureau will not punish sponsors for findings but will provide technical assistance and check progress later. Sponsors will need time to learn the revisions and incorporate them.

# c. Industry-Recognized Apprenticeship Programs

Director Johnson reported that IRAPs have been implemented nationally and the construction sector was not included. The Bureau, as the approving agency of all apprenticeships in Wisconsin, will deny IRAPs in Wisconsin and instead discuss flexible options available through registered apprenticeship. More information is likely to come, so the Bureau will keep the state committees informed.

Attendees did not have questions or comments.

The Bureau has three active federal grants. The first, WAGE\$, is proceeding well. The Bureau anticipates meeting all over its targets except total number of apprentices in new occupations, which is not a surprise because the first programs in new sectors grow slowly at first.

The second and third grants—the State Apprenticeship Expansion (SAE) grant and the Apprenticeship State Expansion (ASE) grant—will help integrate registered apprenticeship into the workforce system. Through the SAE grant, the Bureau will reimburse sponsors for hiring graduates of certified pre-apprenticeship programs. Through the ASE grant, the Bureau funded two full-time Apprenticeship Navigators in the Milwaukee area. The Navigators will connect registered apprenticeship sponsors with the workforce community—WIOA certified individuals, youth apprenticeships, certified pre-apprenticeships, offenders—and will reimburse registered apprenticeship sponsors for certain costs of on-the-job learning.

The state committee asked for the Navigators' contact information. Director Johnson replied that it will be available on the BAS website. The Navigators posted their contact information in the chat.

The state committee asked whether the Navigators will cover the entire state or only the southeast quadrant. Director Johnson replied that he is piloting the Navigator positions in the southeastern quadrant because it is the most populated area of the state and his long-term goal is to have Navigators work across the entire state.

## e. Revisions to www.WisconsinApprenticeship.org

Director Johnson reported that the Bureau received permission from the Department of Workforce Development to re-revise its website to look and function differently than the DWD template. The request was influenced by claims from featured sponsors that the recent redesign made their contact information more challenging to access. The Bureau will revise the site this summer.

### f. Apprenticeship Completion Award Program (ACAP)

Director Johnson reported that ACAP continues to be a strong example of bipartisan support for registered apprenticeship. He reviewed the most recent totals and noted that the denied reimbursements will always be greater than awarded reimbursements because the maximum reimbursement is 25% of total costs or \$1,000, whichever comes first.

He shared that the Bureau is further automating its ACAP processing system to eliminate opportunities for errors. The Department will request including ACAP in the next biennial budget.

Attendees did not have questions or comments.

# g. Other

Attendees did not have additional topics.

### 5. New Business

### a. Lessons learned from DWD tour of Germany Apprenticeship Program

Director Johnson reported that he, Secretary Frostman, and several WI Apprenticeship stakeholders visited Germany to tour the Germany Apprenticeship Program. He stated the visit was invaluable in learning how WI Apprenticeship could improve and how it works very well already, within the context of U.S. society.

He noted several key take-aways:

Apprenticeship in Germany is a socio-economic institution. Many, many industries and

occupations train workers through registered apprenticeship, and students qualified for apprenticeships are tracked as early as fourth grade. These dynamics are possible due to greater government involvement in industries and the K-12 institutions.

- Similarly, apprenticeship in Germany focuses almost exclusively on preparing students and youth; apprenticeship is rarely used by adults to change careers because they would be far behind the skill level of youth. In contrast, Wisconsin Apprenticeship focuses mostly on helping adults prepare for careers and Wisconsin Youth Apprenticeship focuses on broadly exposing participants to a career cluster or industry rather than prepare them in-depth for an occupation.
- WI Apprenticeship works very well within the contexts of U.S. society. Involving K-12 students in career and technical education is very important. Although the U.S. secondary school system would not accept "tracking" students early, students are now required to begin "academic career planning" in middle school. Therefore, the most feasible means of strategically positioning Wisconsin Apprenticeship in the K-12 system is to have it included as an option within academic career planning. Middle-school students could then prepare by taking the necessary academic subjects, such as math and science, and then pursue youth apprenticeship in high school.

Attendees did not have questions or comments.

## b. 2021 Biennial Apprenticeship Conference

Director Johnson reported that the conference will be held February 22-24, 2021, at the Wilderness Hotel in the Wisconsin Dells. The planning team has begun meeting. The specific theme, workshops, and speakers are under discussion, but the primary focus will be that apprenticeship is for everyone, e.g. every sector, worker, student, partner, etc.

The Apprenticeship Expo will be included. By summer the Bureau will launch the registration page via EventBrite and mail a save-the-date notice.

The state committee recommended the Bureau invite Sisters in the Trades to present on diversity an inclusion in construction occupations. Director Johnson welcomed the suggestion.

# c. 2020 National Apprenticeship Week

The 2020 National Apprenticeship Week was not yet announced nationally, so the Bureau will observe Wisconsin Apprenticeship Week the week of November 8-14.

Attendees did not have questions or comments.

# d. Revising Transition to Trainer

Director Johnson reported that the Bureau, Wisconsin Technical College System, and Worldwide Instructional Design System have begun revising "Transition to Trainer." The revisions will make the course more accessible to non-traditional apprenticeship occupations, update terminology and learning activities, and introduce on-line delivery of specific modules. The project is lead by WTCS and includes an industry focus group of trainers from traditional and new sectors.

Attendees did not have questions or comments.

# e. BAS leadership and personnel changes

Director Johnson thanked attendees for their letters of support for his acceptance as Bureau Director. He emphasized that his vision is to innovate registered apprenticeship by integrating it further with certified pre-apprenticeship, youth apprenticeship, technical diplomas, and more.

Additional personnel changes include the following:

- Tommy Myles, Apprenticeship Navigator
- Dawn Pratt, Apprenticeship Navigator
- Milton Rogers, Apprenticeship Training Representative for Madison
- Corey Popp, Apprenticeship Training Representative for Madison
- Melissa Kendhammer, Apprenticeship Training Representative for La Crosse
- Chris Landerman, Apprenticeship Training Representative for Appleton

Attendees did not have questions or comments.

# f. Other

# i. Related instruction during COVID-19

Director Johnson thanked attendees for their flexibility in meeting via webinar. He emphasized that COVID-19 is an unprecedented occurrence, so the Bureau fully supports sponsors and technical colleges in proceeding at their discretion in a manner that they deem safe. The Bureau requests only that sponsors and technical colleges ensure that apprentices eventually receive the proper instruction so they can complete the program.

The state committee voiced support for technical colleges' and sponsors' discretion in providing a safe learning environment. Some schools have closed for safety and moved all instruction online; some small, independent training centers continue to operate in-person but with social distance and cleaning precautions.

The state committee asked how sponsors should pay for homework and online classtime and expressed concern that some apprentices may not have access to computers and wi-fi necessary for online learning. Director Johnson replied that the hours of related instruction on the contract apply whether delivered in-person or online; homework is not included in the hours and not paid, whether done in-person or online. Technical colleges and training centers have the discretion to address logistical difficulties at their discretion.

# ii. Lead abatement training opportunity through WI Dept. of Health Services.

Mr. Owen Smith reported that the WI Dept. of Health Services will reimburse training centers for lead abatement training for apprentices and journey workers through its Lead Safe Homes program. He asked representatives of local committees and training centers if they would be interested in learning more. He is informally gauging interest during the state committee season and will email an official letter, background information, and interest survey in May.

Several local committees replied that they are familiar with the training and expressed interest in learning more. One training coordinator asked if DHS would reimburse train-the-trainer sessions. Mr. Smith replied that he will discuss that option with DHS.

# 6. WTCS Update

Ms. Nancy Nakkoul reiterated that technical colleges have been moving instruction to online delivery in response to COVID-19. She thanked the Bureau and sponsors for their support.

# Ms. Nakkoul reported the following items:

 The WTCS Apprenticeship Completer Report is now online. The response rate increased to 43%; the median salary increased to \$80,344; and respondents reported 92% satisfaction with on-the-job learning and 96% satisfaction with related instruction. The report now includes data on apprenticeships in new sectors, although the data is limited. The WTCS is researching methods to account for differences in over-time in the salary reporting.

- Unduplicated enrollment in apprenticeship programs increased by 9.9% from the prior year.
- The master chart of all apprenticeships with related instruction via technical colleges is now available online.
- Review the program participants. Program participants included 1,321 apprentices and 227 employers with contracts active or unassigned on March 13, 2020.

Attendees did not have questions or comments.

- 8. The Bureau will schedule the next meeting via online survey.
- 9. The meeting adjourned at 12:05 p.m.

Submitted by Owen Smith, Program & Policy Analyst

Appendix A

# **WORK PROCESS SCHEDULE**

# AND

# **RELATED INSTRUCTION OUTLINE**



# Appendix A

# WORK PROCESS SCHEDULE WOOD FLOORING SPECIALIST (EXISTING TITLE: FLOOR LAYER) O\*NET-SOC CODE: 47-2042.00 RAPIDS CODE: 0199HY

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

# **1. TYPE OF OCCUPATION**

Time-based

Competency-based

Hybrid

# 2. TERM OF APPRENTICESHIP

The term of the occupation is 2-3 years with an OJL attainment of 4075-6225 hours, supplemented by the minimum required 480 hours of related instruction.

# 3. RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journeyworker ratio is: 1 apprentice to 1 journeyworker.

# 4. APPRENTICE WAGE SCHEDULE

Sponsors should generally pay apprentices a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current average hourly journeyworker wage rate, which will vary from region to region. For example, \$29.33/\$33.43 (residential/commercial respectively) are examples of a regional average journeyworker wage rate as published by the Carpet, Linoleum, Hardwood and Tile Layers Local 1310, Floorlayer. See attached document for reference. The below and attached document will serve as a documented example. Actual wage progressions will vary based on area and region and the Sponsor.

# **3-Year Term Example:**

$1^{st}$	6 months + hours = \$15.04 (45%)	$4^{th}$	6 months + hours = \$17.72(53%)
$2^{nd}$	6 months + hours = \$16.05 (48%)	$5^{th}$	6 months + hours = \$20.06 (60%)
3 <sup>rd</sup>	6 months + hours = \$17.05 (51%)	$6^{\text{th}}$	6 months + hours = \$21.73 (65%)

# 5. WORK PROCESS SCHEDULE & RELATED INSTRUCTION OUTLINE (See attached Work Process Schedule and Related Instruction Outline)

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



# <u>Appendix A</u>

# WORK PROCESS SCHEDULE & RELATED INSTRUCTION OUTLINE WOOD FLOORING SPECIALIST (EXISTING TITLE: FLOOR LAYER) O\*NET-SOC CODE: 47-2042.00 RAPIDS CODE: 0199HY

**Description:** Provide wood floor installation, sanding and finishing services for customers. Understand the basic construction safety requirements as applied to the wood flooring industry as well as the core competencies of wood flooring installation methods and finishing processes. The apprentice will be able to utilize hand tools, power tools, jobsite testing and preparation methods, layout and design, installation methods, sanding and finishing methods, repairs and identification of common issues and how to avoid them.

**Term:** Hybrid (estimated 4075-6225 hours). It is intended that after a combination of 4075-6225 hours of OJL (on-the-job learning), including a minimum of 480 hours of combined classroom instruction and online instruction to be obtained from National Wood Flooring Association (NWFA) or an NWFA approved instructor, the apprentice will demonstrate competence and be ready to perform the skills outlined below. Once the apprentice has completed all of the necessary requirements, they will be eligible to become an NWFA Certified Professional (more details available on request).

**On-The-Job Learning:** Apprentices will receive training in the various aspects of wood flooring as listed below. The order in which this training is given will be determined by the flow of the work on-the-job and will not necessarily be in the order listed. The times allotted to each of these processes are based on average estimated times in which an apprentice will learn each phase of the occupation. They are intended only as a guide to indicate the quality of the training being provided and the individual ability of the apprentice to absorb the training information in an average amount of time. The suggested related supplements OJL, follows the work process schedule.

General Health & Safety		
0JL - 25-50 hrs.	Related Instruction – 25 hrs. (NWFA	
	University)	
<ul> <li>Execute OSHA practices on the jobsite.</li> <li>Demonstrate proper knowledge of First Aid &amp; CPR</li> <li>Identify fire exits, proper use of fire extinguishers and potential hazards on each job.</li> </ul>	<ul> <li>OSHA <u>https://www.oshaeducationcenter.com/osha</u> <u>-10-hour-training/</u></li> <li>First Aid &amp; CPR</li> <li>Fire extinguishers (NWFAU Fire Extinguisher Safety course)</li> <li>Jobsite (NWFAU Regulations Impacting the Wood Flooring Industry course)</li> </ul>	
Introduction to the Industry		
OJL-	Related Instruction – 5 hrs. (NWFA Basic	
	Installation School)	
	History of the trade	



	Hardwood industry supply chain
	• NWFA
	Career options
	Basic terminology
	Intro trade math
Installation Safety	
OJL - 25-50 hrs.	Related Instruction - 15 hrs. (NWFA
	University + NWFA Basic Installation School)
	• Protect your body (NWFAU Safety Gear
• Demonstrate and practice maintaining	course)
physical fitness and stretches directly	Clothing
related to the wood flooring industry	<ul> <li>PPE (safety glasses, earplugs, dust</li> </ul>
• Wear, inspect and maintain proper	
clothing and PPE needed for installation	masks/respirators, kneepads)
safety including safety glasses, earplugs,	Tool Safety/Operation/Maintenance
dust masks/respirators, kneepads, etc.	(NWFAU Tool Safety courses)
Demonstrate proper usage and	• Hand tools
maintenance of installation tools	<ul> <li>Table Saw</li> <li>Circular Saw</li> </ul>
including, but not limited to hand tools,	
table saw, circular saw, miter saw, router	<ul> <li>Miter Saw</li> <li>Router</li> </ul>
and pneumatics, etc.	
	• Pneumatics
Evaluating	
OJL – 25-50 hrs.	Related Instruction -15 hrs. (NWFA
	University + NWFA Basic Installation School
	+ NWFA Intermediate Installation School)
	History
Use jobsite checklist to evaluate the	Documentation
jobsite and document all findings.	• Evaluating the Exterior of the Home
Evaluate all exterior items on checklist	(NWFAU Evaluating the Exterior of the
and explain findings to customer.	Home course)
• Evaluate all structural items of the	• Evaluating the Structure of the Home
home/building including, but not limited	(NWFAU Evaluating the Structure of the
to foundation, slab, elevated slabs,	Home course)
crawlspace and basement.	• Foundation
• Explain findings to customer.	Slab on Grade
• Evaluate joist span and compare with	Elevated Slabs
NWFA guideline requirements.	Crawlspace
<ul> <li>Articulate findings of jobsite checklist,</li> </ul>	• Basement
suggested fixes and how they affect	• Joists
installation to customer/client.	Span Requirements
	Jobsite checklist
Environmenta	
OJL – 25-50 hrs.	Related Instruction - 10 hrs. (NWFA
	University + NWFA Basic Installation
	School+ NWFA Intermediate Installation
1	School)



<ul> <li>Demonstrate usage of jobsite checklist to evaluate the environmental conditions of the home/building.</li> <li>Determine type of heating and cooling systems being used, regularity and running schedules.</li> <li>Evaluate temperature and relative humidity of environment and compare with EMC chart.</li> <li>Educate customer on conditions of home/building and those needed for successful installation of wood flooring.</li> </ul>	<ul> <li>HVAC</li> <li>Heating Systems</li> <li>Cooling Systems</li> <li>Humidifiers/De-Humidifiers</li> <li>Temporary systems</li> <li>Temp &amp; RH (NWFAU Evaluating the Environmental Conditions of the Home course)</li> <li>Geographic Moisture content</li> <li>EMC Chart</li> <li>Interior/Exterior relationships</li> <li>Ambient Conditions</li> </ul>
Wood Su	bfloors
OJL - 75-125 hrs.	Related Instruction - 15 hrs. (NWFA University + NWFA Basic Installation School+ NWFA Intermediate Installation School)
<ul> <li>Evaluate and determine the condition of the wood subfloor.</li> <li>Know the difference between plywood and OSB and the requirements for each.</li> <li>Understand and execute APA installation standards for wood subfloors.</li> <li>Understand, evaluate, execute and maintain flatness requirements for wood subfloors.</li> </ul>	<ul> <li>Wood Subfloors Subfloor material (NWFAU Evaluating Substrates: Wood Subfloors course)</li> <li>Plywood</li> <li>OSB</li> <li>APA Sheathing Rating</li> <li>Installation requirements</li> <li>Flatness Requirements</li> <li>Particle Board</li> <li>Solid board</li> </ul>
Concrete S	Subfloors
OJL 75 - 125 hrs.	Related Instruction - 15 hrs. (NWFA University + NWFA Basic Installation School+ NWFA Intermediate Installation School)
<ul> <li>Evaluate concrete subfloors</li> <li>Understand the age of concrete and its role in the evaluation process.</li> <li>Identify and assess different types of concrete subfloors.</li> <li>Evaluate blemishes in concrete subfloor and address fixes through removing contaminants, crack repairs, spot repairs, and scarification.</li> <li>Evaluate flatness requirements.</li> <li>Demonstrate use of self-levelers.</li> <li>Perform grinding on high spots.</li> <li>Demonstrate the use of jobsite checklist</li> </ul>	<ul> <li>Introduction to Concrete (NWFAU Concrete Basics course) (NWFAU Moisture &amp; Concrete course)         <ul> <li>Water in Concrete Mix</li> <li>Water/Cement ratio</li> <li>External Sources of Moisture in Concrete</li> </ul> </li> <li>Concrete Identification(NWFAU Evaluating Substrates: Concrete Subfloors course)         <ul> <li>On-grade</li> <li>Suspended</li> <li>On a pan</li> </ul> </li> </ul>



when evaluating concrete subfloors.	<ul> <li>Exposed on 2 sides</li> </ul>
Assess findings and provide solutions for	<ul> <li>Below-grade</li> </ul>
jobsite preparation.	o Age
	<ul> <li>Slab thickness</li> </ul>
	<ul> <li>Concrete Permeability</li> </ul>
	<ul> <li>Lightweight Requirements</li> </ul>
	Concrete Preparation
	• CSP scale
	<ul> <li>Scarification</li> </ul>
	• Crack isolation /Expansion gaps
	• Patches
	<ul> <li>Spot repairs</li> </ul>
	<ul> <li>Flatness Requirements</li> </ul>
	<ul> <li>Grinding and filling</li> </ul>
	<ul> <li>Self-levelers</li> </ul>
	<ul> <li>Primers</li> </ul>
	<ul> <li>Concrete conditions</li> </ul>
	<ul> <li>Curing compounds</li> </ul>
	<ul> <li>Efflorescence</li> </ul>
	-
	Moisture Control Systems
	Sheet Goods
	Chemical Moisture retarders
	Moisture Barriers below slab
Maistura a	and Man and
Moisture a	
OJL - 75-125 hrs.	Related Instruction - 10 hrs. (NWFA
	University + NWFA Basic Installation
	School+ NWFA Intermediate Installation
	School)
• Understand the anatomy of the tree and	Anatomy of wood (NWFAU Basic Tree
how it affects the installation and	Anatomy course)
<ul><li>performance of wood.</li><li>Understand the cuts of wood and how</li></ul>	Harvesting, sawing and seasoning of     humber (NUMEAU From the Found to the
• Understand the cuts of wood and how they affect appearance, installation and	lumber (NWFAU From the Forest to the Floor course) (NWFAU Solid Wood
performance of wood.	Flooring course) (NWFAU Engineered
<ul> <li>Understanding Water &amp; Wood.</li> </ul>	Wood Flooring course)
<ul> <li>Understand the relationship of water and</li> </ul>	Moisture Content (NWFAU Moisture
wood and how it affects the installation	Content & Wood course)
process.	<ul> <li>Dimensional Stability and Grain angle</li> </ul>
<ul> <li>Demonstrate knowledge through</li> </ul>	Equilibrium Moisture Content
evaluating and assessing environmental	Relative Humidity & Temperature
conditions of the jobsite.	Acclimation/Conditioning (NWFAU
<ul> <li>Conduct moisture readings of wood</li> </ul>	Acclimation & Conditioning (course)
subfloor and wood product.	Jobsite checklist
1	,



Demonstrate acclimation/conditioning	Moisture Mitigation
practices on the jobsite and communicate	
the importance/significance to client.	ting (Wood)
Moisture Test	
• Demonstrate proper usage, assessment of	Related Instruction - 10 hrs. (NWFA University + NWFA Basic Installation School+ NWFA Intermediate Installation School) • Moisture Meters & Testing (NWFAU
<ul> <li>Demonstrate proper usage, assessment of results and maintenance of wood moisture meters including, but not limited to pin meters, pinless meters and insulated pins.</li> <li>Demonstrate proper usage, assessment of results and maintenance of thermoshygrometers.</li> </ul>	<ul> <li>Wood Moisture Testing course)</li> <li>Oven Test Method (ASTM D4442)</li> <li>Wood Moisture Meters <ul> <li>Pin Meters (Resistance)</li> <li>Insulated vs non-insulated</li> <li>Temperature Corrections</li> <li>Species Corrections</li> <li>Calibration</li> <li>Hammer Probes</li> <li>Drift</li> <li>Uses</li> </ul> </li> <li>Pinless Meters (non-invasive, scan, surface, dielectric) <ul> <li>Power Loss, Capacitance</li> <li>Calibration</li> <li>Species Correction</li> <li>Uses</li> </ul> </li> <li>Thermo-Hygrometers <ul> <li>Temperature and RH Testing</li> <li>Uses</li> </ul> </li> </ul>
	Relationship with MC
OJL - 75-125 hrs.	trol (Wood) Related Instruction - 10 hrs. (NWFA University + NWFA Basic Installation School+ NWFA Intermediate Installation
<ul> <li>Differentiate between types of vapor retarders and understand use cases.</li> <li>Select proper vapor retarder to be used with wood substrate. Properly install vapor retarder using manufacturer guidelines.</li> </ul>	<ul> <li>School)</li> <li>Vapor Retarders (NWFAU Wood Moisture Control course)</li> <li>Definition of Vapor Permeance</li> <li>Perm Ratings <ul> <li>Class I1 perm or less</li> <li>Class II1 perm to 1.0 perm</li> <li>Class III- 1.0 perm to 10.0 perm</li> <li>Sheet Goods</li> </ul> </li> </ul>
Moisture Testi	ng (Concrete)



OJL - 75-125 hrs.	Related Instruction – 10 hrs. (NWFA
	University + NWFA Basic Installation
	School+ NWFA Intermediate Installation
	School)
• Demonstrate proper usage, assessment of	Quantitative Moisture Tests (NWFAU
results and maintenance of concrete	Concrete Moisture Testing course)
moisture testing methods including, but	Calcium Chloride Test (ASTM 1869)
not limited to calcium chloride, in-situ RH	Moisture Vapor Emission Rates
probe, scan meters and plastic and tape	(MVER)
test.	Process of Testing
<ul><li>Document moisture readings.</li><li>Comply to manufacturer guidelines for</li></ul>	<ul> <li>Documentation of Readings</li> </ul>
<ul> <li>comply to manufacturer guidelines for moisture meters, moisture tests and</li> </ul>	RH Test- In-situ Probes (ASTM 2170)
wood.	Relative Humidity in slab
<ul> <li>Evaluate results and propose solutions</li> </ul>	Process
for all moisture readings.	<ul> <li>Documentation of Readings</li> </ul>
	Qualitative Moisture Tests
	Non-destructive Electronic Moisture
	Meter (ASTM 2659)
	Survey Tools
	Process
	<ul> <li>Documentation and</li> </ul>
	significance of test
	• Plastic Sheet method (ASTM 4263)
	Presence of capillary
	moisture)
	Process
	<ul> <li>Documentation and</li> </ul>
	significance of test
	Other tests
Moisture Contr	
OJL - 75-125 hrs.	Related Instruction – 10 hrs. <i>(NWFA</i>
	University + NWFA Basic Installation
	School+ NWFA Intermediate Installation
	School)
Differentiate between types of vapor	Vapor Barriers/Retarders (NWFAU
<ul> <li>Differentiate between types of vapor retarders and understand use cases.</li> </ul>	• Vapor Barriers/Retarders (NWFAD Concrete Moisture Control course)
<ul> <li>Select proper vapor retarder to be used</li> </ul>	<ul> <li>Manufacturer systems</li> </ul>
over concrete substrate. Properly install	<ul> <li>Concrete Primers and Sealers</li> </ul>
vapor retarder using manufacturer	Specs and perm ratings
guidelines.	Adhesives
Alternative Subfloor S	
OJL - 75-125 hrs.	Related Instruction – 10 hrs. ( <i>NWFA</i>
-,	University + NWFA Basic Installation
	School+ NWFA Intermediate Installation



	School
<ul> <li>Evaluate and determine type of concrete subfloor before installation.</li> <li>Use proper vapor retarder applicable to subfloor type.</li> <li>Follow NWFA guidelines for installation techniques on concrete subfloors.</li> </ul>	School)(NWFAU Wood Subfloors Over Concrete course)Floated Subfloor System• Vapor Retarder requirements• Installation methodsGlue Down Subfloor• Vapor Retarder requirements• Installation methodsNail Down Subfloor• Vapor Retarder requirements• Installation methodsNail Down Subfloor• Vapor Retarder requirements• Installation methodsAlternate Subfloor System (16" x 8' strips)• Vapor Retarder requirements• Installation methodsAlternate Subfloor System (16" x 8' strips)• Vapor Retarder requirements• Installation methodsAlternate Subfloor System (2'x8' or 4'x4' sections)• Vapor Retarder requirements• Installation methodsScreed System (1"x4" or 2"x4" screeds) • Vapor Retarder requirements• Vapor Retarder requirements
Layo	<ul> <li>Installation methods</li> </ul>
• Build a usable trammel point.	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Installation School+ NWFA Intermediate Installation School) (NWFAU Laying Out Working Lines course)
<ul> <li>Use trammel point to develop center layout.</li> <li>Follow steps</li> <li>Use Pythagorean theory to check accuracy of measurements.</li> <li>Transfer layout to hallway and additional rooms.</li> <li>Conduct wall layout using trammel points.</li> <li>Determine starter rows.</li> <li>Demonstrate proper usage of slip tongue</li> </ul>	<ul> <li>Center layout</li> <li>General Trade Math (intermediate)</li> <li>Trammel Points</li> <li>Pythagorean Theorem (3,4,5)</li> <li>Wall layout</li> <li>Reversing direction</li> <li>Slip tongue/spline</li> <li>Jobsite layout/Gridding the job</li> <li>Starter rows</li> </ul>



and spline to reverse directions.		
Installation Meth	ods – Nail Down	
OJL - 300-450 hrs.	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Installation School+ NWFA Intermediate Installation School)	
<ul> <li>Demonstrate proper technique for racking.</li> <li>Demonstrate and execute understanding of proper nailing schedule by complying to NWFA guidelines.</li> <li>Identify and use appropriate fasteners for type of wood and subfloor. Differentiate techniques of solid and engineered nail down installation and execute proper techniques for each.</li> <li>Display proper technique, usage, safety and maintenance of nailing tools including, but not limited to pneumatic nailers, staplers and air compressors.</li> </ul>	<ul> <li>(NWFAU Nail-Down Installation course)</li> <li>Solid</li> <li>Engineered</li> <li>Racking</li> <li>Nailing Schedule</li> <li>Fasteners (length, gauge, type)</li> <li>Manual equipment</li> <li>Pneumatic Nailers</li> <li>Pneumatic Staplers</li> <li>Air compressors and hoses</li> <li>Pneumatic tool maintenance</li> <li>Problems, Causes, Cures</li> </ul>	
OJL - 175-250 hrs.	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Installation School+ NWFA Intermediate Installation School)	
<ul> <li>Differentiate between types of adhesives and understand when to use different types.</li> <li>Read and comply with manufacturer guidelines of adhesive and wood.</li> <li>Demonstrate proper trowel selection for different types of adhesives, wood and subfloors and comply with manufacturer guidelines.</li> <li>Demonstrate proper usage of trowel and coverage rates for adhesives.</li> <li>Safely clean adhesive from tools, wood and jobsite.</li> </ul>	<ul> <li>(NWFAU Glue-Down Installation course)</li> <li>Glue Down Installations</li> <li>History of adhesives</li> <li>Trowels</li> <li>Adhesives</li> <li>Clean-up</li> <li>Manufacturer systems (sealers, moisture inhibitors)</li> <li>Problems, Causes, Cures</li> </ul>	
Installation Methods-Floating		
OJL - 150-225 hrs.	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Installation School + NWFA Intermediate Installation School)	
<ul> <li>Execute proper installation techniques for floating floors.</li> <li>Determine and install proper underlayment pads/systems.</li> <li>Evaluate and determine appropriate</li> </ul>	<ul> <li>(NWFAU Floating Installation course)</li> <li>Floating</li> <li>Engineered/Laminate</li> <li>Underlayment Pads</li> </ul>	



Control course)         • Transition moldings         • Problems, Causes, Cures         Installation Methods- Existing Floors         OJL - 175-250 hrs.         Related Instruction - 15 hrs. (NWFA University + NWFA Intermediate Instruction - 15 hrs. (School)	
• Problems, Causes, Cures         Installation Methods- Existing Floors         OJL - 175-250 hrs.         Related Instruction - 15 hrs. (NWFA University + NWFA Intermediate Instruction)	
Installation Methods- Existing FloorsOJL - 175-250 hrs.Related Instruction - 15 hrs. (NWFA University + NWFA Intermediate Instruction)	
OJL - 175-250 hrs.Related Instruction - 15 hrs. (NWFA University + NWFA Intermediate Instruction)	
University + NWFA Intermediate Inst	
5011001	allation
<ul> <li>Determine layout for new floor to existing.</li> <li>Display proper techniques used for lacing in/out of an existing floor.</li> <li>Evaluate existing floor.</li> <li>Determine requirements for elevation differences, crooked floors, and other challenges.</li> <li>Execute installation techniques to address each challenge.</li> <li>Evaluate remodels. Assess for damage of current floors and lead testing. Address new installation according to results.</li> <li>Evaluate Problems, Causes, Cures</li> </ul>	
Installation Methods-Cork, Bamboo & End Grain	
OJL - 175-250 hrs.       Related Instruction – 15 hrs. (NWFA         University + NWFA Intermediate Instruction       School)	allation
<ul> <li>Understand cork.</li> <li>Learn differences in installation methods, and finishing techniques.</li> <li>Cork (NWFAU Cork as a Flooring Option         <ul> <li>Anatomy and Harvesting</li> <li>Sources</li> </ul> </li> </ul>	ls
<ul> <li>Floating installation method</li> <li>Glue down installation meth</li> <li>Use as an underlayment</li> <li>Sound control</li> <li>Sanding and recoating cork</li> <li>Problems, Causes, Cures</li> </ul>	
<ul> <li>Glue down installation meth</li> <li>Use as an underlayment</li> <li>Sound control</li> <li>Sanding and recoating cork</li> </ul>	ls ods ods
<ul> <li>Glue down installation meth</li> <li>Use as an underlayment</li> <li>Sound control</li> <li>Sanding and recoating cork</li> <li>Problems, Causes, Cures</li> </ul> Interventional differences in installation methods, and finishing techniques. <ul> <li>Glue down installation methods, and finishing techniques.</li> <li>Anatomy and Harvesting</li> <li>Sources</li> <li>Floating installation method</li> <li>Glue down installation method</li> <li>Glue down installation method</li> <li>Sources</li> <li>Floating installation method</li> <li>Glue down installation method</li> <li>Glue down installation method</li> </ul>	ls ods ods



and finishing techniques.	• Spacing
and missing techniques.	Species     installation matheda
	installation methods     Sanding and grain
	Sanding end-grain
	Moisture relationships
	Problems, Causes, Cures
Installation Methods-H	
0JL - 175-250 hrs.	Related Instruction – 15 hrs. (NWFA
	University + NWFA Intermediate Installation
	School)
Demonstrate and execute proper and	(NWFAU Herringbone Layout course)
accurate herringbone layout using	(NWFAU Parquet Layout Installation course)
trammel points, Pythagorean theory,	Trade Math (advanced)
center layout and backer boards.	Herringbone/Parquet
Designing and creating patterns by using	Layout
templates, jigs and sleds.	Installation method
Determining accurate measurements for	Prefabricated patterns
ordering product.	Hand-made patterns
Identification of compatible species from	Jigs and templates
a technical and aesthetic perspective.	Ordering material
Execute proper installation of	Species/material selection
herringbone layout.	Unfinished and Factory Finished
Demonstrate and execute proper and	Problems, Causes, Cures
accurate parquet layout using trammel	, ,
points, Pythagorean theory, center layout	
and backer boards.	
Execute proper installation of parquet	
layout.	
Installation Methods-I	Borders & Medallions
0JL - 175-250 hrs.	Related Instruction – 15 hrs. (NWFA
	University + NWFA Intermediate Installation
	School)
Measure and determine proper layout for	Layout
designing and installing borders.	Installing borders/feature strips
• Measure cut and install borders.	Installing medallions
• Understand the components of a border,	Corners
skirt, different corner details.	Skirting
Determining accurate measurements for	<ul> <li>Prefabricated borders and medallions</li> </ul>
ordering product	<ul> <li>Hand-cut borders and medallions</li> </ul>
Identification of compatible species from	<ul> <li>Measuring and ordering material</li> </ul>
a technical and aesthetic perspective.	<ul> <li>Unfinished and Factory Finished</li> </ul>
Identify pre-fabricated and hand-	<ul> <li>Species/material selection</li> </ul>
designed.	
Board Replace	ment/Repairs
0JL - 175-250 hrs.	Related Instruction – 15 hrs. (NWFA
-,	University + NWFA Basic Installation School
	+ NWFA Intermediate Installation School)
	· ITTE Internetite Installation School



<ul> <li>Determine if/when boards should be replaced/repaired versus entire reinstall.</li> <li>Determine proper steps for board replacement. Differentiate process based on type of install; nail, glue or float.</li> <li>Execute proper board replacement steps including, but not limited to cutting and removal of damaged board, cutting new board to size, installing new board and cleaning repaired area.</li> <li>Execute proper repair skills for isolated damages including, but not limited to scratches and dents.</li> <li>Determine proper tools/items for isolated repairs including, but not limited to scratches and graining tools.</li> <li>Identify and be able to address many of the common irrogularitier.</li> </ul>	<ul> <li>(NWFAU Board Replacement course)</li> <li>Removal of board/s</li> <li>Nail down replacement</li> <li>Glue down replacement</li> <li>Floated board replacement</li> <li>Matching existing floor</li> <li>Isolation repairs (scratches/dents)</li> <li>Waxes, fill sticks, graining tools</li> <li>Color theory</li> <li>Finish repair (sheen, build, application)</li> <li>Irregularities/Problems, Causes, Cures (NWFAU Moisture-Related Wood Floor Issues course)</li> </ul>
the common irregularities	ich Safaty
Sand & Fin	-
OJL - 25-50 hrs.	Related Instruction – 20 hrs. (NWFA University + NWFA Basic Sand & Finish School)
<ul> <li>Wear, inspect and maintain proper clothing and PPE needed for sanding and finishing safety including, but not limited to safety glasses, earplugs, dust masks/respirators, kneepads, etc.</li> <li>Demonstrate proper usage and maintenance of sanding and finishing tools including, but not limited to hand tools and machines used.</li> <li>Demonstrate proper understanding of electrical and chemical safety and execute safety protocols on the jobsite.</li> </ul>	<ul> <li>Protect your body</li> <li>Clothing</li> <li>PPE (safety glasses, earplugs, dust masks/respirators, kneepads) (NWFAU Safety Gear course)</li> <li>Tool Safety/Operation/Maintenance (NWFAU Sanding Equipment Operation course) (NWFAU Sanding Equipment Maintenance course)</li> <li>Hand tools</li> <li>Electrical Safety (NWFAU Electrical Safety course)</li> <li>Chemical Safety (NWFAU Volatile Organic Compounds course)</li> </ul>
Abras	ives
OJL – 25-50 hrs.	Related Instruction - 10 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish School)
<ul> <li>Understand and distinguish the difference between the different types of mineral grains used in abrasives.</li> <li>Understand the different levels of grist used for abrasives.</li> </ul>	<ul> <li>(NWFAU Abrasives course)</li> <li>Sand paper</li> <li>Grit Sequence</li> <li>Belts</li> </ul>



<ul> <li>Determine and execute the proper crit</li> </ul>					
<ul> <li>Determine and execute the proper grit</li> <li>Disks</li> <li>Screens</li> </ul>					
<ul> <li>sequence for flattening a floor.</li> <li>Understand the types of abrasives used</li> <li>Mineral Grains</li> </ul>					
on different machines and execute					
application of knowledge.					
Sanding Equipment-Big Machine					
OJL - 300-450 hrs.	Related Instruction – 15 hrs. (NWFA				
,	University + NWFA Basic Sand & Finish				
	School+ NWFA Intermediate Sand & Finish				
	School)				
Understand and demonstrate proper	(NWFAU Sanding Process Learning Path)				
safety, usage, storage and maintenance of	Storage				
big machines.	<ul> <li>Safety</li> </ul>				
<ul> <li>Demonstrate proper walking speed and</li> </ul>	-				
drum pressure and comply with	<ul><li>Belt sander / Drum Sander</li><li>Settings</li></ul>				
manufacturer and NWFA guidelines.	5				
<ul> <li>Determine proper abrasive selection to</li> </ul>	Operation				
• Determine proper abrasive selection to match job and machine used.	Use of abrasives				
<ul> <li>Use proper grit sequence for desired</li> </ul>	Dust Containment				
results.	Jobsite maintenance/repairs to Big				
results.	Machine				
• Execute proper technique while	Problems/Causes/Cures				
feathering with big machine.					
<ul> <li>Use proper and effective dust</li> </ul>					
contamination systems or practices.					
<ul> <li>Dispose of dust properly.</li> </ul>					
<ul> <li>Demonstrate proper inspection and</li> </ul>					
maintenance of big machine including,					
but not limited to removal/replacement					
of drum, cleaning wheels and adjust					
tracking.					
<ul> <li>Evaluate floor for common sanding flaws</li> </ul>					
and fix flaws as needed.					
Sanding Equip	oment-Edger				
OJL - 150-225 hrs.	Related Instruction – 15 hrs. (NWFA				
	University + NWFA Basic Sand & Finish				
	School+ NWFA Intermediate Sand & Finish				
	School)				
Understand and demonstrate proper	(NWFAU Sanding Process Learning Path)				
safety, usage, storage and maintenance of	Storage				
edger.	Safety				
<ul> <li>Demonstrate proper clocking techniques</li> </ul>	Settings				
and hand pressure and comply with	Operation				
manufacturer and NWFA guidelines.	<ul> <li>Use of abrasives</li> </ul>				
<ul> <li>Determine proper abrasive selection to</li> </ul>	<ul><li>Dust Containment</li></ul>				
match job and machine used.					
<ul> <li>Use proper grit sequence for desired</li> </ul>	Jobsite maintenance/repairs     Drobleme/Causes/Curses				
	Problems/Causes/Cures				



<ul> <li>results.</li> <li>Execute proper technique with edger.</li> <li>Use proper and effective dust contamination systems or practices.</li> <li>Dispose of dust properly.</li> <li>Demonstrate proper inspection and maintenance of edger including, but not limited to brushes, wheels and driver pad.</li> <li>Evaluate floor for common sanding flaws and fix flaws as needed.</li> </ul>	
Sanding Equipment-Ro	
OJL - 150-225 hrs.	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish School)
<ul> <li>Understand and demonstrate proper safety, usage, storage and maintenance of buffer.</li> <li>Demonstrate proper clocking techniques and comply with manufacturer and NWFA guidelines.</li> <li>Determine proper abrasive selection to match job and machine used.</li> <li>Use proper grit sequence for desired results.</li> <li>Use proper and effective dust contamination systems or practices.</li> <li>Dispose of dust properly.</li> <li>Demonstrate proper inspection and maintenance of buffer including, but not limited to wheels and driver pad.</li> <li>Evaluate floor for common sanding flaws and fix flaws as needed.</li> </ul>	<ul> <li>(NWFAU Sanding Process Learning Path)</li> <li>Driver Plates and pads</li> <li>Safety</li> <li>Storage</li> <li>Operation</li> <li>Abrasive selection</li> <li>Dust Containment</li> <li>Jobsite maintenance/repairs</li> <li>Problems/Causes/Cures</li> </ul>
Sanding Equipment – Multi-Head	Sanders (Planetary machines)
OJL - 150-225 hrs.	Related Instruction - 15 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish School)
<ul> <li>Understand and demonstrate proper safety, usage, storage and maintenance of multi-head sanders.</li> <li>Demonstrate proper techniques and pressure and comply with manufacturer and NWFA guidelines.</li> <li>Determine proper abrasive selection to match job and machine used.</li> <li>Use proper grit sequence for desired</li> </ul>	<ul> <li>(NWFAU Sanding Process Learning Path)</li> <li>Storage</li> <li>Safety</li> <li>Operation</li> <li>Abrasive Selection</li> <li>Dust Containment</li> <li>Jobsite maintenance/repairs</li> </ul>



<ul> <li>results.</li> <li>Use proper and effective dust contamination systems or practices.</li> <li>Dispose of dust properly.</li> <li>Demonstrate proper inspection and maintenance of multi-head sanders including, but not limited to brushes, wheels and driver pad.</li> <li>Evaluate floor for common sanding flaws</li> </ul>	
and fix flaws as needed.	
Sanding Equipment – Dust C	
OJL - 25-50 hrs.	Related Instruction - 10 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish School)
<ul> <li>Understand and demonstrate proper safety, usage, storage and maintenance of dust containment systems.</li> <li>Demonstrate proper techniques and compatibility with different equipment types.</li> <li>Dispose of dust properly.</li> </ul>	<ul> <li>Storage</li> <li>Safety</li> <li>Operation</li> <li>Compatibility</li> <li>Jobsite maintenance/repairs (NWFAU Sanding Jobsite Prepartion course)</li> </ul>
Sanding Fina	al Detailing
OJL - 300-450 hrs. <ul> <li>Determine when scrapper is needed on</li> </ul>	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish School) • Scrapers
<ul> <li>job.</li> <li>Display proper safety when using and sharpening blade.</li> <li>Execute proper hand scraping technique for desired results.</li> <li>Demonstrate usage when scraping to blend flatness.</li> <li>Demonstrate usage wen scraping for texture results.</li> <li>Determine when hand sanding is needed to blend edges.</li> <li>Select proper abrasive and grit sequence for the job.</li> <li>Comply with NWFA guidelines.</li> </ul>	<ul> <li>Safety</li> <li>Operation</li> <li>Hand Sanding Operation/Uses</li> <li>Random Orbital Sanders</li> <li>Safety</li> <li>Operation</li> </ul>
Filli	5
OJL – 100-150 hrs.	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish



	School)		
<ul> <li>Select proper type of fill to be used.</li> <li>Execute proper technique by using all types of fills including, but not limited to trowel, spot, putty, flour cement, wood dust, epoxy and Dutchmen/slivers.</li> <li>Adhere to manufacturer guidelines of fill type.</li> <li>Create wood dust mix and demonstrate proper use on jobsite.</li> <li>Learn to match species and grain, then cut and install slivers/Dutchmen</li> </ul>	<ul> <li>(NWFAU The Filling Process course)</li> <li>Trowel Fill</li> <li>Spot Fill</li> <li>Putty, Flour Cement</li> <li>Wood Dust mixes</li> <li>Knots</li> <li>Epoxy</li> <li>Dutchmen/Slivers</li> </ul>		
Stains/Co			
OJL - 150-225 hrs.	Related Instruction - 15 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish School)		
<ul> <li>Understand the different types of stains available for use.</li> <li>Communicate differences, their performances and available options to customer.</li> <li>Prepare floor for stain application.</li> <li>Understand the different types of methods used to apply stain and execute including by not limited to trowel, T-bar, rag, etc.</li> <li>Execute proper safety standards when applying stain.</li> <li>Dispose of stain and stain rags safely and appropriately.</li> <li>Follow manufacturer and NWFA guidelines for all applications.</li> </ul>	<ul> <li>Schooly</li> <li>Types of stains (oil and water)</li> <li>Floor preparation</li> <li>Stain application methods</li> <li>Color</li> <li>Safety</li> <li>Spontaneous combustion</li> <li>Dyes</li> <li>Mineral reactives</li> <li>Oils</li> </ul>		
Sealers and	d Finishes		
OJL - 150-225 hrs.	Related Instruction – 15 hrs. (NWFA University + NWFA Basic Sand & Finish School+ NWFA Intermediate Sand & Finish School)		
<ul> <li>Learn about the different types of wood floor sealers and finishes and application processes.</li> <li>Understand what Safety Data Sheets are, safety precautions and federal requirements surrounding sealers and coatings.</li> <li>Review different manufacturer systems, and characteristics of each one.</li> </ul>	<ul> <li>Safety Data Sheets</li> <li>Types (NWFAU Chemical Properties of Wood Floor Finishes course)         <ul> <li>Oil modified</li> <li>Water Based</li> <li>Shellacs</li> <li>Urethanes</li> <li>Conjugated Oils</li> <li>Varnishes</li> </ul> </li> </ul>		



Communicate differences, their	• UV/LED Cured		
performances and available options to	<ul> <li>Natural Oils</li> </ul>		
customer.	<ul> <li>Hard-wax Oils</li> </ul>		
	Manufacturer Systems		
	Dry-time, Cure-time		
	<ul> <li>Problems/Causes/Cures</li> </ul>		
Finishing			
OJL - 150-225 hrs. Related Instruction – 15 hrs. ( <i>NWFA</i>			
0jL - 150-225 ms.			
	University + NWFA Basic Sand & Finish		
	School + NWFA Intermediate Sand & Finish		
	School)		
<ul> <li>Understand the different types of</li> </ul>	Application Tools (NWFAU Finish		
application methods.	Applicators course)		
Prepare floor for sealer and finish	Application Procedures (NWFAU Finish		
application.	Application Procedures course)		
Understand the different types of	• Preparation (NWFAU Finish Preparation		
methods used to apply sealers/finishes			
and execute including, but not limited to	Final Coat application		
trowel, T-bar, roller, etc.	Problems/Causes/Cures		
• Execute proper safety standards when			
applying sealers and finishes.	(NWFAU Recoating a Previously Finished Wood		
<ul> <li>Follow manufacturer and NWFA</li> </ul>	Floor course)		
guidelines for all application			
Maintenance & Cus	stomer Education		
OJL - 25-50 hrs.	Related Instruction - 10 hrs. (NWFA		
0jL - 25-50 ms.			
	University + NWFA Basic Sand & Finish		
	School+ NWFA Intermediate Sand & Finish		
	School)		
Communicate bids to customer.	(NWFAU Importance of Maintenance &		
Communicate maintenance instructions	Educating the Customer course) (NWFAU		
with customer.	General Maintenance for All Wood Floors		
Preparation and application of	course) (NWFAU Maintenance Products course)		
maintenance coats/recoats.	Soft skills		
• Learn about contaminations/cleaning	Customer service		
products that can affect adhesion of	• Selling after the install		
finishes.	Maintenance Coats		
	<ul> <li>Problems, Causes and Cures (NWFAU</li> </ul>		
	Sanding, Filler & Finish Irregularities		
	course)		
	Inspections		



# WORK PROCESS SCHEDULE & RELATED INSTRUCTION OUTLINE (SUMMARY) WOOD FLOORING SPECIALIST (EXISTING TITLE: FLOOR LAYER) O\*NET-SOC CODE: 47-2042.00 RAPIDS CODE: 0199HY

Subject/Skill	OJL Hours	RI Hours	
General Health & Safety	25-50	25	
Introduction to the Industry		5	
Installation Safety	25-50	15	
Evaluating the Jobsite	25-50	15	
Environmental Conditions	25-50	10	
Wood Subfloors	75-125	15	
Concrete Subfloors	75-125	15	
Moisture and Wood	75-125	10	
Moisture Testing (Wood)	75-125	10	
Moisture Control (Wood)	75-125	10	
Moisture Testing (Concrete)	75-125	10	
Moisture Control (Concrete)	75-125	10	
Alternative Subfloor Systems Over Concrete	75-125	10	
Layout	175-250	15	
Installation Methods – Nail Down	300-450	15	
Installation Methods – Glue Down	175-250	15	
Installation Methods-Floating	150-225	15	
Installation Methods-Existing Floors	175-250	15	
Installation Methods-Cork, Bamboo & End	175-250	15	
Grain			
Installation Methods-Herringbone/Parquet	175-250	15	
Installation Methods-Borders & Medallions	175-250	15	
Board Replacement/Repairs	175-250	15	
Sand & Finish Safety	25-50	20	
Abrasives	25-50	10	
Sanding Equipment-Big Machine	300-450	15	
Sanding Equipment-Edger	150-225	15	
Sanding Equipment-Rotary Sander (Buffer)	150-225	15	
Sanding Equipment-Multi-Head Sanders	150-225	15	
(Planetary machines)			
Sanding Equipment-Dust Containment	25-50	10	
Systems (DCS)			
Sanding Final Detailing	300-450	15	
Filling	100-150	15	
Stains/Colorants	150-225	15	
Sealers and Finishes	150-225	15	
Finishing Process	150-225	15	
Maintenance & Customer Education	25-50	10	
Total Hours	4075-6225	480	



# RELATED INSTRUCTION OUTLINE (SUMMARY)

OSHA = 10 hours Tool safety = 10 NWFA University = 200 NWFA Basic Install = 40 NWFA Basic S&F = 40 NWFA Intermediate Install = 40 NWFA Intermediate S&F = 40 Other non-NWFA approved courses = 100

Total = 480

# WAGE\$ Apprentices and Sponsors by Occupation Fall 2020 Committee Update

The Wisconsin Apprenticeship Growth and Expansion Strategies (WAGE\$) grant is a 5-year, \$5 million grant from the US Department of Labor. The purpose is to expand Registered Apprenticeship in Advanced Manufacturing and develop new programs in Information Technology and Health Care. The grant started October 1, 2015, and will conclude September 30, 2020.

- The overarching goal is 1,000 apprentices in the occupations selected for grant support.
- The table below shows the number of apprentices by occupation and underrepresented population.
- Employ Milwaukee, Inc., applied for and was granted the same type of grant that BAS applied for. Therefore, BAS and EMI entered into an agreement by which EMI would be able to count certain apprentices for its own grant. As of the date of this report, the following number of apprentices are included in EMI's grant, not the WAGE\$ grant.
  - o 9 Industrial Manufacturing Technician apprentices
  - 4 IT Service Desk Technician apprentices
  - 9 Pharmacy Technician apprentices

WAGE\$ Apprentices by Occupation and Underrepresented Status				
			100	
October 1, 2015 - September 2, 2020 This report includes apprentice records for the report period: Industrial Manufacturing Technician;Maintenance Technician;Mechatronics Technician;Welder - Fabricator;Welder / Automated Welding;Software Developer;Medical Assistant;IT Service Desk Technician;Data Analyst;Broadband Service Technician;Cybersecurity Analyst;Pharmacy Technician;Medical Assistant (WTCS),				
Apprentices claimed by Employ Milwaukee have be	en remov		1	
Occupation Name	Count	Female	Minority	Veteran
Report Total:	678	67	110	50
Industrial Manufacturing Technician - 77 completed; 32 cancelled; 9 apprentices counted by Employ Milwaukee	146	21 (14%)	42 (29%)	6 (4%)
Maintenance Technician - 21 completed; 88 cancelled	360	5 (1%)	36 (10%)	31 (9%)
Mechatronics Technician - 19 cancelled	90	2 (2%)	5 (6%)	9 (10%)
Welder / Automated Welding & Fabricator - 5 completed; 5 cancelled	36	1 (3%)	4 (6%)	3 (8%)
Broadband Service Technician	1			
Data Analyst - 4 apprentices counted by Employ Milwaukee				
IT Service Desk Technician: 3 completed	4	1 (25%)	1 (20%)	
Software Developer	2	2 (100%)		
Medical Assistant - 14 completed; 2 cancelled	39	35 (90%)	22 (56%)	1 (2%)
Pharmacy Technician – 9 apprentices counted by Employ Milwaukee				

195 (29%) of the apprentices identify with at least one of the underrepresented populations.

- 164 of them identify with one of the populations.
- 30 identify with two of them.
- 1 of them identifies with all three.

# All ACAP Reimbursement Requests Processed (Time Period) - Summary

# Apprenticeship Completion Award Program (ACAP) Bureau of Apprenticeship Standards Division of Employment and Training 9/9/20 03:02 PM

Filters Applied: Determination Date between 7/1/19 and 7/13/20, Fiscal Year(s)= FY20

_	Fiscal	# of		
Туре	Year	RRs	\$Approved	\$Denied
Year One	20		\$143,372.43	\$673,638.86
Year One Totals	5	707	\$143,372.43	\$673,638.86
Completion	20		\$207,219.76	\$1,281,497.76
Completion Tot	als	479	\$207,219.76	\$1,281,497.76
<b>Report Totals</b>		1,186	\$350,592.19	\$1,955,136.62



# State Standards of Apprenticeship

# Carpentry

# Trades

Cabinet Maker, Construction, Floor Coverer Interior Systems, Millwright, Piledriver

> REVISED October 2018

Karen P Morgan

BUREAU DIRECTOR

CO-CHAIR

Prepared by the Bureau of Apprenticeship Standards and the State Carpentry Apprenticeship Advisory Committee



# FOREWORD

The Wisconsin Department of Workforce Development, with the advice and assistance of the State Carpentry Apprenticeship Advisory Committee and the Wisconsin Technical College System, has developed these standards to promote and facilitate the establishment of adequate, uniform apprenticeship programs in these trades.

The primary purpose of these standards, therefore, is to insure that all persons who enter into an agreement with an employer to learn a Carpentry trade and whose employer has agreed to provide the employee with instruction in that trade be properly registered as an apprentice.

"The recruitment, selection, employment, and training of apprentices during their apprenticeship shall be without discrimination because of race, color, religion, national origin, sex, age, creed, handicap, marital status, ancestry, sexual orientation, arrest record, conviction record, or membership in the military forces of the United States or this state. 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, the Wisconsin Fair Employment Law, and all other applicable state laws."

# FINAL SECTION ALIGNMENT

- I. Definitions
- II. Personnel of State Carpentry Apprenticeship Advisory Committee
- III. Duties of State Carpentry Apprenticeship Advisory Committee
- IV. Personnel of Local Committees
- V. Local Apprenticeship Committee Functions and Duties
- VI. Local Apprenticeship Committee Operations
- VII. Minimum Qualifications of Apprentices
- VIII. Minimum Qualifications of Employers
- IX. Ratio of Apprentices to Journeyworkers
- X. Apprentice Contracts
- XI. Apprenticeship Terms
- XII. Probationary Period
- XIII. Related Instruction Attendance
- XIV. Schedule of Work Processes
- XV. Conditions of Work
- XVI. Continuity of Employment
- XVII. Evaluation and Completion of Apprentices
- XVIII. Cancellation of Apprentice Contracts
- XIX. Applicant, Apprentice, Employer, Committee Appeal Procedure
- XX. Modification of Standards

# I. <u>Definitions</u>

- A. <u>Apprentice</u> means any person who enters into an apprentice contract with the department and with a sponsor or an apprenticeship committee acting as an agent of the sponsor.
- B. <u>Apprentice Contract</u> means any contract or agreement of service, express or implied, between an apprentice, the department, and a sponsor or an apprenticeship committee acting as the agent of a sponsor whereby an apprentice is to receive directly from or through the apprentice's employer, in consideration for the apprentice's services in whole or in part, instruction in any trade, craft, or business.
- C. <u>Apprenticeship Committee</u> means a joint apprenticeship committee or a non-joint apprenticeship committee designated by a sponsor to administer an apprenticeship program.
- D. Assignment means the initial placement of an apprentice with an employer.
- E. <u>Bureau of Apprenticeship Standards</u> (BAS) is the agency within the Department of Workforce Development charged with the oversight responsibilities of Wisconsin's apprenticeship program.
- F. <u>Cancellation</u> means the termination of the registration or approval status of a program at the request of the sponsor or termination of an Apprentice contract at the request of any party to the contract.
- G. <u>Certificate of Completion</u> means the department has determined that an apprentice has successfully completed an apprenticeship shown by a certificate of completion.
- H. <u>Certificate of Registration</u> means the acceptance and recording of such program by the department as meeting the basic standards and requirements of the department for approval of such program for federal and state purposes, as shown by a certificate of registration.
- I. <u>Competency</u> means the attainment of manual, mechanical or technical skills and knowledge, as specified by an occupational standard and demonstrated by an appropriate written and hands-on proficiency measurement.
- J. <u>Completion rate</u> means the percentage of an apprenticeship cohort who receives a certificate of apprenticeship completion within 1 year of the projected completion date. An apprenticeship cohort is the group of individual apprentices registered to a specific program during a 1 year time frame, except that a cohort does not include the apprentices whose apprenticeship agreement has been cancelled during the probationary period or who have transferred.
- K. <u>Department</u> means the Department of Workforce Development (DWD) which is the state registration agency for the purposes of 29 CFR 29. The Bureau of Apprenticeship Standards is part of the Department of Workforce Development.
- L. <u>Direct Entry</u> means qualifying applicants are directly admitted into the apprenticeship program, and all pre-selection requirements remain in force.

- M. <u>Direct Interview</u> means qualifying applicants go directly to oral interviews and are placed on the list, if appropriate.
- N. <u>Electronic media</u> means 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.
- O. <u>Employee</u> is a person who is employed as a journey level carpenter or in one of the other carpentry trades.
- P. <u>Employer</u> is any carpentry trades contractor who is engaged in the carpentry business qualified to employ apprentices as outlined in Section VIII of these standards.
- Q. <u>Interim credential</u> is a credential issued by the department, upon request of the appropriate sponsor, as certification of competency attainment by an apprentice.
- R. <u>Joint Apprenticeship Committee</u> means an apprenticeship committee that consists of an equal number of representatives of employers and of representatives of employees who are represented by a collective bargaining agent.
- S. <u>Journeyworker</u> means 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 and/or hold a State of Wisconsin certification.
- T. <u>Local apprenticeship committee</u> means an apprenticeship committee to which the department has delegated the authority to act under Administrative Code DWD 295.02 and 295.03.
- U. <u>Nonjoint apprenticeship committee</u> means an apprenticeship committee that consists of representatives of employers, but not of representatives of employees who are represented by a collective bargaining agent.
- V. <u>Quality Assurance Assessment</u> means a comprehensive review conducted by the department regarding all aspects of an apprenticeship program's performance (see section VI –Local Apprenticeship Committee Operations).
- W. <u>Reassignment</u> means the assignment of an apprentice from one employer to another within the same apprenticeship program.
- X. <u>Registration of an apprentice contract</u> means the acceptance and recording of an apprentice contract by the department as evidence of the apprentice's participation in a particular registered apprenticeship program.
- Y. <u>Related instruction</u> 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 department.

- Z. <u>Sponsor</u> means any local committee operating an apprenticeship program and in whose name the apprenticeship program is approved by the Bureau of Apprenticeship Standards.
- AA. <u>Sponsor Training Center</u> an education source that provides related instruction as approved by the Bureau of Apprenticeship Standards.
- BB. <u>State Committee</u> The Wisconsin State Carpentry Trades Apprenticeship Advisory Committee is advisory to the Department of Workforce Development and the Bureau of Apprenticeship Standards on matters of apprenticeship and to the Wisconsin Technical College System (WTCS) on matters of related instruction for apprentices.
- CC. <u>Transfer</u> means a shift of apprenticeship registration from one program to another where there is agreement between the apprentice and the affected apprenticeship committees or program sponsors.
- DD. <u>Unassignment means the temporary interruption of an apprentice contract.</u>
- EE. <u>Wisconsin Apprenticeship Advisory Council</u> means the council created by WI Stats. 15.227 (13).
- FF. <u>Wisconsin Technical College System</u> is a publicly funded system of colleges subject to Chapter 38 of the WI State Statutes and Technical College System Administrative Rules.

### II. <u>Personnel of the State Carpentry Apprenticeship Advisory Committee</u>

This Committee shall be composed of no less than ten (10) nor more than thirty (30) members. The intention is to have fair representation from local committees on the state committee. The Bureau of Apprenticeship Standards (BAS) will ensure that all areas of the state are properly represented on each state trade committee.

- A. Employer representative names will include nominees submitted to the Bureau of Apprenticeship Standards (BAS) by the Associated General Contractor's of Wisconsin, Allied Construction Employers Association and by the Associated Builders Contractors—Wisconsin Chapter and others determined by the Department of Workforce Development.
- B. Employee representative names will include nominees submitted to BAS by the North Central States Regional Council of Carpenters and the Chicago Regional Council of Carpenters.
- C. Members will serve for a term of three years and may be re-nominated for further terms. Committee memberships will be staggered to maintain continuity in functioning.
  - Members must be currently and actively participating in the trade and are required to attend at least 75 percent of the meetings over the term of their appointment.
  - 2) Members must represent organizations that are actively involved with training apprentices at the local level; or
  - 3) Be involved in the development of emerging trades; or
  - 4) Have been involved in the training of apprentices in the last two years.

- D. Exceptions to these requirements can be made by the BAS in order to expand female and minority participation on committees.
- E. The BAS may also designate consultant members to serve as non-voting members, as needed. The WTCS representatives, industry apprenticeship coordinators, instructors and other interested parties in the apprenticeship program may advise and consult with state committee, but they are not allowed to serve as voting members
- F. The State Carpentry Apprenticeship Advisory Committee generally meets at least twice each year and their membership includes equal numbers of employer and employee members who have been nominated by organizations involved at the local committee level
- G. The committee operates on a consensus based decision-making process. This means that there may be concerns after discussion, but the committee members may consent to the proposal anyway and allow it to be adopted. Therefore, reaching consensus does not assume that everyone must be in complete agreement, but that all members can live with the decision. When the committee cannot reach consensus, the BAS will make the final decision.
- H. The Bureau may remove a person from membership on a committee for one or more of the following reasons:
  - 1) Failure to attend at least 75% of the committee meetings over the term of the appointment, unless excused by the Bureau for good cause.
  - 2) Failure to meet the membership requirements under paragraph II C unless an exception is granted under II D as noted above.
  - 3) Violation of any state apprenticeship statute, rule or standard.
- I. Vacancies may be filled, or representatives changed in term, at the request of the appropriate association.

### III. <u>Duties of the State Carpentry Apprenticeship Advisory Committee</u>

- A. Recommend/advise on policy and/or program changes in the trade.
- B. Formulate minimum state standards (and review them every five years) for the trade and make recommendations on changes to the Bureau including:
  - 1) the period of training
  - 2) minimum work process requirements
  - 3) related instruction
  - 4) probation period
  - 5) employer requirements to serve as a trainer
  - 6) journey level worker/apprentice ratios
  - 7) apprentice reviews
  - 8) apprentice selection process (AA/EEO requirements)
  - 9) local committee review-assist local committees and/or sponsors in developing selection procedures which are bias free and which ensure minorities and women are considered

- C. Recommend curriculum, related instruction and delivery service requirements for the trade to the Bureau and the Wisconsin Technical College System (WTCS).
- D. Assume statewide leadership for the purpose of improving conditions and expanding the number of employers using apprentices in the trade.
- E. Support the state program of training for apprentices.
- F. Prepare a policy for the trade on proficiency assessment/testing (for work experience and course work) to be utilized by local committees in determining apprenticeship credit for previous experience/education.
- G. Review and monitor local committee activity levels (including biennial reports) and recommend changes in AA/EEO operations where appropriate.
- H. The committee will follow these operational guidelines:
  - 1) Meet at least a minimum of two times a year.
  - 2) Elect of the Committee co-chairs; an employer representative and an employee representative.
  - 3) Conduct meetings in conformity with Wisconsin open meeting law.
  - 4) A meeting quorum exists when at least two employer and two employee representatives are present.
  - 5) Official meeting minutes will be prepared by the Bureau of Apprenticeship standards.
  - 6) Committee recommendations will be made by consensus.

## IV. Personnel of Local Committees

Local Apprenticeship Committees, either joint or non-joint, are created much the same as State Carpentry Apprenticeship Advisory Committee. Each local committee has a minimum of four (4) voting members, generally comprised of employer and employee members.

- A. Multi-trade local committees are authorized provided that at least one member of the committee is a member of the apprentice's trade that is being reviewed.
- B. The BAS requests nominations from associations that have apprenticeship programs and employer/employee organizations that participate in the Wisconsin apprenticeship program.
- C. Joint apprenticeship committees have equal numbers of employer and employee representatives.
- D. Employer members must currently work at the trade or represent those who employ skilled workers of the trade and have trained apprentices in the last five years. Local employer organizations representing contractors who employ journeyworkers and apprentices at the trade will nominate employer members.
- E. Employee members must be active journeyworkers or represent active journeyworkers. Local Labor Organizations representing skilled workers in the area will nominate employee members.

- F. Non joint apprenticeship committees consist of a minimum of four voting members that consist of representatives of employers that participate in Wisconsin's Apprenticeship program. When there is no area employer organization, the BAS will request the state-wide employers' organization or state trade apprenticeship committee to assist it in locating qualified employers to serve.
- G. Exceptions to these requirements can be made by the BAS in order to expand female and minority participation on the committees.
- H. In order for a Local Apprenticeship Committee to be recognized as advisory to the BAS, each member must be designated by the BAS. After nominations have been submitted, the BAS will finalize the committee membership. Before membership is finalized, the BAS will ensure that females and minorities are represented on the committee, where they are employed in the skilled workforce. Membership is finalized with a letter from the BAS confirming the committee membership to committee members. No person is considered a committee member until they have been so designated.
- I. Each Local Apprenticeship Committee is assigned a geographical area by the BAS. The committee may be expected to advise the BAS and the WTCS on all apprenticeship matters in the trades covered by the committee. The assignment of the area may be based on several factors such as; the union jurisdiction, WTCS boundaries, population centers, or others.
- J. Members will serve for a term of three years and may be re-nominated for further terms. Terms will be staggered to ensure that continuity of the committee is maintained.
- K. Members must attend at least 75% of the meetings over the term of their appointment, unless excused for good cause.
- L. The Bureau may remove a person from membership on a committee for one or more of the following reasons:
  - 1) Failure to attend at least 75% of the committee meetings over the term of the appointment, unless excused by the Bureau for good cause.
  - 2) Failure to meet the membership requirements under paragraph IV G, unless an exception is granted under IV E as noted above.
  - 3) Violation of any state apprenticeship statute, rule or standard

## V. Local Apprenticeship Committee Functions and Duties

- A. Ensure that employer and apprentice applications are processed in a timely manner. Ensure that apprentices are properly registered in conformity with Wisconsin Apprenticeship regulations.
- B. Establish Local Standards. The local committee must use the State Carpentry Committee Standards for their trade as a guide in the operation of the apprenticeship program in their area. Provisions drawn from local collective bargaining agreements must conform to the minimum requirements of the State Carpenter Standards.
- C. Development and implement selection procedure and an affirmative action plan to meet the requirements of DWD 295 and 296 and the Wisconsin Apprenticeship

Manual. The committee processes applications for apprenticeship and this method must be spelled out clearly in the selection procedures. The selection procedures must also be available for applicants to review.

D. Recommend to the BAS credit for previous experience/education in conformity with State Carpentry Apprenticeship Advisory Committee policy and procedures.

Individuals selected into the apprenticeship program via direct entry and who have received training or employment in an occupation directly or indirectly related to the occupation in the local standards, will be award Credit for Previous Experience and will pay the apprentice at the wage rate commensurate the awarded credit.

- E. A committee will have a written procedure for assisting apprentices in their area who are out of work, so that the best possible effort can be made to get them back to work.
- F. Approve employers for apprenticeship training purposes in accordance with State Carpentry Apprenticeship Advisory Committee Standards (and para. VIII E below). All employer applications for apprentices must be reviewed by the committee. Ensure that employers provide apprentices with the required range of work process experience and safeguard the training of apprentices on the job.
- G. Maintain records of each apprentice in the committee's program. The local committee must review and ensure that adequate classroom and work/on-the-job records are kept for each apprentice.
  - 1) Each committee must have a record of applications, active apprentices, apprentice progress records, affirmative action efforts, transfers, etc.
  - 2) Local committees must have a system for receiving progress records from each apprentice. These records must be received regularly.
  - 3) Local committees must get regular reports on each apprentice's grades and attendance from the approved training provider.
  - 4) Review and make sure that adequate classroom and on-the-job records are kept for apprentices. All reviews should be in writing. All apprentice records must be maintained for five years after the last apprentice action.
- H. Review and evaluate apprentice classroom and on-the-job performance on a regular basis, as recommended by the State Carpentry Apprenticeship Advisory Committee, (at least annually and a minimum of two times during the term of the Apprentice Contract, in person) and before recommending completion to the Bureau. All reviews must be in writing.
- Review the status and progress of every apprentice prior to the end of the probationary period and recommend any appropriate action to the employer. Apprentices should be interviewed in person by the committee at least twice during their apprenticeship, with one review prior to the end of their probationary period so their progress at work and at school can be discussed with the apprentice. Employers and supervisors should also be interviewed, so that all viewpoints are available to the committee.
- J. Encourage parties to Apprentice Contracts to bring their complaints before the committee. If either the employer or the apprentice has a grievance about their program, it is important to bring this matter before the committee first, rather than

make an official complaint directly to the BAS. If the committee does not make a satisfactory adjustment, then the complainant must be told how to appeal in writing to the BAS.

- K. Local committee standards will have a consistent transfer policy that addresses the transfer of apprentices from one sponsor to another. The committee must assure that transfer forms are properly signed by all parties and forwarded to the BAS promptly.
- L. Recommend to the BAS, credit for previous experience and education in conformity with State Carpentry Apprenticeship Advisory Committee policy and procedures.
  - 1) Credit should be granted prior to the end of the probationary period, or at least as soon as a proper evaluation can be made of the credit request.
  - 2) Apprentices may be granted credit for previous work or school experience.
  - 3) Such credit should only reflect actual work time that relates directly to the trade or school time relating directly to the trade related instruction.
  - 4) Any party to the Apprentice Contract may forward a request for credit to the committee (apprentice, employer, the BAS or the committee). Third parties may supply supporting information to the committee for consideration in the determination process.
- M. If the BAS approves the committee's recommendation of credit and such credit advances the apprentice to a higher wage, then that wage must apply. All credit recommendations of the committee, approved or denied must be made in writing and forwarded to the BAS. Work and school time credit served, under a prior Wisconsin apprentice contract in the same trade, must be credited at once, unless a written reason is presented and approved by the BAS.
- N. Recommend completions of apprenticeship to the BAS. The committee should review each apprentice's record and make a recommendation to the BAS on the apprentice's eligibility to be completed.
- O. Make reports and recommendations to the BAS and the State Carpentry Apprenticeship Advisory Committee. Each area committee must keep the BAS and the State Carpentry Apprenticeship Advisory Committee informed of their activities and their suggestions for program improvements.
- P. Keep minutes of each committee meeting and submit copies to the BAS. The committee must submit a copy of the minutes of each of its meetings. Failure to submit copies of the minutes could result in the termination of the committee's designation and deregistration of the committee.
- Q. Advise and inform the public on projected apprentice openings, where applicable.
- R. Advise the BAS and technical colleges or provider of related instruction on all matters pertaining to related instruction in the committee area. Assist in securing related instruction with the state and/or area WTCS districts.
- S. Respond to surveys and questionnaires sent by the BAS regarding information on participating employers, apprentices, meetings held, and AA/EEO progress.
- T. Meet in conformity with the Wisconsin Open Meeting Law.

- U. Actively participate in statewide trade or industry marketing and apprenticeship promotion. Report back to the respective nominating organizations and keep them fully informed and active in promoting the local program.
- V. Recommend modifications to ratios in state standards to help meet area workforce needs in conformity with bargaining agreements, where applicable.

### VI. Local Apprenticeship Committee Operations

- A. The committee elects its own officers.
- B. The committee is responsible for recording the committee's proceedings.
- C. All meetings must be called and conducted in accordance with Wisconsin's Open Meeting Law.
- D. Notice of all meetings of the committee must be provided to all committee members, the Bureau Representative, and the WTCS School Representative, when appropriate.
- E. A meeting may be called by either a committee member, the Bureau Representative or the WTCS Representative.
- F. The Bureau, State or Local Committees may request interested organizations to have a representative serve as a Consultant Consultants may include: WI Technical College representatives; Industry Apprenticeship Coordinators: Apprenticeship Instructors: Employer and Employee Organization representatives; appropriate Community Based organizations. Consultants, guests, Bureau Representatives and WTCS Representatives are not permitted to vote; only designated members are permitted to vote.
- G. Local committees will meet at least two times each year or as prescribed by the State Carpentry Apprenticeship Advisory Committee.
  - 1) Joint Apprenticeship Committees. A meeting quorum exists when at least one employer and one employee representative is present. In the case of unequal representation, the members present shall vote for those absent from their group.
  - 2) Non-Joint Committees. A meeting quorum exists when at least two members are in attendance.
  - 3) When holding a local committee meeting, it is suggested that committees follow a formal procedure similar to the following:
    - i. Call to order by presiding officer. This meeting is called to order in accordance with Wisconsin's Open Meetings Law.
    - ii. Roll Call of Committee members.
    - iii. Review and approval of minutes from last meeting.
    - iv. Reports.
    - v. Old Business.
    - vi. New business.

- vi. Affirmative Action report.
- vii. Communications and miscellaneous matters.
- viii.Next meeting date.
- ix. Discussion.
- x. Closed meeting portion (motion to close the meeting must be made in accordance with the Wisconsin Opening Meetings Law). Include time.
- xi. Adjournment.
- H. Compliance Reviews

BAS staff will conduct periodic Compliance Reviews of local committees to determine whether local committees are complying with their approved Affirmative action Plan and Selection Procedures.

BAS evaluates the committee performance in accordance with chapter 7 of the Wisconsin Apprenticeship Manual in administering the committee's apprenticeship program to determine that all requirements are being satisfactorily met and that any necessary corrective action is being implemented.

- I. Liability of Local Committees
  - 1) Should the committee or any member be subject to any legal action as a result of recommendations made in the conduct of Local Apprenticeship Committee business, the BAS will, if it has concurred with the recommendations, assume responsibility for representing the committee or committee member.
  - 2) The committee or member must have clearly indicated in writing to all affected parties that the recommendation was appealable to the BAS. Failure to do this may abrogate BAS's responsibility.

### VII. Minimum Qualifications of Apprentices

- A. Must be at least 17 years of age, and must be a high school graduate or show documentation of equivalency.
- B. Must be physically fit and able to perform all tasks of the trade with or without reasonable accommodation.
- C. Must furnish proof of age if under 18 years of age.
- D. Must meet the required ACT Math score of 15 and additional ACT scores as determined by each local committee. Applicants with insufficient ACT scores or without ACT scores must take and pass an assessment as determined by each local committee. Scores for all assessments will be accepted for no more than five years from the test date, except for individuals on active military deployment.
- E. At the time of placement as an apprentice, all persons must possess a valid driver's license or be able to prove ability to get to and from work and school.

- F. Direct Entry for Veterans
  - 1) Meet qualifying requirements as stated VII of these standards.
  - 2) Individuals must submit a DD-214 to verify military training and/or | experience
  - 3) Local committees may elect direct entry or provide for a direct interview after entry qualifications are met.
  - 4) Entry of Veterans will be done without regard to race, color, religion, national origin, sex, age, creed, handicap, marital status, ancestry, or sexual orientation.

## VIII. Minimum Qualifications of Employers

- A. An employer to be eligible to have an apprentice must be financially reliable and must have had at least one (1) year's experience in the carpentry industry. Furthermore, the employer must be qualified by performing a diversified type of work or by membership in an association whose members perform a diversified type of work to properly teach all phases of the industry.
- B. Employers must work at the trade full-time and/or employ a journey worker full time.
- C. The employer who has at least one (1) journey worker should furnish sufficient proof that the contractor has enough work so that the hiring of an apprentice will not displace the journey worker. Apprentices may only be employed when employment conditions warrant.
- D. All employer applications for apprentices must be reviewed by the committee. The committee recommends approval or disapproval of each employer's request for an apprentice.
  - 1) The committee recommends approval or disapproval of each employer's request for an apprentice. This recommendation must be made within 40 days.
  - 2) If approval is recommended, the BAS may proceed with the preparation of the contracts.
  - 3) If, however, the committee recommends denial, the employer must be notified in writing of the committee's reasons and a copy of the notice must be provided to the BAS.
  - 4) The committee must also inform the employer how to appeal if the employer disagrees with the recommendation.
  - 5) All appeals must be investigated by the BAS and will be reviewed with the committee before the BAS makes its final disposition of the application.
- E. The employer must agree to the provisions of these Standards of apprenticeship. It is the employer's responsibility to maintain safe working conditions for the apprentice.
- F. The employer must provide evidence of and must maintain Unemployment Insurance and Worker's Compensation coverage throughout the term of an Apprentice Contract.

# IX. Ratio of Apprentices to Journeyworkers

- A. Any qualified employer may employ one apprentice.
- B. It is recommended that not more than one apprentice be employed when one to three journeyworkers are regularly employed, and that thereafter the ratio be one apprentice for each three journeyworkers.
- C. This ratio may be adjusted by the Local Committee to meet their needs with the approval of the BAS and the State Committee.
- D. If a bargaining unit negotiates a ratio lower than the above minimum, then that ratio may be applied to other programs training in the carpentry trade.

# X. Apprentice Contracts

All apprentices shall have a contract in compliance DWD 295.07 with a local committee. Apprentices are assigned to an employer by a letter of assignment.

- A. Each copy of the contract will contain the term of the apprenticeship, the approved Trade Information (Exhibit A), the credit recommended (if any) and any special provisions.
- B. Individuals that make application and are registered through the application of Administrative Rule DWD 295.10 shall be registered directly with a local committee.

## XI. Apprenticeship Terms

See Trade Information (Exhibit A). The term of apprenticeship, applicable to the following branches of the carpentry trade: Construction Carpenter, Construction Millwright, Construction Lather/Interior Systems, Cabinet Maker, Floor Coverer, and Piledriver shall be a minimum of four years of not less than 6,240 hours of work and school attendance.

- A. Competency-Based Approach. Local committees who choose to employ a competency-based approach to apprenticeship must comply with the following requirements:
  - The occupation must be recognized and approved as a competency-based apprenticeable occupation. If the program is not approved by US DOL as a competency based program, the sponsor must consult with the BAS to determine if it is suitable as a competency based program.
  - 2) The on-the-job learning component of the apprenticeship program must be identified in the program standards.

- 3) The related instruction component of the competency-based approach must comply with all of the provisions of DWD 295 as referenced in the Wisconsin Apprenticeship Manual.
- 4) Program sponsors must identify within the program standards the required competencies that must be mastered within the program standards, and the required competencies that must be mastered by the apprentice during their apprenticeship.
- 5) Successful completion of the term of apprenticeship will require that the apprentice demonstrate mastery of identified competencies.
- 6) Demonstration of the acquisition of the identified competencies must be determined by both written and hands-on proficiency evaluations.
- 7) All testing and evaluation of the identified competencies must occur in a controlled learning environment that permits accurate and verifiable results by a qualified proctor.
- 8) Program sponsors must identify and document the methods and means used to qualify testing and evaluation proctors.
- B. Time Based Approach

The time based approach is the traditional term of apprenticeship and the term is stated in years, months or hours or a combination of thereof. This approach measures an individual skill through completion of at least 8,000 hours of on-the-job learning as described in a work process schedule.

C. Hybrid Approach

Local committee's that choose to use the hybrid approach to apprenticeship measures an individual's skills through a combination of hours of on-the-job learning and successful completion of competency as described in a work process schedule. The program must comply with the guidelines for the competencybased portion of the apprentice's term of apprenticeship.

### XII. Probationary Period:

The probationary period cannot exceed 25 percent of the length of the program or 1 year, whichever is shorter. There shall only be one probationary period for each Apprentice Contract, regardless of the number of employers with whom the apprentice works during that period.

During the probationary period, the apprentice or local committee may void the contract by written notice to the Bureau.

- A. After expiration of the probationary period there must be good cause provided the Bureau for the cancellation of the Apprentice Contract.
- B. Employers may request cancellation of their Letter of Assignment with an apprentice during the probationary period upon written notice to the local

committee. However, the local committee may choose to place the apprentice with another employer.

# XIII. Related Instruction Attendance

Apprentices will attend the appropriate Technical College or other approved training provider and successfully complete the prescribed course materials for the trade for no fewer hours than specified in the Trade Information attached to these Standards unless otherwise approved by the Bureau and the State Committee.

- A. Carpentry apprentices shall attend a minimum of 400 hours of paid related instruction and take such subjects and for such period of time as the Local Committee requires; to include Transition to Trainer.
- B. Apprentices must attend school during the thirty day period following a lay-off. School attendance during this 30 day period shall be paid for by the most recent employer, as an obligation originally assumed by the employer unless the apprentice has been terminated for violation of the employer's written work rules.
- C. Apprentices shall attend unpaid related instruction on their own time and take such subjects as the local committee requires as stated in Special Provisions. In no case shall these hours exceed 250 unless approved by the State Committee in writing.

## XIV. Schedule of Work Processes

See Trade Information (Exhibit A) attached or as approved by the State Carpentry Apprenticeship Advisory Committee.

## XV. Conditions of Work

- A. Apprentices will have the same hours of employment and be subject to the same conditions for overtime as the journeyworkers with whom they work. They shall work under the direct supervision of a journeyworker on all work normally performed by such journeyworkers.
- B. Hours of employment shall not conflict with the hours specified for related instruction or with Federal or State regulations.

# XVI. Continuity of Employment

- A. It shall be the duty of the Local Committee, insofar as possible, to provide the apprentice with reasonable continuous employment by the reassignment of laid off apprentices to other employers who have work.
- B. When it is shown in the apprentice reviews that an employer cannot provide the required instruction in the trade, the local committee may reassign the apprentice to another employer, subject to the approval of the BAS.

- C. When more than 10 percent of the already registered apprentices in any trade area are unemployed for 30 days or more, there will be no acceptance of new apprentices into the particular trade until the unemployment rate drops below the 10% level.
- D. Exceptions to the application of the policy in C. maybe be made, if consistently applied, for the following reasons:
  - 1) All laid off apprentices decline working for the employer requesting an apprentice;
  - 2) The apprentice is a union member and the employer seeking an apprentice is not unionized or the reverse is the case;
  - 3) The employer has an approved Affirmative Action Plan, has plans to hire to meet AA goals, but no appropriate laid off apprentice is available;
  - The Local Committee jurisdictional area is very large and available apprentices would have to travel a long distance to work for the employer requesting an apprentice.

## XVII. Evaluation and Completion of Apprentices

- A. Local committees are expected to require apprentices and their employers to keep the committee informed of the progress of each apprentice. This information must be provided so the committee can review the apprentices' progress at least once annually.
  - 1) The first such review of an apprentice shall be done in person prior to the expiration of the probationary period.
  - 2) The BAS, the employer of record, and/or the applicable area local apprenticeship committee must be provided with timely reports on attendance, progress, and grades on each apprentice. Local committees shall make arrangements with the school that provides related instruction to receive grades and/or progress reports on each apprentice so these records can become a part of each apprentice's review.
- B. Local committees are required to maintain a current "apprentice work record" system so that the committee can get feedback from each apprentice as to the type of work experience they are receiving and the hours of school they are attending. These records are required to be submitted at least monthly.
- C. Local committees shall maintain an apprentice evaluation system so that the committee can get regular feedback from the employers on each apprentice's progress. These reports should be received prior to each apprentice's review.
- D. A summary of each apprentice's review shall be made in writing to the apprentice and where deficiencies exist, a clear defined goal set for correction of the deficiencies and an indication of the penalty (i.e. cancellation) if the goals are not met.
- E. Within a reasonable period of time before expiration of the apprenticeship, the local committee shall review the apprentice in person by a final review or examination.

- 1) If the apprentice successfully completes such review or examination, the committee shall recommend to the BAS that a Certificate of Completion be granted by the BAS.
- 2) If the apprentice fails to meet all provisions of their Apprentice Contract, the final review and/or examination, the committee may recommend to the BAS, that the apprentice's apprenticeship should be extended for a period of time, not to exceed one calendar year.

### XVIII. Cancellation of Apprentice Contracts

The State Committee and the BAS require that each local committee maintain clear records to substantiate a recommendation for cancellation of an apprenticeship. When a party to the contract requests cancellation of the contract, the BAS will send a 20-day Intent to Cancel Notice to all parties to the contract. The notice states that the contract will be cancelled 20 working days from the date of the Notice, unless the BAS receives written objection from any party within the 20 day period.

- A. Employers are required to provide the local committee with written cause for terminating an apprentice (to include reductions in force) to the local committee.
- B. Apprentices may request cancellation of the program by providing a written request to the local committee.
- C. A local committee may request cancellation of the Apprentice Contract after the probationary period has expired by making such request with reasons to the BAS and Committee in writing.
- D. The BAS will consult the local committee before taking final cancellation action.
- E. The local committee may recommend cancellation to the BAS of an Apprentice Contract on its own motion, after proper notice to the parties of the Apprentice Contract.

#### XIX. Right of Appeal

In the case of a dispute between the apprentice and the employer with regard to an Apprentice Contract, either party may appeal in writing to the local committee to adjust the matter. Either party thereafter may appeal the recommendations of the committee to the Bureau regarding any part of the Apprentice Contract.

- A. In cases of a problem or dispute involving a matter of policy or local standards, the matter shall be referred to the State Carpentry Apprenticeship Advisory Committee for review.
- B. If the State committee cannot satisfactorily resolve the matter, it will provide the BAS with its recommendations.
- C. All applicants, employers or apprentices have the right of appeal to the BAS on any recommendation or action taken by the local committee. The advisory status

of a local committee shall include the following statement in their disciplinary actions or denial correspondence:

"Should you feel the recommendation or action taken by the local Apprenticeship Committee to be contrary to the area apprenticeship standards, you have the right to appeal in writing to the Department of Workforce Development, Bureau of Apprenticeship Standards, stating the specific section of said standards or addendum to same which you feel was violated."

- D. Any party to the contract may file an appeal in writing within 20 days of the final decision. When an appeal is received the BAS Director will review the appeal and issue a written determination within 40 days of the appeal.
- E. If requested in writing within ten days by one of the parties, the Bureau Director's decision may be appealed in writing the DWD Legal Counsel. The DWD Legal Counsel will review the case and issue a final determination within ten days.
- F. Right to Hearing. A dissatisfied party may file a written request with the BAS or the DWD Legal Counsel for a formal administrative hearing to review the reasonableness of a DWD order as outlined in Chapter 5 of the Wisconsin Apprenticeship Manual. DWD shall respond to a request for an administrative hearing within 20 days. DWD has the discretion to determine whether or not it will hold a hearing. DWD's final decision is reviewable in Circuit Court.
- G. Items not Subject to a Hearing. Actions of the employer that involve the employment relationship and not the apprenticeship program are not subject to a hearing. Violations of employer work rules may not be subject to a hearing contingent upon a review that the employer is not illegally discriminating in its administration of apprenticeship policy.

### XX. Modification of Standards

- A. Local standards may be modified by the local committee if such modifications are in conformance with these State Standards and approved by the BAS.
- B. The minimum requirements set forth in these Standards shall not be altered by virtue of any collective bargaining agreement.



# WTCS System-Wide Activity Update September 2020

#### WTCS Apprenticeship Enrollment Trend

WTCS enrollments across all apprenticeship programs increased from 7588 to 7910 unduplicated, and 7696 to 8038 duplicated, students by the end of 2019-2020 academic year. That is a 4.1% and 4.25% increase, respectively, in one year.

### Ascendium Education Group Tools of the Trade Scholarships Increased Again in 2020

For the 2020-21 academic year, Ascendium Education Group has committed to awarding an additional 50 scholarships to industrial and construction sector apprentices who receive their related instruction through a WTCS college. A total of 250 awards of \$1500 apiece will be granted statewide in March 2021, with the scholarship application period open from late August until mid-October 2020.

### WTCS Systemwide Apprenticeship Curriculum and Course Development Projects Summary FY 2019-20

New Program Systemwide Curriculum Standards	Major Curriculum Revision	Below-the-Line Courses with virtual modality option	Crosswalks between apprenticeship & technical diploma or AAS programs				
<ul> <li>Industrial Metrology</li> <li>Roadway Maintenance</li></ul>	Early Childhood	<ul> <li>Arborist (2)</li> <li>Machine Tool (1)</li> <li>Plumbing (2 URI)</li> <li>IT-Software Developer (4)</li> <li>IT-Service Desk (3)</li> <li>IT-Data Analyst (5)</li> <li>DC Theory Common Core</li> <li>AC Theory Common Core</li> </ul>	<ul> <li>IT-Software Developer</li> <li>IT-Service Desk</li> <li>Cybersecurity Analyst</li> <li>Metal Fabricator /</li></ul>				
Technician <li>Biotechnology Lab Support Tech</li> <li>Pharmacy Technician</li> <li>Medical Assistant</li> <li>Cybersecurity Analyst</li> <li>Facilities Maintenance Technician</li>	Educator		Welder				

### Active WTCS-BAS Apprenticeship Programs, By Sector, Occupation, and College as of August 2020

The master chart of all apprenticeship programs with related instruction offered through the WTCS colleges can be found here via the following link. "Active" is defined as approved programs with enrollments in the past two years. The color-coded chart can be found on the MyWTCS website here: <u>WTCS Active Apprenticeship</u> <u>Programs Snapshot - Color Chart</u>



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# **State Committee Report - Construction**

# **State Carpentry Committee**

This summary counts employers and apprentices with contract(s) active or unassigned on 9/1/2020 in trade(s) associated with this committee.

				Ар	Employers									
Sponsor Name		Minority		Female		Union		Non- Union			W/Unio	n Appr	W/Non-Union Appr	
Trade	Total	#	%	#	%	#	%	#	%	Total	#	%	#	%
1	2	3	3a	4	4a	5	5a	6	6a	7	8	8a	9	9a
All Sponsors Total	1292	171	13.2	36	2.8	1194	92.4	98	7.6	222	185	83.3	38	17.1
ABC of Wisconsin (All)	79	6	7.6	3	3.8			79	100.0	32			32	100.0
Carpenter (Construction) (0186038102201)	79	6	7.6	3	3.8			79	100.0	32			32	100.0
Central Wisconsin Area Carpentry JAC	13	0		1	7.7			13	100.0	3			3	100.0
Carpenter (Construction) (0186038102201)	13	0		1	7.7			13	100.0	3			3	100.0
Eau Claire Area Carpentry JAC	55	2	3.6	0	0.0	55	100.0			18	18	100.0		
Carpenter (Construction) (0186038102201)	54	2	3.7	0	0.0	54	100.0			18	18	100.0		
Carpenter (Heavy Highway Pile Driver) (0186038158102)	1	0		0	0.0	1	100.0			1	1	100.0		
Greater Wisconsin Millwright JAC	104	6	5.8	2	1.9	104	100.0			19	19	100.0		
Carpenter (Millwright) (0163828101801)	104	6	5.8	2	1.9	104	100.0			19	19	100.0		
La Crosse Area Carpentry JAC	70	8	11.4	2	2.9	70	100.0			21	21	100.0		
Carpenter (Construction) (0186038102201)	57	6	10.5	1	1.8	57	100.0			21	21	100.0		
Carpenter (Floor Coverer) (0186448101001)	2	0		0	0.0	2	100.0			2	2	100.0		
Carpenter (Pile Driver) (0186038158101)	11	2	18.2	1	9.1	11	100.0			1	1	100.0		
Lakeshore Area Carpentry Advisory Comm	5	0		0	0.0			5	100.0	3			3	100.0
Carpenter (Construction) (0186038102201)	4	0		0	0.0			4	100.0	2			2	100.0
Carpenter (Millwright) (0163828101801)	1	0		0	0.0			1	100.0	1			1	100.0
Madison Area Carpentry JAC	233	41	17.6	3	1.3	233	100.0			51	51	100.0		
Carpenter (Construction) (0186038102201)	222	40	18.0	3	1.4	222	100.0			48	48	100.0		
Carpenter (Floor Coverer) (0186448101001)	11	1	9.1	0	0.0	11	100.0			5	5	100.0		
Northeast Wisconsin Carpentry JAC	315	20	6.3	5	1.6	315	100.0			41	41	100.0		
Carpenter (Construction) (0186038102201)	242	17	7.0	4	1.7	242	100.0			26	26	100.0		
Carpenter (Floor Coverer) (0186448101001)	31	3	9.7	0	0.0	31	100.0			7	7	100.0		
Carpenter (Heavy Highway Pile Driver) (0186038158102)	3	0		0	0.0	3	100.0			2	2	100.0		
Carpenter (Millwright) (0163828101801)	37	0		1	2.7	37	100.0			15	15	100.0		
Carpenter (Pile Driver) (0186038158101)	2	0		0	0.0	2	100.0			2	2	100.0		
SE WI Area Carpentry JAC	328	81	24.7	18	5.5	328	100.0			84	84	100.0		
Carpenter (Cabinet Maker) (0166028001001)	5	0		1	20.0	5	100.0			2	2	100.0		
Carpenter (Construction) (0186038102201)	284	72	25.4	17	6.0	284	100.0			73	73	100.0		
Carpenter (Floor Coverer) (0186448101001)	27	8	29.6	0	0.0	27	100.0			9	9	100.0		



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# **State Committee Report - Construction**

# **State Carpentry Committee**

This summary counts employers and apprentices with contract(s) active or unassigned on 9/1/2020 in trade(s) associated with this committee.

Sponsor Name Trade				Ap	Employers									
		Minority		Female		Union		Non- Union			W/Union Appr		W/Non-Union Appr	
	Total	#	%	#	%	#	%	#	%	Total	#	%	#	%
1	2	3	3a	4	4a	5	5a	6	6a	7	8	8a	9	9a
All Sponsors Total	1292	171	13.2	36	2.8	1194	92.4	98	7.6	222	185	83.3	38	17.1
Carpenter (Millwright) (0163828101801)	12	1	8.3	0	0.0	12	100.0			6	6	100.0		
SE WI Area Millwright/PileDriver JAC	29	4	13.8	2	6.9	29	100.0			11	11	100.0		
Carpenter (Millwright) (0163828101801)	23	3	13.0	2	8.7	23	100.0			8	8	100.0		
Carpenter (Pile Driver) (0186038158101)	6	1	16.7	0	0.0	6	100.0			3	3	100.0		
Wausau Area Carpenters JAC	61	3	4.9	0	0.0	60	98.4	1	1.6	27	27	100.0	1	3.7
Carpenter (Construction) (0186038102201)	54	3	5.6	0	0.0	53	98.1	1	1.9	24	24	100.0	1	4.2
Carpenter (Floor Coverer) (0186448101001)	3	0		0	0.0	3	100.0			2	2	100.0		
Carpenter (Millwright) (0163828101801)	4	0		0	0.0	4	100.0			2	2	100.0		