# WISCONSIN— YOUTH APPRENTICESHIP

## **Masonry/Concrete Fundamentals**

Youth Apprenticeship

### MASONRY/CONCRETE FUNDAMENTALS

Masonry/Concrete Fundamentals youth apprentices gain skills related to the use of construction safety, drawings and blueprints, materials, tools, materials, and general worksite procedures related to the masonry and concrete fields. Apprentices must adhere to industry safety and security standards.

Length of Apprenticeship: One or two years

### **OCCUPATIONAL COMPETENCIES**

Year 1: Masonry/Concrete Fundamentals youth apprentices must complete a total of 15
Masonry/Concrete Fundamentals Competencies and a minimum of 1 Masonry/Concrete Specialty
Competency. Employers can substitute 1 competency with another occupationally appropriate skill. That skill should be added to the competency list for assessment. Year 1 competencies are completed with employer guidance. Youth apprentices must also complete the following during the first year:

# Youth Apprentices must also complete the following during Year 1: | First Aid Certification | Occupational Safety and Health Administration (OSHA) 10 or 30 Certification Year 2: Masonry/Concrete Fundamentals youth apprentices must complete the fifteen Masonry/Concrete Fundamentals Competencies with minimal supervision and a minimum of 2 different Masonry/Concrete Specialty Competencies than the first year. A specialty competency may be repeated only if the type of construction (residential or commercial) differs from the first year. Employers can substitute 1 competency with another occupationally appropriate skill. That skill should be added to the competency list for assessment. Year 2 competencies are completed with minimal employer guidance. Select construction type and circle the applicable year: | Residential completed during Year: One and/or Two | Commercial completed during Year: One and/or Two

Note that where necessary, skills can be simulated.

Masonry/Concrete Fundamentals Competencies	Masonry/Concrete Specialty Competencies
<ol> <li>Follow safety procedures</li> <li>Read construction drawings and plans</li> <li>Interpret symbols and procedures</li> <li>Contribute to a job task plan</li> <li>Work as a member of a construction team</li> <li>Prepare work area for construction</li> <li>Select construction materials</li> <li>Use hand and light duty tools</li> <li>Use power tools and equipment</li> <li>Perform materials handling</li> <li>Install materials per job specifications</li> <li>Perform construction measurements</li> <li>Maintain a clean and safe work area</li> </ol>	<ul> <li>16. Assist with cutting brick and block</li> <li>17. Assist with masonry and installation techniques</li> <li>18. Lay masonry units to job specification</li> <li>19. Assist with selecting the correct types of materials for the job</li> <li>20. Perform volume estimates for material quantity requirements</li> </ul>
<ul><li>14. Clean up job site</li><li>15. Practice quality craftsmanship</li></ul>	

### **APPRENTICESHIP BRIDGING OPPORTUNITIES**

Some of the related instruction courses can bridge into the following registered apprenticeship:

• Cement Mason/Concrete Finisher

### **POST-SECONDARY PATHWAY OPPORTUNITIES**

There are several post-secondary pathway opportunities in this area. The following is a partial list.

Carpentry



# **Masonry/Concrete Fundamentals**

Youth Apprenticeship

ON-THE-JOB LEARNING PERFORMANCE STANDARDS GUIDE

(TO BE COMPLETED BY YA CONSORTIUM)

### YOUTH APPRENTICE INFORMATION

Youth Apprentice Name				
YA Coordinator		YA Consortium		
School District		High School Graduation Date		
REQUIREMENTS				
Youth apprentices must complete ALL the items listed below. Check completed areas.    Year 1 Competency checklist     Employability Skills checklist (in this OJL Guide) or the DPI Employability Skills Certificate     Related instruction equal to 1 high school credit or at least 3 college credits     Minimum of 450 work hours    Wouth apprentices must complete ALL the items listed below. Check completed areas.     Year 2 Competency checklist     Employability Skills checklist (in this OJL Guide) or the DPI Employability Skills Certificate     Related instruction equal to 2 high school credits or at least 6 college credits     Minimum of 900 work hours				
HOURS  Record the hours the youth apprentice worked.				
Total Hours Employed	Company Name	:	Telephone Number	

### **RELATED INSTRUCTION**

YEAR 1: Indicate which related instruction courses the youth apprentice completed.

Dual Credit	Course Number and Title	Credits	Instruction Provider

YEAR 2: Indicate which related instruction courses the youth apprentice completed.

Dual Credit	Course Number and Title	Credits	Instruction Provider

### **SIGNATURES**

The On-the-Job Learning Performance Standards Guide includes a list of competencies youth apprentices learn through mentoring and training at the worksite.

Instructions for the Worksite Employers/Mentors and School-Based or YA coordinators: This document should be reviewed with the employer/mentor, school-based or YA coordinator on a regular basis with the youth apprentice to record progress and plan future steps to ensure completion of the required competencies. Mentors, school-based/YA coordinator, and the apprentice sign below.

Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed
School-Based and/or YA Coordinator Signature	School-Based and/or YA Coordinator Signature
School-Based and/or YA Coordinator	School-Based and/or YA Coordinator
School District or Organization	School District or Organization
Date Signed	Date Signed
Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed
Date Signed	Date Signed

### **EMPLOYABILITY SKILLS (TO BE COMPLETED BY YA EMPLOYER/MENTOR)**

Youth apprentices must demonstrate key employability skills.

The DWD YA program employability skills requirement may be attained and demonstrated through two processes. (See options listed below.) Employability skills must be completed for every year a student is in the program. The DPI Employability Skills Certificate may be counted as meeting one of those two years, provided the certificate is earned in the same year the student is enrolled in youth apprenticeship or they can complete the YA Employability Skills in the OJL. The Employability Skills Certificate must be obtained through the DPI.

1.	If a student has successfully completed a Wisconsin Department of Public Instruction (DPI)
	State-Certified Cooperative Education, Co-Op Employability Skill certification then they have me
	the YA Employability Skills requirement for that year. A copy of the student's DPI Co-Op
	Employability Skill Certificate must be maintained on file with their YA regional consortium.
	☐ Earned Wisconsin Employability Skills Certificate (checked if applicable) or,
2.	Completed and rated "Employability Skills" through this YA OJL guide as described below.

3 Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently displays this behavior

**Meets Expectations:** Meets entry-level criteria; requires some supervision; often displays this behavior

**Working to Meet Expectations:** Needs improvement; requires much assistance and supervision; rarely displays this behavior

The following skills are required of all youth apprentices.

Employability Skills		Rating		
Competency and Rating Criteria		Minimum Rating of 2 for EACH Check Rating		
	1	2	3	
Develops positive work relationships with others.		Year 1 Ratir	ıg	
Examples of qualities and habits that the employee might exhibit				
include		Year 2 Ratir	ıg	
<ul> <li>Interacts with others with respect and in a non-judgmental manner</li> </ul>				
<ul> <li>Responds to others in an appropriate and non-offensive manner</li> <li>Helps co-workers and peers accomplish tasks or goals</li> <li>Applies problem-solving strategies to improve relations with others</li> <li>When managing others, shows traits such as compassion, listening, coaching, team development, and appreciation</li> </ul>				

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Employability Skills	Rating
2. Communicates effectively with others	Year 1 Rating
Examples of qualities and habits that the employee might exhibit	
include	Year 2 Rating
<ul> <li>Adjusts the communication approach for the target audience,</li> </ul>	
<ul><li>purpose, and situation to maximize impact</li><li>Organizes messages/information in a logical and helpful manner</li></ul>	
Speaks clearly and writes legibly	
<ul> <li>Models behaviors to show active listening</li> </ul>	
Applies what was read to actual practice	
Asks appropriate questions for clarity	
3. Collaborates with others	Year 1 Rating
Examples of qualities and habits that the employee might exhibit	
include	Year 2 Rating
<ul> <li>Works effectively in teams with people of diverse backgrounds regardless of sex, race, ethnicity, nationality, sexuality, religion,</li> </ul>	
political views, and abilities	
<ul> <li>Shares responsibility for collaborative work and decision making</li> </ul>	
<ul> <li>Uses the problem-solving process to work through differences of</li> </ul>	
opinion in a constructive manner to achieve a reasonable	
compromise	
Avoids contributing to an unproductive group conflict	
Shares information and carries out responsibilities in a timely	
manner	
Maintains composure under pressure	Year 1 Rating
Examples of qualities and habits that the employee might exhibit	
include	Year 2 Rating
<ul> <li>Uses critical thinking to determine the best options or outcomes</li> </ul>	Teal 2 Rating
when faced with a challenging situation	
Carries out assigned duties while under pressure	
<ul> <li>Acts in a respectful, professional, and non-offensive manner while under pressure</li> </ul>	
<ul> <li>Applies stress management techniques to cope under pressure</li> </ul>	
rippines stress management testiniques to cope under pressure	
5. Demonstrates integrity	Year 1 Rating
Examples of qualities and habits that the employee might exhibit	
include	Year 2 Rating
<ul> <li>Carries out responsibilities in an ethical, legal and confidential manner</li> </ul>	
Responds to situations in a timely manner	
Takes personal responsibility to correct problems	
<ul> <li>Models behaviors that demonstrate self-discipline, reliability,</li> </ul>	
and dependability	

	Employability Skills		Rating	
6.	Performs quality work	,	Year 1 Ratir	ıg
	Examples of qualities and habits that the employee might exhibit			
	include	,	Year 2 Ratir	ıg
	<ul><li>Carries out written and verbal directions accurately</li><li>Completes work efficiently and effectively</li></ul>			
	Performs calculations accurately			
	Conserves resources, supplies, and materials to minimize costs			
	and environmental impact			
	<ul> <li>Uses equipment, technology, and work strategies to improve workflow</li> </ul>			
	Applies problem-solving strategies to improve productivity			
	<ul> <li>Adheres to worksite regulations and practices</li> </ul>			
	Maintains an organized work area			
7.	Provides quality goods or services (internal and external)	•	Year 1 Ratir	ıg
	Examples of qualities and habits that the employee might exhibit			
	include	,	Year 2 Ratir	g
	<ul> <li>Shows support for the organizational goals and principles by own personal actions</li> </ul>			
	Displays a respectful and professional image to customers			
	Displays an enthusiastic attitude and desire to take care of			
	customer needs			
	<ul><li>Seeks out ways to increase customer satisfaction</li><li>Produces goods to workplace specifications</li></ul>			
	Produces goods to workplace specifications			
8.	Shows initiative and self-direction	,	Year 1 Ratir	ıg
	Examples of qualities and habits that the employee might exhibit include			
	<ul> <li>Prioritizes and carries out responsibilities without being told</li> </ul>		Year 2 Ratir	ig
	Responds with enthusiasm and flexibility to handle tasks that		Ш	Ш
	need immediate attention			
	<ul> <li>Reflects on any unsatisfactory outcome as an opportunity to learn</li> </ul>			
	Improves personal performance by doing something different or differently.			
	<ul><li>differently</li><li>Analyzes how own actions impact the overall organization</li></ul>			
	Supports own action with sound reasoning and principles			
	Balances personal activities to minimize interference with work			
	responsibilities			
9.	Adapts to change	,	Year 1 Ratir	ıg
	Examples of qualities and habits that the employee might exhibit			
	<ul><li>include</li><li>Shows flexibility and willingness to learn new skills for various</li></ul>	,	Year 2 Ratir	ıg
	job roles			
	Uses problem-solving and critical-thinking skills to cope with			
	changing circumstances			
	Modifies own work behavior based on feedback, unsatisfactory outcomes, efficiency, and effectiveness.			
	<ul><li>outcomes, efficiency, and effectiveness</li><li>Displays a "can do" attitude</li></ul>			
	= p. a, 5 a can ao attitude			
1		I		

Employability Skills	Rating
10. Demonstrates safety and security regulations and practices	Year 1 Rating
Examples of qualities and habits that the employee might exhibit	
include	Year 2 Rating
<ul> <li>Follows personal safety requirements</li> <li>Maintains a safe work environment</li> </ul>	
Demonstrates professional role in an emergency	
Follows security procedures	
Maintains confidentiality	
,	
11. Applies job-related technology, information, and media	Year 1 Rating
Examples of qualities and habits that the employee might exhibit	
include	Year 2 Rating
<ul> <li>Applies technology effectively in the workplace</li> <li>Assesses and evaluates information on the job</li> </ul>	
Assesses training manuals, website, and other media related to	
the job	
12. Fulfills training or certification requirements for employment	Year 1 Rating
Examples of this requirement may include	
Participation in required career-related training and/or	Year 2 Rating
educational programs	
<ul> <li>Passing certification tests to qualify for licensure and/or certification</li> </ul>	
Participation in company training or orientation	
- Turnelpution in company training of orientation	
13. Sets personal goals for improvement	Year 1 Rating
Examples of this requirement may include	
<ul> <li>Setting goals that are specific and measurable</li> </ul>	Year 2 Rating
Setting work-related goals that align with the organization's	
mission	
<ul> <li>Identifying strategies to reach goals</li> </ul>	
<ul><li>Identifying strategies to reach goals</li><li>Reflecting on goal progress to regularly evaluate and modify</li></ul>	
<ul> <li>Identifying strategies to reach goals</li> </ul>	

### **OCCUPATIONAL COMPETENCIES**

### (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

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employer guidance. Youth apprentices must also complete the following during the first year:
Youth Apprentices must also complete the following during Year 1:
☐ First Aid Certification ☐ OSHA 10 or 30
Year 2: Masonry/Concrete Fundamentals youth apprentices must complete the fifteen Masonry/Concrete Fundamentals Competencies with minimal supervision and a minimum of 2 different Masonry/Concrete Specialty Competencies than the first year. A specialty competency may be repeated only if the type of construction (residential or commercial) differs from the first year. Employers can substitute 1 competency with another occupationally appropriate skill. That skill should be added to the competency list for assessment. Year 2 competencies are completed with minimal employer guidance.
Select construction type and circle the applicable year:  Residential completed during Year: One and/or Two Commercial completed during Year: One and/or Two
Note that where necessary, skills can be simulated.
Rating Scale  3: Exceeds entry level criteria   Requires minimal supervision   Consistently displays this behavior  2: Meets entry level criteria   Requires some supervision   Often displays this behavior  1: Needs improvement   Requires much assistance and supervision   Rarely displays this behavior
If any competencies are rated "1" on the final performance review checklist that is submitted to WI DWD it is considered a failed checklist.

### **MASONRY/CONCRETE FUNDAMENTALS**

Occupational Competencies			Rating	
		Minimun	n Rating of 2	for EACH
	Competency and Rating Criteria		Check Rating	3
		1	2	3
1.	Follow safety procedures	•	Year 1 Rating	3
	<ul> <li>select and use appropriate clothing and Personal</li> </ul>			
	Protective Equipment (PPE)	,	Year 2 Rating	3
	<ul> <li>comply with job site safety and security rules and</li> </ul>			
	regulations			
	<ul> <li>maintain a clean and organized work environment</li> </ul>			
	<ul> <li>identify and report unsafe job conditions</li> </ul>			
	report injuries and damage to property			
2.	Read construction drawings and plans	,	 Year 1 Rating	ξ
	<ul> <li>relate drawing to job task</li> </ul>			
	<ul> <li>interpret elements and symbols</li> </ul>		Year 2 Rating	,
	<ul> <li>locate worksite features on a construction plan</li> </ul>			<u>,                                    </u>
	<ul> <li>convert scales measurements to full measurements</li> </ul>			
	translate specifications to work requirements			
3.	Interpret symbols and procedures	•	 Year 1 Rating	,
•	explain the role of drawings and specifications			<u> </u>
	<ul> <li>identify drawings and symbols used on a construction</li> </ul>	,	Year 2 Rating	<u> </u>
	drawing			<u> </u>
	apply information from drawings in construction activities			Ш
	<ul> <li>interpret specifications appearing on construction</li> </ul>			
	drawings			
	• interpret and convert measurements in terms of actual			
	dimensions			
	<ul> <li>explain specifications in terms of work requirements</li> </ul>			
4.	Contribute to a job task plan	,	Year 1 Rating	3
	• setup and prepare tools and equipment for safe operation			
	<ul> <li>determine the scope of work</li> </ul>	•	Year 2 Rating	
	<ul> <li>respect contractual relationships</li> </ul>			
	<ul> <li>apply scheduling practices</li> </ul>			
5.	Work as a member of a construction team	,	 Year 1 Rating	3
	offer and request assistance			
	follow company policies and procedures	,	Year 2 Rating	7
	<ul> <li>learn from other team members</li> </ul>			<u> </u>
6.	Prepare work area for construction		Year 1 Rating	<u> </u>
	remove debris			
	• clean up sites	•	Year 2 Rating	3
	dispose of waste and hazardous materials			
		Ī		

Occupational Competencies	Rating
7. Select construction materials	Year 1 Rating
<ul> <li>consider usefulness and portability</li> </ul>	
<ul> <li>consider minimizing cost</li> </ul>	Year 2 Rating
consider performance goals	
8. Use hand and light duty tools	Year 1 Rating
<ul> <li>wear appropriate PPE</li> </ul>	
<ul> <li>select the correct tool for the job</li> </ul>	Year 2 Rating
<ul><li>inspect tool</li></ul>	
operate the tool safely	
perform routine maintenance on hand tools	
• store tool	
9. Use power tools and equipment	Year 1 Rating
wear appropriate PPE	
<ul> <li>select the correct tool for the job</li> </ul>	Year 2 Rating
inspect tool	
<ul> <li>operate the tool safely</li> </ul>	
<ul> <li>perform routine maintenance on power tools</li> </ul>	
<ul> <li>store tool</li> </ul>	
	1 1 1 1
10. Perform materials handling	Year 1 Rating
identify materials necessary to complete the task	
conserve resources and materials     retrieve equipment and materials needed.	Year 2 Rating
retrieve equipment and materials needed      lead and unload materials tools againment and supplies.	
<ul> <li>load and unload materials, tools, equipment, and supplies</li> <li>lift position and secure materials during installation</li> </ul>	
<ul> <li>lift, position, and secure materials during installation</li> </ul>	
11. Install materials per job specifications	Year 1 Rating
<ul> <li>retrieve equipment and materials needed</li> </ul>	
<ul> <li>unload materials, tools, equipment, and supplies</li> </ul>	Year 2 Rating
<ul> <li>lift, position, and secure materials during installation</li> </ul>	
12. Perform construction measurements	Year 1 Rating
select measuring tool	
read measurement accurately	Year 2 Rating
<ul><li>scale proportions</li><li>convert units of measurement</li></ul>	
<ul> <li>estimate resources, materials, and supplies needed for a project</li> </ul>	
record measurements	
- record mediatrements	

Occupational competencies		Nating	
13. Maintain a clean and safe work area	•	Year 1 Rating	
<ul> <li>clean and maintain materials and tools</li> </ul>			
<ul> <li>clean, organize, and put way items in the work area</li> </ul>		Year 2 Rating	
<ul> <li>store materials and tools after use</li> </ul>			
follow facility procedures for clean-up and shut down			
14. Clean up job site	,	Year 1 Rating	
<ul> <li>clean and maintain materials and tools</li> </ul>			
<ul> <li>store materials and tools after use</li> </ul>	,	Year 2 Rating	
follow facility procedures for clean-up and shut down			
15. Practice quality craftsmanship	,	Year 1 Rating	
<ul> <li>inspect and test work to determine quality</li> </ul>			
<ul> <li>monitor throughout for safety and quality</li> </ul>		Year 2 Rating	<u> </u>
<ul> <li>identify impact of building codes on quality of work</li> </ul>			
verify work meets job expectation			
Competency Substitute (if you replaced a competency above,	,	Year 1 Rating	•
note the competency and rating)			
need the competency and ratingy		Year 2 Rating	<u> </u>
Comments:			
MASONRY/CONCRETE SPECIALTY SKILLS (TO BE COMPLETED BY Year 1: Select 1 Year 2: Select 1 different specialty skills or type of construction commercial) identified by employer			TOR)
Occupational Competencies		Rating	
		n Rating of 2	
Competency and Rating Criteria		Check Rating	
	1	2	3
16. Assist with cutting brick and block		Year 1 Rating	
<ul> <li>work with brick and block for application</li> </ul>			
use tools in cutting brick and block	,	Year 2 Rating	
cut brick and block			
prepare joints			
<ul> <li>assure proper techniques for bonding</li> </ul>			
17. Assist with masonry and installation techniques	,	Year 1 Rating	
<ul> <li>assist with depositing masonry material</li> </ul>			

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Year 2 Rating

assist with spreading masonry material

assist with consolidating concrete assist with striking concrete in a form

Occupational Competencies	Rating
18. Lay masonry units to job specification	Year 1 Rating
<ul> <li>assist with building a concrete footer</li> </ul>	
<ul> <li>assist with setting and aligning forms that hold concrete to</li> </ul>	Year 2 Rating
the desired pitch and depth	
<ul> <li>assist with preparing units for placement</li> </ul>	
<ul> <li>verify the proper construction of forms</li> </ul>	
<ul> <li>ensure proper placement onto spacers</li> </ul>	
<ul> <li>assist with placing concrete</li> </ul>	
19. Assist with selecting the correct types of materials for the	Year 1 Rating
job	
<ul> <li>assist with the use of mortar applications in a project</li> </ul>	Year 2 Rating
<ul> <li>assist with mixing mortar to the proper consistency for the</li> </ul>	
application	
<ul> <li>assist with selecting the various types of mortar for the</li> </ul>	
specific jobs	
20. Perform volume estimates for material quantity	Year 1 Rating
requirements	
assist with applying measurements, drawings, and	Year 2 Rating
specifications to a project	
perform a slum test	
<ul> <li>successfully mix a batch of concrete</li> </ul>	
	¥ 45 ··
Competency Substitute (if you replaced a competency above,	Year 1 Rating
note the competency and rating)	
	Year 2 Rating
Comments:	

# WISCONSIN— YOUTH APPRENTICESHIP

# **Post-Program Completion Survey**

Youth Apprenticeship

### YA POST-PROGRAM COMPLETION SURVEY: EMPLOYER FEEDBACK

Employers complete the following information. YA Coordinators will enter this into the Post-Program Completion Survey.

YA Employer Post-Program Completion Questions	
Will you offer or have you offered the Youth Apprentice a continuing position with your company?	☐ Yes ☐ No
If continuing position offered to youth apprentice, did they accept?	☐ Yes ☐ No
If yes, please answer the questions below:	
Was the offer for full time or part time work?	☐ Full-time ☐ Part-time
Title of the position offered:	
What is the wage of the continuing employment offer?	
If applicable, will the youth apprentice advance to a Registered Apprenticeship?	

### YA POST-PROGRAM COMPLETION SURVEY - COMPLETED BY YA CONSORTIUM

The <u>Post-Program Completion Survey</u> form is to be provided to each student completing the Youth Apprenticeship program to capture information on the student's plans after leaving the program. This **form should be completed by the Youth Apprenticeship Coordinator** to capture information from all high school seniors and their employers after successful completion of the Youth Apprenticeship Program.

The form should be completed during the final meeting between the student, mentor, and Youth Apprenticeship Coordinator, when the final checklist or On-the-Job Learning (OJL) Guide is filled out and signed. Information captured on this form must be entered online using the Bureau of Apprenticeship Standards Electronic Records System (BASERS).

No part of this document may be altered, duplicated, or extracted without written consent from the Wisconsin Department of Workforce Development (DWD).

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language.