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

REQUIRED COMPETENCIES

Youth apprentices must become proficient in both general employability and occupation-specific competencies. All of these, and examples of how each can be demonstrated, are found in the following pages. Year 1: A total of 15 Masonry/Concrete Fundamentals Competencies and a minimum of 1 Masonry/Concrete Specialty Competency must be learned for this occupation. Year 2: A total of 15 Masonry/Concrete Fundamentals Competencies and a minimum of 2 different Masonry/Concrete Specialty Competencies than the first year. Year 2 competencies are completed with minimal employer guidance.

A specialty competency may be repeated only if the type of construction (residential or commercial) differs from the first year. Employers may substitute out one of these and should write in the competency they are adding. Where necessary, skills can be simulated. Youth apprentices must be evaluated on these competencies at least two times each year of their apprenticeship.

Youth Apprentices must also complete the following during Year 1:
First Aid Certification
Occupational Safety and Health Administration (OSHA) 10 or 30 Certification
Select construction type and circle the applicable year:
Select construction type and circle the applicable year: Residential completed during Year: One and/or Two

Masonry/Concrete Fundamentals Competencies		Masonry/Concrete Specialty Competencies
1.	Follow safety procedures	16. Assist with cutting brick and block
2.	Read construction drawings and plans	17. Assist with masonry and installation
3.	Interpret symbols and procedures	techniques
4.	Contribute to a job task plan	18. Lay masonry units to job specification
5.	Work as a member of a construction team	Assist with selecting the correct types of materials for the job
6.	Prepare work area for construction	20. Perform volume estimates for material
7.	Select construction materials	quantity requirements
8.	Use hand and light duty tools	

Masonry/Concrete Fundamentals Competencies	Masonry/Concrete Specialty Competencies
9. Use power tools and equipment 10. Perform materials handling 11. Install materials per job specifications 12. Perform construction measurements 13. Maintain a clean and safe work area 14. Clean up job site 15. Practice quality craftsmanship	

APPRENTICESHIP BRIDGING OPPORTUNITIES

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

- Bricklayer
- Cement Mason
- Cement Mason/Concrete Finisher
- Cement Mason (Heavy Highway)
- Plasterer
- Terrazzo Worker
- Title Settler

POST-SECONDARY PATHWAY OPPORTUNITIES

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

Carpentry

WISCONSIN — YOUTH APPRENTICESHIP SINCE 1991

Masonry/Concrete Fundamentals

Youth Apprenticeship

ON-THE-JOB LEARNING PERFORMANCE STANDARDS GUIDE

YOUTH APPRENTICE INFORMATION

TOUTH APPRENTICE INFORMATION	N .
Youth Apprentice Name	
YA Coordinator	
YA Consortium	
School District	
SIGNATURES	
The On-the-Job Learning Performance Standar	rds Guide includes a list of competencies youth
apprentices learn through mentoring and train	·
should be reviewed with the employer/mento	ors and School-Based or YA coordinators: This document r, school-based or YA coordinator on a regular basis with lan future steps to ensure completion of the required rdinator, and the apprentice sign below.
	ployer/Mentor
1 st Evaluation (Required)	2 nd Evaluation (Required)
Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed
3 rd Evaluation (Optional)	4th Evaluation (Optional)
Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed

School-Based and/or YA Coordinator

1st Evaluation (Required)

2nd Evaluation (Required)

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

3rd Evaluation (Optional)

4th Evaluation (Optional)

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

1st Evaluation (Required)

2nd Evaluation (Required)

Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

3rd Evaluation (Optional)

4th Evaluation (Optional)

Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
7	
School District / High School	School District / High School
Date Signed	Date Signed

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

All youth apprentices must demonstrate the key employability skills listed below in order to complete the YA program. They do so by earning at least a "Meets Expectation" rating in each. **At least two evaluations are required each year of a youth apprenticeship.** More columns are included below for those who choose to conduct more frequent reviews.

1	Working to Meet Expectations: Needs improvement; requires much assistance and supervision;
	rarely displays this behavior
2	Meets Expectations: Meets entry-level criteria; requires some supervision; often displays this
	behavior
3	Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently
	displays this behavior

	Employability Skills		Rat	ing	
	Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final
1.	Develops positive work relationships with others. Examples of qualities and habits that the employee might exhibit include: Interacts with others with respect and in a non-judgmental manner Responds to others in an appropriate and non-offensive manner Helps co-workers and peers accomplish tasks or goals Applies problem-solving strategies to improve relations with others When managing others, shows traits such as compassion, listening, coaching, team development, and appreciation	☐ 1 ☐ 2 ☐ 3			
2.	Communicates effectively with others Examples of qualities and habits that the employee might exhibit include Adjusts the communication approach for the target audience, purpose, and situation to maximize impact Organizes messages/information in a logical and helpful manner Speaks clearly and writes legibly Models behaviors to show active listening Applies what was read to actual practice Asks appropriate questions for clarity	☐ 1 ☐ 2 ☐ 3			
3.	 Collaborates with others Examples of qualities and habits that the employee might exhibit include Works effectively in teams with people of diverse backgrounds regardless of sex, race, ethnicity, nationality, sexuality, religion, political views, and abilities Shares responsibility for collaborative work and decision making Uses the problem-solving process to work through differences of 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 	☐ 1 ☐ 2 ☐ 3			

Employability Skills			Rat	ing	
	Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final
4.	 Maintains composure under pressure Examples of qualities and habits that the employee might exhibit include Uses critical thinking to determine the best options or outcomes when faced with a challenging situation Carries out assigned duties while under pressure Acts in a respectful, professional, and non-offensive manner while under pressure Applies stress management techniques to cope under pressure 	☐ 1 ☐ 2 ☐ 3			
5.	Demonstrates integrity Examples of qualities and habits that the employee might exhibit include Carries out responsibilities in an ethical, legal and confidential manner Responds to situations in a timely manner Takes personal responsibility to correct problems Models behaviors that demonstrate self-discipline, reliability, and dependability	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	□1 □2 □3
6.	Performs quality work Examples of qualities and habits that the employee might exhibit include Carries out written and verbal directions accurately Completes work efficiently and effectively Performs calculations accurately Conserves resources, supplies, and materials to minimize costs and environmental impact Uses equipment, technology, and work strategies to improve workflow Applies problem-solving strategies to improve productivity Adheres to worksite regulations and practices Maintains an organized work area	☐ 1 ☐ 2 ☐ 3			
7.	 Provides quality goods or services (internal and external) Examples of qualities and habits that the employee might exhibit include Shows support for the organizational goals and principles by own personal actions Displays a respectful and professional image to customers Displays an enthusiastic attitude and desire to take care of customer needs Seeks out ways to increase customer satisfaction Produces goods to workplace specifications 	☐ 1 ☐ 2 ☐ 3	□1 □2 □3	☐ 1 ☐ 2 ☐ 3	□1 □2 □3
8.	 Shows initiative and self-direction Examples of qualities and habits that the employee might exhibit include Prioritizes and carries out responsibilities without being told Responds with enthusiasm and flexibility to handle tasks that need immediate attention Reflects on any unsatisfactory outcome as an opportunity to learn Improves personal performance by doing something different or differently Analyzes how own actions impact the overall organization Supports own action with sound reasoning and principles Balances personal activities to minimize interference with work responsibilities 	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	□1 □2 □3

Employability Skills		Rati	ing	
Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final
 9. Adapts to change Examples of qualities and habits that the employee might exhibit include Shows flexibility and willingness to learn new skills for various 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 Displays a "can do" attitude 	□ 1 □ 2 □ 3		☐ 1 ☐ 2 ☐ 3	□ 1 □ 2 □ 3
 10. Demonstrates safety and security regulations and practices Examples of qualities and habits that the employee might exhibit include Follows personal safety requirements Maintains a safe work environment Demonstrates professional role in an emergency Follows security procedures Maintains confidentiality 	□ 1	☐ 1	□ 1	☐ 1
	□ 2	☐ 2	□ 2	☐ 2
	□ 3	☐ 3	□ 3	☐ 3
 11. Applies job-related technology, information, and media Examples of qualities and habits that the employee might exhibit include Applies technology effectively in the workplace Assesses and evaluates information on the job Assesses training manuals, website, and other media related to the job 	☐ 1	☐ 1	☐ 1	☐ 1
	☐ 2	☐ 2	☐ 2	☐ 2
	☐ 3	☐ 3	☐ 3	☐ 3
 12. Fulfills training or certification requirements for employment Examples of this requirement may include Participation in required career-related training and/or educational programs Passing certification tests to qualify for licensure and/or certification Participation in company training or orientation 	☐ 1	☐ 1	☐ 1	☐ 1
	☐ 2	☐ 2	☐ 2	☐ 2
	☐ 3	☐ 3	☐ 3	☐ 3
 13. Sets personal goals for improvement	□ 1	□ 1	□1	□ 1
	□ 2	□ 2	□2	□ 2
	□ 3	□ 3	□3	□ 3

OCCUPATIONAL COMPETENCIES (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

Youth apprentices must earn a rating of at least "MEETS EXPECTATIONS" in each competency by the conclusion of the apprenticeship. **Year 1**: All required 15 Masonry/Concrete Fundamentals occupational competencies and a minimum of 1 Masonry/Concrete Specialty Competency. **Year 2**: All required 15 Masonry/Concrete Fundamentals competencies and a minimum of 2 Masonry/Concrete Specialty competencies different than first year. Year 2 competencies are completed with minimal employer guidance.

A specialty competency may be repeated only if the type of construction (residential or commercial) differs from the first year. Employers may substitute out one of these and should write in the competency they are adding. Where necessary, skills can be simulated. **At least two evaluations are required each year of a youth apprenticeship.** More columns are included below for those who choose to conduct more frequent reviews.

1	Working to Meet Expectations: Needs improvement; requires much assistance and supervision;
	rarely displays this behavior
2	Meets Expectations: Meets entry-level criteria; requires some supervision; often displays this
	behavior
3	Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently
	displays this behavior

Youth Apprentices must also complete the following during Year 1:				
First Aid Certification				
☐ OSHA 10 or 30				
Select construction type and circle the applicable year:				
Residential completed during Year: One and/or Two				
☐ Commercial completed during Year: One and/or Two				

MASONRY/CONCRETE FUNDAMENTALS (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

Occupational Competencies			Rati	ing	
	Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final
1.	Follow safety procedures		Year 1	Rating	
	 select and use appropriate clothing and Personal Protective Equipment (PPE) comply with job site safety and security rules and regulations maintain a clean and organized work environment identify and report unsafe job conditions report injuries and damage to property 	☐ 1 ☐ 2 ☐ 3			
		Year 2 Rating			
		□ 1	□ 1	□ 1	□ 1
		□ 2	□ 2	□ 2	□ 2
		□ 3	3	□ 3	□ 3

Occupational Competencies		Rati	ing		
Competency and Rating Criteria	Initial	Mid	Mid	Final	
· , , -		Year 1	Year 2		
2. Read construction drawings and plans		Year 1			
relate drawing to job taskinterpret elements and symbols	∐1	∐1	∐1	∐1	
locate worksite features on a construction plan	<u>□</u> 2	<u> </u>	<u></u>	<u></u>	
convert scales measurements to full measurements	∐3	∐3	∐ 3	3	
 translate specifications to work requirements 					
		Year 2			
	∐ 1	∐ 1	<u></u>		
	<u> </u> 2	□ 2	<u></u>	□ 2	
	∐ 3	∐3	∐ 3	3	
2. Intermed combale and proceedings		V 1 '	Datin -		
 Interpret symbols and procedures explain the role of drawings and specifications 	□ 1	Year 1		□1	
identify drawings and symbols used on a construction drawing			∐1 □2		
apply information from drawings in construction activities	<u> </u> 2 		2 	∐ 2 □ 2	
 interpret specifications appearing on construction drawings 		∐3	∐3	∐ 3	
interpret and convert measurements in terms of actual dimensions		Year 2 Rating			
explain specifications in terms of work requirements				□ 1	
			□ <u>1</u> □ 2		
	□²		□ ² □ 3	□2	
			3		
4. Contribute to a job task plan		Year 1	Rating		
setup and prepare tools and equipment for safe operation	□ 1	□ 1	1	□ 1	
determine the scope of work	<u> </u>	 2	 2	 2	
respect contractual relationships	<u> </u>		 3	 3	
apply scheduling practices					
		Year 2	Rating		
	□ 1	□ 1	□ 1	□ 1	
	□ 2	□ 2	□ 2	□ 2	
	□ 3	□ 3	□ 3	□ 3	
5. Work as a member of a construction team		Year 1	Rating		
offer and request assistance	<u> </u>	<u> </u>	□ 1		
 follow company policies and procedures learn from other team members 	2	2	2	2	
• learn from other team members	□ 3	□ 3	□ 3	□ 3	
		Year 2 Rating			

	Occupational Competencies	Rating				
	Competency and Rating Criteria	Initial	Mid	Mid	Final	
	Competency and Nating Citteria	IIIICIAI	Year 1	Year 2	IIIIai	
		□ 1	□ 1	□ 1	□ 1	
		□ 2	□ 2	2	☐ 2	
		□ 3	□ 3	□ 3	□ 3	
6.	Prepare work area for construction		Year 1	Rating		
	• remove debris	□ 1	□ 1	□ 1	□ 1	
	• clean up sites	□ 2	□ 2	□ 2	□ 2	
	 dispose of waste and hazardous materials 	3	□ 3	3	3	
		_	_			
			Year 2	Rating		
		□ 1	□ 1	□ 1	□ 1	
		□ 2	□ 2	□ 2	□ 2	
		_ 3	_ 3	_ 3	_ 3	
7.	Select construction materials		Year 1	Rating		
	consider usefulness and portability	□1	□ 1	1	□ 1	
	consider minimizing cost					
	consider performance goals		☐ 3	□ -	□ -	
			Year 2	Rating	<u> </u>	
		□1	□ 1	□ 1	□ 1	
		3	3	3	□ 3	
8.	Use hand and light duty tools		Year 1 Rating			
	wear appropriate PPE	□1	□ 1	1	□ 1	
	• select the correct tool for the job			 2		
	• inspect tool	□ - □ 3	☐ 3		□ -	
	operate the tool safely					
	 perform routine maintenance on hand tools 		Year 2	Rating	<u> </u>	
	• store tool	□ 1			□ 1	
		□ <u>1</u>		□ <u>1</u> □ 2	_	
		□ 3	3	□ 3	<u> </u>	
			<u> </u>			
9.	Use power tools and equipment		Year 1	Kating		

Occupational Competencies		Rati	ng		
Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final	
 wear appropriate PPE select the correct tool for the job inspect tool operate the tool safely 	☐ 1 ☐ 2 ☐ 3				
perform routine maintenance on power tools		Year 2 I	Rating		
• store tool	□ 1 □ 2 □ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	
10. Perform materials handling		Year 1 I	Rating		
 identify materials necessary to complete the task conserve resources and materials retrieve equipment and materials needed load and unload materials, tools, equipment, and supplies lift, position, and secure materials during installation 	☐ 1 ☐ 2 ☐ 3				
int, position, and secure materials during installation		Year 2 I	Rating		
	☐ 1 ☐ 2 ☐ 3				
11. Install materials per job specifications		Year 1	Rating		
 retrieve equipment and materials needed unload materials, tools, equipment, and supplies lift, position, and secure materials during installation 	☐ 1 ☐ 2 ☐ 3				
		Year 2 I	Rating		
	☐ 1 ☐ 2 ☐ 3				
12. Perform construction measurements		Year 1 I	Rating		
 select measuring tool read measurement accurately scale proportions convert units of measurement estimate resources, materials, and supplies needed for a project 	☐ 1 ☐ 2 ☐ 3	☐ 1 ☐ 2 ☐ 3	□ 1 □ 2 □ 3	☐ 1 ☐ 2 ☐ 3	
 estimate resources, materials, and supplies needed for a project record measurements 		Year 2 I	Rating		
	☐ 1 ☐ 2 ☐ 3				

Occupational Competencies	Rating			
Competency and Rating Criteria	Initial	Mid	Mid	Final
Competency and Rating Criteria	IIIILIAI	Year 1	Year 2	rillai
13. Maintain a clean and safe work area	Year 1 Rating			
 clean and maintain materials and tools 	□ 1	□ 1	□ 1	□ 1
 clean, organize, and put way items in the work area 	□2	□2	□2	□2
 store materials and tools after use 		 3	 3	
 follow facility procedures for clean-up and shut down 				
		Year 2 I	Rating	
	□1	□ 1		□ 1
	☐ 2	☐ 2	□ - □ 2	□ - □ 2
			☐2 ☐3	
	🗆 3	🗆 3	□3	3
14. Clean up job site		Year 1	Rating	
 clean and maintain materials and tools 	□ 1	□ 1	□ 1	□ 1
 store materials and tools after use 	□ 2	□ 2	□ 2	☐ 2
 follow facility procedures for clean-up and shut down 	□3	□3	□3	□ 3
		Year 2 I	 Rating	
	□1	□ 1		□ 1
	☐ 2	☐ 2		
	☐ 2 ☐ 3		□ 2	3
	🗆 🤊	🗀 🤊		_
15. Practice quality craftsmanship		Year 1	Rating	
 inspect and test work to determine quality 	□1	□1		□ 1
 monitor throughout for safety and quality 			☐ 2	
 identify impact of building codes on quality of work 				
 verify work meets job expectation 	3	3	3	3
		Year 2 I		
	2	2	2	□ 2
	□ 3	□ 3	□ 3	<u> </u>
Competency Substitute (if you replaced a competency above, note the		Year 1 I		
competency and rating)	□ 1	□ 1	□1	∐ 1
	□ 2	□ 2	☐ 2	☐ 2
	□ 3	□ 3	□ 3	☐ 3
		Year 2 I	Rating	
	□ 1	□ 1	□ 1	□ 1
	□ 2	□ 2	□ 2	□ 2
	3	3	□ 3	□ 3
	-	-	_	<u> </u>
			<u> </u>	

Occupational Competencies		Rating			
Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final	
Comments:					
MASONRY/CONCRETE SPECIALTY SKILLS (TO BE COMPLETED BY	YA EMPLOYER	R/MENT	OR)		
Year 1: Select 1					
Year 2: Select 1 different specialty skills or type of construct	tion (residenti	al vs.			
commercial) identified by employer					
Occupational Competencies		Rating			
Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final	
16. Assist with cutting brick and block		Year 1 Rating			
work with brick and block for application	□ 1	□ 1	1	□ 1	
 use tools in cutting brick and block 					
 cut brick and block 					

Occupational Competencies	Rating			
Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final
18. Lay masonry units to job specification	Year 1 Rating			
 assist with building a concrete footer 	□ 1	□ 1	□ 1	□ 1
 assist with setting and aligning forms that hold concrete to the desired 	2	□ 2	□ 2	2
pitch and depth	_ 3	_ 3	_ 3	_ 3
assist with preparing units for placement	_			
verify the proper construction of formsensure proper placement onto spacers		Year 2 I	Rating	
assist with placing concrete	□ 1	□ 1	□ 1	□ 1
assist with placing concrete	□ 2	□ 2	□ 2	□ 2
	□ 3	□3	□3	□3
19. Assist with selecting the correct types of materials for the job		Year 1 l	Rating	I
 assist with the use of mortar applications in a project 	□ 1	□ 1	□ 1	□ 1
assist with mixing mortar to the proper consistency for the application	☐ 2	□ 2	□ 2	□ 2
 assist with selecting the various types of mortar for the specific jobs 	□ 3	□ 3	□ 3	☐ 3
		Year 2 I	Rating	•
	□ 1	□ 1	□ 1	□ 1
	□ 2	□ 2	□ 2	□ 2
	□ 3	□ 3	□ 3	□ 3
20. Daufaum valuma astimatas fau matarial avantitu vanvinamenta		Vac. 1	Datina	
 20. Perform volume estimates for material quantity requirements assist with applying measurements, drawings, and specifications to a 		Year 1 I		
project				
perform a slum test			☐ 2	<u> </u>
successfully mix a batch of concrete	□ 3	3	□ 3	3
		V21	D-+:	
	Year 2 Rating			
	☐1 □2		∐1 □2	
	☐ 2 ☐ 2	☐ 2 ☐ 2	☐ 2 ☐ 2	<u> </u>
	☐ 3	3	□ 3	<u></u> 3
		1	1	1

Occupational Competencies	Rating			
Competency and Rating Criteria	Initial	Mid Year 1	Mid Year 2	Final
Competency Substitute (if you replaced a competency above, note the		Year 1 Rating		
competency and rating)	□ 1	□ 1	□ 1	□ 1
	□ 2	□ 2	□ 2	□ 2
	□ 3	□ 3	□ 3	□ 3
		Year 2 I	Rating	
	□ 1	□ 1	□ 1	□ 1
	□ 2	□ 2	□ 2	□ 2
	☐ 3	□ 3	□ 3	□ 3
Comments:				

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