

Competency Outline

Understand procedures, methods, and concepts in using tools, equipment, and materials to establish a safe work environment

1. Identify and demonstrate the procedures and policies of safety of the trade.
AAI 8. Health, Safety, and Environment: Explain the health and safety laws and practices affecting the employee, the surrounding community, and the environment in this industry.
2. Demonstrate safe use of tools, power equipment and proper use of ladders and scaffolding.
3. Demonstrate use of appropriate personal safety equipment and proper use of emergency equipment.
4. Discuss and explain the dangers of chemical finishes.

Understand the governmental regulations and applicable codes to assist with project planning

5. Recognize elements and symbols of blueprints and drawings and use two- and three-dimensional drawings to convey information.
AAI 4. Technical and Production Skills: Identify specific production and technical skills for this industry.
6. Discuss and recognize state and local residential building codes and statutory compliance issues, i.e., ADA, OSHA, etc.
AAI 8. Health, Safety, and Environment: Explain the health and safety laws and practices affecting the employee, the surrounding community, and the environment in this industry.

Understand concepts, procedures and methods in utilizing materials and fasteners for various applications

7. Explain the terms commonly used to describe wood/lumber and discuss and identify lumber materials such as dimensional lumber, plywood, building boards and engineered wood products.
8. Demonstrate proper selection and use of a variety of fasteners and adhesives.

Understand the concepts and procedures in utilizing hand and power tools

9. Demonstrate proper use of commonly used hand tools.
AAI 4. Technical and Production Skills: Identify production and technical skills for this industry.
10. Demonstrate proper use of commonly used power tools and stationary power equipment.
AAI 4. Technical and Production Skills: Identify production and technical skills for this industry.

Understand the concepts related to building construction systems

11. Explain terms associated with footings and foundations and identify the use of footings, foundations and flatwork.
AAI 4. Technical and Production Skills: Identify production and technical skills for this industry.
12. Identify floor, sill framing, support members and demonstrate accurate cutting and installation of joists.
13. Describe how to install a subfloor.
14. Identify components of wall and ceiling layout and demonstrate how to cut studs, trimmers, cripples and headers to dimension in order to build wall sections including sheathing.
AAI 4. Technical and Production Skills: Identify production and technical skills for this industry.
15. Identify roof framing members and demonstrate how to erect rafters and/or trusses and apply roof sheathing.
AAI 4. Technical and Production Skills: Identify specific production and technical skills required for this industry.
16. Identify various window types and state the requirements for proper window installation.
17. Identify various door types and common sizes and explain the correct installation procedure for doors.
18. Explain the safety requirements for roof jobs, identify the materials and methods used in roofing, and demonstrate the techniques for installing roofing.
AAI 4. Technical and Production Skills: Identify specific production and technical skills required for this industry.
19. Describe the types and applications of siding materials, demonstrate the installation of siding and describe the types and styles of gutters and downspouts.
AAI 4. Technical and Production Skills: Identify production and technical skills for this industry.

Understand the concepts, methods and techniques related to interior building systems

20. Describe the characteristics of various types of insulation materials, vapor barriers and building wraps.
21. Recognize types and uses of stair parts, and materials needed for a stair system.
22. Describe a variety of interior finishing products.
23. Demonstrate how to install drywall.
AAI 4. Technical and Production Skills: Identify production and technical skills for this industry.
24. Identify various types of doors and jamb options.
25. Describe the process for placing and hanging a selected door.
AAI 4. Technical and Production Skills: Identify specific production and technical skills required for this industry.
26. Identify the different types of standard moldings, describe their uses and recognize the proper techniques for installing interior trim.
27. State typical base and wall kitchen cabinet sizes, describe the process for installing kitchen cabinet sizes and identify various countertop products and installation techniques.
28. Discuss the application of different floor finishes and the suitability of each.

Understand the fundamental concepts of Entrepreneurship

29. Discuss and assess venture creation possibilities and identify the steps in planning the venture.
AAI 1. Planning: Explain the key elements of a long-term plan for a successful company.
AAI 2. Management: Discuss the different forms of management and ownership within this industry.
AAI 3. Finance: Explain the key components of financial management of a company.
30. Identify the resources needed for venture startup and operation.
31. Discuss the options in planning the venture's future (growth, development, demise).
AAI 6. Labor Issues: Explain the employees' and employers' rights and responsibilities in this industry.
AAI 7. Community Issues: Discuss the ways a company can impact its community and the ways a community can impact a company.
32. Identify and discuss the traits and behaviors of an entrepreneur (leadership, personal assessment, personal management).

Understand the importance of personal growth, leadership and career success

33. Demonstrate personal growth, community leadership, democratic principles and social responsibility by participating in activities/events offered through student organizations.

Understand the key concepts associated with high performance/employability skills (SCANS)

34. Decision –Making & Problem-Solving: Demonstrate and apply good decision-making and problem-solving skills by outlining issues in situations/problems and determining, collecting, and organizing information needed in order to formulate a solution.
35. Self –Management: Demonstrate and apply self-management skills by adhering to regulations, being responsible, and following through on commitments.
AAI 9. Personal Work Habits: Explain the work habits an employer looks for in an employee in this industry.
36. Communication Skills: Demonstrate and apply effective communication skills: verbal, written, visual, and listening
37. Ability to Work with Others: Demonstrate and apply the necessary skills in order to work effectively with others.
38. Information Use - Research, Analysis, Technology: Demonstrate and apply the use of information through research, analysis, and technology.
AAI 5. Underlying Principles of Technology: Explain through discussion the technological systems used within this industry.
39. Mathematical Concepts: Demonstrate mathematical and computation skills as applied to real world situations.
40. General Safety: Demonstrate and apply safe practices and procedures in the workplace.
41. Career Development: Demonstrate personal/career development skills by completing a career plan.