

SEACOAST SCHOOL OF TECHNOLOGY

Building Construction Technologies Competencies

Technical Competencies	
	1. Identify and demonstrate the procedures and policies of safety of the trade.
	2. Explain basic riggings and describe inspections techniques and load-handling safety practices with proper use of ladders and scaffolding.
	3. Demonstrate use of appropriate personal safety equipment and proper use of emergency equipment.
	4. Explain the dangers of chemical finishes and recognize hazard materials as associated with proper handling techniques and procedures.
	5. Discuss and define ADA, OSH, ICC, NHEC, RRP, Lead certifications, and what the code books look like.
	6. Describe the importance of professional ethics: employee/employer expectations.
	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.
	9. Demonstrate proper use of commonly used hand tools.
	10. Demonstrate proper use of commonly used power tools, stationary power equipment and portable power equipment.
	11. Discuss the operations and safety of heavy equipment including forklift training, man lifts, scissor lifts, skid steers, aerial lifts.
	12. Explain terms associated with footings and foundations and identify the use of footings, foundations and flatwork.
	13. Recognize elements and symbols of blueprints and drawings and use two- and three-dimensional drawings to convey information.
	14. Explain the purpose and components of contract documents and specifications.
	15. Identify floor, sill framing, support members and demonstrate accurate cutting and installation of joists.
	16. Describe how to install a subfloor.
	17. Identify components of wall and ceiling layouts and demonstrate how to cut studs, trimmers, cripples and headers to dimension in order to build wall sections including sheathing.
	18. Identify roof framing members and demonstrate how to erect rafters and/or trusses and apply roof sheathing.
	19. Identify various window types and rating classifications and state the requirements for proper window installation.

	20. Identify various door types and common sizes and explain the correct installation procedure for doors
	21. Explain the safety requirements for roof jobs, identify the materials and methods used in roofing, and demonstrate the techniques for installing roofing.
	22. Discuss the types and styles of gutters and downspouts.
	23. Describe the characteristics of various types of insulation materials, vapor barriers and building wraps.
	24. Describe the types and applications of siding materials, demonstrate and discuss the installation of siding.
	25. Discuss how to meet new energy code standards.
	26. Recognize types and uses of finish stair parts, and materials needed for a stair system.
	27. Demonstrate how to install drywall.
	28. Identify various types of doors and jamb options.
	29. Describe the process for placing and hanging a selected door.
	30. Identify the different types of standard moldings, describe their uses and recognize the proper techniques for installing interior trim.
	31. State typical base and wall kitchen cabinet sizes, describe the process for installing kitchen cabinet sizes and identify various countertop products and installation techniques.
	32. Discuss the application of different floor finishes and the suitability of each.
Core Competencies	
	33. Discuss and assess venture creation possibilities and identify the steps in planning the venture.
	34. Identify the resources needed for venture startup and operation.
	35. Discuss the options in planning the venture's future (growth, development, demise).
	36. Identify and discuss the traits and behaviors of an entrepreneur (leadership, personal assessment, personal management).
	37. Demonstrate personal growth, community leadership, democratic principles and social responsibility by participating in activities/events offered through student organizations.
	38. Decision-Making & Problem-Solving

	39. Self-Management
	40. Communication Skills
	41. Ability to Work with Others
	42. Information Use – Research, Analysis & Technology

	43. Mathematical Concepts
	44. General Safety
	45. Career Development

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