

Woodwork Career Alliance Correlation Chart



The content of the text and Lab Workbook correlates to Woodwork Career Alliance (WCA) skill standards. The WCA establishes a benchmark to measure and recognize an individual's skills and knowledge. The WCA skill standards help ensure that students are prepared for rigorous industry standards, and provide a pathway for advancement for professional woodworkers.

The WCA skill standards define the minimum requirements for specific woodworking machine operations. Using the WCA skill standards in a wood training program can help you, your students, and your program obtain industry recognition. The *Modern Cabinetmaking* textbook and Lab Workbook are correlated to the performance standards, helping prepare your students for certification.

8. Clamping & Laminating

Clamping & Laminating Considerations

- Pre-Operation Checklist is a prerequisite for ANY operation.
- Materials are machined and prepared properly, with dowels and hardware installed.
- Clears machine and cleans work area after operation.
- Required OSHA-approved personal protective equipment is worn.
- Lock-out/tag-out procedure is in place and followed.
- Process is completed in a timely manner.
- If required, select proper program from controller or programmable logic controller (PLC).
- Inspect for evidence of chatter marks or part hesitation.
- Operator clears machine and cleans work area after use.
- Proper stance and hand position are demonstrated.
- Spot check results following the operation.
- Tool/machine manufacturer's safety rules and guidelines are followed.
- Verifies tool is properly guarded.

Case Clamp

| Pre-Operation Checklist | | | | | |
|-------------------------|--|---|---------------------|--------------------------|--|
| Level | Objective | Performance Standard | Textbook Chapter | Lab Workbook Material | |
| 1 | | Verifies work area is free of clutter. | Chapters 32, 40 | | |
| | | Ensures fastening supplies and hand tools are positioned for use. | Chapters 32, 40 | | |
| | | Verifies press faces are clean, flat, and free of blemishes. | Chapters 32, 40 | | |
| 2 | | Verifies clamps are adjusted square and true. | Chapters 32, 40 | | |
| | | Verifies pressure points are adjusted appropriately to produce even pressure during clamping. | Chapters 32, 40 | | |
| | | Meets Level 1 performance standard. | | | |
| Opera | ation—Assemble Cabinet Box | | | | |
| Level | Objective | Performance Standard | Textbook Chapter | Lab Workbook Material | |
| 1 | Given materials and machine ready to operate, assemble and clamp a four-sided box with a back. | Joints remain tight and sound when pressure is released from clamps. | Chapters 32, 40 | Section Project 5-2 | |
| | Tour Sided box with a back. | Box is assembled square within ±0.8 mm (1/32") [0.0312"] when measured corner to corner in any direction. | Chapters 32, 40 | Section Project 5-2 | |

| | | Surfaces of any two opposing parts intended to be flush are flush within ± 0.4 mm (1/64") [0.0156"]. | Chapters 32, 40 | Section Project 5-2 |
|---|--|--|-----------------|------------------------|
| | | Surfaces of any two opposing parts are within ±0.4 mm (1/64") [0.0156"] of intended position. | Chapters 32, 40 | Section Project 5-2 |
| 2 | Given materials, set up machine to assemble and clamp a foursided box with a back. | Inspects materials to confirm dowels/glue are accurately applied. | Chapters 32, 40 | |
| | | Adjusts pressure points to produce even pressure during clamping. | Chapters 32, 40 | |
| | | Meets Level 1 performance standard. | | |

Edgebander

| Pre-Operation Checklist | | | | |
|-------------------------|-----------|--|------------|--------------|
| Level | Objective | Performance Standard | Textbook | Lab Workbook |
| | | | Chapter | Material |
| 1 | | Demonstrates knowledge of and proper use of all machine specific controls. | Chapter 34 | |
| | | Verifies core material thickness. | Chapter 34 | |
| | | Ensures dust collection is functioning. | Chapter 34 | |
| | | Ensures proper air pressure is supplied. | Chapter 34 | |
| | | Monitors all supply levels. | Chapter 34 | |
| | | Ensures paths of in-feed and out-feed have no obstructions to material and operator. | Chapter 34 | |

| 2 | | Powers up machine and verifies proper operating temperature has been reached. | Chapter 34 | |
|-------|--|---|------------|-------------------------|
| | | Selects and installs proper adhesive for given task and material. | Chapter 34 | |
| | | Loads magazine for coiled or straight banding material. | Chapter 34 | |
| | | Sets beam height to within 0.1 mm [0.0039"] based on panel thickness. | Chapter 34 | |
| | | Enables correct stations for given material/ process. | Chapter 34 | |
| | | Meets Level 1 performance standard. | | |
| Opera | tion—Edgebanding | | | |
| Level | Objective | Performance Standard | Textbook | Lab Workbook |
| | | | Chapter | Material |
| 1 | Given machine set up, adjusted, with edgebanding and material ready to band, apply the coiled or strip | Feeds panels properly into machine. | Chapter 34 | Section Project 4-12 |
| | edgebanding to the given material or parts. | | | Section Project |
| | parts. | | | 4-13 |

| | | Applies edgeband to correct edges in proper sequence (opposing edges first). | Chapter 34 | Section Project 4-12 Section Project 4-13 |
|---|---|--|------------|---|
| | | Identifies basic material and processing defects. | Chapter 34 | Section Project 4-12 Section Project 4-13 |
| 2 | Given material, set up machine and apply edgebanding to specifications. | Loads program and/or adjusts machine for given material. | Chapter 34 | |
| | | Sets up and adjusts all processing stations. | Chapter 34 | |
| | | Corrects basic processing defects. | Chapter 34 | |
| | | Produces parts which exhibit acceptable glue line with minimal glue residue. | Chapter 34 | |
| | | Powers down machine in accordance with machine manual. | Chapter 34 | |
| | | Meets Level 1 performance standard. | | |