

STATE OF MICHIGAN

CARPENTRY

Business and Law examination specifications and suggested study materials are contained in the Candidate Information Bulletin.

# of Questions	Passing % Score	Passing Raw Score
50	72	36

TOPIC INFORMATION	# OF ITEMS
1. PLAN READING, ESTIMATING, AND PERMITTING a. Sketch Work Proposal for General Reference b. Perform Site Layout c. Obtain Required Permits d. Contact MISS DIG to Verify Location of Underground Utilities, as Appropriate e. Estimate Job Material Needs f. Estimate Job Material Costs g. Submit Appropriate Construction Document for Permitting Purposes	7
2. DOORS AND WINDOWS a. Install Doors (standard door - wood, metal, or plastic) b. Install Sliding Doors c. Install Garage Doors d. Install Windows e. Install Weather Seals f. Install Skylights g. Apply Weatherstripping and Seals h. Determine What Type of Replacement is Needed i. Accessibility Requirements	7
3. FINISH CARPENTRY a. Understand Finish Carpentry General Knowledge, Definitions, and Theory b. Perform Millwork c. Install Board Paneling d. Install Closet and Utility Wood Shelving e. Assemble and Install Custom Cabinets f. Countertops (solid surface, laminate, wood surface, etc.) g. Finish Stairs After Framing h. Select and Install Standing and Running Trim i. Install Suspended/Acoustical Ceiling Systems j. Install Gypsum Sheathing and Drywall k. Install Wood Floors	8
4. ROUGH CARPENTRY a. Perform Material Identification and Evaluation for Different Uses b. Use Span Tables, as Appropriate	11

c. Select and Install Engineered Lumber Products d. Understand General Aspects of Wood Framing e. Assemble Floors f. Assemble Walls g. Assemble Ceilings h. Assemble Roofs i. Frame Stairs j. Install Timber Trusses k. Install Engineered Wood Trusses l. Install Metal Support Assemblies m. Ensure Installation Complies with Egress and Escape Requirements n. Ensure Installation Complies with Fire Blocking and Draft Stopping Requirements o. Ensure Structure Complies with Ventilation Requirements p. Apply Insulation as Needed q. Formwork	
5. SPECIALTY INSTALLATIONS a. Assemble Heavy Timber Construction b. Install Treated Wood Foundations (Permanent Wood Foundation) c. Install Wood Decks and Manufactured Decks d. Install Wood Siding e. Aluminum/Screen Enclosures (sunrooms, etc.) f. Perform Open and Closed Panel Construction	6
6. SAFETY AND EMPLOYEE PROTECTION a. Set Up Appropriate Illumination for Workplace b. Set Up Appropriate Sanitation for Job Site c. Understand Responsibility for Providing Personal Protective Equipment (Contractor's Responsibilities) d. Provide Employee Protection in Trenches and Excavations e. Prepare Emergency Action Plans f. Ensure Safety Training is Conducted when Needed g. Ensure Adequate Ventilation is Available for Employees h. Ensure First Aid Kit is Available per MIOSHA Requirements	11



i.	Follow MIOSHA Guidelines to Protect Employees and the General Public from Falling-Object Hazards
j.	Ensure Personal Protective Equipment is Used Correctly
k.	Install Signs, Signals, and Barricades as Required by MIOSHA
l.	Use All Tools and Equipment in Accordance with MIOSHA Requirements
m.	Utilize Ladders in Accordance with MIOSHA Requirements
n.	Assemble and Utilize Scaffolds in Accordance with MIOSHA Requirements
o.	Follow MIOSHA Requirements for Work Around Toxic Materials
p.	Perform Appropriate Material Cleanup and Disposal
q.	Provide Fall Protection

Suggested Study Materials

The study materials listed here should be helpful to candidates preparing for the **M&A Contractor** examination.

Except for the Michigan Laws, Rules, Codes and Standards, neither the Department nor PSI endorses any of the materials listed. However, we try to ensure that the references are currently available and consist of recognized industry standards.

If the answer to a specific examination question could differ because of conflicting information contained in the suggested study materials, the legal requirement, such as a law, regulation, board or commission rule, or building code, takes precedence over (overrides) any other reference. If two legal requirements appear to conflict, the Michigan specific law, regulation, board or commission rule, or building code, takes precedence over the national one. Information from the suggested study materials listed here takes precedence over information from all other sources or persons.

This is only a sample of the available reference materials that contain information about the professions. These materials contain neither all of the general trade knowledge required to be competent in any specific area nor all of the information on which you will be tested. Also, please be aware that reference materials may go out of print or be otherwise unavailable.

Please contact a library, community college, currently practicing builder or contractor, Code enforcement agency, or other specialists in the profession for additional information or reference material.

These examinations are **CLOSED BOOK**, so the following reference materials suggested as study resources are not allowed in the examination center.

- Michigan Residential Code, 2009, Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes and Fire Safety, Office of Management Services, PO Box 30255, Lansing, MI 48909, (517) 241-9313, www.michigan.gov/bccfs
- *Michigan Occupational Safety and Health Act 154 of 1974 as amended, and Administrative Rules for All Industries*, Department of Licensing and Regulatory Affairs, MIOSHA Standards Division, P.O. Box 30643, Lansing, MI 48909, (517) 322-1845. Price: Free.
All MIOSHA standards may be printed from the MIOSHA web site:
www.michigan.gov/mioshastandards
- Gypsum Construction Handbook, 2000, ISBN: 0-9636862-2-4, United States Gypsum Company (USG), 125 S. Franklin Street, Chicago, IL 60606, (800) 874-4968, <http://www.usg.com>
- Carpentry and Building Construction, 10th Edition, John L. Feirer and Mark D. Feirer, ISBN: 0-07-822702-X, Glencoe/McGraw-Hill, PO Box 543, Blacklick, OH 43004, (800) 334-7344, www.glencoe.com
- Finish Carpentry : A Complete Interior & Exterior Guide, 1995, William P. Spence, ISBN 0-8069-0700-2, The Sterling Publishing Company, Inc., 387 Park Avenue South, New York, NY 10016, (212) 532-7160, www.sterpub.com
- The Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses, 2003, Wood Truss Council of America & the Truss Plate Institute, One WTCA Center, 6300 Enterprise Lane, Madison, WI 53719, (608) 274-4849, www.woodtruss.com
- Building Trades Printreading - Part 2 Residential and Light Commercial Construction, Fourth Edition, 2004, Thomas E. Proctor, ISBN: 0-8269-0425-4, American Technical Publishers, Inc., 1155 W. 175th St., Homewood, IL 60430-4600, (800) 323-3471, www.go2atp.com

