Drywall Mechanic Career Path Manual

V4 Ceiling Systems Included Your guide to moving up the career path with Marek Family of Companies

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WORKFORCE DEVELOPMENT



SUMMARY JOB DESCRIPTION:

THE MECHANIC FRAMES AND INSTALLS A VARIETY OF WALL AND CEILING SYSTEMS, DOORS, AND WINDOW FRAMES.

Description:

This is a structured career path where the employee is given a list of training and tasks to be done, along with the competencies for each item. A qualified coach or supervisor has the same list as the employee and guides the employee through completion of the items. Completion consists of the employee obtaining the required competencies. When the training or task has been completed the supervisor signs off of the item. When all items have been signed off the employee is considered trained. At the completion of the required training, the employee will participate in the certification process with the goal of achieving NCCER mechanic certification.



MAREK WORKFORCE DEVELOPMENT Career Path Manual for

Drywall Mechanics V4 Ceiling Systems Included

Intent

The intent of this program is to accelerate the proficiency of employees in becoming safe, productive, and qualified mechanics, to provide coaching on tasks deemed critical to the trade, to provide direction and guidance to employees in determining their career goals, and to provide a means to evaluate employees for the purpose of identifying potential future leaders.

Guidelines for Administering the Mechanic Career Path Program

Coaching and Administration:

- All coaches will be selected at the branch level and complete the OJT Coaching Qualification Training Course if they have not already done so.
- Branches will utilize this manual for administering training and OJT coaching. The training coordinator is responsible for ensuring that the branch is utilizing the most current version of this manual.
- OJT training coaches will provide instruction for each task and observe the employee during performance of tasks. The foreman or other supervisor will evaluate the employee on his/her proficiency. The employee must display proficiency in all evaluation items to be checked off any task. At the mechanic level, proficiency means that the employee can performs the task(s) without supervision and to the highest standard of quality and production. Evaluating production should be done over time to ensure that the employee is performing at the expected production level on a consistent basis. Production standards will be set at the branch level.
- Employees will receive a Marek wallet card indicating what task they are qualified to perform.
- Employees who obtain NCCER certification will receive NCCER credentials.
- Each branch will be responsible for providing classroom/lab opportunities to their employees. These labs can have a variety of delivery options, including on the jobsite, but the content and evaluation items must maintain the standards set by the program.

- The optional specialty items listed in this manual are intended to provide additional training for employees who show aptitude in these areas, or when the branch strategically determines a need for employees who can perform these tasks.
- Employee's trained in specialty crafts will receive credentials on their Marek WFD Card.
- Any proposed changes to the content of this program are to be reported to the director of workforce development for dissemination by the subject matter expert (SME) group for approval and revision of the manual. (The changes you will want to make will either be an improvement all branches should make, or not really an improvement at all.)
- Each branch will be responsible for the following:
 - o Recording and maintaining accurate training records.
 - Providing incentives, recognition and rewards for the Workforce Development (WFD) team and employees engaged in the program.
 - Provide yearly recognition of employees who have graduated from the program and received certified status.

Employee responsibilities in the program:

- The employee will progress through the training and task list according to personal aptitude; therefore, may complete the course well before or after targeted completion date.
- The program, designed to be eighteen (18) months will include:
 - Twenty (20) hours of lab/classroom activity to be scheduled by Training Coordinator.
 - Remaining time in the program should be spent improving productivity and proficiency of task listed in the OJT training section of this manual.
 - Monthly evaluations of the employee's performance and productivity should be submitted to the head coach or training coordinator.
 - These evaluations should be incorporated into yearly performance evaluation process.
- The employee will be provided a copy of the manual to offer clear expectations and a deeper understanding of the program content. The supervisor or head coach should mark completions not only in his own records, but also in the employee's manual so he can chart his own progress.

- The employee should be informed that the Mechanic Career Path Program is a privilege and a fast track to moving up with Marek. An employee not meeting attendance, productivity, or attitude expectations should be removed from the program.
- The Mechanic Career Path Program will allow for test out for those employees who are designated a journeyman, and have previous work experience. Test out requires the OJT head coach and the employee's foreman to review the training task list and both sign off stating that the employee is proficient in this task. Test out of labs/classroom will include a written exam.

Drywall/Acoustical Mechanic Career Path – 18 Months V4 Ceiling Systems Included Page Task **Prerequisites** 8 **OJT Helper Program** Referral by Foreman 8 **Basic Communication** 8 Labs/Classroom MBS-ECO101 Economics of the Job 9 MBS-BM101 Basic Construction Math 9 10 MBS-BP101 Intro To Construction Drawings and Layout for the Drywall Mechanic 11 MBS-BP201 Advanced Construction Drawings and Specifications (Optional) 12 OJT Training 13 DW-MQ-01 Interior and Exterior Framing Mechanic Qualified DW-MQ-02 Under Grid Head Track Mechanic Qualified 14 14 DW-MQ-03 Drywall Ceilings and Furdowns Mechanic Qualified DW-MQ-04 Shaft Wall Mechanic Qualified 15 DW-MQ-05 Wall Systems Mechanic Qualified 17 19 DW-MQ-08 Basic Doors and Hardware Mechanic Qualified 20 DW-MQ-09 Basic Drywall Layout (Detail Drawing) Mechanic Qualified DW-MQ-10 Basic Drywall Aluminum Products Mechanic Qualified 22 CE-MQ-12 Ceiling Layout and Construction Documents Mechanic Qualified 24 24 CE-MQ-13 Install Ceiling Wires Mechanic Qualified 25 CE-MQ-14 Install Wall Angle Mechanic Qualified CE-MQ-15 Install Ceiling Grid Mechanic Qualified 25 26 CE-MQ-16 Install Ceiling Tike Mechanic Qualified 26 CE-MQ-17 Install Ceiling Aluminum Products Mechanic Qualified 27 CE-MQ-18 Install Wall Panels Mechanic Qualified Page Advanced and Specialty Tasks

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Mechanic Prerequisites

Successful Completion of the OJT Helper Program

The progress from helper to mechanic involves having a good foundation of knowledge and skill. The OJT Helper Program prepares new employees to become a productive, valuable part of the Marek team. In order to enter the Mechanic Career Path Program, an employee must successfully complete the OJT Helper Program, or have been tested out of the program. NOTE: Employees who enter by the test out process will be assigned a coach to complete any deficiencies in his check list.

Recommendation by a Supervisor/Foreman

Whether the employee is a graduate from the OJT Helper Program, or an employee who has exhibited the safety, production, and leadership standards of our company, employees entering into the Mechanic Career Path Program should be evaluated and recommended by a supervisor.

☐ Basic Communication

The Marek Family of Companies has always understood their value to the customer is their ability to provide quality workmanship and professional construction management. The ability to communicate on the job is crucial to our ability to compete in today's market. Employees who enter the Mechanic Career Path Program must be able to:

- 1. Answer basic questions in English.
- 2. Give and receive directions on work activities in English. Employees recommended for the Mechanic Career Path Program not meeting these criteria shall sign an agreement committing to participate in free ESL classes.

LABS and CLASSROOMS

MBS-ECO101

Economics of the Job LAB: 2 Hour or Test OUT



It is important for all employees to understand the business economics of the commercial construction industry and his role in ensuring our ability to meet our commitment to our customers to provide the most cost effective and safe project completions.

Employees enrolled into the Mechanic Career Path will complete the required lab on the following concepts to show competency:

- 1. Explain the labor code system.
- 2. Explain what is meant by production goals.
- 3. Explain how the labor budget affects the project.
- 4. Explain the structure of the commercial sub-contractor industry and the role of the: Owner/Developer, Tenant, Architect and Engineer, Construction Manager/General Contractor, and the Subcontractor.

MBS-BM101

Basic Construction Math

LAB: 6 Hours or Test Out



The ability of the mechanic to successfully perform the required tasks will depend a great deal on his/her ability to perform basic calculations related to the construction industry.

Employees enrolled into the Mechanic Career Path Program will complete the required lab or test out utilizing the written exam.

The concepts required to show competency include:

- 1. Add, subtract, multiply, and divide whole numbers and fractions with and without a calculator.
- 2. Use a standard ruler.
- 3. Recognize basic shapes used in the construction industry, and apply basic geometry to measure them.

MBS-BP101

Introduction to Drywall Construction Drawings and Layout Lab 6 Hours



The ability for a mechanic to evaluate a task and identify any issues before beginning his work will dramatically decrease rework. The mechanic who has a basic understanding of construction drawings and the layout process will make a more productive mechanic.

Employees who enter the Mechanic Career Path Program will complete the required lab on the following concepts required to show competency:

- 1. Identify the basic key abbreviations, and other references contained in a set of commercials drawings.
- 2. Identify and document specific items from a door and window schedule.
- 3. Explain basic construction details and concepts employed in commercial construction.
- 4. Accurately transfer information from basic construction drawings (enlarge drawings, detailed drawings, 8 ½ by 11) to the floor or ceiling.
- 6. Understand partition schedules and how they apply to the layout process.
- 7. Explain the following terms:
 - Over/under (outside/inside)
 - Inside/inside
 - Center/center
 - Control lines
 - Grid lines
 - O/S lines
- 8. Show basic geometry in techniques to create:
 - Perpendicular walls
 - Angle walls
 - Radius walls
 - Compound radius walls

MBS-BP201

Advanced Construction Drawings and Specifications **30 Hours Classroom** (optional)



TEXT:

Advanced Construction Drawings and Specifications (Student Guide), 1 Set of Blueprints, set of multi colored highlighters, construction calculator **DISCRIPTION:**

This course will give practical knowledge and hands-on experience with blueprints; schedules, shop drawings, and specifications. The course consists of 10 - 3 hour sessions. Attendance is a must.

This course designed is for drywall carpenters on the Leadman or Foreman career path.

PREREQUISITES: BM101-Basic Construction Math and BP101-Introduction to Construction Drawings and Layout.

OBJECTIVES OF THE CLASS:

- 1. Define the terms used in construction.
- 2. Explain and recognize blueprint symbols.
- 3. Explain organization of the specification book.
- 4. Recognize and interpret different types of construction drawings.
- 5. Recognize and interpret different blueprint details.
- 6. Interpret finish schedules
- 7. Understand addenda

EVALUATION:

The student must show the ability to read and understand Blueprints, Specification Books, Schedules, and Shop Drawings. They will be evaluated in class participation, and the ability to move through a set of construction documents, and pass a final exam.

FINAL EXAMINATION:

A minimum grade of 80% is required for a successful completion.



OJT Training Activities Safety, Quality and Production Goals

The employee enrolled in the Mechanic Career Path Program will now be expected to meet all standards of safety, quality and production and will, if not already, quickly be the lead in a two man crew. Employees will be evaluated on a monthly basis by their supervisor to ensure that he/she is meeting the standards set. Employee should be evaluated for the concepts listed and the OJT task standards.



DRYWALL FRAMING

At this point the employee should have a good working knowledge of the task of framing. The following safety points should always be observed while performing framing tasks.

Safety

- Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, protective sleeves, and gloves. Wear Personal Fall Arrest System when applicable. (i.e., perimeters, shaft wall, stairwell, atriums, floor openings) Verify completion of training and level of skill: *SF-BSO Basic Safety Orientation *SF-MET-1 Elevating Work Platforms MBS-SF Proper Use of Scaffolding o MBS-LAD Proper Use of Ladders *SF-MET-4 Stilt Certification *SF-MET-3 Powder Actuated Tool Certification MBS-LAT Laser Awareness Training o MBS CS Proper Use of Chop Saw * Verify with Safety Department
- Perform inspection of abrasive saw (chop saw):
 - No nicks in cord:
 - Blade is in good condition;
 - Vise is working properly, and blade guard moves freely. NEVER DISABLE THE GUARD.

TASK: DW-MQ-01 Interior and Exterior Framing Mechanic Qualified



Evaluation items:	
Safet	y:
Checl	c Drywall Framing Safety List
	Corners and intersections are correct. Track is on the correct side of the line. Anchors are secured properly. If required, clips are installed and located correctly. Stud spacing per specs or structural drawings. Track and studs are plumb. Correct gauge. Channel of stud faces direction of start of layout. Correct header installed. Interior top track production: 175 linear ft. in an 8Hr. day (per man) or job specific production. Exterior top track production: 100 linear ft. in an 8 Hr. day (per man) or job specific production. Interior bottom track and stud production: 150 linear ft. in an 8Hr. day (per man), or job specific production requirements. Exterior bottom track and stud production: 30 linear ft. in an 8Hr. day. (per man), or job specific production requirements.

TASK: DW-MQ-02 Under Grid Head Track Mechanic Qualified



	Evaluation items:	
Safety: Check Drywall Framing Safety List		
Evalua	ation items:	
	Valls are square with grid. Iips are in place. rack is screwed to ceiling. oll pins are used. roper plastic spacers are used. orners are 45°, 90's are mitered correctly. orrect color and type of head track. roduction: 300ft. in an 8 hour day (per man) or job specific production.	
	DW-MQ-03 Drywall Ceilings and Furdowns Mechanic Qualified	
Install		
Evalua Safety	Drywall Ceilings and Furdowns Mechanic Qualified IIII	

TASK; DW-MQ-04 Shaft Wall Mechanic Qualified



Evaluation items:

Lva	Lvaluation items.	
Safe Chec	ety: ek Drywall Framing Safety List	
Tasl	K :	
	Walls are plumb, level, and square. Shaft wall system is installed per UL Specs. J-Track installed correctly and shaft wall studs installed with liner to the back. Joints are staggered in 3rds over 16ft. The long side of the J-Track is toward the inside of the shaft. Screw spacing 12 in. on center on J-Track. Joints are caulked, if required. Production: 50-60 linear ft. in an 8 hour day or job specific production requirements.	



DRYWALL INSTALLATION

At this point the employee should have a good understanding of various wall systems and installation methods. The following safety points should always be observed while performing drywall installation tasks.

Safety:

Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, half face filtering face piece, protective sleeves, and gloves.
Wear Personal Fall Arrest System when applicable. (i.e., perimeters, shaft wall, stairwell, atriums, floor openings)
Verify completion of training and level of skill: • *SF-BSO Basic Safety Orientation

- *SF-MET-1 Elevating Work Platforms
- *SF-MET-4 Stilt Certification
- MBS-LAD Proper Use of Ladders
- MBS-SF Proper Use of Scaffolding
- DW-K-1 Material Handling
- MBS-SG Demonstrate Use of Screw Gun

^{*}Verify with Safety Department

TASK: DW-MQ-05

Wall Systems Mechanic Qualified



Non-rated, Rated Wall (smoke or fire)

Evaluation items:	
Safety:	Safe
Check Drywall Installation Safety List	Chec
Гаsk:	Tasl
Walls are plumb, level, and square Per UL specs Screws are set, but not breaking through paper. Wallboard is attached to the bottom track. Joints are tight and staggered. Screw spacing 8" on joint; 12" on center; or per specs. Drywall is ½" off sub straight. Factory butt joints are together. ¾" gap at control joint. Drywall is cut tight around penetrations. Clean cut edge. Spacers are removed. Hollow metal door jambs are plumb with proper rating. Aluminum door jamb conditions: check door opening width. Good use of materials; no waste. No rips of drywall less than 6" at the start of the end of the wall. Wall is caulked at head and base. Production: 60 sheets in an 8 Hr. day; 15 sheets on top out or job specific production requirements.	

Low Wall

TASK: DW-MQ-08

Basic Doors and Hardware



Evaluation Objective: The employee will demonstrate the ability to install basic door hardware (Hinges, locksets, standard closures, and door stops) in pre-prepped doors to the specifications and standards of the manufacturer and install them in the proper opening,

Conditions:

Given the following conditions, information, tools, and materials:

- Door and hardware schedule
- Finish schedule
- Clean area
- Prints and specs
- Cordless drill and bits(3# tips)
- Rubber tip clamps
- Ladder
- Door dolly
- 3/8 and 1/2 Drills
- Belt Sander
- Skill saw

- Allen wrench set
- Rubber mallet
- Center punch
- Wood files
- Rubber tip clamps
- Cut off guide
- PPE
- Door jack (stand)
- Die grinder
- Laminate scribe
- Rotor hammer

Evaluation Items: Safety:

Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, half face filtering face piece, protective sleeves, and gloves.
Verify completion of training and level of skill::

- *SF-BSO Basic Safety Orientation
 - *SF-MET-4 Stilt Certification
 - MBS-LAD Proper Use of Ladders
 - MBS-PTW Power Tool Workshop
 - MBS-SG Demonstrate Use of Screw Gun

Basic Doors and Hardware continued on next page

^{*}Verify with Safety Department

Basic Doors and Hardware continued

Evaluation items: Task:
Read and interpret door schedule Size the slab: undercut the door
Swing the door in the frame-(plumb, level, and square, with even reveal
around the door edge)
☐ Install hardware and adjust
Door and hardware function correctly
☐ No visible damage.
Work meets the standards of manufacturer
Production: 8 Doors in an 8Hr. day or job specific production
requirements.

TASK: DW-MQ-09

Basic Drywall Layout (Detailed Drawing) Mechanic Qualified



Evaluation Objective:

The employee will demonstrate the ability to accurately transfer information from a Detail Drawing (8 $\frac{1}{2}$ x 11) to the floor or ceiling.

Conditions:

Given the following conditions, information, tools, and materials:

- Clean work area
- Contract documents
- Control lines and benchmark
- Broom
- Plumb bob and chalk
- Calculator
- Pencil

- Tape measure
- Square
- Knife
- Laser and signs
- Clear spray
- PPE- Hard hat, safety glasses, Fall protection, kneepads

Basic Drywall Layout continued on next page

Basic Drywall Layout continued

Evalu Safe	uation Items: ty:
	Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, half face filtering face piece, knee pads, protective sleeves, and gloves.
	Wear Personal Fall Arrest System when applicable. (i.e., perimeters,
	shaft wall, stairwell, atriums, floor openings)
	Verify completion of training and level of skill::*SF-BSO Basic Safety Orientation
	*SF-MET-1 Elevating Work Platforms
	*SF-MET-4 Stilt Certification
	MBS-LAD Proper Use of Ladders
	MBS-SF Proper Use of Scaffolding MBS BTM Power Tool Workshop
	MBS-PTW Power Tool WorkshopMBS-LAT Laser Awareness Training
*Veri	fy with Safety Department
T A C I	7 .
TASI	\:
	nes are clearly marked; including furdowns, windows and doors,
	s per construction drawings.
	all, door, and window openings are labeled on the floor. orrect wall type and materials identified.
	erify accuracy of control line and benchmark.

TASK: DW-MQ-10 Basic Aluminum Products Mechanic Qualified



Evaluation Objective: The employee will demonstrate the ability to install aluminum products to manufacturer's specifications and standards.

Conditions:

Given the following conditions, information, tools, and materials:

- Construction drawings
- RFI's
- Manufacturer's cut sheets
- 12" miter saw
- Chop saw
- Grip clamps
- Laser and signs
- Spray glue
- Screw driver
- Small pliers
- Vice grips

- Staple gun/staples
- Framer and sheetrock screws
- Rubber mallet
- Measuring tape
- Tin snips
- Utility knife
- Level
- Square
- Ladder/Scaffold
- PPE

Evaluation Items:

Safety:	
---------	--

Wear required PPE; hard hat, safety glasses, face shield/goggles,
hearing protection, protective sleeves, and gloves.
Wear Personal Fall Arrest System when applicable. (i.e., perimeters
shaft wall, stairwell, atriums, floor openings)
Verify completion of training and level of skill:
*OF DOO Deals Cafety Orientation

- *SF-BSO Basic Safety Orientation
- *SF-MET-1 Elevating Work Platforms
- MBS-SF Proper Use of Scaffolding
- MBS-LAD Proper Use of Ladders
- *SF-MET-4 Stilt Certification
- *SF-MET-3 Powder Actuated Tool Certification
- o MBS-LAT Laser Awareness Training
- MBS CS Proper Use of Chop Saw
- * Verify with Safety Department

Basic Aluminum Products continued on next page

Basic Aluminum Products continued

Evaluation Items: Task:	
Joints are tight, installed without imperfections in material.	
Corners are tight corners	
Reveal openings per construction drawings.	
Material is level, square, and plumb.	
All pieces of installation match in color.	
Product is installed according to manufacturer's cut sheet.	
Confirm right material in the right area.	
Production: Door jambs: 45 minutes each. Windows: 60 minutes each.	
Reveals: 100 ft. in an 8 hour day or job specific production requirements.	



CEILING SYSTEMS

The mechanic is now expected to have a good working knowledge in installing ceiling systems to the standards of quality, production, and safety set by Marek. The following safety points should always be observed while performing ceiling tasks:

Safety

- Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, protective sleeves, and gloves.
 Wear Personal Fall Arrest System when applicable. (i.e., perimeters, shaft wall, stairwell, atriums, floor openings)
 Clean Work area, free of debris and broom swept
 Verify completion of training and level of skill:
 - *SF-BSO Basic Safety Orientation
 - *SF-MET-1 Elevating Work Platforms
 - MBS-SF Proper Use of Scaffolding
 - MBS-LAD Proper Use of Ladders
 - *SF-MET-4 Stilt Certification
 - *SF-MET-3 Powder Actuated Tool Certification
 - o MBS-LAT Laser Awareness Training
 - o MBS-PTW Power Tool Workshop

^{*} Verify with Safety Department

TASK: CE-MQ-12 Ceiling Layout and Construction Documents Mechanic Qualified



Evaluation items

Safety: See Ceiling Systems check list	
Task	Establish a level line using benchmarks and finish schedule Interpret Reflected Ceiling Plans (RCP) related to ceiling layout. Sketch a ceiling layout for a basic suspended ceiling. Perform a material takeoff for a suspended ceiling.
TASK: CE-MQ-13 Install Ceiling Wires Mechanic Qualified	
Evaluation items	
Safet See (y: Ceiling Systems check list
Task	Wires must be 6" off wall and spaced 4' on center on main tees or per prints and specifications Must be hanging in a straight line (not splayed) Obstructions are properly bridged. Length of wire should be correct per elevation. Production: 700 wires in an 8 hour day or job specific production requirements.

Install Wall Angle Mechanic Qualified



Evaluation items

Safety: See Ceiling Systems check list	
Task	:
	Corners are cut tight. Spacing between anchors is per specs. Wall angle should be installed at correct elevation per room finish schedule. No gaps or off sets at butt joints. Production: 600 ft. in an 8 hour day or job specific production requirements.
TASK: CE-MQ-15 Install Ceiling Grid Mechanic Qualified	
Evaluation items	
Safety: See Ceiling Systems check list	
Task	:
	Grid installed per Reflected Ceiling Plans and Finish Schedule Grid is secured to wires per specs and code Lights, grills, returns, and other ceiling equipment are framed in correct locations per drawings
	Grid is straight, level, and square. Production: 1,500 sq. ft. in an 8 hour day or job specific production requirements.



Install Ceiling Tiles Mechanic Qualified

Evaluation items	
Safety: See Ceiling Systems check list	
	k: Free of any blemishes, fingerprints or damage. Borders are neat, with no damaged tile. Tile is properly seated. Directional tile is installed accordingly. Makes smooth, clean cuts on tegular tile. Penetrations cut with no gaps. No broken, nicked, or soiled tiles. Production: 3,000 sq. ft. in an 8 hour day or job specific production requirements.
TASK: CE-MQ-17 Installation of Aluminum Products Mechanic Qualified	
Evaluation items	
Safety: See Ceiling Systems check list	
Task:	

Installation of Acoustical Wall Panels Mechanic Qualified



Systems and branding used in this task (not to exclude others)
Tectum©, Wall Technologies©, Decoustic©, MBI©, Conwed©, Soundsoak©,
and Contura©

and Contura©		
Evaluation items		
Safety: See Ceiling Systems check list		
Task:		
 Clips are installed to specifications. Panels are installed at locations and elevations on drawings and finish schedule. All panels are plumb and level. All joints are free of gaps or off-sets. Modified panels have clean, stretched fabric with tight tucks. Panels are free of any blemishes, fingerprints or damage. Production: job specific production requirements. 		



ADVANCED & SPECIALTY ITEMS

The drywall trade requires a specific number of employees who are able to perform tasks considered a specialty skill. For this purpose some employees will be trained on the job or in the classroom on these tasks. Training or coaching for these tasks requires a qualified coach or instructor that excels in those tasks.

TASK: DW-MQ-06
Advanced Construction Drawings and Layout
Mechanic Qualified



Evaluation Objective: The employee will demonstrate the ability to accurately transfer information from a complete set of construction drawings and documents to the floor or ceiling. He will be able to recognize deficiencies and breaks in the drawings and effectively communicate the issues to his/her supervisor so they may be resolved.

Conditions:

Given the following conditions, information, tools, and materials:

- Clean work area
- Contract documents
- Control lines and benchmark
- Broom
- Plumb bob and chalk
- Calculator
- Pencil
- Print table

- Tape measure
- Square
- Knife
- Laser
- Clear spray
- PPE- Hard hat, safety glasses, Fall protection, kneepads

Advanced Construction Drawings and Layout continued next page

Advanced Construction Drawings and Layout continued

Evaluation Items:	
Safety:	
 Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, knee pads, protective sleeves, and gloves. Wear Personal Fall Arrest System when applicable. (i.e., perimeters, shaft wall, stairwell, atriums, floor openings) Verify completion of training and level of skill: *SF-BSO Basic Safety Orientation *SF-MET-1 Elevating Work Platforms MBS-SF Proper Use of Scaffolding MBS-LAD Proper Use of Ladders MBS-LAT Laser Awareness Training * Verify with Safety Department 	
Task:	
Is able to navigate through a complete set of construction documents (detailed drawings, enlarged drawings, elevations, and schedules) to accurately layout a project. Verifies accuracy of control lines and benchmarks Uses a system that flows from one side of project to the other Lines are clearly marked; including furdowns, windows and doors. Wall, door, and window openings are labeled on the floor per schedule Correct wall type and materials identified. No leave outs Recognizes breaks and deficiencies in the documents and notifies supervisor. Job specific production requirement	
obs opening production requirement	

TASK: DW-MQ-07 Advanced Aluminum Products Mechanic Qualified



Evaluation Objective: The employee will demonstrate the ability to install advanced aluminum products (doors with sidelights, clearstories, multi light windows, and reveals with intersections) to manufacturer's specifications and standards.

Conditions:

Given the following conditions, information, tools, and materials:

- Construction drawings
- RFI's
- Manufacturer's cut sheets
- 12" miter saw
- Chop saw
- Grip clamps
- Laser and signs
- Spray glue
- Screw driver
- Small pliers
- Vice grips

- Staple gun/staples
- Framer and sheetrock screws
- Rubber mallet
- Measuring tape
- Tin snips
- Utility knife
- Level
- Square
- Ladder/Scaffold
- PPE

Evaluation Items:

Safety:

Wear required PPE; hard hat, safety glasses, face shield/goggles,
hearing protection, knee pads, protective sleeves, and gloves.
Wear Personal Fall Arrest System when applicable. (i.e., perimeters
shaft wall, stairwell, atriums, floor openings)
Verify completion of training and level of skill:

- *SF-BSO Basic Safety Orientation
- *SF-MET-1 Elevating Work Platforms
- MBS-SF Proper Use of Scaffolding
- o MBS-LAD Proper Use of Ladders
- o MBS-PTW Power Tool Workshop
- MBS-LAT Laser Awareness Training
- * Verify with Safety Department

Advanced Aluminum Products continued on next page

Advanced Aluminum Products continued

Evaluation Items:

Ta	Task:	
	Joints are tight, installed without imperfections in material.	
	Corners are tight corners	
	Reveal openings per construction drawings.	
	Material is level, square, and plumb.	
	All pieces of installation match in color.	
	Product is installed according to manufacturer's cut sheet.	
	Confirm right material in the right area.	
	Production: Door jambs: 45 minutes each. Windows: 60 minutes each.	
Re	veals: 100 ft, in an 8 Hr, day or job specific production requirements	

Task: DW-MQ-11

Advanced Doors and Hardware Mechanic Qualified



Evaluation Objective: The employee will demonstrate the ability to prep slabs and install doors and hardware to the specifications and standards of the manufacturer.

Conditions:

Given the following conditions, information, tools, and materials:

- Door and hardware schedule
- Finish schedule
- Clean area
- Prints and specs
- Skill saw
- Cordless drill and bits(3# tips)
- Rubber tip clamps
- Hole saw set
- Ladder
- Door dollv
- Corner chisel
- 3/8 and 1/2 Drills
- Electric Planer
- Belt Sander
- Die grinder

- Allen wrench set
- Rubber mallet
- Center punch
- Wood files
- Wood chisel
- Router
- Rotor hammer
- Cut off guide
- PPE
- Door jack (stand)
- Full mortise machine
- Butt template
- · Cylindrical lockset boring kit
- Laminate scribe

Advanced Doors and Hardware continued next page

Advanced Doors and Hardware continued

Evaluation Items:	
Sa	ifety:
*V	 Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, half face filtering face piece, protective sleeves, and gloves. Verify completion of training and level of skill: *SF-BSO Basic Safety Orientation *SF-MET-4 Stilt Certification MBS-LAD Proper Use of Ladders MBS-PTW Power Tool Workshop MBS-SG Demonstrate Use of Screw Gun erify with Safety Department
Та	sk:
	Read and interpret door schedule Laminate the door Size the slab: undercut the door Mortise hinge pattern Operate the full mortis machine. Operate the full mortise machine Operate the cylindrical boring kit Swing the door in the frame-(plumb, level, and square, with even reveal
ard	ound the door edge) Install hardware and adjust Door and hardware function correctly ADA closures operate correctly. No visible damage. Panic hardware is installed and operates correctly.
	Work meets the standards of manufacturer Production: 8 Doors in an 8Hr. day or job specific production requirements.

TASK: DW-MQ-12 SPECIALTY GLASS FIBER REINFORCED GYPSUM (GFRG) MECHANIC QUALIFIED



Evaluation Objective: The employee will demonstrate the ability to use shop drawings, grid lines and benchmarks to prep and accurately install glass-fiber reinforced gypsum architectural pieces to the specifications and standards of the manufacturer.

Conditions:

Given the following conditions, information, tools, and materials:

- Manufacturer shop drawings
- Clean area
- Reciprocating Saw
- Circular saw
- Rotor hammer
- Cordless drill and bits
- Large clamps
- Laser with signs
- Level
- Lift
- Ladder
- Anchors
- Fasteners
- Blueprints and specifications

- PPE
- Prints and specifications
- Rubber mallet
- Belt Sander
- 3/8 and 1/2 Drills with bits
- Dolly
- Powder Actuated Tool
- Well pulley and ropes
- Die grinder
- Scaffold
- Clips
- Construction adhesive
- Belt straps
- String line

Evaluation Items:

Safety:

Wear required PPE; hard hat, safety glasses, face shield/goggles,
hearing protection, knee pads, protective sleeves, and gloves.
Wear Personal Fall Arrest System when applicable. (i.e., perimeters
shaft wall, stairwell, atriums, floor openings)
Verify completion of training and level of skill:

- *SF-BSO Basic Safety Orientation
- o *SF-MET-1 Elevating Work Platforms
- *SF-MET-3 Powder Actuated Tool Certification
- MBS-SF Proper Use of Scaffolding
- MBS-LAD Proper Use of Ladders
- o MBS-PTW Power Tool Workshop
- o MBS-LAT Laser Awareness Training
- * Verify with Safety Department

GFRG Mechanic Qualified continued on next page

GFRG Mechanic Qualified continued

	luation Items:
S S S S S S S S S S	Incrates GFRG materials without damage stores and protects uncrated/uninstalled GFRG materials in an upright tion on a flat, smooth, and level surface landles and installs GFRG material in a safe manner verifies all lines, marks, and grades prior to installation inspect all GFRG material prior to installation insures that substrate or structure is adequate to support material being alled installs GFRG materials plumb and level in accordance with shop wings, blueprints, and specifications accurately fits, aligns, securely fastens, and installs GFRG materials free a distortions or defects. Pre-drills all holes for fasteners to prevent cracking counter sinks for fastener heads (being careful not to penetrate glass).
-	ASK: DW-MQ-13 Advanced Bead Skills Mechanic Qualified
j-be prop proc	luation Objective: Employee will demonstrate installation of corner bead, ad, and I-bead including: measuring, cutting, and applying bead using per techniques, safe work practices, and proper tool and equipment redures on radiuses, multi-planed, and stair stepped applications. Iluation Items: Wear required PPE; hard hat, safety glasses, face shield/goggles, hearing protection, knee pads, protective sleeves, and gloves. Wear Personal Fall Arrest System when applicable. (i.e., perimeters, shaft wall, stairwell, atriums, floor openings)

	Verify completion of training and level of skill:
	 *SF-BSO Basic Safety Orientation
	 *SF-MET-1 Elevating Work Platforms
	 *SF-MET-3 Powder Actuated Tool Certification
	 MBS-SF Proper Use of Scaffolding
	 MBS-LAD Proper Use of Ladders
	 MBS-PTW Power Tool Workshop
	MBS-LAT Laser Awareness Training
	* Verify with Safety Department
	verny man carety Department
Eva	luation items:
Tas	k:
	Clean your area as you work and upon completion of work to prevent a
	slipping hazard.
	Select proper bead for location and length.
	Establish control lines - Checking substrate for straight line and correct
	problems.
	Install bead using correct application method; spray glue, screws,
	staple, or crimper.
	Install bead flush to substrate, ensuring plumb, level, square, correcting
	any substrate deviations.
	Ensure any reveal is at the end of bead, not in the middle.
	Ensure all planes of bead meet with no gaps and no overlaps
Ħ	Ensure radiuses are smooth with no variances
П	Ensure termination of bead overlaps substrate.
Ħ	In high traffic areas, screwed at bottom and mid-height.
Ħ	Production: job specific production requirements.

TASK: DW-MQ-14 Advanced Framing Skills Mechanic Qualified



Evaluation Objective: Employee should have a good working knowledge of the task of advanced framing tasks. He/she should be able to use floor plans, elevations, detailed drawings, and specifications to accurately frame stair stepped furdowns radiuses, compound radiuses, and complex angled shapes and features.

Evaluation items: Safety:	
	 Perform inspection of abrasive saw (chop saw): No nicks in cord; Blade is in good condition; Vise is working properly, and blade guard moves freely. NEVER DISABLE THE GUARD.

Advanced Framing Skills continued

Task: Corners and intersections are correct. Track is on the correct side of the line. Anchors are secured properly. If required, clips are installed and located correctly.
 Track is on the correct side of the line. Anchors are secured properly. If required, clips are installed and located correctly.
Stud spacing per specs or structural drawings. Radiuses are correct Stair stepped furdowns to correct level and plumb Track and studs are plumb. Correct gauge. Channel of stud faces direction of start of layout. Correct header installed. Furdown are braced

Production: job specific production requirements.

TASK: CE-MQ-19

Advanced Ceiling Grid and Tile Types Mechanic Qualified



Evaluation Objective: The employee will demonstrate the ability to use shop drawings, construction documents, grid lines and benchmarks to accurately install non typical ceilings, clouds, and features to the specifications and standards of the manufacturer, and architect.

Evaluation items

Safety:

See Ceiling Systems check list

Advanced Ceiling Grid and Tile Types continued on next page

Advanced Ceiling Grid and Tile Types continued

Evaluation items

ıask	:
	Grid is straight, level, and square.
	Grid is secured to wires.
	Lights, grills, returns, and other ceiling equipment are framed in correct locations per drawings
	Corners are cut tight.
	Spacing between anchors is per specs.
	Wall angle should be installed at correct elevation per room finish schedule.
	No gaps or off sets at butt joints.
П	Borders are neat, with no damaged tile.
	Tile is properly seated.
	Directional tile is installed accordingly.
	Cuts are smooth clean on tegular tile.
	Penetrations cut with no gaps.
	Production: job specific production requirements.



NCCER Assessment and Certification Program



The National Center for Construction Education and Research (NCCER) is an industry recognized education foundation whose mission is to develop a safe, productive workforce. NCCER provides a standardized credentialing process that evaluates and recognizes the skills and knowledge of an individual and provides a training prescription to guide future professional development.

Documentation of a craft professional's qualifications are tracked through the NCCER's National Registry. The program provides transcripts, certificates, and a wallet card indicating the craft professional's credentials.

Referral from a Supervisor

Employees who successfully complete all items on the check off list should be recommended by supervisor's referral to begin the assessment and certification process.

Preparation for Assessment

Employees who are referred by their supervisor to begin the certification process should start by preparing to sit for the National Center for Construction Education and Research (NCCER) Drywall Mechanic Assessment. Preparation can include regularly scheduled study halls, or could include self study.

NCCER Assessment

For specific policy and procedure for the NCCER Assessment process, contact the training coordinator. A brief overview of the process includes:

- 1. The employee is referred by a supervisor who feels he has the required knowledge and skill of the trade.
- 2. The employee goes through a period of preparation for the exam.
- 3. The training coordinator schedules his exam date and provides the employee with any necessary information regarding the assessment.
- 4. The employee sits for the assessment. He/she will usually receive the results of the assessment within 20 minutes. The training coordinator or proctor should council the employee on the assessment results and

- provide information on when the employee should receive his/her credentials or what the procedure is for addressing deficiencies and retaking the assessment.
- 5. Policies for re-taking an assessment are outlined in the NCCER Policy and Procedures manual. See your Training Coordinator for copies.



National Craft Assessment and Certification Program S P E C I F I C A T I O N S

Drywall Mechanic DRWM45

Overview

This written assessment is a two-hour closed-book examination. You will be permitted to use a basic function, non-printing calculator during the examination. The assessment center will provide any necessary pencils. No extra papers, books, notes or study material are allowed in the testing area.

Study Material

All NCCER written assessments are referenced to Contren® Learning Series modules listed in the content. You may order modules from Pearson (800.922.0579) or from NCCER's Online Catalog at www.nccer.org.

Assessment Development

All questions on each assessment have been developed and approved by subject matter experts from the respective craft. Assessment development and administration is under the direction of ProvTM, NCCER's testing partner.

Credentials

NCCER will send appropriate credentials (certificate, wallet card and official transcript) to the assessment center upon successful completion of the written assessment.

Training Prescription Reports

Each candidate will have access to individual results of the written assessment from Prov's website at www.provexam.com. This training prescription will include the overall score and results by topic area.

National Registry

Assessment results will be maintained in NCCER's National Registry and become a part of each candidate's training records. These records are stored and become a portable record of the candidate's training and assessment achievements.

Focus Statement

A journey-level Drywall Mechanic should be able to:

- Apply basic safety principles at all times
- Recognize the tools needed in the trade and their application
- Apply basic math operations for calculating areas and proper measurements
- Interpret commercial drawings and layouts
- Identify the proper procedures and materials for interior and exterior framing considering drawing specifications, wall openings, expansion joints and other key factors
- Identify the proper procedures and materials for installing shaftwall

- Apply the best practices for thermal moisture and protection, including the installation of batt and rigid installation and zee-furring
- Identify the appropriate finishing procedures for hanging sheetrock. This includes but is not limited to measuring and cutting sheetrock according to a wall's length and openings, determining the proper spacing, and applying the right caulk and trims necessary for the job.

Written Assessment Contents:

Module Number	Module Name	Number of Questions
00101-04	Basic Safety	10
00102-04	Introduction to Construction Math	4
00104-04	Introduction to Power Tools	8
45101-07	Orientation to the trade	4
45102-07	Construction materials and methods	4
45103-07	Thermal moisture and protection	4
45104-07	Drywall Installation	12
45105-07	Drywall Finishing	10
45201-09	Commercial Drawings	4
45202-09	Steel Framing	12
45203-09	Acoustical Ceilings	10
45204-09	Interior Specialties	4
45205-09	Exterior Cladding	4
Tot	al number of questions	90

The cut score for this assessment is 65%.

A Performance Verification is available.

Sample Score Report and Training Prescription

NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH 3600 NW 43rd St. Bldg G • Gainesville, FL 32606 • P 352.334.0911 • F 352.334.0932 •

Score Report





 Name:
 Test:
 Drywall Mechanic

 Sponsor:
 Date:
 Test ID:

 ID #:
 Test ID:

 Score:
 80
 Result:
 Pass

Unanswered Questions: (

Congratulations. You have successfully completed the written examination component of your NCCER Craft Certification. A minimum score of 65 was required to pass.

Below you will find a summary of your test performance in each of the major subject areas. Even though you were successful in completing your certification examination, we hope you will continue to improve your knowledge throughout your career. Your certification documents will be forwarded to the organization that administered this test and should be available within 4 to 6 weeks.

Module	Subject Area	LOW	Cut Score HIGH
00101-04	Basic Safety	***************************************	
00102-04	Introduction to Construction Math	*************	04/44/40A742/40404/40A74/40A44/40A444/40A444/40A44/40A44/40A44/40A44/40A44/40A44/40A44/40A44/40A44/40A44/40A44
00104-04	Introduction to Power Tools	***************************************	
45101-07	Orientation to the Trade		
45103-07	Thermal & Moisture Protection		
45102-07	Construction Materials & Methods	***************************************	
45104-07	Drywall Installation		
45203-09	Acoustical Ceilings	***************************************	
45202-09	Steel Framing	***************************************	44444444444444444444444444444444444444
45205-09	Exterior Cladding		\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
45204-09	Interior Specialities	******************************	**************************************
45201-07	Commercial Drawings	*************************	<u> </u>
45105-07	Drywall Finishing		

Training Prescription

Answer Sheet .

Report prepared for f

Sponsor Name Marek Brothers Systems, Inc

Assessment Drywall Mechanic

Result Pass

This Training prescription reflects the results you obtained for the NCCER Written Assessment on 06/02/2010, 80% is the overall score you obtained. While the overall score is very important, there is other information contained in this Training Prescription which is vital for continued growth in this craft / technical area.

As you review your personal Training Prescription, look at each Topic Area and the score you achieved in that area. If your personal score is less than the Cut Score for any Topic Area on this Written Assessment, you may want to consider some form of follow-up. Here is a list of these areas for potential follow-up:

Module Code

Module Name

% of Total Questions Missed on topics with Training Recommended status

45102-07

Construction Materials & Methods

45105-07

Drywall Finishing

As with all types of Assessments; this is just a sampling of your skills and knowledge. In other words, it is a snapshot, not a total picture. However, the Assessment is a valid tool to help determine where you should consider enhancing your background in identified Topic Areas. A few ways to strengthen your knowledge and skill in these areas include:

- On the Job Coaching: Work with someone on the job who has more experience in this particular area (such as your Supervisor).
- · Self Study: Order the NCCER Standardized Curriculum Module associated with the particular Topic Area and study on your own.
- Formal Training: Meet with your Supervisor or Assessment Center Representative and find a local site where you can enroll in classes that cover these Topic Areas using the NCCER Standardized Curriculum Modules.

NCCER and our Sponsors are committed to Workforce Development. You are a part of this workforce and your growth and development are important. Please consider taking the next step in continuing your professional growth by talking with your Supervisor or Assessment Center Representative.

Much Continued Success, Carla Sly. Assessment Program Manager, NCCER

Marek Certified Professional



Top 10 Reasons to Become a Marek Certified Professional

- 1. Certification grants you professional credentials.
- 2. Certification demonstrates your commitment to the industry.
- 3. Certification enhances the profession's image.
- 4. Certification reflects achievement.
- 5. Certification builds self-esteem.
- 6. Certification can improve career opportunities and advancement.
- 7. Certification may provide for greater earnings potential.
- 8. Certification improves skills and knowledge.
- 9. Certification prepares you for greater on-the-job responsibilities.
- 10. Certification offers greater recognition from peers.

The Marek Family of Companies has a long history of developing leaders and providing greater opportunities for those who exhibit the values that Marek represents.

This application is to help guide you through becoming recognized as a trained, qualified, and valuable member of the Marek team; a **Marek Certified Professional (MCP)**.

The process is not difficult for you, it involves verifying that you have met the criteria listed or have completed the required training or assessments.

Becoming a MCP is a sure way to get on the fast track to leadership positions within Marek. Our mechanics play a key role in the success of our company. Successful mechanics that achieve and retain MCP will receive an MCP benefits package in addition to the benefits already enjoyed. MCP mechanics receive top pay, experience more job security, and are recognized at company events and through the Marek Insights and WFD E-news.



FAQS (Frequently Asked Questions) for the Marek Certified Professional Program:

Q: What is the purpose of this certification program?

A: Marek has developed the Marek Certified Professional Program in order to identify and recognize our most skillful and productive mechanics and to provide a clear career path for those who wish to advance their careers.

Q: How do I find out if I qualify for the Marek Certified Professional Program?

A: Contact anyone in the Workforce Development Department (WFD), or talk to your foreman. The application will give you an idea of the criteria you must meet to become an MCP.

Q: What are the advantages for me to hold this certification?

A: Being identified as a Marek Certified Professional means that you have been trained and evaluated according to the highest standards. This group of craft professionals will enjoy guaranteed top pay, job security, and professional pride in the knowledge and skill you have achieved in your career.

Q: How long does it take to become a Marek Certified Professional?

A: To be eligible for the program, you must meet the work experience requirement. The length of time to process your application will depend on several factors, one of which will be a review of your Annual Performance Evaluation. If you have not been evaluated, an appointment will be scheduled with your foreman to meet with you. Some training courses are also required. If you have not completed these courses, your WFD training coordinator can schedule these for you.

Q: Is this certification a lifetime credential?

A: Each year during your Performance Evaluation, your MCP credential will be reviewed and if appropriate, renewed.



Mechanic Training Check-off Sheet

V4 Ceiling Systems Included

oyee

Employee:		 #:		

Instructions: The employee must have all items checked before his/her training will be considered complete. Coach/Supervisor Task/Course Date of **Description of Task/Knowledge/Training Employee Signature** Completion # **Signature OJT Helper Program** Referral by Foreman **Basic Communication** MBS-ECO101 Economics of the Job MBS-BM101 **Basic Construction Math MBS-BP101 Drywall Construction Drawings and Layout** Advanced Construction Drawings and Specification MBS-BP201 (optional) DW-MQ-01 Interior and Exterior Framing Mechanic Qualified DW-MQ-02 Under Grid Head Track Mechanic Qualified Install Drywall Ceilings and Furdowns Mechanic **DW-MQ-03** Qualified DW-MQ-04 Shaft Wall Mechanic Qualified

Employee checked off the following OJT Items must meet Mechanic Level Production and Quality Standards						
Task/Course #	Description of Task/Knowledge/Training	Date of Completion	Employee Signature	Coach/Supervisor Signature		
DW-MQ-05	Wall Systems Mechanic Qualified					
DW-MQ-08	Basic Door and Hardware Mechanic Qualified					
DW-MQ-09	Basic Drywall Layout (Detail Drawing) Mechanic Qualified					
DW-MQ-10	Basic Drywall Aluminum Products Mechanic Qualified					
CE-MQ-12	Ceiling Layout and Construction Documents Mechanic Qualified					
CE-MQ-13	Install Ceiling Wires Mechanic Qualified					
CE-MQ-14	Install Ceiling Wall Angle Mechanic Qualified					
CE-MQ-15	Install Ceiling Grid Mechanic Qualified					
CE-MQ-16	Install Ceiling Tiles Mechanic Qualified					
CE-MQ-17	Install Ceiling Aluminum Products Mechanic Qualified					
CE-MQ-18	Install Wall Panels Mechanic Qualified					
CERTIFIED	NCCER Certified Mechanic					
DW-MQ-06	Advanced Construction Drawings and Layout Mechanic Qualified (through the evaluation process)					
DW-MQ-07	Advanced Drywall Aluminum Products Mechanic Qualified (through the evaluation process)					

Task/Course #	Description of Task/Knowledge/Training	Date of Completion	Employee Signature	Coach/Supervisor Signature
DW-MQ-11	Advanced Doors and Hardware Mechanic Qualified (through the evaluation process)			
DW-MQ-12	Specialty Glass Fiber Reinforced Gypsum (GRG) Mechanic Qualified (through the evaluation process)			
CE-MQ-19	Advanced Ceiling Grid and Tile Mechanic Qualified (through the evaluation process)			