Labor and Education

Focused on training, education and outreach to help sustain the metal building industry

- Arnold Corbin, Metl-Span
- Sasha Demyan, MBCEA
- Tony Downs, Downs Construction
- Bryan Hargett, Paramount Metal Systems
- Jennifer Heimburger, Heimburger Construction
- John Iveson, Package Steel
- David Leinbach, Kaiser Martin Group
- Jackie Meiluta, MBCEA
- Tom Myers, Crossland Construction
- Gary Smith, Thomas Phoenix International
- Keith Wentworth, Dutton & Garfield

Committee

- Presentations to Schools and Potential Future Workers
- Construction Career Days
- Building Construction Technology Class
- Training Resources
- In-House Training
- Discussion / Q&A

Agenda

Presentations to Schools and Potential Future Workers

- Supply members with prepared, modifiable presentations and speaker notes
- Members and chapters pitch/deliver to elementary and middle school Career Days, Technical Schools and CTE programs
- Create excitement about opportunities in Metal Building Construction
- Highlight teamwork, high demand jobs, good pay, etc.
- Volunteer for an Advisory Board
- Offer to host a field trip or training session

FYI - MBMAmedia Youtube channel is also a great resource

Presentation Goals

- One is geared to young people to expose them to the potential of working in metal building construction
- One is geared to Educators to encourage them to develop a program
- The following slides are just a quick snapshot of the one to young people.
- Both will be available in the members only section of the website

Presentations







Construction Occupations

- Employment of construction and extraction occupations is projected to grow 11 percent from 2016 to 2026, faster than the average for all occupations, a gain of about 747,600 new jobs.
- The median annual wage for all construction and extraction occupations was \$46,010 in May 2018, which was higher than the median annual wage for all occupations of \$38,640.



Metal Building Erectors

 MBCEA members report starting rates of \$15/hour with general laborers quickly rising to \$20-\$24/hour

Annual salaries of \$42,000 to \$50,000 before overtime and benefits are typical.









Equipment, personal protective gear, computers, training, safety, and communication methods continue to evolve and

Still the same: A sense of accomplishment every day and the happiness of a good, weekly paycheck!



Each metal building job requires many roles, with a lot of cross training required. Each job is different Everyone has to work together as a team to.

Plan the work and stage and organize the tools, material and equipment.
Operating forblitts, manhifts and seissorshifts.
Run cranes.
Using a lot of different power tools.
Sheet metal work.

- Use a side of which work.
 Use a side of which we tasks might be filled by a different person; on smaller jobs, each team member, may need many skills to make it all happen.



8



Safety is a huge and necessary part of every job. Providing and installing the correct fall protection, barriers, wearing the right PPE, OSHA training, site specific safety training – all these come together to ensure you go home at night.



Inserting columns before picking roof sections







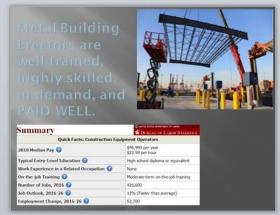


Some jobs require unconventional picking methods; many require use of drones and technology.











It's never too early to start doing what you love.



19



20

Construction Career Days

- A non-profit organization which brings students together with Construction & Transportation industries to explore career options through hands-on activities.
- States that have program AL, AZ, CO, CT, FL, GA, HI, KY, MI, MO, NE, NM, NV, NH, NY, OH, OR, Tri-state OH/KY/IN, TX, WA.
- In NH there were 53 participating schools and over 700 high schools students each day (totaling 1437)

Career Days

Promoting The Construction Industry

Construction Career Days





- Designed to inspire high school students toward construction careers
- Addresses the need to educate young people about the tremendous opportunities available in the construction industry.
- Students are given the opportunity to operate rigs, tools, and equipment under the guidance of operators and apprentices.





- Use of equipment and other materials are generously donated by local companies.
- Students can try their hand at activities such as laying mortar on brick, survey map reading, or running a crane simulator.
- Students are exposed to local educational programs, industry associations, apprenticeship training programs, etc.





- We plan to have VR set up at the booth to get the attention of the younger generation.
- We need suggestions for handson activities.
- Companies can sponsor and advertise in the booklet
- Chapters should participate.
- Great opportunity to reach
 1,000's of kids





What Carpenters Do

Carpenters are key to the success of a construction project. They **cut**, **shape**, **fit**, **and assemble** building materials to construct buildings, bridges, highways, docks, and industrial plants. Carpenters today build with wood, metal, concrete, plastics, composites of multiple materials, and more. Following blueprints, they **measure**, **lay out material**, **and then build** foundations, walls, floors, ceilings, and roofs. As a carpenter, you can specialize in areas like structural framework, concrete formwork, interior trim and cabinetry, commercial carpentry, and more. In this craft, you get to use cool power tools like pneumatic nail fasteners, power saws and drills, and laser leveling tools.

How Much Can I Earn?

As an entry-level apprentice or carpenter, you can start at \$31,110 per year. As you learn and increase your skill set, you can quickly advance to a median salary of \$45,400 per year. An experienced carpenter can make upwards of \$61,790 a year!

Carpentry



What Can I Expect from a Career in Carpentry?

Carpentry is challenging and satisfying work. No day is ever the same. Even the same job site is different each day. It can be physically challenging – there is lifting, climbing, and carrying involved. It is also mentally challenging – math, quick calculations, the ability to visualize, and the ability to make quick decisions are all part of the job. Someone who can do precise work and needs little supervision is a good candidate. Carpenters are in high demand for any given job. If you enjoy hands-on work, working outdoors, and seeing the results of your work, you can go far in this field.







NHCCD Program 2018

What Metal Building Erectors Do

Metal Buildings are hiding in plain sight! And we put them up. We erect and assemble metal building systems according to blueprint specifications and engineered drawings. We use hand tools, power tools, aerial lifts and hoisting equipment; assembling frames of buildings and lift them into the air; bolt steel frame members together; install bracing and insulating materials to framework; screw sheet metal roof and siding panels to framework; read blueprints to determine the location of items such as doors, windows, ventilators, and skylights and install items using, hand and power tools; trim excess sheet metal using power saws, power shears and tin snips; install corner, gable, rake, door and window trims; install gutters and downspouts; and are responsible for related clean-up and waste management.

In this craft, you get to use cool power tools and operate heavy equipment; you work on the ground and in the air. Erectors are highly trained, in demand, and well-paid. Plus we have a cool name!

How Much Can I Earn?

Most entry-level erectors start at \$31,200/year. As you learn and increase your skill set, you can quickly advance to a median salary of \$47,840 per year. An experienced erector can make upwards of \$75,000 a year!

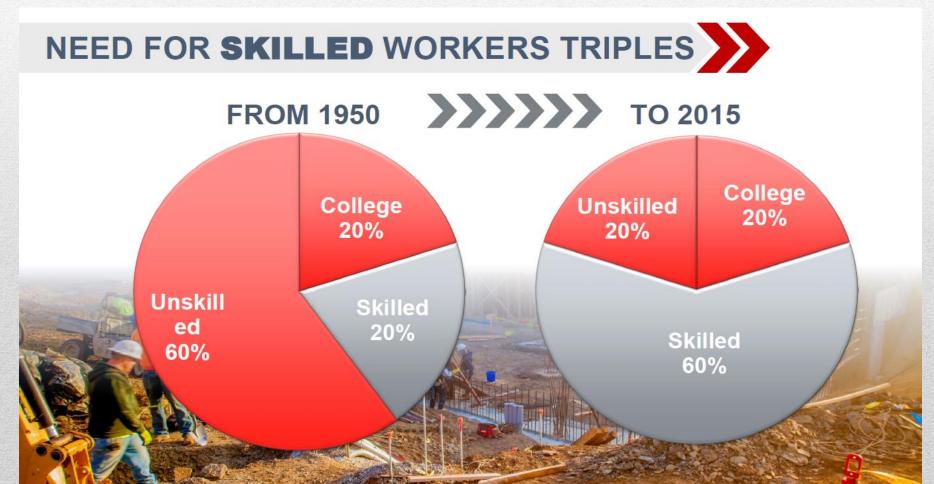
What Can I Expect from a Career in Metal Building Erection?

Metal Buildings are highly engineered and increasingly complex. Which means the work is challenging and highly satisfying. No building is ever the same. Even the same job site is different each day. It can be physically challenging – there is lifting, climbing, and carrying involved. It is also mentally challenging – math, quick calculations, the ability to visualize, and the ability to make quick decisions are all part of the job. Someone who can do precise work and needs little supervision is a good candidate. If you enjoy hands-on work on a team, working outdoors, and seeing the results of your efforts, this is an exciting career for you.

Building Construction Technology Class



We need the help of community colleges and technical schools to help us develop the next generation of workers.



Goal: capture Metal Building education in existing two year degree / 75 credit program

- We have identified a few schools with existing programs
- Other schools have broad/ general programs that might be willing to add focus on Metal Building Erection
- We have tools for the instructors
- Manufacturers donate material

Building Construction Technology Class



TECHNOLOGY prepares students to meet the specific needs of the construction industry. The program can be finished in as little as two years. As a graduate, you'll have core knowledge for commercial construction learned through hands-on experiences:

- Read prints and navigate specifications
- Estimate materials and labor
- Operate equipment
- Identify and understand safety regulations
- Understand the products and materials used in today's construction industry
- Learn the skills and knowledge to construct commercial structures
- Effective and efficient use of hand tools

SUPERVISED OCCUPATIONAL EXPERIENCE (SOE)

Students will gain college credits for two paid SOE's while working for our partnering commercial contractors. See our website for a list of the partnering contractors since it is subject to change to include new partners.

The first SOE will be the summer between the students first and second year of college. The second SOE will be six weeks during the fall semester. Money earned through these two work experiences can help to pay for college.

COMMERCIAL CONSTRUCTION

is what really sets our program apart.

Through the commercial aspect of the program, you'll work with concrete, masonry, wood, light steel framing, pre-engineered metal building systems and a multitude of commercial finishes.

PARTNERING COMMERCIAL CONTRACTORS

We have many contractors who value a degree in Building Construction Technology and are willing to partner with NDSCS to provide paid work experiences for our students and most contractors are also willing to sponsor students to go to NDSCS. Each sponsorship will be different depending on the contractor. Students are advised to contact the partnering commercial contractors directly and ask about job shadows and student sponsorships.

For a current list of Partnering Contractors see the Building Construction Technology web page.

ARE YOU READY TO GET YOUR HANDS DIRTY?

You'll be working on real projects in six lab classes:

- Concrete work
- Rough carpentry
- Exterior finishes
- Pre-engineered metal building erection
- Commercial interior finishes
- Other small building projects

WHAT YOU CAN EXPECT

- A nationally-recognized curriculum
- Focus on commercial construction
- Curriculum is based on National Center for Construction Education and Research (NCCER)

The NDSCS Building Construction Technology program is nationally recognized and has courses that are established and updated by industry professionals. Learn skills and apply knowledge that companies in the industry want and need!

BUILT BY STUDENTS

The NDSCS Building Construction Technology program takes on real world projects, such as the north side Wahpeton Fire Department building.



BUILDING CONSTRUCTION TECHNOLOGY + CONSTRUCTION MANAGEMENT TECHNOLOGY

Although 100% employable, after two years you have the option to return to NDSCS for a third year to earn a second major in Construction Management Technology. You'll be even more valuable, knowledgeable and employable.

WHAT CAN YOU DO WITH AN NDSCS BUILDING CONSTRUCTION TECHNOLOGY DEGREE?

- Construction Tradesman
- Construction Foreman
- Job Site Superintendent
- Field Engineer
- Project Manager
- Owner



GAIN INDUSTRY CERTIFICATIONS

- Occupational Safety & Health Administration (OSHA) 30-Hour Card
- First Aid & CPR Certification
- Skid Steer Familiarization Training
- Hilti Powder Actuated Tool Certification



100% PLACEMENT

Since 1997, every student who has completed this program has found employment or continued education for an advanced degree.

Many schools have expressed an interest in offering these type of courses:

- Southeast Kansas Career and Technical Education Center of Crawford County (CTEC).
- Fort Scott Community College, Miami Co. Campus, Paola, KS
- Coffeyville Community College Columbus, KS
- Cass Career Center, Harrisonville, MO
- Tulsa Tech Sand Springs Campus Sand Springs, OK
- Gordon Cooper Technology Center, Shawnee, OK
- Don Tyson School of Innovation (Springdale, AR)
- Har-Ber High School (Springdale, AR)

Fort Scott Community College Program of Study

Construction Trades

Associate of Applied Science

This program provides a hands-on approach to delivery of NCCER industry-developed curriculum. FSCC's construction program is an NCCER ATEF and allows a student to earn industry-recognized credentials at many levels in multiple trades. Through articulation agreements between area high schools, FSCC and Pittsburg State University, students are provided a seamless 2+2+2 path to pursue their educational goals. Students can earn an Associates of Applied Science in Construction Trades through a BAS degree at PSU without having to duplicate technical courses. To successfully complete the AAS program, the student will complete the technical Core classes, technical electives and the general education requirements as listed in this catalog.

In addition to a degree, students can earn industry recognized credentials in Safety, Carpentry, Masonry,

This course provides experience and knowledge of how to work with commercial construction materials. Methods of constructing engineered structures and steel construction including frame, roof, and exterior wall systems will be taught. Tools of the trade, framed openings, trims, wall and roof accessories will also be included. Equipment usage and safety will be emphasized.

OSHA 10 and other safety training will be included.

Course: Metal Building Erection

- Understand metal building terminology
- Correctly interpret blueprints and specifications
- Correctly interpret erection drawings
- Correctly "shake out" a building
- Layout and erect structural steel properly
- Demonstrate the basics of temporary bracing
- Properly install wall and roof sheathing
- Demonstrate the ability to manage a crew
- Demonstrate the ability to Quality Control others
- Demonstrate the ability to act as a Safety Coordinator
- Demonstrate the ability to organize and maintain tools and equipment
- Demonstrate the ability to properly use tools and equipment
- Properly don ALL Personal Protective Equipment
- Demonstrate the ability to work SAFELY AND aware of others at all times
- Demonstrate safe and organized demolition practices when applicable
- Learn, practice, and demonstrate leadership and problem solving techniques
- Demonstrate the ability to organize a jobsite efficiently
- Demonstrate the ability to document jobsite activities
- Hollow metal doors/ frame & hardware installation will be taught

Learning Objectives

- Quality and Craftsmanship Training Series by Metal Buildings Institute
- Pre-Engineered Systems by NCCER
- Building Erection Information provided by Building Manufacturer
- Building Plans and Specifications
 (All are provided in class.)

Textbook / Required Materials

- > Students are expected to show up **every day** on time, willing to learn and ask questions, and work as part of a team.
- ➤ Learn the basics of being an effective crew member
- Learn communication skills and safety awareness by practicing safety on an actual construction site
- Learn teamwork including effective communication within a crew
- > Follow direction
- ➤ Accurately track time for applicable building assemblies
- > Accurately record daily logs
- ➤ Record and reflect on daily problems or issues and their related outcomes
- > Assess areas of needed improvement

Expectations of the Student

Grading will be broken down by generalized tasks performed in lab associated with the project we are working on plus the following:

- Ability to accurately record daily logs and timesheets.
- Ability to effectively and efficiently work as a member of a crew.
- Ability to follow direction
- Reflection on daily problems and outcomes
- Ability to come prepared and on-time with appropriate PPE, tools, clothing, etc.

Grading

- Students will demonstrate knowledge of practices and procedures used in residential and light commercial construction.
- Students will demonstrate good verbal and written communication skills.
- Students will demonstrate the ability to lead and work as part of a team.
- Students will have comprehensive knowledge of construction safety practices.
- Take field trips to sites to see buildings going up.

Tie to Assessment Outcomes



METAL BUILDING MANUFACTURERS ASSOCIATION

1300 SUMNER AVE., CLEVELAND, OHIO 44115-2851 • (216) 241-7333 FAX (216) 241-0105 E-Mail: mbma@mbma.com • URL: www.mbma.com

General Manager-THOMAS ASSOCIATES, INC.

April 10, 2019

MBMA Bulletin No. 139-19 (E)

TO: AUTHORIZED REPRESENTATIVES

SUBJECT: Assistance with MBCEA Labor Development Initiatives

Our partners at the Metal Building Contractors and Erectors Association (MBCEA) have a Labor Development/Education Committee that is working hard to create relationships with technical schools and community colleges. Their goal is to introduce and support metal building erection training courses as part of those schools' Construction Course Programs.

The MBMA Board of Directors supports this initiative and encourages MBMA member companies to support it too. You can help by providing metal building materials as a donation or at a discount to schools with metal building erection training courses. Schools will reach out to MBMA member companies in their area directly to make requests for materials. There is no obligation for members to participate, but we think you will agree that labor development is one of the best investments metal building manufacturers can make in the MBS industry.

Please contact the MBMA office with any questions.

Manufacturers donate materials.

Local MBCEA contractors and erectors offer internships and jobs.

Suppliers provide insulation and tools.

Rental Equipment companies provide training and certification.

Sincerely,

Tony Bouquot

Training Resources

- MBCEA- Metal Building Contractors and Erectors Association
- MBMA Metal Building Manufacturers Association
- MBI Metal Buildings Institute
- NCCER National Center for Construction Education and Resource
- IAS- International Accreditation Services, specifically AC478 Accreditation
- Youtube Videos by Manufacturers
- Manufacturer/Supplier Installation videos

Training Resources

GOAL: To provide the trainer with tools to effectively communicate an idea or skill

- E Explain
- D Demonstrate
- G Guide
- E Enable
- Google EDGE training method

Trainers Edge

- Train the trainer designed to empower instructors and trainers
- Provide resources and hands on training that provides feedback
- Eliminate (or minimizes) Death by PowerPoint
- Learner is supported while they "fly solo" until they successfully demonstrate their ability to use their new knowledge

Trainers Edge

- New members are peer matched with a more experienced member
- Relationship can be as intense as you both choose
- Share and collaborate on best practice, templates, ways of working
- Some have shared crews or foreman to further enhance the experience
- Can be as simple as a sounding board for occasional questions or much more structured

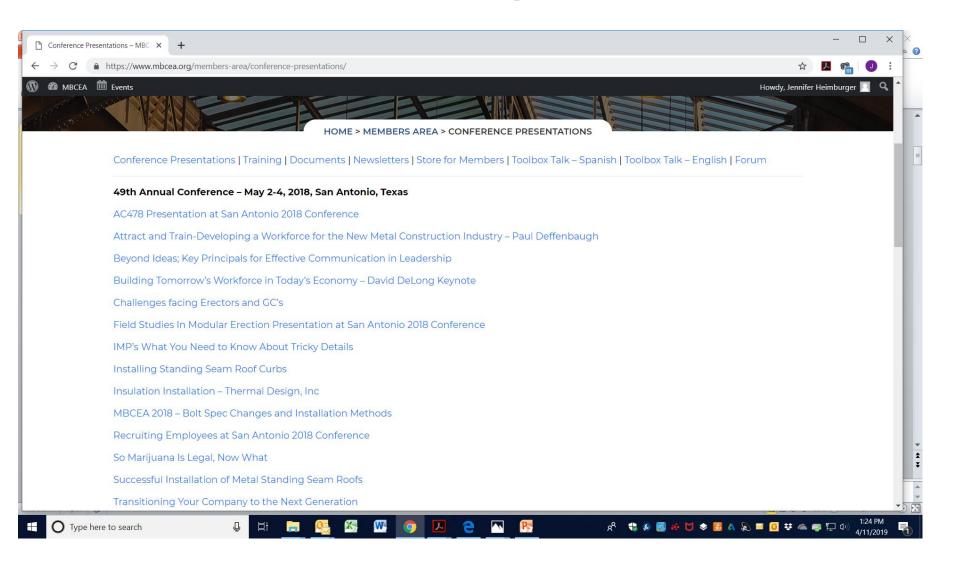
MBCEA Mentoring Program

- Mentors will be in the same type of business as those being mentored.
- Maximum mentoring commitment is two
 (2) years.
- Mentors will not be in the same geographic marketing area as those being mentored.
- Mentors agree to provide reasonable and pertinent information and assistance to those being mentored, but will not be expected to provide confidential, or proprietary information, assistance or data.
- Mentors may cease being such by providing thirty days notice to the MBCEA.

- My mentor will be in the same type of business as I am.
- Maximum mentoring commitment is two
 (2) years.
- My mentor will not be in my geographic marketing area.
- I understand my mentor will provide only reasonable and pertinent information and assistance.
- I agree to keep all information provided confidential.
- I understand that my mentor may cease being such by providing thirty days notice.
- I understand that MBCEA reserves the right to change or assign a new mentor at its discretion.

Mentor/Mentee Agreement

Information found on the "member" part of the MBCEA website



48th Annual Conference – May 18-20, 2017, New Orleans Marriott at the Convention Center, New Orleans, Louisiana

Inspecting Metal Building Systems – MBCEA 2017 New Orleans

Reroof Presentation PPT MBCEA 48th Annual Conference May 2017 update 4 05-17-17

Common Problems in Metal Bldg Assy Presentation

COMCheck and Metal Building Systems

New Energy Codes Presentation

OSHA Update Presentation

<u>47th Annual Conference – May 19-21, 2016, Sheraton Sand Key Resort, Clearwater Beach, Florida</u>

AIA – ATAS International, Inc Insulated Metal Panels Presentation

Contract Clauses that Kill

Defending OSHA Citations and Inspections Handouts

MBCEA – Certificate of Retraining Fall Protection

MBCEA – Certificate of Retraining Haz Comm

MBCEA – New Hire Checklist

MBCEA – Weekly Safety Meeting Checklist

MBCEA- Fall Protection Compliance Agreement

Document Your Project_ A guide to the why and how for field personnel

IMP Installation

Leading The Way_ Leadership skills for effective management

AC478

Introduction to the Assemblers Accreditation Program

MBCEA Management System

co handbook MR

IAS Requirements

Checklists/Forms

MB Systems Assembly Do's and Dont's

Acceptance of materials

BoomLiftInspection

Change Order

Damages

RiggingInspectionForm

RoughTerrainForkliftInspection

SITE INSPECTION CHECKLIST

MB Systems Assembly Checklist

Blank Change Order Log

Certification to begin steel erection

Damage Report

Job Close Out

Roof installation Checklist

ScissorLiftInspection

Initial Hire

DRUG TESTING POLICY

Physical test

Copy of Functional Lift Test

SCI Aptitude Test

New Hire Orientation Quiz

Project Planning Forms

Erector Specifications OSHA Site Layout – Column Anchorage

CriticalLiftPlan Dead Man Layout Erection Narrative HoursEvaluation Iowa_Rigging JobScheduleHours

LiftEvaluationForm ProjectPlan

QA_QC_Plan Rafter Bracing Plan

Site lay out1 Site lay out2

Site Specific Erection Plan for Placing of Construction Loads on Joists

TableOfContents – Job Site Folder

Reference Materials

OSHA 1926.752 – Site layout, site-specific erection plan and construction sequence

Turn of Nut Guide

OSHA Top 10 Most Frequently Cited Standards

Safety Templates

Metal Building Jobsite Safety Reference Guide – English

Metal Building Jobsite Safety Reference Guide Quiz - English

Metal Building Jobsite Safety Reference Guide Quiz Answer Key – English

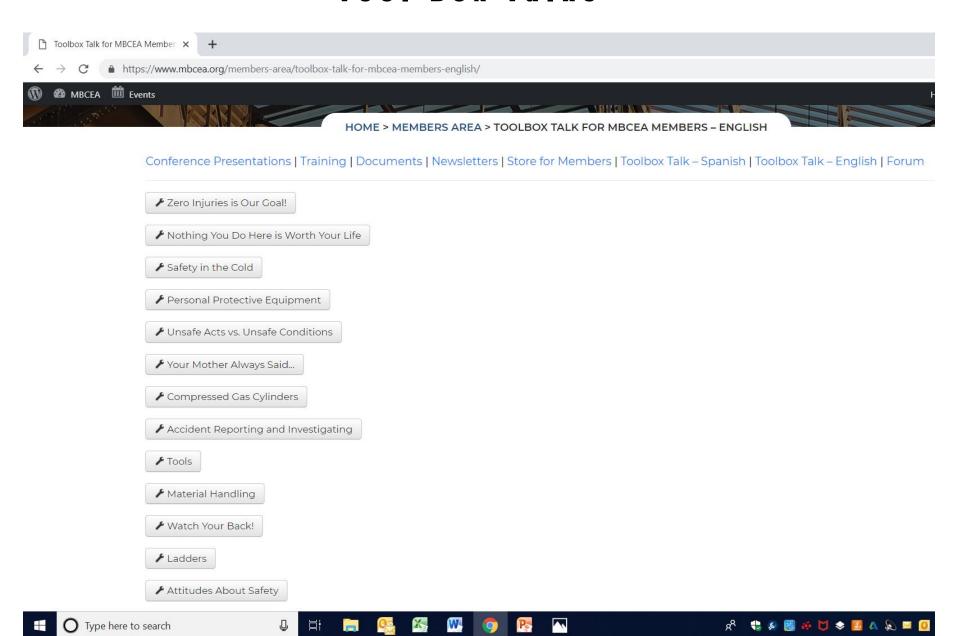
Metal Building Jobsite Safety Reference Guide – Spanish

AccidentNearMissReport CFI Iowa AHA's

CompetentSafetyPersonAssignment whs_construc-safe-plan_all Designation_Inspection_Qualification_Forms EmergencyEvacuationPlan

EmployeeSafetyAcknowledgement Fall Protection Plan

Tool Box Talks



www.iasonline.org



Back to All Resources

About IAS

Accreditation Programs

Training

News

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Accreditation Criteria for Metal Building Inspection Assemblers (AC478)

> International Accreditation Service, Inc. 3060 Saturn Street. Suite 100 Brea, CA 92821 USA t: 562,364,8201 f: 562.699.8031

Download Resource





























- ✓ Metal building assemblers accredited under these criteria shall establish, document and implement a training program that ensures a qualified labor force competent in techniques necessary to ensure the quality and integrity of assembled metal buildings.
- ✓ There must be a procedure ensuring the training of personnel who influence the quality of the finished assembly. And a procedure for maintaining current personnel qualifications
- ✓ Must have a procedure in place for new hires to ensure they are trained adequately for assigned tasks.
- ✓ Procedures for storing, maintaining and accessing training records and maintaining current personnel qualifications.
- ✓ As a minimum, there must be training requirements established for foremen, journeyworkers and apprentices regardless of whether or not there is a formal apprenticeship program in place.

Training required for AC478 Accreditation

Example of a Training SOP for AC478 Accreditation

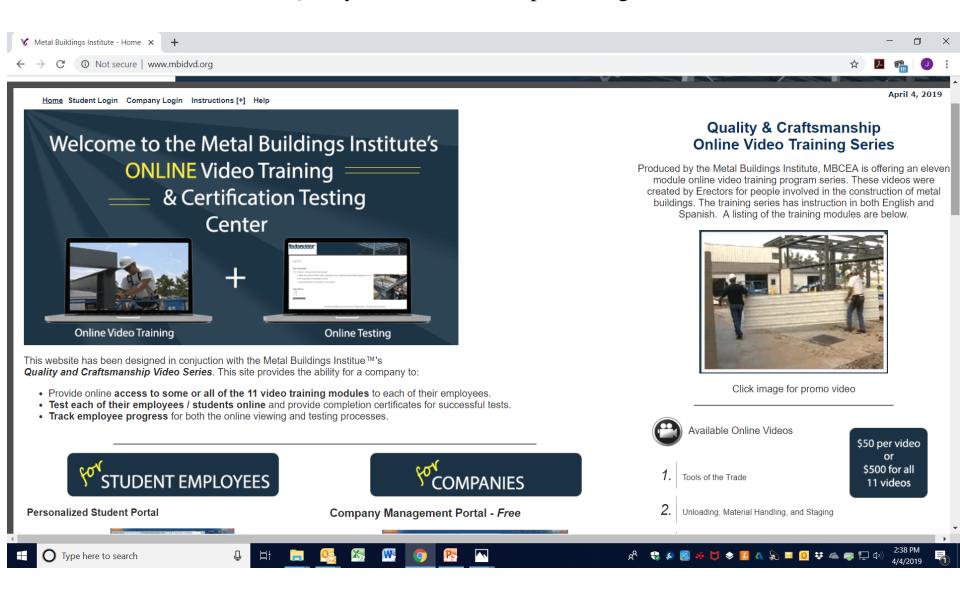
New Hires receive the following training upon satisfactory completion of probation and/or within their first six months of employment:

- Driving Safety
- Fall Protection
- Fall Hazards Safety
- Connector Safety
- ANSI Material Safety Data Sheet/Global Harmonized System
- Field Assembly Training
- Controlled Deck Safety Zone

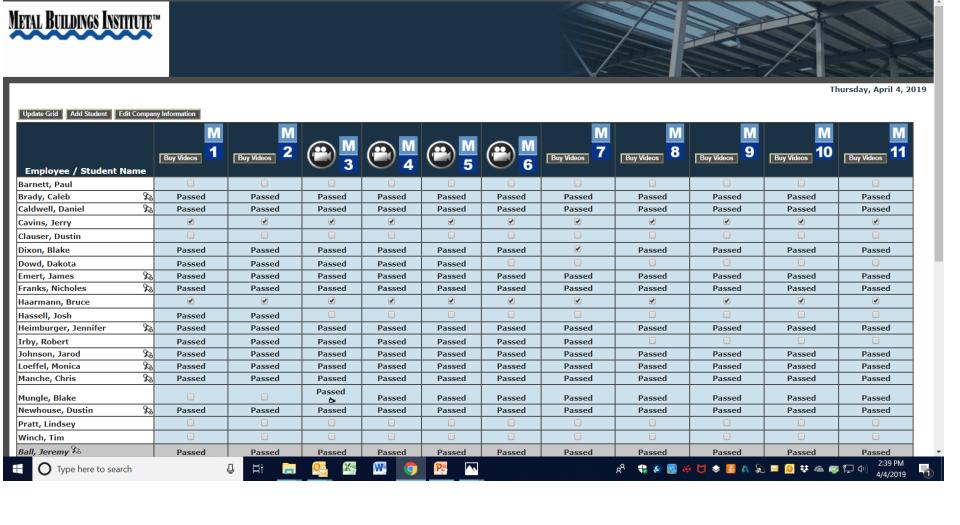
All field personnel are expected to satisfactorily complete the following training within their first year of service:

- MBI Quality and Craftsmanship Training series
- OSHA 10
- Crane Signal Person
- Rigging 1
- Cutting Torch and Hot Safety Work
- Rough Terrain Fork Lift Safety

MBI Quality and Craftsmanship Training Series

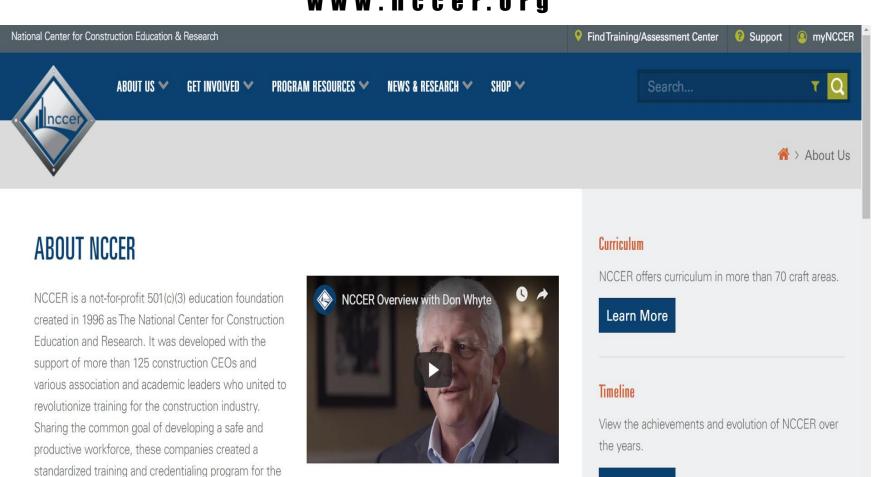


FYI – new website with expanded offerings coming soon



① Not secure | test.mbidvd.org/OnlineTesting/KeyMaintenance/Control.cfm?DBID=MBI&CFID=1827038&CFTOKEN=19775970

www.nccer.org



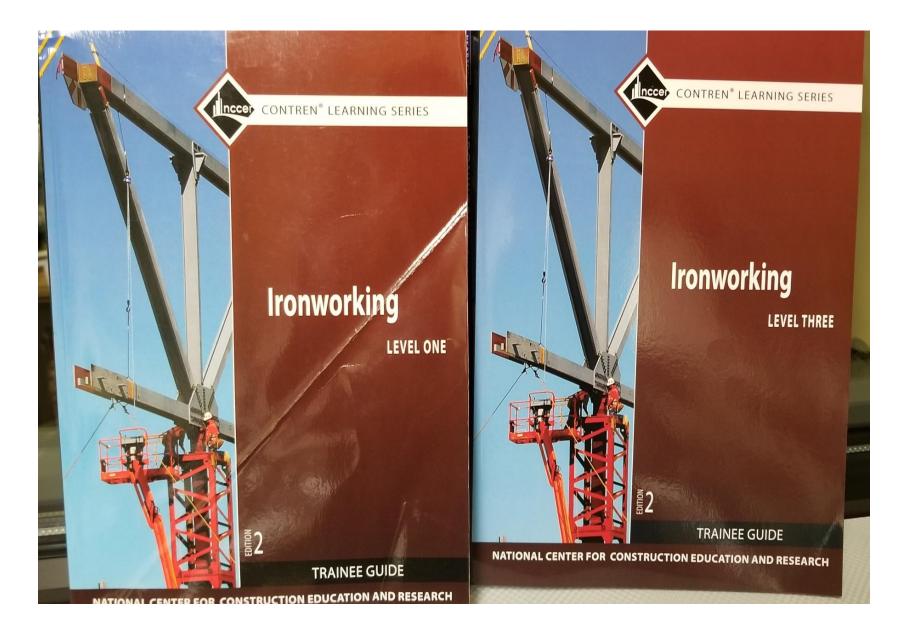
industry. This progressive program has evolved into curricula for more than 70 craft areas and a complete series of more than 70 assessments offered in over 4,000 NCCER-accredited training and assessment

locations across the United States.

Learn More

News & Media

Chapter Nine of Level 3 has PEMB training. The supplement is all PEMB training.



earsonconstructionbooks.com/store/product.aspx?isbn=0130312371



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30302 Pre-Engineered Systems TG



By NCCER

Pub. Date: Aug 24, 2000 by Pearson.

ISBN-10: 0-13-031237-1

ISBN-13: 978-0-13-031237-2

Student/Retail Price: \$26.67

Institutional/Business Price: \$20.00

Copyright: 2000 Edition: 1st

ADD TO CART

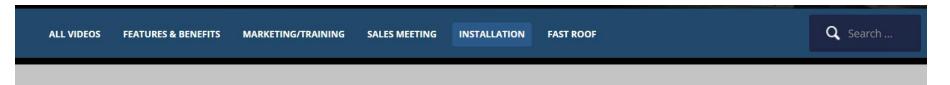
This title is available upon request and is not an in-stock item. Please allow 3-4 weeks for fulfillment and shipping.

ADD TO MY WISH LIST

Corporate, Academic, and **Employee Purchases**

Already own this? Register it.

Manufacturers resources e.g. www.BBTV-network.com







TBS Insulation System Installation



MR-24 Installation



Sky-Web Installation

LOGIN STATUS

You are logged in as jen@heimburgerconstruction.com

LINKS

Profile
Purchase History

ABOUT BBTV

BBTV-Network is the online video library for Butler Builders and subscribers of MyBuildernet.com. This site provides you with 24-7 access to our collection of Installation and Sales videos. You can access them anytime and from anywhere you have an internet connection – even on the job site! For questions, comments or to

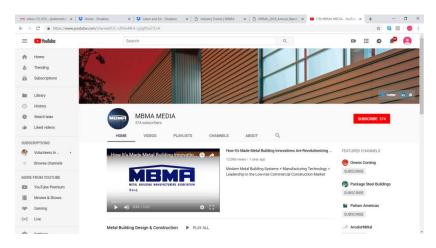


Manufacturer and Industry Association Youtubes









In-House Training







REAL PEOPLE

We're experienced construction managers and skilled tradespeople by day, mentors, coaches, and neighbors by night.



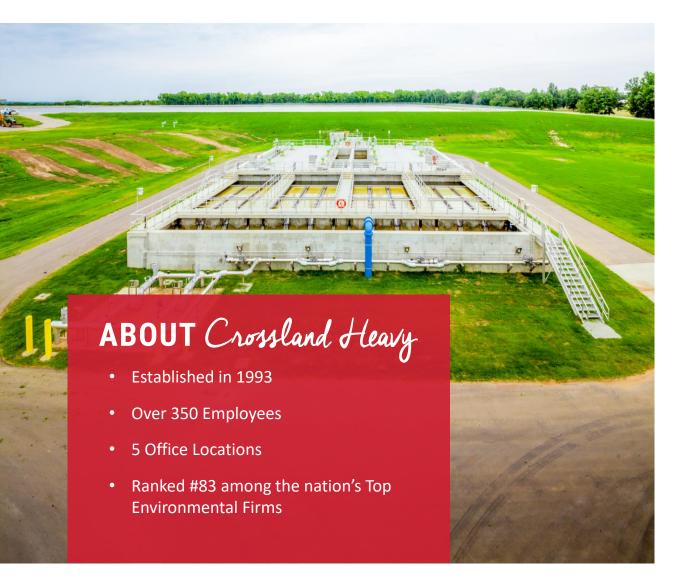
REAL PURPOSE

We share a deep sense of **purpose** and a wholehearted commitment to our customers and their unique visions.



REAL BUILDERS

Crossland understands the advantages of digging in and getting our hands dirty. We hang more steel, pour more concrete, and move more earth than most of our competitors combined.





MISSION

To provide our clients with quality, superior service with cost effective construction methods.



VISION

Our passion for building enriches the lives of our customers, employees, partners, and communities.



VALUES

We are driven by our core values – reputation, integrity, speed, efficiency, and quality.

CROSSLAND Academy PROGRAM ORGANIZATION





CLAY KUBICEK
Director – Craft
Education
& Credentialing



LYNSEY MCCMINN
Education Coordinator



NATHAN KUBICEK
Director Talent Development
& Leadership Education



SAMMY SWANWICK

Talent Development

Manager

Lead Mentors/Instructors: BY CRAFT AND COMPANY



STEVE ROBISONHeavy Equipment Operators
& Carpenters - CHC



TOM PARSONHeavy Equipment
Operators -CCC



MARK ROBINSON
Carpenters - CCC



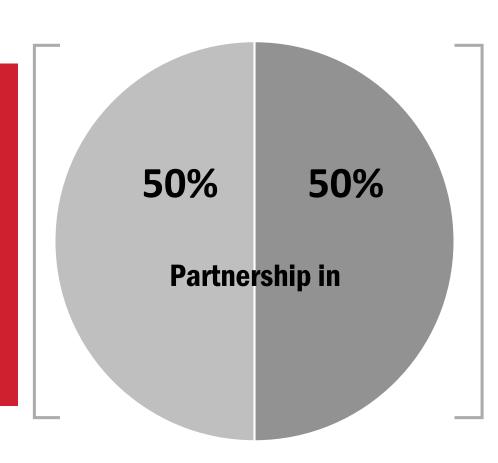
JAKE DOSS
Ironworkers - CCC

50/50 APPRENTICESHIP PROGRAM

= full time employment

NCCER Credentialed Instructors

- Hands on Training from Certified Journeyman Mentors
- Taught the Crossland Way
- Proficient in Chosen Craft
- Career Path Guidance
- Earn Credentials



THERE IS NEVER ENOUGH TIME TO TRAIN, So why do we do what we do?

We are looking for highly motivated and passionate people that want a Career in Construction. We will provide them the instruction and guidance to be:

- Journeyman
- **Foreman**
- **Mentors**
- **Craft Superintendents**
- **Assistant Superintendents**
- **Project Superintendents or Project** Managers



We are building futures and creating leaders for our business



TIME LINE FOR THE Apprentice

- 4 Year Registered Ironworking Apprenticeship Program
- NCCER Credentialing:
 - Year 1 = NCCER CORE
 - Year 2 = NCCER Level 1
 - Year 3 = NCCER Level 2
 - Year 4 = NCCER Level 3

Graduation = Journeyman Level Craft Professional





CORE CURRICULUM





Core Curriculum: Introductory Craft Skills

CORE CURRICULUM



INTRODUCTORY CRAFT SKILLS

Curriculum Notes

- Core Curriculum is a prerequisite to most Level 1 completions and must be purchased separately.
- 72.5 Hours (plus 7.5 Elective/Optional Hours)
- Revised: 2015, Fifth Edition
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at www.nccer.org/irc.
- A Spanish translation of the fifth edition is available. Please see NCCER's online catalog for more information.

HARDCOVER ISBN

Trainee Guide: \$57 978-0-13-413143-6

Introduction to Hand Tools (10 Hours)

Trainee \$20 ISBN 978-0-13-412937-2 Instructor \$20 ISBN 978-0-13-412886-3

(Module ID 00103-15) Introduces common hand tools used in a variety of construction crafts. Identifies tools and how to safely use them. Also presents proper hand tool maintenance.

Introduction to Power Tools (10 Hours)

Trainee \$20 ISBN 978-0-13-412901-3 Instructor \$20 ISBN 978-0-13-412902-0 (Module ID 00104-15) Identifies and describes the operation of many power tools common in the construction environment. Provides instruction on proper use, as well as safe-handling

Introduction to Construction Drawings

avidelines and basic maintenance.

(10 Hours)

Trainee \$20 ISBN 978-0-13-412903-7 ISBN 978-0-13-412904-4 Instructor \$20 (Module ID 00105-15) Introduces the basic terms, components, and symbols of construction drawings, as well as

the most common drawing types. Also covers the interpretation and use of drawing dimensions.

Enhance your construction training with these supplemental Core Curriculum companions. The following titles are excellent resources for your existing program. They can be used on a standalone basis or in combination with the Core Curriculum.

Applied Construction Math



A Novel Approach

Published: 2006

PAPERBACK

ISBN

Trainee Guide: \$30

978-0-13-227298-8

3 IRONWORKING

LEVEL 3

Curriculum Notes

- 150 Hours
- Revised: 2012, Second Edition
- Downloadable instructor resources that include module tests, PowerPoints[®], and performance profile sheets are available at www.nccer.org/irc.

PAPERBACK

ISBN

Trainee Guide: \$97 978-0-13-257785-4 Instructor's Guide: \$97 978-0-13-266259-8

MODULES

All of the modules listed below are included in the Trainee Guide and the Instructor's Guide. The following ISBN and pricing information is for ordering individual modules only.

Applied Trade Math (5 Hours)

Trainee \$20 ISBN 978-0-13-292280-7 Instructor \$20 ISBN 978-0-13-292293-7

(Module ID 30313-12) Explains the math needed to calculate the size of cribbing or blocking needed for a load; parts of line, maximum load, and line pull for lifting operations; sling capacities; and load distribution for two-crane lifts.

Flux Core for Ironworking (40 Hours)

Trainee \$20 ISBN 978-0-13-292281-4 Instructor \$20 ISBN 978-0-13-292294-4

(Module ID 30314-12) Describes the equipment and methods used in flux core arc welding (FCAW). Includes proper selection and use of filler metals and shielding gases, as well as techniques for performing fillet and V-groove welding in various positions.

Precast/Tilt-Up Erection (12.5 Hours)

Trainee \$20
Instructor \$20
Instructor \$20
ISBN 978-0-13-292285-2
(Module ID 30311-12) Describes the fabrication and uses of precast concrete elements and cast-in-place tilt-up wall systems. Focuses on rigging practices associated with these two distinct construction methods and the role of ironworkers in their installation.

Special Application Hoisting Devices (10 Hours)

Trainee \$20 ISBN 978-0-13-292286-9 Instructor \$20 ISBN 978-0-13-292298-2

(Module ID 30307-12) Explains techniques for rigging and moving equipment using a variety of hoisting devices, including gin poles, Chicago booms, A-frames, davits, balance beams, pump handles, high lines, caterpillar dollies, rollers. Also covers special cranes, including derricks, gantries, HLDs, trolley cranes, and jacking frames.

Survey Equipment Use and Care Two (15 Hours)

Trainee \$20 ISBN 978-0-13-292287-6 Instructor \$20 ISBN 978-0-13-292299-9

(Module ID 30315-12) Focuses on the total station and its uses, including setup and controls. It includes information on primary and secondary control points and procedures for turning horizontal angles and plumbing columns and wall panels.

Pre-Engineered Systems (5 Hours)

Trainee \$20 ISBN 978-0-13-292288-3 Instructor \$20 ISBN 978-0-13-292300-2

(Module ID 30302-12) Identifies the structural components and accessories of metal buildings and describes their installation. Describes the pre-erection and erection procedures that apply to their installation and the safety precautions associated with their installation.

Miscellaneous/Ornamental Ironworking

ON THE JOB (OTJ) Training Program

- Homework and Written Testing are done on schedule.
- Performance Tasks are documented when they are mastered on the job.

CROSSLAND IRONWORKING Program



One test every week. (9 Modules)
Stay on schedule = \$\$ Incentive
6 WEEK BREAK BEFORE STARTING LEVEL 1.



One test every third week. (15 Modules)
Stay on schedule = \$\$ Incentive

16 WEEK BREAK BEFORE STARTING LEVEL 2



One test every third week. (10 Modules)
Stay on schedule = \$\$ Incentive

16 WEEK BREAK BEFORE STARTING LEVEL 3



One test every third week. (13 Modules)
Stay on schedule = \$\$ Incentive
16 WEEKS TO COMPLETE 4TH YEAR AND ALL

EARN WHILE YOU LEARN
THE OTHER 4 YEAR DEGREE

REMAINING PERFORMANCE ITEMS.





MENTOR TO APPRENTICE Responsibilities











PLAN & SCHEDULE

Program Schedule determined by the Academy, knowledge testing plan determined by Mentor and Trainee



Education
Department
collects/tracks
testing and progress
of Apprentice

TRAINEE PROGRESSION

Self Study Program with direction and support from their Mentor

PROVIDE TESTING

Test will take an average of 15—30 min.; testing provided by the Mentor anywhere

DOCUMENT PERFORMANCE

Mentor documents trainee Performance Profiles when working together on site to validate skill development





RECRUITING OF Prospects



PROGRAM CRITERIA

What you do How you do it

Program Structure, Criteria and Path



RELATIONSHIPS

Classroom Visits, Instructor Resource, Advisory Boards, Career Fairs....

Be a Friend....



SCHOOL CHAMPIONS

Local Employee to be the Face to Face Contact for Immediate needs and Assistance



PROSPECTS

Develop a list of candidates...

Potential, Background, Expectations, Scorecard....







What to do and How to Make this Happen

Next Steps

Questions?