Lesson 1: Hollow Metal Doors and Frames
This lesson introduces you to the terminology, components, and materials used to manufacture hollow metal doors and frames.

Objectives:
By the end of this lesson, you will be able to:

• Identify and describe components of hollow metal doors and frames.
• Identify and describe profiles and elevations of hollow metal frames.
• Assist customers in selecting the proper hollow metal doors, frames and anchors.
• Recognize accessories and options when ordering frames for a job.
• Recommend the proper frame construction and assembly.
• Interpret SDI levels in door specifications.
• Distinguish NAAMM hardware locations from SDI hardware locations.
• Advise contractors on how to store hollow metal doors and frames on the job site.

Lesson 2: Architectural Wood Doors
Students learn the terminology, components, and materials used to manufacture flush and stile and rail architectural wood doors.

Objectives:
Upon completion of this lesson you will be able to:

• Identify and distinguish species, cuts, grades and matching of wood door veneers.
• Describe the components of a flush wood door.
• Identify the components of stile and rail wood doors.
• Explain special features and considerations for flush wood doors.
• Use the proper terminology as related to flush wood doors.
• Explain special considerations for flush wood doors.

Lesson 3: Materials and Finishes
This lesson describes the common metals, materials, and finishes used in the builders hardware industry.

Objectives:
Upon completion of this lesson, you will be able to:

• Identify various common finishes.
• Determine the material and finish best suited for a particular job.
• Recognize the process used to form hardware items.

Lesson 4: Hand the Door
This lesson teaches students how to properly hand doors, door frames, and hardware products using industry-stand terms and abbreviations.

Objectives:
Upon completion of this lesson you will be able to:

• Recognize the correct hand of doors and hardware.
• Use the correct handing abbreviations.
• Instruct others in how to hand doors and hardware.
• Select appropriately handed hardware.

Lesson 5: Hang the Door
This lesson introduces students to the builders hardware items that are used to carry the weight of the door leaves and the hardware items attached to them.

Objectives:
Upon completion of this lesson you will be able to:

• Select the proper hanging device.
• Answer basic technical questions about hanging devices.
• Visually identify a variety of common hanging products.
• Use the proper terminology as related to hanging devices.
• List some common causes of hinge failure.
Lesson 6: Secure the Door – Door Bolts
This lesson describes the different types of door bolts used to secure the inactive leaves of pairs of doors.

Objectives:
• Upon completion of this lesson you will be able to:
  • Select the proper door bolt.
  • Answer basic technical questions about door bolts.
  • Visually identify the different types of door bolts.
  • Use the proper terminology as related to door bolts.

Lesson 7: Secure the Door – Locks and Latches
This lesson focuses on the different types of builders hardware locks and latches used to secure door openings.

Objectives:
• Upon completion of this lesson you will be able to:
  • Identify the different types of locks.
  • Recognize the function of a lock.
  • Select the correct lock type and function.
  • Hand a lock.

Lesson 8: Secure the Door – Panic hardware and Fire Exit Hardware
This lesson explains the differences between panic hardware and fire exit hardware devices and teaches students when and how exit devices are used to meet the life safety requirements of building, fire, and life safety codes.

Objectives:
Upon completion of this lesson you will be able to:
• Visually identify the different types of exit devices.
• List the different functions and applications of exit devices.
• Distinguish panic hardware from fire exit hardware.
• Select the proper exit device for a particular application.
• Use the proper terminology related to exit devices.

Lesson 9: Secure the Door – Cylinders and Keying
This lesson explains the different types of cylinders used in builders hardware and provides students with a working understanding of pin tumbler cylinders as well as how masterkeying is designed to provide convenience to the building’s occupants.

Objectives:
• Upon completion of this lesson you will be able to:
  • Visually identify types of cylinders and key components.
  • Explain why and how cylinders are used.
  • Use correct keying terminology.
  • Discuss the basic principles of keying.

Lesson 10: Control the Door
This lesson describes surface mounted and concealed door closers that are used to control the opening and closing speeds of door leaves.

Objectives:
Upon completion of this lesson you will be able to:
• Visually identify types of door closers.
• Select the proper door closer.
• Size and hand door closers.
• Use the proper terminology as it relates to the features of door closers.
• Select the proper arm options for surface door closers.
• Explain how overhead stops and holders are used.
• Describe the difference between soffit-mounted and gravity coordinators.

Lesson 11: Protect the Door
This lesson teaches students the various products (e.g., protection plates, door pulls, edge guards) that are used to protect door openings from being dented and scratched.

Objectives:
• Upon completion of this lesson you will be able to:
  • Understand the uses for door pulls and push plates.
  • Select appropriate protection plates.
  • Identify stops and holders.
  • Select appropriate thresholds and gasketing.
  • Use the proper terminology as related to protection hardware.
Lesson 12: Electrified Architectural Hardware
This lesson provides students with a base-level understanding of the principles of basic electricity and how it is used to modify the functions of builders hardware items to enhance accessibility and maintain security in today’s buildings.

Objectives:
Upon completion of this lesson, you will be able to:

- Identify the elements of a circuit.
- Use the proper terminology related to the principles of electricity.
- Explain the characteristics of select electrified hardware items.
- Explain the differences between fail secure and fail safe products.
- Select switches and access control devices.
- Select power supplies.
- Distinguish among the four types wiring diagrams.

Lesson 13: Codes and Standards
This lesson introduces students to the many codes and standards that affect architectural door openings, with a focus on NFPA 80, NFPA 101, and ICC A117.1.

Objectives:
Describe the differences between codes and standards.

- Identify codes and standards used in our industry.
- Look up information in codes and standard, in publications or documents, etc.
- Define code-related terms.
- List requirements for fire-rated openings.
- Describe how positive pressure fire testing affects doors and hardware.
- Answer questions about life safety and accessibility requirements.

Lesson 14: Blueprint Reading, Specifications, and Scheduling
This lesson teaches students how to read blueprints and specifications and introduces students to hardware schedules.

Objectives:
By the end of this lesson, you will be able to:

- Read blueprints.
- Identify the four types of architectural drawings.
- Use an architectural scale ruler.
- Look up information in a specification.
- List the three parts of a specification section.
- Explain the purpose of a detailed hardware schedule.
- List the proper sequence and format for hardware sets.

Lesson 15: Jobsite Service
This lesson explains how preparing hardware submittals, marking and packaging doors, frames, and hardware items sets the stage for good jobsite service during the course of the project.

Objectives:
By the end of this lesson, you will be able to:

- Prepare submittals.
- Mark and package doors and hardware.
- Deliver material to the jobsite.
- Set up a hardware room.
- Visit a jobsite.
- Conduct a keying meeting.
- Conduct a pre-installation meeting.
- Handle service calls.