Learning Objectives:
• The features and benefits of the products you sell.
• How to answer your customers’ product-related questions.
• How to help your customer choose the right products.
• How to increase transaction sizes by learning more about add-on sales and upselling techniques.

Module 1: Window & Door Millwork

Product Knowledge:

Styles of Millwork
• One of the most important considerations to buying millwork is the pattern or design of the piece. Millwork is classified by its style, or the type of architecture it represents, such as Country, Victorian, Arts & Crafts or Traditional.
• Millwork is also classified by its profile. This is what the piece looks like when viewed from its end. Examples are cove and crown.
• Finally, millwork is available in stock and custom patterns. Custom millwork is made for a specific job by a custom millshop.

Millwork Materials
• Wood: This is the traditional material used for mouldings. Both softwoods and hardwoods are available. Softwoods used for mouldings are generally made from pine, poplar, fir or redwood. They are usually painted, or referred to as paint grade. Hardwoods used for mouldings are generally made from oak, cherry, birch or lauan. They are generally stained, or sometimes referred to as stain grade.
• Primed wood: Some wood mouldings are available pre-primed, which makes it easier for the customer to finish.
• Finger-jointed wood: Wood mouldings intended to be painted are usually finger-jointed. This is where short lengths have the ends joined using a finger-joint, fastened together to make longer lengths.
• MDF: MDF, or medium density fiberboard, is a composite material intended to be painted. It offers a smooth surface because it has no natural wood grain.
• Cellular PVC: Mouldings made from PVC, or polyvinylchloride, are rot proof, easy to handle and not subject to insect damage. Some are flexible enough to be run around curved openings, such as circle-top windows. These may also be used for exterior applications.
• Polyurethane Foam: These types of mouldings are easy to install and lightweight. They are ideal for exterior applications because they resist rotting, mildew, warping and insects.

Window Casing
• Generally referred to as casing when referring to use on windows.
• This is the piece of trim that surrounds the window and covers the gap between the wall and the window frame.
• The same trim can be used around doors.
• These trim pieces can also be used as base trim in floor/wall applications.
• Casing trim can also be used for the apron piece under the window stool.
• Traditional profiles include colonial, oval, R2E and molded.
• When more than one window is put together, the edge between the two windows is covered with a Mullion Casing, or Panel Strip.
Stool
• The horizontal trim piece at the window bottom.
• If a window does not use a stool, but uses the same trim all the way around the window, the technique is called “picture casing” a window.
• Used in conjunction with an apron, which is the piece of trim directly under the window stool.

Door Stop
• Used with swinging doors installed on flat jambs.
• Keeps the door from swinging through.
• Some doorjambs have the stop included, but the stop can also be purchased separately.
• Available in several different styles.

Door Jamb
• Doors are usually sold pre-hung, with the door already installed in the frame. However, sometimes the door style the customer wants may not be available pre-hung. In that case, you'll need to sell the individual pieces.
• The standard interior door jamb is made up of two side jambs and one head jamb.
• Thicknesses are 3/4” or 11/16”.
• Common widths are 4-9/16”, 4-13/16”, 5-1/4” and 6-9/16”.
• Height is standard to receive the 6'8” door. Top jamb lengths are sized to accept standard door widths of 18”, 20”, 24”, 28”, 30”, 32” and 36”.

Taking it to the Floor:

Frequently Asked Questions
Q: Do I need a special door jamb to hang a bifold door?
A: You can use a standard door jamb, if you wish, and mount the track on the face of the jamb. A better option may be to use a jamb specially designed for a bifold jamb. This jamb has the bifold door track hardware hidden in the jamb so it’s not exposed.

Q: I want to put molding around a curved window in my house. Can I get molding that is curved?
A: You might want to try a cellular PVC molding that is flexible enough to be run around curved openings, like your windows.

Q: How wide of a molding should I buy for my home?
A: It all depends on personal preference. As a rule, wider moldings make a room look smaller. You may want to avoid wide moldings unless you have large rooms. If you want wide moldings, you can make your own profile by combining several different styles together.

Q: Are all door jambs made of solid wood?
A: No, there are several different types. A solid wood jamb is shaped from a solid piece of wood. The edges are beveled and the back may be kerfed to reduce warping. You can also buy a veneered jamb, which has a core of dense particleboard with a hardwood veneer on the face and edges. Some of these jambs have a hardwood veneer on the face and edges. The edges have about 1/4” of real wood to allow for some planning and cutting.
Upselling

- When selling any millwork item, be aware of your store's special order capabilities and mention these to your customer. Some trim manufacturers have hundreds of styles, sizes and profiles available.
- Other customers will want a custom-made piece of millwork. Customers with older homes may want to match an existing piece of millwork in their home. Most mill shops can mill trim to match any profile.

Add-on Sales

Here are some of the items your customer will need to install millwork.

- Recommend a measuring tape for determining the length of trim required.
- Make sure the customer has a hammer and nails for installing the trim. Recommend a nail set for sinking the nails so they are hidden.
- Ask if the customer needs a ladder for installing crown moulding.
- A miter saw will be essential for cutting millwork to a precise angle.
- A stud finder can help find the framing members for mounting millwork.
- Know which adhesive is recommended if your customer is installing plastic-type millwork. Some adhesives will require a caulking gun.
- Recommend painter's caulk to hide any cracks between the wall and the millwork.
- Finally, recommend safety glasses and gloves.

Module 2: Wall & Ceiling Millwork

Wall/Ceiling Molding

- Molding used to cover the space where the wall and ceiling meet.
- Traditional profiles include cove, crown, bed, attic and picture, but other styles may be available or custom milled.
- Available in widths from 1/2" to more than 5”.
- Several different types may be combined for a more complex, architectural design.

Floor/Wall Molding

- Molding used to cover the space where the floor and wall meet.
- Traditional profiles include oval base, molded base, base, shoe or quarter-round.
- Different types may be combined for a more complex design. The most common combination is the combination of base and shoe.
- A hardwood floor generally has a base and shoe combination. A carpeted floor generally has only a base.
- A common confusion is between the quarter-round and shoe molding. The quarter-round is a full 1/4 of a circle, while the shoe does not have an even length on both sides.

Wall/Wall Molding

- Molding used to cover the space where two walls meet.
- If the two walls make an outside corner, the molding is called a corner bead. This type is also used to protect the corner.
- For an inside corner, a simple cove molding may be used to cover up cracks in the wall.
Chair Rail
- Used to trim the top of wainscot paneling (paneling that only goes halfway up the wall).
- Styles include wainscot cap, ply cap or Dado cap.

Ceiling Medallion
- Round, decorative trim on the ceiling.
- Most types come with a hole in the middle so they can be used to surround ceiling fixtures.
- Can help cover up unfinished areas around the electrical box used for a ceiling fixture.
- If no fixture is to be used in the middle of the medallion, a rosette is used to fill in the center hole.
- Highly decorative and often made of polyurethane or some other lightweight, moldable material.

Corner Block
- Installed at the corners where the two runs of molding meet.
- Makes installation of molding easy, as the installer doesn't have to cut a miter joint.
- Styles include rosettes and plinth blocks.

Mantel
- Used to decorate the opening of a fireplace.
- A variety of styles are available, from the simple to the expensive.
- Wood trim should be more than 3-1/2" from a fireplace opening. The mantel should be 12" or more above it.

Taking it to the Floor:

Frequently Asked Questions

Q: What's the difference between shoe molding and quarter-round?
A: Quarter-round molding is a full quarter circle and the sides are the same length. Shoe molding, on the other hand, does not have an even length on both sides.

Q: I've heard you should let molding sit a couple of days before installing. Why?
A: It is advisable to climatize your moldings by letting them sit for 48 hours in the room where they will be installed. Wood moldings, and even MDF and manufactured products, can absorb moisture from many sources, including the places where they are stored. If they're not allowed to dry out to the climate of the room, they will shrink after they're installed, resulting in gaps at the joints.

Q: What does it mean to cope a joint?
A: To cope a joint means to shape the end of the molding so it fits the profile of the adjoining piece of molding, which can be cut at a 90° angle and butted flush into the corner.

Q: Is there a molding I can use to cover the space between two pieces of paneling?
A: Use a batten. This conceals joints where plywood panels or other boards meet. This is best to use for
Upselling Skills

Wire management moulding

• Some types of mouldings serve a dual purpose as a décor element and a way to hide wires. These are typically made from a synthetic material such as PVC and are easy to install.

Moulding with lighting

• Some crown and baseboard moulding is installed to allow light, usually LEDs, to be installed behind it. This provides ambient lighting or a dramatic effect and systems are usually easy to install.

Built-up moulding

• Show your customer how he or she can create a more complex and customized moulding design by combining several different profiles. For example, with a base moulding, you can combine a board with a base cap, a base and a base shoe.

• Instead of just framing a door with standard door casing, suggest adding corner blocks for a more customized look.

Add-on Sales

In the last module, we discussed the add-on products your customer might need to install millwork. In addition to suggesting those items, you can also suggest the items needed for the final finish of millwork.

• After trim is installed, customers will want to use wood putty for filling in nail holes, then sandpaper for smoothing the putty after it has dried.

• For customers buying paint-grade molding, remind them to pick up the paint they want to finish, along with a trim brush, painter’s tape and a drop cloth.

• Those buying stain-grade moulding will want the appropriate stain and applicator.

• For a complete listing of all of the items a customer needs for a painting project, check out the Paint and Decorating department in NRHA’s Basic Training Course in Hardware Retailing.

Module 2: Exterior Millwork

Product Knowledge:

Brick Molding

• Commonly used for exterior door and window casing.

• It provides a surface for brick or other siding materials to butt against.

• Molding may come already installed on the frame of a pre-hung door.

• The thickness of the small edge is 1-1/8", the same thickness as the storm or screen door.

Drip Cap

• Installed over the top of exterior door and window casing to help direct water away from window glass.

• Some windows have a built-in drip cap, while others have an aluminum drip cap.

• Windows under an overhang may not need a drip cap, but it is still good practice to have one.

Frieze Board

• A 1x4 or 1x6 finish-quality board nailed against the house and under the overhang.

• Mainly used for trim and for decorative purposes. Can make the house look taller.

• May be wood and many wood substitute products are available.

• May be decorative, or used as a backer for other decorative trim pieces.

• The frieze is also a decorative molding that may be used indoors. It is installed on the wall space directly below the ceiling.
Corbels and Brackets
- On interior applications, used for added support of shelves, countertops and wall treatments.
- On exterior applications, may be fastened under the soffit attached to the frieze, or attached to porch posts under the eave of the porch roof.
- May provide actual structural support, or may be for decoration only.
- May be made of elaborately carved wood, or a polymer material. Those used outside are often made of rot-resistant polymer material.

Threshold
- Placed on top of the door sill to provide a place for the door to close and seal tight.
- Helps seal out weather and insects.
- Commonly made of aluminum with a vinyl seal on top. Also may be made of oak.
- Various heights are available to match the different thicknesses of finished floors.
- Most new doors have built-in thresholds designed to work with that particular brand.

T-Astragal
- Fastens to the fixed or more permanent door of a pair of doors to provide a stop for the active door.
- Available in several shapes.
- When this is used on interior doors, it is usually oak or pine.
- When it is used on exterior doors, it is usually aluminum or fiberglass.

Shutters
- Available in various designs.
- Made to be closed over the window for security or privacy.
- Interior and exterior designs are available.
- Some modern exterior shutters are for decorative purposes only, and do not actually close.
- To be authentic, width should be about half the window width. Most shutters today, however, are made only 14” or 15” wide.

Posts
- Typically used as porch posts outside, where they serve both to decorate and to support the structure of the porch.
- Inside, they can be used as a design element, often as a room divider.
- May be solid or built as a box. Solid posts are often turned.
- Posts may be made out of wood, PVC, fiberglass, aluminum or steel.
- One type is a pilaster, which is similar in appearance to a column, but does not carry any weight. These may also be used for interior trim.

Cupolas
- Sits on the roof and can act as a natural chimney.
- Consist of a rectangular box with a copper or aluminum roof on top and vents on the side.
- Used both for decoration and ventilation.
- Many cupolas have a wind vane on the top.
Taking it to the Floor:

Frequently Asked Questions

Q: What is the difference between the door sill and the threshold?
A: The door sill is part of the frame structure of the door and sits under the door jamb. The threshold sits on top of the sill and performs the duty of making the door weathertight.

Q: Are there other options besides brick trim for trimming the doorway of my home?
A: There are a variety of other trim options that can add a lot of detail to the entranceway. Options include caps or headers over the door, pilasters, plinths, sidelights and transoms. Also, many of the types of trim, such as crown molding and cove molding, that are used inside can be used outside as well.

Q: How high should the cupola on the roof be?
A: For proper proportion the cupola should be about 1” high for every foot high of the front of the house. The sizes of cupolas you can get range from 21” to 31” square and 21” to 30” high.

Q: How do I cut and fasten PVC trim?
A: To cut PVC trim, use a carbide-tipped, combination saw blade. You can use any standard power tool. To fasten it, use a quality nail such as a stainless steel or hot-dipped galvanized nail. If you are joining two pieces of trim together, you can use PVC cement to weld the pieces together to keep them tight.

Q: What are some advantages of polyurethane moldings over wood moldings?
A: Different products from different manufacturers will vary, so check manufacturer’s material for claims of product performance. Generally, polyurethane will not swell or shrink, will not rot, will not split when nailed, is lightweight and easy to install, and does not need sanding before painting.

Upselling Skills

Show customers the advantages of wood alternatives such as PVC cellular and polyurethane trims. These types of trim resist rotting and insect damage. Be familiar with your store’s vendor and let the customer know of any custom order products available.

Add-on Sales

Customers may need these items for installing exterior trim.

• Ask customers if they have the proper hammer and nails for making the installation.
• Recommend a pencil and tape measure for marking the correct length of trim, and then a miter saw for cutting it.
• If the customer is buying PVC trim, offer a PVC cement for joining pieces of trim.
• Also remind customers they need a carbide-tipped blade for cutting PVC trim.
• A nail set, wood putty and putty knife are necessary for hiding nail holes.
• Remind the customer to use caulk to fill in gaps when the installation is finished.
• Always recommend safety glasses and ear protection when using power tools.
Module 3: Stair Systems

Product Knowledge:

Tread
- The part of the stair that is walked on.
- Often has a rounded edge, also known as a bull nose.
- Stairs that are to be carpeted may have treads made of unfinished plywood or other wood.
- Hardwood treads may be made of finish quality wood so they can be left exposed.
- Common thickness is 5/4", or 1-1/8".
- Standard minimum length for a stair is 36".
- Total depth is 10". That includes a minimum tread depth (or run) of 9" plus a 1" overhang. Design rules and calculations for finding the proper rise and run will dictate the exact measurements for a particular stair project.

Risers
- The vertical piece between stair treads.
- An open stair has no risers. This is common in basement, outdoor or secondary stairs that will not be finished.
- Risers are typically made from a 1x8 #2 or #3 pine board, or particleboard if the stair is to be covered.
- If the stair will be uncovered, risers are made of a hardwood to match the treads.
- Most codes require a maximum of 8-1/4" for an individual rise.

Stringer
- Also called a horse or jack.
- A long piece of wood with notches cut out to hold the risers and the treads and to hold up the stair.
- Constructed of two or three pieces of 2x10 or 2x12, depending on the stair span, width and local codes.
- A finished stringer is used to the side of the finished stair and made in the same wood as the tread material.

Landing Tread
- The landing tread is a hardwood moulding designed to match the treads and provide an overhang at the top of a run of stairs.
- Edge is nosed and rabbeted so the floor edge at the top of the stair creates a border around a finished floor and the baluster. It can also create a border around a landing.
- If the stair is carpeted, a similar effect can be achieved by extending the subfloor so it overhangs the top rise.
- Size is 3-1/2" x 5/4".

Cove
- A hardwood molding used under the tread nosing as a finish element.
- Not used if the stair is carpeted.

Railing
- Provides hand support to the stairway.
- Often used in conjunction with balusters.
- Available in a variety of styles.
Baluster
• Used to support the handrail.
• Available in a variety of sizes and styles.

Newel Post
• An upright post at the bottom of a stair.
• Used to support and end of the rail.
• May be solid or hollow.
• May be plain, but often a highly decorative piece, with a wide variety of styles available.

Taking it to the Floor:

Frequently Asked Questions
Q: What kind of wood do I need for a stair tread?
A: You can buy hardwood pieces especially made as stair treads if you plan on having the stair parts exposed and finished nicely. If the stair will be covered with carpet or in a place such as in a basement, you can use 2x10s or 2x12s. Make sure you use the correct width your stair requires, according to the rise and run calculations.

Q: I’m going to be carpeting my stair, but have to replace a few of the rises. What kind of board should I use?
A: A common board to use for this is a 1x8 #2 or #3 pine. You may need to cut it down to size.

Q: How high should the handrail be?
A: Always check with local codes. Generally, it’s between 30” and 34” from a line measured across the nosing faces of the tread. There must also be at least 1-1/2” between the handrail and the wall.

Q: How much should the handrail come out from the wall?
A: As a general rule, the handrail may not project more than 3-1/2” from each side into the required width of the wall.

Upselling
• Customers doing a major remodel or building a home may want to consider a prebuilt stair kit. Designs range from simple to elaborate, and some are custom built. Some kits can be installed by do-it-yourselfers. Check to see which vendors your store carries, and then show these options to any customer looking at your stair system products.

Add-on Sales
One project do-it-yourselfers may be willing to tackle is installing a handrail. In addition to the premade handrail, here are some of the items they will need for that project.
• Handrail brackets are specially made for holding premade handrails.
• A chalk line and pencil will help mark the correct locations for mounting the brackets.
• Suggest a stud finder for finding secure locations for mounting the brackets.
• Recommend screws for attaching the brackets and make sure the customer has a cordless drill to make the task easier.