



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.

Chapter 1: Siding

Module 1: Vinyl and Metal Siding

Product Knowledge:



Vinyl Siding

- Vinyl siding is made of polyvinyl chloride (PVC).
- The top strip on the siding has nail slots and it installs over housewrap or house paper.
- It is easy to clean and maintain.
- The face of vinyl siding is available in a variety of custom colors, which vary with the manufacturer.
- The double panel style has two laps per panel. Other styles are available with more laps per panel. It is available in 4" or 5" widths.
- The single panel style has a single lap per panel, and is available in 8" widths.



Vertical Panel

- A vertical panel may be installed vertically or used as a soffit trim.
- Styles include V-groove and board and batten.
- It is available in smooth and wood-grain finish.
- Soffit trim is installed under the eave or overhang of the roof or on porch ceilings.
- Panels to be used for soffit trim may have perforations that serve as a vent for the eave of the roof.



Corner Post

- The corner post can be an inside or outside style.
- It is used to trim the corners and provides a place for siding panels to snap.



Trim

- Trim is also known as an undersill trim.
- It is used to hold the top of siding, especially if it is cut.
- J-channel type trim is used to hold siding around windows and other places where a run of a siding panel ends.



Starter Strip

- The starter strip is another piece that goes around the building perimeter at the bottom and secures the bottom of the first row of siding.



Aluminum Siding

- Aluminum siding has a baked-on enamel factory finish generally available in a large selection of colors.
- It is easy to maintain and should be washed annually. It can also be painted.
- Aluminum siding is prone to denting, but generally can be repaired without replacing the entire panel.
- Since aluminum can conduct electricity, it needs to be grounded after installation.
- It may be used with an insulated panel that can add R-value to the wall.
- This type of siding is available in smooth and textured designs.
- The most common style is the lap style.



Steel Siding

- Galvanized steel siding is a premium siding with a prefinished vinyl finish that is stronger than aluminum but usually more expensive.
- Steel siding is a superior siding product because it is easy to maintain, can be repainted, is strong and resists shrinking and bulging due to temperature changes.
- However, scratches in steel siding must be painted to avoid rusting. It is also more difficult to cut than aluminum siding.
- Steel siding is popular in the construction of “pole barns” or other sheds and commercial buildings.
- Some companies offer seamless installation to avoid the seams that result when installing factory-cut panels.
- This type of siding is available in lap style profiles, as well as vertical panels.

Taking it to the Floor:

Frequently Asked Questions

Q: Can I paint my vinyl siding?

A: You may be able to paint vinyl, but check with the manufacturer. Painting may void the manufacturer’s warranty.

Q: How do I clean my vinyl siding?

A: Use a soft-bristled, long-handled brush. You can even use one attached to a garden hose. If needed, use a general purpose cleaner for ordinary dirt. If you use a power washer, hold the washer straight or at eye level so it can clean most effectively. Do not point the power washer upward, as water may collect behind the siding.

Q: Do I need any special tools for installing vinyl?

A: Yes. You’ll need a nail hole punch for punching slots in cut panels, a snaplock punch for dimpling panels where they will be pressed into the utility trim and an unlocking tool for separating panels.

Q: Do I have to tear off my existing siding before installing metal siding?

A: You don’t have to tear off existing siding before you install steel or aluminum siding. You do, however, need to make sure that the existing siding will hold nails and is stable. You can install it over wood, stucco, concrete block and other surfaces that are structurally sound.

Q: What are the advantages of vinyl siding?

A: The biggest advantage is ease of maintenance. Vinyl does not rot, mold or need painting. Better quality vinyl siding incorporates insulation to raise the energy efficiency of your home.

Q: Do I have to tear off my existing siding before installing steel siding?

A: You don't have to tear off existing siding. You do, however, need to make sure that the existing siding will hold nails and is stable.

Q: Can I paint aluminum siding?

A: You can paint aluminum siding. Be sure to prep it properly by sanding with a fine-grit paper and clean it. Replace dented siding or repair with filler made for metal. Also prime any bare aluminum using a metal primer.

Upselling

- Premium vinyl siding products have color that goes all the way through so scratches won't show.
- Premium products also have UV inhibitors that resist fading.
- Quality vinyl siding is judged by its thickness; the thicker the siding, the better the quality.
- Also consider factors such as the design of the locking mechanism that holds the panels together and the design of the nailing hem.
- Some manufacturers offer vinyl siding with a built-in foam insulation backing. The backing helps seal out moisture, protects against insects and adds R-value to the home.

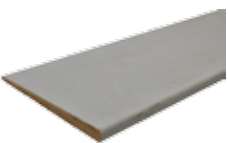
Add-On Sales

- There are several special tools customers will need to install vinyl siding: a **nail hole punch**, a **snap-lock punch** and an **unlocking tool**.
- Customers will need a **utility knife** and **tin snips** for cutting siding.
- Ask if they need a **measuring tape**, **combination square** and a felt tip **pen** for marking for cuts.
- Suggest a **chalk line** and **level** for laying out the starter strips of the vinyl panels.
- Make sure customers have enough **nails** for attaching vinyl pieces to the house.
- After customers have installed siding, they may need **caulk** for sealing around windows and doors.

Module 2: Wood and Composite Siding

Product Knowledge:

Wood Lap



- Wood lap siding is typically made from redwood or cedar, as these types of wood are highly resistant to decay and dimensionally stable. Pine, spruce, fir and Cyprus may also be used, depending on your region.
- This type of siding is applied horizontally. Pieces overlap each other at the top.
- Pieces range in thickness from 3/4" to 1", and may be 4" to 12" wide.
- There is a choice of styles and shapes, with edges that are beveled or tapered.
- Styles include wide bevel, drop, tongue and groove and Dolly Varden.

Wood Plank



- Wood plank siding is applied vertically and plywood sheathing or blocking is used to provide a nailing surface.
- Wood pieces are generally 6" to 12" wide.
- They may be rough sawn or smooth, depending on the type of finish desired.
- The way the boards are arranged determines their style. Common styles include board and batten, reverse board and batten, board on board and channel rustic.

Plywood

- Panels of plywood or hardboard, often used because of its ease of installation and low cost.
- Available in a variety of wood species and face treatments. Fir and pine are two commonly used types for panel siding. They are economical and can be painted or stained. Cedar and Redwood are premium sidings, and customers are more likely to stain them.
- It is available in 4'x8' or 4'x9' sheets.
- Common thickness is 3/8", 1/2" and 5/8".



Structural Panel

- Some plywood and composite panels are designed to combine wall bracing and siding in a single application step. Use them as siding either over sheathing or directly over studs.
- This is a performance-rated panel, graded according to its structural characteristics rather than by its appearance.
- It is available as panel and lap siding and in various surface treatments, including grooved, rough sawn, smooth or textured face.
- Common thicknesses range from 1 1/32" to 5/8".



Shingle

- Shingle siding is commonly made of redwood, cedar or cypress.
- The shingles are machine cut to be uniform.
- One disadvantage is that they may be prone to warping and cracking. They also fade, which can create a desired rustic appearance.
- Panelized cedar siding panels apply 8' of shingles in one step, with the backing material already applied.
- One type is the fancy cut shingle, also called a fancy butt shingle, which has a decorative cut at the butt end. These are used for areas of the home where a more decorative appearance is desired, such as the gable of a Victorian style home.
- Another type is a wood shake shingle, which is hand-split and does not have a uniform size.



Fiber Cement

- Fiber cement siding is a popular alternative to wood or vinyl. It is made of cement, sand and cellulose fiber.
- There are many advantages to this type of siding. It is strong, durable and will not buckle or warp like wood. However, it is heavier than wood.
- Most fiber cement siding is available in a variety of textures and colors.
- It is available as lap siding for horizontal installation or as panels for vertical installation.



Engineered Wood

- Engineered wood siding is made of wood strands coated with a resin binder and compressed. Then, the board is coated with a moisture-resistant overlay that has a wood-grain appearance.
- This type of siding installs and cuts like wood. However, manufacturer installation instructions must be followed carefully to avoid problems with moisture.



Hardboard

- Hardboard siding is made from reconstituted natural wood fibers and resins.
- It is tempered to be dense and moisture resistant. However, it must be properly primed, painted and sealed against moisture, or it is susceptible to swelling.
- Some products are available pre-primed.
- Hardboard siding is available in planks for lap installation or in panels for vertical installation.
- The quality of panels is rated on nail head pull-through, hardness, lateral nail resistance and weatherability of the substrate.

Taking it to the Floor:

Frequently Asked Questions

Q: What is the advantage of wood siding over other types of exterior sidings?

A: Wood acts as a natural insulator. It also can add dimensional stability to the structure.

Q: How do I finish or treat wood siding?

A: Most wood siding can be stained or painted, or finished with a clear coat to let the natural grain show through.

Q: What kind of nail should I use to install wood siding?

A: Use a stainless steel nail, a high tensile strength aluminum nail or a hot-dipped galvanized nail. The nail should have a ring-threaded or spiral-threaded shank for improved holding power.

Q: What is back priming?

A: It means priming the backside of the siding. You should also prime the cut edges so the wood is completely sealed from moisture. Hardboard, fiber cement, engineered wood and lap wood siding is often available pre-primed on both sides to save you installation time.

Q: How do I cut and fasten fiber cement siding?

A: To cut fiber cement siding, use a saw blade specially designed for cutting fiber-cement. Or, use shears and a score-and-snap method. To fasten it, use corrosion resistant nails, either stainless steel or galvanized. You can also use galvanized screws. We do not recommend using staples.

Upselling

- Suggest fiber cement products with long manufacturer warranties.
- Some manufacturers offer engineered wood siding that has self-aligning edge designs that make them easier to install.
- Better engineered wood siding also has a special treatment that protects against termites and rot.
- When selling any wood or composite siding, suggest boards that are pre-primed, as that will save installation time.

Add-On Sales

- Customers installing wood siding will need several tools, including a **hammer** and a **saw**.
- They will also need a **tape measure** and **square** for marking cuts.
- Make sure the customer has plenty of **nails**, and suggest a **nail apron** for convenience.
- Customers will need **building paper** for wrapping the structure before installing siding.
- For anyone not buying pre-primed boards, recommend **primer** for back priming before installation.
- Customers may need **caulk** for sealing edges after installation.
- Recommend customers use **respiratory protection** when cutting fiber cement siding, as the dust can be hazardous.
- Also recommend using **safety glasses** and **gloves**.



Chapter 2: Roofing

Module 1: Asphalt Roofing

Product Knowledge:



Asphalt Shingle

- Asphalt shingles consist of a heavy mat saturated with asphalt and coated with ceramic granules.
- The ceramic granules give the roof color and protect the asphalt from damage from UV rays, which can severely shorten the life of asphalt products.
- They use self-sealing adhesive patches that melt in the heat of the sun and seal the overlapping tab.
- Asphalt shingles are installed with roofing nails and over the top of solid decking and roofing paper.
- They are available in a variety of styles and colors.
- The most popular type is the fiberglass shingle where the mat is made of fiberglass, which weighs less and contains more asphalt than organic shingles.
- The organic shingle, also known as a composition shingle, has a mat made of a heavy paper-like material made from wood pulp. It is typically heavier than a fiberglass shingle and not as fire resistant.

There are two styles of asphalt shingles.

Three-tab Shingle



- The three-tab shingle, also called the strip shingle, has a single thickness with anywhere from two to four tabs per strip.
- It comes in various edge patterns and surface texture treatments.
- There are three or four bundles per square (100 sq. ft.).
- Common sizes are widths of 12" to 13-1/4", and lengths of 36" to 40".
- Typical exposure (or how much of one shingle is exposed) is 5" to 5-5/8", depending on the manufacturer.
- Weight is 215 to 300 lbs. per square.
- Has a UL fire rating of A (for fiberglass shingles) or C (for organic shingles).

Architectural Shingle

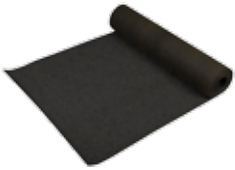


- An architectural shingle, often called laminated or dimensional shingle, consists of two layers of shingles together to achieve the look of a wood shake. It is considered a high-end shingle.
- Some have a self-sealing strip and some do not. With the added weight and thickness of a laminated shingle, the adhesive strip is not as important.
- This type has three to four bundles per square.
- Common sizes are 12" to 13-1/4" widths, and 36" to 40" lengths.
- The typical exposure is 5" to 5-1/4".
- Its weight is 250 to 340 lbs. per square.



Selvage Edge Roll

- Selvage edge roll roofing is an asphalt-type roll that is applied like shingles, where a portion of the roll overlaps the other. It is also called double coverage roll roofing because of the amount of overlap it provides.
- The lower part of the roll is covered with granules and the top half is smooth. This allows for a better adhesive action on the top part that is double covered.
- This type of roofing should be used on low-slope roofs, or those with a 3-in-12 pitch or lower.
- It is installed with roofing nails and asphalt lap cement
- Two rolls cover one square.
- Rolls are 36' long and 36" wide. The standard overlap is 19" with an exposure of 17".
- Selvage edge roofing is available in several colors, including black and white.



Surface Roll

- Surface roll roofing is an asphalt-based roof covered with colored granules like shingles.
- When installed, it has an overlap, but not as much as selvage edge. It is considered a single coverage roll. It is also heavier than smooth roll roofing, so it lasts longer.
- While selvage edge roll roofing is used on low-slope roofs, surface roll roofing is for roofs with a higher pitch. Do not use it on roofs with less than a 3-in-12 slope.
- It is used for utility buildings or as a temporary roof.
- It is installed using roofing nails and lap cement.
- It comes in 36' to 38' long rolls and it 36" wide.



Smooth Surface Roll

- A heavy asphalt sheet that comes in roll.
- Weight is 40 to 65 lbs. per square.
- For use as a temporary roof or as a layer of a commercial built-up roof system.
- Does not have granules covering it, but is dusted with mica flakes to give it protection.
- Rolls are 36' long and 36" wide.
- End lap is 6" and top lap is 2".

Taking it to the Floor:

Frequently Asked Questions

Q: Why are the shingles I just installed already blowing off the roof?

A: One possible cause is that the shingles were laid in the fall or winter and the self-sealing tab never had the opportunity to properly seal. This doesn't always happen, but can. A possible solution is to put asphalt adhesive in a caulking gun and tack down the tabs, one by one.

Q: What's the difference between a roofing nail and a shingle nail?

A: A roofing nail has a large head for holding down asphalt roofing, which is typically asphalt shingles. The large head helps reduce "tear through." A shingle nail is just a 3d galvanized box nail used to fasten wood shingles.

Q: Can dirt and debris buildup hurt my roof?

A: Yes. Dirt and debris such as limbs, leaves or pine straw can hold moisture that can cause mildew and damage to the roof.

Q: What is a “square” in roofing terms?

A: A square is 100 sq. ft. of shingles on a roof. Shingles are typically sold in bundles and will tell you how many bundles it takes to make a square.

Q: What are some signs my roof is getting old or has problems?

A: When inspecting your roof, check for cracked, warped or missing shingles. Also look for seams that are loose and flashing that has deteriorated. Look in the gutters for excessive granules that are coming loose from the roof. Also, of course, check inside for leaks.

Q: How much should the roll roofing I’m using overlap?

A: It depends on what type of roofing you’re using. For selvage edge roll roofing, the recommended top lap is 19” with an exposure of 17”. Use a 6” end lap. For surface roll roofing, the recommended head lap is 2” to 4” with an exposure of 32” to 34”. The recommended side lap is 6”.

Upselling Skills

- Some asphalt shingles have colors designed to reflect sunlight, which can reduce a roof’s temperature in the summer and save on cooling costs. These shingles may meet ENERGY STAR® standards.
- Another feature of a quality asphalt shingle is a high impact resistance that minimizes the damage caused by hail or other objects hitting the roof.
- Some manufacturers offer a stain protection feature for asphalt shingles. This protects from algae stains and streaking, which is a common problem that can leave unsightly discoloration on a roof.

Add-on Sales

Here are some other items customers will need if they are buying shingles.

- Anyone putting shingles on a roof will need plenty of **nails**.
- Customers will need **builder’s felt** to use as an underlayment or an **ice barrier** for extra protection.
- You’ll also want to help them get enough **starter rolls** for starting the shingle installation.
- Remind customers to get enough rolls of **flashing** and **roof cement** for the project.
- Ask if the customer needs a **roof boot** for flashing around vent pipes.
- Tools your customers need include a **utility knife** and **extra blades** for cutting asphalt shingles; **tin snips** for cutting flashing; and a **chalk line** and **measuring tape** for getting the first row of shingles started.
- Suggest **hand cleaner** for cleaning up after the project.
- Always ask if customers have the appropriate safety equipment for working on a roof, including a roof **safety harness, gloves** and a **safety helmet**.

Module 2: Wood, Slate & Tile Roofing

Product Knowledge:



Wood Shingle

- A wood shingle is typically made of Western red cedar, although cypress and redwood are also used.
- It has a smooth surface and is taper sawn.
- This shingle comes in random widths and lengths of 16" (called Fivex), 18" (called Perfections) and 24" (called Royals).
- Grading designations are No. 1 (blue label), No. 2 (red label), No. 3 (black label) and No. 4 (undercoursing).
- Four bundles contain enough shingles to cover one square (100 sq. ft.) at standard exposure.
- May be pressure treated to protect against decay. Some manufacturers will also treat with a chemical that is fire resistant.
- Some manufacturers offer a 20 to 25 year limited warranty.



Wood Shake

- A wood shake is similar to a wood shingle, but it is handsplit instead of sawn and has a rough surface for a more rustic appearance.
- Shakes are installed like wood shingles, but the butts are often laid out unevenly for a more rustic appearance.
- Exposure is greater than between wood shingles: 7-1/2" for 18" shakes, 10" for 24" shakes and 13" for 32" shakes.
- Another type is a tapersawn shake that is a hybrid of a shake and a shingle. It is sawn on both sides but the dimensions are similar to a shake.



Clay Tile

- Clay tile is made from clay fired in a kiln.
- It is able to endure harsh conditions and protect against wind, hail, rain and fire.
- Since it is highly durable, many manufacturers of clay tile offer long warranties (as many as 50 years) on their products.
- Clay tile is typically a terra cotta red clay color, although other colors are available.
- Most tiles are unaffected by UV rays, which means their color will not fade.
- Heavier than other types of roofing, so additional structural support may be needed to support a clay tile roof. It is also more difficult to install than other types of roofing materials.
- Mission style is the familiar rounded or S-shaped tile, often called Spanish or Barrel tile.
- Another type is the flat clay tile, which has a flat overlapping or interlocking design.
- Other shapes and styles of clay tile are available.



Slate Tile

- Slate tiles are cut from natural stone into shingle squares.
- It is considered a high-end roof product and is expensive.
- It has high strength, durability, fire and water resistance and requires low maintenance.
- Slate is a very durable roof product and some manufacturers claim 75 years of life from a slate roof.
- However, its weight is three times that of asphalt shingles.
- Slate tiles are attached to the roof by nailing through pre-drilled holes in the shingle.
- Installation is difficult and best done by a professional.

Taking it to the Floor:

Frequently Asked Questions

Q: Do I need to put some kind of finish on my wooden shingle roof?

A: There are several different kinds of products you can put on your wood shingle or shake roof. Depending on the look you want, you can use transparent, semi-transparent or bleaching oil penetrating stain; solid color stain; or paint. Check with the manufacturer's instructions first to review finishing recommendations.

Q: What are the advantages of using wood shingles on my roof?

A: Besides the beauty of natural wood, a wooden shake or shingle is a renewable resource and is highly durable in extreme weather such as hail, high wind and earthquakes.

Q: Can I just replace tiles instead of replacing the entire roof?

A: Usually the best choice is to replace tiles. Clay tiles last a very long time and it is likely that most of the roof is in good condition. A clay tile roof is also expensive to replace. An experienced roofer can replace individual clay tiles. Check the condition of your clay tile roof by using binoculars to check for missing, cracked or slipped tiles and missing mortar. Be sure to check the ridge, horizontal row, valleys and any place the roof changes direction.

Q: Does a tile roof have a good insulation value?

A: The combination of the roof tiles, decking and the air space under and between the tiles makes roof tiles good insulators.

Q: Aren't clay tile roofs expensive?

A: They are economical if you consider their long life, typically 50 years or longer. You may replace an asphalt roof several times during the lifespan of a clay roof.

Q: What type of sheathing do I need under wood shingles?

A: Wood shingles may be installed over solid or spaced sheathing. Open, sheathing saves money and allows shingles to dry out quickly, and is often used in mild climates. Solid sheathing adds insulation, reduces air infiltration and is often used in colder climates. If you are using wood shakes, use solid sheathing under shakes and a felt underlay between each course for areas that have wind-driven snow.

Add-on Sales

- Customers installing wood shingles will need to first cover the roof with the appropriate type of **underlayment**.
- Suggest a **chalk line** and **measuring tape** for ensuring proper spacing for each row of shingle.
- Make sure they have a **circular saw** and **utility knife** for cutting shingles.
- Ask if they have enough **galvanized nails** for the project, as well as a hammer.
- Customers will also need a **ridge cap**, specially made for wood shingles.
- Next, ask customers if they plan to **stain** or finish the shingles in any way, and then help them find the appropriate product.
- As with any roofing project, suggest the appropriate safety equipment for working on a roof, including a roof **safety harness**, **gloves** and a **safety helmet**.

Module 3: Metal & Synthetic Roofing

Product Knowledge:



Steel Panel

- Steel panels are sometimes used to cover a roof. These panels are galvanized and often coated with a baked-on enamel, siliconized paint or other finish.
- This is often called a “standing seam” roof.
- These steel panels can be installed over existing roof or decking. In commercial or agricultural buildings, it may be installed directly onto framing members.
- They are commonly used in commercial, farm and residential applications.
- Panels are installed with nails, although some manufacturers may offer a special interlocking system that covers the nails.
- Steel panels are mostly available corrugated, but other profile shapes are available. They are also available in a variety of colors.
- The most popular lengths for panels are 8', 10' and 12'.



Steel Shingle

- A steel shingle can be made to mimic the appearance of cedar shingles, slate tiles or clay tiles.
- Since they are reflective, they reflect the sun's rays and aid in cooling costs.
- Fire-resistant and rot-resistant. Also resists rotting, cracking, splitting and breaking.
- May be susceptible to damage by hail or high winds
- Steel shingles are long lasting. Some manufacturers will warranty their product up to 50 years.
- They are available in a variety of colors and textures.



Composite Shingle

- Composite shingles are made of composite materials and made to resemble slate, wood or other high-end roofing materials without the high cost associated with those materials.
- They are easy to cut and install.
- They are also lightweight and easy to maintain.
- These shingles usually come with preformed hip and ridge shingles.



Rolled Rubber Roof

- Rolled rubber roof materials are used primarily on flat roofs.
- It is common in commercial and industrial applications and requires professional installation.
- Rubber roof is the generic name commonly known to consumers. There are several different types and the following are two common classifications.
- Polymer-modified bitumen or modified bitumen (MB) membrane is a roll material that attaches to the roof with hot asphalt or heat-welding. It is also composed of multiple layers. It requires some top surface like gravel or metal foil, much like a built-up membrane roof.
- EPDM (ethylene propylene diene monomer) is a roll membrane composed of ethylene and propylene and is the most commonly used roof membrane. The product most consumers know as rubber roofing is EPDM.
- Easy-to-use EPDM kits for homeowners are available and some have a self-stick backing.



Fiberglass Panel

- Some roofing panels are made of fiberglass or other type of fiberglass reinforced plastic.
- They are popular with do-it-yourselfers as they make a good covering for a patio area, garden/greenhouse, carport or boat shed. They can also be used in commercial buildings or barns.
- Fiberglass panels usually allow some natural light to pass through, but opaque panels are also available.
- Their advantage is they will not rot, rust or mildew.
- Fiberglass panels are corrugated or shaped to some profile.
- Their lengths are usually 8', 10' and 12'. A common width is 26". When lapped 2", it can be placed 24" on-center spacing.



Rubber Shingles

- Shingles made of rubber and designed to simulate slate or wood shakes.
- Available in a three-tab design and easy to install.
- Very durable. Manufacturers generally offer a long warranty.
- Insulates well against extreme heat and cold.
- Resists UV rays and resists impact from hail.
- Does not require extra structural support.



Aluminum Shingle

- Lightweight.
- Can be made to mimic the appearance of cedar shingles or tile.
- Since they are reflective, they reflect the sun's rays and aid in cooling costs.
- Most install by nailing, but some manufacturers offer an interlocking system that seals all four edges of the tile.
- Long lasting. Some manufacturers will warranty their product up to 50 years.
- Does not rust, rot, attract insects, dry or split.
- Fire resistant.



Mineral Copper Shingle

- Lightweight.
- Uses a locking system to seal out weather.
- Long lasting. Manufacturers typically offer long-term warranties.
- Easy to install. Installs directly over decking and requires no special tools.
- Installs with nails.
- Weathers to a green color.
- Can be used on commercial and residential roofs.
- High resistance to fire and wind.

Taking it to the Floor:

Frequently Asked Questions

Q: Will a metal roof be noisy in the rain or attract lightning?

A: An aluminum or steel roof will not necessarily be noisy in the rain. Aluminum shingles should be installed over a solid deck, and the insulation in the attic as well as any insulation between the decking and the shingles will help deaden the sound. They do not attract lightning either. However, if the roof were struck by lightning, it would safely dissipate the charge throughout the structure. These roofs are also fire resistant, so they will actually help prevent the house from catching fire if the house were struck by lightning.

Q: Why are some metal roofs called “standing seam”?

A: A standing seam roof is one where the seam between sheets is raised to be above the sheet, and therefore is less likely to leak.

Q: What kind of nails do I use with a steel panel roof?

A: The most common nail to use is a nail with a washer that seals the hole from leaking. This is used because, unlike shingles, the nail on a steel panel roof is exposed.

Q: What is the advantage of a steel roof?

A: A steel roof does not support the growth of moss, mildew or fungus. They are also lightweight and can withstand severe weather. They also last longer than some types of roofing.

Q: Can I use an asphalt patching material to patch a rubber roof?

A: No. Asphalt is not compatible with rubber roofing. Patch according to the manufacturers specifications.

Q: Does an EPDM roof require gravel on top?

A: No. Unlike an MB membrane, EPDM is installed using an adhesive at the lapped joints.

Q: Can I install an EPDM rubber roof over an existing roof?

A: You cannot install an EPDM rubber roof directly over asphalt, tar, shingles or felt paper. Install on 5/8” plywood or OSB. You can install it over existing roofing only if you first place the plywood or OSB decking over the existing roof. Oils in the asphalt and tar roofing will cause problems in the EPDM.

Q: How thick of an EPDM rubber roof do I need?

A: For most applications, a 40 or 45 mil roll is sufficient. Use a thicker 60 or 90 mil if the roof will be in an area where you need good puncture resistance, such as an area where tree limbs may fall.

Add-on Sales

- For customers installing a metal panel roof, ask if they need **snips** or **shears** for cutting metal pieces to size.
- Ask if they need **vent boots**, and then the manufacturer’s recommended caulk for sealing around the boot.
- Make sure customers have the appropriate **underlayment** to install under the shingles.
- Always recommend customers use the appropriate safety equipment for working on a roof, including a roof **safety harness**, **gloves** and a **safety helmet**.

Module 4: Roofing Accessories

Product Knowledge:



Builder's Felt

- Builder's felt is an asphalt-saturated felt used as an underlayment material for shingles.
- It is available in 15 or 30 lb. weights.
- A 15 lb. felt roll is 36" x 144' (432 sq. ft.). When applied with the recommended head lap of 2" and end lap of 4", it covers 400 sq. ft.
- A 30 lb. felt roll is 36" x 72" (216 sq. ft.) When applied with recommended laps, it covers 200 sq. ft.
- Be sure you know the local code requirements for which weight of felt is required for roofing in your area.



Flashing

- Flashing is a roll of 28-gauge, galvanized steel, painted steel or aluminum.
- It helps shed water in areas that are prone to leaking, such as valleys and ridges, where the roof meets a chimney or around vent pipes.
- Flashing is available in rolls 16" to 24" wide.
- It may be referred to as open valley flashing, where the shingles are cut back and flashing is visible.
- Where the roof joins a wall, the flashing is called step flashing.
- Another type of flashing that does not use metal is closed valley flashing. Here, 90 lb. mineral surfaced roll roofing is used and centered in the valley from top to bottom with the shingles woven over the top of it.
- Some roofers may use metal roof edging as flashing around the edge of the roof. The most common is the D style and helps make a neat roof edge.



Hip and Ridge Shingle

- A hip and ridge shingle is designed specifically to cover the angles formed by two intersecting roof planes, otherwise known as the hip or ridge.
- Available for each of the various types of shingles or tiles.
- Installation is similar to field shingles or tiles.



Starter Roll

- A shingle starter roll functions as the beginning run of an asphalt shingle installation.
- It is installed along a roof's eave or rake line.
- A starter roll eliminates the need to use shingles as a starter strip and saves time.
- Use it with fiberglass and asphalt shingles.



Ice / Water Barrier

- An ice and water barrier is a product applied on the deck of a roof under the shingles to prevent water leakage caused by ice damming.
- It helps seal around nails to further reduce water leakage.
- It has a self-adhesive backing for easy installation and is available in rolls.



Roof Cement

- Roof cement is used to fill gaps, openings and penetrations in the roof. It can also be used to seal down shingle taps and to fill around flashing joints.
- Roof cement can also be used on floors and walls.
- It is available in quart, 1-gal. and 5-gal. cans, and in caulking cartridges.



Roof Coating

- Roof coating is used on low-slope roof areas, including mobile homes and R.V.s.
- Apply it with a brush.
- There are two types. The unfibered type is used to recoat old roofs as part of regular maintenance or to help protect metal roofs from corrosion.
- The fibered type is heavier and used in the same places as the unfibered when a heavier-duty product is wanted.

Taking it to the Floor:

Frequently Asked Questions

Q: What is an ice dam?

A: An ice dam is a condition where the temperature is just below freezing and the snow has fallen on the roof. The combination of heat from the sun and the escaping building heat causes the snow above the heated space to melt. The melted snow runs down the roof until it hits the unheated eave overhang. If the weather is cold enough, the runoff freezes and forms a small ridge. As the process continues, the ridge grows. Soon, water is backed up over the house and flows under the shingles, leaking into the home.

Q: So how do I prevent ice dams from happening on my roof?

A: Three ways. If you are installing a new roof, you can install an ice/water shield as an underlayment to the shingles. Second, you should have adequate insulation in the attic to keep heat from escaping, which causes the snow to melt. Third, the attic should have adequate ventilation to allow the roof deck to evenly cool and help prevent snow on the roof from melting.

Q: How do I know if my attic is properly ventilated?

A: In general, the formula is based on the square footage of the attic. You should have one vent for every 150 sq. ft. of attic floor space. The vents should be split between high and low vents. If you have a vapor barrier, you

Q: How do I know if my attic is properly ventilated?

A: In general, the formula is based on the square footage of the attic. You should have one vent for every 150 sq. ft. of attic floor space. The vents should be split between high and low vents. If you have a vapor barrier, you only need one vent for every 300 sq. ft.

Q: How do I install the final shingle on a roof ridge?

A: The most important thing to remember is to take care to ensure that a nail isn't left uncovered and becomes a possible source of a leak. With asphalt shingles, the final shingle in the run may be nailed, then the nail covered with a roof cement to prevent leaking. Another method is to attach the final shingle with a sealant.

Add-On Sales

- Customers buying roof coating will need to first clean the roof. Suggest a wire brush, TSP cleaner and a broom.
- To apply the coating, suggest a **brush** or a **roller** and **tray**.
- Roof coating and cement is also messy, so suggest the appropriate cleaner, such as **mineral spirits**.
- Customers buying builder's felt or a shingle starter roll will need a **utility knife** with extra **blades** for making cuts.
- Suggest **snips** for cutting metal flashing, and **gloves** for protecting their hands while cutting.
- They also may need **caulk** for sealing the areas where flashing meets a chimney.
- Customers will need galvanized roofing **nails** for attaching flashing, starter rolls or builder's felt.

Chapter 3: Guttering

Product Knowledge:



Guttering

- Guttering collects water and directs it away from the home.
- A guttering system consists of long lengths of guttering as well as a variety of fittings and connectors.
- Popular sizes of gutters are 4", 5" and 6".
- It is available in a variety of colors.
- The K-style is the most popular, while a half-round style is also available.
- Continuous guttering is popular and avoids joints in the gutter, but is usually installed by a professional.
- Guttering can be made of several different types of material. Aluminum is the most popular type of guttering and used on most homes today.
- Galvanized guttering is sturdy, but is unpainted and requires some type of finish. This type must also be cleaned regularly if it is to last.
- Vinyl guttering is easy to install and is manufactured specifically with the do-it-yourselfer in mind.
- Plastic guttering is the least expensive option but not very durable. Prolonged cold and hot weather can cause plastic guttering to be damaged.



Downspout

- A downspout attaches to the gutter to carry water down the side of the house.
- Rainfall capacity of a guttering system is largely dependent on the size and number of downspouts rather than strictly gutter size.
- Downspouts are usually rectangular in shape and come in 10' lengths.
- Popular sizes of downspouts are 2"x3", 3"x4" and 4"x5".

It is often used with a splash block, which diverts water away from the foundation of the house.

Strap

A strap attaches the gutter downspout to the side of the house.

Elbow

- An elbow diverts the direction of the downspout by 45°.
- A square elbow is available in two different styles.
- A square shoe style elbow is used at the bottom of the downspout to help divert water away from the house.

Mitre

- A mitre changes the direction of a run of gutter.
- An outside mitre is used for an inside turn of a gutter.
- An inside mitre is used for an outside turn of a gutter.





End Cap

- An end cap stops a run of gutter.



Spike & Ferrule

- Spikes and ferrules are used to hold a gutter to the eave of the roof.
- The spike is inserted through the ferrule.
- The ferrule helps hold the width of the gutter.



Gutter Leaf Guard

- Gutter leaf guards keep leaves out of the gutter while letting rainwater in.
- A variety of styles are available from different manufacturers, but there are two main types.
- One type is placed inside the gutter. These may be made of foam or made to look like a bottle brush.
- Another type sits on top of the gutter. These may be screens or solid covers that allow leaves and debris to pass over the gutter while letting in water.

Taking it to the Floor:

Frequently Asked Questions

Q: How do I fix a leak in my gutter?

A: For some types of guttering, there are repair tapes that quickly and easily patch holes. Or, you can patch it using cement and a patch of the same material as the gutter. For larger holes, you may want to replace the entire section of gutter.

Q: How much of a slope should my gutters have?

A: Allow a fall of about 1-1/4" for every 20' length of guttering material.

Q: How often should I inspect the gutters on my house?

A: Inspect them at least twice a year, in the spring and fall. Be sure to clear out all leaves and debris.

Q: What are some problem areas in the guttering system?

A: Check for high spots where water might not flow or low spots in the gutter where water might collect. Correct that problem by either installing additional spikes and ferrules or by bending the hanger that supports the gutter. Fix leaks or holes in the gutter by patching or replacing a section of the gutter.

Add-On Sales

Here are some products you can suggest to customers for either gutter repair or new installation.

- They will need sheet metal **screws** along with a **screwdriver** for connecting guttering pieces.
- Customers may also need **rivets** and a **rivet gun** for attaching pieces.
- Ask if customers have a **hacksaw** for cutting gutters to length.
- Remind them they will also need the appropriate length **ladder**.
- Suggest a tape measure and a chalk line for planning the run of gutter.
- Customers will also need gutter **sealant** for sealing joints.
- Finally, don't forget to recommend **gloves**.