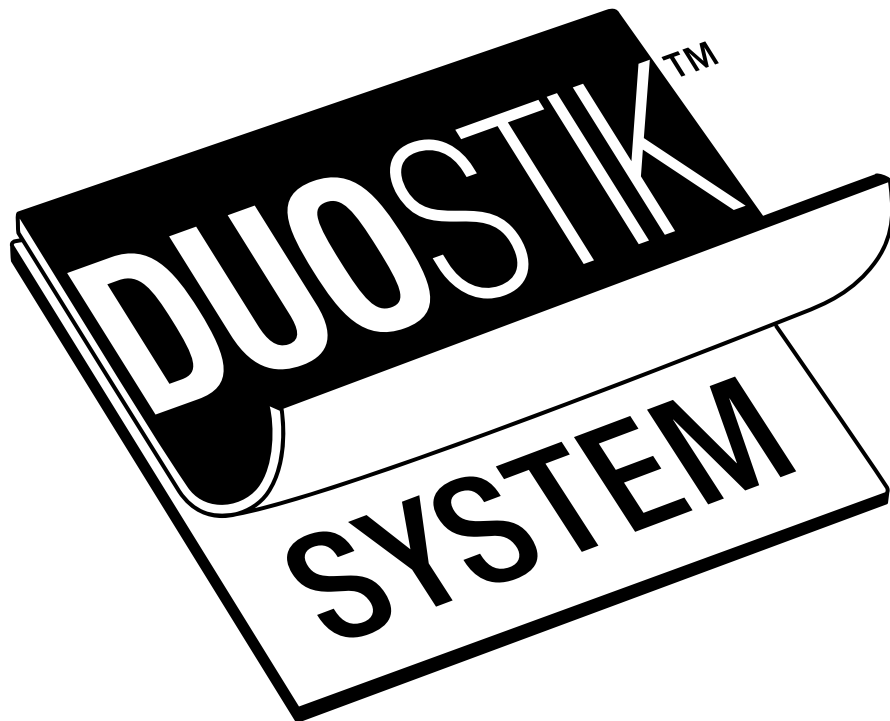


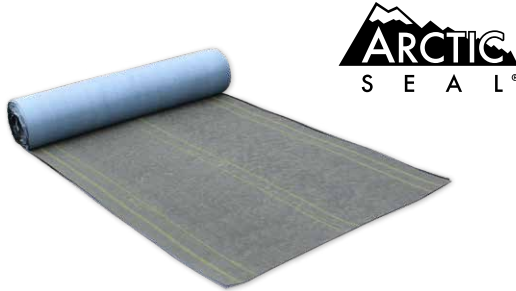


DuoStik™ System Installation Instructions



Directions for Applying the Malarkey DuoStik™ System

The DuoStik™ System (DuoStik) from Malarkey is an easy-to-install roofing system for low slope installations greater than ¼" to less than 4:12" and utilizes two (2) roll roofing components:



Malarkey's 401 Arctic Seal® underlayment
(hereafter referred to as the *base sheet*)



Malarkey's 430 OmniSeal™ Cap sheet

Both membranes are *self-adhering* and have adhesive on the underside that is protected by *release film*, a sheet of plastic you remove during installation. The release film is split down the middle so one side can be peeled off at a time. The importance of this will be explained in the installation instructions to follow. In addition, the topside, upper edge of the 430 cap sheet has a strip of release film to protect its *selvage edge* adhesive (see Glossary below). Roll roofing is applied horizontally, parallel to the eaves.

HELPFUL GLOSSARY OF ROOFING TERMS

- **Lay lines:** The base sheet has six (6) yellow lines on it that run the length of the roll. Lay lines are there to guide the amount of overlap one course of base sheet can have over another. For this installation, please use the lay line positioned 4" from the edge of the roll.
- **Side laps:** Side laps are the amount a course of roll roofing overlaps the course below it to shed water. Lay lines exist to help installers establish consistent side laps.
- **Selvage edge:** On the cap sheet, the selvage edge is the 4-inch wide strip along the top of the roll (shown black in the picture above) that has adhesive on it. The adhesive creates a watertight seal and makes it easy to adhere one membrane to another at side laps.
- **End laps:** End laps are where the end of a roll is overlapped by the start of another in the same course. End laps in a DuoStik application should be a minimum of 6".

STORAGE AND HANDLING TIPS

- Materials require dry, well-ventilated storage and protection from the weather; store off the floor on pallets, and keep the rolls on end to prevent flattening and distortion.
- Before application, roll out the material, cut into manageable lengths for easier handling, and lay them out flat to relax. Wrinkles and buckles can result if not fully relaxed, especially in cooler temperatures.
- Having roll lengths the exact width of the roof are not necessary. Once in position and adhered to the deck, excess amounts can be trimmed off later with a utility knife.
- If installing on a hot day, keep rolls in the shade if possible. Too much heat can make the release film difficult to peel off.

Directions for Applying the Malarkey DuoStik™ System

- In most instances, proper application is more easily accomplished with *two installers*.

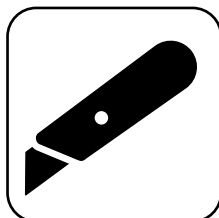
PRECAUTIONS

- ALWAYS wear fall protection when working on a roof.
- The Arctic Seal® base sheet can be slippery, particularly when wet or covered with frost. Be careful when walking on it.
- Installation on a tongue and groove surface is not recommended unless a base sheet is first installed to bridge minor substrate imperfections.

QUESTIONS?

These instructions are meant to act as a general guide, and strongly **recommend they be reviewed completely before beginning**. Roofs vary in design and complexity; please direct questions about this installation or any Malarkey roofing product, please contact our Technical Services Department weekdays at (800) 545-1191 or (503) 283-1191, 7:00 am to 5:00 pm PST. You can also email us at technicalinquiries@malarkeyroofing.com. Thank you.

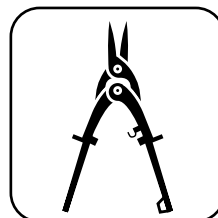
Tools You Will Need



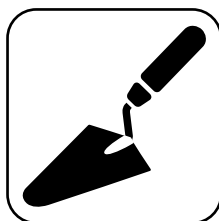
UTILITY KNIFE



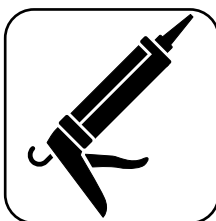
HAMMER / NAILS



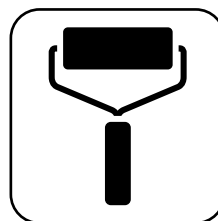
TIN SNIPS



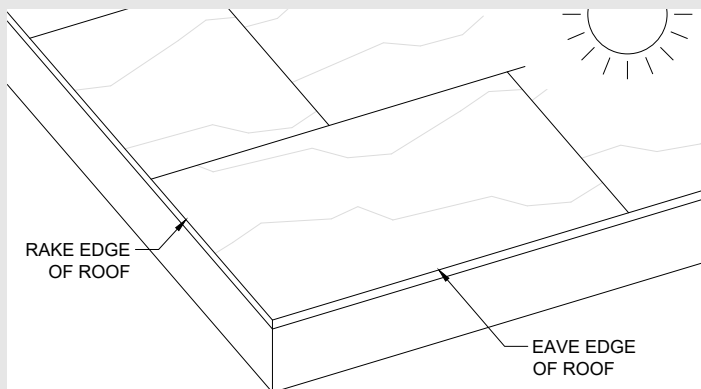
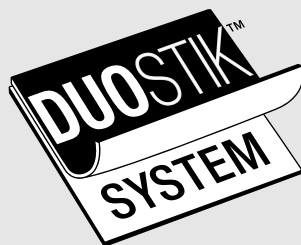
TROWEL



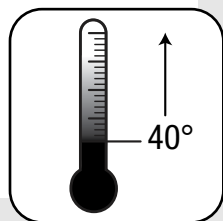
TUBE OF TROWEL-GRADE
ADHESIVE/MASTIC IN
CAULKING GUN



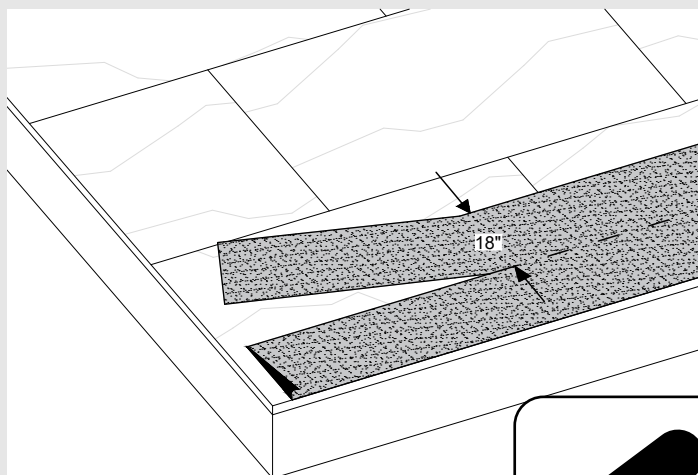
HAND AND
WEIGHTED ROLLERS



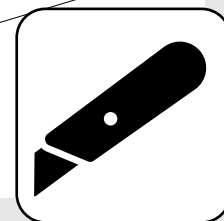
Slide 1



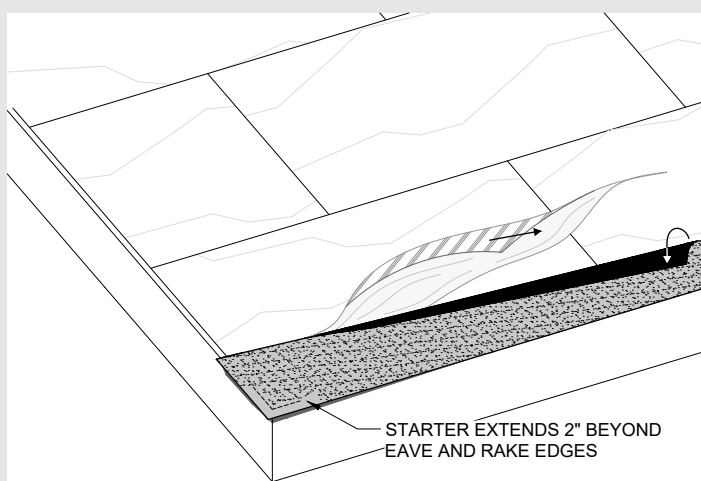
Begin installation with a smooth roof deck, clean and dry – temperature 40°F and rising; no rain expected



Slide 2

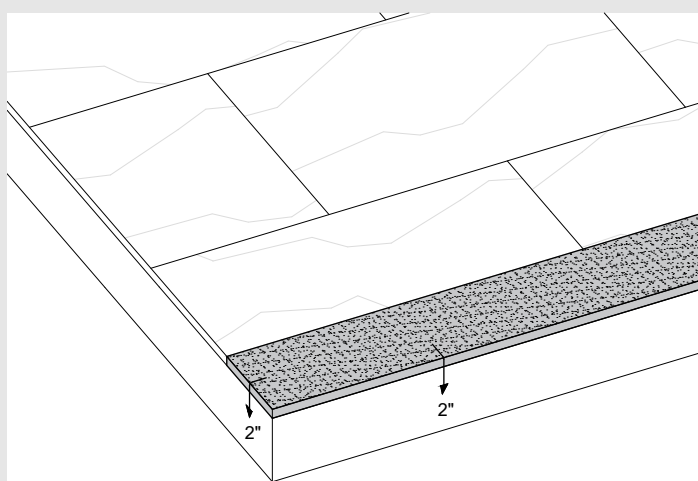


Cut first course base sheet in half to create a *starter strip* – set other half aside for possible use elsewhere



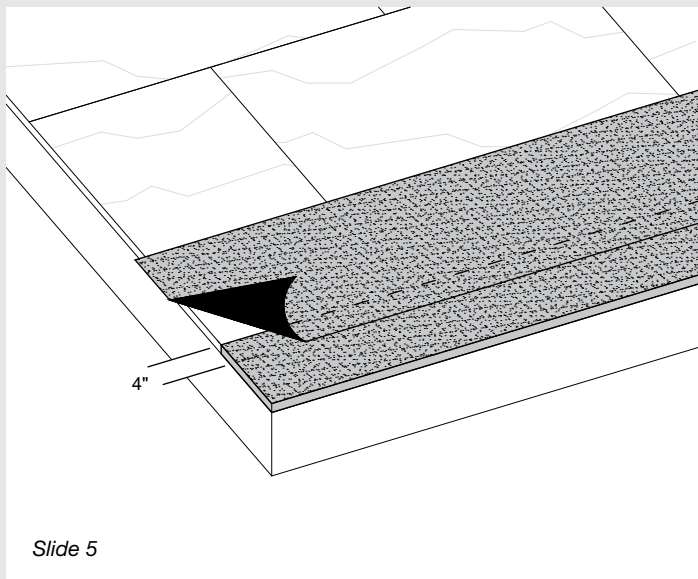
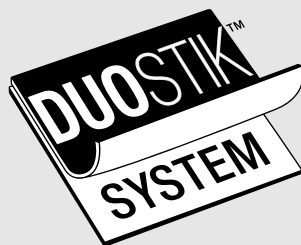
Slide 3

Position starter strip along the eave, **extending it 2" beyond the eave and rake edges of roof** – peel back release film from starting end to expose adhesive, and adhere that end to deck with heavy hand pressure – remove balance of release film, pulling it out and back until the membrane can be completely adhered to the deck – roll the surface to ensure adhesion

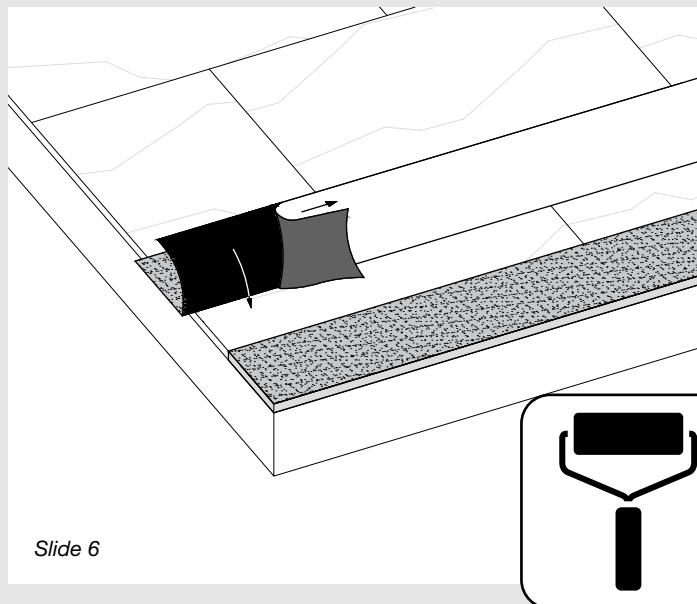


Slide 4

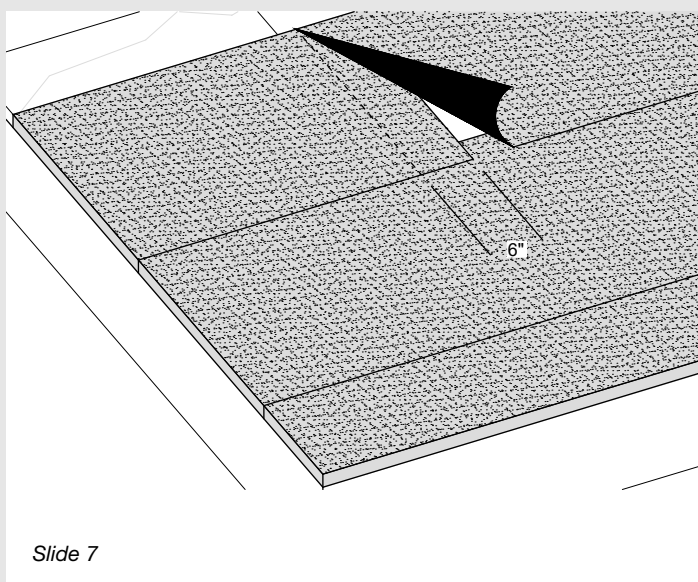
Turn the edges of the starter strip down over the edge of the deck 2" and press firmly to secure



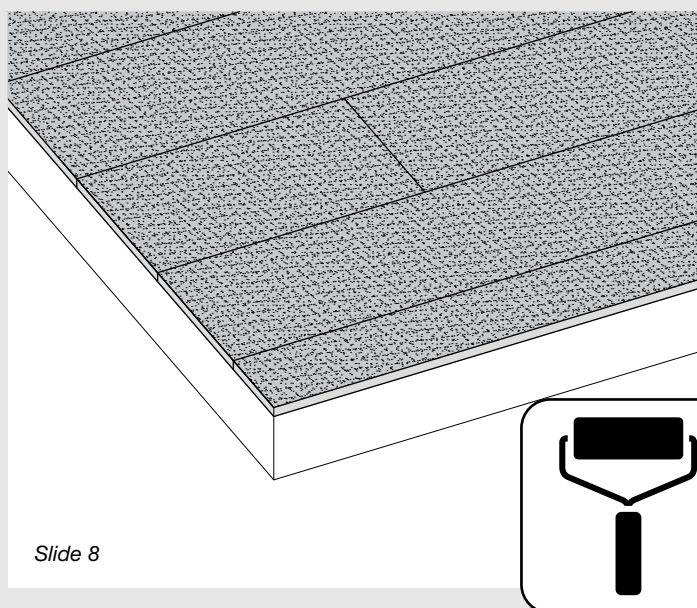
Courses to follow starter strip are all full-width sheets – position second course 2" beyond the rake and overlap starter strip at top edge by 4"



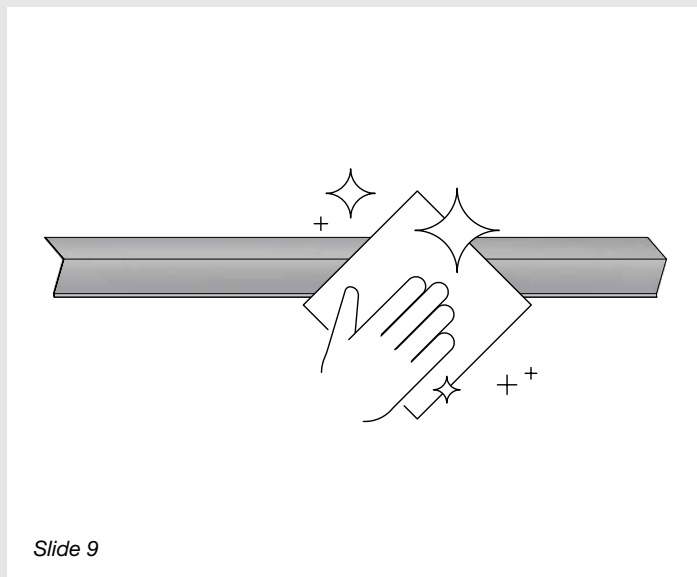
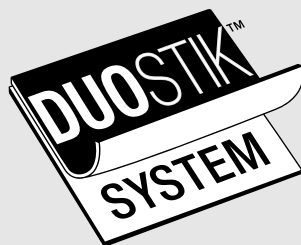
Application of self-adhering membranes: With second course in position up roof from the starter strip, fold upper half back on itself – remove release film – return upper half back down and secure to deck – repeat for lower half – turn the end 2" over the rake edge – roll to ensure adhesion



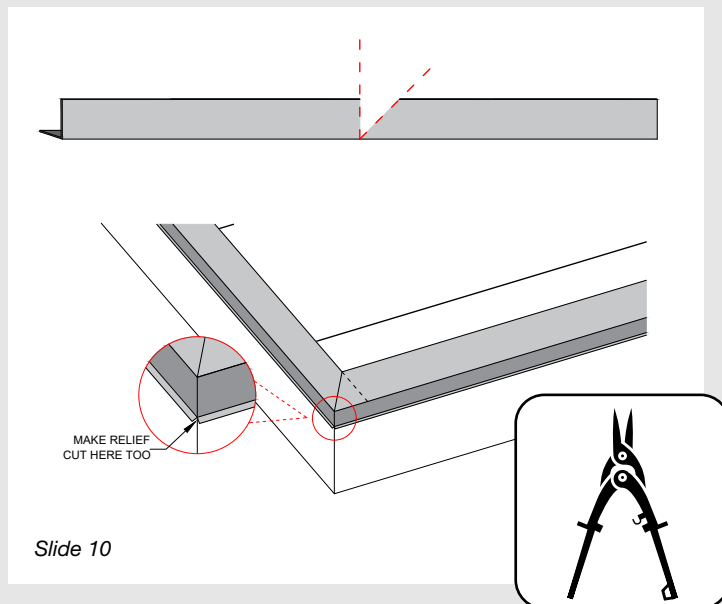
In courses with partial rolls, lap the end of one 6" over the other – stagger *end laps* like this 3' apart in subsequent courses



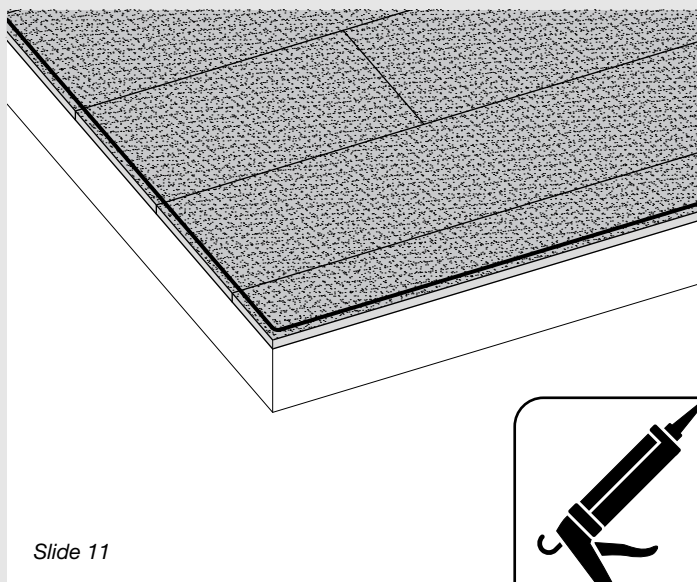
Continue up roof, each course overlapping the previous by 4" – lay line on sheet shows how far to lap material – when finished, roll the surface – smooth wrinkles – ensure overlaps, end laps, and seams completely sealed



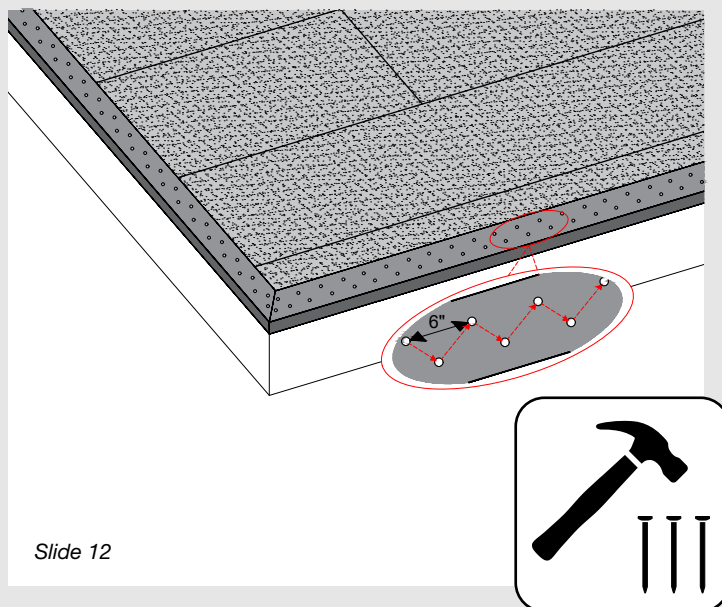
Prepare metal *drip edge flashing* – wipe with vinegar and water solution – scuff painted metal, lightly prime, and allow to dry



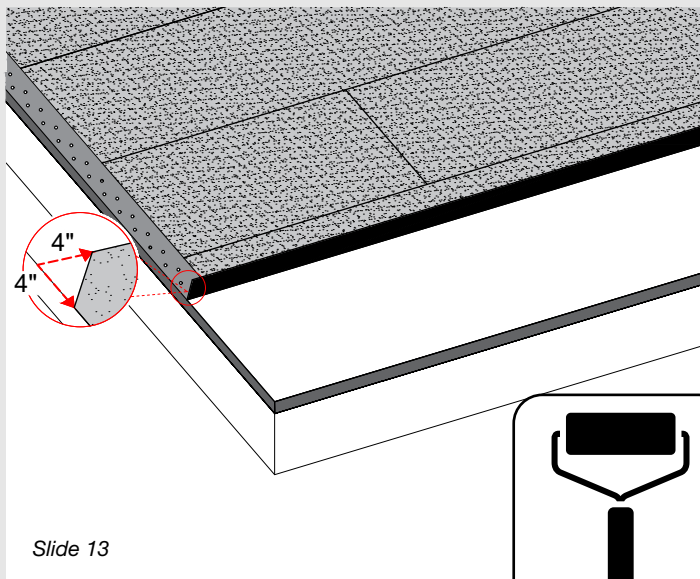
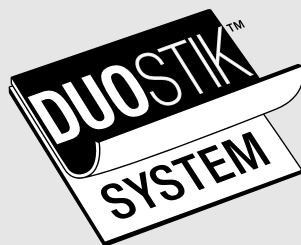
Cut drip edge to bend around corners – make two relief cuts in the metal as shown at top – bring the cut edges together, the angled piece overlapping the straight edge, to form 90° corner piece



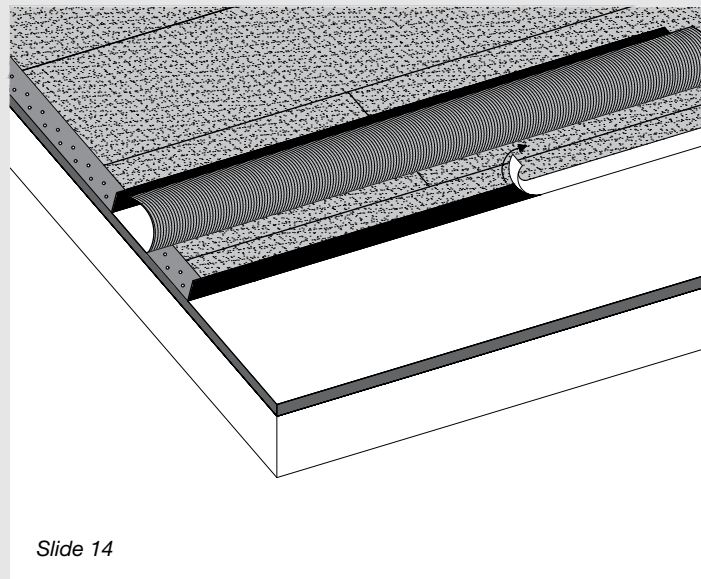
Apply bead of trowel-grade adhesive/mastic along perimeter edge of roof



Install drip edge into adhesive along perimeter – fasten top of flange in two staggered rows, zigzag fashion, each nail 6" apart, and no closer than 2" from roof edge



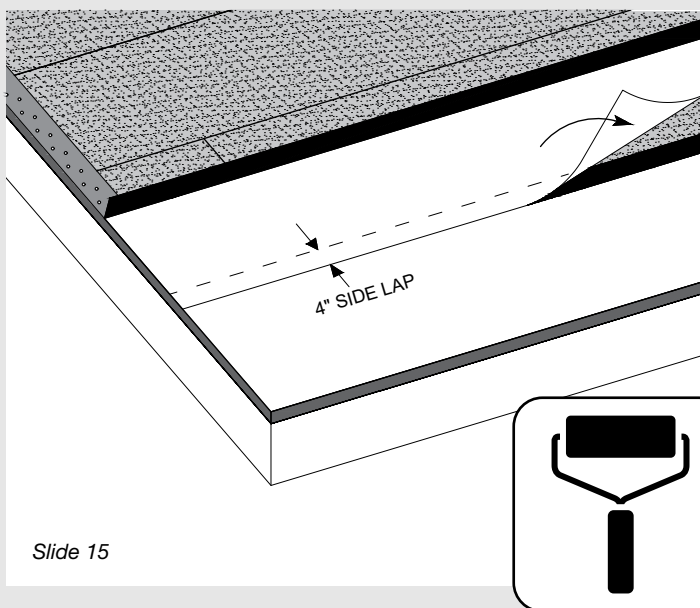
Slide 13



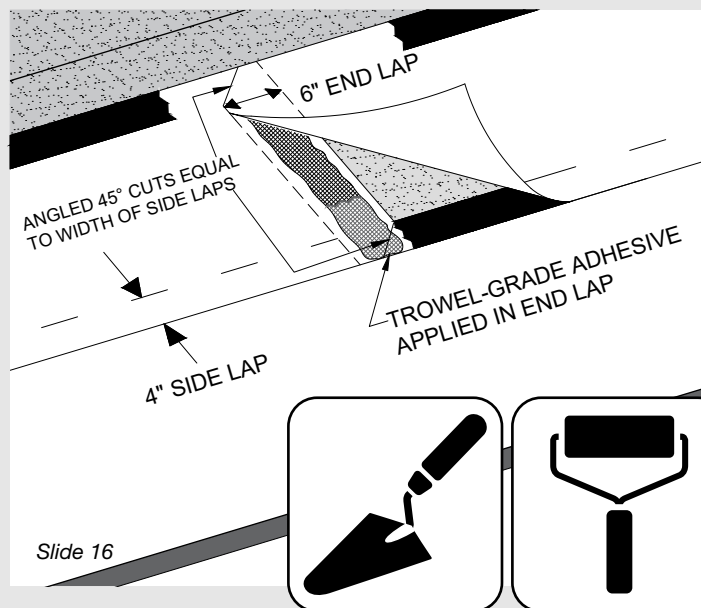
Slide 14

Sweep the base sheet layer clean of debris – install first course of full-width cap sheet along eave and rake, selvage edge at the top (all courses of cap sheet will be full-width) – make angled, 45° cut in upper corner at rake edge equal to anticipated 4" side laps – ensure membrane is sticking to drip edge – hand-roll thoroughly

Install second course and position to overlap first course 4" (width of selvage edge) – adhere upper half of second course to deck – fold back bottom half but leave release film in place – remove release film from first course selvage, exposing the adhesive



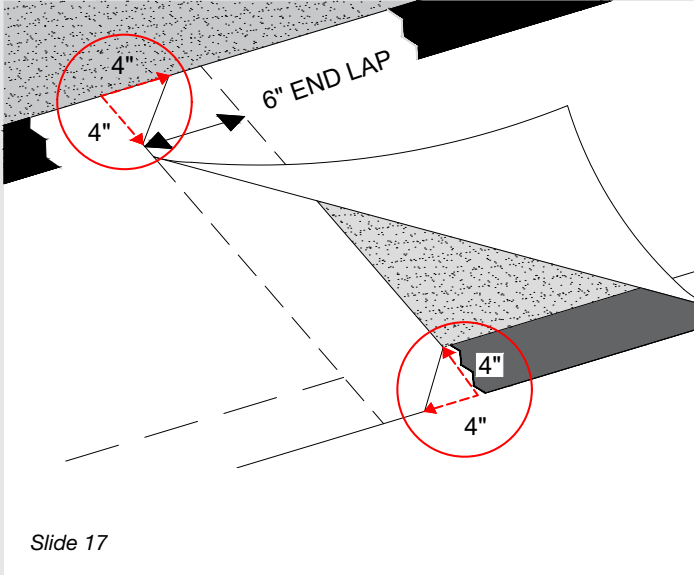
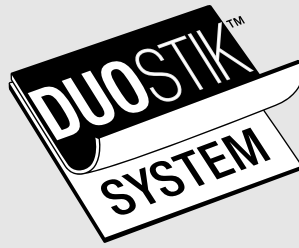
Slide 15



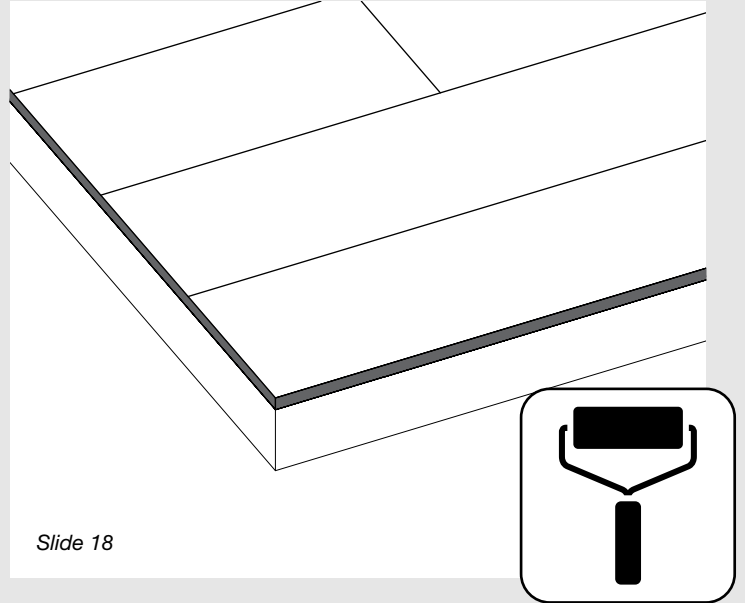
Slide 16

Remove release film from bottom half of second course and lower to deck, covering first course selvage – roll to ensure adhesion

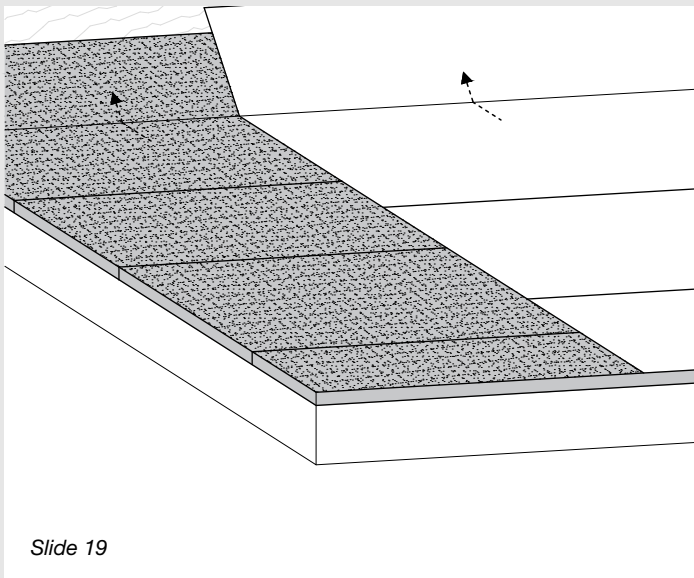
In courses with partial rolls, lap the end of one 6" over the other – make angled, 45° cuts in opposing corners (see next slide) – with trowel apply thin coat of trowel-grade adhesive/mastic to entire 6" end lap – press overlapping end into adhesive – use hand roller to ensure adhesion



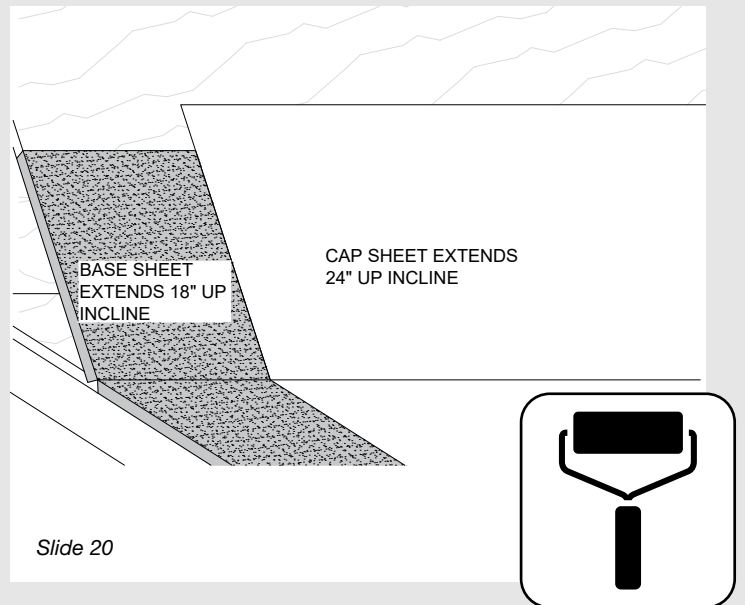
Making angled, 45° cuts in opposing corners: width of cuts same as width of side laps, 4" – discard cut corner pieces after cropping – Note: properly-dimensioned cut corners should be completely covered by the application of courses that follow



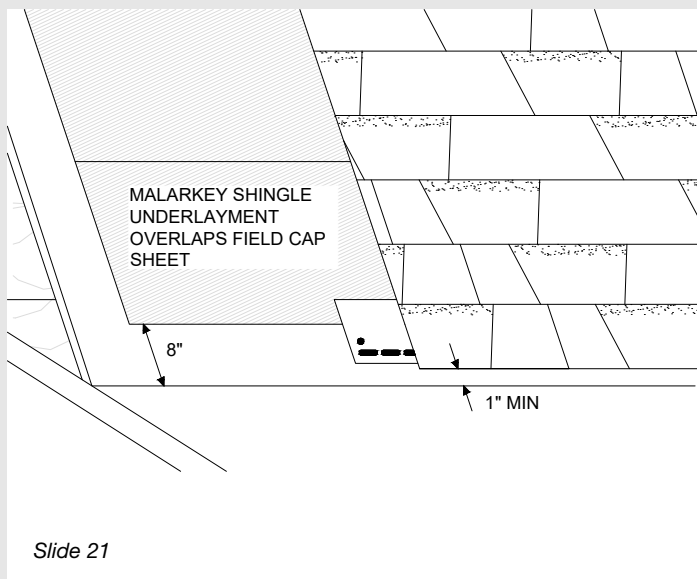
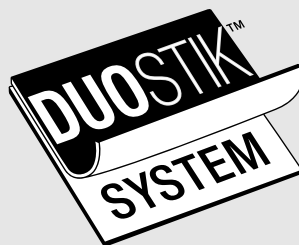
Continue up roof, each course overlapping the previous by 4" – when finished, roll the surface – surface should be wrinkle free – ensure overlaps, end laps and seams completely sealed



Instructions follow for the installation of membranes at the transition from a low slope roof to a steep slope roof, for instance, from a porch roof to the house roof



Apply base sheet 18" up incline of angled roof and cap sheet 24" – ensure each is forced into the break at the transition – hand-roll to seal



Apply shingle underlayment from angled roof over field cap sheet and terminate 8" above transition – install shingles minimum 1" up from transition – shingles should not contact low slope roof

FINAL NOTE

These instructions are meant to act as a general guide. If you have questions about this installation or any Malarkey roofing product, please contact our Technical Services Department weekdays at (800) 545-1191 or (503) 283-1191, 7:00 am to 5:00 pm PST. You can also email us at technicalinquiries@malarkeyroofing.com. Thank you.



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