

# RoofKit

**RUBBER ROOFING PRODUCTS**



## ***Rubber Roofing*** **Pocket Application Guide**

**For technical assistance call:  
1-800-225-4714 EXT 7888**

**[www.RoofKitRoofing.com](http://www.RoofKitRoofing.com)**

# Table of Contents

Page 2	General Information
Page 2	Cautions and Warnings
Page 4	Recommended Tools
Page 4	Available Products
Page 5	Surface Preparation
Page 6	Installation
Page 9	Pipe Penetrations
Page 9	Roof Protrusion
Page 11	Seaming Membrane
Page 13	Perimeter Walls and Inside Corners
Page 14	Termination Bar
Page 15	Outside Corner Detail
Page 16	Cover Strip
Page 17	Rubber Pipe Boot with Steel Clamp
Page 17	Pipe or Conduit Flashing with Tape Flashing
Page 19	T-Joints
Page 21	Metal Edge Detail
Page 21	Cover Strip on Metal Edge Detail
Page 22	RoofKit Membrane to Shingle Transition
Page 23	Wood Decks
Page 24	Repair of RoofKit Rubber Roofing Membrane
Page 25	Glossary
Page 28	Review of Application Procedures
Page 30	Installation Details
Page 37	Frequently Asked Questions

**In the event that certain RoofKit products are not available in your area, please visit our website at [www.RoofKitRoofing.com](http://www.RoofKitRoofing.com) for additional information including specific installation measures.**

# GENERAL INFORMATION

This APPLICATION GUIDE has been designed to give the installer a GENERAL DESCRIPTION of a RoofKit fully adhered roof system. This APPLICATION GUIDE is intended as a reference aid only and is not intended or meant to be all-inclusive.

Prior to the installation of a RoofKit roof system, it is recommended that the installer view the RoofKit “Instructional” Video. This video is available from your local RoofKit dealer or visit [RoofKitroofing.com](http://RoofKitroofing.com).

Remembering a few, simple things not to do when installing RoofKit can help ensure a smooth and successful installation.

- Never use solvent-based roof cement on a rubber roof
- Never use aluminum coatings
- Never use RoofKit Latex Adhesive for rubber-to-rubber seaming
- Never use RoofKit Contact Adhesive packaged in a five-gallon metal bucket for rubber-to-rubber seaming
- Never bond RoofKit EPDM membrane directly to the flange of a metal drip edge
- Never bond RoofKit EPDM membrane on top of shingles
- Never adhere RoofKit EPDM unless contact and or multipurpose adhesive is dry to the touch
- Never use Seam Tape or Tape Flashing as cover strip
- Never use "ice and watershed" in, or as part of, your RoofKit EPDM roof installation
- Never use RoofKit Rubber Roofing Products as pond liner.

## RoofKit User Cautions and Warnings!

- Read Caution labels on all adhesive, primer and sealant containers. These materials contain petroleum distillates and are extremely flammable. Care must be taken to avoid open flames. Do not smoke when using these products. Safety Data Sheets (SDS) are available for these products and should be consulted.
- Adhesives should be used in a well-ventilated area. Avoid inhalation of any fumes. Care should be taken to ensure fumes do not enter the building through windows or fresh-air-intake ventilation fans.

- Avoid adhesive contact with skin. Contact with skin should be avoided and necessary protective equipment and clothing should be worn.
- Avoid adhesive contact with eyes. Contact with eyes should be avoided and necessary protective equipment should be worn.
- Safeguard against falling by reading ladder manufacturer's warnings; and by establishing a perimeter warning system utilizing ropes with flags attached. Surfaces may be slippery when wet or covered with frost. Always work with a friend and never work with your back to the roof's edge.
- Care must be taken with fasteners that penetrate the deck to avoid contact with electrical wiring and plumbing.
- Re-roofing over a wet substrate is not a good roofing practice. All wet materials should be removed before proceeding with the installation of new materials.
- Condensation may occur when applying adhesives at temperatures below 40° F. especially when there is high humidity. If droplets of water are discovered, discontinue installation until weather conditions improve. At that time reapply a thin coat of adhesive over the old coat of adhesive and continue installation. Note: All adhesives should be applied at temperatures above 40° F.
- Allow adhesives to adequately dry to avoid blistering of the membrane (solvent based adhesives only). Given time, blistering will likely subside and roof membrane will perform for the long term. Note: The RoofKit Rubber Roofing Membrane may be applied to wet Latex Bonding Adhesive for field applications.
- Positive drainage of at least one-eighth inch (1/8") in twelve inches (12") is required for warranty coverage.
- Solvent based products such as asphalt roof cements and coatings will deteriorate the RoofKit Rubber Roofing Membrane and should never be used on this type of roof.

Note: RoofKit adhesives have been tested to ensure compatibility with the RoofKit Rubber Roofing Membrane. Use of non-RoofKit products will void the membrane warranty.

# Tools Recommended

The following list is for reference only, as tools and equipment may vary from project to project:

- 2-inch steel or hard rubber roller
- Scissors
- Chalk line
- Tape measure
- Solvent resistant rubber gloves
- Stir stick for adhesives
- 9-inch paint roller frame and several large nap, solvent compatible roller covers
- Caulk gun
- Screw gun and hammerdrill

## RoofKit Products Available

- **RoofKit Rubber Roofing Membrane** (45 mil thickness) available 10' x 20' or 15' x 25'. Also in 10' and 20' widths with 50' or 100' lengths. (60 mil thickness available in 10' and 20' widths with 50' or 100' lengths.)
- **RoofKit Latex Bonding Adhesive** in 1 gallon and 3.5 gallon containers (coverage rate 100 sq. ft./gal)
- **RoofKit Contact Adhesive** in 5 gallon containers (coverage rate 60 sq. ft./gal)
- **RoofKit Multi-Purpose Bonding Adhesive** in 1 gallon containers (coverage rate 60 sq. ft./gal)
- **RoofKit Seam Primer** in 1 pint and 1 gallon containers
- **RoofKit Seam Kit** *Contents include:* Primer (pint), seam tape (25'), scrub pad, seam roller and wipe cloths
- **RoofKit Seam Tape** in rolls 3" wide in 50' lengths
- **RoofKit Tape Flashing** in 12" x 25' rolls
- **RoofKit Cover Strip** in rolls 5" wide by 50' long
- **RoofKit Rubber Caulk** in 10 oz. tubes (20 lineal feet/tube)
- **RoofKit Rubber Corner Covers** in a box of 4
- **RoofKit Rubber Pipe Boot and Steel Clamp** 1 per box
- **RoofKit Aluminum Termination Bar** in 5' & 10' lengths
- **RoofKit Waterstop** in 10 oz. tubes (20 lineal feet/tube)
- **RoofKit 6" Reinforced Strip** in rolls 6" x 50'
- **RoofKit Patch Kit** *Contents include:* (4) Round 8" patches, Primer (pint), scrub pad, seam roller, wipe cloth
- **RoofKit Instructional DVD**
- **RoofKit Fastening Screws (3") and Plates** in a box of 100 each.

# ROOF SURFACE PREPARATION

RoofKit Rubber Roofing Membrane will adhere to insulation boards compatible with RoofKit adhesives (this does not include polystyrene insulation). The roof membrane will also adhere to plywood, OSB (Oriented Strand Board), one-half inch (1/2") high-density wood fiberboard, and concrete. If polystyrene insulation is used, cover the insulation with one-half inch (1/2") high-density wood fiberboard. Butt all insulation boards together, staggering all of the joints. All spaces larger than 1/4" must be filled to provide a uniform, smooth surface.

Fastening Screws and Plates shall be applied at the minimum rate of ten (10) per 4 ft. x 8 ft. board of insulation, and five (5) per 4 ft. x 4 ft. board, or as required by the insulation manufacturer. When installing insulation around the perimeter, the fastening pattern is one (1) fastening screw and plate every two (2) square feet (16 per 4 ft. x 8 ft. board). Examples of fastening patterns are shown in Figure 1.

NOTE: Extra fastening screws should be installed around protrusions such as pipes, chimneys, skylights and irregularities in the roof deck.

Do not install more than can be covered with RoofKit Rubber Roofing Membrane by the end of the day.

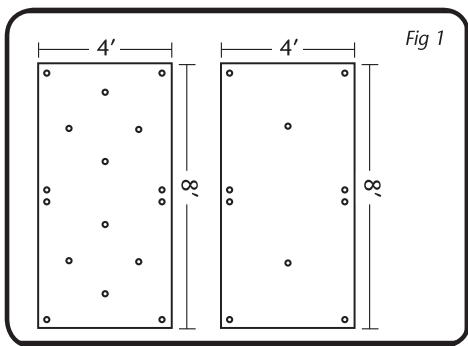
Re-roofing over a wet substrate is not a good roofing practice. All wet materials should be removed and replaced prior to the installation of new materials.

The roof surface must be dry. Moisture will cause poor membrane adhesion and blistering.

The roof surface should be swept to remove dirt, dust and other loose particles.

Good roofing practice dictates that the roof surface must have positive drainage of at least 1/8" in 12 inches.

**Be certain at this point to install RoofKit 6" x 50' Reinforced Strip at the base of any roof angle changes such as parapet walls, transition to sloped roofs, chimneys, skylights, etc.**

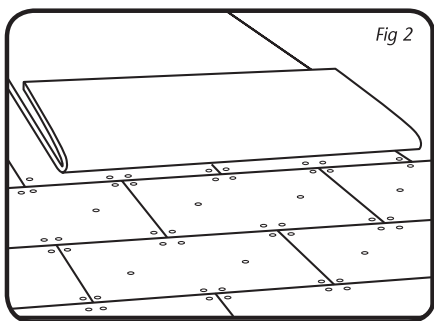


## INSTALLATION

Unroll the RoofKit Rubber Roofing Membrane over the substrate so that the sheet is in the desired position and is wrinkle free. If more than one roll of membrane is required, subsequent rolls must overlap the prior roll a minimum of four inches (4") for seaming. Care should be taken to ensure the membrane overhangs the perimeter of the roof at least three inches (3").

Allow the RoofKit Rubber Roofing Membrane to relax for approximately 30 minutes depending upon weather conditions.

Fold the membrane onto itself so that one-half (1/2) of the underside of the membrane is exposed. Take care to avoid wrinkles. See Figure 2.



## Contact Adhesive Application

Open and thoroughly stir the Contact Adhesive. Using a solvent approved roller, apply Contact Adhesive to both the substrate and the membrane at a rate of sixty (60) square feet per gallon. **Use care not to get adhesive into the seam area(s)** (See Figure 4). Allow the adhesive to dry to the finger touch of tacky, but not stringy (approximately 20 to 35 minutes). Then carefully fluff air under the **top half** of the membrane and roll the membrane into the glued substrate. Roll the middle of the membrane first, followed by the ends. **DO NOT** let the ends of the membrane roll ahead of the middle. Finally, apply pressure to the installed membrane with a push broom to ensure good contact.

Fold back the remaining unglued portion of membrane and repeat this process.

## Latex Bonding Adhesive

*(May be applied in one of two methods)*

**Contact Application Method:** Open and thoroughly stir the Latex Bonding Adhesive. Using a large nap roller, apply Latex Bonding Adhesive to both the substrate and the membrane at a rate of 100 square feet per gallon of combined surface area. **Use care not to get the adhesive into the seam area(s)** (See Figure 4). The adhesive should be consistent in color when applied, but will turn clear when ready for bonding. Then carefully fluff air under the **top half** of the membrane and roll the membrane into the glued substrate. Roll the middle of the membrane first, followed by the ends (shown in Figure 3). **DO NOT** let the ends of the membrane roll ahead of the middle. Finally, apply pressure to the installed membrane with a push broom to ensure good contact.

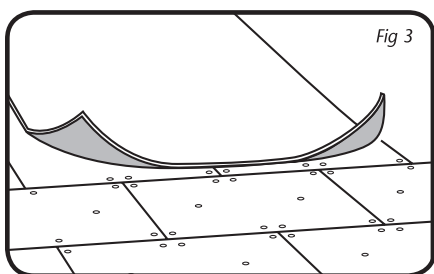
Fold back the remaining unglued portion of membrane and repeat this process.

**One-Sided Application Method:** Open and thoroughly stir the Latex Bonding Adhesive. Using a 3/4" large nap paint roller, apply the Latex Bonding Adhesive to **just the substrate** at a rate of 100 square feet per gallon. Then carefully fluff air under the **top half** of the membrane and roll the membrane into the wet adhesive starting from the middle of the membrane first, followed by the ends (shown in Figure 3, next page). **DO NOT** let the ends of the membrane roll ahead of the middle. Lightly broom the membrane to remove any air pockets or wrinkles and to ensure transfer of adhesive to the bottom side of the

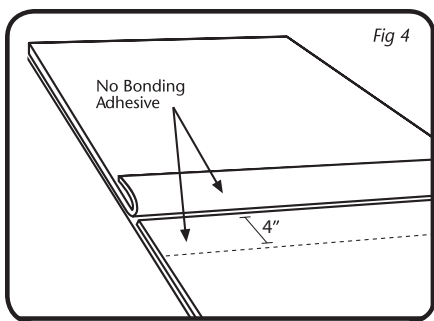


membrane. Caution: limit foot traffic on the membrane while adhesive is curing. The sheet offers less resistance until the adhesive is completely cured. Repositioning of the membrane is possible while the adhesive is still wet. After the adhesive begins to set-up (approximately 20 to 35 minutes) apply pressure with a push broom to ensure good contact. This application requires a porous substrate, such as High Density Fiberboard.

Fold back the remaining unglued portion of membrane and repeat this process.



If installing more than one roll, always install the membrane so that the flow of water goes over and not against the lapped edges. Allow the next roll of membrane to overlap the previous roll of membrane a minimum of four inches (4"). Again, fold the membrane onto itself so that one-half (1/2) of the underside of the membrane is exposed. Apply Latex Bonding Adhesive to the substrate and proceed as you did with the first roll.



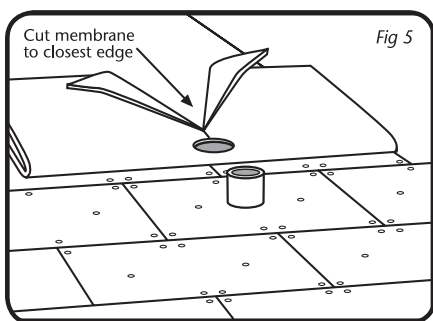
## Multi-Purpose Adhesive

The Multi-Purpose Bonding Adhesive can be used for any application on the roof: adhering the membrane to a substrate or membrane-to-membrane seaming. This adhesive must be applied to both the membrane and the substrate in a thin coat using a solvent approved roller. Allow the adhesive to dry (tacky), then bring the membrane and substrate together in a

contact fashion. All membrane-to-membrane seam applications require RoofKit Seam Primer and 5" Cover Strip to be installed over the entirety of the seam.

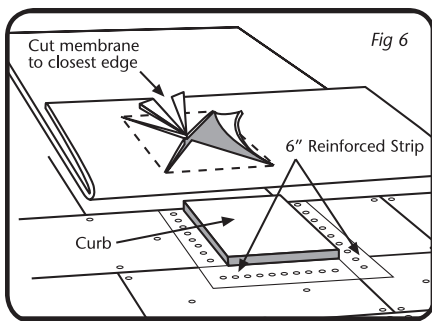
## PIPE PENETRATIONS

When laying out the field membrane and a pipe is encountered, roll the folded membrane to the pipe. Be sure to maintain the proper alignment of the membrane with the roof edge, wall, and seams. Make a straight cut from the pipe to the nearest edge of the field seam (see Figure 5). Cut a hole to match the diameter of the pipe and roll the membrane around the pipe. Check the final position of the membrane. Fold the membrane back and begin the adhesive application.

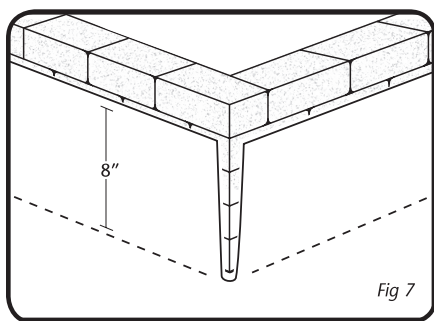


## PROTRUSION IN THE ROOF

1. When laying out the field membrane and a curb (chimney, skylight, etc.) is encountered, unroll the folded membrane up to the curb while maintaining proper sheet alignment with walls, perimeter edges and other protrusions.
2. Measure the height of the curb from the center of the curb base to the top of the curb. Transfer the corresponding dimensions onto the folded membrane and mark the membrane. Cut the membrane in a straight line from the nearest edge to the mark. Then angle cut the membrane from the mark to each corner of the curb detail. NOTE: this should be a 45° cut. See Figure 6, next page.



3. Install 6" Reinforced Strip to the substrate with Fastening Screws and Plates every twelve inches (12"). Ensure that the 6" Reinforced Strip is butted to the curb detail. Clean and prime all membrane surfaces, including the 6" Reinforced Strip, and allow to dry.
4. Roll the membrane around the curb, leaving a triangle of membrane, and turning the membrane up on all four (4) sides. Using scissors cut a round hole at every angle change of the membrane at the outside corners (This will prevent the cut in the membrane from continuing.)
5. After all cuts are made and the membrane has been correctly positioned, fold the membrane back and begin bonding procedure. Apply Multi-Purpose Bonding Adhesive to the 6" Reinforced Strip, folded membrane, and the curb area.
6. Starting at the base or angle change, roll the membrane up the curb (chimney, skylight, etc). Take care to thoroughly adhere the membrane into the angle change before rolling the membrane up the curb. Roll the flat surface of the 6" Reinforced Strip with a steel or hard rubber roller. Broom or hand rub the membrane to ensure 100% adhesion.

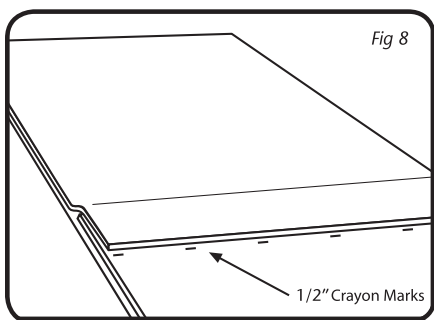


see detail illustration #RK202, page 33 for more detail

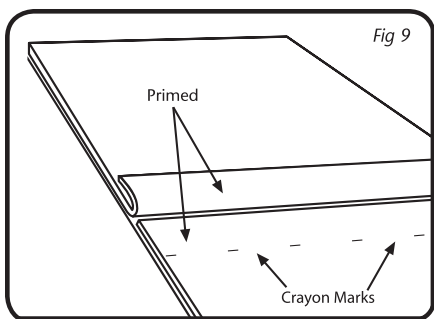
7. The membrane should travel up the curb at least eight inches (8") or to the top of the opening if it is less than eight inches (8"). See Figure 7, previous page.

## SEAMING MEMBRANE

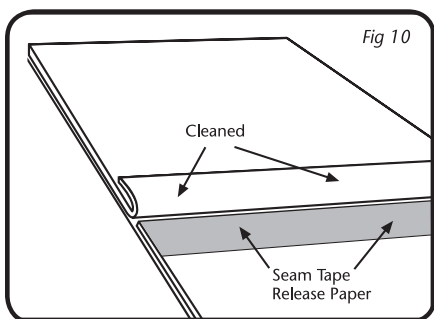
After adhering the membrane so that the width of the seam is the width of the 3" Seam Tape, using a crayon, mark a line one-half inch (1/2") from the leading edge of the top membrane sheet every 3'-4' (shown in Figure 8). This will provide a guide for the correct placement of the seam tape.



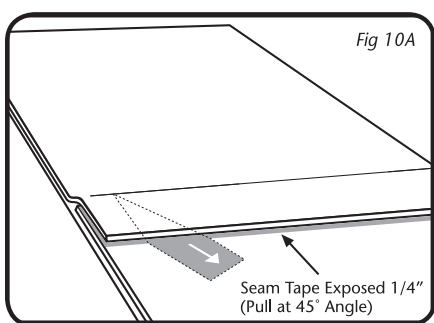
Fold the top membrane sheet back to expose the seam area. (HINT: A small piece of seam tape that is tacky on both sides is useful to tack the membrane back.) Clean and prime the seam area with Seam Primer using the scrub pad in back and forth strokes with moderate pressure. Continue until the seam surface attains a smooth black appearance. Ensure the entire area is primed past the edge to the crayon marks, then allow primer to dry. (shown in Figure 9).



Unroll the Seam Tape along the length of the seam, tape side down, aligning the Seam Tape paper with the crayon marks. Then with the release paper still in place, roll the Seam Tape with a steel or hard rubber roller. This will set the Seam Tape into place and keep air from being trapped under the tape. Fold the top membrane onto the Seam Tape release paper (shown in Figure 10).



Reaching under the top ply of membrane, pull the release paper away from the Seam Tape at a 45° angle to the seam. While removing the paper, draw your hand across the seam, from the back to the leading edge. This will prevent wrinkles and fishmouths from forming in the seam. After the paper is removed, roll the entire length of the seam with a steel or hard rubber roller – first, across the seam, and then the length of the seam (shown in Figure 10a).



**IMPORTANT!** If the Seam Tape does not visibly extend beyond the leading seam edge, the edge should be cleaned with Seam Primer and sealed with Rubber Caulk.

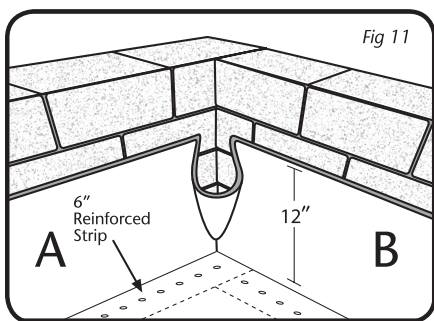
**NOTE:** When splicing Seam Tape, overlap each piece a minimum of three inches (3") and firmly roll with a steel or hard rubber roller.

## PERIMETER WALLS AND INSIDE CORNERS

Install to the substrate the RoofKit 6" Reinforced Strip with Fastening Screws and Plates every twelve inches (12"). Ensure that the 6" Reinforced Strip is butted to the parapet wall.

Apply Multi-Purpose Bonding Adhesive to the 6" Reinforced Strip, folded membrane, and the wall area. Starting at the base or angle change between the corner and opposite end of each wall, begin to roll the membrane up and along the wall. Roll the excess membrane towards the corner. Take care to thoroughly adhere the membrane into the angle change before rolling the membrane up the walls. Roll the flat surface of the 6" Reinforced Strip with a steel or hard rubber roller. Broom or hand rub the membrane to ensure 100% adhesion.

NOTE: Wall flashings should extend a minimum of twelve inches (12") above the roof surface (shown in Figure 11).

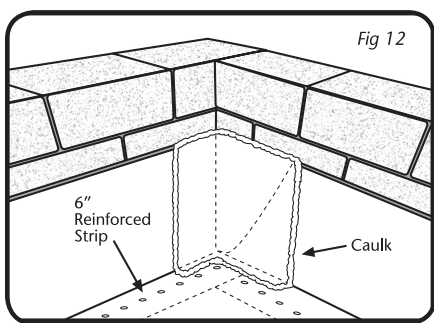
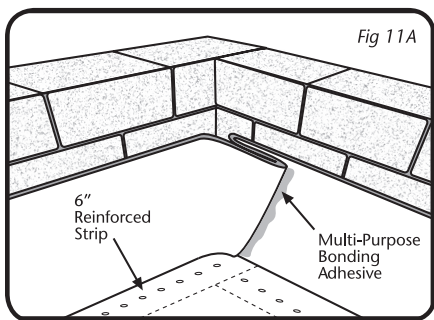


When one side is adhered in (A), begin the other side, (B). When both walls are flashed in, excess material should form a pocket in the corner.

Clean and prime the inside and outside pocket “triangle” with Seam Primer and apply Multi-Purpose Bonding Adhesive to both sides of the pocket. (shown in Figure 11). Allow the adhesive to dry to the finger touch as tacky, not stringy.

Note: It is important to adhere the wall flashing on each side of the corner as tightly into the corner as possible.

Starting at the base of the inside corner pocket, press the two glued surfaces together. Adhere the pocket to either wall (shown in Figure 11A) with Multi-Purpose Bonding Adhesive. Install a piece of Tape Flashing eight inches (8") wide extending from the bottom of the pocket fold to the top. The Tape Flashing should extend four inches (4") onto the pocket and four inches (4") onto the wall. Caulk all edges of the tape flashing. (shown in Figure 12).



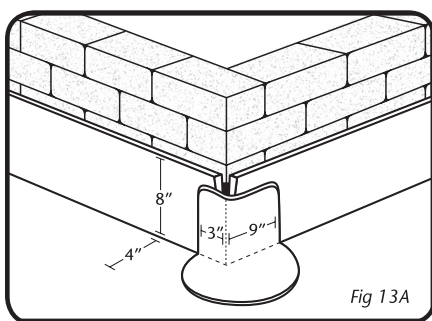
## TERMINATION BAR

Determine the height of the finished wall flashing (12" or less if job conditions won't allow for full 12" height) and the placement of the Termination Bar. Peel the top of the wall flashing from the wall and apply a heavy bead of Water Stop between the membrane and wall. The Water Stop should be applied so that the final position of the Termination Bar will be directly over the Water Stop.

Fasten the Termination Bar with the appropriate fasteners. Install a fastener in every pre-drilled hole. Remove excess membrane that extends above the Termination Bar and apply Rubber Caulk to the top of the Bar.

## OUTSIDE CORNER DETAIL

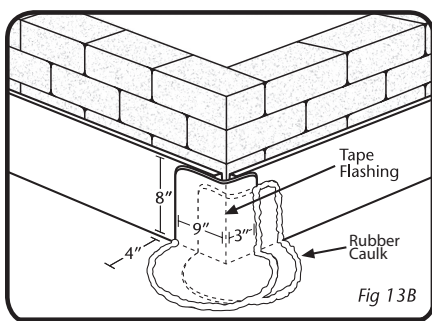
1. Prior to installing any flashings, using the scrub pad, apply Seam Primer to all areas to be flashed. Cut the Tape Flashing twelve inches (12") by twelve inches (12"), or enough to cover the corner area. Round all corners of the Tape Flashing. After the Primer has dried, fold the flashing in half. Place the Tape Flashing against the vertical surface so that three inches (3") overlaps on one side of the corner and nine inches (9") overlaps the other side. Fold the flashing around the corner and adhere to the vertical surface. Ensure good contact at the angle change before extending the flashing onto the flat roof surface. The flashing should extend out four inches (4") onto the roof surface, and eight inches (8") up the vertical. See Figure 13A.



**IMPORTANT:** The Tape Flashing should  
***NOT BE STRETCHED EXCESSIVELY!***

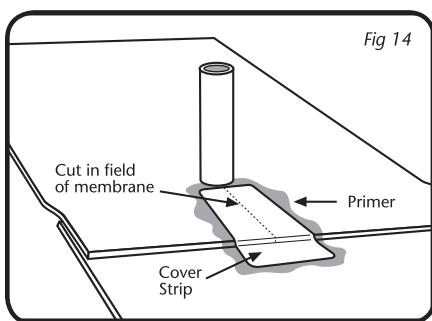


2. Install a second layer of twelve inch (12") by twelve inch (12") Tape Flashing over the first, but reverse the process by installing the nine inch (9") half overlapping the previously installed three inch (3") piece. See Figure 13B. This patch should extend onto the roof surface a minimum of four inches (4") and up the vertical a minimum of eight inches (8").



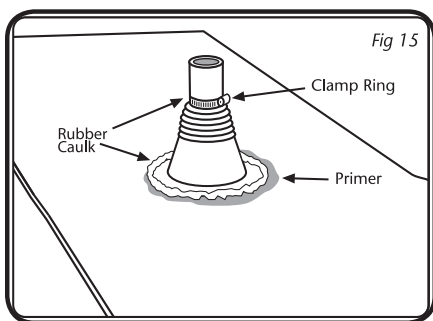
## COVER STRIP

Where a protrusion in the roof, such as a pipe or curb opening, was encountered while installing the RoofKit Rubber Roofing Membrane; the membrane was cut to the nearest edge to allow easy layout of the membrane. After the field membrane has been glued and broomed into place; apply Seam Primer to all areas to be covered using a scrub pad and allow to dry. After the Primer has dried, install the Cover Strip over the entire cut in the field membrane from the pipe to the end of the membrane, prior to Pipe Boot installation. See Figure 14.



## **RUBBER PIPE BOOT WITH STEEL CLAMP**

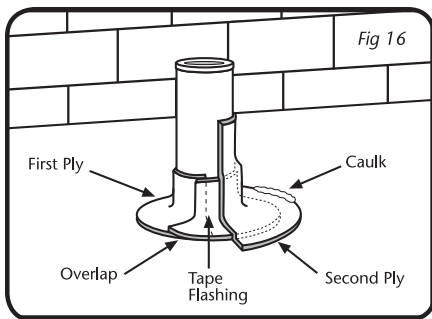
1. Measure the outside diameter of the pipe and cut the pipe boot at the corresponding index ring. **DO NOT CUT DIAGONALLY THROUGH THE INDEX RING.** The Pipe Boot should fit snugly over the pipe.
2. Install the Pipe Boot over the pipe and turn the boot inside out exposing the bottom of the boot flange. Apply Seam Primer at least ten inches (10") in all directions from the pipe. Pull the Pipe Boot down, remove release paper from the Pipe Boot and adhere it to the field membrane (shown in Figure 15). Roll adhesive area with a steel or hard rubber roller.
3. Install the enclosed stainless steel adjustable clamp ring over the Pipe Boot. Apply Rubber Caulk around the top of the boot.



## **PIPE OR CONDUIT FLASHING WITH TAPE FLASHING**

When a pipe or conduit is encountered and cannot be flashed with a Pipe Boot, the protrusion must be flashed using two (2) layers of RoofKit 12" Tape Flashing.

1. After the field membrane has been adhered and broomed in, the cut made from the protrusion to the nearest edge should be stripped in with Cover Strip. See Figure 14.



2. Make sure to clean the protrusion and remove any loose flashings. Scrub Seam Primer to the area being flashed and allow to dry.
3. Cutting from Tape Flashing, install a four inch (4") piece extending two inches (2") up the protrusion and two inches (2") onto the roof deck. Wrap the entire protrusion, allowing a two inch (2") overlap of each flashing. Use as many pieces as necessary to flash the pipe.
4. After the first layer is complete, install the second layer using twelve inches (12") of Tape Flashing. Wrap the protrusion with nine inches (9") of Tape Flashing extending up the protrusion, and three inches (3") onto the deck. Make sure to stagger the end laps of the Tape Flashing so that one lap is not directly over another. Utilize as many pieces as necessary to complete the flashing detail (See Figure 16).

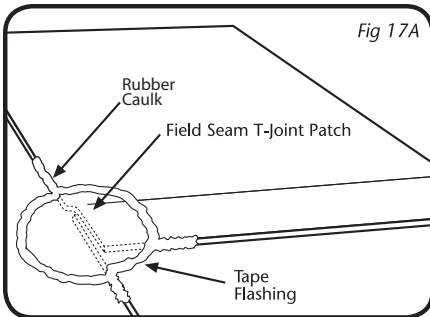
Always extend the new flashing ABOVE any old flashings that may remain on the protrusion. Clean and apply Rubber Caulk to all edges of the flashing. DO NOT install a Pipe Boot Steel Clamp over the Tape Flashing.

# T-JOINTS

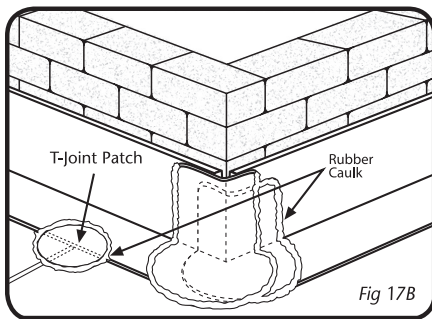
A T-Joint is formed when two layers of RoofKit Rubber Roofing Membrane form a seam that travels under, or over, a third layer of membrane. The center of the “T” is where the middle layer ends and the top layer bridges over the middle layer. This T-Joint can provide an opportunity for water to seep under the membrane. To avoid problems at this area, a T-Joint patch should be installed as follows:

1. Clean the membrane with Seam Primer at least four inches (4") in all directions from the T-Joint and allow to dry.
2. Cut a piece of Tape Flashing three inches (3") larger than the T-Joint and round all corners. A single T-Joint patch can be made large enough to accommodate more than one T-Joint, as shown in Figure 17D (see page 21).
3. Remove the backing, place over the T-Joint and roll with a steel or hard rubber roller.
4. Use Rubber Caulk to seal all edges of T-Joint patches.

## *Where T-Joint Patches Are Required*

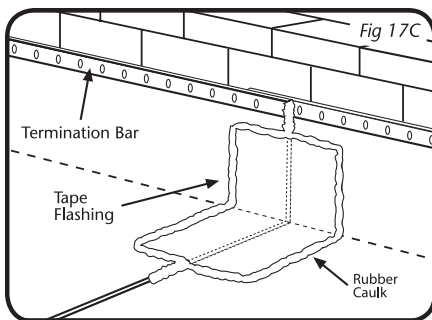


## *Where a Field Seam Travels Under a Wall Flashing.*



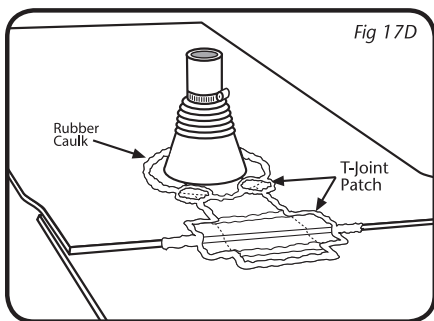
## *Field Seam at Vertical Change*

Where a field seam makes a radical bend (turns up a wall or down over a perimeter edge), a six-inch (6") wide by twelve inch (12") long piece of Tape Flashing is to be adhered over the seam. Round the corners of the Tape Flashing. Follow standard flashing procedures; install the flashing so that half of the flashing is on either side of the area to be covered. Finally, use Rubber Caulk to seal all edges. (Figure 17C)



## *Where a Cover Strip Travels Under a Pipe Boot or Other Flashing.*

**IMPORTANT: ONLY TAPE FLASHING IS USED FOR T-JOINT PATCHES. ALL T-JOINT PATCHES SHOULD BE THOROUGHLY ROLLED WITH A STEEL OR HARD RUBBER ROLLER.**



### **METAL EDGE DETAIL**

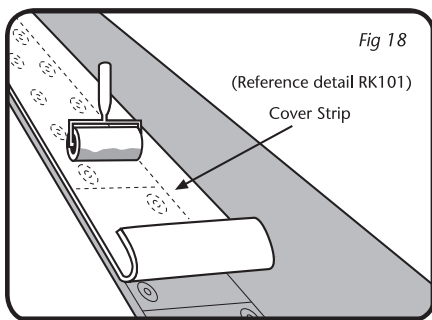
Fully adhere the membrane to the roof edge. Allow the membrane to wrap completely over the edge of the roof a minimum of three inches (3").

Install the metal edge using 3/4" minimum roof nails every 4" to 6" on center.

### **COVER STRIP ON METAL EDGE DETAIL**

Using Seam Primer, clean the metal and the membrane to be covered. Using a scrub pad, apply the primer to the metal and field membrane using back and forth motions the entire length of the metal edge. To ensure 100% adhesion, always apply the primer to an area that is wider than the Cover Strip. After the Seam Primer has flashed off, install the Cover Strip approximately one-half inch (1/2") in from the outside edge of the metal edge. Roll the entire Cover Strip with a steel or hard rubber roller. (shown in Figure 18, next page).

Clean all Cover Strip edges with Seam Primer and apply a one-quarter inch (1/4") bead of Rubber Caulk to those edges.

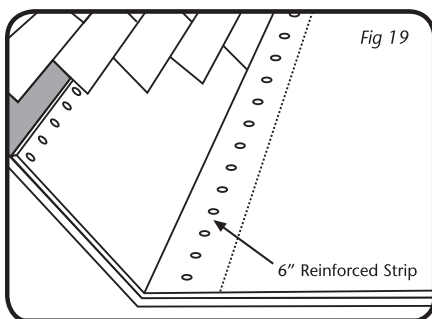


When splicing two pieces of Cover Strip, allow for a minimum overlap of four inches (4"). After properly rolling the entire Cover Strip, install a six inch (6") piece of Tape Flashing over any T-Joints. Seal all exposed edges with Rubber Caulk.

## ROOFKIT MEMBRANE TO SHINGLE TRANSITION

When installing a RoofKit Rubber Roofing Membrane system with a tie-in to an existing shingle roof, remove three (3) courses of shingles.

Adhere the membrane onto the sloped roof deck. Peel the top of the membrane back and apply a bead of Waterstop between the membrane and the deck. Nail the top of the membrane every six inches (6") and install the shingles over the RoofKit membrane. See Figure 19.

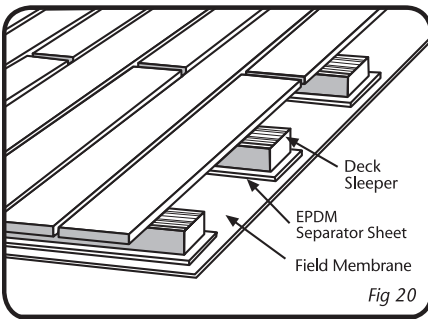


Keep the bottom course of shingles a minimum of four inches (4") above the roof angle change. To adhere the bottom course of loose shingle tabs to the membrane, lift each tab and apply a bead of Rubber Caulk.

## WOOD DECKS

**IMPORTANT: THE ROOFKIT MEMBRANE IS NOT DESIGNED AS A FINAL WALKING SURFACE AND SHOULD BE PROTECTED FROM EXCESSIVE FOOT TRAFFIC.**

When installing a wood deck over the RoofKit Rubber Roofing Membrane, the deck sleepers should be laid over an extra piece of EPDM membrane called a separator sheet. The EPDM separator sheet should extend a minimum of two inches (2") past the sleeper on all sides. See figure 20.



**DO NOT attach the sleepers through the RoofKit Rubber Roofing Membrane.** The deck should be secured at a sidewall, post, or perimeter area. When attaching outdoor carpet, use an exterior carpet adhesive after contacting the manufacturer for instructions.

**Note:** When flashing around posts, follow the instructions on page 17 for pipe and conduit flashing.



## **REPAIR OF ROOFKIT RUBBER ROOFING MEMBRANE**

If your RoofKit Rubber Roofing Membrane is punctured or torn, repairs can be made easily by:

1. Cleaning and priming the membrane with Seam Primer at least four inches (4") in all directions from the puncture or tear.
2. After the primer has flashed off, cut a piece of Cover Strip three inches (3") larger than the puncture or tear and round all corners. Remove backing and place over puncture.
3. Hand roll the entire Cover Strip with a steel or hard rubber roller.
4. Seal all exposed edges with RoofKit Rubber Caulk.

**DO NOT USE ASPHALT ROOF CEMENT ON ROOFKIT RUBBER ROOFING MEMBRANE.**

**For small repairs, RoofKit Patch Kits are available.**

# GLOSSARY

**BRIDGING:** Occurs when the membrane is unsupported at a juncture or angle change. Moisture condensing on the bottom of the membrane can cause further delamination. Areas where bridging occurs should be repaired and re-flashed.

**CONTACT ADHESIVE:** RoofKit Contact Adhesive is used to adhere the field membrane to substrate, walls and curbs. It should be thoroughly stirred before using. **(Do Not Use For Seams)**

**COVER STRIP:** Five inch (5") wide cured EPDM membrane with butyl tape laminated to one side. Used when stripping in metal edge details, repairing cuts in the field membrane.

**FASTENING SCREWS AND PLATES:** Used to mechanically attach (fasten) the insulation board to the roof deck.

**TERMINATION BAR:** Extruded aluminum bar used to terminate the membrane at parapet walls, chimneys, skylights, and AC curbs. Also used to terminate membrane to fascia when no metal drip edge is used. The proper fastener should be installed in every hole and a one-quarter inch (1/4") space maintained between bars.

**FISHMOUTH:** A wrinkle is formed when an increasing amount of membrane is forced onto an area too small to accommodate the material. When the wrinkle ends at the edge of the material, a conical opening is formed called a Fishmouth. Wrinkles and Fishmouths in seams are not acceptable. They must be removed and flashed in.

**FLASHED OFF:** Allowing the solvents in the adhesives or primer to evaporate, leaving the material in a tacky, not wet or stringy condition, before mating the two surfaces together. If the proper Flash Off time is not allowed, blisters will form in the membrane. Blisters will not harm the membrane and over time, will usually disappear.

**LATEX BONDING ADHESIVE:** RoofKit Latex Bonding Adhesive is used to adhere the field membrane to the substrate. It should be thoroughly stirred before using. **(Do Not Use For Seams)**

**METAL EDGE DETAIL:** Used to create a finished appearance and prevent water from running down the surface of fascias and walls. The Metal Edge is made from painted aluminum and galvanized or painted steel.

**MULTI-PURPOSE BONDING ADHESIVE:** RoofKit Multi-Purpose Bonding Adhesive is used to adhere the field membrane to walls, metal, curbs, and rubber to rubber applications. It should be thoroughly stirred before using. All membrane-to-membrane seam applications require RoofKit Primer and 5" Cover Strip be installed over the entirety of the seam.

**PIPE BOOT AND CLAMP:** Pre-molded EPDM boot. The most cost effective way to flash pipe protrusions. The stainless steel clamp is used to secure the top of the pipe to the Pipe Boot.

**RUBBER CAULK:** Applied at the top of all Termination Bar applications; at the top of Pipe Boots and after the pipe boot clamp has been installed, seams, patches, membrane flashings, and to adhere shingle tabs to RoofKit Rubber Roofing Membrane.

**SEAM PRIMER:** Solvent-based primer used to clean and prime the RoofKit Rubber Roofing Membrane before applying Seam Tape or any cured or uncured tape product. Applied using a scrub pad. **DO NOT APPLY PRIMER DIRECTLY TO TAPE.** Primer is only applied to surfaces being prepared to accept tape products.

**SEAM TAPE:** Butyl tape used to splice two layers of membrane into a watertight seam. Available in a width of three-inches (3").

**SIX (6") REINFORCED STRIP:** RoofKit Reinforced Rubber Roofing Membrane in six inch (6") wide strips. Used with Multi-Purpose Bonding Adhesive and Fastening Screws and Plates to secure base flashings at walls and curbs (and all angle changes).

**SUBSTRATE:** The surface on which the membrane is applied (brick, concrete block, high-density wood fiberboard, plywood, OSB, isocyanurate insulation). **NOTE:** EPDM rubber membrane should not be applied to asphalt roofing, shingles, or polystyrene insulation.

**T-JOINT:** An area formed when two layers of RoofKit Rubber Roofing Membrane form a seam that travels under, or over, a third layer. The center of the “T” is where the middle layers end and the top layer bridges over the middle layers.

**TAPE FLASHING:** Uncured EPDM membrane with adhesive tape that is used whenever the field sheet has to be cut to accommodate outside corners, pipes, T-Joint patches and field seams making angle changes. After the Tape Flashing is applied, it will cure in the position in which it was applied. Seam Primer must be used in the membrane area where the Tape Flashing is applied.

**WATERSTOP:** Used to create a waterproof compression gasket whenever the RoofKit Rubber Roofing Membrane is mechanically fastened using a Termination Bar or Pipe Boot Steel Clamp. Water Stop is applied between the membrane and the pipe or wall. The mechanical termination is installed over the membrane, compressing the Water Stop and creating the gasket. Also used for all gasket seals at drain clamping rings.

# QUICK REVIEW OF APPLICATION PROCEDURES

## 1. SUBSTRATE

- a. Plywood, OSB or high-density wood fiberboard.
- b. Concrete.
- c. Insulation boards – polyisocyanurate.

## 2. INSULATION

- a. Insulation joints are butted together with no gaps.
- b. Correct fastener pattern and quantity used.
- c. 100% adhesion of the membrane to the substrate.

## 3. FIELD SEAMS

- a. Seam Primer should be visible past the leading edge of the field seams (over scrub).
- b. There are no wrinkles, void or fishmouths in any portion of the field seams.
- c. All angle changes in the field seams are flashed over with one ply of Tape Flashing.
- d. Seam Tape should extend past leading edge of the seam.

## 4. FLASHING DETAILS

- a. No bridging occurring in the Tape Flashing at any angle change.
- b. Two layers of Tape Flashing are applied on all outside corners, pipes (when not using a Pipe Boot) and stacks.
- c. One layer of Tape Flashing applied at all T-Joint field seam angle changes and over inside corner folds.
- d. Seam Primer is visible past the leading edge of flashing (over scrub).

## 5. TERMINATION BAR

- a. Apply Water Stop behind membrane prior to installing the Termination Bar.
- b. Install fastener in every hole and maintain a one-fourth inch (1/4") space between Bars.
- c. Termination Bar installed on parapet walls a minimum of twelve inches (12") above the roof deck.
- d. Rubber Caulk applied over top of Termination Bar.

## **6. PENETRATIONS**

- a. Tape Flashing is applied in two layers a minimum of eight inches (8") above the roof deck.
- b. Pipe Boots are terminated with a Pipe Boot Steel Clamp and are caulked with Rubber Caulk.

## **7. METAL EDGE DETAIL**

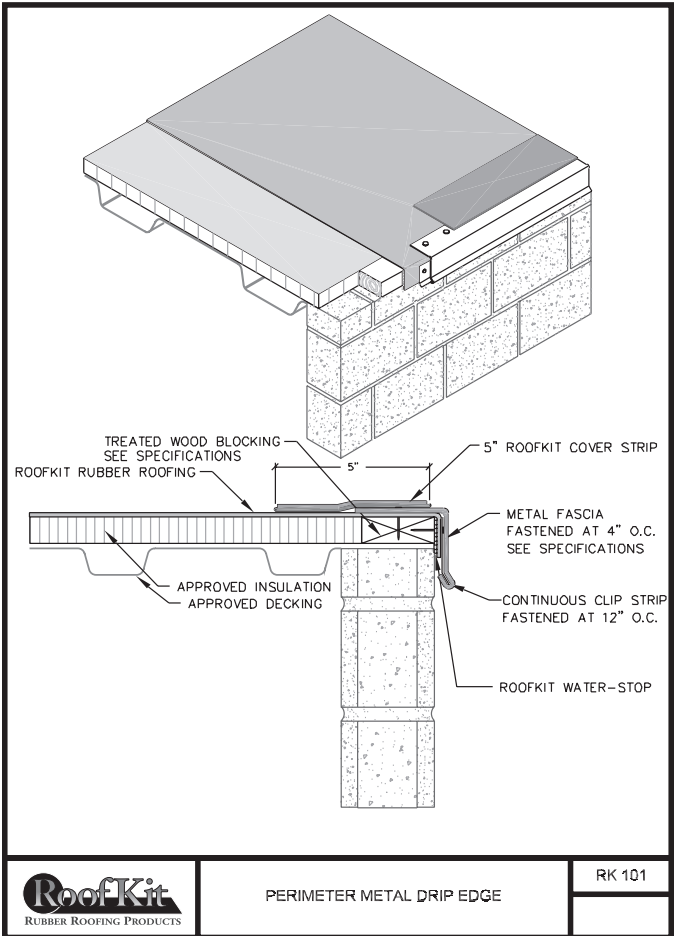
- a. Metal Edge is prepped (cleaned with seam primer), and of sufficient gauge and adequately fastened to withstand wind uplift.
- b. Properly stripped in using five inch (5") wide Cover Strip. Cover Strip should extend a minimum of two inches (2") beyond any fastener.

## **8. OVERALL APPEARANCE**

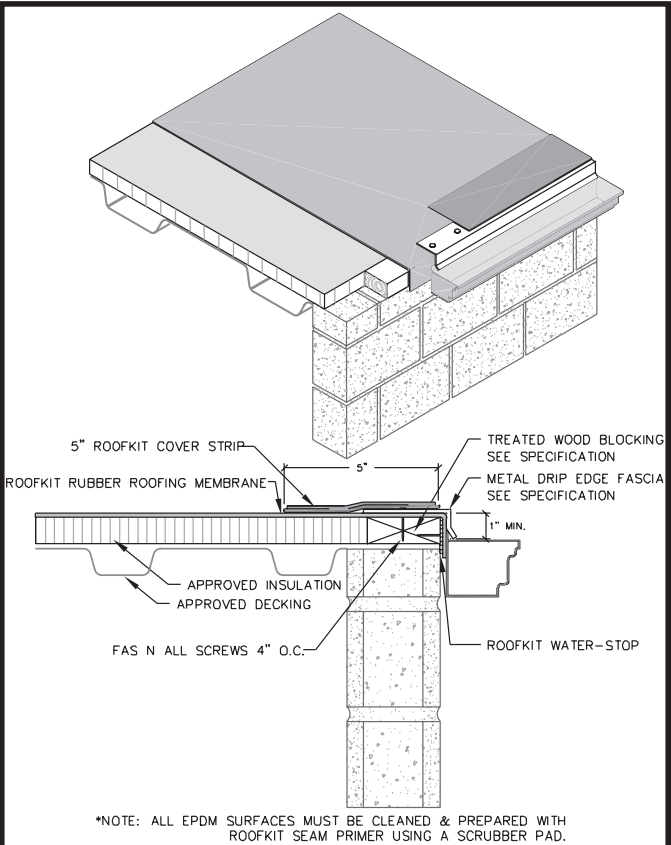
- a. Termination Bars are level.
- b. Seam widths are uniform and completely rolled in.
- c. All trash or debris is removed from job site.

***NOTE: OVERALL APPEARANCE IS VERY IMPORTANT.***

# Installation Detail



# Installation Detail

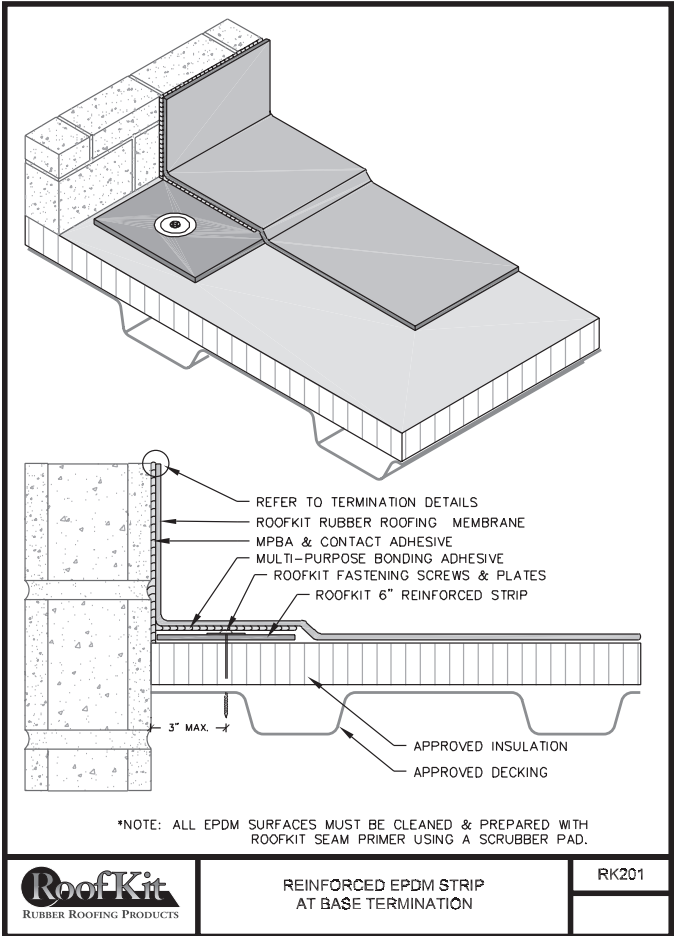


GUTTER FOR NON-BALLASTED SYSTEMS

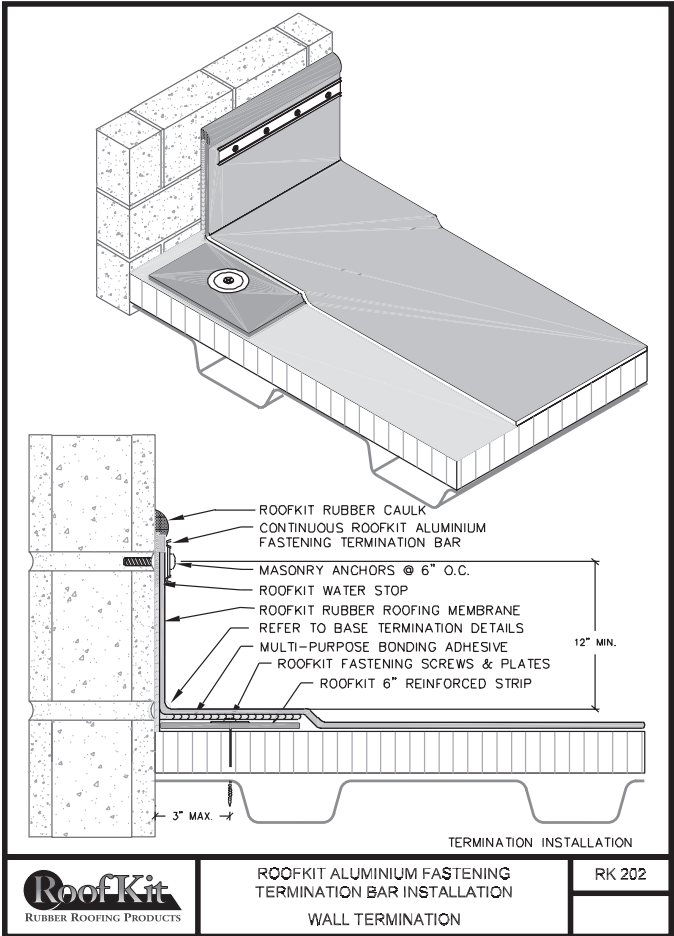
RK 102



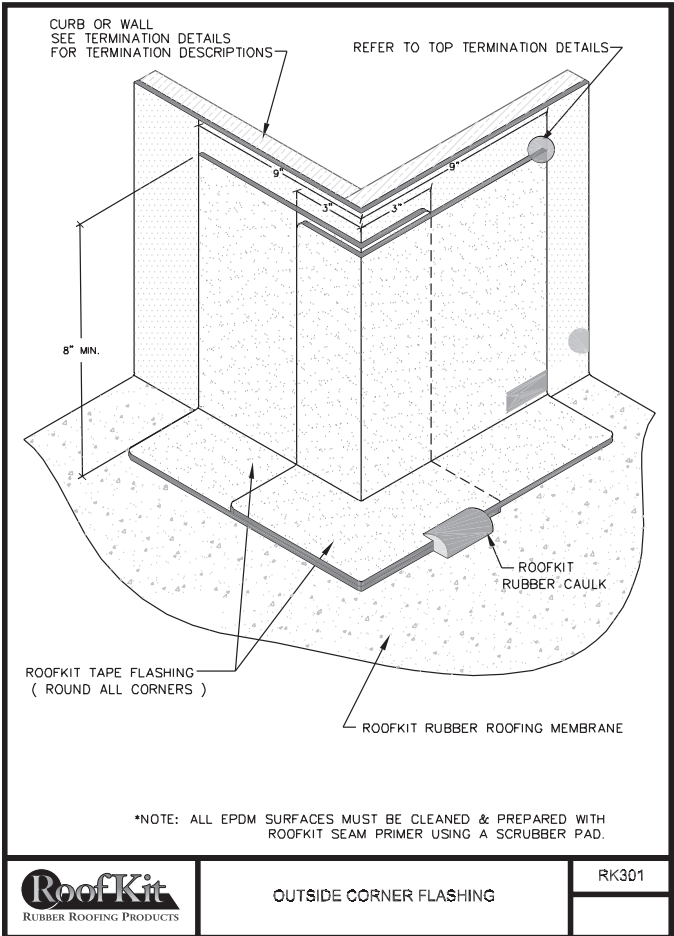
# Installation Detail



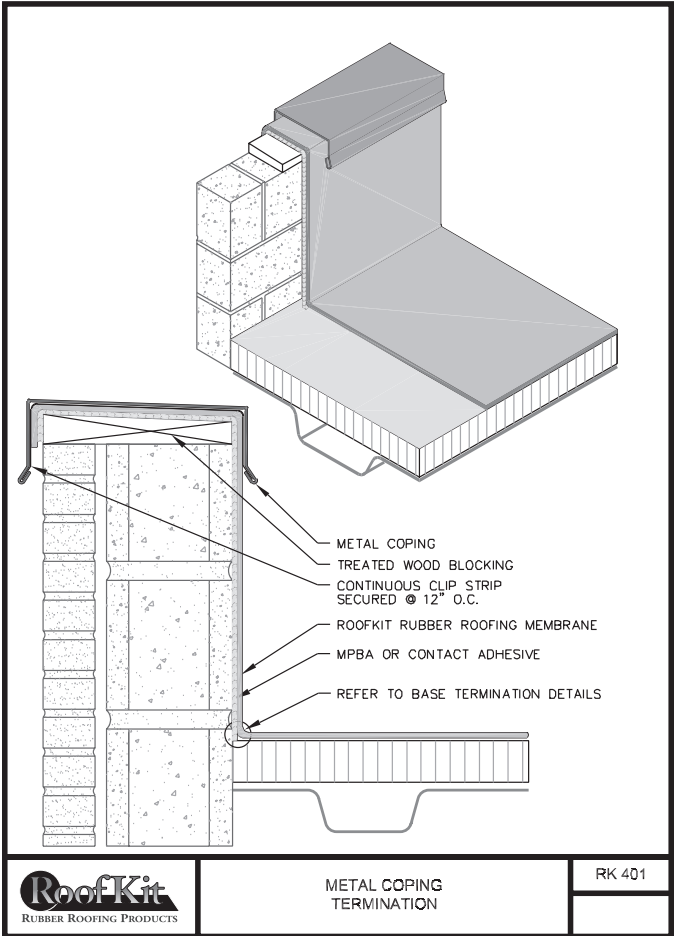
# Installation Detail



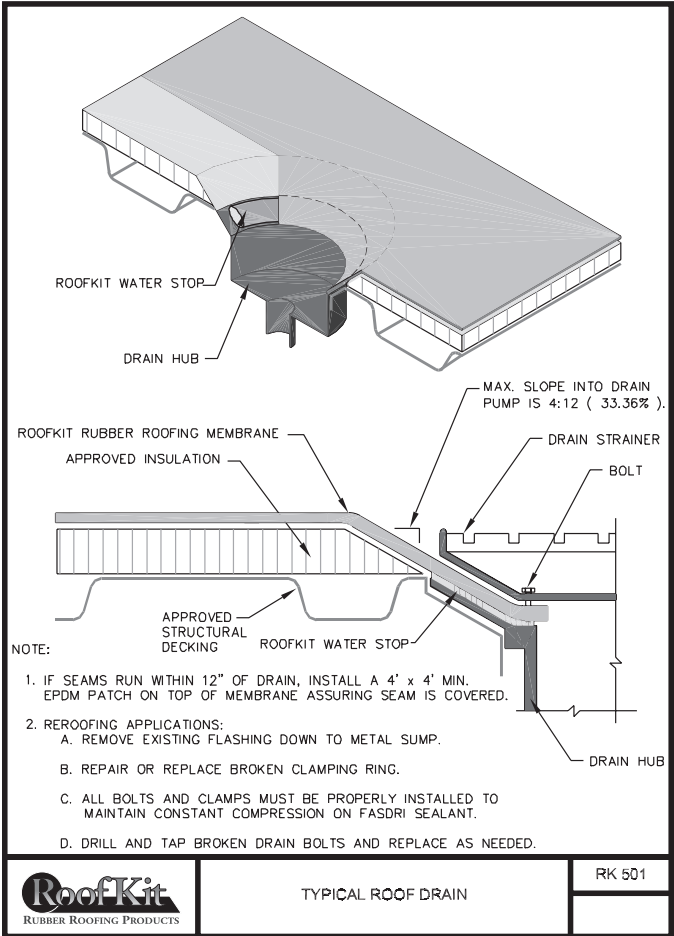
# Installation Detail



# Installation Detail



# Installation Detail



# FREQUENTLY ASKED QUESTIONS

## GENERAL

**1. Can I use RoofKit EPDM membrane as a pond liner?**

*No, the RoofKit membrane is a roofing grade material. Use only certified fish-friendly membrane available by special order.*

**2. What are the sizes, thicknesses and roll weights of RoofKit EPDM membrane?**

<i>SIZE</i>	<i>THICKNESS</i>	<i>WEIGHT</i>
<i>10'x 20'</i>	<i>45 mil</i>	<i>60 lbs.</i>
<i>15' x 25'</i>	<i>45 mil</i>	<i>113 lbs.</i>
<i>10' x 50'</i>	<i>45 mil</i>	<i>155 lbs.</i>
<i>10' x 100'</i>	<i>45 mil</i>	<i>310 lbs.</i>
<i>20' x 50'</i>	<i>45 mil</i>	<i>310 lbs.</i>
<i>20' x 100'</i>	<i>45 mil</i>	<i>620 lbs.</i>
<i>10' x 50'</i>	<i>60 mil</i>	<i>200 lbs.</i>
<i>10' x 100'</i>	<i>60 mil</i>	<i>400 lbs.</i>
<i>20' x 50'</i>	<i>60 mil</i>	<i>400 lbs.</i>
<i>20' x 100'</i>	<i>60 mil</i>	<i>800 lbs.</i>

**3. Is RoofKit EPDM membrane available in different colors?**

*The membrane is available only in black, because this color provides the most UV resistance and the best long-term performance.*

**4. What slope is acceptable for application of RoofKit EPDM membrane?**

*Any slope is fine, but a slope exceeding a 2" in 12" pitch requires using our RoofKit Contact Adhesive or Multi-Purpose Adhesive.*

**5. Does RoofKit EPDM membrane break down under direct sunlight (UV light)?**

*No. It has excellent UV resistance and will provide many years of service with no ill effects.*

**6. Can I put indoor/outdoor carpeting over the EPDM membrane?**

*Yes, contact the carpet manufacturer for proper instructions. Please note certain adhesives could damage or negatively affect the performance of the EPDM membrane.*

- 7. Will the RoofKit EPDM membrane be damaged by asphalt-based products?**  
*Yes. The membrane should not come in contact with roof cement, black jack, or other asphalt-based products.*
- 8. What does the RoofKit warranty cover?**  
*StaFast Roofing Systems warrants to you, the purchaser of its cured RoofKit EPDM membrane (“Product”), and to subsequent owners of the premises on which the Product is installed, that the Product is free from manufacturing defects and will not prematurely deteriorate due to weathering.*
- 9. How long will the RoofKit EPDM membrane last?**  
*Because this is the same quality material as our commercial grade membrane, under normal circumstances the RoofKit EPDM membrane has a ten-year warranty.*
- 10. How hot does the RoofKit EPDM membrane get in the summer?**  
*The membrane can get very hot in direct sunlight, but it is able to provide watertight integrity over a wide variety of temperatures.*

## ***ROOF SUBSTRATES***

- 11. What roof insulation board should I use as an underlayment for the membrane?**  
*Use a commercial grade roof insulation board, OSB board, or plywood.*
- 12. What do I do if I have a metal roof deck?**  
*A minimum of one-inch roof insulation board must be installed directly over the metal deck. Then secure the insulation to the deck with RoofKit screws and plates, using 10 screws and plates per 4' x 8' board.*
- 13. Can I install RoofKit EPDM membrane directly over felt paper?**  
*No. A new commercial grade roof insulation board, OSB board, or plywood is recommended.*

**14. Can I install RoofKit EPDM membrane directly over an existing roof?**

*Yes, but a new commercial grade roof Insulation board, OSB board, or plywood is required.*

**15. How do I fasten the roof insulation board?**

*Use RoofKit plates and screws, installing a minimum of 10 plates per 4' x 8' board. (See Application Guide.)*

**16. Can I apply RoofKit EPDM membrane directly to a plywood surface?**

*Yes, making sure that the surface is clean, dry, even, with no sharp corners.*

**17. Can I install roof insulation board over an installed EPDM membrane system?**

*No, this is not recommended.*

## **ADHESIVES**

**18. What adhesives can I use to adhere the membrane to the roof surface?**

*RoofKit Latex Bonding Adhesive, Contact Adhesive, or Multi-Purpose Adhesive.*

**19. What adhesive must be used for membrane-to-membrane applications?**

*Use only the RoofKit Multi-Purpose Adhesive.*

**20. How do I use the RoofKit Latex Bonding Adhesive?**

*Apply Latex Bonding Adhesive to the substrate using a large, thick-nap paint roller. Spread a sufficient layer of adhesive so the roof surface is completely covered. Roll the EPDM membrane into the wet adhesive. Then, using a stiff-bristled push broom, apply sweeping pressure to ensure a smooth application of the membrane. Do not use Latex Bonding Adhesive on metal surfaces.*

**21. At what temperature can I apply the RoofKit Latex Bonding Adhesive?**

*The temperature must be above 40 degrees F during the project and for no less than 72 hrs. after project completion.*



**22. What happens if the RoofKit Latex Bonding Adhesive freezes?**

*This could damage the adhesive and affect its performance.*

**23. How do I use the RoofKit Multi-Purpose Bonding Adhesive?**

*The Multi-Purpose Bonding Adhesive can be used for any application on the roof: adhering the membrane to a substrate or membrane-to-membrane seaming. This adhesive must be applied to both the membrane and the substrate in a thin coat using a small-nap paint roller. Allow the adhesive to dry (tacky), then bring the membrane and substrate together in a contact fashion. All membrane-to-membrane applications require the cleaning of both surfaces with RoofKit Seam Primer, using a scrub pad. Apply the adhesive to both surfaces with a 3" paint brush. Allow the adhesive to dry, then bring both membranes together.*

**24. How do I use the RoofKit Contact Adhesive?**

*RoofKit Contact Adhesive is used to adhere EPDM membrane to a substrate using a small-nap paint roller. Apply the adhesive to both the membrane and the substrate, allow to dry tacky to the touch, then bring together the membrane and the substrate in a contact fashion.*

**25. How long does it take for the adhesive to set up or dry to a tacky touch?**

*For RoofKit Multi-Purpose and Contact Adhesives, drying time is usually 15 to 30 minutes depending on temperature and humidity. For RoofKit Latex Adhesive, the membrane must be installed while the adhesive is still wet.*

**26. How do I adhere RoofKit EPDM membrane to a wall?**

*Apply RoofKit Multi-Purpose or Contact Adhesive on the wall and the membrane using a small-nap paint roller. Allow the adhesive to dry to a tacky touch. Then place the membrane on the wall in a contact fashion.*

**27. What are the container sizes and coverage rates for the RoofKit adhesives?**

Latex Bonding Adhesive:

1 gallon and 3.5 gallons, 100 sq. ft. per gallon

Multi-Purpose Bonding Adhesive:

1 gallon, 60 sq. ft. per gallon

Contact Adhesive: 5 gallons, 60 sq. ft. per gallon

**28. Can I use wood glue to install RoofKit EPDM membrane?**

*No, use only RoofKit adhesives to ensure a quality installation.*

## **SEAMING**

**29. How do I best complete the seaming of RoofKit EPDM membrane?**

*Detailed instructions are available on the carton of the RoofKit Seam Kit. (See Application Guide.)*

**30. What are the differences between RoofKit tape products? How are each used?**

*RoofKit Seam Tape (3" x 50') is used as the adhesive for the overlap of two pieces of membrane that are to be seamed together. (See Application Guide.)*

*RoofKit Tape Flashing (12" x 25') is used to seal corners at skylights, chimneys, or at the junction of walls, and to protect any irregular surface. RoofKit Seam Primer and a scrub pad must be used to clean all membrane surfaces before using the Tape Flashing.*

*RoofKit Cover Strip (5" x 50') covers the RoofKit Fastening Termination Bar or the flange of the edge metal detail on a flat roof surface. RoofKit Seam Primer and a scrub pad must be used to clean the edge metal flange and 4" of the adjacent membrane before using the Cover Strip. (See Application Guide.)*

## **INSTALLATION AND MAINTENANCE**

**31. What installation aids are available to help me install RoofKit EPDM membrane?**

*Both a printed installation guide and an instructional video are available to assist you.*

**32. How many people are needed to install a RoofKit EPDM system?**

*This would depend on the size of the project, but for many reasons it is recommended to have at least two people.*

**33. How is the RoofKit Termination Bar used?**

*The Termination Bar is used for the attachment of the membrane at wall and edge details. It is attached with RoofKit screws (or masonry fasteners, if required).*

**34. What do I use to seal the perimeter of my roof?**

*Use either the RoofKit Termination Bar or a prefabricated edge metal. (Refer to the Application Guide.)*

**35. How do I install the edge metal detail at the perimeter of my roof?**

*After the membrane has been rolled over the edge a minimum of 3", install the edge metal using roofing nails that are at least  $\frac{3}{4}$ " long, securing the flange to the roof deck every 4" to 6". Use RoofKit Seam Primer and a scrub pad to clean the edge metal and 4" of the adjacent membrane, then cover with RoofKit Cover Strip. Assure good contact by rolling with a seam roller.*

**36. Where do I use the RoofKit Rubber Caulk?**

*Caulk is used for sealing the edge of a membrane seam, at the edges of flashing details and patches, and at the top edge of Termination Bar details.*

**37. What should I do about a pipe vent on my roof?**

*Use the RoofKit Rubber Pipe Boot with Steel Clamp. Use Seam Primer and a scrub pad to clean the membrane surface around the pipe a minimum of 4" larger than the Pipe Boot. Place the Boot over the pipe and cut to the correct size (1" to 6"). Position the Boot onto the roof surface and remove the release paper. Secure the Boot with a seam roller, clamp the top of the Boot with the steel clamp, and seal all edges with RoofKit Rubber Caulk.*

**38. How do I repair a large tear or rip in the RoofKit EPDM membrane?**

*Cut a patch out of RoofKit Cover Strip to extend 3" past the tear, making sure to round all corners on the patch. Clean the torn area with RoofKit Seam Primer and a scrub pad about 2" wider than the size of the patch. Wait for the Primer to dry, then pull off the release paper on the Cover Strip and place the patch over the primed area. Assure good contact by rolling with a seam roller, then apply RoofKit Rubber Caulk around the edge of the patch.*

**39. Can I walk on the RoofKit EPDM membrane after I install it?**

*Yes, but be careful not to rip or puncture the membrane with sharp objects.*

**40. What should I do if a wrinkle gets in the membrane during installation?**

*Although a wrinkle is not very attractive, it will not affect the performance of the roof. There is one exception: if it is within 3" of a seam, it must be cut out and patched with Cover Strip or a piece of membrane.*

**41. How do I patch a hole larger than the 5" RoofKit Cover Strip?**

*Cut a patch out of an extra piece of EPDM membrane larger than the hole, and round the edges of the patch. With Seam Primer and a scrub pad, clean the mating surface of the patch and the installed membrane a minimum of 4" larger than the hole. Apply RoofKit Multi-Purpose Adhesive to the patch and the area surrounding the hole with a small-nap paint roller. After drying to a tacky touch, place the patch over the hole, roll the entire patch with a seam roller. Next cover the perimeter of the rubber patch with 5" Cover Strip. Caulk all laps and 3" from each intersection of the Cover Tape with RoofKit Rubber Caulk.*

**42. What maintenance is required for my new RoofKit EPDM membrane system?**

*Inspect your roof twice a year to keep all gutters, drains and the roof surface free of debris.*





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**RUBBER ROOFING PRODUCTS**

**7095 Americana Parkway  
Reynoldsburg, OH 43068**

**For technical assistance call:  
1-800-225-4714 EXT 7888**

**[www.RoofKitRoofing.com](http://www.RoofKitRoofing.com)**