

# TYPAR® WEATHER PROTECTION SYSTEM INSTALLATION GUIDE

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These instructions describe how to install the TYPAR Weather Protection System for exceptional exterior water management. For more detail on other TYPAR® products, please visit [www.TYPAR.com](http://www.TYPAR.com)

## SPECIAL INSTALLATION CONSIDERATIONS

### Stucco\*\*

When stucco is installed over wood-based sheathing, the 2006-IBC (section 2510.6) and the 2006 IRC (section R703.6.3) require "a water-resistive barrier with a performance at least equivalent to two layers of Grade D paper" or a layer of water-resistive barrier (WRB) which is separated from the stucco by an "intervening layer." When TYPAR® WRB is used behind stucco, it should be separated from the stucco by a second layer of TYPAR WRB, a layer of Grade D building paper, or the Grade D paper backing of paper-backed lath.

### Brick\*\*

The 2006 IRC (section R703.7.4.2) requires a min. 1" (25 mm) airspace separating the brick from the WRB. The Brick Industry Association recommends a 1" (25 mm) airspace in front of the wood stud construction and a 2" airspace in front of a steel stud construction.

### Stone Veneer\*\*

The 2006 IBC (Section 1405.6) requires two layers of WRB behind stone. Over wood frame construction, TYPAR WRB should be installed behind stone the same way it is installed behind stucco.

### Wood Siding\*\*

TYPAR WRB and wood siding must be installed according to the manufacturer's instructions and the industry standards. Wood industry associations recommend siding should be primed before installation.

\*\*TYPAR® recommends that the installation of any material must first follow the local applicable building codes.

**CODE REQUIREMENTS**

The 2006 International Building Code (IBC) and the 2006 International Residential Code (IRC) require a water-resistant barrier equivalent to ASTM D226 Type 1 #15 felt be installed behind the exterior cladding. TYPAR® BuildingWrap exceeds these standards.

**APPROVALS AND REPORTS**

ICC-ESR-1404

CCMC #12892-R & 12884-R

TYPAR BuildingWrap meets AC38 standards, Acceptance Criteria for Water-Resistive Barriers.

TYPAR® flashing products meet the requirements for AAMA 711.

**RECOMMENDED MATERIALS**

TYPAR BuildingWrap

TYPAR® All-Temperature Flashing

TYPAR® Butyl Flashing

TYPAR® Flexible Flashing

TYPAR® Construction Tape

**PRODUCT SIZE DATA**

<b>Weather-Resistive Barriers</b>	<b>Size</b>	<b>Rolls/Pallet</b>
TYPAR BuildingWrap	3' x 100'	144
	40" x 100'	144
	4'5" x 200'	32
	9' x 100'	40
	9' x 150'	36
	9' x 195'	32
	9'6" x 95'	40
	10' x 100'	40
	10' x 150'	36
	10' x 195'	32

<b>Accessories</b>	<b>Size</b>	<b>Rolls/Case</b>
TYPAR All-Temperature Flashing	4" x 75'	12
	6" x 75'	8
	9" x 75'	4
	12" x 75'	3
TYPAR Butyl Flashing	4" x 75'	9
	6" x 75'	6
	9" x 75'	4
	12" x 75'	3
TYPAR Flexible Flashing	6" x 75'	3
	9" x 75'	2
TYPAR Construction Tape	1-7/8" x 165'	24
	3" x 165'	16
TYPAR Construction Tape Canada	60 mm x 55 m	24



**VERTICAL WALL INSTALLATION**

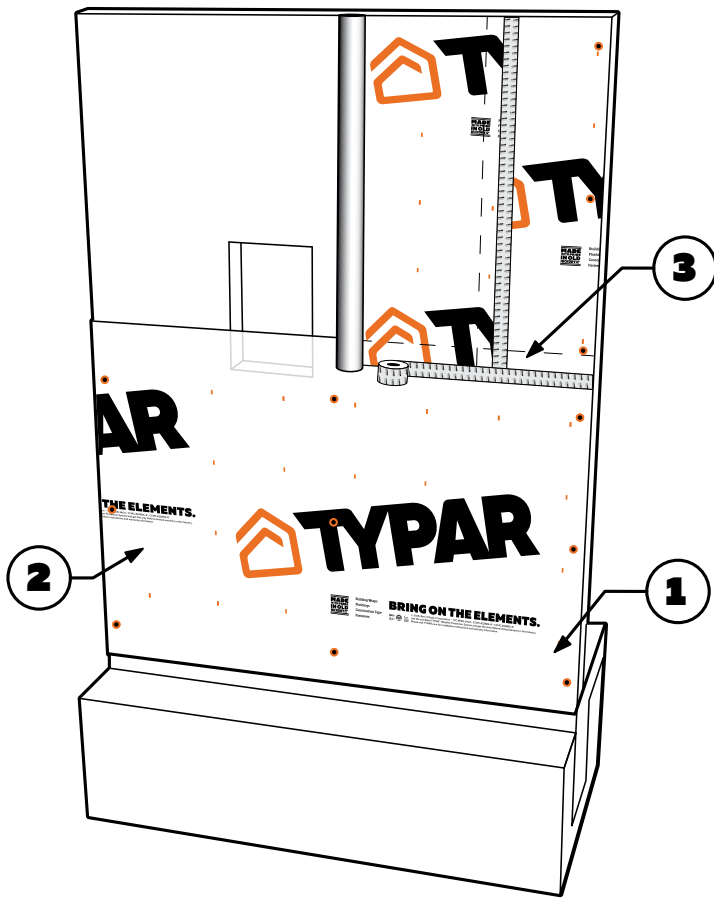
Install TYPAR® BuildingWrap over an approved exterior sheathing after the framing is complete and before the windows and doors have been installed. Plastic-capped fasteners should be used and spaced at 32" OC (vertically and horizontally) when being applied over 7/16" OSB or 15/32" plywood. When installing over metal framing, use screws with washers. If the windows and doors have already been installed, trim the TYPAR® WRB close to the window frame and flash according to the TYPAR® flashing instructions.

**STEP 1**

Start at the bottom of one end of the wall with the printed side facing out. When starting at a corner, overlap by a minimum of 12".

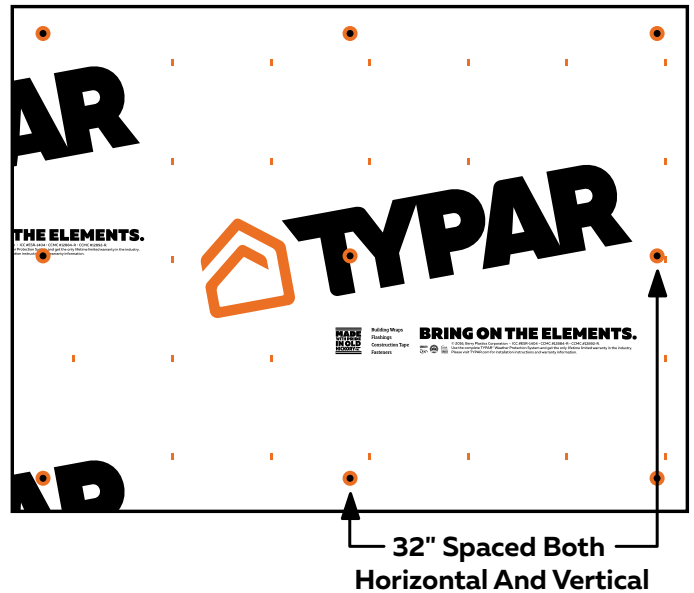
Place the housewrap roll horizontally and roll out the first course evenly, covering rough window and door openings. A minimum of a 1" (25.4 mm) overlap on the sill plate is required; however, for maximum protection, a 2-4" (51-102 mm) overlap on the sill plate is recommended.

Pull the TYPAR WRB snug and avoid wrinkles and creases. Ensure that the product is level.



**STEP 2**

Fasten the TYPAR WRB to the stud using plastic-capped nails or plastic-capped staples at 32" OC, both horizontally and vertically.



**STEP 3**

The upper layer of TYPAR WRB should overlap the bottom layer by a minimum of 6" (152 mm) vertically and horizontally. Ensure proper shingling throughout the installation to properly shed water. Once the structure is completely covered, tape all seams and penetrations using TYPAR® Construction Tape. (Please refer to the TYPAR flashing instructions for more detailed instruction on penetrations and window flashing installation.)

**STEP 4**

After the installation is complete, and before the exterior cladding is installed, inspect the TYPAR WRB for tears. Repair the issues with TYPAR Construction Tape or TYPAR flashing.

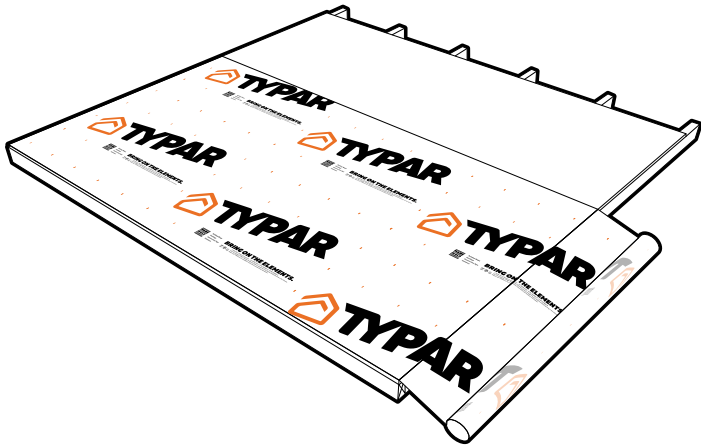


**TILT WALL INSTALLATION**

Install TYPAR® BuildingWrap over an approved exterior sheathing after the framing is complete and before the windows and doors have been installed. Plastic-capped fasteners should be used and spaced at 32" OC (vertically and horizontally) when being applied over 7/16" OSB or 15/32" plywood. When installing over metal framing, use screws with washers.

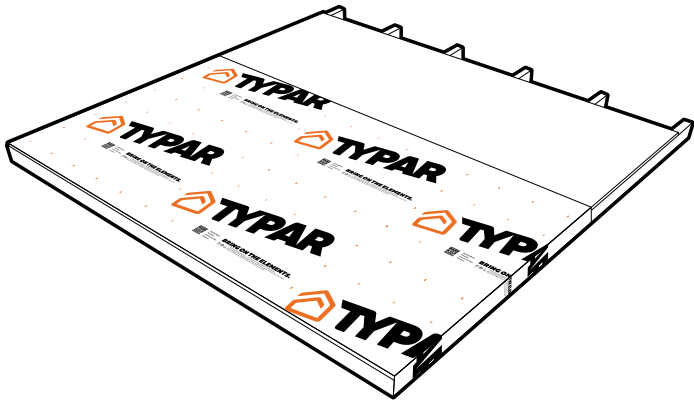
**STEP 1**

Begin with the wall lying on the ground. Start at one corner, allowing an extra 12" (304mm) flap for the corner and align the guide marks on the TYPAR® WRB with the studs. Ensure a 6" excess flap on one side to allow for overlap to the next wall section. Fasten TYPAR® to the wall at 32" both horizontally and vertically.



**STEP 2**

When starting a new section, fold the beginning side flap over the vertical stud and secure (only one side). After fastened, trim the excess TYPAR WRB. Remember to allow enough so that the bottom excess overlaps the sill plate when the wall is put into place. As each wall is put into place, ensure that each side flap is on the exterior of the building.

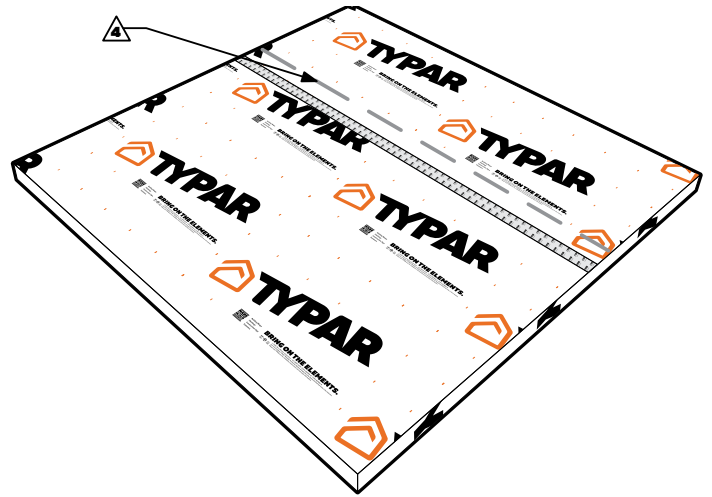


**STEP 3**

Secure the side flaps and the bottom flap using plastic-capped nails or plastic-capped staples, TYPAR® Construction Tape, and/or a non-silicone caulk.

**STEP 4**

The second course of TYPAR should overlap the bottom sheet at least 6" (152mm). Both vertical and horizontal seams ensure proper drainage by using the shingling method.



**STEP 5**

Tape all seams with TYPAR Construction Tape. (Please refer to the TYPAR flashing instructions for further detail.)

**STEP 6**

After the installation is complete, and before the exterior cladding is installed, inspect the TYPAR WRB for tears. If issues are found, tape the imperfections with TYPAR Construction Tape or TYPAR flashing.

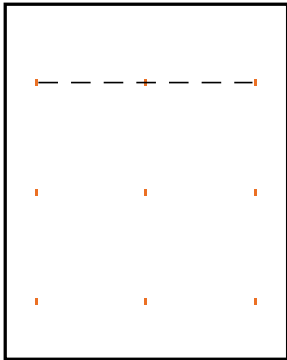


**WINDOW AND DOOR PREPARATION**

**Preparing for Window Installation**

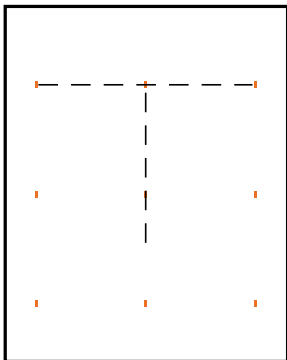
**STEP 1**

After wrapping the structure and covering all rough openings, cut a horizontal line across the top of the window opening. The cut should not extend past the rough opening.



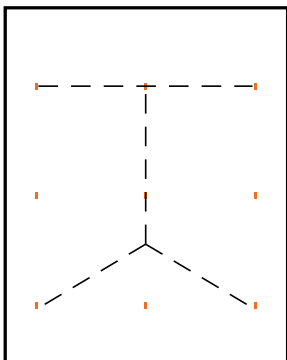
**STEP 2**

Start at the top center and make a vertical cut running two-thirds of the way down the opening.



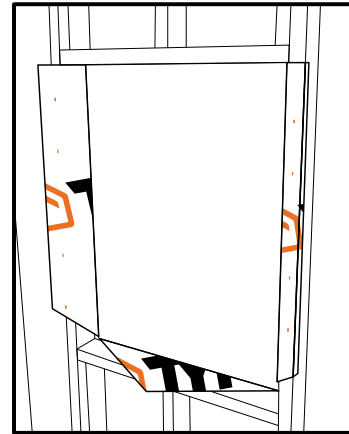
**STEP 3**

From that stopping point, cut diagonally to both lower left and right corners of the opening.



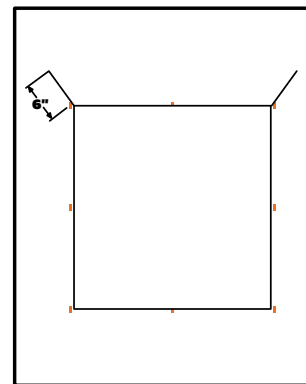
**STEP 4**

Pull each of the flaps tightly inside the rough opening and attach them to the frame with nails, staples or tape.



**STEP 5**

At the window header, make a 6" diagonal cut at a 45-degree angle on both corners. Fold the material up exposing the sheathing. Now install the window or door according to the manufacturer's instructions. The final step is to flash all seams and flanges securely (refer to TYPAR® flashing instructions). TYPAR flashing should also be installed in accordance with window manufacturer's instructions and according to the ASTM 2112 standard.



## **WINDOW FLASHING GENERAL INSTRUCTIONS**

Installation methods approved by the American Architectural Manufacturers Association (AAMA) are acceptable for TYPAR® products and system warranties.

Flashing products should always be installed on a dry surface that is free of dirt and debris. Wipe surfaces to remove moisture, grease, and other contaminants that could interfere with adhesion.

Avoid placing fasteners where the TYPAR flashing will be installed; however, the fasteners can be installed over the flashing.

Most circumstances do not require you to prime the surface before installing TYPAR flashing. However, some adverse weather conditions, extreme temperatures, or specialty installations, such as concrete, masonry, or fiber-face gypsum board may require a primer to obtain optimal adhesion. Install the primer according to the manufacturer's installation instructions.

The use of a heat gun will assist in adhesion during colder conditions.

Do not expose the flashing to direct sunlight for longer than recommended by the manufacturer.

Do not apply the flashing to a flexible vinyl surface, although rigid PVC is acceptable. Please check with the window manufacturer for compliance with rubberized asphalt flashing products.

For more information, visit our website at [www.TYPAR.com](http://www.TYPAR.com) or contact your local TYPAR sales rep.

### **Tools Needed**

- Brush for surface preparation
- Utility knife or scissors
- Gloves
- J-roller
- Primer (optional)



**TYPICAL WINDOW FLASHING**

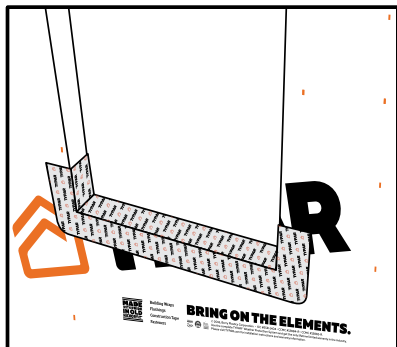
**STEP 1**

Install the window sill pan according to the manufacturer’s instructions. Alternatively, you can create a sill pan using TYPAR® Flexible Flashing. Cut a piece that is 12” longer than the length of the rough opening window sill.

Carefully peel off the release liner. Center the flashing in the center of the rough opening and work your way toward the corners and then up the sides. Note: the Flexible Flashing should overlap to the outside of the wall by 2-3”. Only stretch the flashing in the corners.

Alternatively to above, you can create a sill pan by installing TYPAR® straight flashing along the bottom sill and installing TYPAR Flexible Flashing on the corners only.

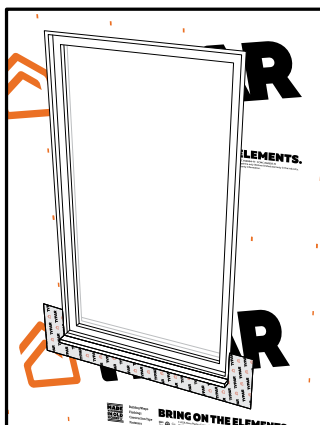
If needed, secure the fanned edges of the TYPAR Flexible Flashing with a plastic-capped nail or plastic-capped staple.



**STEP 2**

Apply a continuous bead of sealant to the back of the window or on the wall. Do not apply the sealant across the bottom of the sill or on the bottom of the window. This area is left open to allow for proper drainage.

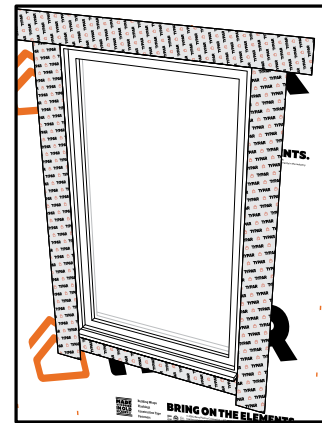
Install the window according to the manufacturer’s installation instructions.



**STEP 3**

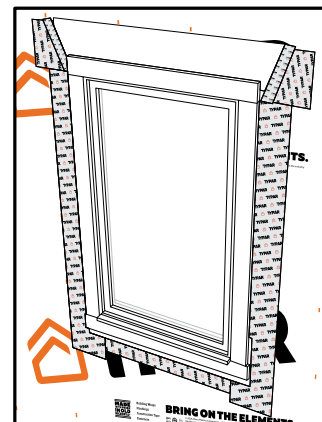
Cut two pieces of TYPAR flashing long enough to extend 1” above the window head flange and 1” below the window sill flange. Carefully peel off the release liner and apply the flashing on both sides of the window. Make sure to cover the entire window flange, and press firmly either by hand or using a J-roller. Ensure there are no wrinkles or bubbles.

Cut a piece of TYPAR flashing for the head flashing. Ensure that the piece is long enough to extend by 1” on both sides of the jamb flashing. Remove the release liner and carefully install the flashing. Cover the window flange and press firmly by hand or using a J-roller.



**STEP 4**

Release the upper flap of the TYPAR® WRB that you cut earlier. Tape the 45-degree cuts using TYPAR® Construction Tape or TYPAR flashing. DO NOT tape the WRB along the top of the window flange.



**FLASHING ARCHED WINDOWS**

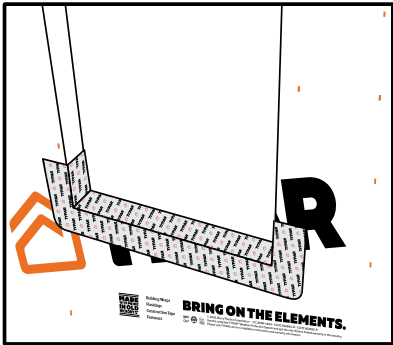
**STEP 1**

Start with the TYPAR® Flexible Flashing. Cut a piece that is 12" longer than the length of the rough opening window sill.

Carefully pull off the release liner. Center the flashing in the center of the rough opening and work your way toward the corners and then up the sides. Note: the Flexible Flashing should overlap to the outside of the wall by 2-3". Only stretch the flashing in the corners.

Alternatively to above, you can create a sill pan by installing TYPAR® straight flashing along the bottom sill and installing TYPAR Flexible Flashing on the corners only.

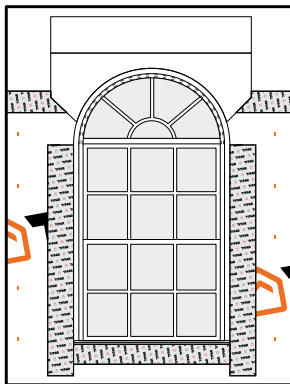
If needed, secure the fanned edges of the TYPAR Flexible Flashing with a plastic-capped nail or plastic-capped staple.



**STEP 2**

Apply a continuous bead of sealant to the back of the window or on the wall. Do not apply the sealant across the bottom of the sill or on the bottom of the window. This area is left open to allow for proper drainage.

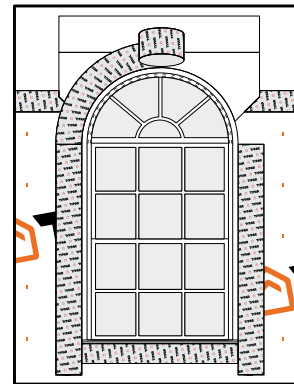
Install the window according to the manufacturer's installation instructions.



**STEP 3**

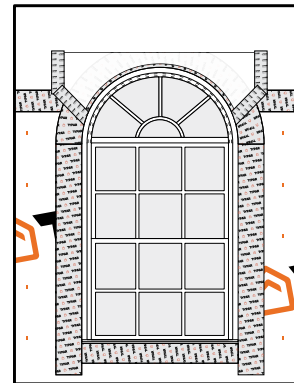
Cut two pieces of TYPAR flashing long enough to extend 1" above the window head flange and 1" below the window sill flange. Carefully peel off the release liner and apply the flashing on both sides of the window. Make sure to cover the entire window mounting flange, and press firmly either by hand or using a J-roller. Ensure there are no wrinkles or bubbles

For the head flashing, cut a piece of TYPAR Flexible Flashing 12" longer than the length on the window arc. Carefully begin to peel off the release liner and install the flashing to the contour of the window flange as you go. The head flashing should overlap the jamb flashing by at least 6". If needed, use button fasteners to secure the outer edges.



**STEP 4**

Flip down the WRB that you cut earlier. Trim the WRB tight to the window arc if needed. Tape the seams using TYPAR® Construction Tape. DO NOT tape along the window arc.





**FLASHING PENETRATIONS**

Penetrations such as exhaust fans, exterior electrical outlets, dryer vents, exterior lights, and gas outlets are a common entrance for bulk water into the wall cavity. Using TYPAR® flashing will ensure proper water holdout and maintain the integrity of the structure.

The method is similar to flashing a window. Start by flashing the bottom of the penetration. Ensure to shingle the upper tape over the bottom tape.

Some penetrations have flanges, such as dryer vents. These penetrations should be flashed according to the details below.

**STEP 1**

Install the vent according to the manufacturer’s recommendations. Trim the housewrap as close as possible around the perimeter of the vent.

**STEP 2**

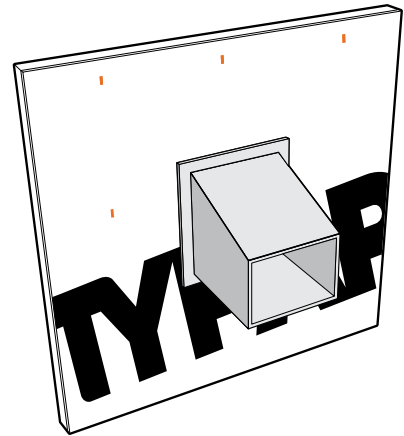
Flash the vent using the same method as windows. Starting at the bottom flange, cut the flashing so that it extends past the flanges by 1" on both sides. Now apply the flashing to the sides of the vent. Remember to extend the flashing 1" on both top and bottom. Make sure to smooth out wrinkles and air bubbles. The use of a J-roller is optional.

**STEP 3**

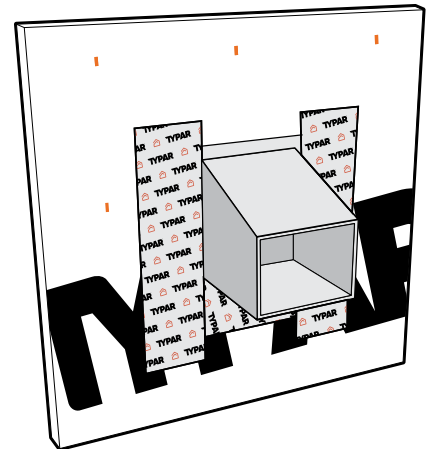
The final step is to install the flashing across the top. Extend the flashing out at least 1" on both sides.

Note: This type of installation is suitable for several different penetrations. Always use the shingling method and ensure a tight seal around the flange/penetration.

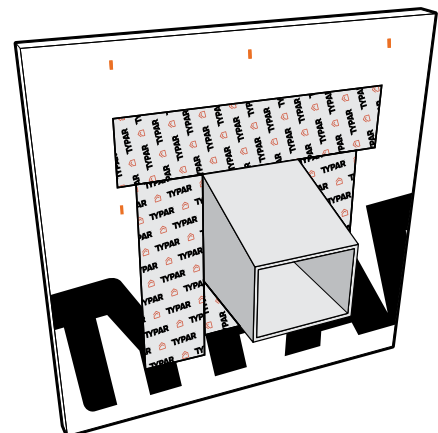
1.



2.



3.



TYPAR® BuildingWrap is part of a complete Weather Protection System, which also includes TYPAR® MetroWrap®, TYPAR® Flashings and Construction Tape.

For more information, visit [www.TYPAR.com](http://www.TYPAR.com)

