TYPAR® WEATHER PROTECTION SYSTEM
INSTALLATION GUIDE

FOR COMMERCIAL APPLICATIONS

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OBJECTIVE

The objective of these installation instructions for TYPAR® MetroWrap is to provide guidance to the design professional and to the installation contractor. TYPAR MetroWrap can provide the function of a water resistive barrier and the function of an air barrier in a commercial building when installed as an assembly.

Note: As commercial buildings vary significantly in design and height and are subject to different forces depending on where it is located, the design professional shall determine the loads on the material to determine the material is appropriate and usable for the intended use in a particular building. The design professional shall review these guidelines to determine if they are applicable to their specific project.

The design professional may use the model specification developed for TYPAR MetroWrap for additional guidance. This installation guide provides the basic requirements and does not cover all details which may be required for a specific building. Contact the manufacturer when more information is required.

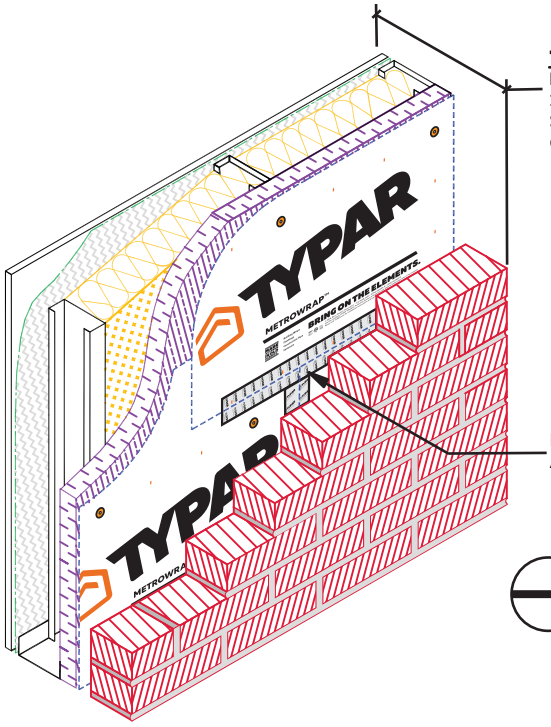
FUNCTIONS

Water Resistive Barrier Function

TYPAR MetroWrap has been designed to shed the liquid water which passes through the cladding when installed as a water resistive barrier assembly. Additional materials and components shall be used to work with the TYPAR MetroWrap to direct the water to the exterior of the building enclosure.

Air Barrier Assembly

TYPAR MetroWrap has been designed to reduce the air infiltration and exfiltration through the walls of the building. The material has an air permeance rate well below the maximum allowed air permeance rate to be classified as an air barrier material. Additional materials and components shall be used to seal the TYPAR MetroWrap to penetrations and to terminate the material at the roof intersection and at the foundation. Both the design professional and the installer have to keep in mind that the force on the material will be in both directions (positive and negative). This load must still be transferred to substrate. Therefore, the fastener type and spacing are very important.



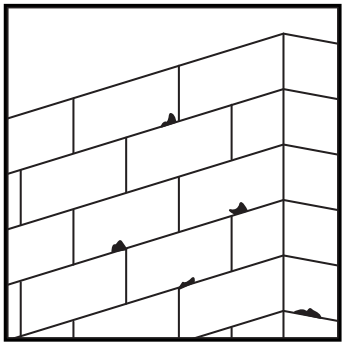
TYPICAL WALL
MASONRY VENEER
1" AIR SPACE TYPAR® METROWRAP RIGID INSULATION
STEEL STUDS w/BATT INSULATION VAPOR RETARDER
GYPSUM BOARD

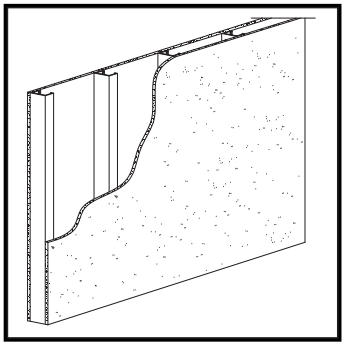
LAP AND TAPE TYPAR®
AT JOINTS

TYPICAL WALL ISOMETRIC
COMMERCIAL STEEL FRAME STRUCTURE w/MASONRY VENEER

INSTALLATION GUIDELINES

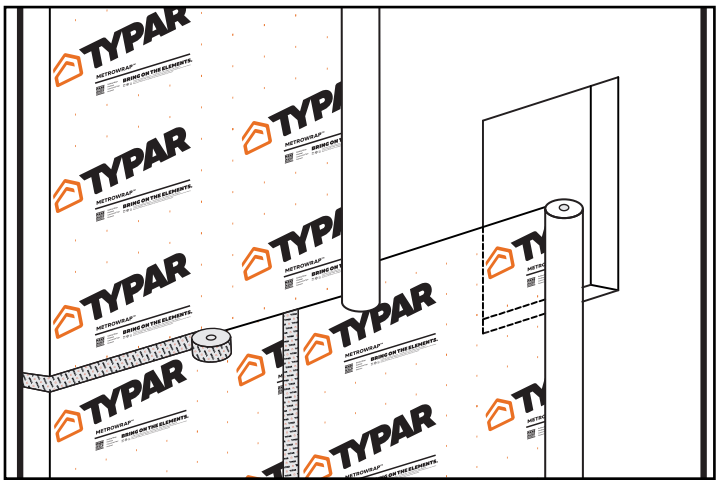
Substrate
TYPAR MetroWrap can be installed over any substrate. The installer shall check for any sharp protrusions on the substrate. These protrusions shall be removed so that the TYPAR MetroWrap is not penetrated. The material must be intact to keep the water and air out. The substrate on the building will determine what fasteners will be used.





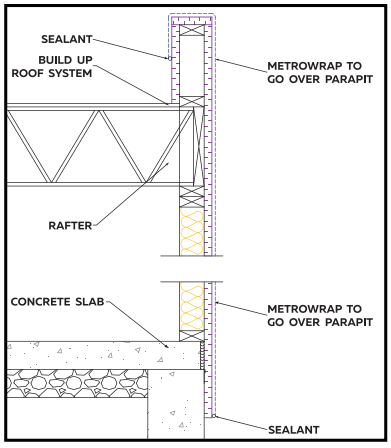
Weather Conditions
Temperature does not impact the installation procedure. High winds can affect installation as TYPAR MetroWrap will be installed in large sheets. TYPAR MetroWrap should not be installed when it is raining or before the substrate has dried after a rain.

Overlaps
TYPAR MetroWrap and all other materials and components used as part of the installation are to be installed in a shingle fashion, the material or component above must overlap the material or component below it. The overlap shall be 4 inches (101 mm) horizontally and 6 inches (152 mm) vertically everywhere this is possible. TYPAR® Construction Tape is then installed on every seam and each termination. TYPAR MetroWrap can also be installed vertically. This allows a single length to start at the top and continue to the bottom. The 6 inches (152 mm) vertical overlap is required. All corners are to be overlapped 12 inches (304 mm).



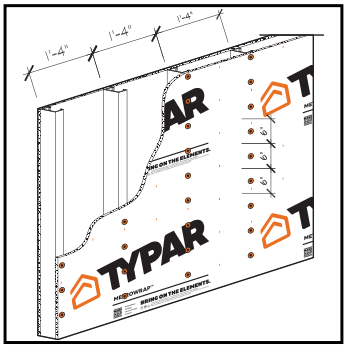
Penetrations
TYPAR® MetroWrap must be carefully cut around penetrations. A bead of approved sealant is then installed on the substrate, approximately 1 inch (2.5 cm) back from the edge of the cut. The TYPAR MetroWrap is then pressed into the sealant to keep out both water and air. TYPAR® Flexible Flashing or TYPAR straight flashing is then installed on the exterior of the TYPAR MetroWrap and joins the material to the penetration. For more detailed information, refer to the TYPAR Installation Manual.

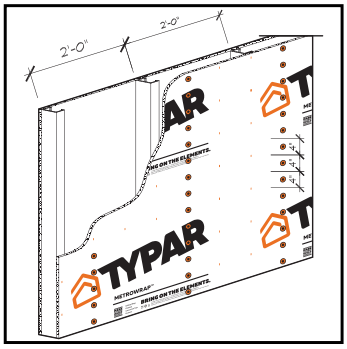
Terminations
Terminations are treated similar to penetrations. A bead of approved sealant is installed on the substrate approximately 1 to 2 inches (25 to 50 mm) back from the edge of the TYPAR MetroWrap. The TYPAR MetroWrap is pressed into the approved sealant. In high wind locations, consider installing a furring strip where the material is terminated to provide additional structural support.



Fasteners
Different fasteners would be used if the substrate is poured concrete, concrete block, steel stud, and gypsum board or wood framing. The most common walls used in commercial buildings are either steel studs with a treated gypsum board or wood framing with OSB sheathing. The fastener shall penetrate the substrate by 2 inches (50 mm) and shall have a 1 inch (50 mm) plastic head. When steel studs are used, the fasteners shall be self taping screws with a 7/8 inch (50 mm) plastic washer. The screw shall be 2 inches (50 mm) long when ½ inch (12 mm) gypsum board is used. When wood studs are used, a 1 inch (50 mm) plastic headed nail or screw shall be used which is 2 inches (50 mm) long when the ½ inch (12 mm) OSB sheathing is used, or a 1 inch plastic cap staple with leg length to penetrate at least 5/8 inch into the wood stud can be used. When the substrate is concrete block or poured concrete, use an adhesive approved by the manufacturer to adhere the TYPAR MetroWrap to the substrate.

Fastening Requirements
Attach one fastener or more every 24 inches (601 mm) in horizontal and vertical direction.





Windows and Doors
Windows and doors are similar to penetrations. Depending on whether the windows are installed or not installed before the TYPAR MetroWrap is installed, the installer will follow AAMA Procedure A or Procedure B. The installer shall always install the materials and components, so that the product above overlaps the product below. For more detailed information, refer to the TYPAR Installation Manual.

Completing the Installation
When one section or wall is complete, the installer shall visually inspect the installation and check to see if all rows of material have overlapped the row below it, that all materials and components have been installed in a shingle fashion, that the fasteners are the proper ones, that the nailing pattern is correct, that all penetrations and terminations have been done correctly and that doors and windows have been properly flashed and integrated into the TYPAR MetroWrap material. The installer shall repair any cuts or tears with TYPAR® Construction Tape.

Disclaimer: This guideline document provides general guidance only for the installation of TYPAR® MetroWrap on commercial buildings. The design professional or builder shall consider all of the physical properties of the material and design the installation requirements to suit specific building requirements. Failure to consider all specific requirements for a building may lead to improper use of the material resulting in non-optimum performance of the material.

70 Old Hickory Blvd, Old Hickory, TN 37138
Please visit TYPAR.com for installation instructions and product information.
Building Wraps | Flashings | Construction Tape