

### Installation Instructions

## Typar® DW DRAINABLE HOUSEWRAP

	Page
Basic Installation and Window Flashing: Pre-Installation Considerations	2
List of Approved Compatible Products	3
METHOD I: Modified "O" or "Cut-Back" Method	4
METHOD II: Modified "I" or "Fold-In" Method	7
METHOD III: "Windows-First" Method	10
Details for Stone & Stucco Applications:	
Stone & Stucco Assembly Detail	13
Bottom Detail for Casing Bead	14
Bottom Detail for Weep Screed	14
Deck Ledger Flashing Detail	15
Rigid Foam Details	
Option 1	16
Option 2	17 18
Option 3	18



#### **Pre-Installation Considerations**

- Flash wall penetrations (such as outlets, exhaust vents, etc.) with proper shingling technique to maintain drainage to the exterior
- Flash windows and doors according to building code requirements. Surface should be clean and dry. All self-adhered flashing must be adhered using a foam roller or hand applicator. Typar AT Flashing should be stored inside or in conditioned space prior to installing in cold temperatures
- Install windows and doors per manufacturers' installation instructions
- Tape all tears and holes that may have been inadvertently introduced during the construction process
- Typar DW can be installed in any direction with the spacers facing to the exterior and still maintain its drainage characteristics
- Taping of housewrap seams is not recommended unless housewrap will serve as the primary air barrier

#### BENEFITS OF NOT TAPING SEAMS:

- No reverse flashing introduced into the drainage plane resulting in an unobstructed drainage path
- No potential for trapped condensation
- Lower cost (as much as 13%)
- No impact on warranty coverage by manufacturer

### When installing Typar DW as the primary air barrier, consider the following:

- Tape all seams with Typar AT Flashing. Surface must be clean and dry and tape must be adhered using a foam roller or hand applicator
- Seal the bottom of the first course to the foundation or sill plate using approved sealant
- Seal the top of the last course to the sheathing or top plate
- Tape/seal all penetrations and tears. Surface must be clean and dry and tape must be adhered using a foam roller or hand applicator
- Use cap fasteners

### To achieve 15 YEAR PRODUCT AND LABOR LIMITED WARRANTY:

#### Install with Typar wall system accessories

- Cap-fasteners must be used (any brand)
- Typar AT Flashing must be used as the self-adhered flashing for windows, doors and other penetrations
- Typar Flex Flashing can be used in conjunction with Typar AT Flashing to treat sills
- Taping seams of housewrap is optional, but Typar AT Flashing (4 inches or wider) must be used if seams are taped



### **Approved Compatible Products**

**CLADDING** 

Fiber Cement

Wood (including Shingles & Shakes) Vinyl and Insulated Vinyl Manufactured Stone

Stucco Metal

**FASTENERS** 

Staples

Cap Fasteners\*

**SEAM TAPE** 

Typar AT Flashing 4-in Sealing Tape

**SELF-ADHERED FLASHING** 

Typar AT Flashing

SILL TREATMENT

\*Typar AT Flashing

\*Typar AT Flashing with Typar Flex Flashing

Minimum 9 inches width self-adhered flashing from those listed here under "Self-Adhered Flashing"

**CAULKS and SEALANTS** 

OSI®

WinTeQ™

TeQ::Seal™ Sealant

Loctite® Premium® Construction Adhesive

Loctite® PL Premium® S40 Polyurethane

GeoCel® 2300 Construction Tripolymer

GeoCel® Pro Flex®

Fortifiber® Moistop® Sealant

Bostik® 915™ Polyurethane Sealant

Bostik® 915FS™ Polyurethane Sealant

Dow Corning® 732 Multi-Purpose Sealant

NPC® Solar Seal #900

Titebond® Heavy Duty Construction Adhesive

Titebond® WeatherMaster™

Titebond® WeatherMaster™ ULTIMATE MP

Tremco® Vulkem® 116

DAP® Flexible CLEAR Sealant

<sup>\*</sup>required components to achieve 15 YEAR PRODUCT AND LABOR LIMITED WARRANTY



#### Basic Installation & Window Flashing: METHOD I - Modified "O" or "Cut-Back" Method

#### STEP 1

- A. Unroll Typar DW Drainable Housewrap with orange spacers facing to the exterior and fasten to sheathing with nails, staples or cap fasteners.
- B. Fasteners should provide a minimum 3/8 inch penetration into the nail base and be spaced approximately 12 to 18 inches apart along the horizontal and vertical laps. Fasten every 3 sq. ft elsewhere. For commercial installation above 40 feet, cap fasteners are recommended.
- C. Typar DW Drainable Housewrap should be installed shingle lap fashion (i.e. begin installation at the base of the wall assembly).
- D. Extend housewrap a minimum 2 inches over sill plate.
- E. Overlap all horizontal seams by at least 4 inches, all vertical seams by at least 6 inches and corners by 12 inches.
- F. Be sure that the housewrap installation and flashing provide for positive drainage to the exterior of the assembly.
- G. Do not allow the housewrap to be exposed to sunlight in excess of 120 days. Recommended coverage within 30 days.
- H. Taping of seams is NOT REQUIRED. (See pg. 2 for further details). Optionally, tape all Typar DW Drainable Housewrap seams with Typar AT Flashing 4 inch. Surface must be clean and dry, and tape must be adhered using a foam roller or hand applicator.

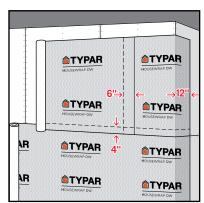


Fig. 1

- A. Wrap the entire building including window and door openings.
- B. At each window opening, cut housewrap flush with window opening. Then, cut housewrap back 2 inches at each window jamb and sill to reveal sheathing. Cut housewrap at the head 45 degrees away from window opening to account for flashing width.
- C. Fold up top trapezoid shaped "flap" and secure temporarily with tape prior to installing window.

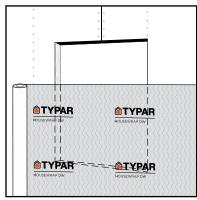


Fig. 2

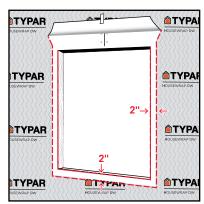


Fig. 3



#### Basic Installation & Window Flashing: METHOD I - Modified "O" or "Cut-Back" Method

- A. (Optional) Install sloped sill or back dam (optimal slope 1/4 inch), except when using approved premanufactured sill pan.
- B. 9 inches or 12 inches wide Typar AT Flashing is recommended for sill installation as pictured in illustrations. If using 6 inches wide Typar AT Flashing, you must use two pieces of Typar AT Flashing at the sill: one piece flush with edge of sill; one piece folded into sill. 4 inches wide self-adhered flashing is not recommended for sill treatment.

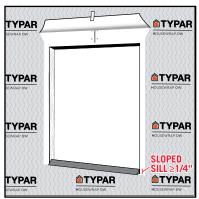


Fig. 4

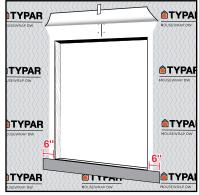


Fig. 5

- C. To properly flash the sill, cut and install corner patch flashing (Fig. 6, 7, 8) or use Typar Flex Flashings (Fig. 9, 10).
- D. Install pre-cut TyparAT Flashing over corner patches. Install TyparAT Flashing to extend at least 6 inches up the side of each jamb inside window opening.

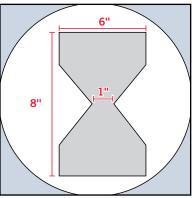


Fig. 6

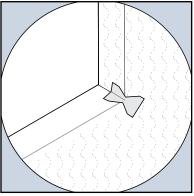


Fig. 7

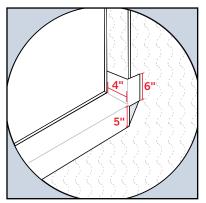
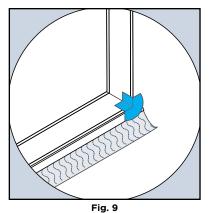


Fig. 8



E. To use Typar Flex Flashings instead of corner patches, place a Typar Flex Flashing in each sill corner and fasten in place with a staple. Install pre-cut Typar AT Flashing over corner patches. Install Typar AT Flashing to extend at least 6 inches up the side of each jamb inside window opening.



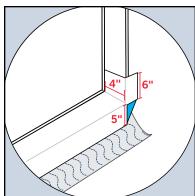
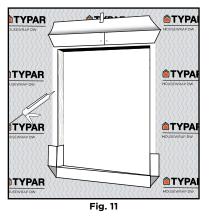
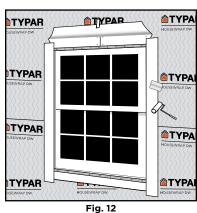


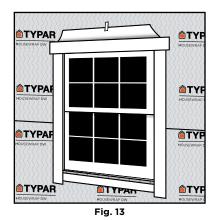
Fig. 10

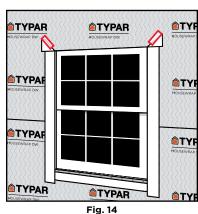
- F. Apply caulk/sealant at jambs and head.
- G. Install flanged window.
- H. Install Typar AT Flashing to the side jambs. Surface should be clean and dry and selfadhered flashing should be applied using a foam roller or hand applicator.





- Install drip cap. Install Typar AT Flashing header flashing. Surface should be clean and dry and self-adhered flashing should be adhered with a foam roller or hand applicator.
- J. Fold top flap down on top of flashed header and apply Typar AT Flashing at diagonal cuts.







#### Basic Installation & Window Flashing: METHOD II - Modified "I" or "Fold-in" Method

#### STEP 1

- A. Unroll Typar DW Drainable Housewrap with orange spacers facing to the exterior and fasten to sheathing with nails, staples or cap fasteners.
- B. Fasteners should provide a minimum 3/8 inch penetration into the nail base and be spaced approximately 12 to 18 inches apart along the horizontal and vertical laps. Fasten every 3 sq. ft elsewhere. For commercial installation above 40 feet, cap fasteners are recommended.
- C. Typar DW Drainable Housewrap should be installed shingle lap fashion (i.e. begin installation at the base of the wall assembly).
- D. Extend housewrap a minimum 2 inches over sill plate.
- E. Overlap all horizontal seams by at least 4 inches, all vertical seams by at least 6 inches and corners by 12 inches.
- F. Be sure that the housewrap installation and flashing provide for positive drainage to the exterior of the assembly.
- G. Do not allow the housewrap to be exposed to sunlight in excess of 120 days. Recommended coverage within 30 days.
- H. Taping of seams is NOT REQUIRED. (See pg. 2 for further details). Optionally, tape all Typar DW Drainable Housewrap seams with Typar AT Flashing 4 inches. Surface must be clean and dry, and tape must be adhered using a foam roller or hand applicator.

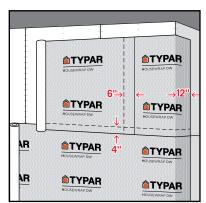


Fig. 15

#### STEP 2

- A. Wrap the entire building including window and door openings.
- B. At each window opening, cut an "I" shape into housewrap. Cut housewrap above top corners 45 degrees away from window opening to account for flashing width.
- C. Fold side flaps into rough opening and cut/fasten.

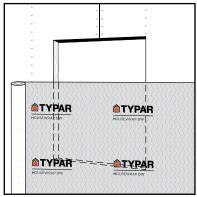


Fig. 16

D. Fold up top trapezoid shaped "flap" and secure temporarily with tape prior to installing window.

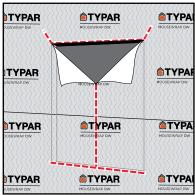


Fig. 17

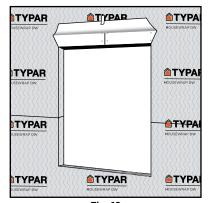


Fig. 18



### Basic Installation & Window Flashing: METHOD II - Modified "I" or "Fold-in" Method

#### STEP 3

A. (Optional) Install sloped sill or back dam (optimal slope 1/4 inch), except when using approved pre-manufactured sill pan.

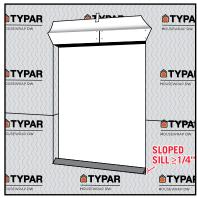


Fig. 19

B. 9 inches or 12 inches wide Typar AT Flashing is recommended for sill installation as pictured in illustrations. If using 6 inches wide Typar AT Flashing, you must use two pieces of Typar AT Flashing at the sill: one piece flush with edge of sill; one piece folded into sill. 4 inches wide self-adhered flashing is not recommended for sill treatment.

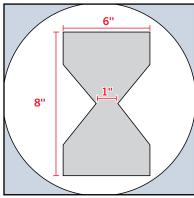


Fig. 20

C. To properly flash the sill, cut and install corner patch flashing (Fig. 21, 22) or use Typar Flex Flashings (Fig. 23, 24).

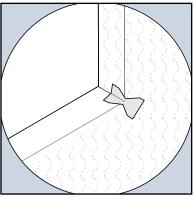


Fig. 21

D. Install pre-cut Typar AT Flashing over corner patches. Install Typar AT Flashing to extend at least 6 inches up the side of each jamb inside window opening.

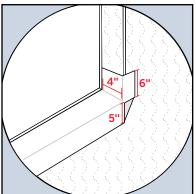


Fig. 22



E. To use Typar Flex Flashings instead of corner patches, place a Typar Flex Flashing in each sill corner and fasten in place with a staple. Install pre-cut Typar AT Flashing over corner patches. Install Typar AT Flashing to extend at least 6 inches up the side of each jamb inside window opening.

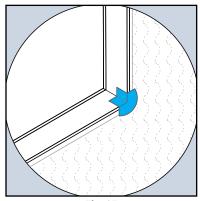
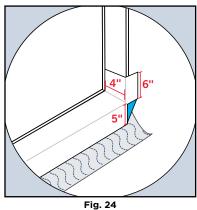


Fig. 23



F. Apply caulk/sealant at jambs and head.

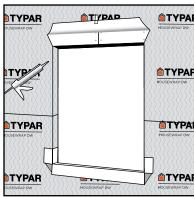


Fig. 25

G. Install flanged window.

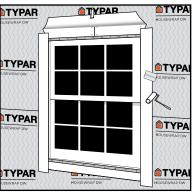


Fig. 26

- H. Install Typar AT Flashing to the side jambs. Surface should be clean and dry and self-adhered flashing should be applied using a foam roller or hand applicator.
- Install drip cap. Install Typar AT Flashing header flashing. Surface should be clean and dry and selfadhered flashing should be adhered with a foam roller or hand applicator.

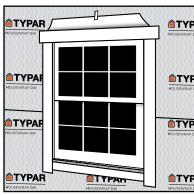


Fig. 27

J. Fold top flap down on top of flashed header and Typar AT Flashing at diagonal cuts.

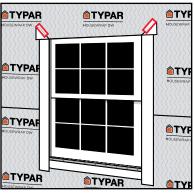


Fig. 28



## Basic Installation & Window Flashing: METHOD III - "Windows-First" Method

- A. Secure a Typar DW "apron" at sill using a piece of Typar AT Flashing. Apron should extend beyond each side of rough opening at least the width of the jamb flashing; not less than 6 inches. Secure apron to the wall along the top edge, but leave the bottom of the apron loose. The loose edge will overlap the layer of Typar DW installed after window installation is complete.
- B. (Optional) Install sloped sill or back dam (optimal slope 1/4"), except when using approved pre-manufactured sill pan.
- C. 9 inches or 6 inches wide Typar AT Flashing is recommended for sill installation as pictured in illustrations. 4 inches wide self-adhered flashing is not recommended for sill treatment.
- D. To properly flash the sill, cut and install corner patch flashing (Fig 29, 30, 31) or use Typar Flex Flashings (Fig 32, 33).

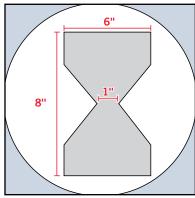


Fig. 29

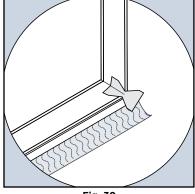
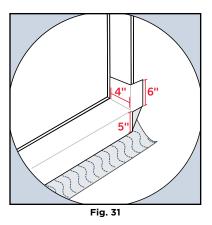


Fig. 30



- E. Install pre-cut Typar AT Flashing over corner patches. Install TyparAT Flashing to extend at least 6 inches up the side of each jamb inside window opening.
- F. To use Typar Flex Flashings instead of corner patches, place a Typar Flex Flashing in each sill corner and fasten in place with a staple. Install pre-cut Typar AT Flashing over corner patches. Install Typar AT Flashing to extend at least 6 inches up the side of each jamb inside window opening.

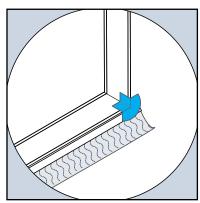


Fig. 32

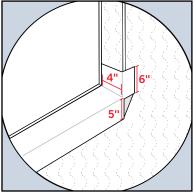


Fig. 33



- G. Apply caulk/sealant at jambs and head. Do not caulk at window sill.
- H. Install flanged window.
- I. Install Typar AT Flashing to the side jambs. Surface should be clean and dry and self-adhered flashing should be applied using a foam roller or hand applicator.
- J. Install drip cap. Install Typar AT Flashing header flashing. Surface should be clean and dry and selfadhered flashing should be adhered with a foam roller or hand applicator.

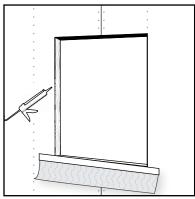


Fig. 34

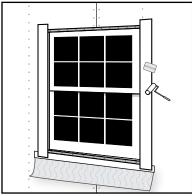


Fig. 35

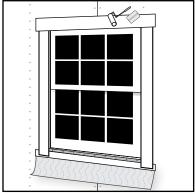


Fig. 36

- A. Wrap the entire building, including windows and doors. Unroll Typar DW Drainable Housewrap with orange spacers facing to the exterior and fasten to sheathing with nails, staples or cap fasteners.
- B. Fasteners should provide a minimum 3/8 inch penetration into the nail base and be spaced approximately 12 to 18 inches apart along the horizontal and vertical laps.
- C. Fasten every 3 sq. ft elsewhere. For commercial installation above 40 feet, cap fasteners are recommended.
- D. Typar DW Drainable Housewrap should be installed shingle lap fashion (i.e. begin installation at the base of the wall assembly).
- E. Extend housewrap a minimum 2 inches over sill plate.
- F. Overlap all horizontal seams by at least 4 inches, all vertical seams by at least 6 inches and corners by 12 inches.

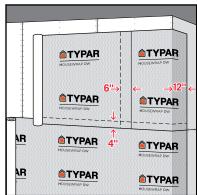


Fig. 37

- G. Be sure that the housewrap installation and flashing provide for positive drainage to the exterior of the assembly.
- H. Do not allow the housewrap to be exposed to sunlight in excess of 120 days. Recommended coverage within 30 days.
- I. Taping of seams is NOT REQUIRED. (See pg. 2 for further details). Optionally, tape all Typar DW Drainable Housewrap seams with Typar AT Flashing 4 inch. Surface must be clean and dry, and tape must be adhered using a foam roller or hand applicator.



### Basic Installation & Window Flashing: METHOD III - "Windows-First" Method

- A. At window locations, cut back Typar DW to expose window. Do not cut through Typar AT Flashing or Typar DW apron.
- B. At 2 4 inches below window, cut horizontal slit in Typar DW, extending to edges of jamb flashing.
   Do not cut through Typar AT Flashing or Typar DW apron. Pull apron through to lap over top layer of Typar DW, creating positive drainage.
- C. Tape seams with Typar AT Flashing at window jambs. Do not tape the top or bottom of window.

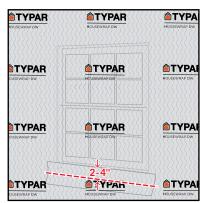


Fig. 38

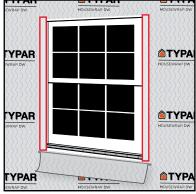
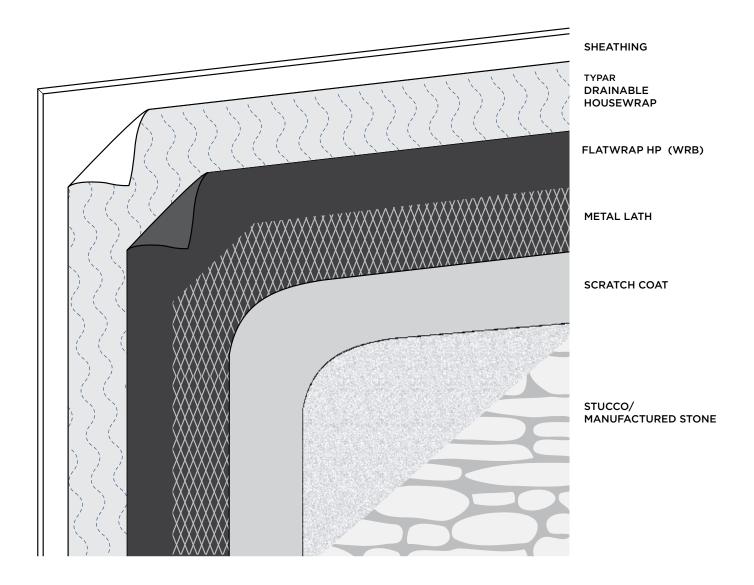


Fig. 39



### Stone and Stucco Application: Stucco and Stone Assembly

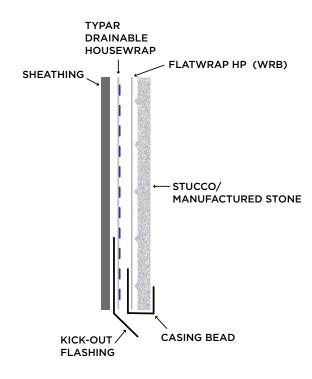


Integrate Typar with all sidewall flashing materials.

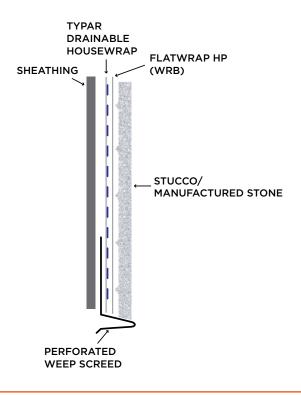
The second layer of water-resistive barrier (WRB) serves as an intervening layer, or "bond break", with the scratch coat to help maintain the drainage gap.



### Stone and Stucco Application: Bottom Detail for Casing Bead

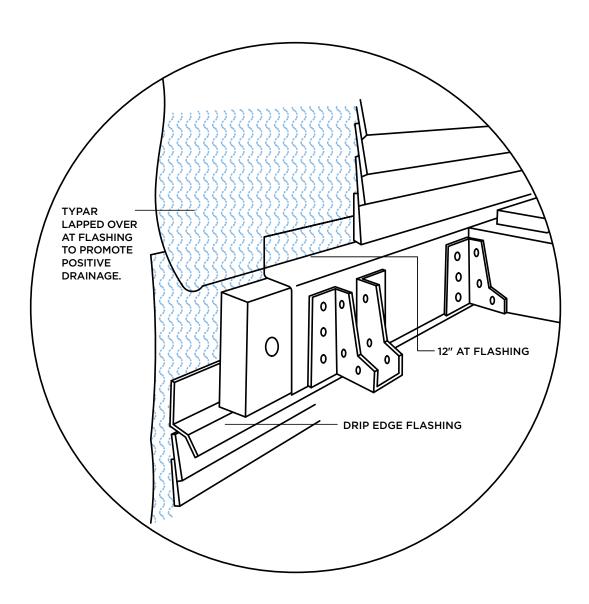


### Stone & Stucco Application: Bottom Detail for Weep Screed



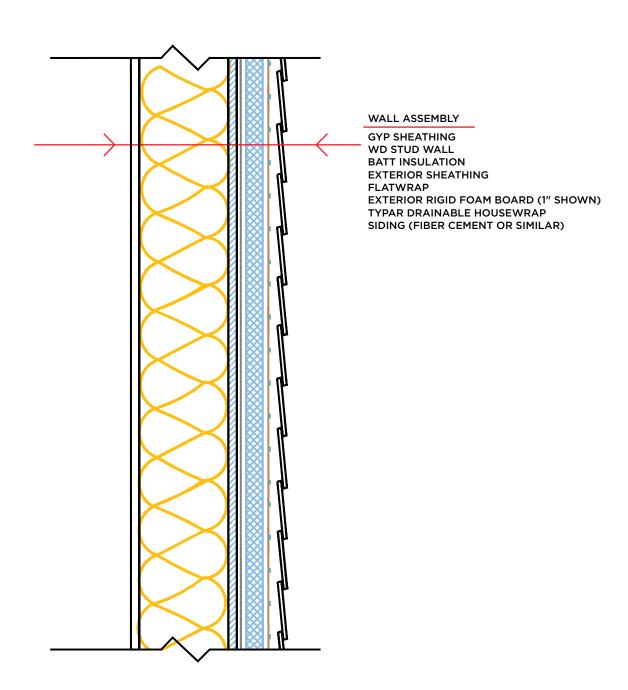


### **Deck Ledger Flashing Detail**





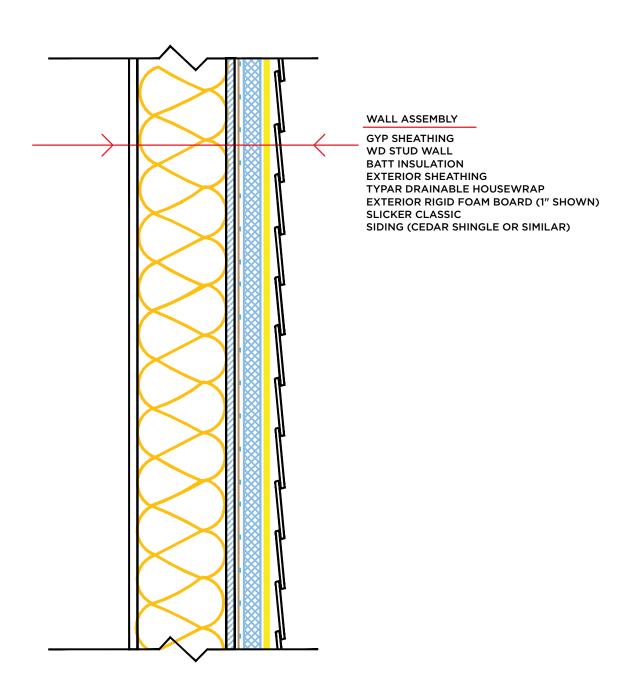
**Rigid Foam Applications: Option 1** 



**OPTION 1: FLATWRAP, RIGID FOAM AND TYPAR** 



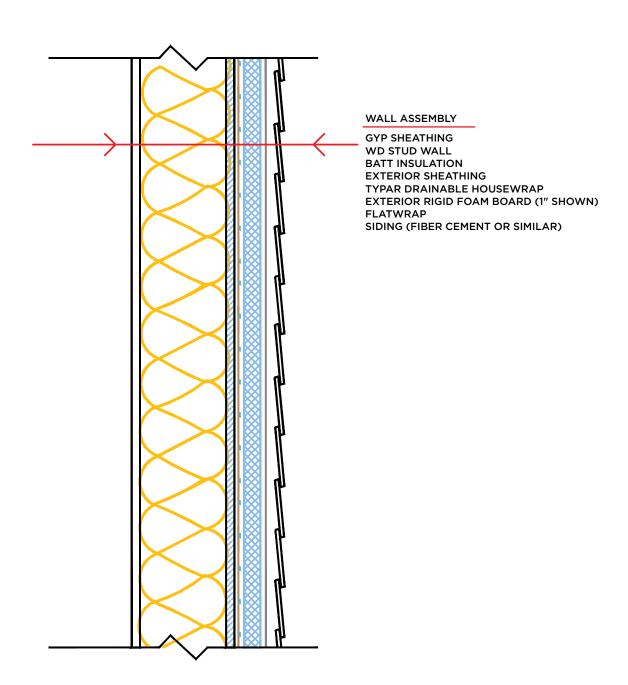
**Rigid Foam Applications: Option 2** 



OPTION 2: TYPAR, RIGID FOAM, SLICKER CLASSIC



**Rigid Foam Applications: Option 3** 



OPTION 3: TYPAR, RIGID FOAM AND FLATWRAP





