

# TeifsPERMADRAIN® Wall System Details

## Table of Contents

### GENERAL DETAILS:

TeifsPERMADRAIN® WALL SYSTEMS (PDN.101).....	3
AESTHETIC GROOVE (PDN.103).....	4

### OPENINGS:

FLASHED WINDOW HEAD (PDN.201).....	4
FLASHED WINDOW SILL (PDN.202).....	5
WINDOW HEAD (PDN.203).....	5
WINDOW JAMB (PDN.204).....	6
WINDOW HEAD - ALUMINUM (PDN.205).....	6
WINDOWSILL - ALUMINUM (PDN.206).....	7
WINDOW JAMB - ALUMINUM (PDN.207).....	7
PENETRATIONS (PDN.208).....	8
PENETRATION - HOSE BIB/LIGHT FIXTURE (PDN.209).....	8

### TERMINATIONS:

TERMINATION AT GRADE (PDN.301).....	9
TERMINATION AT SIDEWALK (PDN.302).....	9
TERMINATION AT ROOF (PDN.303).....	10
TERMINATION WITH DISSIMILAR SUBSTRATE (PDN.304).....	10
PARAPET (PDN.305).....	11
PARAPET WITH METAL COPING (PDN.306).....	11
DECK FLASHING (PDN.307).....	12
KICK OUT FLASHING (PDN.308).....	12

### JOINTS:

EXPANSION JOINT (PDN.401).....	13
EXPANSION JOINT AT DISSIMILAR SUBSTRATE (PDN.402).....	13

# TeifsPERMADRAIN® Wall System Details

## Table of Contents

EXPANSION JOINT AT FLOORLINE (PDN.403) ..... 14

### **SOFFIT:**

SOFFIT (PDN.501)..... 14

SOFFIT - VENTED (PDN.502) ..... 15

### **FIRE ASSEMBLIES:**

FIRE RATED ASSEMBLIES (1 AND 2-HR) (PDN.601-602)..... 15

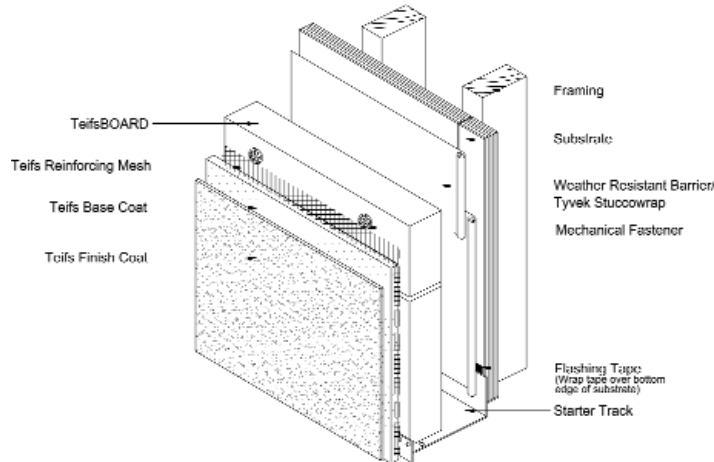
# TeifsPERMADRAIN® Wall System (PB)

## DETAILS

### TeifsPERMADRAIN® Wall System (PB)

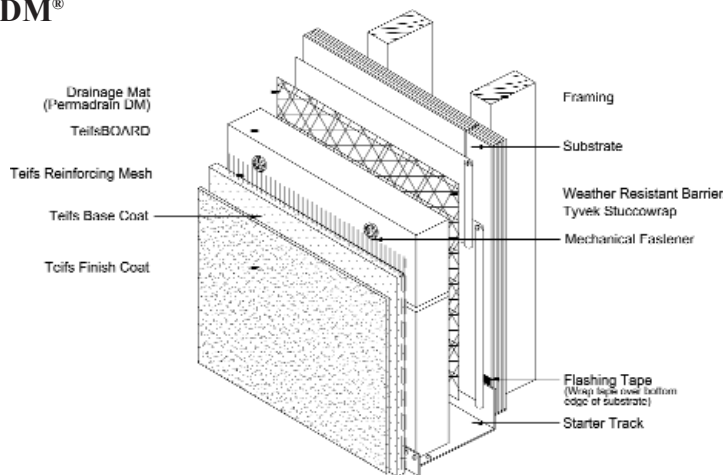
#### TeifsPERMADRAIN®

Flat minimum 1" insulation board mechanically fastened directly over a weather resistant barrier.



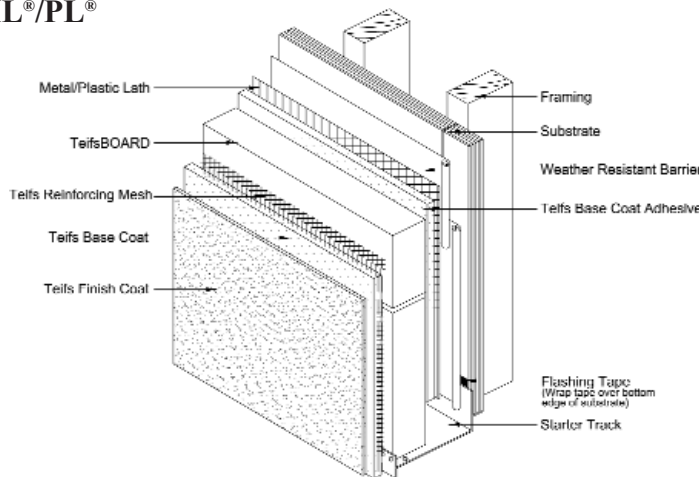
#### TeifsPERMADRAIN DM®

Flat minimum 1" insulation board mechanically fastened over a drainage mat and a weather resistant barrier.



#### TeifsPERMADRAIN ML®/PL®

Flat insulation board adhesively attached to metal or plastic lath that is attached to weather resistant covered framing/sheathing.



The details in this booklet show the TeifsPERMADRAIN DM® Wall System with notes indicating the differences for the other systems. For a full set of details for either TeifsPERMADRAIN® or TeifsPERMADRAIN ML®/PL®, they are available on our website at [www.teifs.com](http://www.teifs.com) or contact Teifs by phone.

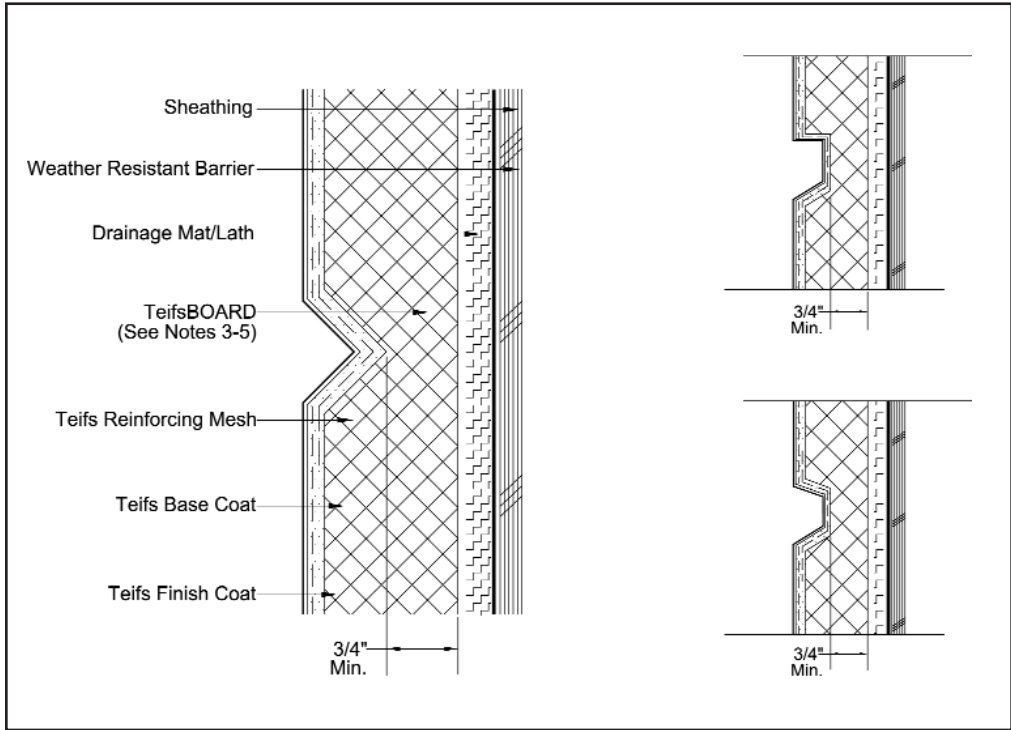
SCALE: Not to scale

PDN.101

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# TeifsPERMADRAIN® Wall System (PB)

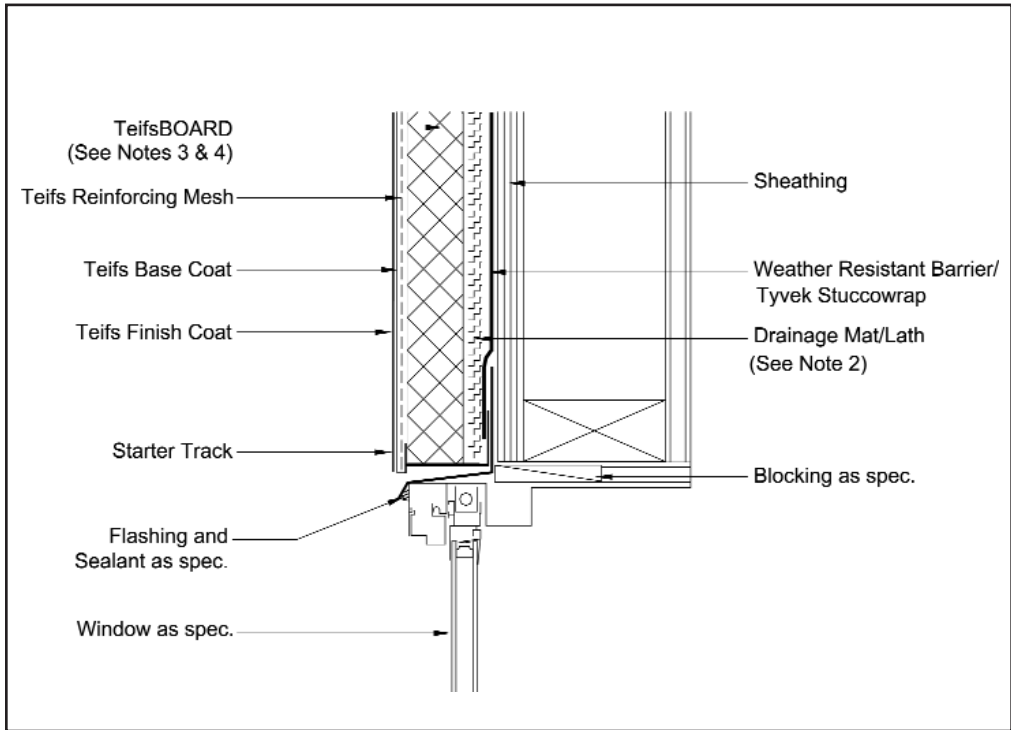


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PDN.103

## AESTHETIC GROOVE

1. Use TeifsMESH to reinforce reveals and overlap w/ TeifsMESH min. 64-mm (2 1/2 in).
2. Do not locate reveals at stress areas such as corners of windows, doors, etc.
3. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
4. PERMADRAIN DM® (with drainage mat) - mechanically attached
5. PERMADRAIN ML®/PL® (with lath) - adhesively attached.
6. Maintain 19 mm (3/4 in) thickness between substrate and reveals.



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PDN.201

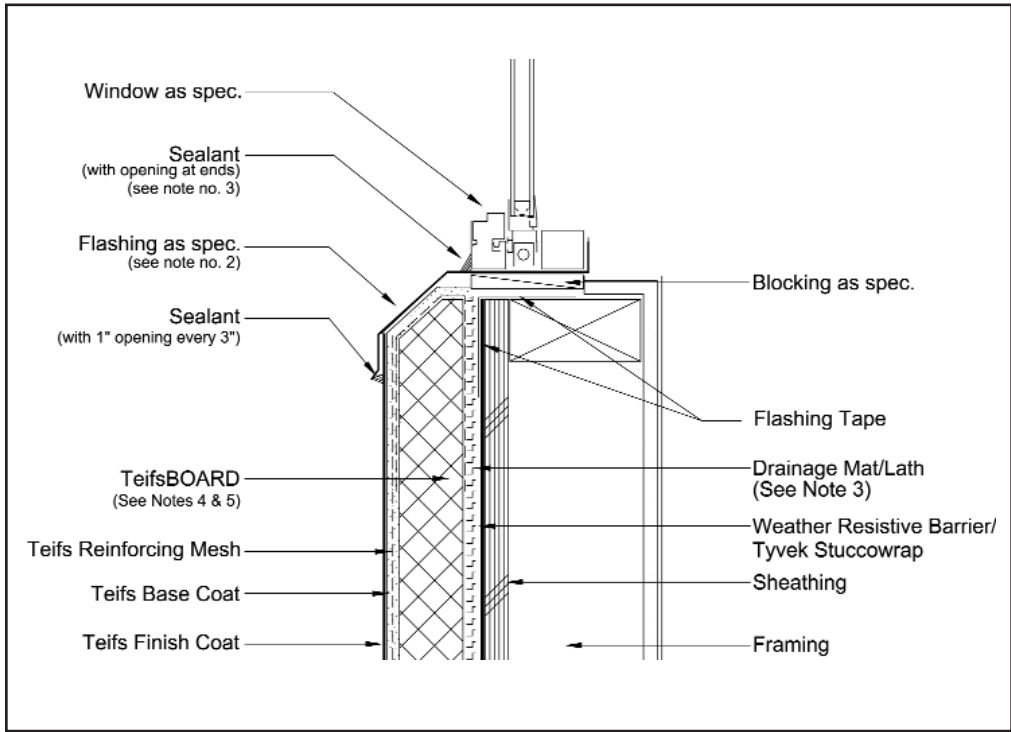
## WINDOW HEAD-FLASHED

1. Flashing is designed and supplied by others.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.
5. Maintain 19 mm (3/4 in) thickness between substrate and reveals.

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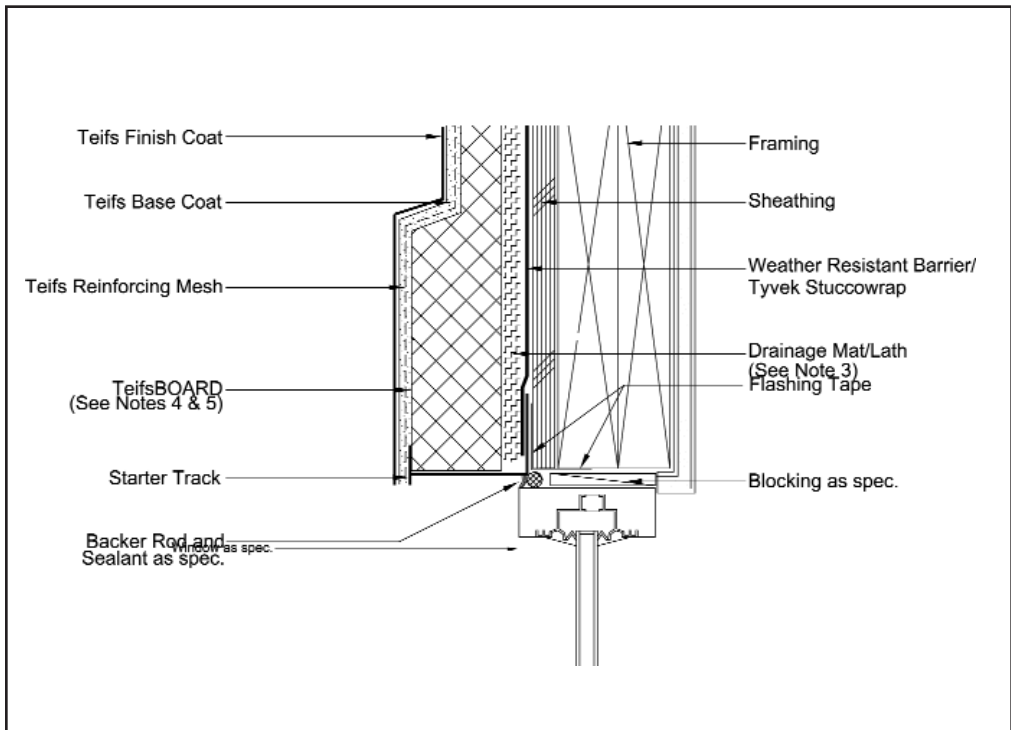


SCALE: Not to scale

PDN.202

## WINDOW SILL WITH FLASHING

1. See current Teifs Window Flashing Technical Bulletin for proper window flashing details.
2. Openings in sealant should allow for incidental moisture to escape the pan flashing.
3. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
4. PERMADRAIN DM® (with drainage mat) - mechanically attached.
5. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.203

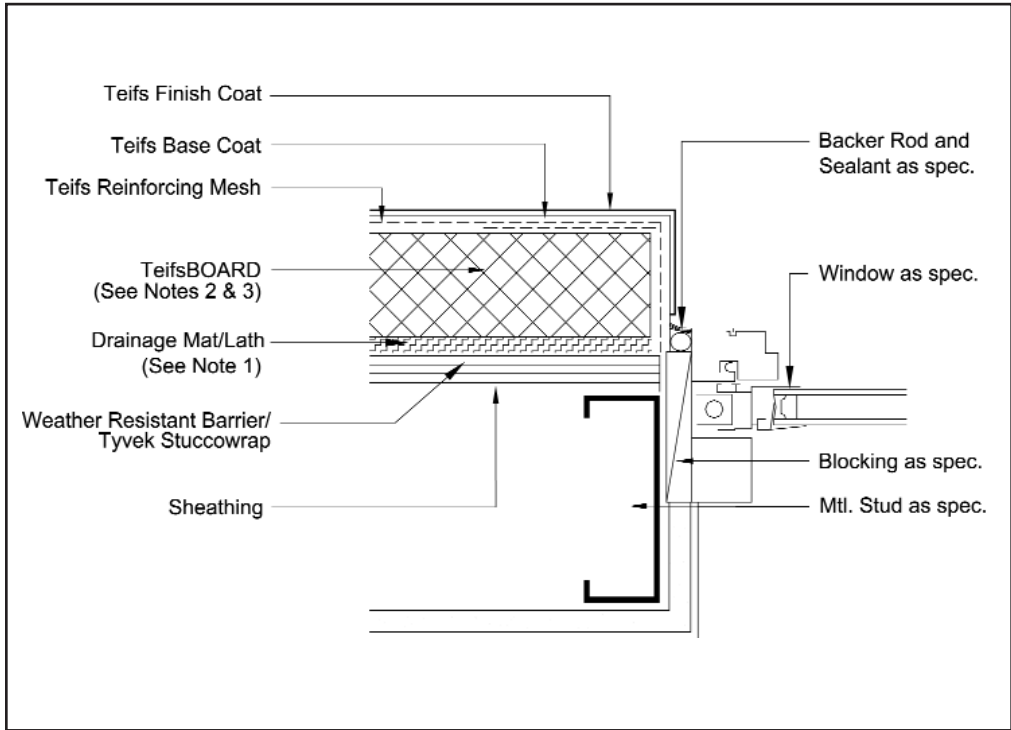
## WINDOW HEAD

1. See current Teifs Window Flashing Technical Bulletin for proper window flashing details.
2. The bottom of the Starter Track should be painted for aesthetics.
3. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
4. PERMADRAIN DM® (with drainage mat) - mechanically attached.
5. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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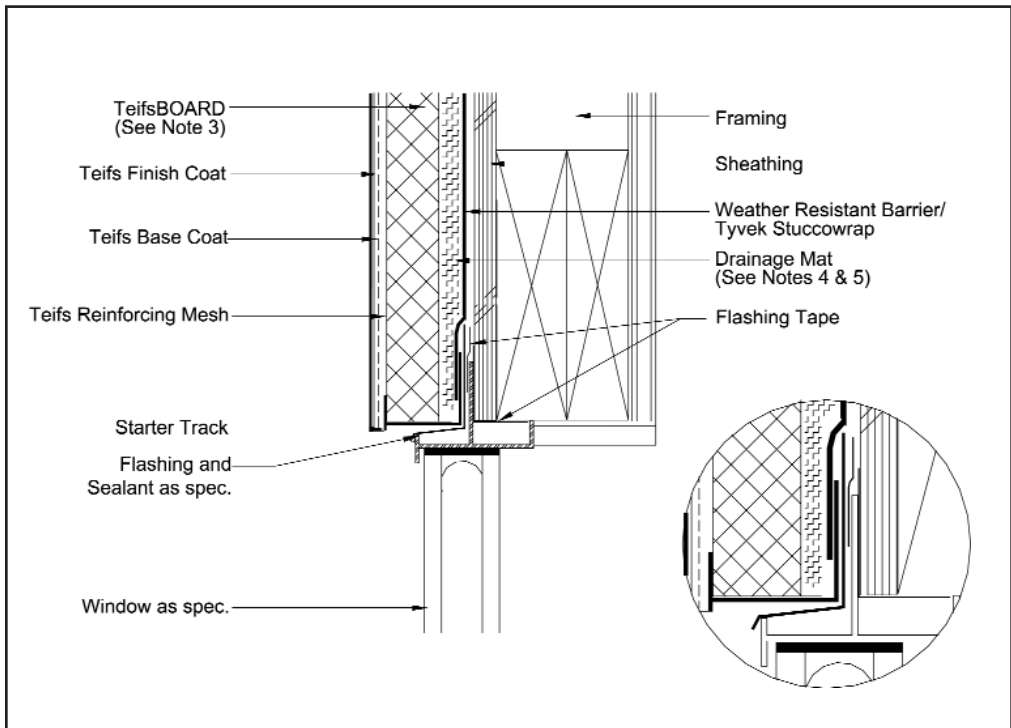


SCALE: Not to scale

PDN.204

## WINDOW JAMB

1. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
2. PERMADRAIN DM® (with drainage mat) - mechanically attached.
3. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.205

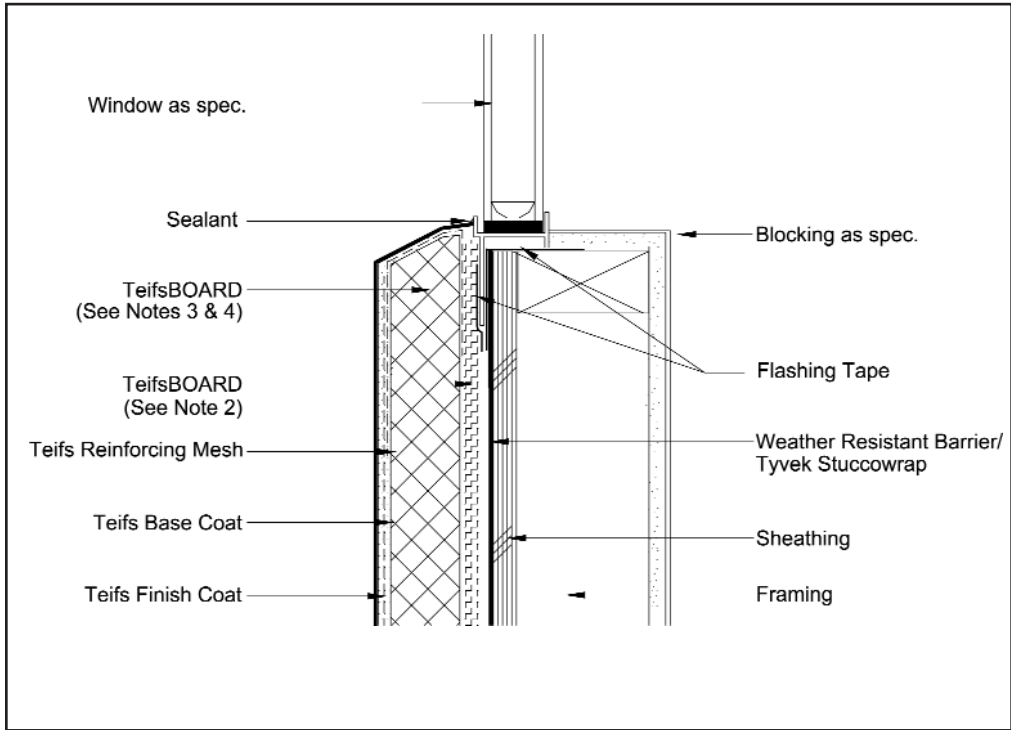
## WINDOW HEAD - ALUMINUM

1. See current Teifs Window Flashing Technical Bulletin for proper window flashing details.
2. The bottom of the starter track should be painted for aesthetic purposes.
3. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
4. PERMADRAIN DM® (with drainage mat) - mechanically attached.
5. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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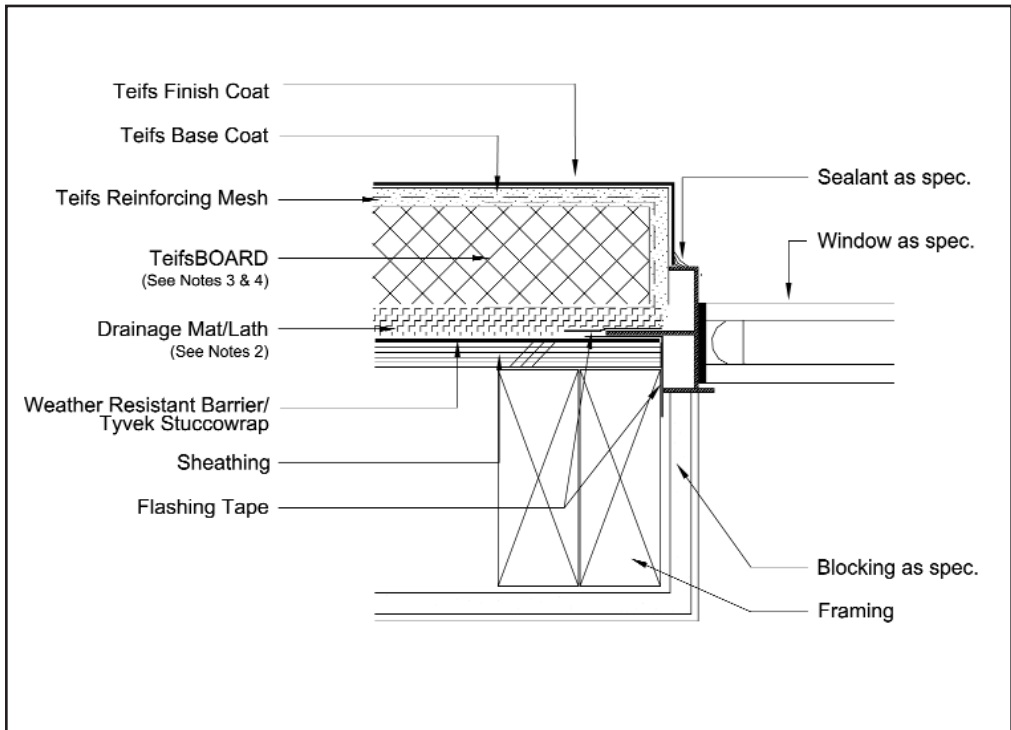


SCALE: Not to scale

PDN.206

## WINDOW SILL- ALUMINUM

1. See current Teifs Window Flashing Technical Bulletin for proper window flashing details.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached.
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.207

## WINDOW JAMB - ALUMINUM

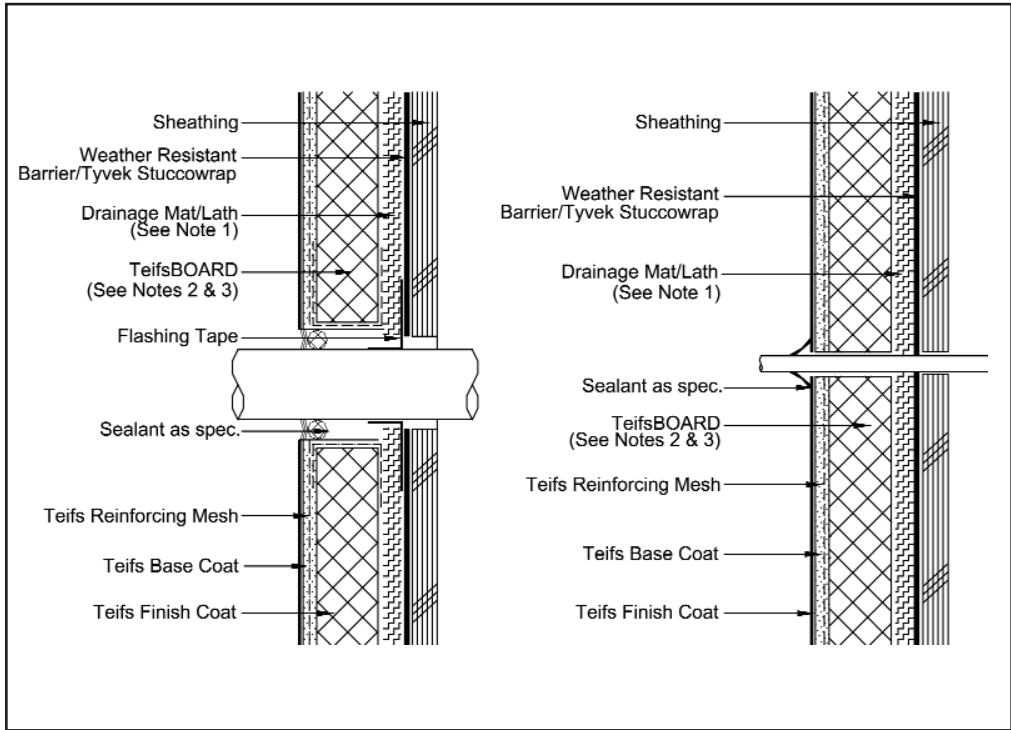
1. See current Teifs Window Flashing Technical Bulletin for proper window flashing details.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached.
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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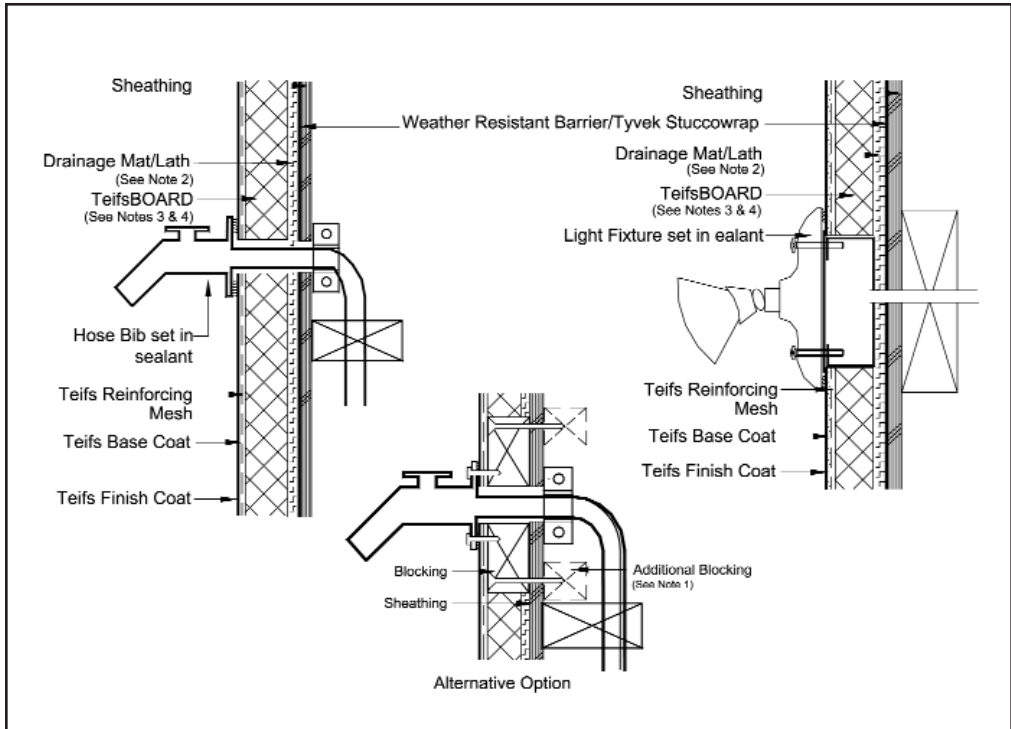


SCALE: Not to scale

PDN.208

## PENETRATIONS

1. Joint size when backer rod is used, shall be a minimum of 1/2".
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached.
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.209

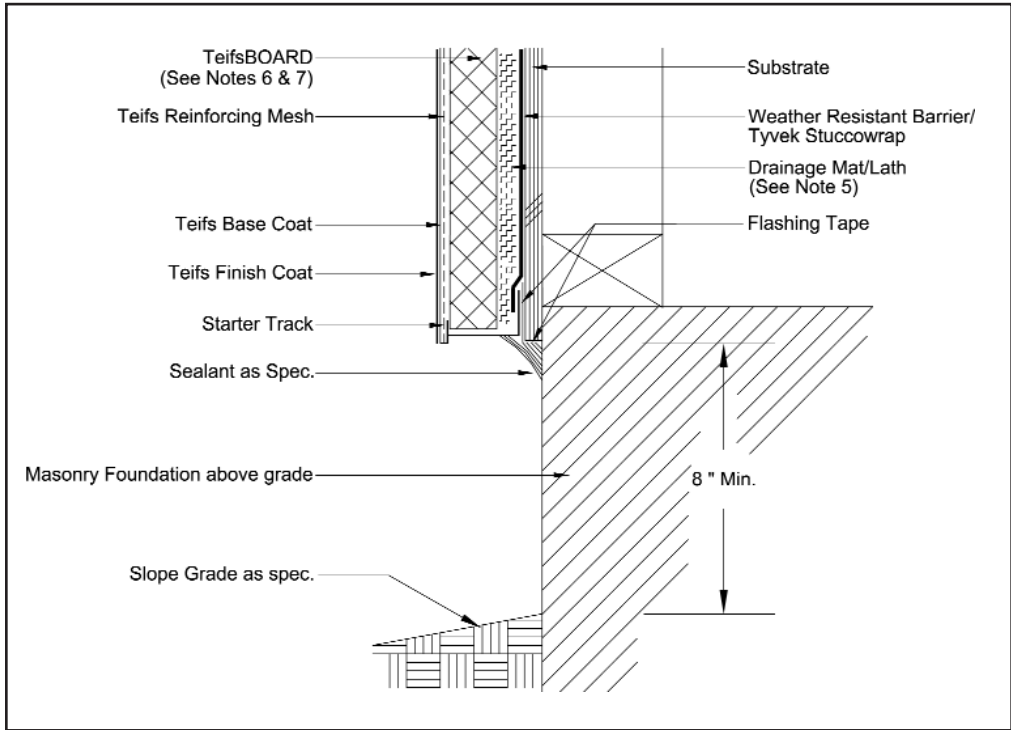
## PENETRATION (HOSE BIB/LIGHT FIXTURE)

1. Additional blocking would be required behind the sheathing for non-wood based sheathings.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached.
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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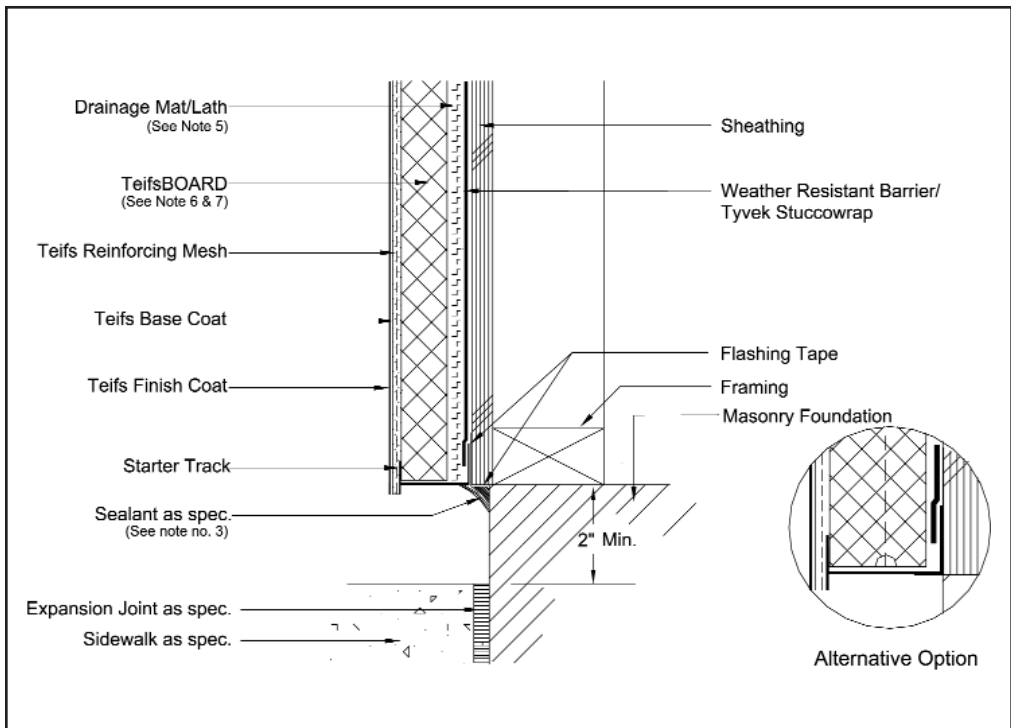


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PDN.301

## TERMINATION AT GRADE

1. Teifs recommends the use of high impact mesh at grade levels and all high impact areas. High impact areas utilizing 15 or 20 oz. reinforcing mesh should be noted on detail.
2. When applying the sealant, ensure that it does not cover the drainage holes in the bottom of the starter track.
3. Specifier should consider whether they need a finished material to the exterior wall surface below the termination of the EIFS, e.g. painted concrete, skim or parge coat.
4. Stop system minimum 200 mm (8") above grade.
5. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
6. PERMADRAIN DM® (with drainage mat) - mechanically attached.
7. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.302

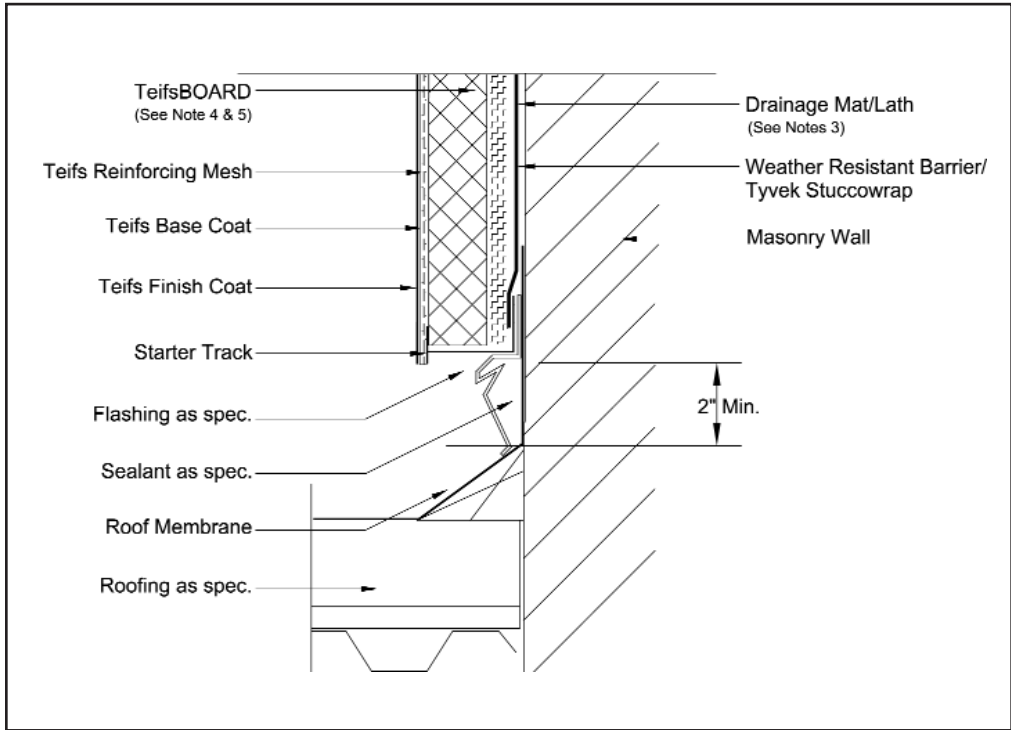
## TERMINATION AT SIDEWALK

1. Teifs recommends the use of high impact mesh at grade levels and all high impact areas. High impact areas utilizing 15 or 20 oz. reinforcing mesh should be noted on detail.
2. When applying the sealant, ensure that it does not cover the drainage holes in the bottom of the starter track.
3. Specifier should consider whether they need a finished material to the exterior wall surface below the termination of the EIFS, e.g. painted concrete, skim or parge coat.
4. Stop system minimum 51 mm (2") above sidewalk to avoid damaging the bottom of EIFS due to future uplift of sidewalk.
5. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
6. PERMADRAIN DM® (with drainage mat) - mechanically attached
7. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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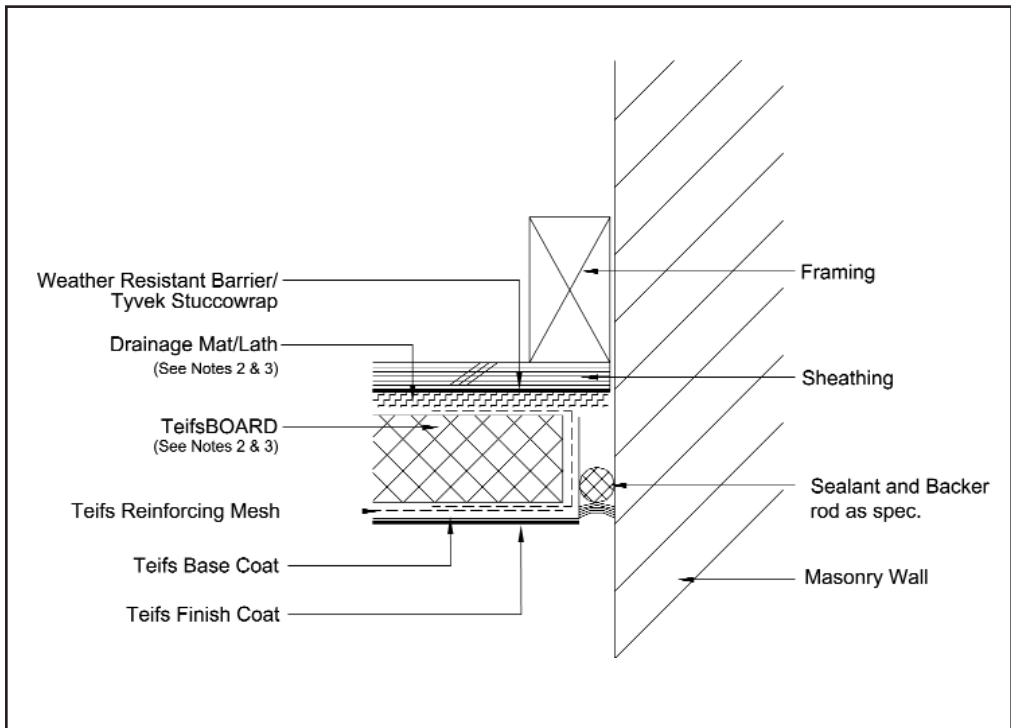


SCALE: Not to scale

PDN.303

## TERMINATION AT ROOF

1. Stop system minimum 51 mm (2") above roof surface to ensure that water will not wick up.
2. Where snow may occur this number should be increased to 8".
3. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
4. PERMADRAIN DM® (with drainage mat) - mechanically attached
5. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.304

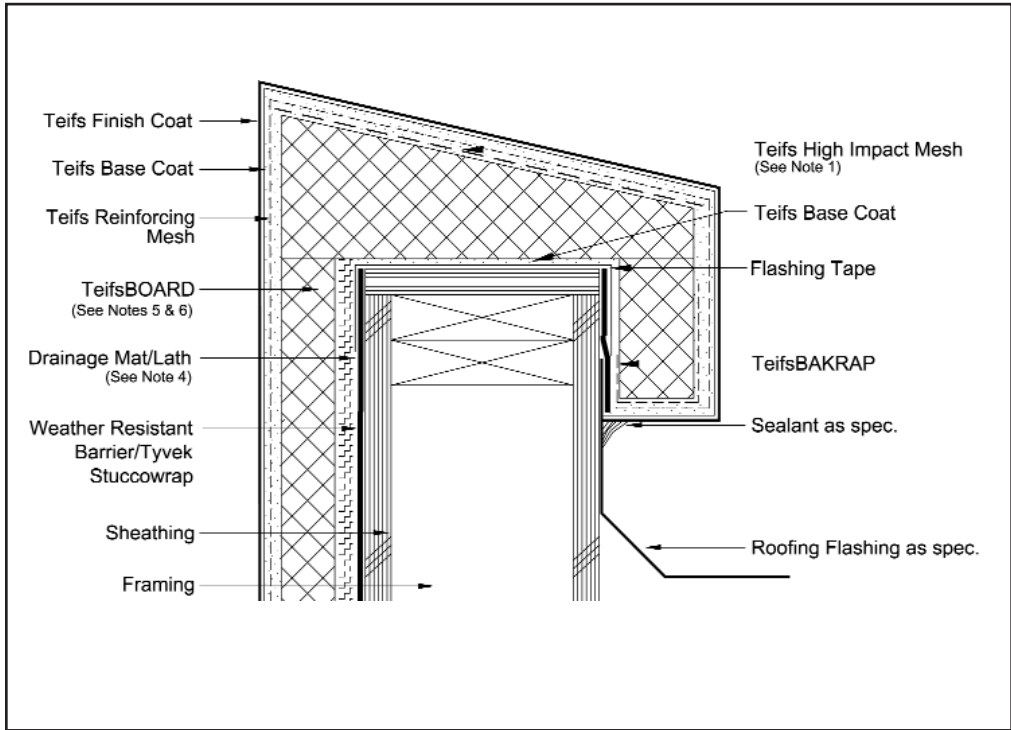
## TERMINATION WITH DISSIMILAR SUBSTRATE

1. Joint should be a minimum of 1/2"
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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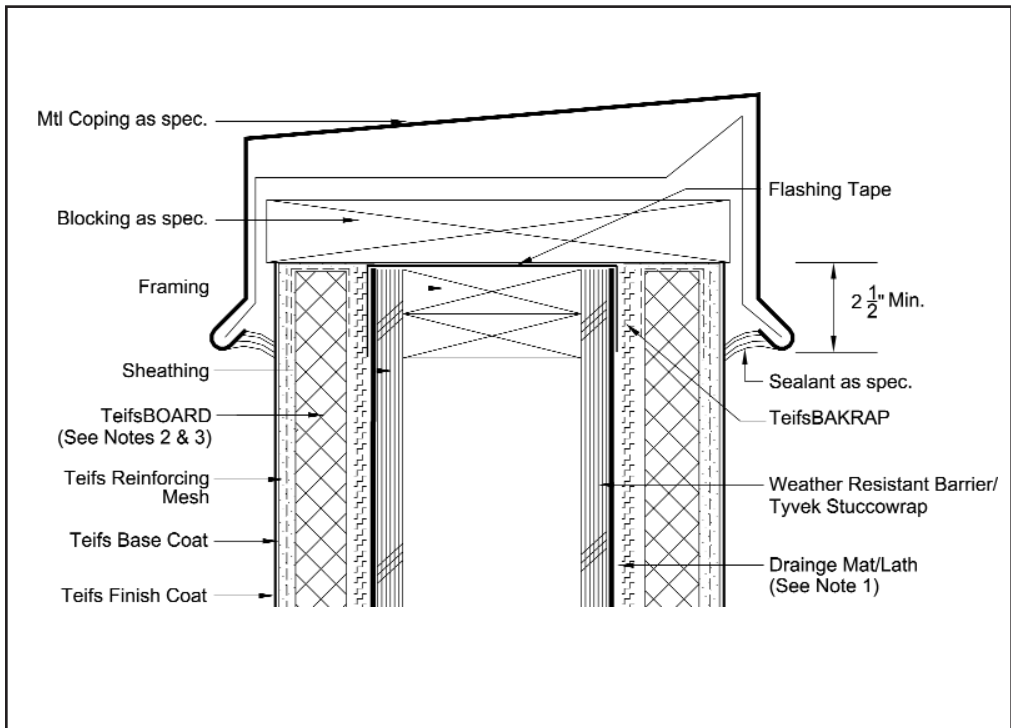


SCALE: Not to scale

PDN.305

## PARAPET

1. TEIFS recommends the use of high impact mesh on parapet caps and all high impact areas. High impact areas utilizing 15 or 20 oz. reinforcing mesh should be noted on detail.
2. Top of wall shall be sloped so water can not stand.
3. Teifs recommends the use of waterproof basecoat (STAYDRY) on all parapet caps.
4. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
5. PERMADRAIN DM® (with drainage mat) - mechanically attached
6. PERMADRAIN ML®/PL® (with lath) - adhesively attached.
7. Where snow may occur, the system shall be held up a minimum of 8".



SCALE: Not to scale

PDN.306

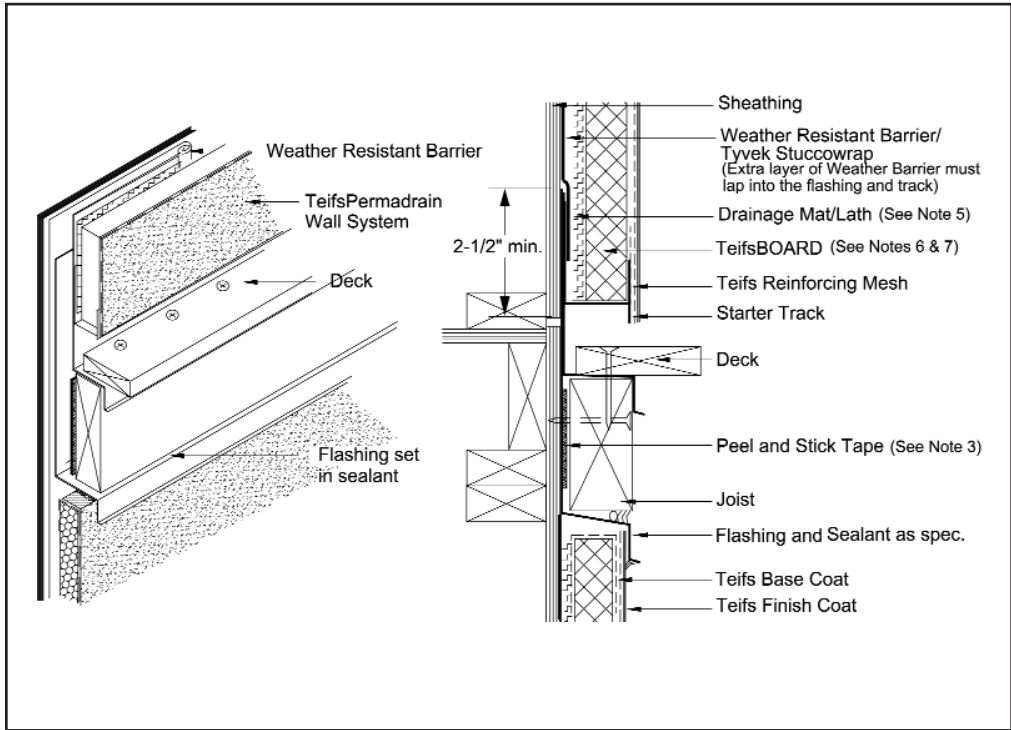
## PARAPET WITH METAL COPING

1. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
2. PERMADRAIN DM® (with drainage mat) - mechanically attached
3. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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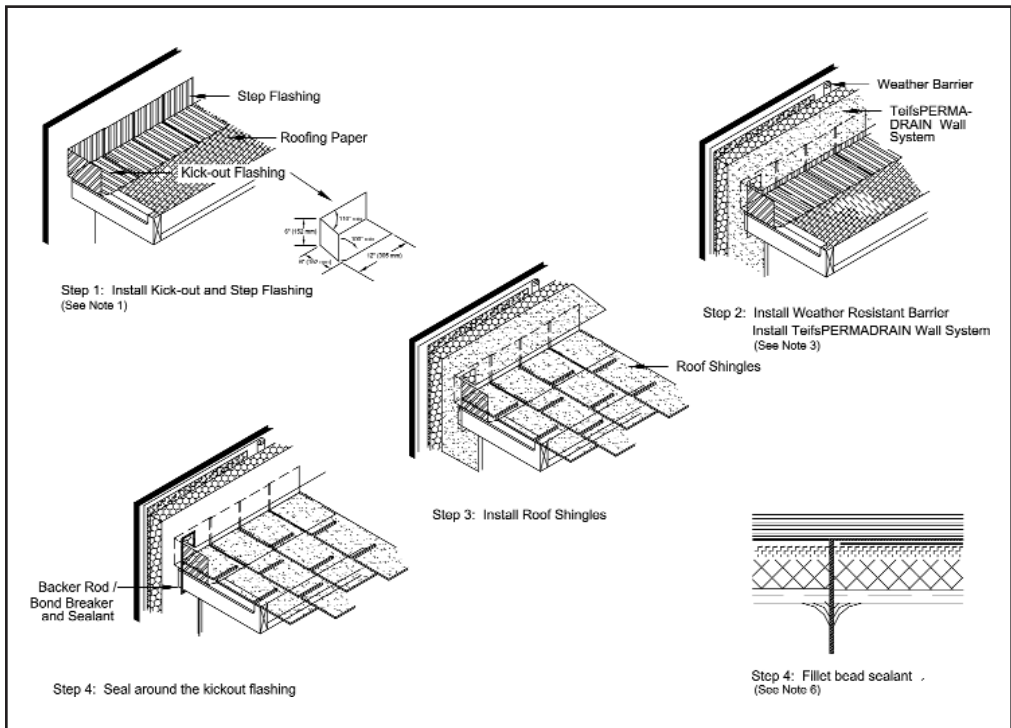


SCALE: Not to scale

PDN.307

## DECK FLASHING

1. Flashing should extend behind the EIFS minimum of 2-in (50 mm).
2. Teifs Wall Systems should be terminated 1-in (25 mm) minimum above the decking.
3. Self sealing Peel and Stick Tape should be applied to the flashing to seal the fastener penetration.
4. This detail is for guidance only. The flashing is supplied and designed by others.
5. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
6. PERMADRAIN DM® (with drainage mat) - mechanically attached.
7. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.308

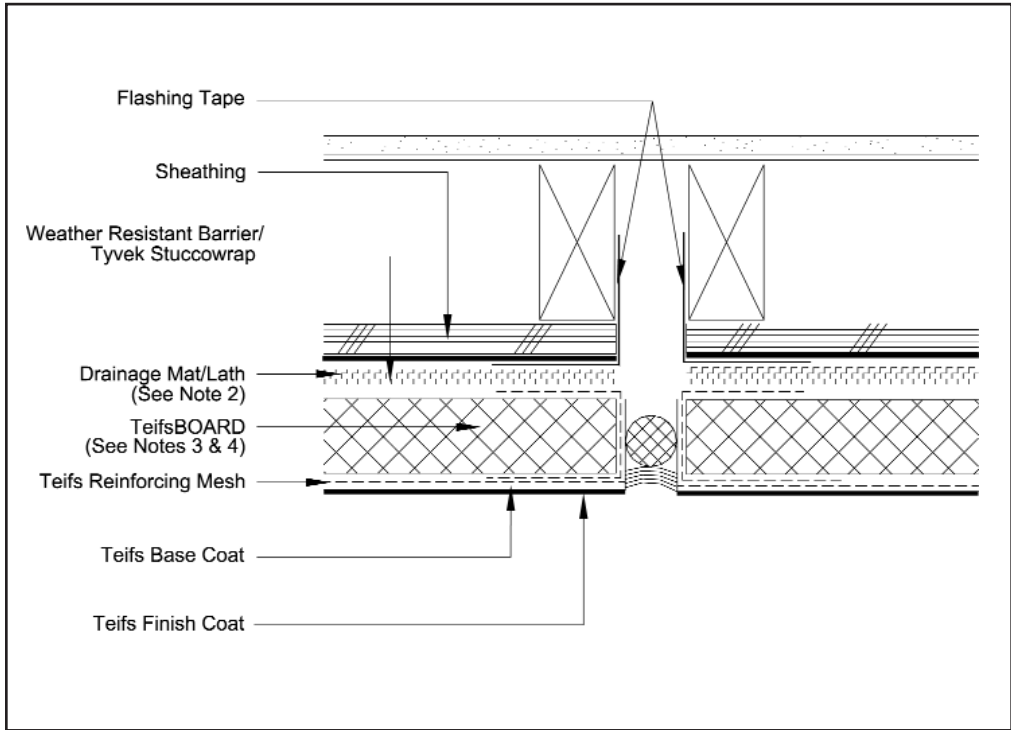
## KICK OUT FLASHING

1. Kickout Flashing should extend past the edge of the roof.
2. Flashing should extend behind the EIFS minimum 2-1/2" (63.5mm).
3. Teifs Wall Systems should be terminated 2" (51mm) minimum above the roof line.
4. Kickout Flashing seams must be soldered or sealed.
5. Backer Rod or bond breaker should be used where the EIFS terminates into or intersects with the roof and wall.
6. The use of Backer Rod is required where movement is expected.
7. This detail is for guidance only. The flashing is supplied and designed by others.
5. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
6. PERMADRAIN DM® (with drainage mat) - mechanically attached.
7. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

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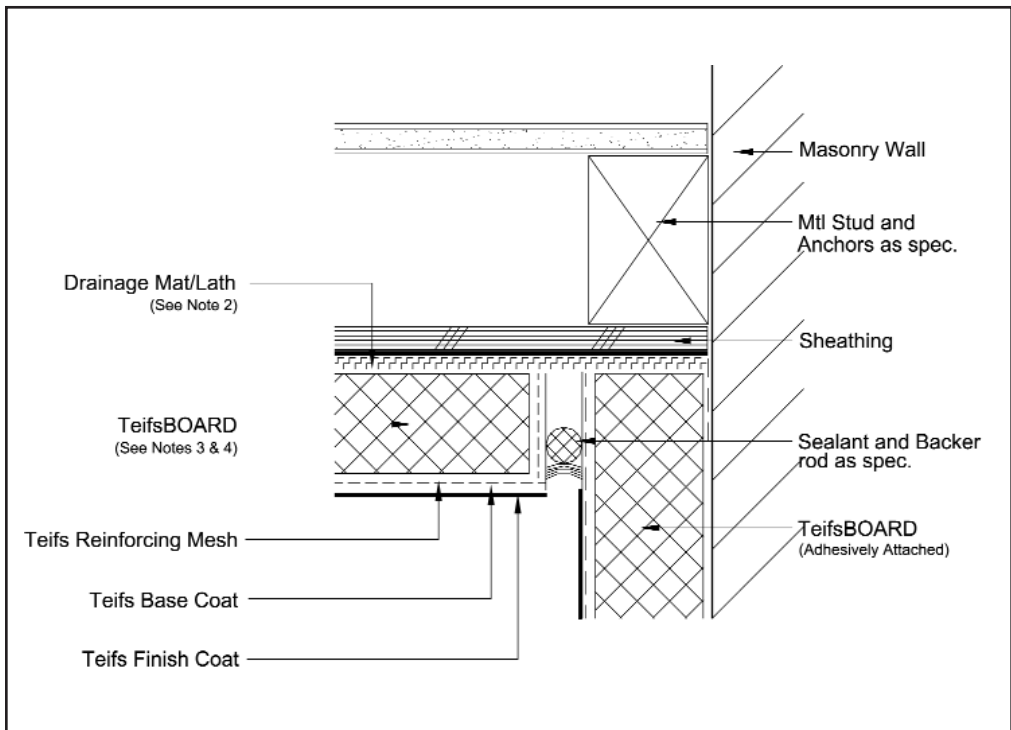


SCALE: Not to scale

PDN.401

## EXPANSION JOINT

1. Structural engineer shall determine joint dimensions.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached.
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.402

## EXPANSION JOINT AT DISSIMILAR SUBSTRATE

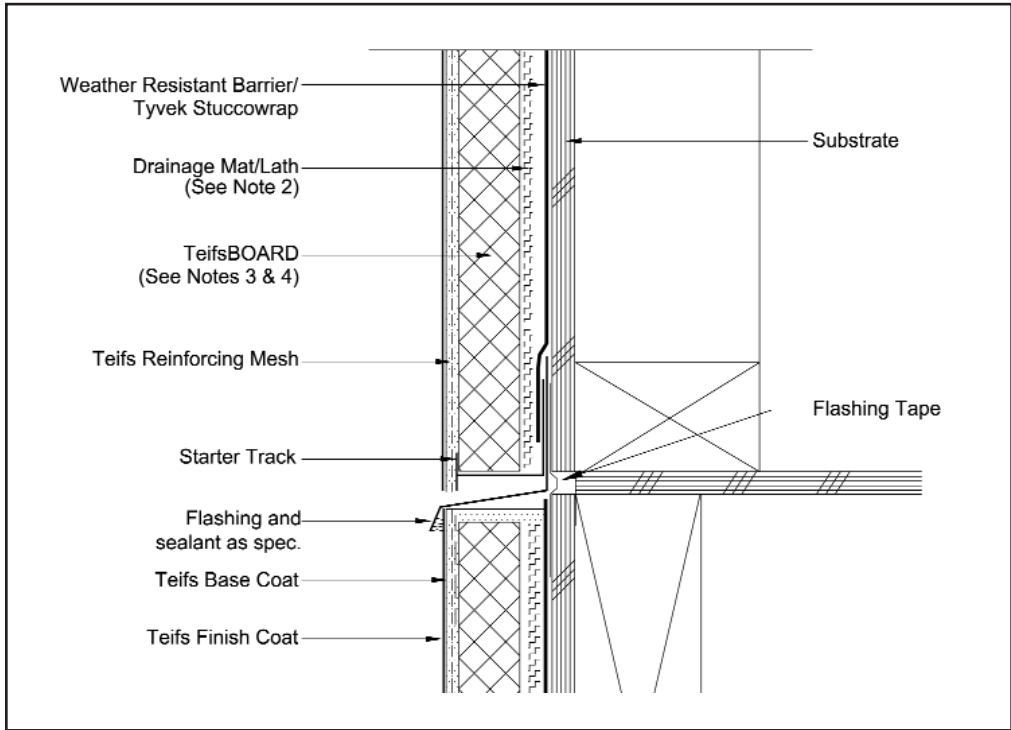
1. Structural engineer shall determine joint dimensions.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
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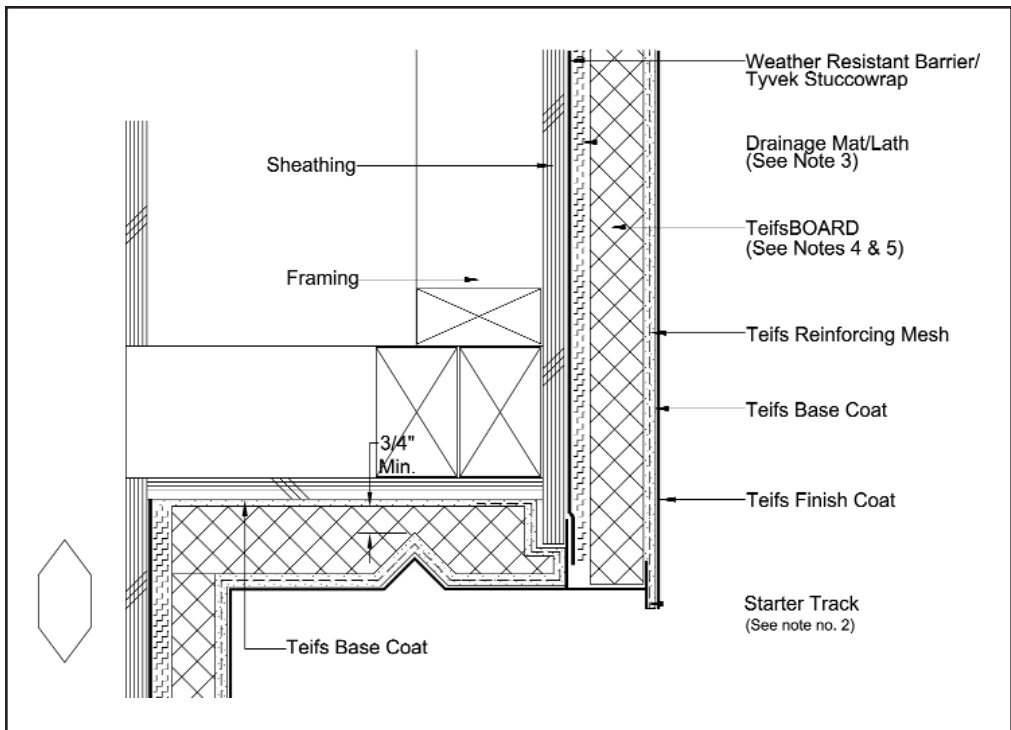


SCALE: Not to scale

PDN.403

## EXPANSION JOINT AT FLOORLINE (LIGHT GAUGE STEEL FRAMING)

1. Structural engineer shall determine joint dimensions.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached.
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.501

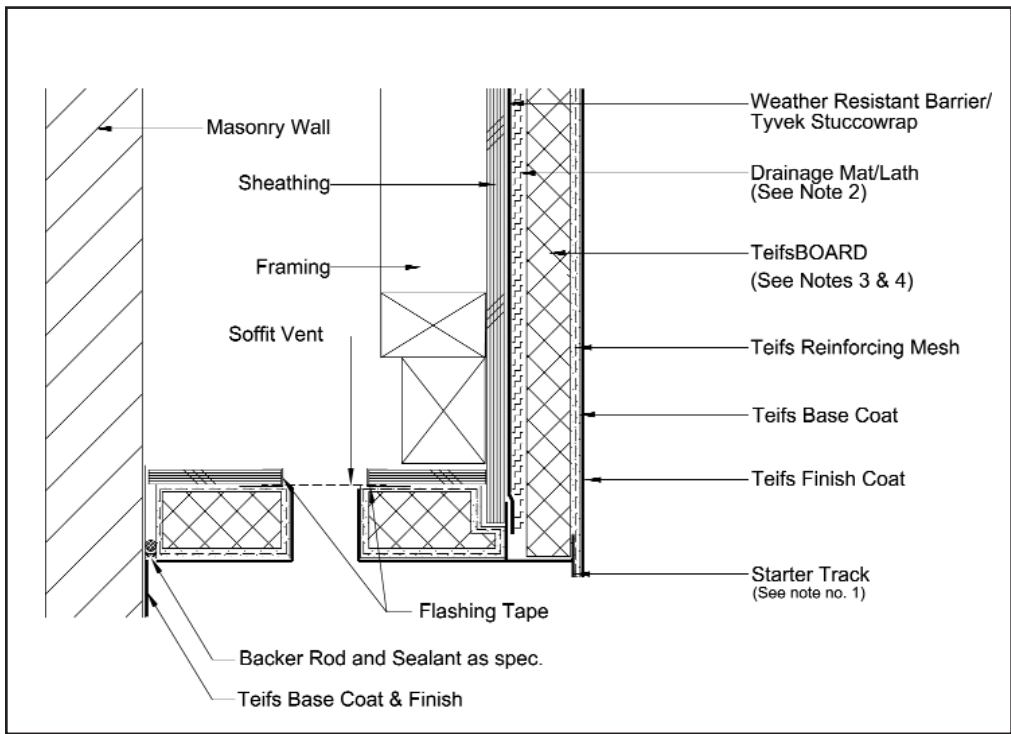
## SOFFIT

1. Teifs recommends the use of high impact mesh on parapet caps and all high impact areas. High impact areas utilizing 15 or 20 oz. reinforcing mesh should be noted on detail.
2. Top of wall shall be sloped so water cannot stand.
3. Teifs recommends the use of a waterproof basecoat (Staydry) on all parapet caps.
4. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
5. PERMADRAIN DM® (with drainage mat) - mechanically attached.
6. PERMADRAIN ML®/PL® (with lath) - adhesively attached.
7. Where snow may occur, the system shall be held up a minimum of 8".

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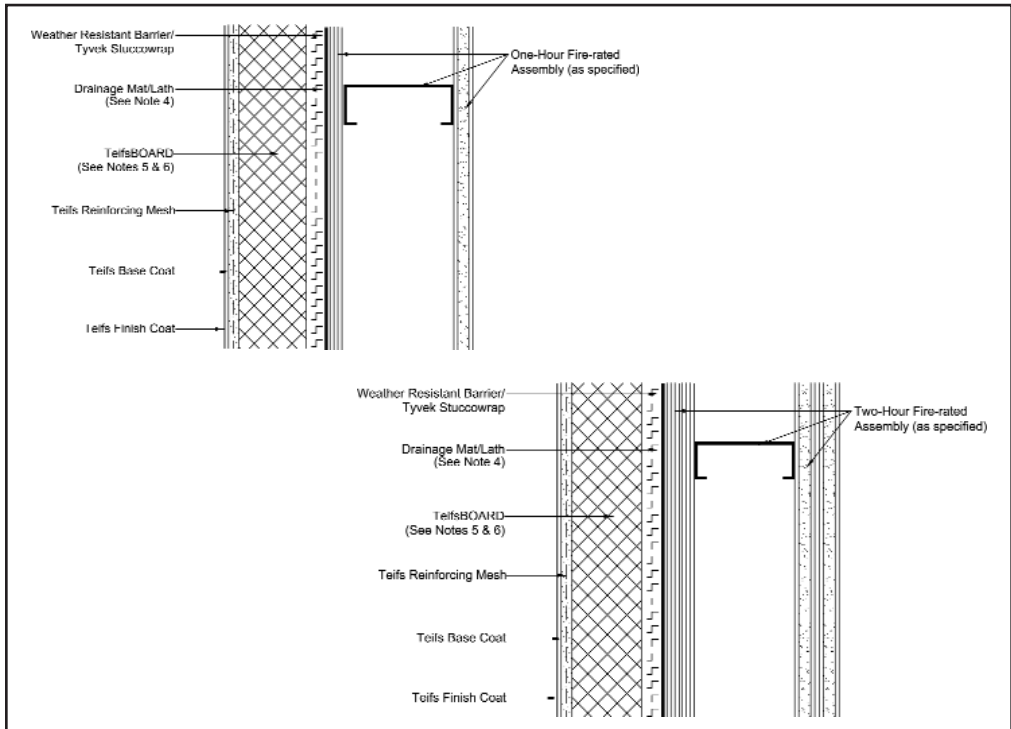


SCALE: Not to scale

PDN.502

## SOFFIT - VENTED

1. Provide framing as needed to support the starter track.
2. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
3. PERMADRAIN DM® (with drainage mat) - mechanically attached.
4. PERMADRAIN ML®/PL® (with lath) - adhesively attached.



SCALE: Not to scale

PDN.601-602

## FIRE RATED ASSEMBLIES

1. The architect shall be responsible for specifying the fire-rated wall assembly that meets ASTM E119.
2. The maximum thickness of EPS shall be 4-in.
3. Architect shall verify that the sheathing board of the fire-rated assembly is acceptable for application of the Teifs Wall System.
4. PERMADRAIN® has no drainage plane, insulation is mechanically attached over the weather barrier.
5. PERMADRAIN DM® (with drainage mat) - mechanically attached.
6. PERMADRAIN ML®/PL® (with lath) - adhesively attached.

**DISCLAIMER:**

The design specifications and construction of EIFS shall comply with all local building codes and standards. TEIFS details and specifications are for general information and guidance only and apply only to new construction after 2002. They are not intended for use with inspections, retrofit or repair. These guidelines are not intended as an exclusive method of obtaining desired results and other configurations may achieve equal or better performance. TEIFS specifically disclaims any design liability for the use of this detail and for the design, engineering, or workmanship of any project. The wall assembly shall be designed to prevent condensation within the assembly. The licensed professional and the user shall approve final drawings and specifications.