

# Teifs Weathertight Wall System

**Installation Guide** 

#### WARNING

This product is a component part of a complete TEIFS WALL SYSTEM. Specifications require that only approved, trained or otherwise knowledgeable applicators install such systems. TEIFS cannot be responsible for deterioration of the substrate, mold, mildew and wood rot due to water intrusion or entrapment from causes such as improperly installed windows; windows that leak at the miter joints, mullions, or through improperly installed glazing; improper flashing, lack of flashing or use of improper flashing materials; use of improper sealants; or inadequate specifications, details or installation of the TEIFS WALL SYSTEM. Sealants and flashing will also deteriorate over time if not maintained. Maintenance of the TEIFS WALL SYSTEM is required. No exterior insulation finish system should be installed on a residential project, (or any other projects as required by the applicable model code), without providing for a secondary weather resistant barrier.

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NOTE: For details not shown, contact Teifs Technical Department for application instructions.

#### TEIFSWEATHERTIGHT WALL SYSTEM

#### **GENERAL NOTES**

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TEIFS offers a variety of wall systems that include weather barrier and drainage options, to better protect the wall assembly. TEIFS cannot be responsible for deterioration of the substrate, mold, mildew and wood rot due to water intrusion or entrapment from causes such as improperly installed windows; windows that leak at the miter joints, mullions, or through improperly installed glazing; improper flashing, lack of flashing or use of improper flashing materials; use of improper sealants; or inadequate specifications, details or installation of the TEIFS WALL SYSTEM. Sealants and flashing will also deteriorate over time if not maintained. Maintenance of the TEIFS WALL SYSTEM is required.

#### NOTES:

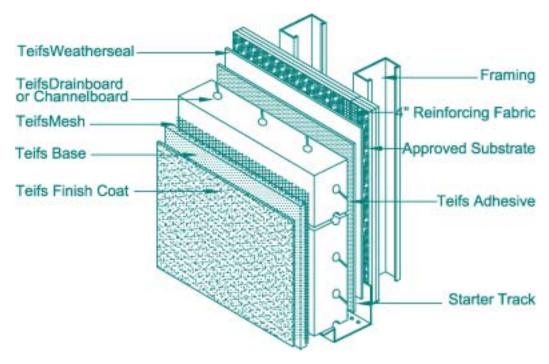
- 1. Teifs recommends that high impact mesh be used at ground floor applications and areas exposed to high traffic. Location of high impact mesh should be indicated on contract drawings.
- 2. There are multiple methods of properly detailing wall sections; therefore, other methods of installation may be acceptable and are not necessarily incorrect. Please contact Teifs for a review of alternative or addition details for this project.
- 3. Joint dimensions are not specified by Teifs and must be determined by the engineer or designer.
- 4. The adhesive is applied in vertical notches according to the application instructions. The adhesive notches are not noted on each detail but are assumed to be applied.

#### **DISCLAIMER:**

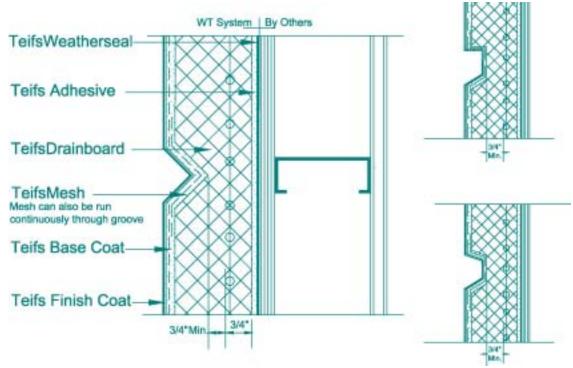
The design specifications and construction of TeifsWeathertight shall comply with all local building codes and standards. Teifs details and specifications are for general information and guidance only and apply only to new construction after 2004. They are not intended for use with inspections, retrofit 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.

# **GENERAL DETAILS**

# TEIFS WEATHERTIGHT WALL SYSTEM WT.101



#### **AESTHETIC GROOVE** WT.102



#### Notes:

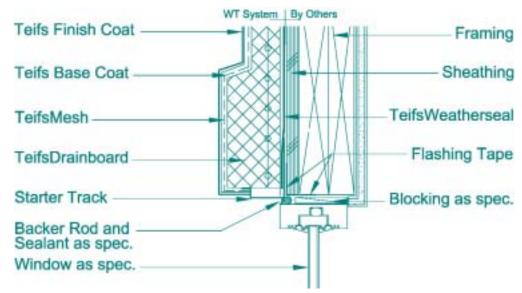
- 1. Use TeifsMesh to reinforce reveals and overlap w/TeifsMesh min. 64-mm (2 1/2 in).
- 2. Do not locate reveals at stress areas such as corners of windows, doors, etc.
- 3. Maintain 19 mm (3/4 in) thickness between substrate and reveals.

# **OPENINGS**

- 1. Flashing is designed and supplied by others.
- 2. See current Teifs Window Flashing Technical Bulletin for proper window flashing details.
- 3. Provide protection of rough openings before installing windows, doors, and other penetrations through the wall and provide sill flashing.
- 4. Sill pan flashing shall be leak-proof with end and back
- 5. Construct full-scale mock-up of typical EIFS/window wall assembly and test water infiltration. Maintain

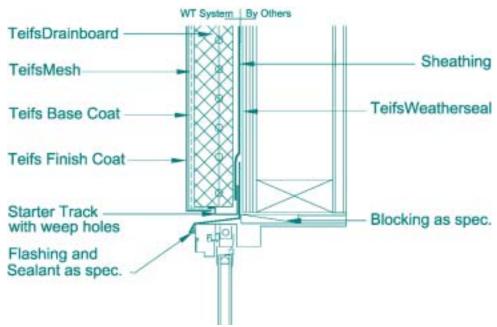
- the mock-up at job site as reference.
- 6. Install window and door head flashing immediately after windows and doors are installed.
- 7. Coordination and scheduling of installation is essential for performance.
- 8. Sealant must conform to Teifs Specifications.
- There are many possible wall/window intersection construction details and window sections that may be integrated.

#### WINDOW HEAD WT.201



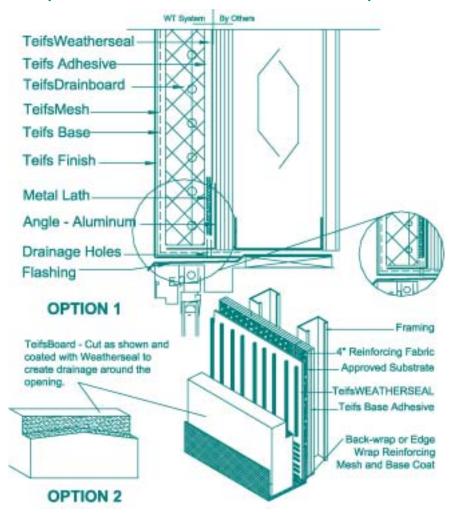
This detail is for combustible construction only.

#### WINDOW HEAD - FLASHED WT.202

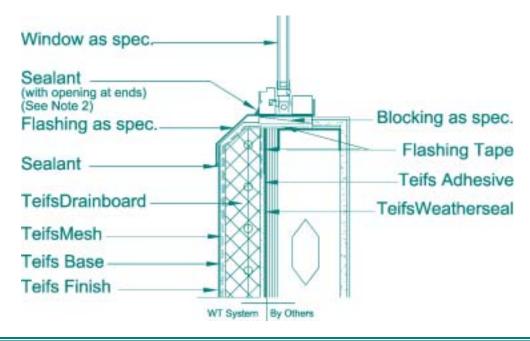


This detail is for combustible construction only.

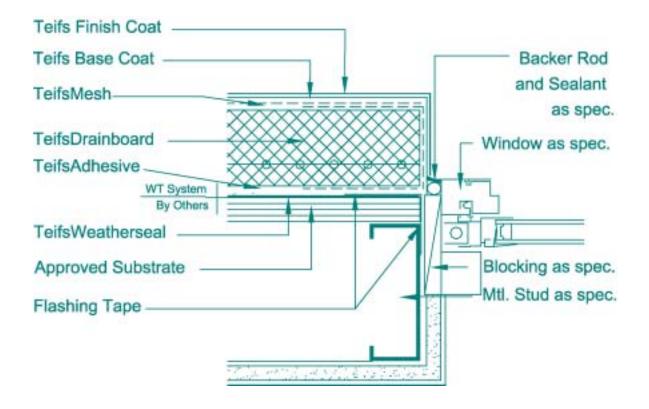
# WINDOW HEAD WT.203 (NON-COMBUSTIBLE CONSTRUCTION)



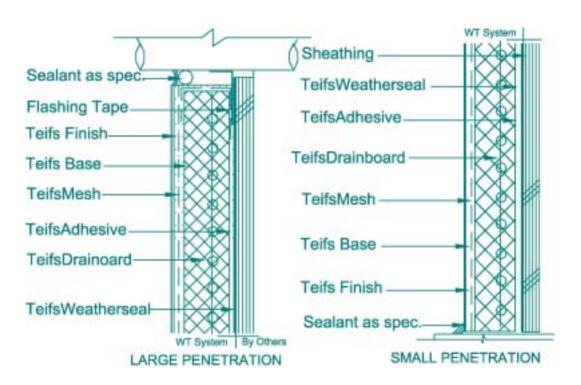
#### WINDOW SILL with FLASHING WT.204



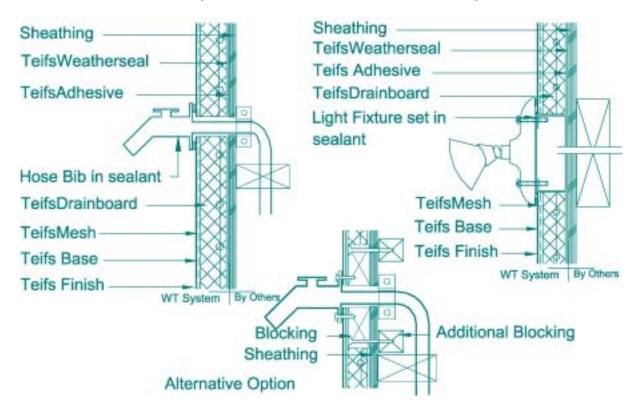
#### WINDOW JAMB WT.205



#### PENETRATIONS WT.206



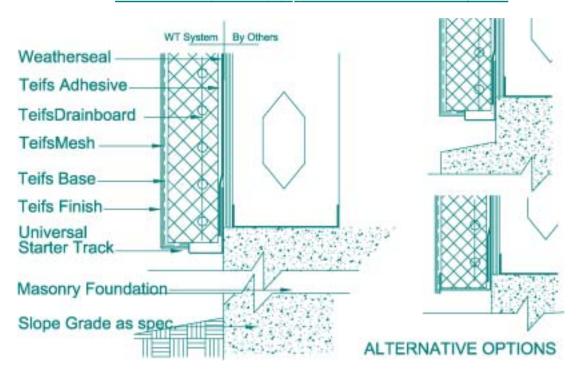
#### PENETRATIONS (HOSE BIB/LIGHT FIXTURE) WT.207



Additional blocking would be required behind the sheathing for non-wood based

# **TERMINATIONS**

#### **TERMINATION AT GRADE** WT.301

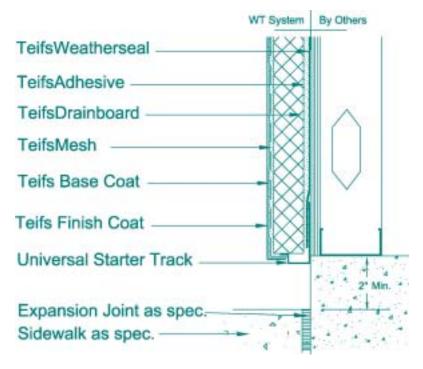


- TEIFS recommends the use of high impact mesh at grade levels and all high impact areas.
   High impact areas utilizing 15 or 20 oz. reinforcing mesh should be noted on detail.
- Specifier should consider whether they need a finished material to the exterior wall surface below the termination of the EIFS, e.g. painted concrete, skim or parge coat.
- Some building codes require that finished grade be located a minimum of 6" below the EIFS. remember that the grade before and after construction may be different.
- 4. Grade should be sloped away from the wall.
- Unlandscaped soil may splash onto the wall staining the finish coat.

#### **ALTERNATIVE OPTIONS**

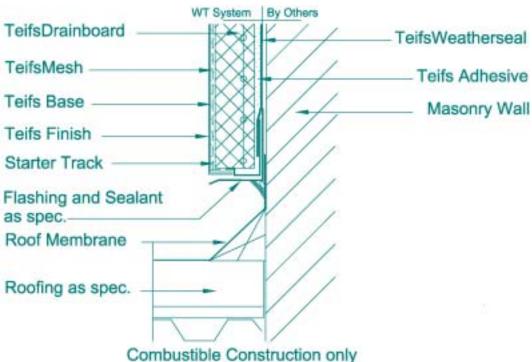
- Placing EIFS over a concrete ledge in the foundation can protect the termination from being too close to grade
- 2. Specific width starter track may be used, however a universal track eliminates the need for different sizes for each project or within a project.

#### **TERMINATION AT SIDEWALK** WT.302



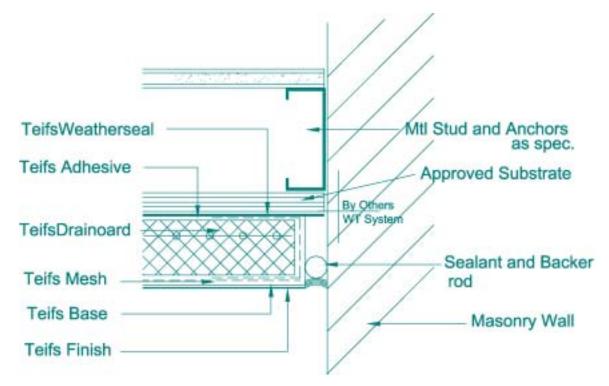
TEIFS recommends the use of high impact mesh at grade levels and all high impact areas. High impact areas utilizing 15 or 20 oz. reinforcing mesh should be noted on detail.

#### **TERMINATION AT ROOF** WT.303



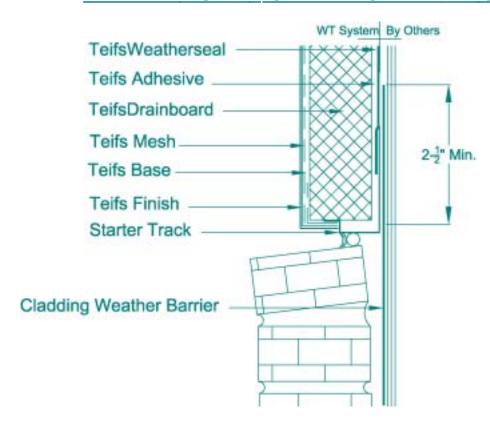
(For Non-combustible Construction, contact Teifs Technical Department)

EIFS should be kept a minimum of 2-in above roof surface to ensure that water cannot wick up.

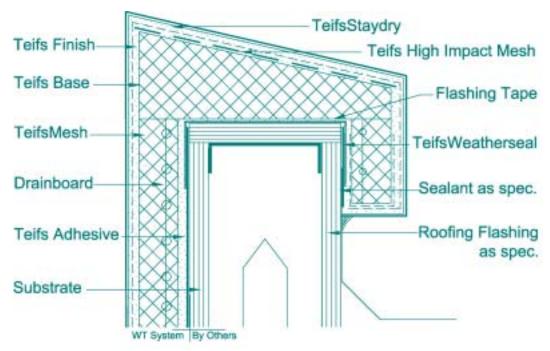


Structural engineer shall determine joint dimensions.

#### TERMINATION AT CLADDING WT.305

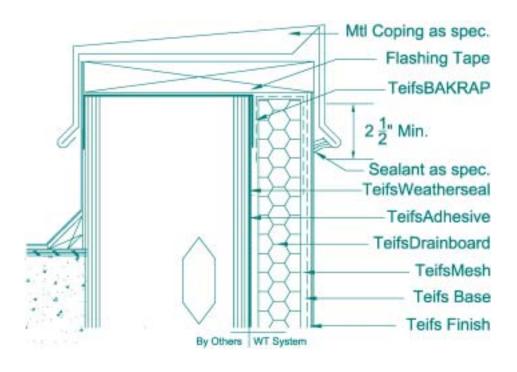


#### PARAPET WT.306



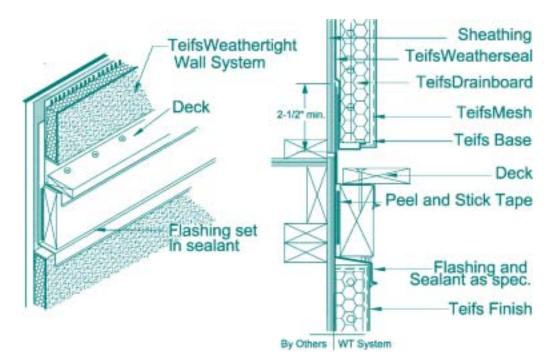
- 1. TEIFS recommends the use of high impact mesh on parapet caps and all high impact areas. High impact areas utilizing 15 or 20 oz. reinforcing mesh should be noted on detail.
- 2. Top of wall shall be sloped so water can not stand.
- 3. Teifs recommends the use of waterproof basecoat (STAYDRY) on all parapet caps.
- 4. Detail applicable for channelboard also.

#### PARAPET WITH METAL COPING WT.307



#### **DECK FLASHING**

#### WT.308

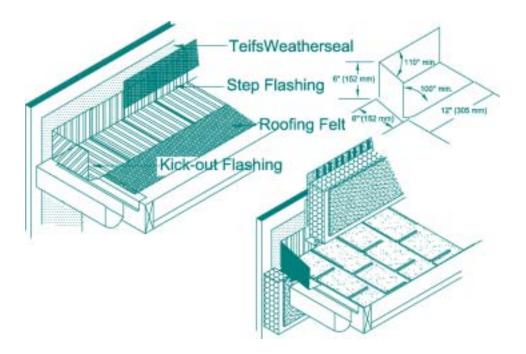


- Deck construction and flashing is independent from the EIFS and is not dependent on the cladding. Most flashings will not be installed by the EIFS applicator which demands that the detail be drawn correctly and proper coordination of the trades by the General Contractor be handled appropriately to ensure proper application of all flashings prior to installation of the EIFS materials. Omitting or incorrectly installing flashing around a deck can result in water intrusion.
- 2. Flashing should extend behind the EIFS minimum of 2-1/2" (63 mm).
- To keep water from entering behind the cladding or deck, the attachment of the deck must be flashed above, below and to the sides of the deck.
- 4. Slide the lower flashing up under the upper flashing and position it below the planned position of the deck.

- Provide flashing end dams on each side of the lower flashing. Set the end dams in sealant. End dams prevent water from getting around the ends of the deck and behind the cladding.
- Teifs Wall Systems should be terminated 2" (50 mm)
  minimum above the decking. The space allows for
  system edge termination and ease of deck replacement
  or repair. It also provides for inspection of the system
  and flashing to ensure proper installation has occurred.
- Self sealing Peel and Stick Tape should be applied behind the deck ledger and to the flashing to self seal the fastener penetration.
- 8. This detail is for guidance only. The flashing is supplied and designed by others.

#### **KICK OUT FLASHING**

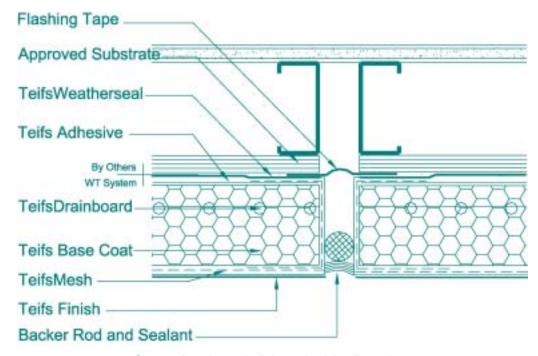
#### WT.309



- Kickout Flashing should extend past the edge of the roof.
- 2. Flashing should extend behind the EIFS minimum 2-1/2" (63.5 mm)
- 3. The Weather Resistant Barrier should overlap the flashing.
- Teifs Wall Systems should be terminated 2" (51 mm) minimum above the roof line. the space permits re-roofing at a future date and helps prevent debris from accumulating between roof and EIFS.
- Kickout Flashing seams must be soldered or sealed.
- 6. Backer Rod is required where the EIFS terminates into or intersects with the roof and wall.
- 7. The use of Backer Rod is required where movement is expected. A 1/2" joint may be required and sealed with backer rod and sealant.
- 8. This detail is for guidance only. The flashing is supplied and designed by others.

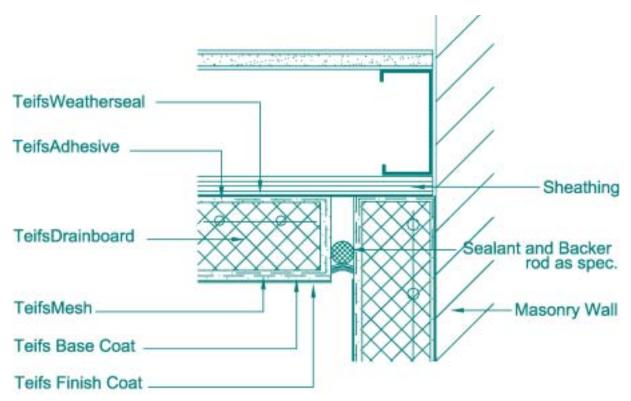
# **JOINTS**

#### **EXPANSION JOINT** WT.401



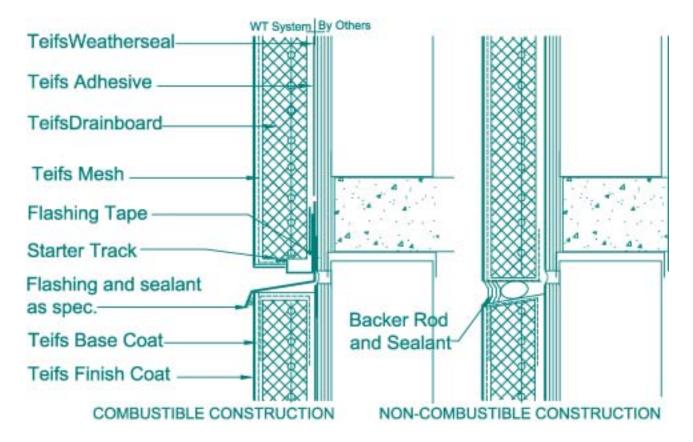
Structural engineer shall determine joint dimensions.

#### CONTROL JOINT AT DISSIMILAR SUBSTRATE WT.402



Structural engineer shall determine joint dimensions.

#### **EXPANSION JOINT AT FLOORLINE** WT.403

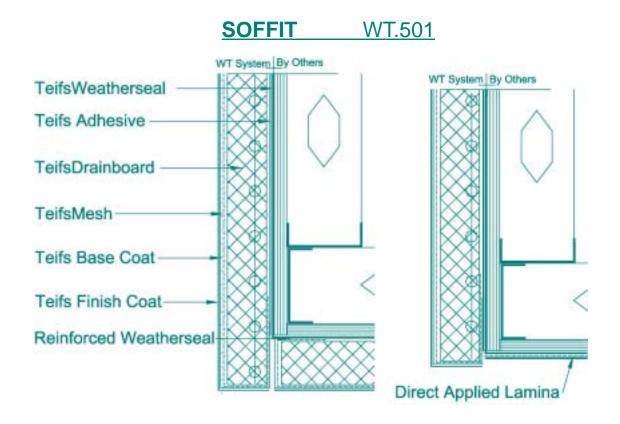


- 1. Structural Engineer shall determine joint dimensions.
- 2. A barrier membrane is installed over the joint in the sheathing to provide air barrier continuity and secondary weather protection at the joint location.
- 3. Locate the sealant joint within 2" (50 mm) of the break in the sheathing.

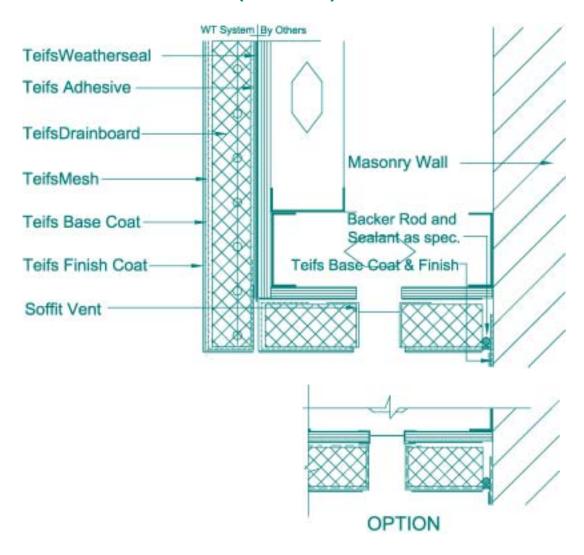
# **SOFFIT**

- Soffits without insulation require expansion joints every 20 ft
- 2. Insulation board should only be used on small soffit areas with a maximum of 4' in width. Large soffits or overhangs should utilize a direct applied system.
- 3. Unheated soffit areas may require venting and will need to be detailed by the project design professional.
- 4. Where wall/soffit are subject to differential movement, provide a joint at the inside corner.
- Some local codes may require a weather resistive barrier behind soffit board unless fascia extends 12" (300 mm)beyond soffit line.
- 6. Teifs Lamina can be directly applied in a soffit application to the Dens-Glass® Gold by Georgia-Pacific® Corp., Eterspan® by Eternit, Harditex®or Hardiflex® by

- JamesHardie Building, Durock® by U. S.Gypsum Co., Exterior Gypsum Ceiling Board by U. S. Gypsum Co. Or Permabase® Sheathing By NationalGypsum Co.
- 7. Deflection of substrate systems shall notexceed L/240.
- 8. Design minimum 1/4 inch (6 mm) wide sealant joints at penetrations through the system (lights, vents, etc.).
- Fasten surface mount accessories (for example, casing beads and surface mount expansion joints) through the sheathing into framing at locations indicated on architectural drawings
- Where necessary, level surfaces such as outside corners with appropriate leveling material to maintain plumbness and squareness



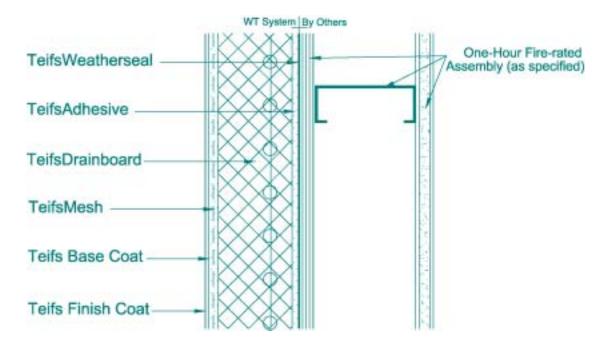
# SOFFIT (VENTED) WT.502



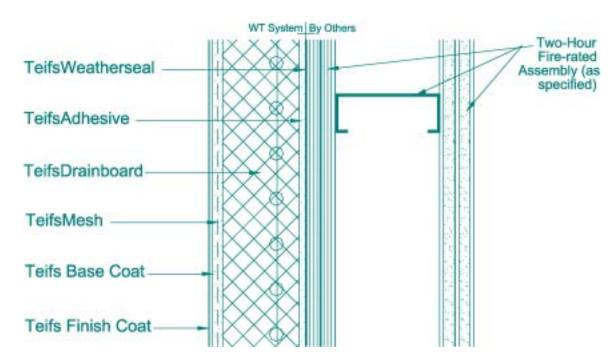
# **FIRE ASSEMBLIES**

- 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".
- 3. Architect shall verify that the sheathing board of the fire-rated assembly is acceptable for application of the Teifs Wall System.

#### 1-HR FIRE RATED ASSEMBLY WT.601



#### **2-HR FIRE RATED ASSEMBLY** WT.602



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