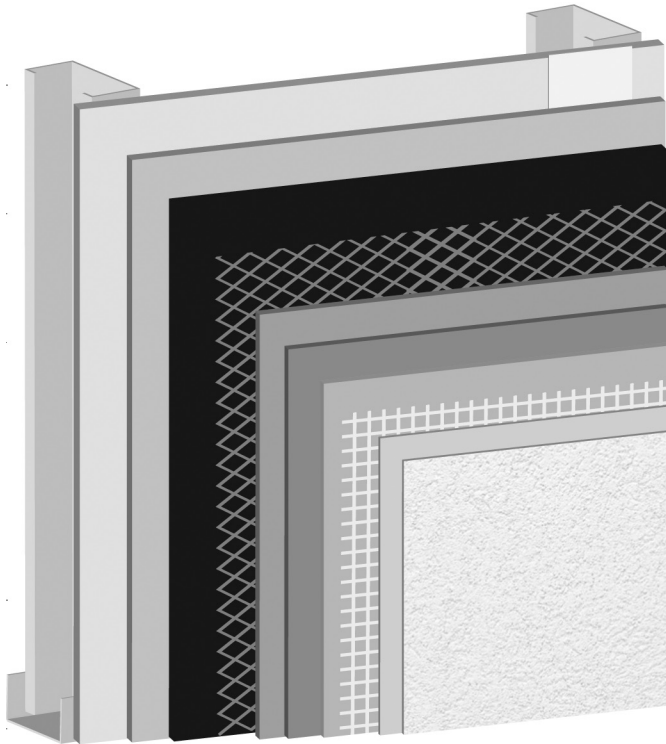




Stucco Application Guide



Teifs Stucco Watermaster Krak-Shield
Teifs Stucco Watermaster
Teifs Stucco Krak-Shield
Teifs Stucco

The latest Teifs Stucco Application Guide can be found at
www.teifs.com.



JOB PLANNING CHECKLIST

Job: _____ Date: _____

Job Size: _____

- | | |
|---|-------------------------------------|
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Renovation |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Commercial |

- | | | |
|--|---|---|
| <input type="checkbox"/> Removal of plants, shrubs, etc. | <input type="checkbox"/> Heating | <input type="checkbox"/> Finish |
| <input type="checkbox"/> Protecting Finished Surfaces | <input type="checkbox"/> Installing Lath and Trim Accessories | <input type="checkbox"/> Expansion/Control Joints |
| <input type="checkbox"/> Scaffolding | <input type="checkbox"/> Fasteners | <input type="checkbox"/> Window flashing |
| <input type="checkbox"/> Removal preparation | <input type="checkbox"/> Preformed Shapes | <input type="checkbox"/> Parapet cap flashing |
| <input type="checkbox"/> Substrate preparation | <input type="checkbox"/> Base Coat | <input type="checkbox"/> Cleanup |
| <input type="checkbox"/> Sandblasting | <input type="checkbox"/> Reinforcing mesh | <input type="checkbox"/> Shipping |
| <input type="checkbox"/> Cleaning | <input type="checkbox"/> Primer | |
| <input type="checkbox"/> Tenting | <input type="checkbox"/> Sealant | |

Notes: _____



HOW TO USE THIS GUIDE

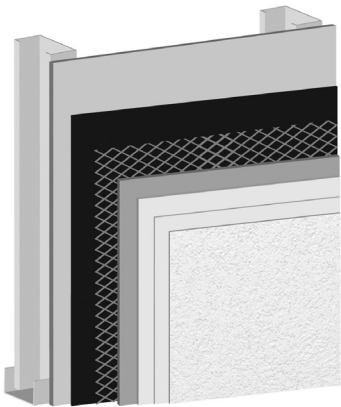
This guide focuses on the installation of the Teifs Stucco Assemblies.

We recommend reading this entire guide before beginning the project.

Always use the current Teifs details, specifications, and product data sheets for additional information.

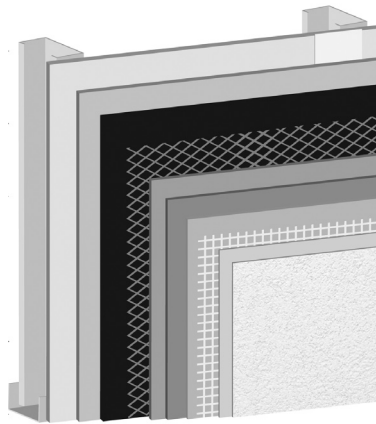
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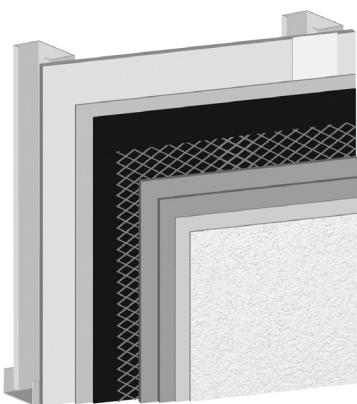
1. FRAME
2. SHEATHING
3. BUILDING PAPER
4. METAL LATH
5. TEIFS STUCCO BASE OR SCRATCH & BROWN
6. TEIFS STUCCO BASE OR SCRATCH & BROWN
7. TEIFS SHIELD PRIMER
8. TEIFS FINISH

Teifs Stucco Over Frame



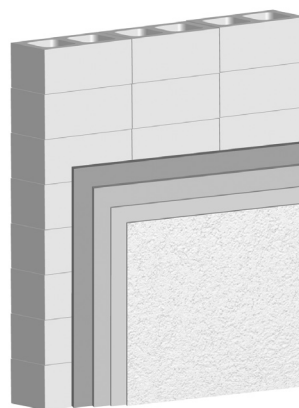
1. FRAME
2. SHEATHING
3. SHEATHING TAPE
4. WEATHERSEAL ROLL-ON
5. BUILDING PAPER
6. METAL LATH
7. TEIFS STUCCO BASE OR SCRATCH & BROWN
8. TEIFS STUCCO BASE OR SCRATCH & BROWN
9. TEIFS MESH (EMBEDDED IN STUCCO LEVEL COAT)
10. TEIFS LEVEL COAT (OR ANY TEIFS BASE PRODUCT)
11. TEIFS SHIELD PRIMER
12. TEIFS FINISH

Teifs Stucco WaterMaster Krak-Shield Over Frame



1. FRAME
2. SHEATHING
3. SHEATHING TAPE
4. WEATHERSEAL ROLL-ON
5. BUILDING PAPER
6. METAL LATH
7. TEIFS STUCCO BASE OR SCRATCH & BROWN
8. TEIFS STUCCO BASE OR SCRATCH & BROWN
9. TEIFS SHIELD PRIMER
10. TEIFS FINISH

Teifs WaterMaster over Frame

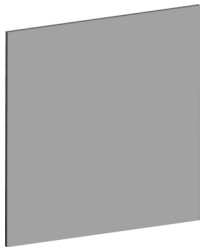


1. CONCRETE OR MASONRY
2. TEIFS STUCCO BASE OR SCRATCH & BROWN
3. TEIFS STAYDRY WATERPROOF BASECOAT
4. TEIFS SHIELD PRIME
5. TEIFS FINISH

Teifs Prime WaterMaster Over CMU

Components

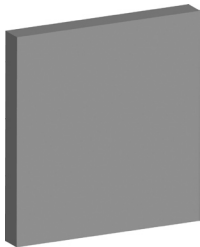
Moisture Protection (For WaterMaster Assemblies)



Weatherseal Roll-On: The industry leading waterproof membrane & air barrier for use as a water-resistive barrier under Teifs Stucco WaterMaster assemblies and other claddings. Teifs Weatherseal is easy to apply and makes applicators more efficient than other roll-on barriers because one product treats both the field and board joints.

Teifs Staydry: A waterproofing base coat used on Teifs Stucco WaterMaster assemblies that go over concrete or masonry. The product requires the addition of portland cement and is trowel applied over the stucco brown coat.

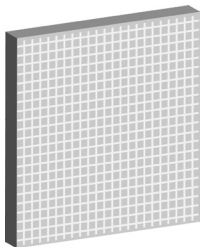
Stucco Base



Teifs One Coat Concentrate and One Coat Sanded : A factory controlled blend of portland cement, fibers, and other additives to which sand (for One Coat Concentrate) and water (for both One Coat Concentrate and One Coat Sanded) are added at the jobsite. Use for 3/8-5/8 inch thick stucco applications. Consult applicable evaluation service reports for assemblies and limitations of use.

Teifs Scratch & Brown Stucco Basecoat: A factory prepared stucco that conforms to ASTM C 926 when water and sand are added at the jobsite. For use in 3/4 inch thick frame wall assemblies.

Stucco Level Coat & Mesh (For Krak-Shield Assemblies)



Stucco Level Coat: used to smooth a wall's surface out in preparation for primer or finish and to embed Teifs mesh for Teifs Krak-Shield stucco assemblies

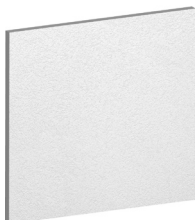
Mesh: Teifs 4.8 or 12 oz fiberglass mesh. Used in Teifs Krak-Shield assemblies to reduce cracking.

Primers



Teifs Shield Primer: A tintable acrylic primer that can be applied by roller or sprayer. Use primer to act as a sealer for your stucco assembly and to improve the handling and coverage of finish.

Finishes



Teifs offers a number of finish options for your Armourwall stucco assembly.

- Teifs DPR Finishes: Integrally colored acrylic finish available in 6 different textures
- TeifsFlex Finishes: Is a high end acrylic that offers easy application and improved durability available in 6 textures.
- Teifs Elastomeric Finishes: Integrally colored elastomeric finish available in 4 different textures. Elastomerics offer the ability to bridge existing hairline cracks to improve the aesthetics of your wall



2. GENERAL INSTALLATION REQUIREMENTS

These requirements are essential to good practice. Failure to follow these requirements could lead to problems with the installation or ultimately, to assembly failure. Follow the requirements of the Product Data Sheets for each product used, available on www.teifs.com

■ Application Coordination Requirements

Ensure that the installation of the assembly is being coordinated with other trades on the project. Many flashings must be installed prior to other construction components such as windows, louvers, doors, roof

■ intersections, deck headers.

Make sure critical details needed prior to application are acceptable and in place.

■ Employ sufficient manpower, to ensure a continuous coating application free of cold joints, scaffold staging

■ shadows and texture variations

Have scaffolding and other necessary equipment in place prior to the installation.

■ Have access to electricity for power tools.

Have access to cool, potable water at the area where

■ assembly materials will be mixed.

Determine who will be responsible for installing the sealant.

3. BEFORE BEGINNING THE INSTALLATION

If there are any discrepancies with your initial inspection of the substrate, do not proceed with the application until all unsatisfactory conditions are corrected. The general contractor should be advised of all discrepancies so that appropriate action can be taken. Failure to advise the general contractor of unsatisfactory conditions before the application begins might be construed as acceptance, by the applicator, of the substrate for the purpose of installing the assembly.

At this time, it may also be appropriate to once again review the contract documents to ensure that the installation will be consistent with what has been detailed and specified. It is certainly easier for all parties concerned if problems were addressed "up front" rather than when they present themselves in the installation process.

Critical Details

In most cases, the installation of the assembly begins at a level base line at the bottom of the wall. However, in evaluating the installation, particular attention must be focused on all locations within the installation where the assembly will be interrupted or terminated. Based upon what has been detailed and specified, consideration must be given to these critical locations:

- Tops of walls
- Bottom of walls
- Cladding transitions
- Penetrations such as scuppers, fixtures, outlets, and signage
- Deck connection
- Aesthetic features
- Expansion joints
- Abutments to dissimilar materials
- Gable roof/wall intersection/kick-out flashing (flashing turn-outs)
- Chimney flashing

Section A: Job Conditions

4. ENVIRONMENTAL CONDITIONS

Teifs products should only be used when the air in which they are applied is at 40°F (4°C) or higher during application and drying.

Do not apply Teifs products to substrates which have a surface temperature of 40°F (4°C) or lower.

For installation in temperatures less than 40°F (4°C), shelter and supplemental heat must be provided and maintained for at least 48 hours after installation.

Avoid application in direct sunlight or temperatures exceeding 90°F (32°C). Under these conditions, provide a sun screen or work in cooler parts of the day such as early morning or late evening.

Note: Because Teifs finishes and coatings are waterbased acrylic products, it is essential that the above requirements be followed. Humidity, wind, cold, heat, rain, etc., can all affect workability and drying of the coatings. As conditions warrant, tenting and/or tarping with supplemental heat might be necessary to maintain these requirements.

5. MATERIAL STORAGE

Insulation Boards (When Applicable)

Store insulation boards in plastic bags and under cover away from sunlight, open flames, and heaters and be sure that they are kept clean.

Liquid Bonding Agents and Coatings

Keep Teifs bonding agents, finishes, coatings, and primers from freezing and from temperatures in excess of 100°F (38°C) for prolonged periods.

Lath and Accessories

Teifs plaster, lath, and accessories must be stored under cover and off of the ground.

Reinforcing Mesh

Store reinforcing mesh in the shipping container in order to keep it clean and protected.

6. PROTECTION

All surrounding areas and surfaces must be protected to prevent against damage and spills during application of the products.

Protect the Teifs stucco bases and any finish coat material from freezing weather, direct rain, running water or other detrimental weather conditions for a minimum of 48 hours or until dry.

Section B: Teifs Stucco Installation

7. INSTALLATION

Check all surfaces to receive the assembly for fastening, tolerance, damaged areas and presence of flashing, kickouts (water diverters) and chimney crickets. Examples listed below:

■ Substrate Requirements

Verify that the substrate:

- Is of a type approved by code and by the manufacturer
 - Is sound showing no signs of deterioration
 - Is correctly applied and oriented to the framing
 - Is correctly and tightly fastened
 - Is free of any crumbling or looseness of surface
 - Has no gaps or voids greater than allowed
 - Has no projections or planar irregularities greater than 1/4 in. (6 mm) in a 4 ft (1.2 m) radius
 - Is dry, clean of foreign materials such as oil, dust, dirt, form release agents, water, frost, etc.
- Wood-based sheathing requires a minimum 1/8 in. (3 mm) gap between adjacent panels
 - Wood-based sheathing requires fastening in accordance with the building code, or project specification if it exceeds the code.
 - Glass mat gypsum sheathing requires fastening spaced not more than 8 in. (203 mm) on center or closer if required by the specifications, along framing members and framing spaced not more than 16 in. (406 mm) on center. For greater framing spacing, contact ParexLahabra Technical Services.

8. START THE INSTALLATION

- A foundation weep screed is the typical accessory required by code and found in ASTM C1063. This accessory shall have a sloped, solid, or perforated, ground or screed flange to facilitate the removal of moisture from the wall cavity and vertical attachment flange not less than 3.5 in. (89 mm) long. The selection of all trim accessories should be determined by a design professional and comply with ASTM C1063 and local code requirements. Some typical items to consider regarding lath accessories, water resistive barriers, and lath installation are included here.

Note: Teifs One Coat series using One Coat Concentrate or One Coat Sanded Stucco Bases requires 1/2 in. (13 mm) minimum base coat thickness and 3 coat series using Teifs Scratch & Brown on framed construction requires 3/4 in. (19 mm) minimum base coat thickness.

- Provisions to allow for proper water drainage:
 - Identify all locations to receive the particular type of weep accessory, including head flashings. Stay a minimum of 6 in. (152 mm) away from finish grade and 2 in. (51 mm) above pavement and roof lines.
 - The weep screed must overlap the the joint formed by the foundation and framing not less than 1 in. (25mm) and appropriate flashing at roof lines a minimum of 2 in. (51 mm) (Fig. 8.1).
 - Stay 3/4 in. (19 mm) away from concrete or other horizontal surfaces, walkways, etc. (Fig. 8.2). Take care not to block the holes in the weep screed.
 - Windows and door frames should be placed after the openings have flashed and the moisture barrier has been installed (Fig. 9.1-9.8). Refer to Rough Opening Flashing Details on page 10 and 11.

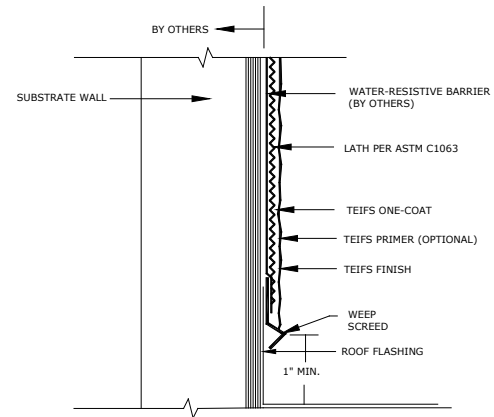


Fig. 8.1

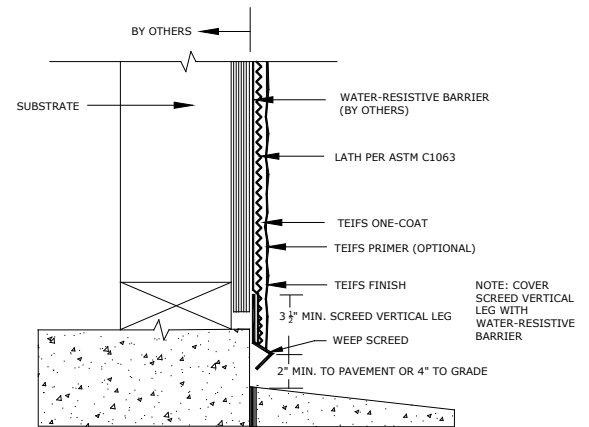


Fig. 8.2

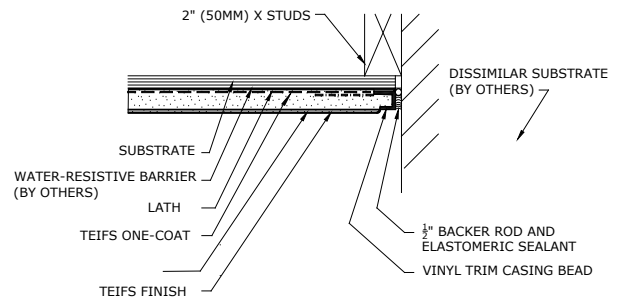


Fig. 8.3

9. FLASHINGS, ROUGH OPENING FLASHINGS, AND WATER RESISTIVE BARRIERS

- Flashing:** Make sure all necessary flashings are installed properly. Proper size, installation and location of flashings are very important. Particularly at windows, doors, wall penetrations, where the wall assembly and roof or other assemblies meet, etc. If not located at the ridgeline, chimneys are to have a cricket. If these items are not present, notify the builder or general contractor in writing. A kick-out flashing (water diverter) is required where the roof terminates against the assembly. Using a weep screed device, terminate the assembly a minimum of 2 in. (51 mm) above the adjoining roof. The assembly should lap over the vertical leg of roof step flashing a minimum of 2 in. (51 mm). Section 1405.3 of the International Building Code calls for flashing installed in such a manner so as to prevent moisture from entering the wall or to redirect it to the exterior.

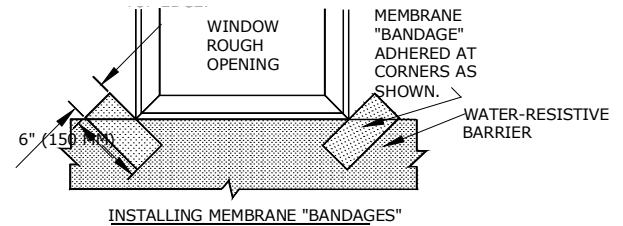


Fig. 9.1

- Teifs Stucco WaterMaster Assembly:** In a Teifs Stucco WaterMaster assembly, you will be treating the substrate and rough openings with additional materials prior to the application of the normal water resistive barrier and rough opening treatment used with basic Teifs Stucco assembly.

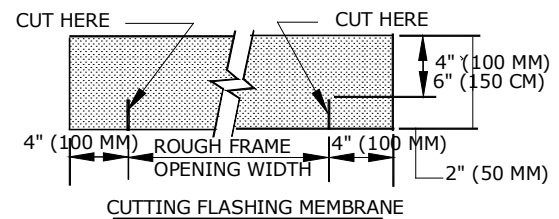


Fig. 9.2

- Materials needed for the Teifs Stucco WaterMaster assembly:
 1. Teifs Weatherseal Roll-On
 2. Teifs Sheathing Tape
- Application procedure
 1. Review Product Technical Data Sheets for current application instructions
- Rough Opening Flashings:** Windows and doors should not be in place. The following steps show one of many ways to weatherproof rough openings. The basic theory is to do what is necessary to prevent water from entering the sheathing and framing after windows and doors are installed. This must be done prior to the installation of the cladding and possible sealants.
 - Cut and staple a 12 in. (30 cm) wide strip of Tyvek® StuccoWrap™ or code-approved water resistive barrier in line with bottom edge of the rough opening extending past jambs approximately 12 in. (30 cm) on each side. Staple top edge only (Fig. 9.1).
 - Cut self-adhering flashing membrane to approximately 4 in. (10 cm) x 6 in. (15 cm). Remove backer paper and install diagonally at sill corners (Fig. 9.1).
 - Cut a strip of self-adhering flashing to a width of 12 in. (30 cm) and a length equal to that of the rough opening width plus 8 in. (20 cm). Make two 2 in. (5 cm) long cuts into flashing even with jambs (Fig. 9.2).
 - Fold self-adhering flashing to fit rough opening sill (Fig. 9.3).

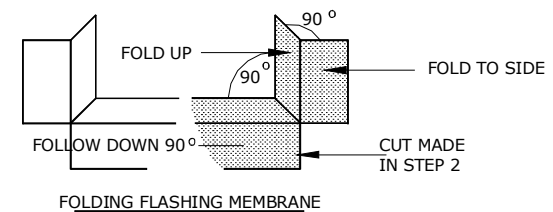
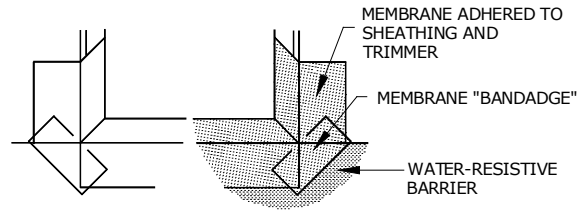


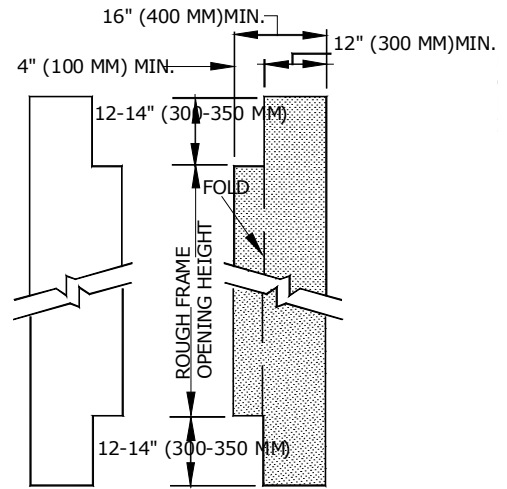
Fig. 9.3

- Peel backing and install flashing as shown, making sure to lap over previously installed diagonal flashing and StuccoWrap or code-approved water resistant barrier (Fig. 9.4).
- Rough opening jambs may be protected by using either the StuccoWrap or self-adhering flashing membrane. Cut as shown in Fig. 9.5.
- Fit flashing into rough opening jambs. Install jamb flashing making sure bottom leg overlaps sill flashing (Fig. 9.6).



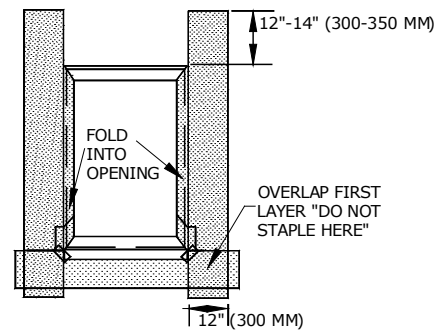
INSTALLING THE FLASHING MEMBRANE

Fig. 9.4



CUTTING WATER-RESISTIVE BARRIER FOR JAMBS

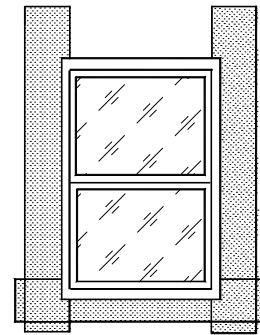
Fig. 9.5



INSTALLING WATER-RESISTIVE BARRIER AT JAMBS

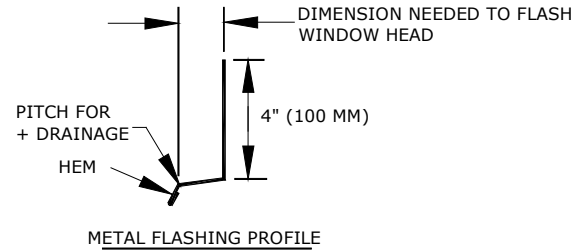
Fig. 9.6

- The window, door, etc. can be installed at this time (Fig. 9.7).
- Install corrosion resistant metal head flashing. Length of flashing should be 1 in. (25 mm) longer than the width of window or door frame. Rear vertical leg of flashing should be a minimum of 4 in. (101 mm) high (Fig. 9.8 and Fig. 9.9).



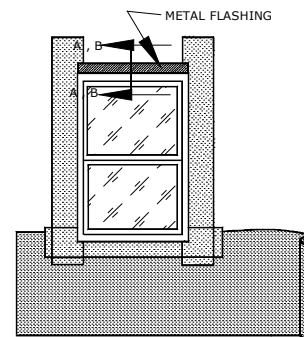
INSTALLING WINDOW

Fig. 9.7



METAL FLASHING PROFILE

Fig. 9.8

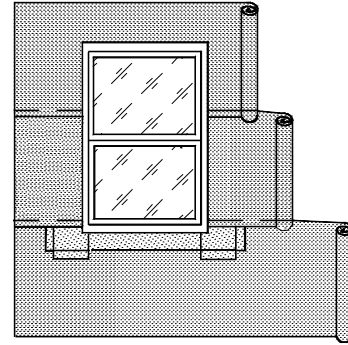


INSTALLING ROLLS OF WATER-RESISTIVE BARRIER

Fig. 9.9

■ Water Resistive Barriers

- Tyvek StuccoWrap, 15-lb. (6.8-kg) asphalt saturated felt (ASTM D-226), or building paper conforming to Federal Spec. UU-B-790a, D-grade paper. Check with local building code.
- Install the water resistive barrier over the entire sheathing surface shingle fashion starting at the bottom of each wall section. Overlap each layer a minimum of 2 in. (51 mm) horizontally and 6 in. (152 mm) at vertical laps. The water resistive barrier must be continuous behind movement joings (control, expansion, etc.) and be wrapped around interior and exterior corners.
- Make sure the water resistive barrier is installed under the rough opening sill flashing as per Fig. 9.9. Lap moisture barrier over jamb flashings and over the vertical back flange of the head flashing as per Fig. 9.10.
- The water resistive barrier must overlap the vertical back flange of the weep screed device at least 2 in. (51 mm).
- Seal all water resistive barrier joints where they intersect with horizontal or vertical surfaces and at abutments, eaves, doors or window frames. Use a self-adhering flashing membrane.
- When the substrate is wood, for example plywood or OSB, the Uniform Building Code requires two layers of Grade D Building Paper. Underlying sheathing and wall cavity must be dry.



INSTALLING ROLLS OF WATER-RESISTIVE BARRIER CONTINUED

Fig. 9.10

10. PAN FLASHING INSTALLATION

Be especially careful that all vertical flashings drain within the pan and are sealed where they join the sill flashing.

Pans are to be installed before the window is installed, and must be the full width of the opening with end dams. The outboard lip of the pan must drain over the weep screed device barrier or extend to the outside of the total assembly thickness, and down over the assembly a minimum of 2 in. (51 mm).

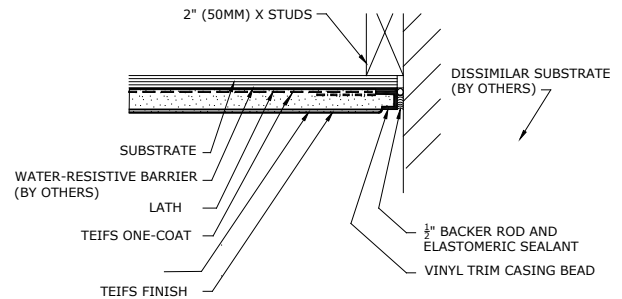


Fig. 10.1

11. TRIM ACCESSORIES

Install Trim Accessories per ASTM C-1063. Install all trim accessories in such a manner that flanges and fasteners that provide for attachment are completely embedded in the plaster.

All trim accessories shall have a plaster ground of a minimum of 3/8 in. (9.5 mm) over concrete and masonry and 1/2 in. (13 mm) over self-furring lath used in frame construction. All trim accessories should be sealed where they join.

Attach trim accessories to the substrate in such a manner, as to ensure proper alignment during application of stucco. Maintaining consistent stucco thickness helps prevent cracking.

- Plaster stops or casing beads should be installed to create a minimum 1/2 in. (13 mm) gap at all abutments to allow for installation of backer rod and sealant (Fig. 10.1).
- Casing beads isolate non-load-bearing members from loadbearing members to avoid transfer of structural loads.
- Control joints placed to create wall panels no larger than 144 sq. ft. (13.4 sq. m.) or with a length-to-width ratio no greater than 2.5:1, with no dimensions exceeding 18 ft. (5.6 m) (Fig. 10.2).

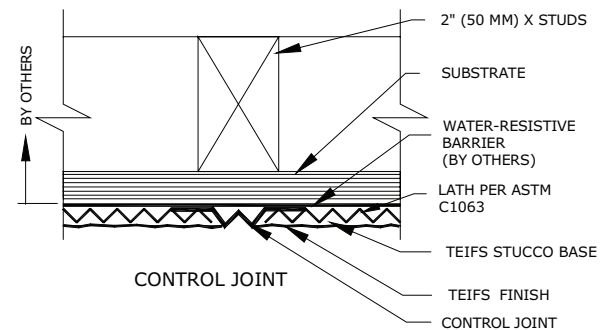


Fig. 10.2

Control joints and expansion joints must be continuous through decorative bands or other embellishments, so they will not restrict panel movement.

- Expansion joints are required at existing wall expansion joints, changes in substrates (Fig 10.3), at inside corners, and at floor lines on wood frame construction.
- Corner over lath aids are installed to protect all external corners and to establish grounds after the lathing has been completed.

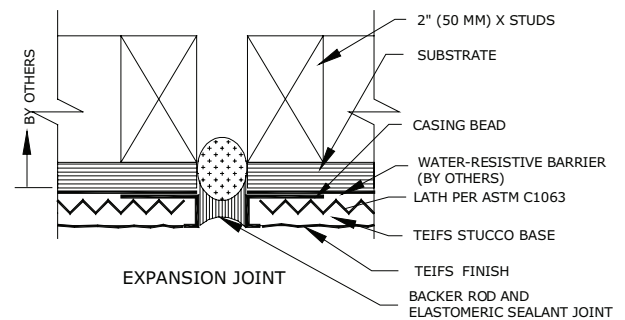


Fig. 10.3

12. LATHING OVER FRAMED CONSTRUCTION

Install as per ASTM C-1063. Mechanically attach lath with the long dimension at right angles to the support members, with corrosion resistant or non-corrosive fasteners. Spacing maximum 7 in. (177 mm) o.c. for expanded metal lath and maximum 6 in. (152 mm) o.c. for woven wire lath along the supports.

Wrap the lath around corners and attach to framing, staggering vertical joints. Lath installations over solid backing are to be furred 1/4" per ASTM C1063.

Fasteners must penetrate wall studs:

- Wood studs minimum 1 in. (25 mm)
- Metal studs minimum 1/2 in. (13 mm)

Use 1 in. (25 mm) galvanized washer or approved plastic washer or plate with the nails or screws. The use of 16-gauge corrosion-resistant or non-corrosive staples are permitted 6 in. (152 mm) o.c. with a minimum of 1 in. (25 mm) penetration in wood studs. Staples must have a minimum crown width of 3/4 in. (19 mm).

13. LAPPING AND SPACING OF FASTENERS

- Secure side laps of metal plaster bases by tying between supports with 18 ga. wire at intervals not to exceed 9 in. (228 mm).
- Lap expanded metal lath 1/2 in. (13 mm) at the sides and 1 in. (25 mm) at ends. When end laps occur between the supports, lace or wire-tie the ends of the sheets of all metal plaster bases with 18 ga. galvanized, annealed steel wire.
- Lap woven wire lath one mesh at the sides and the ends.
- When using metal plaster base with backing, the vertical and horizontal lap joints will be paper-on-paper and metal-on-metal.
- Lap backing on walls so water will flow to the exterior.
- Space attachments for securing metal plaster bases to supports no more than 7 in. (177 mm) o.c. apart for diamond mesh and 6 in. (152 mm) o.c. for woven wire lath.
- The application to minimum No. 20 gauge steel studs is similar except that No. 8 Type S screws are installed at 6 in. (152 mm) o.c.
- Apply all lath with the long dimension at right angles to the supports, unless otherwise specified. Lath that is not firmly or properly attached can cause cracking in the stucco.
- Stagger ends of adjacent lath.

- Lath at each side to the flange of the control joint or trim accessory.
- Where furred or suspended ceilings butt into or are penetrated by columns, wall, beams, or other elements, terminate the sides and ends of the ceiling lath at the horizontal internal angles with a casing bead or similar device designed to keep the sides and ends of the ceiling lath and plaster free of the adjoining vertically oriented elements. Do not use cornerite at these locations.
- Attach diamond-mesh expanded metal lath, and wire lath to horizontal wood supports with 1.5 in. (38 mm) roofing nails, driven flush with the plaster base and attached to vertical wood supports with 6-D common nails or 1 in. (25 mm) roofing nails driven to a penetration of at least 3/4 in. (19 mm) or 1 in. (25 mm) wire staples driven flush with the plaster base. Staples shall have crowns not less than 3/4 in. (19 mm) and shall engage not less than three strands of lath and penetrate the wood framing not less than 3/4 in. (19 mm).

Common Mistakes Made in Lath Installations

- Improper wood sheathing installation.
- Improper selection of lath weight and type for specific application.
- Using unfurred lath over solid backing, lath it to be to be furred 1/4" per ASTM C1063.
- Improper attachment to support members and not properly wire tying accessories and lath between the support members.
- Improper use or installation of lath accessories.
- Improper selection of accessory materials.
- Inadequate number or spacing of control/expansion joints.
- Improper installation of flashing and water resistive barriers at all possible locations for water entry.

14. ATTACHMENT OF METAL PLASTER BASES TO MASONRY/CONCRETE

- Fasteners shall be installed in rows not more than 16 in. (406 mm) on center horizontally along the sheet and spaced vertically along each row not more than 7 in. (178 mm) on center. All fasteners shall not be less than 3/4 in. (19 mm) long with heads not less than 3/8 in. (10 mm) wide.
- Securely wire-tie side and end laps between the fastener rows.
- Do not apply stucco directly over painted substrates.

For complete methods, including soffits and ceilings, reference ASTM C-1063.15.

15. MIXING

Teifs One Coat Concentrate Stucco Base

This material requires the addition of clean, masonry sand (meeting ASTM C-144 or C-897) added at the job site. The proper amount is 200-240 lb. (90.9-109.1 kg) of sand per 80-lb. (36.3 kg) bag of Teifs One Coat Concentrate depending upon quality and gradation of sand.

- When using Teifs Admix, use one gallon to one bag of Teifs One Coat Concentrate.
- Optimum sand additions depend on the sand gradation. Finer sand will result in a lower total sand addition to the Teifs One Coat Concentrate. Poor sand quality may cause cracking and weakened plaster.
- Actual water quantity will vary depending on the density, gradation and moisture content of the sand. Use a mechanical mixer. Mixing time must not exceed five minutes.

Teifs One Coat Sanded Base

This product requires the addition of water only. Under certain conditions the use 1 qt. Teifs Admix per 80 lb bag recommended or required. Use a mechanical mixer and DO NOT exceed five minutes for mixing time.

16. MIXING WITH ADDITIVES

For improved workability and performance over clean, uncoated masonry, mix Teifs Admix as an admixture. The use of Teifs Bond as a bonding agent is required when applying over concrete (precast or formed), structural clay tile, clay brick, or stone.

17. BASE COAT APPLICATION

Teifs One Coat Concentrate or One Coat Sanded Stucco Bases

- Before applying the base coat, inspect all lathing, flashing, trim accessories and moisture barriers. The first coat is pressed tightly into the lath to provide proper keying. Allow this coat to set firm and follow with a second coat to the total required 1/2 in. (13 mm) minimum thickness over lath. Rod surface, straight and true in all directions.

Note: The 1/2 in. (13 mm) total thickness is measured from the back plane of the lath to the finish surface exclusive of texture.

- No wire or lath should be visible through the base coat. To avoid cold joints, the material must be applied continuously, stopping only at natural stopping points, such as control joints, corners, etc. Application may be hand troweled or sprayed. If sprayed, material must be pressed into the lath with trowel, rodded and floated.



- A minimum of 3/8" (10mm) thickness may be used over concrete and concrete masonry substrates.

Teifs Scratch & Brown

- This stucco material is used with the typical conventional "scratch and brown" procedure and is installed in 2 applications producing a 3/4 in. (19 mm) minimum total thickness. Follow ASTM C926 guidelines.

18. CURING

- Moist curing is required of all Teifs Stucco applications except when special admixtures are used, or when high humidity is prevalent (90% relative humidity). Fog spray once or twice a day to replace the evaporated moisture from the plaster.
- Protect newly applied substrates from rain for 12 hours. Protect walls from freezing for 48 hours after application.
- Materials modified with Teifs Admix should be air cured, unless extreme hot and/or drying winds or low humidity are present. Under such conditions, moist curing may be necessary.
- Curing is complete when the surface is hard and does not powder.

19. PREFORMED SHAPES

If your project includes preformed shapes, instead of using metal lath to protect the foam, use any Teifs Base with glass mesh fabric embedded in a 1/16 in. (2 mm) minimum thickness base coat. The glass mesh fabric covers the face and edges of the foam shape.

It is required that the stucco be hard and dry (cured) before attaching the embellishment. Provide a 6:12 minimum pitch on sloped areas and at top surfaces of embellishments

The foam shape embellishment may be attached adhesively, mechanically, or using a combination of both. When attaching shapes adhesively, use any Teifs Base applied to the entire backside of the shape using a notched trowel. When attaching shapes mechanically, use corrosion-resistant or non-corrosive fasteners attached to structural members.

Large shapes require back-wrapping along with both mechanical and adhesive attachment due to the weight of the shape and the potential effect of strong winds. Shapes are not to be used to bridge expansion or control joints unless the shapes are adhered to only one side of the joint and allowed to "float" over the joint to conceal the joint for aesthetic purposes. Otherwise, at such points, the shape is to be separated and backer rod and sealant used.

The Teifs Stucco Krak-Shield Assembly:

If your project has been upgraded to the Krak-Shield Assembly, you will be installing an additional layer of fiberglass reinforcing mesh embedded in Teifs Stucco Level Coat over your cured Teifs Stucco assembly.

- Materials required for Krak-Shield assembly:
 1. Stucco Level Coat
 2. Reinforcing Mesh (4.5 or 12 oz.)
- Installation Procedure:
 1. See Product Technical Data Sheets for installation instructions

20. FINISHES

The following finish choices provide color and texture for Teifs Stucco Assemblies:

Acrylic and Elastomeric Finishes:

- Teifs DPR Finishes: Integrally colored acrylic finish available in 6 different textures
- TeifsFlex Finishes: Integrally colored premium acrylic finish available in 6 textures. DPR Optimum Finish is the Teifs high end acrylic that offers easier application and improved durability.
- TeifsLastic Finishes: Integrally colored elastomeric finish available in 4 different textures. Elastomerics offer the ability to bridge existing hairline cracks to improve the aesthetics of your wall.

Note: TeifsShield Primer is highly recommended as a primer under all Teifs acrylic and elastomeric finishes.

21. SEALANTS

Sealants and waterproofing are not considered part of the Teifs Stucco Installation. Consult with Section 07900 of the project document. The architect, engineer, builder, owner or owners representative shall select the sealant and provide written approval from the sealant manufacturer.

Sealants for use with Teifs must comply with the following:

- ASTM C-920 Grade NS, Type M or S, Class 25.
- Minimum elongation of 50% after curing.
- Sealants shall be tested in accordance with ASTM C-1135.
- Sealants shall be installed in accordance with ASTM C-1193.

22. APPLICATION OF SEALANT

Consult Specification ASTM C-1193.

- Control joint, expansion joint and perimeter joint width should be specified by a design professional.
- Apply all sealants over closed cell backer rod or bond breaker tape.
- Make sure that sealant does not close weep holes at weep screed locations, at head flashing, or at locations where water drainage is imperative.
- Do not adhere sealants to acrylic finishes.
- Sealants are used with manufacturer's recommended primer and backer rod or bond breaker tape. Fillet or cove sealant joints are acceptable if used with 1/2 in. (13 mm) or greater bond breaker tape.

23. PROTECTING THE SYSTEM AFTER INSTALLATION

After the application of the Teifs Stucco Base, the ambient air temperature must remain at 40°F (4°C) or higher, for a minimum of 48 hours, or until the Teifs Stucco Base is completely dry, which may take several days in high humidity and/or cool weather.

Protecting the System

Although it may not be outwardly apparent, freshly applied Teifs Stucco Base that seem hard and dry on the surface often require protective measures to ensure their proper cure through their entire thickness. This is especially so if freezing temperatures, rain, snow, or other damaging weather conditions are likely.

Temperatures below 40°F (4°C) can prevent the proper curing of Teifs finishes and coatings by slowing down or stopping the film formation of the acrylic copolymers. Damage from cold conditions often remains undetectable in the short term, but shows up later as the finish or coating cracks, erodes, becomes crumbly, or delaminates.

Like excessive cold, precipitation can affect the proper curing of Teifs Stucco Base, but its results can be dramatically fast. A sudden downpour can wash fresh, uncured Teifs Stucco Base directly off a wall.



As circumstances may dictate, work according to the weather or provide appropriate sheltering, such as tenting and/or trapping. To maintain proper curing temperature, supplemental means of heating the temporary shelter may have to be used.

Flashings and Sealants

While providing a means for drainage of incidental water from behind the insulation, Teifs Stucco Base, like other wall claddings, relies on flashings and sealants to prevent moisture entry behind the face of the cladding.

Always provide a temporary means of protecting the assembly at critical locations if there are substantial delays before permanent flashings and sealants are installed. These locations include window and door perimeters; expansion joints; abutments to dissimilar materials; penetrations such as fixtures, hose bibs, outlets, scuppers, etc.; and terminations at the tops and bottoms of walls.

More About Sealants

Sealants provide two vital functions:

- They effectively seal joints between abutting materials against the weather.
- They absorb thermal expansion and contraction. In general, sealant joints are constructed similarly to Fig. 11.1. Teifs requires the surface of the system receiving the sealant to be casing bead or other suitable accessory. Do not return finish into the joints or other areas to receive sealant. Sealants are applied in strict conformance with the sealant manufacturer's recommendation.

Because of the wide variety of surface materials and conditions, check with the sealant manufacturer to ensure compatibility of the sealants to the surface(s) to which they will be applied. Special surface preparation or primers may be necessary.

24. CLEANING UP

Clean splatters of Teifs Stucco Base immediately with running water. Likewise, tools used in the application should be cleaned immediately after use. Stucco materials can be very difficult to remove after they have dried. Special cleaners are available that may help in some cases. Contact ParexLahabra Technical Services for more information.

As is customary with any trade, keeping the work site free of debris is everyone's responsibility. The job is complete when all discarded materials are disposed of properly. All waste items-such as plastic buckets, unused coatings, EPS, etc.-should be disposed of in a manner that conforms to local, state, and federal regulatory standards.

Remember... The only reminder of your application should be a quality Teifs Stucco installation.

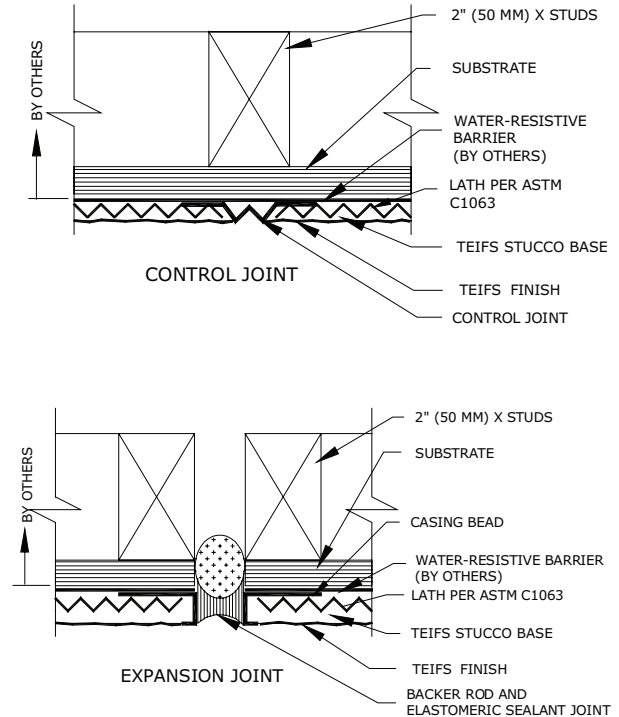


Fig. 23.1



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