

PART 1: GENERAL

The optimum performance of the Total Direct DA Exterior Finish System over cement board as an exterior cladding system is directly related to outdoor temperature extremes. Using the United States Frost Zone Map, this exterior cladding system is recommended for zones 4 through 10, and is not recommended for zones 2, or 3. Therefore, the Total Direct DA Exterior Finish System over cement board is not recommended for zones (areas inside or outside the United States) where the average annual low temperature is expected to fall below -30° F.

It is important to note the requirements of this specification relate to unprotected exterior wall surfaces. Direct application of the base coat and finish options listed herein is permitted also for protected horizontal and vertical surfaces. These surfaces may include areas such as soffits, overhangs and the undersides of porches and porticos. In such areas, sheathing materials such as siliconized gypsum core sheathing, e.g., DensGlass, GlasRoc, Fiberock, National Gypsum EXP or equal, are permissible substrates, equal to cement board. Also, the requirements for sub-sheathing and the use of a secondary moisture barrier, as detailed below, are waived for these protected areas.

1.01. DESCRIPTION AND SCOPE

- A. Requirements contained within Division I (General Requirements) are applicable to the work required of this section. Provide labor, materials, equipment, and supervision necessary to complete the exterior wall and finish systems including:
 - 1. Attachment of PVC starter weep track and PVC trim over the sub-sheathing or existingsheathing
 - 2. Application of moisture barrier over the sub-sheathing and lapping over the back of the PVC starter weep track
 - 3. Installation of Permabase, Durock or other approved cement board
 - 4. Application of a Total Wall base coat and Total Wall reinforcing mesh over the cementboards
 - 5. Application of Total Wall synthetic finish coat
 - 6. Application of bond-breaker tape or backer rod and caulk sealant
- B. Related work specified elsewhere
 - 1. Masonry, Division 4
 - 2. Metals, Division 5
 - 3. Wood Construction, Division 6
 - 4. Sheathing, Division 9
 - 5. Caulking/Sealants, Division 7
 - 6. Portland Cement Plastering, Division 9
- C. Referenced Documents
 - 1. Standards
 - (1) ASTM A526 Specification for Sheet Steel, Zinc Coated (Galvanized) by Hot-Dip Process, Commercial quality
 - (2) ASTM B69 Specification for Rolled Zinc
 - (3) ASTM B117 Test Method for Salt Spray (Fog) Testing
 - (4) ASTM C67 Mod. Test Method for Saturated Freeze/Thaw
 - (5) ASTM C150 Specification for Portland Cement

- (6) ASTM C297 Test Method for Tensile Strength of Flat Sandwich Constructions in Flatwise Plane
- (7) ASTM C578 Specification for Preformed, Cellular Polystyrene Thermal Insulation
- (8) ASTM C1135 Test Method for Determining Tensile Adhesion Properties of Structural Sealants
- (9) ASTM D968 Test Method for Abrasion Resistance of Organic Coatings by Falling Abrasive
- (10) ASTM 1784 Specification for Rigid PVC
- (11) ASTM D2247 Practice for Testing Water Resistance of Coatings in 100% Relative Humidity
- (12) ASTM E84 Test Method for Surface Burning Characteristics of Building Materials
- (13) ASTM E108 Mod. Full Scale Structural Fire Testing of Wall Systems
- (14) ASTM E330 Test Method for Structural Performance by Uniform Static Air Pressure Difference
- (15) ASTM E331 Test Method for Water Penetration by Uniform Static Air Pressure Difference
- (16) ASTM E695 Method for Measuring Relative Resistance to Impact Loading
- (17) ASTM G23/G53 Accelerated Weathering for Exposure of Nonmetallic Materials
- (18) Fed Mil Spec 810D Test Method for Determining the Resistance to Mold and Fungus Growth
- (19) NFPA Standard Test Method 268 Radiant Heat Fire Test
- (20) UBC 26-9 Intermediate Scale Multi-Story Fire Testing

2. Building Code Standards

- (1) National Building Code, Building Officials and Code Administrators (BOCA), Section 1406.0
- (2) Standard Building Code, Southern Building Code Congress International (SBCCI), Sections 717.4 and 717.5
- (3) Uniform Building Code, International Conference of Building Officials (ICBO), UBC Standard 26-4
- (4) International Building Code, International Code Council (ICC), Applicable IBC Standards
- (5) International Residential Code (IRC).

D. Terms and Definitions

1. **TOTAL DIRECT DA**

A class of DEFS where a layer of moisture barrier is used as a secondary line of protection against water intrusion into the wall behind cement board sheathing and over a sub-sheathing. A drainable moisture barrier, such as Tyvek StuccoWrap, RainDrop HouseWrap, Weather Trek Wrap or Vortec Drainage Barrier is used for this purpose. Water entering the system will flow down the face of the moisture barrier and safely exit the system at a PVC weep base accessory. Since a waterproof, cement-based sheathing is used, such as Durock, Permabase or equal, the moisture barrier is installed over the sub-sheathing and behind the cement board. The exterior lamina, consisting of a layer of base coat and reinforcing mesh and synthetic finish coat, covers the cement board. Total Wall reinforcing mesh is embedded into a Total Wall base coat applied in a minimum 1/16" (1.6 mm) layer. One layer of base coat and reinforcing mesh is used at the sheathing joints and at high stress areas, such as window corners. A second full layer of Total Wall standard reinforcing mesh embedded in a Total Wall base coat covers the entire outer surface of the sheathing. This approach improves performance since the sheathing joints and high stress areas are double based and meshed.

The Total Wall reinforcing mesh is a woven glass fiber fabric coated with a protective plastic material A Total Wall high grade synthetic finish coat in a chosen color and texture is applied over the base coat.

2. Moisture Barrier

A flexible sheet-like material available in rolls is attached to a substrate with staples or similar attachment and is designed to act as a water protection layer.

3. Base Coat

A material that is applied to the face of the cement board and is used to embed the reinforcing mesh and functions as a weather barrier.

4. Reinforcing Mesh

An open weave fiberglass fabric coated with a protective plastic. Embedded into a layer of Total Wall base coat to strengthen the system.

5. Finish Coat

A premixed, synthetic plaster material functioning to provide a decorative color, texture coat and additional weather resistance.

6. Accessories

Items such as weep bases, corner beads and casing beads may be utilized in the assembly of the system. Flashing for window and door treatments, decks, roof kick-out areas and dormers are utilized.

7. Sealant

A permanently flexible, self-sticking compound used to seal seams in the system such as the seams occurring between the system and windows and doors.

1.02. DESIGN LIMITATIONS AND DETAILING

- A. The maximum allowable system deflection, normal to the plane of the wall is L/360.
- B. Design wind load must not exceed Total Wall, Inc.'s allowable wind load as stated in Total Wall Code Evaluation Reports.
- C. All details must conform to Total Wall, Inc.'s recommendations and must be consistent with the project requirements.

1. General

- (1) The length and slope of inclined surfaces must follow the guidelines listed below:
 - (a) Minimum slope: 6" (152.4 mm) of rise in 12" (304.8 mm) of horizontal projection
 - (b) Inclined surfaces must not be used for areas defined as roofs by building codes.
 - (c) Uses not meeting the above criteria must be approved in writing by Total Wall, Inc. prior to installation.

2. Substrate System

- (1) Must be engineered to withstand all applicable load including live, dead, positive, and suction wind; seismic activity; etc. Bond strength, fastener strength, and connection strength must be analyzed and engineered. Appropriate factors of safety must be used.
- (2) The maximum deflection under positive or suction full designs loads of the substrate system must not exceed L/360.

3. Substrates

- (1) Application of the system must be to one of the following substrates:
 - (a) Cement board meeting ASTM 1325
 - (b) CMU
 - (c) Poured Concrete

- (2) Substrates other than those listed above must be approved in writing by Total Wall, Inc. prior to installation of the system.
 - (3) The substrate must not have any planar irregularities greater than 1/4" (6.35 mm) in 10 lineal feet (3.04 m).
4. Expansion Joints and Control Joints
- (1) Continuous expansion joints and control joints must be installed at the following locations:
 - (a) Where expansion joints occur in the substrate
 - (b) Where building expansion joints occur
 - (c) Where the system abuts other materials
 - (d) Where the substrate changes
 - (e) Where significant structural movement may occur, such as:
 1. Changes in roof line
 2. Long continuous elevations
 3. Changes in building shape and structural system
 - (f) At floor lines in wood frame construction
 - (g) As required by cement board manufacturer
 - (2) Expansion and contraction of the system and adjacent materials must be considered in the design of expansion joints, with proper consideration given to sealant properties, installation conditions, temperature range, coefficient of expansion of materials, joint width-to-depth ratios, etc.
 - (3) Isolation joints are required around all wall penetrations, including doors and windows.
5. Details
- (1) Total Wall, Inc.'s latest published information must be followed for standard detail treatments.
 - (2) Non-standard detail treatments must follow the recommendations of Total Wall, Inc.
 - (3) Corners must be reinforced by wrapping reinforcing fabric around the corner from both directions for a minimum of 8" (20.32 mm), or with corner mesh, or approved PVC accessory.
 - (4) Openings which do not have control joints, must be reinforced using a 9" x 12" (22.86 cm x 30.48cm) wide strip of detail mesh placed at a 45° angle to the opening corner.
 - (5) Flashing is detailed at window and door heads, deck ledger boards, roof kick-outs, and roof/wall interfaces.
- D. The use of dark colors must be considered in relation to estimated wall surface temperatures as a function of local climate conditions.

1.03. QUALITY ASSURANCES

A. Contractor

The contractor must have a minimum of two years' experience in the wall construction trades, be licensed by Total Wall, Inc. for application of DA systems, demonstrate the ability to install the system based on projects of similar size and complexity, and meet the approval of the architect. The contractor must provide a list of completed projects. The contractor must provide equipment, manpower and supervision necessary to install the system in compliance with the project plans and specifications.

1.04. SUBMITTALS

- A. Sample Panel
The contractor must submit to the architect a sample panel of at least 12" by 12" (30.48 cm x 30.48 cm) demonstrating the texture and color of the finish desired. The architect must review the panel and determine the suitability of the finish presented.
- B. The contractor must submit a list of three projects which have been completed within the last five years, exhibiting the contractor's installation skills. The list must include project name, location, description of work and date completed.
- C. Total Wall, Inc.'s literature, including application instructions, specifications, and details.
- D. The cement board manufacturer's documentation to show compliance with Total Wall, Inc., and code requirements.

1.05. PRODUCT DELIVERY AND STORAGE

- A. Delivery
Deliver all materials supplied by Total Wall, Inc. in original, unopened containers with legible manufacturer's identification intact.
- B. Storage
 - 1. Store all products off the ground, under cover and protected from dampness and sunlight.
 - 2. All liquid products must be stored at 40° F (4.4° C) or above and protected from freezing. Protect from exposure to direct sunlight during storage.

1.06. JOB CONDITIONS

- A. Install all materials in strict accordance with all safety and weather conditions required by the product literature, and in accordance with ASTM C1516, and as modified by the applicable standards of authorities having jurisdiction.
- B. Apply all coatings when the ambient temperature is 40° F (4.4° C) and rising. A minimum temperature of 40° F (4.4° C) must be maintained 24 hours after completion of work. Supplementary heat must be provided if stated temperature conditions do not exist. Do not apply coatings to a frozen surface.
- C. Protect surrounding areas and surfaces during application of the wall system.
- D. Protect system from precipitation during application and for at least 24 hours after application.

1.07. COORDINATION AND SCHEDULING

- A. Closely coordinate work with related sections and trades.
- B. Protect the tops of walls to prevent water from entering behind the system. Any required cap flashing, overhangs or drip edges must be installed as soon as possible after the finish coat has been applied.
- C. Install all sealants in a timely fashion. Protect open joints from water intrusion with backer rod or other means until the sealant has been installed.
- D. When required by code or job requirements, contract with an independent inspector prior to Total Wall DEFS installation. The inspector must be EDI (Exterior Design Institute) certified or other applicable certifying agency as approved by Total Wall, Inc., and the local code official. The inspector will make a minimum of three on-site inspections, which will include the following examinations:
 - 1. Material – storage and environmental application conditions
 - 2. Trim accessory – installation
 - 3. Moisture barrier – type and installation
 - 4. Cement board – material(s) and condition
 - 5. Flashings – kick-out diverters, deck, window, and door heads
 - 6. Trims and architectural enhancements – configuration and installation

7. Base coat – type, labeling, mixing and application.
Mesh – type, labeling, back-wrapping, corner reinforcement, general installation
8. Finish – type, labeling, mixing, application
9. Sealant and backer rod – type, labeling, joint dimensions, joint preparation, joint placement, sealant application

The inspector must provide a minimum of three interim text reports and one final report, which will include photographs. The inspected items must be compared with job documents and Total Wall, Inc. specifications and reported accordingly. Report copies must be issued to the copy list within 3 days of each inspection phase. The payment of monies for the inspection process will be allocated prior to the bidding process.

1.08. SYSTEM WARRANTY

- A. A Total Wall, Inc. warranty application form must be completed prior to the commencement of the DEFS installation.
- B. Upon completion of the DEFS installation in accordance with specifications and payment of monies due Total Wall, Inc., Total Wall, Inc. will issue a warranty.

PART 2: PRODUCTS

2.01. MANUFACTURERS

- A. All materials related to DEFS must originate from:
Total Wall, Inc.
PO Box 366
Rio, WI 53960
(888) 702-9915

2.02. EXTERIOR SYSTEM COMPONENTS

- A. The moisture barrier over the sub-sheathing must be
 1. Tyvek StuccoWrap
 2. RainDrop HouseWrap
 3. Weather Trek Wrap
 4. Vortec Drainage barrierThese are drainable moisture barriers when sandwiched between two sheathings.
- B. The trim accessories must be UV resistant PCV as manufactured by either Vinyl Corporation or Plastic Components. The trim accessories may consist of the following:
 1. Starter track with weeps
 2. Casing bead starter track
 3. Drip casing bead (head flashing)
 4. Sloped sill wedge
 5. Control joint
- C. Base coat must be Total Wall T-2000, a dry polymer modified Portland cement based mixture this mixed with water at the job site; or Total Wall Foam N' Base coat, a wet acrylic polymer slurry is mixed with Portland cement at the job site; or EZ Base NCB, a pre-mixed ready-to-use base coat. The selected mixture is used to embed the Total Wall reinforcing fabric into the face of the polystyrene board.
- D. Reinforcing mesh must be plastic coated fiberglass reinforcing fabric as required and supplied by Total Wall, Inc. The Total Direct DA system utilizes detail and standard width meshes 4.3 oz in weight, having 25 – 35 in-lbs. (2.8-4.0 Newton-M) impact resistance.
- E. Portland cement must be Type I, I-II or II meeting ASTM C150, fresh and free of lumps

F. Water must be clear, potable, and free of foreign matter.

Sealant Systems

1. Must be one of the following:

(1) Tremco, Inc.

(a) Sealant: "Dymeric"

(b) Primer: use manufacturer's recommended primer

(c) Backer rod: Dow "Ethafoam"

(d) Bond breaker: 3M #226, 480, 481, 710; Valley Industrial Products #90; or Dow "Ethafoam"

(2) Pecora Corporation

(a) Sealant: "Dynatrol II" or 890 Silicone

(b) Primer: use manufacturer's recommended primer

(c) Backer rod: Dow "Ethafoam"

(d) Bond breaker: 3M #226, 480, 481, 710; Valley Industrial Products #90; or Dow "Ethafoam"

(3) Dow Corporation

(a) Sealant: Dow 790 series sealants (790, 791, 795)

(b) Primer: use manufacturer's recommended primer

(c) Bond breaker: 3M #226, 480, 481, 710; Valley Industrial Products #90; or Dow "Ethafoam"

(4) Sonneborn Corporation

(a) Sealant: Sonneborn 150 sealant

(b) Primer: use manufacturer's recommended primer

(c) Bond breaker: 3M #226, 480, 481, 710; Valley Industrial Products #90; or Dow "Ethafoam"

(5) Sika Corporation

(a) Sealant: Sika LM 15

(b) Primer: use manufacturer's recommended primer

(c) Bond breaker: 3M #226, 480, 481, 710; Valley Industrial Products #90; or Dow "Ethafoam"

(6) Alternate sealant as approved in writing by Total Wall, Inc.

2. Sealant must be bonded to the base coat layer of the system, not to the finish.

3. System materials must be dried prior to sealant installation.

4. Color must be selected by the architect.

G. Finish coat must be a 100% acrylic pre-textured and pre-tinted synthetic finish as manufactured by Total Wall, Inc.

2.03. MIXING AND PREPARATION

A. Total Wall T-2000 Base Coat

1. Obtain a clean container for mixing. Do not use contaminated or dirty containers.

2. Add 5 quarts (4.7 Liters) of fresh, potable water to the container.

3. Open a new 50 lb. (22.7 Kg) bag of Total Wall T-2000 Base Coat

4. Using a low speed mechanical mixer, begin stirring while adding the Total Wall T-2000 Base Coat. After all the material is added, continue mixing an additional minute. Being sure to scrape the sides and bottom of the mixing container. Add up to 1 quart (.95 Liters) of additional water to adjust the mixture to a creamy, trowel-grade consistency.

5. Allow the mixture to stand for 15 minutes and mix again on low speed for an additional minute.

6. Begin using product immediately.

B. Total Foam N' Base Coat (an alternative to T-2000 Base Coat)

1. Obtain a clean container for weighing and mixing. Do not use contaminated or dirty containers.

2. Open a new pail of Total Foam N' Base Coat and stir with a low speed mechanical mixer for one minute.
 3. In separate containers, weight equal quantities of Total Foam N' Base and Portland cement.
 4. Using a low speed mechanical mixer, begin stirring the Total Foam N' Base Coat while adding the Portland cement in small increments. Up to 1 quart (.95 Liters) of clean water may be added to enhance workability. After all the Portland cement is added continue mixing on low speed an additional two minutes, being sure to scrape sides and bottom of the mixing container.
 5. Allow the mixture to stand for 15 minutes. Mix again on low speed for an additional minute.
 6. Begin using product immediately.
- C. Total EZ Base NCB (an alternative pre-mixed base coat)
1. The Total EZ Base NCB must be stirred for 1 minute with a low speed mixer until a uniform workable consistency is obtained.
 2. A small amount of water may be added to adjust workability; maximum water addition not to exceed 6 oz (0.177 Liters) per 5-gallon (18.93 Liter) pail. The water must be clean and potable.
 3. No additives or material of any kind, such as rapid binders, antifreeze, accelerators, filters, pigments, etc. must be added unless specified by Total Wall, Inc.
 4. The Total EZ Base NCB must be used immediately after mixing. The container must be kept closed when not in use.
 5. The mixing tool must be cleaned immediately after use.
- D. Total Wall Synthetic Finish Coat
1. The Total Wall Finish Coat must be thoroughly stirred with a clean mixer until a uniform workable consistence is obtained.
 2. A small amount of water may be added to adjust workability. Maximum water addition not to exceed 12 oz (.355 Liter) per 5-gallon (18.93 Liter) pail. The water must be clean and potable.
 3. No additives or material of any kind, such as rapid binders, antifreeze, accelerators, fillers, pigments, etc. must be added unless specified by Total Wall, Inc.
 4. The Total Wall Finish Coat must be used immediately after mixing. The container must be kept closed when not in use.
 5. The mixing tool must be cleaned immediately after use.

2.04. PERFORMANCE REQUIREMENTS

The Total Wall system and its components must meet the following performance requirements:

ASTM E84 Surface Burning	FSI = 10, SDI = 35
ASTM E108 mod. Full Scale Fire Test	Pass (no flame spread)
MIL STD 810D Mildew Resistance (Method 508.3)	28 days - no growth
ASTM E695 Full Scale Impact Loading	No damage
ASTM D968 Sand Abrasion 500 liters, 260 L/ml	No deleterious effects
ATM D2247 Water Resistance	No deleterious effects
ASTM B117 Salt Spray (300 hours)	No deleterious effects
ASTM E96 Water Vapor Transmission	Approx. 14 perms (finish)

ASTM C67 Mod. Saturated Freeze/Thaw (50 cycles)	No deleterious effects
ASTM C297 Tensile Adhesion	No failure in adhesive, base, or finish
ASTM E330 Modified by E72-80 Negative and positive wind load	(Pos. 0.079, Neg. 0.079 Kg/cm ²)
ASTM E331 Wind Drive Rain (5 gal/sq. ft./hr. rain fall plus 65 mph wind)	No penetration
ASTM D2797 Impact resistance	2.5 Newton-Meters
ASTM G23 Accelerated Weathering (2000 hours)	No deleterious effects
ASTM C209 Tensile Bond	26 PSI (1.846 Kg/cm ²)
ASTM C203 Flexural Strength	1.41 cm deflection at 33.4 Kg load

PART 3: EXECUTION

3.01. COMPLIANCE

- A. The installation must be performed strictly in accordance with Total Wall, Inc.'s current literature and current job specifications.

3.02. FRAMING and SHEATHING

- A. Requirements of framing
 1. The framing assembly components must be constructed to meet local code requirements and framing manufacturer requirements.
 2. Wood and steel framing must be a maximum of 16" oc. (40 cm) designed not to exceed L/240 deflection based on stud properties only. Steel framing must be 20 gauge minimum and have a corrosion resistance equal or better to G60 hot dipped galvanized coating.

3.03. INSTALLATION

- A. Mixing
All materials requiring preparation must be labeled; accordingly, the contractor must follow all instructions.
- B. System Terminations
At all system terminations, the system must be terminated with the proper PVC accessory including window head flashing
 1. Weep starter track must be installed at lower terminations and at roof/wall intersections. Attach track to the framing (and through sheathing) using corrosion resistant nails or screws. Butt sections of track together and miter inside and outside corners.

C. Installation of Weather Resistive Moisture Barrier

1. Tyvek StuccoWrap, RainDrop HouseWrap, Weather Trek Wrap or Vortec Drainage Barrier are approved self-venting moisture barriers.

- (1) A moisture barrier must be installed horizontally over sub-sheathing. Attach the moisture barrier to the sheathing with corrosion resistant staples. Lap runs of moisture barrier starting at the bottom and working up, so any water running down the wall cannot get behind the moisture barrier. Runs of moisture barrier must be lapped 6" (15 cm) at vertical laps and 2" (5 cm) minimum at horizontal laps. Wrap the moisture barrier back into the window and door openings by cutting a horizontal slit at the window head and windowsill, then cut vertically down the middle of the rough opening and wrap the moisture barrier back around the jamb openings.
- (2) Moisture barrier must lap over the back of leg of the starter track. Use waterproofing tape to integrate and seal the moisture barrier at penetrations.

- D. Cement board sheathing must be attached with appropriate fasteners and spacing to meet local code requirements and for design wind pressures. Install cement board panels either horizontally or vertically (horizontal is recommended). Precut panels into L-shaped pieces around door and window corners unless control joints are being installed. Stagger vertical joints one stud cavity or greater. Offset cement board panel joints from any sub-sheathing joints. Fasten panels along framing members using screws 6" (15 cm) or 8" (20.5 cm) apart, as required for wind load, with panel ends 3/4" (1.88 cm) onto studs. Drive screws until heads are flush with panel surface. Install any remaining PVC accessories, such as casing bead, window angle bead and control joint.

E. Total Wall Base Coat

1. The surface of the cement board must be inspected as follows:

- (1) For flatness, use a straight edge.
- (2) Pocked areas may be built up to 1/4" (6.35 mm) with base coat to form a flat surface.
- (3) Damaged areas and foreign materials must be addressed prior to application of the base coat or finish.
- (4) Using a plastering or margin trowel, apply Total Wall base coat to the cement board sheathing joints and embed a minimum 4.5" (11.25 cm) wide 4.3 oz detail mesh. Allow to dry to reduce joint read-through and joint cracking.
- (5) Using a steel trowel, apply the Total Wall soft coat base coat to the surface of the cement board to a minimum thickness of approximately 1/16" (1.59 mm).
- (6) In this step, the entire cement board surface is fully meshed. The reinforcing mesh must be embedded immediately into the wet base coating using a steel trowel. Working from the center to the edges while smoothing out wrinkles, the surface of the base coating must be smoothed with a trowel until the reinforcing mesh is fully embedded. Apply additional Total Wall base coat as necessary so the color of the reinforcing mesh is not visible, and the pattern is not visible or is barely visible beneath the surface of the basecoating.
- (7) The reinforcing fabric pieces must be lapped a minimum of 2.5" (63.5 mm) on all sides, and the sheathing board joints must be covered with the full field of reinforcing mesh in addition to the strip of detail mesh. Butterflies of detail mesh (9" x 12") (22.5 cm x 30 cm) must be embedded in base coat at door and window corners. Omit if control joints have been installed.
- (8) A minimum period of 18 hours must lapse to allow the Total Wall base coat to cure. The base coat must be protected from damage and weather while curing.
- (9) Details of the installation of the base coat at the ends of walls, windows, insulation board edges, corners, etc., must be in accordance with Total Wall, Inc.'s latest detailed installation instructions and current job drawings.

F. Finish

1. The Total Wall Synthetic Finish Coat must be applied continuously and in one operation to the entire wall surface or to a logical break point. A wet edge must be maintained. The Total Wall finish coat must not be allowed to set up in a distinct area. Sufficient manpower, scaffolding, and equipment must be employed to ensure a continuous operation and a uniform appearance. In some instances, a primer may be used over the base coat ahead of the finish coat. The primer may be T-Wall Lastic Smooth or other material only as approved by Total Wall, Inc. in writing.
2. Work must proceed toward natural wall stops and corners.
3. A clean stainless-steel trowel must be used.
4. Always apply the Total Wall finish to the dry base coat or dry primer maintaining a wet edge. The thickness of the Total Wall finish coat must be in accordance with Total Wall, Inc.'s specifications and job requirements to achieve the desired result.
5. Immediately texture the finish with the appropriate float, trowel or other tool required to achieve the specified texture and appearance. All applicators must use the same design tool, equipment, timing, and technique to achieve uniformity.
6. Certain finishes may be spray applied. Total Wall, Inc. must be contacted for specific information for a project if a spray application is indicated.
7. The finish must be protected from contamination, weather, and damage for a minimum of 24 hours.
8. Do not wrap the finish into expansion joints or isolation joints. The primer and sealant must be bonded directly to the base coat in the joint.

G. Sealant

Ensure that proper backer rod, primer and sealant are installed at all required locations, such as expansion joints and isolation joints, in accordance with Total Wall, Inc. details and the sealant manufacturer's specifications.

3.04. JOB SITE CLEANUP

- A. All excess Total Wall system material must be removed from job site by the applicator.
- B. All surrounding areas where Total Wall DEFS has been applied must be left free of debris and foreign substances.

3.05. INSPECTION

- A. The Total Wall applicator, a representative of the property owner's team and a Total Wall representative must inspect the DEFS installation and prepare an inspection summary with a copy to Total Wall, Inc.
- B. If an independent DEFS inspector is used, a copy of the final report must be submitted to Total Wall, Inc.

END OF SPECIFICATION