

100% ACRYLIC TEXTURED COATINGS



MASTER GUIDE SPECIFICATION

**MANUFACTURER SPECIFICATION
SECTION 09960**

Carrara: TAPE & FLOAT STUCCO™

PART I – GENERAL

1.01 This document contains all the Manufacturer's requirements for the proper design, use, and installation of Carrara Tape & Float Stucco. The primary use of Carrara is the application of exterior weather resistant coatings and texture finishes over a number of approved substrates.

- A. The Carrara components are a combination of coatings and finishes and include an acrylic primer, an acrylic base coat, and an acrylic texture coat in combination with sealers, tapes, levelers, and other supporting products.
- B. The Carrara components shall utilize acrylic primer, base coat, tape, finish coat, and texture coat in such combinations as necessary to render a finish that is weather resistant, producing the design and texture as specified by the Architect. The combination of components along with supporting products shall be in accordance with GLOBAL COATINGS specifications for the particular wall surface as listed under section 3.03 (Installation).
- C. Cautions and Limitations:
1. Carrara Tape & Float stucco system is intended for use on vertical above grade walls in residential and light commercial or institutional construction.
 2. **Hair line cracking or small ridge lines may occur at seams due to stress induced by framing, settling, and thermal effects. Although not common, this is more typical at horizontal seams.**
 3. **Telegraphing of studs through the finished wall surface may occur in some climates because of the thermal bridging effects of studs.**
 4. **Planar irregularities and waviness may be visible in the finished wall surface due to out of plane studs and other framing inconsistencies. Heavy texture finishes or two coats of texture finish may be required to minimize the above effects.**
 5. **Critical light will tend to exaggerate construction irregularities when coatings are applied directly to sheathing in framed construction.**
- D. Expansion Joints: Design and location of expansion/control joints shall be determined by the design professional. As a minimum, the following are required for Carrara Tape & Float Stucco over approved exterior panels:
1. Where expansion joints occur in the substrate system;
 2. Where building expansion joints occur;
 3. At floor lines in wood frame construction;
 4. Where Carrara Tape & Float Stucco abuts dissimilar materials;
 5. Where the substrate changes;
 6. Where significant structural movement occurs: at horizontal seams, changes in roofline, building shape or structural system.
- E. Control Joints: Design and location of expansion/control joints shall be determined by the design professional. As a minimum, control joints shall be located at the following locations:
1. At Horizontal Seams;
 2. Wall lengths should not exceed 20 ft. in any direction with a maximum of 160 ft² area with out a control joint;
 3. Length to width ratios of wall areas do not exceed 2-1/2:1.
- F. Flashing: Flashing shall be provided at all roof-wall intersections, windows, doors, chimneys, decks, balconies and other areas as necessary to prevent water penetration behind Carrara Tape & Float Stucco system.

1.02 REFERENCES

- A. ASTM B117 (Federal Test Standard 141A Method 6061) Test Method of Salt Spray (Fog) Testing.
- B. ASTM C150 Specification for Portland Cement.
- C. ASTM C297 Test Method for Tensile Strength of Flat Sandwich Constructions in Flat wise Plane.
- D. ASTM D968 (Federal Test Standard 141A Method 6191) Test Method for Abrasion Resistance of Organic Coatings by Falling Abrasive.
- E. ASTM D3273 Test Method for Resistance to Growth of Mold on Surfaces.
- F. ASTM E84 Test Method for Surface Burning Characteristics of Building Materials.
- G. ASTM E96 Test Method for Water Vapor Transmission of Materials.
- H. ASTM G155 (ASTM G23 or G26) Recommended Practice for Operating Exposure Apparatus (Carbon-Arc Type) With and Without Water, for Exposure of Nonmetallic Materials.

1.03 DESCRIPTION

- A. General: Carrara Tape & Float Stucco is an Acrylic Textured Coating (ATC) consisting of waterproofing components, primers, base coat, Foundation and Finish Tapes, ceramic compound, elastomeric primer and a textured finish.

- B. Design Requirements: Acceptable surfaces for Carrara Tape & Float Stucco include: LP(Louisiana Pacific) Smartside Precision Panels and Trim Boards, Fiber Cement (FC) panels, FC Trim Boards, galvanized metal, cement blocks, Autoclaved Aerated Concrete (AAC), and other dimensionally stable, weather-resistant substrates. Contact Global Coatings, Inc., for recommendations regarding other products.
- C. Vapor Retarders: Use, type and location of vapor retarders, within a wall assembly, is the responsibility of the project designer and shall be noted on the project drawings and specifications.
- D. Projecting surfaces shall have a minimum slope of 6:12 and maximum length of 305 mm (12 in).
- E. The substrate shall be flat and smooth.
- F. The specified substrate shall comply with all applicable code requirements for the construction type (combustible or non-combustible). Details shall conform with proper termination requirements for combustible or non-combustible construction (refer to published details).
- G. Not intended for use below grade. Maintain minimum 4 inches above earth grade and 2 inches above payment. Increase distance above grade for snow regions.
- H. L/360 maximum allowable stud deflection. Space studs 16 inches on center maximum
- I. **Horizontal blocking is required to provide continuous support and attachment of panel substrate perimeter.**
- J. In wood frame construction, provide only Kiln dried or S-Dry wood studs.
- K. Not for use as a parapet coping or for other non-vertical weather exposed surfaces.

1.04 SUBMITTALS

- A. Product Data – The Contractor shall submit to the owner/architect manufacturer's product data sheets describing products, which will be used on this project.
- B. Samples – The Contractor shall submit to the owner/architect two samples of each finish, texture, and color to be used on the project. The same tools and techniques proposed for the actual installation shall be used to prepare the samples. Samples shall be of sufficient size to accurately represent each color and texture to be utilized on the project.

1.05 QUALITY ASSURANCE

- A. Qualifications
 - 1. Producer shall be Global Coatings, Inc. All materials shall be produced or sold by Global Coatings and shall be purchased from Global Coatings or its authorized distributor.
 - a. Materials shall be manufactured at a facility covered by a current ISO 9001:2000 certification. Certification of the facility shall be done by a registrar accredited by the American National Standards Institute, Registrar Accreditation Board (ANSI-RAB).
 - 2. Contractor: Shall be knowledgeable in the installation of Carrara materials and shall be experienced and competent in the application of Tape & Float Stucco.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. All Carrara materials shall be delivered to the job site in the original, unopened packages with labels intact.
- B. Upon arrival, materials shall be inspected for physical damage, freezing or overheating. Questionable materials shall not be used.
- C. Materials shall be stored at the job site in a cool, dry location, out of direct sunlight, protected from weather and other damage. Minimum storage temperature shall be 7 °C (45 °F) for all Carrara products.

1.07 PROJECT CONDITIONS

- A. Environmental Requirements
 - 1. Application of wet materials shall not take place during inclement weather unless appropriate protection is provided. Protect materials from inclement weather until they are dry.
 - 2. At the time of application, the air and wall surface temperatures shall be minimum 7 °C (45 °F) and rising for all Carrara products. These temperatures shall be maintained, with adequate air ventilation and circulation, for a minimum of 24 hours thereafter, or until the products are dry.
- B. Existing Conditions – The Contractor shall have access to electric power, clean water, and a clean work area at the location where the Carrara materials are to be applied.

1.08 SEQUENCING AND SCHEDULING

- A. Installation of the Carrara Tape & Float Stucco shall be coordinated with other construction trades.
- B. Coordinate installation of Carrara Wall coatings with related work specified in other sections to ensure that the wall assembly is protected to prevent water from getting behind the wall. The cap flashing shall be installed as soon as possible after the finish coat has been applied. When this is not possible, temporary protection shall be provided immediately in this area.
- C. Sufficient manpower and equipment shall be employed to ensure a continuous operation, free of cold joints, scaffold lines, texture variations, etc.

1.09 LIMITED MATERIALS WARRANTY

A. Global Coatings, Inc., shall provide a written limited warranty against defective materials, upon written request. Global Coatings, Inc., shall have no liability for the application of the materials. Global Coatings shall make no other warranties, expressed or implied. Global Coatings is not liable for incidental or consequential damages. Contact Global Coatings, Inc. for complete details.

1.10 DESIGN RESPONSIBILITY

A. It is the responsibility of both the specifier and the purchaser to determine if a product is suitable for their intended use. The designer selected by the purchaser shall be responsible for all decisions pertaining to design, detail, structural capability, attachment details, shop drawings, and the like. Global Coatings has prepared guidelines in the form of specifications and details to facilitate the design process only. Global Coatings is not liable for any errors or omissions in design, detail, structural capability, attachment details, shop drawings, or the like, whether based upon the information prepared by Global Coatings or otherwise, or for any changes which purchasers, specifiers, designers, or their appointed representatives may make to Global Coatings, Inc. published comments.

1.11 MAINTENANCE

- A. Maintenance and repair shall follow the procedures noted in Carrara Master Guide Specifications.
- B. All Carrara products are designed to minimize maintenance. However, as with all building products, depending on location, some cleaning may be required.
- C. Sealant and flashing shall be inspected on a regular basis and repairs made as necessary.

PART II PRODUCT**2.01 MANUFACTURER:**

All components of the Carrara Tape & Float Stucco shall be obtained from Global Coatings, Inc. or its authorized distributors.

2.02 MATERIALS & PROPERTIES

- A. **METAL PRIMER**, as supplied by Global Coatings, shall be an all-acrylic polymer combined with special ingredients to prevent flash rusting over metal and to bond tenaciously to galvanized metal, aluminum, steel and re-paintable steel surfaces.
- B. **COLORFLEX** primer, as supplied by Global Coatings, shall be an all acrylic emulsion coating with a minimum 55% vol. solids & 400% elongation at 0 ° F. with excellent adhesion to: concrete, masonry, AAC, cement block, wood & plaster board. It shall be provided in a color tint to match that of the **Texture** finish.
- C. **ColorTex-AE** primer, as supplied by Global Coatings, shall be a water based acrylic-epoxy "roller applied scratch coat", ideal for LP Smartside panels, concrete, masonry, stucco, plaster, median barriers and retaining walls.
- D. **FINE, MEDIUM, WORM & SONORA SAND TEXTURE**, as supplied by Global Coatings, shall be an all-acrylic polymer mastic combined with varying size mineral aggregates, antibacterial agents, hydrophobic additives, titanium dioxide and colorants to result in a uniform weatherproof attractive texture finish.
- E. **Foundation Tape**, as supplied by Global Coatings, shall be 2-1/4" wide PVC fiber composite material with holes to promote encapsulation of AcraCream binder, quick drying and easier detection of voids and applied on all vertical & horizontal panel seams.
- F. **FINISH TAPE**, as supplied by Global Coatings, shall be a 4" wide stitch-bonded polyester reinforcing fabric for overlay and reinforcement of Foundation Tape with AcraCream on all seams, joints and other detail areas.
- G. **ACRACREAM**, as supplied by Global Coatings, shall be a 100% acrylic-rubber waterproof elastomer specifically developed to seal and waterproof Foundation & Finish Tape and create a rubber-like gasket for all joints and seams on panel. concrete and masonry exteriors exhibiting the following unique properties: Vol. Solids: 66%; Elongation: 200%(+/-25%); Tensile Strength: 325 psi (+/-25).
- H. **FILL "N" BUILD**, as supplied by Global Coatings, shall be a light weight, heavy bodied, 100% acrylic fortified with ceramic, for filling and leveling corner beads, columns, arches, and nail holes.
- I. **MICROSEAL**, as supplied by Global Coatings, shall be a single package of acrylic copolymer formulated as a clear glaze, non-yellowing film to reject dirt and pollution.
- J. **AcraBond™**, as supplied by Global Coatings, shall be liquid polymer based material which is field-mixed in a 1:1 ratio by weight with Portland Cement.
- K. **AcraBond Bag Mix**, as supplied by Global Coatings, shall be a dry blend cementitious, co-polymer based product, field mixed with water.

2.03 COMPONENTS

A. Waterproofing (at openings and penetrations)

1. Carrara AcraCream™: An Acrylic Rubber Joint Sealant, non-cementitious, water based material.
2. Carrara Foundation Tape; A 2" wide PVC fiber composite material with holes to promote encapsulation of AcraCream binder, quick drying and easier detection of voids and applied on all vertical & horizontal panel seams.
2. Carrara Finish Tape: A 4" wide stitch-bonded polyester reinforcing fabric for overlay and reinforcement of Foundation Tape with AcraCream on all seams, joints and other detail areas.

B. Base Coat/Adhesive

1. Cementitious: A liquid polymer based material, which is field-mixed in a 1:1 ratio by weight with Portland Cement.
 - a. AcraBond® Poly-Based Leveling & Base Coat .
2. Ready mixed: A dry blend cementitious, copolymer based product, field mixed with water.
 - a. Shall be AcraBond™ Bag Mix.

C. Reinforcing Mesh(s):

Shall be a balanced open weave, glass fiber fabric treated for compatibility with cementitious products as noted in Paragraph 2.03 B-2 above.

D. Finishes & Coverage:

Shall be the type, color, and texture as selected by the owner/architect and shall be one or more of the following:

1. Carrara Texture: Water based, acrylic coatings with integral color and texture, and formulated with acrylic, water-based chemistry; mold & mildew resistant.
 - a. Sonora Sand Texture®: Free style very fine sand texture: 50 -120 F2 / 5-gal pail (varies by application)
 - b. Carrara Fine Texture®: Fine texture: 120 - 150 F2 / 5-gal pail
 - c. Carrara Medium Texture: Medium texture: 100 - 115 F2 / 5-gal pail
 - d. Carrara Worm Texture®: Medium swirl texture: 120 - 150 F2 / 5-gal pail

E. Coatings, Primers and Sealers:

Metal Primer, ColorFlex™, Fill-N-Build™, AcraCream™, AcraBond™, MicroSeal™, ColorTex-AE™.

F. Color:

The Architect shall select the color of the Carrara texture from standards established by Global Coatings. Color and/or texture not selected from those pre-established standards will be designated as custom color and texture.

2.04 PERFORMANCE REQUIREMENTS

Carrara Tape & Float Stucco shall have been tested for the following environmental conditions. The properties shall meet or exceed these listed values:

1. Mildew/Fungus Resistance: ASTM D3273; Passed
2. Accelerated Weathering: ASTM G155 - 3000 hrs.; Passed
3. Salt Spray Resistance: ASTM B117 – 1300 hrs.; Passed
4. Abrasion Resistance: ASTM D968; Passed
5. Absorption, Freeze/Thaw: ASTM C67 – 60 Cycles; Passed
6. Water Penetration: ASTM E331; Passed
7. Flame Spread: ASTM E84 – Flame Spread Index less than 25, Smoke Developed less than 450.
8. Water Vapor Transmission: ASTM E96 – Vapor Permeable
9. Tensile Adhesion: ASTM D897; Average 22.4 psi on Gypsum Board; 298 psi on concrete substrate

PART III EXAMINATION

3.01 Examination of Substrate

- A. Prior to application of Carrara Tape & Float Stucco, the Contractor shall ensure that the substrate is as listed in Section 1.03-B.
- B. Prior to the installation of Carrara Tape & Float Stucco, the Architect or General Contractor shall insure that all needed flashing and other waterproofing details have been completed, if such completion is required.
 1. When wood framed construction is used, flashing or sill pans shall be installed prior to window frame installation so as to collect and direct water to the exterior of the reinforced base and finish coat.
 2. Metal flashing shall be installed at heads of openings.
 3. Continuous metal flashing shall be installed at heads of ganged windows.
 4. Flashing shall be installed at roof-lines in a manner to prevent any intrusion of water behind any panels or structural details. This shall include the use of roof kick-out flashing at roof terminations.
 5. When added details are applied to the chimney, a chimney cricket shall be installed.

6. Wooden decks must be flashed before Carrara is installed.
- C. The Contractor shall notify the General Contractor and/or Architect and/or Owner of all discrepancies. Work shall not proceed until discrepancies have been corrected.

3.02 SURFACE PREPARATION

- A. The substrate shall be free of foreign materials such as dust, dirt, moisture, frost and any other materials that inhibit adhesion.
1. Prior to commencement of any work in this section, the Carrara applicator shall, together with the general contractor, inspect all existing surfaces over which the CARRARA stucco is to be applied. If it is determined that the surface conditions are not acceptable to receive Carrara coatings and finishes, then the general contractor shall effect such corrective work in this section.
 2. Concrete and concrete composition wall panels must be exterior grade, resistant to extended exposure to moisture, humidity, salt air and termites. It must be non-combustible and warranted not to crack, rot or delaminate for a minimum of 10 years.
 3. All fasteners, including nails or screws, must be exterior grade (corrosion resistant); staples are unacceptable. Fasteners, when attached, must be flat to the plane of the panel but not driven through the panel. It is recommended that fasteners be placed 6 inches on center at panel edges and 6 to 12 inches on center at intermediate supports.
 4. Substrate must be clean, sound, smooth and true to plane within a 1/8th-inch tolerance. The general contractor must honor voids at windows, doors, soffit, etc., to absorb thermal changes within the panels. Panels at the corners must be joined by the overlap method, resulting in a flush corner for application of the Corner Bead. ***Silicone sealant is considered a contaminant and may not be used to correct or seal joints or voids.*** To weather proof around windows, doors and other wall penetrations, it is recommended to first use a foam backer rod for openings greater than 1/4" before applying a weatherproof water based sealant. The use of a permanently flexible, crack-proof, all acrylic exterior caulk with antimicrobial protection meeting ASTM C 920, class 25 specification such as DAP ALEX Ultra 230 is recommended.

3.03 INSTALLATION

The Carrara materials shall be mixed and applied in accordance with current published Carrara Product Technical Data.

A. Expansion Joints: Continuous expansion shall be installed at the following locations:

1. At building expansion joints.
2. At substrate required expansion joints.
3. Where Carrara coatings abut other materials.
4. Where significant structural movement occurs, such as: horizontal seams, floor lines in wood frame construction, rim joists, changes in building shape and/or its structure.
5. Where substrate abuts a dissimilar substrate.

B. Insulated Concrete Forms (ICF)

1. Surface Preparation:
 - a. The ICF shall be manufactured with buried webs or exposed webs (additional layer of EPS required) and consist of molded EPS. Extruded ICF must include a layer of EPS attached to the ICF.
 - b. The surface of the ICF or EPS layer shall be prepared as to be flat and smooth.
 - c. The entire surface of the ICF or EPS layer shall be rasped to remove any UV degradation and provide a smooth planar surface.
 - d. All voids and gaps greater than 1.6 mm (1/16 in) in the ICF or EPS layer shall be slivered and filled using additional pieces of insulation. Note: base coat material shall not be used for leveling. The wall surface must be brought into plane prior to applying coatings.
 - e. Where required, provision shall be made for termite control and inspections along the base of the wall. Consult ICF manufacturer regarding proper treatment at grade.
2. Install additional layer of EPS insulation board when specified:
 - a. To face of molded ICF (if applicable) use AcraCream™ Acrylic-Rubber Joint Sealant or use mechanical fasteners anchored in attachment strips in the ICF to satisfy structural requirements.
 - b. To face of extruded ICF (required) using mechanical fasteners anchored in attachment strips in the ICF to satisfy structural requirements.
3. Apply edge wrap using detail reinforcing mesh embedded in base coat at all ICF and EPS terminations.
4. Install all EPS trim by adhering to the existing ICF using AcraCream™, Joint Sealant and allow to dry.
5. Apply AcraCream™ Acrylic-Rubber Joint Sealant with imbedded Finish tape to waterproof all windows, doors, joints, seams and other building penetrations in accordance with product data installations.

6. Apply a layer of the specified reinforcing mesh embedded in wet base coat mixture over the entire wall surface area, trowel smooth and allow to dry to the touch. Lap mesh 2 ½" (64mm) minimum on all sides. Apply a second layer of base coat to achieve a total base coat thickness of 1/8 inch (3.1mm). Refer to AcraBond™ printed product tech data.
7. Reinforcing Mesh shall be continuous through all interior and exterior corners extending beyond the corner a minimum of 12" from both directions creating a minimum of two layers of standard reinforcing mesh on all interior and exterior corners.
8. Allow the base coat mixture to cure a minimum of 24 hours until completely dry. Cool, humid conditions may require longer cure times.
9. Apply ColorFlex or ColorTex-AE primer to the dry base coat. The Primer shall be tinted the same color as the Texture finish that's applied over the ColorFlex primer. Allow to dry 4-6 hours before applying Carrara Textured finish coat.
10. **CARRARA FINISH TEXTURE** shall be applied in such a manner to achieve the desired texture. See (2.03 D-1).

C. NEW GALVANIZED METAL

1. Examine surface for any contamination such as forming oils or dust. Power wash metal, and if necessary, utilize a detergent cleaner in conjunction with power wash.
2. Apply **CARRARA Metal Primer** primer by airless spray or roller, at the rate of 250 to 300 sq. ft. per gallon. Apply 2-even coats for best results. Primer coat shall have color matched to **CARRARA** texture coat.
3. **CARRARA FINE TEXTURE** shall be applied in such a manner so as to achieve the specified texture. Application may be by texture sprayer, trowel, brush, free-style, knife, etc. Application rates will vary according to the surface profile (corrugated panels may account for 15 – 30% additional actual surface area to be coated compared to flat surfaces). Heaviness of texture and application technique will also affect coverage. Estimated spray coverage is 125 – 175 sq. ft. per 5-gal pail; see 2.03 D-1 for estimated trowel coverage. Dry time to touch is 4 – 6 hours. *Note: A darker Texture color is better than a lighter color for hiding and camouflaging the corrugation profile.*

D. PRE-PAINTED STEEL – Good Condition, no rust.

1. Examine surface for any contamination. Power wash surface, and if necessary, utilize a detergent cleaner in conjunction with power wash.
2. Apply **CARRARA METAL PRIMER** base coat at the rate of 250-300 sq. ft. per gallon, in multiple passes, so as to obtain full coverage. Apply 2-even coats for best results. **METAL PRIMER** shall be color matched to **CARRARA** texture coat.
3. **CARRARA FINE TEXTURE** shall be applied in such a manner to achieve the desired texture. See (3.03 C-3)

E. PRE-PAINTED OR GALVANIZED STEEL – Partially Rusted Condition.

1. Examine surface of metal and any fasteners for rust or other contamination. Power wash surface, and if necessary, utilize a detergent cleaner in conjunction with power wash.
2. Physically abrade any rust area to a tight surface, removing any base particles. Spot prime rusted fasteners and flash rusted areas with **CARRARA METAL PRIMER**. Apply **CARRARA METAL PRIMER** over total area at rate of 200 to 250 sq. ft. per gallon. Heavily rusted areas and where rust bleed-through is evident should be primed with a solvent-based sealer recommended by Global Coatings.
3. **CARRARA FINE TEXTURE** shall be applied in such a manner to achieve the desired texture. See (3.03 C-3)

F. CONCRETE - New.

1. Examine the new surface for any contaminants such as for release agents, soils, efflorescence or other adhesion inhibiting substances. Power wash surface, and if necessary, utilize a detergent cleaner in conjunction with power wash.
2. Apply **ACRACREAM & FOUNDATION/FINISH TAPES** to joints until a level surface has been achieved. Grind off any protrusions greater than 1/16 inch before application of AcraCream. Note: any protrusion may remain if Architect allows profile to show.
3. Apply **COLORFLEX** or **ColorTex-AE** primer at the rate of 200 - 250 sq. ft. per gallon, in two (2) passes, so as to obtain full even coverage. Allow to dry 4-hours before applying Carrara texture.

Goal: when dry, the ColorFLEX or ColorTex-AE primed wall should look even and consistent with no color variations.

4. **CARRARA FINISH TEXTURE** shall be applied in such a manner to achieve the desired texture. See (2.03 D-1)

G. CONCRETE - Painted.

1. Examine the painted surface for any loose or peeling surface. Power wash surface, and if necessary, utilize a detergent cleaner in conjunction with power wash.
2. Remove any and all loose paint particles to form a tightly adhered surface. If there is any doubt as to adhesion, the paint or coating must be totally removed.

- a. Apply Primer: same as (3.03 F-3)
- b. **CARRARA FINISH TEXTURE** shall be applied in such a manner to achieve the desired texture: (2.03 D-1)

H. FIBER CEMENT PANELS

The performance and warranty of Fiber Cement panels is the sole responsibility of the fiber cement panel manufacturer and to be installed as per manufacturers written directions & guidelines. The recommendation for proper method of attachment and substrate preparation is the sole responsibility of the general contractor or architect. Note: due to flexing and warping of wood studs, it is not recommended to apply a fiber cement panel direct to wood studs*. Use OSB, plywood sheathing or other approved exterior sheathing under the fiber cement panel. Stapling is not an approved method of attachment.

Note: the only panel that is both APA approved for single wall construction (Direct-to Studs) and for Carrara Tape & Float Stucco is **Lp Smartside Precision Panel(see Section J).*

Panel edges are to be examined for uniformity of thickness. Any flaws or unevenness in thickness at the edges, between panels, shall be corrected by the utilization of Carrara AcraCream acrylic rubber elastomer with Carrara Foundation & Finish tape. Secure to studs with corrosion resistant screws or nails as per manufacturer's guidelines as well as previous requirements, limitations and cautions previously described in sections 1.01 - 1.11 including the following:

1. All Fiber-Cement panels must include a weather-resistant barrier under the panel.
2. Fiber-Cement panels must be installed with it's long dimension oriented vertically, not exceeding 3-stories in height.
3. All Fiber-Cement Panel Siding joints must occur at framing members. Horizontal blocking is required to provide continuous support and attachment of panel substrate perimeter.
4. Vertical joints: install panels as per manufacturers guidelines.
5. Horizontal joints (Non-Treated/Exposed): provide expansion joints, reveals, trim bands or Z-flashing at all horizontal joints (ex: at floor lines in wood frame construction, multi-story, etc) to control for ridge lines, and hairline cracking. Global Coatings assumes no responsibility for water infiltration.
6. Kick-out flashing is required where the roof intersects a side wall and above a window jam to deflect water away from the siding.
7. All outside corners shall receive a nailed or screwed Galvanized Metal or Plastic Corner Bead.
8. Hot-dipped galvanized nails are recommended; stainless steel fasteners when near ocean, lakes & very humid climates. Global Coatings isn't responsible for the corrosion resistance of fasteners.
9. Corner Bead shall be leveled utilizing Foundation & Finish Tape with Carrara AcraCream (preferred) or Fill "N" Build (FNB).
10. Joint & Seam Treatment:
 - a. Use a 4-6" Mud knife to lay down the 1st pass of AcraCream for the Foundation Tape.
 - b. Lay the Foundation tape into the AcraCream & pull the knife down the Tape to remove any air bubbles.
 - c. Make sure the Foundation tape is flat and fully adhered.
 - d. Using an 8-10" Mud knife, lay a 2nd pass of AcraCream to cover the Foundation tape and immediately center the Finish Tape over the Foundation tape.
 - e. Pull the knife down the Finish Tape making sure the tape is flat and fully adhered.
 - f. Float a light coat of AcraCream, 9"-12" --**on each side of the butt joint**, to minimize any center bump. Total float should be 18-24" (similar to a drywall butt joint). Apply enough AcraCream to hide the black reinforcing threads of the Finish tape.
 - g. Don't overlap the Foundation tape at the intersection of horizontal & vertical seams.
11. Allow the ACRACREAM and Foundation/Finish tapes to cure overnight before applying ColorFlex or ColorTex-AE primer & Textured Finish coat. Spot-float the nail or screw heads with AcraCream or FNB until a smooth and level surface has been achieved. A uniform wall appearance is dependent on how smooth and level the joints and seams are AND the volume and uniformity of the Finish Texture.
12. Apply **COLORFLEX OR COLORTEX-AE** primer coat over the full surface of the wall, with a 9-inch roller or sprayer, as previously specified in section (3.03 F-3).
13. **CARRARA FINISH TEXTURE** shall be applied in such a manner to achieve the desired texture: See, (2.03 D-1).

Note: Once the ColorFlex or ColorTex-AE primer is dry, examine the wall for imperfections and smoothness. To correct, simply apply a light coat of AcraCream over the Primer and re-coat the Primer. Goal: to make the exterior wall look like a perfectly painted interior wall, before the Texture coat is applied.

Note: It is required that a Permeable Weather Resistant Barrier be installed under the concrete panel together with **kick-out flashing, trim flashing and urethane caulk** to dissipate incidental water penetration and allow moisture vapor to escape. Global Coatings will assume no responsibility for water infiltration.

I. MASONRY – NEW OR PAINTED (BLOCK OR BRICK).

1. The CARRARA Tape & Float Stucco texture will not hide the profile of the block or brick points. The various textures will diffuse the profile, thus changing the surface to a new look.
 - a. Preparation: same as (3.03 F-1)
 - b. Apply Carrara Primer: same as (3.03 F-3)
 - c. Apply Carrara Texture: same as (2.03 D-1; 3.03 C-3)

2. If a smooth finish is desired, Carrara AcraBond polymer cement base-coat must first be applied. The use of reinforcing mesh is recommended but not required, for greater crack & impact resistance.
 - a. Preparation: same as (3.03 F-1)
 - b. Apply AcraBond & Mesh: same as (3.03 B-6, B-8)
 - c. Apply Carrara Primer: same as (3.03 F-3)
 - d. Apply Carrara Texture: same as (2.03 D-1; 3.03 C-3)

J. Lp-Smartside Precision Panels & Trim

1. **General:** The performance and warranty of Lp Smartside Panels & Trim is the sole responsibility of the panel manufacturer and to be installed as per manufacturers written directions & guidelines. The recommendation for proper method of attachment and substrate preparation is the sole responsibility of the general contractor or architect.
 - a. **Storage:**
 - Store off the ground, on a flat surface, under a roof or separate waterproof covering.
 - Keep siding clean and dry. Inspect prior to application.
 - Allow siding to adjust to atmospheric conditions before application.
 - b. **Stud Spacing:**
 - When applying siding directly to framing members or on walls without structural sheathing, space studs no farther apart than the span rating indicated on the product trademark.
 - Precision Series 3/8" and 7/16" smooth panel siding must be installed on 16" OC framing only. When installing on 24" OC framing, Precision Series 19/32" smooth panel siding is required.
 - c. **Moisture:**
 - As with all wood products, do not apply engineered wood siding to a structure having excessive moisture conditions such as drying concrete or plaster. If such conditions exist, the building should be well ventilated to allow it to dry prior to the application of the siding.
 - Siding must not be applied to green or crooked structural framing members. Do not apply siding over rain-soaked or buckled sheathing materials.
 - Gutters are recommended for control of roof water run off.
 - d. **Vapor Retarder/Weather Barrier:**
 - A properly installed breathable water-resistive barrier is required behind the siding.
 - Consult your local building code for details.
 - Global Coatings nor LP will assume responsibility for water penetration.
 - e. **Gaps & Sealants:**
 - Seal all gaps with a high-quality, non-hardening, paintable sealant with a minimum stated service life of 30 years. Follow the sealant manufacturer's instructions for application.
 - f. **Flashing, Windows, Doors & Openings:**
 - All openings must be properly sealed or flashed in a manner that prevents moisture intrusion or buildup.
 - Siding applied adjacent to porches, patios, walks, etc. must have a clearance of at least 1" above any surface. The surface must be sloped or otherwise designed to provide proper drainage so the siding is at no time directly exposed to standing water.
 - g. **Trim:** Trim should be thick enough so the siding does not extend beyond the face of the trim.
 - Trim and fascia must be applied in a manner that will not allow moisture intrusion or water buildup.
 - LP® SmartSide® Lap siding and LP SmartSide Panel siding are not designed and/or manufactured to be used as trim or fascia. LP SmartSide trim and fascia are available in a variety of dimensions.

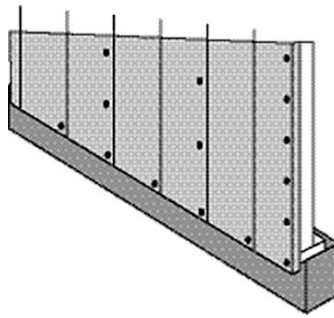
h. Nailing Instruction (Stapling is not an approved method of attachment) :

- Use minimum 6d, corrosion resistant according to ASTM 641, box style nails for 3/8" and 7/16" panels and minimum 8d for 19/32" panels.
- Penetrate studs or studs and wood sheathing a combined minimum of 1-1/2."
- * Nail a minimum 3/8" from edge, 12" max. field nail spacing and 6" max. perimeter nail spacing.

- * Nail corner first and maintaining 6" max. perimeter nail spacing. Do not let panel contact masonry
- * Maintain at least a 6" min. ground clearance

i. Caution:

- 3/8" and 7/16" panels must be installed on 16" OC framing only. When installing on 24" OC framing, 19/32" panels are required.
- Backside of panel must not come in contact with masonry foundation.
- Do not force siding into place. Maintain the illustrated 1/8" space behind the joint to allow for expansion while the panel equilibrates with the local environment.
- LP® SmartSide® Panel siding must not be attached by stapling.



IN HIGH MOISTURE CONDITIONS, SUCH AS THOSE ASSOCIATED WITH PACIFIC NORTHWEST, IT IS RECOMMENDED TO ACCLIMATE THE SIDING AT THE JOB SITE FOR 48 HOURS PRIOR TO INSTALLATION

2. Carrara Installation on Lp-Smartside Precision Panel

The performance and warranty of Lp-Smartside Precision panels is the sole responsibility of the panel manufacturer. The recommendation for proper method of attachment and substrate preparation is the sole responsibility of the general contractor or architect. Lp-Smartside Precision panels may be applied over approved exterior sheathing or Direct-to-Studs (DTS).

Note: the only panel that is both APA approved for single wall construction (Direct-to Studs) and for Carrara Tape & Float Stucco is **Lp Smartside Precision Panel.*

Panel edges are to be examined for uniformity of thickness. Any flaws or unevenness in thickness at the edges, between panels, shall be corrected by the utilization of Carrara AcraCream acrylic rubber elastomer with Carrara Foundation & Finish tape. Secure to studs with corrosion resistant screws or nails as per manufacturer's guidelines as well as previous design requirements, limitations and cautions previously described in Sections 1.01 - 1.11 including the following :

1. All Lp-Smartside panels must include a weather-resistant barrier under the panel.
2. Lp-Smartside panel siding must be installed with its long dimension oriented vertically, not exceeding 3-stories in height.
3. **All LP Smartside Panel Siding joints must occur at framing members. Horizontal blocking is required to provide continuous support and attachment of panel substrate perimeter.**
4. Joints: install with a 1/8" gap between all panel joints.
5. Horizontal joints (Non-Treated/Exposed): provide expansion joints, reveals, trim bands or Z-flashing at all horizontal joints (ex: at floor lines in wood frame construction, multi-story, etc) to control for ridge lines, and hairline cracking. Global Coatings assumes no responsibility for water infiltration.
6. Kick-out flashing is required where the roof intersects a side wall and above a window jam to deflect water away from the siding.
7. All outside corners shall receive a nailed or screwed Galvanized Metal or Plastic Corner Bead.
8. Hot-dipped galvanized nails are recommended; stainless steel fasteners when near ocean, lakes & very humid climates. Global Coatings isn't responsible for the corrosion resistance of fasteners.

9. Corner Bead shall be leveled utilizing Foundation & Finish Tape with Carrara AcraCream (preferred) or Fill "N" Build (FNB).
10. Joint & Seam Treatment:
 - a. Use a 4-6" Mud knife to lay down the 1st pass of AcraCream for the Foundation Tape.
 - b. Lay the Foundation tape into the AcraCream & pull the knife down the Tape to remove any air bubbles.
 - c. Make sure the Foundation tape is flat and fully adhered.
 - d. Using an 8-10" Mud knife, lay a 2nd pass of AcraCream to cover the Foundation tape and immediately center the Finish Tape over the Foundation tape.
 - e. Pull the knife down the Finish Tape making sure the tape is flat and fully adhered.
 - f. Float a light coat of AcraCream, 9"-12" --**on each side of the butt joint**, to minimize any center bump. Total float should be 18-24" (similar to a drywall butt joint). Apply enough AcraCream to hide the black reinforcing threads of the Finish tape.
 - g. Don't overlap the Foundation tape at the intersection of horizontal & vertical seams.
11. Allow the ACRACREAM and Foundation/Finish tapes to cure overnight before applying Carrara Primer and the Textured Finish coat. Spot-float the nail or screw heads with AcraCream or FNB until a smooth and level surface has been achieved. A uniform wall appearance is dependent on how smooth and level the joints and seams are treated AND the volume and uniformity of the Textured Finish coat.
12. Apply **COLORTX-AE PRIMER** over the full surface of the wall, with a 9-inch roller or sprayer, as previously specified in section (3.03 F-3).
13. **CARRARA FINISH TEXTURE** shall be applied in such a manner to achieve the desired texture: same as, (2.03 D-1).

Guideline: Once the Carrara Primer is dry, examine the wall for imperfections and smoothness. To correct, simply apply a light coat of AcraCream over the Primer and re-coat with Carrara Primer. Goal: to make the exterior wall look like a perfectly painted interior wall, before the Texture coat is applied.

Note: *It is required that a Permeable Weather Resistant Barrier be installed under the Lp-Smartside Precision panel together with kick-out flashing, trim flashing and a high-quality, non-hardening, paintable sealant with a minimum stated service life of 30 years so as to dissipate incidental water penetration and allow moisture vapor to escape. Global Coatings will assume no responsibility for water infiltration.*

3.04 FIELD QUALITY CONTROL

- A. The Contractor shall be responsible for the proper application of the Carrara materials.
- B. Global Coatings, Inc. assumes no responsibility for on-site inspections or application of its products.

3.05 CLEANING

- A. All excess Carrara materials shall be removed from the job site by the Contractor in accordance with contract provisions.
- B. All surrounding areas, where Carrara coatings have been installed, shall be left free of debris and foreign substances resulting from the Contractor's work.

3.06 PROTECTION

- A. The Carrara coatings and the project shall be protected from water, freezing temperature, damage and exposure to dust and other contaminants until dry.

DISCLAIMER 707-10

Information contained in this specification conforms to standard detail and product recommendations for installation of Carrara Tape & Float Stucco as of the date of publication of this document and is presented in good faith. Global Coatings, Inc. assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. Failure to install and finish the substrate that Carrara is applied to, in accordance with applicable building codes and manufacturers written instructions, may lead to personal injury, affect system performance, violate local building codes and void the product only warranty.

To ensure that you are using the latest, most complete information, contact:



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