**SenergySurfacing Systems for Insulating Concrete Forms (ICF)**

*Weather resistant surfacing system using a mesh-reinforced base coat and 100% acrylic polymer exterior finish*

**INTRODUCTION**

This specification refers to applications of Senergy Surfacing Systems to Insulating Concrete Forms that are constructed of minimum 1.5 lb density EPS and *do not* utilize any external mechanical ties.

**DESIGN RESPONSIBILITY**

It is the responsibility of both the specifier and the purchaser to determine if a product is suitable for its 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. The Senergy® brand of Master Builders Solutions Construction Systems US, LLC (herein referred to as “Master Builders Solutions”) has prepared guidelines in the form of specifications, typical application details, and product bulletins to facilitate the design process only. Master Builders Solutions 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 provided by Master Builders Solutions or otherwise, or for any changes which the purchasers, specifiers, designers or their appointed representatives may make Master Builders Solutions published comments.

**Designing and Detailing a Senergy Surfacing System**

General: The system shall be installed in strict accordance with current recommended published details and product specifications from the system’s manufacturer. Ensure an accurate scope of work is developed by experts in the building envelope forensics and engineering. Areas such as existing cladding conditions, expansion joints, flashings, moisture management, sealant degradation, etc. must be inspected and addressed prior to the application of the Senergy Surfacing System.

**TECHNICAL INFORMATION**

Consult Master Builders Solutions’ Technical Services Department for specific recommendations concerning all other applications. Consult the Senergy website, senergy.master-builders-solutions.com, for additional information about products, systems and for updated literature.

**PART 1 GENERAL**

**NOTE TO SPECIFIER: Items in blue/underlined indicate a system option or choice of options. Throughout the specification, delete those which are not required or utilized.**

* 1. **SECTION INCLUDES**

1. Senergy products are listed in this specification to establish a standard of quality. Any substitutions to this specification shall be submitted to and receive approval from the Architect at least 10 days before bidding. Proof of equality shall be borne by the submitter.
2. Senergy (ICF) Surfacing System: A surfacing system typically consisting of Senergy: Base Coat, Reinforcing Mesh and Finish Coat.
   1. **COLOR SELECTION**

The use of dark colors must be considered in relation to wall surface temperature as a function of local climate conditions. Select Finish Coat color with a light reflectance value (LRV) of 20% or higher. The use of dark colors (LRV less than 20%) is not recommended with EIFS that incorporate expanded polystyrene (EPS). EPS has a sustained service temperature limitation of approximately 160°F (71°C).

* 1. **RELATED SECTIONS**

Products installed, but not supplied under this section: insulated concrete form; concrete substrate; masonry substrate; cold-formed metal framing; sheet metal flashing and trim; perimeter flashings; sealants; metal support systems and gypsum board.

* 1. **SUBMITTALS**

1. Submit under provisions of Section [01 33 00] [x].
2. Product Data: Provide data on Senergy Surfacing System for ICF materials, product characteristics, performance criteria, limitations and durability.
3. Samples: Submit [two] [ x ] [millimeter] [inch] size samples of Senergy Surfacing System for ICF illustrating finish coat [custom] color and texture range.
4. Certificate: System manufacturer’s approval of applicator.
5. Sealant: Sealant manufacturer’s certificate of compliance with ASTM C1382.
6. System manufacturer’s current specifications, typical details, system overview and related product literature which indicate preparation required, storage, installation techniques, jointing requirements and finishing techniques.
   1. **QUALITY ASSURANCE**
7. Manufacturer: More than 10 years in the EIFS industry, with more than 1000 completed EIFS projects.
8. Applicator: Approved by Master Builders Solutions in performing work of this section.
9. Regulatory Requirements: Conform to applicable code requirements. .
10. Field Samples:
    1. Provide under provisions of Section [01 43 36] [01 43 39].
    2. Construct one field sample panel for each color and texture, [x] [meters] [feet] in size of system materials illustrating method of attachment, surface finish, color and texture.
    3. Prepare each sample panel using the same tools and techniques to be used for the actual application.
    4. Locate sample panel where directed.
    5. Accepted sample panel [may] [may not] remain as part of the work.
    6. Field samples shall be comprised of all wall assembly components including substrate, insulation board, base coat, reinforcing mesh, primer (if specified), finish coat, and typical sealant/flashing conditions.
11. Testing:
12. Senerflex Lamina

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| --- | --- | --- | --- |
| **TEST** | **METHOD** | **CRITERIA** | **RESULTS** |
| Surface Burning | ASTM E84 / UL 723 | Flame spread < 25  Smoke developed < 450 | All components of the system meet Class A performance (FS < 25; SD < 450) |
| Water resistance of Coatings in 100% R.H. | ASTM D2247 | No deleterious effects after 14 days | Pass |
| Salt Fog Resistance | ASTM B117 | No change after 300 hours | Pass |
| Mildew Resistance | Mil. Std. 810B Method 508 | No fungus growth after 28 days | Pass |
| Abrasion Resistance | ASTM D968 | Finish Coat not worn through after 686 liters of falling sand | Pass |
| Accelerated Weathering | ASTM G53 | No deleterious effects after 7500 hours | Pass |
| Accelerated Weathering | ASTM G23 | No deleterious effects after 2000 hours | Pass |
| Tensile Bond | ASTM C297, E2134 | Greater than 15 psi | Pass |

1. Senerflex Tersus Finish

|  |  |  |  |
| --- | --- | --- | --- |
| **TEST** | **METHOD** | **CRITERIA** | **RESULTS** |
| Surface Burning | ASTM E84 / UL 723 | Flame spread < 25  Smoke developed < 450 | All components of the system meet Class A performance (FS < 25; SD < 450) |
| Water resistance of Coatings in 100% R.H. | ASTM D2247 | No deleterious effects after 14 days | Pass |
| Salt Fog Resistance | ASTM B117 | No change after 300 hours | Pass |
| Mildew Resistance | Mil. Std. 810B Method 508 | No fungus growth after 28 days | Pass |
| Abrasion Resistance | ASTM D968 | Finish Coat not worn through after 686 liters of falling sand | Pass |
| Accelerated Weathering | ASTM G53 | No deleterious effects after 7500 hours | Pass |
| Accelerated Weathering | ASTM G23 | No deleterious effects after 2000 hours | Pass |
| Dirt Collection | ASTM D3719 | 61 days at 45° South exposure  Dc Index = 99.0 (100 = Best Performance) | Pass |
| Dirt Pickup Resistance | Miami Dade County TAS 143-95 section 7.8 (modified) | Greater than 90% reflectance retained after dirt pickup | Pass |
| Tensile Bond | ASTM C297, E2134 | Greater than 15 psi | Pass |

1. Reinforcing Mesh Testing and Impact Resistance

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| --- | --- | --- | --- |
| **TEST** | **METHOD** | **CRITERIA** | **RESULTS** |
| Alkali Resistance of Reinforcing Mesh | ASTM E 2098 | Greater than 120 pli (21 dN/CM) retained tensile strength | Pass (all mesh) |
| Date County Impact Test | Protocol 201 | Large & Small Missile | Passed with various wall assemblies |
| FLEXGUARD 4 | ASTM E2486 (formerly EIMA 101.86) | 25-49 inch-lbs. (2.8-5.6 j) | Pass |
| INTERMEDIATE 6 | ASTM E2486 (formerly EIMA 101.86) | 25-49 inch-lbs. (2.8-5.6 j) | Pass |
| INTERMEDIATE 12 | ASTM E2486 (formerly EIMA 101.86) | 50-89 inch-lbs. (5.7-10.1 j) | Pass |
| INTERMEDIATE 12 & FLEXGUARD 4 | ASTM E2486 (formerly EIMA 101.86) | 90-150 inch-lbs. (10.2-17.0 j) | Pass |
| STRONG 15 & FLEXGUARD 4 | ASTM E2486 (formerly EIMA 101.86) | 150 inch-lbs. (17 j) | Pass |
| HI-IMPACT 20 & FLEXGUARD 4 | ASTM E2486 (formerly EIMA 101.86) | 150 inch-lbs. (17 j) | Pass |

* 1. **DELIVERY, STORAGE AND HANDLING**
     1. Deliver, store and handle products under provisions of Section [01 65 00] [01 66 00] [ ].
     2. Deliver Master Builders Solutions materials in original unopened packages with manufacturer’s labels intact.
     3. Protect Master Builders Solutions materials during transportation and installation to avoid physical damage.
     4. Store Master Builders Solutions materials in cool, dry place protected from freezing. Store at no less than 40°F/4°C (50°F/10°C AURORA STONE, AURORA TC-100 and ALUMINA finish).
     5. Store Reinforcing Mesh in cool, dry place protected from exposure to moisture.
  2. **SEQUENCING AND SCHEDULING**

1. Coordinate and schedule installation of Senergy Surfacing System for ICF with related work of other sections.
2. Coordinate and schedule installation of windows, doors, A/C units, air seals etc. if being removed and replaced.
   1. **PROJECT/SITE CONDITIONS**
3. Do not apply Master Builders Solutions material in ambient temperatures below 40°F/4°C (50°F/10°C for AURORA STONE, AURORA TC-100 and ALUMINA Finish). Provide properly vented, supplementary heat during installation and drying period when temperatures less than 40°F/4°C (50°F/10°C for AURORA STONE, AURORA TC-100 and ALUMINA Finish) prevail.
4. Do not apply materials to frozen surfaces.
5. Maintain ambient temperature at or above 40°F/4°C (50°F/10°C for AURORA STONE, AURORA TC-100 and ALUMINA Finish) during and at least 24 hours after Channeled Adhesive CI Design Wall System installation and until dry.
6. Protect applied Senergy Surfacing System for ICF materials from rain for 24 hours or until dry.
   1. **WARRANTY**
7. Provide Master Builders Solutions standard warranty for Senergy Surfacing System for ICF installations under provisions of Section [01 70 00].
8. Comply with Master Builders Solutions project review requirements and notification procedures to assure qualification for warranty.

**PART 2 - PRODUCTS**

* 1. **MANUFACTURERS**

**(NOTE TO SPECIFIER: Items in blue/underlined indicate a system option or choice of options. Throughout the specification, delete those which are not required or utilized. Contact Master Builders Solutions’ Technical Services department for further assistance.)**

1. **Senergy Base Coats: *(Required, Select One or More)***
   1. ALPHA Base Coat: A 100% acrylic based adhesive and base coat, field-mixed with Type I or Type II Portland cement. It has a creamy texture that is easily spread.
   2. ALPHA DRY Base Coat: A dry-mix polymer adhesive and base coat containing Portland cement, and requiring only water for mixing.
   3. XTRA-STOP Base Coat: A 100% acrylic-based, water-resistant adhesive and base coat, field-mixed with Type I or Type II Portland cement.
   4. ALPHA GENIE Base Coat: A 100% acrylic, fiber-reinforced base coat, adhesive and leveler that is field-mixed with Type I or Type II Portland cement.

**NOTE TO SPECIFIER: Portland cement is not used with ALPHA DRY Base Coats.**

1. **Portland cement:** Conform to ASTM C150, Type I, II, or I/II, grey or white; fresh and free of lumps.
2. **Water:** Clean and potable without foreign matter.
3. **Senergy Reinforcing Mesh:** balanced, open-weave glass, fiber reinforcing mesh, twisted multi-end strands treated for compatibility with Senergy Base Coats.

***(Required, Select One or More)***

1. FLEXGUARD 4: Standard weight, 4 oz.
2. INTERMEDIATE 6: Standard/medium weight, 6 oz.
3. INTERMEDIATE 12: Intermediate weight, 12 oz.
4. STRONG 15: Heavy weight, 15 oz. used only in combination with FLEXGUARD 4 or INTERMEDIATE 6.
5. HI-IMPACT 20: Heavy weight, 20 oz. used only in combination with FLEXGUARD 4 or INTERMEDIATE 6.
6. CORNER MESH: Intermediate weight, 9 oz. pre-marked for easy bending, for reinforcing at exterior corners.
7. **COLOR COAT by Master Builders Solutions** **Coating (Optional):**: A 100% acrylic-based coating. It is designed for spray-, roller- or brush-application over EIFS with minimum change in finish texture or sheen.
8. **TINTED PRIMER by Master Builders Solutions** **Primer (Optional):**: A 100% acrylic-based primer that helps alleviate shadowing and enhances performance of the Senergy Wall Systems. Color to closely match the selected Senergy Finish Coat color.
9. **Senergy Finish Coat: *(Required, Select One or More Finishes and Textures)***
10. SENERFLEX Finish: 100% acrylic polymer finishes with advanced technology to improve long-term performance and dirt pick-up resistance; air cured, compatible with base coat; Senergy finish

color [ ] as selected; finish texture:

1. CLASSIC: A medium worm-holed” appearance which is achieved by the random aggregate sizes in the Finish. The “worm-holed” look can be circular, random, vertical or horizontal.
2. COARSE: A heavy “worm-holed” appearance which is achieved by the random aggregate sizes in the finish. The “worm-holed” look can be circular, random, vertical or horizontal.
3. FINE: Utilizes uniformly-sized aggregates for a uniform, fine texture.
4. TEXTURE: Can achieve a wide variety of free-formed, textured appearances, including stipple and skip-trowel
5. SAHARA: Provides a uniform, “pebble” appearance.
6. SENERFLEX TERSUS Finish: Modified acrylic based finish with water repellent properties, compatible with base coat; Senergy finish color [ ] as selected; finish texture:
   1. F1.0: A 1.0 mm uniform aggregate creating a fine texture.
   2. M1.5: A 1.5 mm uniform aggregate creating a medium sand texture.
7. Specialty Finishes: 100% acrylic polymer finishes that can be hand-troweled to simulate stone or create a time-honored, mottled tone-on-tone look that achieves a soft and weathered patina over time.
8. ENCAUSTO VERONA: Utilizes uniformly-sized aggregate to achieve a free-formed, flat texture. It can be used to achieve a mottled look and unlimited tone on tone designs by combining multiple colors.
9. METALLIC: A pearlescent appearance. It utilizes uniformly-sized aggregates for a uniform fine texture.
10. AURORA TC-100: Provides a stone-like appearance, either rough or smooth depending upon application.
11. AURORA STONE: Provides a rough, stone-like appearance.
12. ALUMINA: A factory-mixed, reflective stone finish consisting of colored aggregate and large black mica flakes in a 100% acrylic transparent binder that provides a classic granite or marble-like textured finished appearance.
13. CHROMA Finish: 100% acrylic polymer based finish with integrated high performance colorants for superior fade resistance, compatible with base coat; Senergy Finish color [ ] as selected; finish texture:
    1. F1.0: Utilizes uniformly-sized aggregates for a uniformly fine texture.
    2. M1.5: Provides a uniform “pebble” appearance.
    3. R1.5: A medium “worm-holed” appearance which is achieved by the random aggregate sizes in the Finish. The “worm-holed” look can be circular, random, vertical or horizontal
14. **ANTICOGLAZE by Master Builders Solutions** **Glaze/Stain (Optional):** 100% acrylic antiquing stain product used to impart an ‘old world’ mottled look to textured finishes.

**PART 3 - EXECUTION**

* 1. **EXAMINATION**

**A.** Verify project site conditions under provisions of Section [01039] [ ].

**B.** CMU and/or precast concrete Wall System shall be installed in accordance with specifications, details and per applicable building code requirements.

**C.** Examine surfaces to receive Senergy Surfacing System and verify that substrate and adjacent materials are dry, clean, cured, sound and free of releasing agents, paint, or other residue or coatings. Verify substrate surface is flat, free of fins or planar irregularities. Verify substrate surface is flat, free of fins or planar irregularities greater than 1/4" in 10' (6.4 mm in 3 m).

**D.** Fill large voids and irregularities with appropriate parging or cement mortar materials. ALPHA GENIE BASE COAT can be applied at a maximum thickness of 1/4" (6.4 mm) to fill small voids and help level the surface. Other Senergy Base Coats can be applied at a maximum thickness of 1/8" (3.2 mm), to fill small voids and help level the surface.

**E.** Senergy TINTED PRIMER may be applied to surface prior to Senergy Finish application to reduce suction and the potential for color variation due to varying absorption rates.

**F.** Control/Expansion joint type and placement shall be the responsibility of the architect/engineer.

**G.** Unsatisfactory conditions shall be reported to the general contractor and corrected before application of the Senergy Surfacing System.

* 1. **PREPARATION**

1. All surfaces to receive Senergy EIFS Resurfacing System components must be clean, dry and free of airborne contaminants.
2. Protect all surrounding areas and surfaces from damage and staining during application of Senergy Surfacing System.
3. B. Protect finished work at end of each day to prevent water penetration.
4. C. Fill gaps between insulation board with slivers of insulation board.
5. D. Rasp flush any irregularities of the insulation board greater than 1/16" (1.6 mm).
   1. **MIXING**

General: No additives are permitted unless specified in product mixing instructions. Close containers when not in use. Prepare in a container that is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product. Clean tools with soap and water immediately after use.

**NOTE TO SPECIFIER: Keep only the products in this section which were selected in Section 2.02. Delete those not to be utilized.**

1. **Senergy Base Coat:**
   1. ALPHA Base Coat: Mix base coat with a clean, rust-free paddle and drill until thoroughly blended, before adding Portland cement. Mix one part (by weight) Portland cement with one part base coat. Add Portland cement in small increments, mixing until thoroughly blended after each additional increment. Clean, potable water may be added to adjust workability.
   2. XTRA-STOP Base Coat: Mix base coat with a clean, rust-free paddle and drill until thoroughly blended, before adding Portland cement. Mix one part (by weight) Portland cement with one part base coat. Add Portland cement in small increments, mixing until thoroughly blended after each additional increment. Clean, potable water may be added to adjust workability.
   3. ALPHA GENIE Base Coat: Mix base coat with a clean, rust-free paddle and drill until thoroughly blended, before adding Portland cement. Mix one part (by weight) Portland cement with one part base coat. Add Portland cement in small increments, mixing until thoroughly blended after each additional increment. Clean, potable water may be added to adjust workability.
   4. ALPHA DRY Base Coat: Mix and prepare each bag in a 5-gallon (19-liter) pail. Fill the container with approximately 1.5-gallons (5.6-liters) of clean, potable water. Add ALPHA DRY Base Coat in small increments, mixing after each additional increment. Mix ALPHA DRY Base Coat and water with a clean, rust-free paddle and drill until thoroughly blended. Additional ALPHA DRY Base Coat or water may be added to adjust workability.
2. **COLOR COAT**: Mix the factory-prepared material with a clean, rust-free paddle and drill until thoroughly blended. A small amount of clean, potable water may be added to adjust workability. Do not overwater.
3. **TINTED PRIMER**: Mix the factory-prepared material with a clean, rust-free paddle and drill until thoroughly blended. A small amount of clean, potable water may be added to adjust workability. Do not overwater.
4. **Senergy Finishes -** SENERFLEX, SENERFLEX TERSUS, CHROMA, and ENCAUSTO VERONA Finish: Mix the factory-prepared material with a clean, rust-free paddle and drill until thoroughly blended. A small amount of clean, potable water may be added to adjust workability. Do not overwater.
5. **Specialty Finishes -** AURORA TC-100, AURORA STONE and ALUMINA Finish: Gently mix the contents of the pail for 1 minute using a low RPM ½” drill equipped with a mixing paddle such as a Demand Twister or a Wind-Lock B-MEW, B-M1 or B-M9.
6. **ANTICOGLAZE**: Mix the contents of the pail with a slow speed drill and paddle mixer until thoroughly blended.
   1. **APPLICATION**
7. **Senergy Base Coat/Reinforcing Mesh:**

**NOTE TO SPECIFIER: Indicate on drawings the required locations of standard, medium and high or ultra-high impact reinforcing mesh.**

1. Base coat shall be applied to achieve reinforcing mesh embedment with no reinforcing mesh color visible.
2. **CORNER MESH:**
3. Install CORNER MESH at corners.
4. Apply CORNER MESH prior to application of reinforcing mesh.
5. Cut CORNER MESH to workable lengths.
6. Apply mixed Senergy Base Coat to insulation board at outside corners using a stainless-steel trowel.
7. Immediately place CORNER MESH against the wet base coat and embed the CORNER MESH into the base coat by troweling from the corner; butt edges and avoid wrinkles.
8. After base coat is dry and hard, apply a layer of FLEXGUARD 4, INTERMEDIATE 6 or 12 Reinforcing Mesh over the entire surface of the CORNER MESH in accordance with 3.04 C.
9. **Standard Impact or Medium Impact Resistance Reinforcing Mesh:** FLEXGUARD 4 INTERMEDIATE 6 and INTERMEDIATE 12
10. Install Senergy Reinforcing Mesh where indicated on drawings.
11. Apply mixed Senergy Base Coat to entire surface of insulation board with a stainless-steel trowel to embed the reinforcing mesh.
12. Immediately place Senergy Reinforcing Mesh against wet base coat and embed the reinforcing mesh into the base coat by troweling from the center to the edges.
13. Lap reinforcing mesh 2 ½" (64 mm) minimum at edges.
14. Ensure reinforcing mesh is continuous at corners, void of wrinkles and embedded in base coat so that no reinforcing mesh color is visible.
15. If required, apply a second layer of base coat to achieve total nominal base coat/reinforcing mesh thickness of 1/16" (1.6 mm).
16. Allow base coat with embedded reinforcing mesh to dry hard (normally 8 to 10 hours).
17. **High Impact or Ultra High Impact Resistance Reinforcing Mesh:** INTERMEDIATE 12,

STRONG 15 and HI-IMPACT 20

**NOTE TO SPECIFIER: Where STRONG 15 or HI-IMPACT 20 is specified, FLEXGUARD 4 or INTERMEDIATE 6 must be specified also.**

1. Install Senergy Reinforcing Mesh where indicated on drawings.
2. Apply mixed Senergy Base Coat to entire surface of insulation board with a stainless-steel trowel to embed the reinforcing mesh.
3. Immediately place INTERMEDIATE 12, STRONG 15 or HI-IMPACT 20 against wet base coat and embed the reinforcing mesh into the base coat by troweling from the center to the edges.
4. Butt STRONG 15 or HI-IMPACT 20 at all adjoining edges; do not use to backwrap or bend around corners.
5. Butt STRONG 15 or HI-IMPACT 20 at adjoining edges of CORNER MESH.
6. Ensure reinforcing mesh is free of wrinkles and embedded in base coat so that no reinforcing mesh color is visible.
7. After base coat with embedded reinforcing mesh is dry and hard (normally 8 to 10 hours), apply a layer of FLEXGUARD 4 or INTERMEDIATE 6 Reinforcing Mesh over the entire surface in accordance with 3.04 C to achieve total nominal base coat/ reinforcing mesh thickness of 3/32" (2.4 mm).
8. **COLOR COAT:**
9. Apply material to the base coat/reinforcing mesh in sealant joints with a high-quality, latex-type paintbrush. Work material continuously until a uniform appearance is obtained.
10. Allow to dry thoroughly (approximately 24 hours) prior to application of sealant primer and sealant.
11. **TINTED PRIMER:**
12. Apply Primer to the base coat/reinforcing mesh with a sprayer, ⅜" (10 mm) nap roller, or good quality latex paint brush at a rate of approximately 150–250 ft² per gallon (3.6–6.1m² per liter).
13. Primer shall be dry to the touch before proceeding to the Senergy Finish coat application.
14. **Senergy Finish Coat:** SENERFLEX, SENERFLEX TERSUS and CHROMA.
15. Apply Senergy Finish directly to the base coat with a clean, stainless steel trowel.
16. Apply and level Senergy Finish during the same operation to minimum obtainable thickness consistent with uniform coverage.
17. Maintain a wet edge on Senergy Finish by applying and texturing continually over the wall surface.
18. Work Senergy finish to corners, joints or other natural breaks and do not allow material to set up within an uninterrupted wall area.
19. Float Senergy Finish to achieve final texture.
20. **Specialty Finish:**
21. AURORA TC-100 Finish:
22. Apply TINTED PRIMER by Master Builders Solutions to substrate in accordance with current product bulletin. Primer shall be of corresponding color for selected AURORA TC-100 Finish color. Allow Primer to dry to the touch before proceeding Finish application.
23. Apply a tight coat of finish with a clean, stainless steel trowel.
24. Maintain a wet edge on finish by applying and leveling continually over the wall surface.
25. Work finish to corners, joints or other natural breaks and do not allow material to set up within an uninterrupted wall area. Allow first coat to set until surface is completely dry prior to applying a second coat of finish.
26. For a smooth appearance, use a stainless-steel trowel and apply the second coat of finish. Achieve final texture using circular motions.
27. For a textured appearance, apply the second coat of finish using a spray gun and hopper. Double-back to achieve final texture.
28. Total thickness of finish shall be approximately 1/16 (1.6 mm).
29. AURORA STONE Finish:
30. Apply TINTED PRIMER by Master Builders Solutions to substrate in accordance with current product bulletin. Primer shall be of corresponding color for selected AURORA STONE Finish color. Allow Primer to dry to the touch before proceeding Finish application.
31. Apply a coat of Finish using a spray gun and hopper, maintaining a wet edge. Work to corners, joints or other natural breaks and do not allow material to set up within an uninterrupted wall area.
32. Allow first coat of AURORA STONE Finish to set until surface is completely dry prior to applying a second coat of Finish.
33. Apply a second coat of Finish using a spray gun and hopper; double back to achieve final texture.
34. Thickness of Finish may vary between 1/16" (1.6 mm) and 1/8" (3.2 mm), depending upon texture.

**Note: Spraying of AURORA STONE shall be in the same manner and direction and by the same mechanic on a particular elevation or project whenever possible, to maintain a uniform appearance. Maintain consistent air pressure to minimize texture variations. Stator or rotor design pumps are not recommended.**

1. ALUMINA Finish:
2. Apply TINTED PRIMER by Master Builders Solutions to substrate in accordance with current product bulletin. Primer shall be of corresponding color for selected ALUMINA Finish color. Allow Primer to dry to the touch before proceeding Finish application.
3. Apply a tight coat of finish with a clean, stainless steel trowel.
4. Maintain a wet edge on finish by applying and leveling continually over the wall surface.
5. Work finish to corners, joints or other natural breaks and do not allow material to set up within an uninterrupted wall area. Allow first coat to set until surface is completely dry prior to applying a second coat of finish
6. Use a stainless-steel trowel and apply the second coat of finish. Achieve final texture using circular motions
7. Total thickness of finish may be between 1/16" (1.6 mm) and 1/8" (3.2 mm).
8. **ANTICOGLAZE Glaze/Stain:** Apply in accordance with recommendations contained in current product literature.

**3.05 CLEANING**

* + - * 1. Clean work under provisions of Section [01 74 00] [x].
        2. Clean adjacent surfaces and remove excess material, droppings, and debris.

**3.06 PROTECTION**

Protect finished work under provisions of Section [01 76 00] [x].

**END OF SECTION**

**Warranty**

Master Builders Solutions Construction Systems US, LLC (hereinafter “Master Builders Solutions”) warrants this product to be free from manufacturing defects and to meet the technical properties on the current Product Bulletin, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. MASTER BUILDERS SOLUTIONS MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of Master Builders Solutions. In the absence of an extended warranty issued by Master Builders Solutions, any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. Master Builders Solutions WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on Master Builders Solutions’ present knowledge and experience. However, Master Builders Solutions assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. Master Builders Solutions reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.