

ADDENDUM

Project: Huntsville 1,2, South Fork

Project No.: 502184719020101

Addendum No.: 2

Project Address: 277 South 7400 East, Huntsville, Utah

Date: June 6, 2019

Owner: Corporation of the Presiding Bishop of The Church of Jesus Christ
of Latter-day Saints, a Utah corporation sole

From (Architect): McNeil Engineering

Instructions to Prospective Bidders:

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents and/or prior Addenda as noted below. All conditions, requirements, materials and workmanship are to be as described in the Contract Documents unless specifically stated otherwise. This Addendum consists of 10 page(s) and the attached drawing(s), Sheet(s) _____, dated _____

1. Changes to prior Addenda:

- a.
- b.

2. Changes to Bidding Requirements:

- a.
- b.

3. Changes to Conditions of the Contract:

- a.
- b.

4. Changes to Specifications:

- a.
- b.

5. Changes to Drawings:

- a. All blocking at the eaves of the roof are to have three (3) 3" holes drilled in each truss bay block. The holes shall be equally spaced acrossed each block. If the truss spacing is less than 24" O.C. the engineer will give the hole size and spacing needed for what spacing is being worked with. Plastic baffles shall be installed in each truss bay to hold the insulation away from the ventilation slot. The baffle vent slot is to be a minimum of 2" deep from truss to truss.
- b. The stucco on the side wall locations on the north and south sides of the chapel roof as well as the small gable end area on the Relief Society addition shall be removed and replaced with new stucco and wall flashings. All labor, materials, accessories needed to complete the work shal be part of this contract. See attached photos for locations. The stucco on the beams is to be included with this work. The stucco on the east and west gable ends is not part of this work. Also the stucco above the east entryways is not included in this work. If there is no insulation installed under the original stucco the contractor will not apply any insulation to the new system. The specification for the EFIS system is attached.

End of Addendum





SECTION 07 2419**WATER-DRAINAGE EIFS****PART 1 - GENERAL****1.1 SUMMARY**

- A. Includes But Not Limited To:
 - 1. Furnish and install drainage-type PB EIFS system as described in Contract Documents, including sealants.
- B. Related Requirements:
 - 1. Section 06 1636: 'Wood Panel Product Sheathing'.
 - 2. Section 06 1643: 'Gypsum Sheathing'.
 - 3. Sections under 07 6000 heading: 'Flashing And Sheet Metal' for furnishing and installation of step and roof diverter flashing.

1.2 REFERENCES

- A. Definitions:
 - 1. Base Coat: Any or all layers of plaster in place prior to application of finish coat.
 - 2. Drainage Medium: Means that allows incidental moisture to drain to exterior of EIFS wall cladding.
 - 3. EIFS (Exterior Insulation And Finish System: Nonstructural, nonload-bearing, exterior wall cladding systems that consist of an insulation board attached either adhesively or mechanically, or both, to the substrate; an integrally reinforced base coat; and a textured protective finish coat.
 - 4. Finish: Final layer of plaster applied over basecoat.
 - 5. Gypsum Sheathing: Gypsum board used as backing for exterior surface materials.
 - 6. Impact Resistant: Flying debris will not puncture.
 - 7. Insulation Board: Expanded polystyrene (EPS) insulation board, which is affixed to the substrate.
 - 8. Reinforcing Mesh: Glass fiber mesh used to reinforce the base coat and to provide impact resistance.
 - 9. Water Resistive Barrier: Interior material behind EIFS that is intended to resist liquid water that has penetrated behind the EIFS.
- B. Reference Standards:
 - 1. American National Standards Institute / Factory Mutual Resource Corporation:
 - a. ANSI FM 4880:2017, 'Evaluating the Fire Performance of Insulated Building Panel Assemblies and Interior Finish Materials'.
 - 2. ASTM International:
 - a. ASTM C150/C150M-18, 'Standard Specification for Portland Cement'.
 - b. ASTM C578-18, 'Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.'
 - c. ASTM C1382-16, 'Test Method for Determining Tensile Adhesion Properties of Sealants When Used in Exterior Insulation and Finish Systems (EIFS) Joints'.
 - d. ASTM E330/E330M-14, 'Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference'.
 - e. ASTM E2273-18, 'Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies'.
 - f. ASTM E2486/E2486M-13(2018), 'Standard Test Method for Impact Resistance of Class PB and PI Exterior Insulation and Finish Systems (EIFS)'.
 - g. ASTM E2568-17a, 'Standard Specification for PB Exterior Insulation and Finish Systems'.
 - h. ASTM E2570/E2570M-07(2014), 'Standard Test Methods for Evaluating Water-Resistive Barrier (WRB) Coatings Used under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage'.
 - 3. International Code Council (ICC):

- a. AC212, 'Acceptance Criteria For Water-Resistive Coatings Used As Water-Resistive Barriers'.
- b. AC219, 'Acceptance Criteria For Exterior Insulation And Finish Systems'.
- c. AC235, 'Acceptance Criteria for EIFS Clad Drainage Wall Assemblies'.

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Conferences:
 1. Participate in MANDATORY pre-installation conference.
 2. Schedule meeting for after installation of foam and reinforcing mesh, but before flashing of openings.
 3. In addition to agenda items specified in Section 01 3100, review following:
 - a. During Conference, apply flashing at one window and associated back-wrapping at same location. Examine foam and reinforcing installation as well.

1.4 SUBMITTALS

- A. Action Submittals:
 1. Product Data:
 - a. Provide Manufacturer's product data sheets describing products to be used.
 - b. Provide Manufacturer's storage and handling, preparation, and installation requirements.
 - c. Color selection.
 2. Shop Drawings:
 - a. Provide Manufacturer's details and recommended sealant application and details for flashing of drainage EIFS assembly.
 - b. Show wall layout, connections, details, expansion joints and installation sequence.
 3. Samples:
 - a. Field created sample of each color and texture to be used. Make sample with same tools and techniques to be used on Project.
 - 1) Acceptable sample panel to be stand alone panel and not part of Work.
 - 2) Sample to 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.
- B. Informational Submittals:
 1. Certificate:
 - a. Sealant Manufacturer's certificate of compliance with ASTM C1382.
 2. Test And Evaluation Reports:
 - a. Provide Manufacture's applicable code compliance report.
 3. Qualification Statements:
 - a. Letter from EIFS Manufacturer certifying level of training and experience of Installer.
 - b. System Manufacturer's approval of Installer.
- C. Closeout Submittals:
 1. Include following in Operations And Maintenance Manual specified in Section 01 7800:
 - a. Operations and Maintenance Data:
 - 1) Maintenance, cleaning, and repair instructions.
 - b. Warranty Documentation:
 - 1) Final, executed copy of Warranty.
 - c. Record Documentation:
 - 1) Manufacturers documentation:
 - a) Manufacturer's literature.
 - b) Color selection.
 - c) Shop Drawings.

1.5 QUALITY ASSURANCE

- A. Regulatory Agency Sustainability Approvals:
 - 1. System shall be recognized for intended use by applicable building codes.
- B. Qualifications:
 - 1. Installers:
 - a. Installer shall be experienced and competent in installation EIFS systems and have performed at least ten (10) installations of similar size, scope, and complexity in each of the past five (5) years and be approved and listed applicator by EIFS Manufacturer.
- C. Single Source Responsibility: All EIFS materials shall be from a single manufacturing source, or listed as an approved source.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery And Acceptance Requirements:
 - 1. Materials shall be delivered in original, unopened packages with labels intact. Protect during transportation to avoid physical damage.
 - 2. Upon arrival, materials shall be inspected for physical damage, freezing, or overheating. Questionable materials shall not be used.
- B. Storage And Handling Requirements:
 - 1. Store in cool, dry location, out of direct sunlight and weather, and at temperatures above 40 deg F (4.4 deg C) or greater than 110 deg F (43 deg C) and remain so for twenty four (24) hours thereafter.
 - 2. Stack insulation board flat, fully supported off the ground and protected from direct exposure to the sun.

1.7 FIELD CONDITIONS

- A. Ambient Conditions:
 - 1. Ambient air temperature shall be 40 deg F (4.4 deg C) minimum and rising at time of installation and remain at 40 deg F (4.4 deg C) or above for twenty four (24) hours minimum after application.
 - 2. Ambient air temperature shall not exceed 120 deg F (49 deg C) within twenty four (24) hours of application.
 - 3. Do not install system during inclement weather conditions, excessive wind or rain.

1.8 WARRANTY

- A. Manufacturer Warranty:
 - 1. Manufacturer's ten (10) year guarantee that system shall be free from defects that will affect its weather resistance.
 - 2. Installer Warranty: Installer shall warranty project against workmanship and installation for five (5) years.

PART 2 - PRODUCTS

2.1 SYSTEMS

- A. Manufacturers:
 - 1. Class One Quality Standard. See Section 01 6200.
 - a. BASF Senergy Senerflex Channeled Adhesive Design.
 - b. Dryvit Outsulation Plus MD.

- c. Parex Standard Water Master Drainage.
- d. Master Wall Rollershield Drainage System.
- 2. Approved Manufacturers:
 - a. BASF Wall Systems, Jacksonville, FL www.senergy.basf.com.
 - b. Dryvit, West Warwick, RI www.dryvit.com.
 - c. Master Wall Inc, Midland, GA www.masterwall.com.
 - d. Parex, Anaheim, CA www.parex.com.
 - e. STO Finish Systems Div, Atlanta, GA www.stocorp.com.
- B. Description:
 - 1. Drainage type Exterior Insulation and Finish System (EIFS) consisting of Adhesive to create drainage planes, Expanded Polystyrene Insulation (EPS) Board, Base Coat with embedded Reinforcing Fabric Mesh, and Finish Coat. System is installed over drainage track or back wrapped weep holes and applied over glass mat gypsum sheathing or wall sheathing.
 - 2. Style / pattern / color as selected by Architect or Owner's Representative.
- C. Design Criteria:
 - 1. EIFS shall be constructed such that it meets performance characteristics required in ASTM E2568.
 - 2. System to meet the performance and testing requirements of the International Code Council (ICC) Acceptance Criteria AC212 and AC235.
 - 3. Design Wind loads:
 - a. Withstand positive and negative wind loads as specified by Building Code and tested by ASTM E330/E330M.
 - 4. Drainage Medium to comply with requirements of ASTM E2273.
 - 5. Substrate Systems:
 - a. Engineered to withstand applicable design loads as required by IBC Chapter 16 including required safety factor.
 - b. Maximum deflection of substrate system under positive or negative design loads shall not exceed L/240 of span except as otherwise approved in writing by EIFS manufacturer prior to installation.
 - c. Substrate dimensional tolerance: Flat within **1/4 inch (6.4 mm)** in any **4 feet (1.2 m)** radius.
 - d. Surface irregularities: Sheathing not over **1/8 inch (3 mm)**; masonry not over **3/16 inch (4.76 mm)**.
 - 6. Impact Resistance Classification: EIFS shall be classified in accordance with ASTM E2486/E2486M classification and impact ranges as follows:
 - a. Standard Impact Resistance:
 - 1) Impact Range: **25-49 in-lbs (2.8 – 5.6 J)**.
 - 2) Minimum Tensile Strength: **150 lbs/in (27 g/cm)**.
 - b. High Impact Resistance:
 - 1) Impact Range: **90-150 in-lbs (10.2–17.0 J)**.
 - 2) Minimum Tensile Strength: **300 lbs/in (54 g/cm)**.
 - 7. Insulation Board: Meet requirements of ASTM C578, nominal **1 lb per cu ft (16 kg per cu m)** aged expanded polystyrene by EIFS Manufacturer.
 - 8. Portland Cement: Shall be Type I or II, meeting ASTM C150/C150M, white or gray in color, fresh and free of lumps.
 - 9. Weather Resistance:
 - a. EIFS with drainage shall have an average minimum drainage efficiency of ninety (90) percent when tested in accordance of requirements of ASTM E 2273.
 - b. Water-resistive barrier shall comply with IBC Section 1404.2 or ASTM E2570/E2570M.
- D. Materials:
 - 1. General:
 - a. Acceptable substrate:
 - 1) Gypsum Sheathing: See Section 06 1643: 'Gypsum Sheathing'.
 - 2) Oriented Strand Board (OSB): See Section 06 1636: 'Wood Panel Product Sheathing'.
 - 3) Plywood: See Section 06 1636: 'Wood Panel Product Sheathing'.
 - b. The configuration of the water resistive barrier, drainage plane and flashing and EIFS materials, must allow for the egress of incidental moisture.
 - c. Inclined surfaces shall follow the guidelines listed below:

- 1) Minimum slope: **6 inch (152 mm)** of vertical rise in **12 inches (305 mm)** of horizontal run.
- 2) For sloped surfaces, run of slope shall be a maximum of **12 inches (305 mm)**.
- 3) Usage not meeting above criteria shall be approved by EIFS Manufacturer prior to installation.
- d. Building interior shall be separated from insulation board by **1/2 inch (12.7 mm)** of gypsum board or equivalent fifteen (15) minute thermal barrier.
2. Base Coat:
 - a. Manufacturer's standard.
3. Drainage Track:
 - a. Standard of EIFS Manufacturer.
4. Finish Coat:
 - a. One hundred (100) percent acrylic, factory-mixed, elastomeric, flexible coating with integral color and texture.
5. Liquid Applied Water Resistive Barrier:
 - a. Apply liquid applied water resistive barrier over all seams of sheathing and embed sheathing tape.
 - b. Then spray or roll apply additional liquid applied water resistive barrier over all sheathings and substrates in number of coats and constancy as per Manufacturer's requirements and recommendations to achieve coverages as required.
6. Insulation Board:
 - a. At system termination, completely encapsulate insulation board edges by mesh reinforced base coat, substrate or drainage track (limited to terminations at foundation).
 - b. Maximum thickness of insulation board shall be in accordance with applicable building codes and EIFS manufacturer requirements.
7. Insulation Board Adhesive: Standard of EIFS Manufacturer.
8. Water:
 - a. Clean, drinkable, and free of foreign matter.

2.2 ACCESSORIES

- A. Flashing:
 1. Flashing shall be continuous and watertight.
 2. Flashing shall be designed and installed to prevent water infiltration behind the EIFS.
- B. Expansion Joints: Continuous expansion joints shall be installed at the following locations in accordance with Manufacturer's recommendations:
 1. At building expansion joints.
 2. At substrate expansion joints.
 3. At floor lines in wood frame construction.
 4. Where EIFS panels abut one another.
 5. Where EIFS abuts other materials.
 6. Where significant structural movement occurs, such as the following:
 - a. Changes in roof line.
 - b. Changes in building shape and/or structural system.
 - c. Where substrate changes.
 7. Substrate movement and expansion and contraction of EIFS and adjacent materials shall be taken into account in design of expansion joints, with proper consideration given to sealant properties, installation conditions, temperature range, coefficients of expansion of materials, joint width to depth ratios, and other material factors. Minimum width of expansion joints shall be as follows:
 - a. **1/2 inch (12.7 mm)** where EIFS abuts other materials.
 - b. **3/4 inch (19 mm)** EIFS abuts the EIFS.
- C. Mechanical Fasteners:
 1. Masonry:
 - a. Type M expansion fastener with **1-1/2 inch (38 mm)** diameter washer and **one inch (25 mm)** minimum penetration into masonry.
 2. Steel Framing, **20 ga (0.91 mm)** And Thinner:

- a. Type S self-tapping bugle head screws with 1-1/2 inch (38 mm) diameter washer and 5/8 inch (15.9 mm) minimum penetration into framing.
 3. Steel Framing, Thicker Than 20 ga (0.91 mm):
 - a. Type S-12 self-tapping bugle head screws with 1-1/2 inch (38 mm) diameter washer and 5/8 inch (15.9 mm) minimum penetration into framing.
 4. Wood Framing:
 - a. Type W bugle head screws with 1-1/2 inch (38 mm) diameter washer and 5/8 inch (15.9 mm) minimum penetration into framing.
- D. Reinforcing Mesh:
1. Standard Mesh: Balanced, open weave treated glass fiber mesh by EIFS Manufacturer, 4 oz per sq yd (135 g per sq m) minimum weight.
 2. High Strength Mesh: A balanced, open weave treated glass fiber mesh by EIFS Manufacturer made for high impact areas, 20 oz per sq yd (678 g per sq m) minimum.
- E. Sealants:
1. Quality Standard. See Section 01 6200:
 - a. Silicone by Dow or GE as acceptable to EIFS Manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification Of Conditions:
1. Before application, inspect substrate and flashing for compliance with Contract Documents and with EIFS Manufacturer's printed requirements.
 2. Verify that step flashing and roof diverters have been installed properly for 'roof to wall' conditions.
 3. Notify Architect of unsuitable conditions in writing.
 - a. Do not install material over unsuitable conditions.
 4. Commencement of Work by installer is considered acceptance of substrate.

3.2 PREPARATION

- A. Protect adjoining work and property during installation.
- B. Clean surfaces thoroughly prior to installation.
- C. Prepare substrate to be free of foreign materials, such as oil, dust, dirt, form-release agents, efflorescence, paint, wax, water repellants, moisture, frost, and any other condition that may inhibit adhesion using methods recommended by the Manufacturer for achieving best results.
- D. Application of wet materials shall not take place during inclement weather unless appropriate protection is provided. Protect materials from inclement weather until they are completely dry.

3.3 INSTALLATION

- A. General:
1. Install drainage components required by Manufacturer's system if not incorporated into other elements of system.
 2. Roof To Wall:
 - a. Provide 2 inch (50 mm) minimum spacing above roofing.
- B. Liquid Applied Water Resistive Barrier:

1. Verify substrate is dry, clean, sound, and free of releasing agents, paint, or other coatings prior to installation of fluid applied water resistive barrier.
- C. Insulation Board:
1. Follow Manufacturer's written instruction for installation of Insulation Board.
 2. Apply insulation board horizontally in running bond pattern with joints staggered in relation to substrate joints and staggered and interlocked at corners.
 3. Attach board to substrate with mechanical fasteners where required by EIFS Manufacturer.
 4. Sand high spots to create smooth surface.
- D. Base Coat And Reinforcing:
1. Apply base coat to all exposed insulation board. Embed one (1) layer of high strength mesh with edges abutted and material smoothed out until completely embedded in adhesive. Allow to cure for twenty-four (24) hours.
 2. Apply base coat over cured, reinforced base coat. Embed one (1) layer of standard reinforcing mesh overlapping edges **2-1/2 inches (63 mm)** minimum. Smooth out material until completely embedded and allow twenty-four (24) hours to cure.
- E. Finish Coat:
1. Correct surface irregularities, such as trowel marks and board lines.
 2. Apply finish coat with stainless steel trowel using sufficient manpower and equipment to insure continuous wet edge to prevent cold joint, scaffolding lines, etc. Same type of equipment and techniques shall be used by all applicators. Finish shall closely match samples prepared for Architect.
- F. Apply sealants as required by EIFS Manufacturer.
- G. Tolerances:
1. Deflection of the substrate systems shall not exceed L/240 times the span.
 2. Substrate shall be flat within **1/4 inch (6.4 mm)** in **4 feet (1.2 m)** radius.

3.4 FIELD QUALITY CONTROL

- A. Non-Conforming Work: Non-conforming work as covered in the General Conditions applies, but is not limited to the following:
1. Roof To Wall:
 - a. Non-conforming work includes required **2 inch (50 mm)** minimum spacing above roofing.
 2. Correct any work found defective or not complying with contract document requirements at no additional cost to the Owner.

3.5 CLEANING

- A. Remove debris resulting from work of this Section and clean adjacent surfaces.

3.6 PROTECTION

- A. Protect from inclement weather and other sources of damage until dry and permanent protection in the form of flashings, sealants, etc. are installed.

END OF SECTION