SECTION 07240 - EXTERIOR INSULATION AND FINISH SYSTEMS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Field applied exterior insulation and finish system.
   2. Resurfacing of existing exterior insulation and finish systems.
      a. Cleaning of existing system.
      b. Repair of existing system surface defects.
      c. Application of new finish coating.

B. Related Requirements:
   1. Section 06100 - Rough Carpentry: Non-structural plywood panels used for sheathing.
   2. Section 07900 - Joint Sealers: Joint sealants used in conjunction with exterior insulation and finish system.
   3. Section 09900 - Paint and Coatings: Field applied paint finish.

1.2 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.

B. ASTM International (ASTM):
   1. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
   2. ASTM D1682 - Test Method for Breaking Load and Elongation of Textile Fabrics.

1.3 SYSTEM DESCRIPTION

A. Exterior Insulation and Finish System (EIFS) shall consist of the following:
   1. Thermal insulation board secured to supporting structural system.
   2. Reinforcing mesh set into a trowel applied primer/adhesive base coat.
      a. Standard reinforcing mesh.
   3. Acrylic-based trowel-applied weatherproof and textured finish with integral white coloring and field applied paint finish.
   4. Primers, backer rods, bond breakers, and sealants for all EIFS to EIFS, and EIFS to dissimilar material joints.

1.4 SUBMITTALS

A. Contract Closeout Submittals:
   1. Contractor Installation Declaration Form: Include completed Exhibit A and Exhibit B forms (included at the end of this section) signed by EIFS Contractor and Sealant Installer, under provisions of Section 01770.

1.5 QUALITY ASSURANCE

A. Applicator: Single firm, approved in writing by system manufacturer, employing trained workers familiar with current installation methods and materials.

B. Standards: Current model code approval by ICC, ICBO, BOCA, and SBCC.
   1. Base approval on full scale diversified Fire Testing, end use configuration by independent agencies whose classifications and requirements have general acceptance as regulatory.

C. Technical Representative: A manufacturer’s technical representative shall be on site to oversee the repair of

surface defect repairs and resurfacing to verify proper installation of product(s).

1.6 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to site in original unopened packages, clearly marked with manufacturer's name, brand name, and description of contents. Store materials in accordance with manufacturer's recommendations for storage and handling.

1.7 PROJECT CONDITIONS

A. Ambient air temperature shall be 40 degrees F or greater and rising at time of installation of coating application and shall remain at 40 degrees F or greater for at least 24 hours after application.
   1. Provide temporary heat as required to meet above requirements.

B. Ambient air temperature shall be as recommended by manufacturers of EIFS and cleaning products during cleaning of existing system prior to resurfacing.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with requirements, provide EIFS by one of the following:
   1. BASF Wall Systems, Inc., Jacksonville, FL (Formerly Senergy, Inc & Degussa Wall Systems) (800) 221-9255. Contact: Steve DonFrancesco (770) 335-5260.
   2. Dryvit Systems, Inc., Warwick, RI, (800) 556-7752
   3. Parex, Inc., Redan, GA, (800) 537-2739.
   4. Sto Industries, Atlanta, GA, (800) 221-2397, Abe Koury.

B. Substitutions: Not permitted.

2.2 MATERIALS

A. Products:
   1. Senerflex Classic PB Wall System, by BASF
   2. Outsulation, by Dryvit Systems, Inc.
   3. Standard System, by ParexLahabra, Inc.
   4. StoTherm Essence, by Sto Industries.

B. Insulation Board: Insulation board shall be produced by manufacturer approved by EIFS manufacturer meeting the following requirements.
   1. Type: Expanded Polystyrene Insulation Board.
   2. Nominal Density: 1.0 pcf.
   3. Maximum Flame-Spread and Smoke Development: ASTM E-84, 25 and 450 respectively.
   4. Thickness: As indicated on Drawings but not less than 3/4 inch at any point.

C. Reinforcing Mesh: Manufacturer's open weave type glass fiber fabric complying with ASTM D1682 as supplied by system manufacturer:
   1. Standard Weight: Minimum 4.2 ounces per square yard plus or minus 10 percent.
   2. Heavy Weight: Minimum 20 ounces per square yard plus or minus 10 percent.

D. Coating System:
   1. Base Coat Materials: Standard formulation.
   2. Primer (For use over gloss urethane coating): Material recommended by EIFS manufacturer.
   3. Skim Coat (For resurfacing of existing EIFS where shown on Drawings):
      a. Skim Coat, by BASF Wall Systems, Inc. (Senergy).
      b. Freestyle or NCB, by Dryvit Systems, Inc.

c. 302 ABC-N1 Base Coat & Adhesive, by ParexLahabra, Inc.
d. RFP, by Sto Industries.

4. Finish Coat: Factory-mixed, standard acrylic-Acrylic based coating.
   a. Integral Color: Match Dryvit standard #310 "China White."
   b. Paint Finish: Field applied paint finish as specified in Section 09900. Color as shown on the drawings and as defined within Section 09900.
   c. Texture: Match Dryvit standard "Sandblast". If new Exterior Insulation and Finish System is installed adjacent to existing Exterior Insulation and Finish System with finish coat texture other than that specified, consult with the Walmart Construction Manager for finish coat to be installed at new adjacent Exterior Insulation and Finish System.

E. Water: Potable.

F. Joint Sealant: Joint sealant shall be as specified in Section 07900 unless otherwise required by the EIFS manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine surfaces and adjacent areas in which Work under this Section is to be performed. Report in writing to Walmart Construction Manager prevailing conditions that may adversely affect satisfactory execution of Work. Do not proceed with Work until unsatisfactory conditions have been corrected.

B. Starting Work constitutes acceptance of existing conditions and this Contractor shall then, at his expense, be responsible for correcting unsatisfactory and defective Work encountered.

3.2 INSTALLATION - GENERAL

A. Follow manufacturer's printed instructions for installation of exterior insulation and finish system.

3.3 INSULATION BOARD INSTALLATION

A. Install rigid insulation board to conform to insulation manufacturer's printed recommendations except as otherwise specified and modified by system manufacturer.

B. Place insulation starting from level base line. Stagger vertical joints with insulation board interlocked at corners. Butt joints of insulation tightly. Flush surfaces of adjacent boards at joints.

C. Apply insulation to substrate providing firm butt joints. Tamp entire surface with even pressure to ensure complete contact with adhesive. Test installation of each board with the use of a 6 foot straight edge.
   1. Allow adhesive a minimum of 24 hours to dry.
   2. Sand surfaces which are high and out of plane until flush. Do not fill low areas.

D. Form 3/4 inch drip rustication joints straight and true to line, as indicated on Drawings.

3.4 ACCESSORIES

A. Locate expansion joints at locations indicated; do not exceed manufacturer's maximum recommended area. Coordinate placement of additional joints with Walmart Construction Manager.

3.5 REINFORCING MESH

A. Place reinforcing mesh over insulation and secure in place with base coating.

B. Apply heavy weight mesh in conjunction with standard weight mesh in areas below 8 feet above ground level.

3.6 FINISH SYSTEM

A. Base Coat:
1. Mix in accordance with manufacturer's instructions and apply to insulation surfaces.
2. Trowel material into reinforcing mesh in tight coat and doubling back. Cover reinforcing mesh 100 percent with base coat.
3. Apply base coat in such a manner as to level surface and fill joints. Apply base coat 1/8 inch to 3/16 inch thick.
4. Cure base coat as directed by manufacturer.

A. Skim Coat (Resurfacing):
1. Clean existing system in accordance with manufacturer's instructions.
2. Inspect surface of existing system in presence of manufacturer's technical representative and make any required repairs in accordance with manufacturer's published instructions.
3. Prime existing EIFS surfaces previously coated with gloss urethane coating as recommended by EIFS manufacturer prior to application of skim coat.
4. Prior to application of skim coat over existing EIFS with urethane coating, perform bond test to substrate as recommended by EIFS manufacturer.
5. Apply skim coating material as recommended by manufacturer at the minimum thickness required to fill in the existing surface texture and provide a flat, smooth surface ready to accept final textured finish.
   a. If existing, maintain rustication joints clear of skim coat.
6. Allow to dry as recommended by manufacturer.
7. Correct any imperfections that may telegraph through the finish coat.

B. Textured Finish:
1. Mix in accordance with manufacturer's printed instructions.
2. Do not apply finish texture until previous coat has cured properly.
3. Trowel finish coat onto surface and float to achieve uniform texture to match approved sample.
4. Apply and level material in one operation.
5. Obtain final texture by trowels or floats as necessary to achieve specified finish.
6. Provide finish coat 1/16 inch to 1/8 inch thick.

3.7 CURING

A. Apply coating materials at 40 degrees F or above. Cure each coat at least 24 hours prior to application of next coat.

3.8 JOINTING

A. Install sealant at joints within system and where system abuts dissimilar materials. Apply joint sealant type and method in accordance with Section 07900 unless otherwise required to conform to the sealant manufacturer's installation methods and procedures and the EIFS manufacturers evaluation report.

END OF SECTION

EXHIBIT A

EIFS Contractor Name: _____
(Insert EIFS Contractor Name Here)

Completion Date: _____

THE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) INSTALLED ON THE STRUCTURE LOCATED AT THE ADDRESS INDICATED BELOW CONFORMS:

TO _____ RECOMMENDED INSTALLATION PRACTICES AND
(Insert EIFS Manufacturer Name Here)

SECTION(S) _____ OF ICC ICBO BOCA SBCCI EVALUATION REPORT NO. _____
(Insert Appropriate Section Numbers Here)(Circle Applicable Code) (Insert Applicable Report Number Here)

Address of Structure:

_____
_____
_____
_____

Product Component Names:

Adhesive(s): _____
Fasteners (Mech.): _____
Base Coat: _____
Reinforcing Fabric: _____
Finish Coat (s): _____

INSTALLATION		CONFORMS
A.	Substrate Type and Tolerance	_____
B.	EIFS	
	1. Adhesive and/or Fasteners	_____
	2. Insulation	_____
	3. Reinforcing Fabric	_____
	4. Base Coat	_____
	5. Finish	_____

C. The information entered above is offered in testimony that the EIFS installation conforms with the EIFS manufacturer's installation methods and procedures, and the EIFS manufacturers ES report.

D. An installation card shall be received from the Sealant Installer indicating that the sealant installation conforms with the EIFS evaluation report and sealant manufacturer's installation methods and procedures must accompany this declaration.

EIFS Contractor Company Name and Address:

_____
_____
_____
_____

Signature of Responsible Officer: _____

Typed Name and Title of Officer: _____

Telephone Number: (_____) _____

cc: Original: Building Department (Must be submitted with sealant installer declaration.)

Copies: EIFS Manufacturer
Walmart (include in Final Closeout Submittals)

EXHIBIT B

Sealant Installer Name: _____
(Insert Sealant Installer Name Here)

Completion Date: _____

THE SEALANT INSTALLED IN CONJUNCTION WITH AN EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) INSTALLED ON THE STRUCTURE LOCATED AT THE ADDRESS INDICATED BELOW CONFORMS:

TO _____ and _____ RECOMMENDED
(Insert EIFS Manufacturer Name Here) (Insert Sealant Manufacturer Name Here)

INSTALLATION PRACTICES AND SECTION(S)_____ OF IBC ICBO BOCA SBCCI
(Insert Appropriate Section Numbers Here) (Circle Applicable Code)

EVALUATION REPORT NO. _____.
(Insert Applicable Report Number Here)

Address of Structure:

_____
_____
_____
_____

Product Component Names:

Primer(s): _____
Sealers: _____
Bond Breakers: _____
Sealant Materials: _____

INSTALLATION		CONFORMS
A.	Designer's requirements, details and instructions	_____
B.	Sealant Manufacturer's details and Requirements	_____
C.	Exterior Insulation Manufacturer's Requirements	_____

D. The information entered above is offered in testimony that the Sealant installation conforms with the Sealant manufacturer's installation methods and procedures, and the EIFS manufacturers evaluation report.

Sealant Installer Company Name and Address:

_____
_____
_____
_____

Signature of Responsible Officer: _____

Typed Name and Title of Officer: _____

Telephone Number: (_____) _____

cc: Original: Building Department (Must be submitted with EIFS contractor declaration.)

Copies: EIFS Manufacturer
EIFS Contractor
Sealant Manufacturer
Walmart (include in Final Closeout Submittals)