

**CSI SECTION 07240 - Exterior Insulation & Finish System (EIFS) - Class PB
(Parex, Inc. EIFS Water Master™ System, Class PB)**

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Description: Section includes exterior insulation and finish system (EIFS - Class PB).

1.02 SYSTEM DESCRIPTION

- A. Description of Parex EIFS Water Master™ System:
1. Parex EIFS Water Master™ System with Cementitious Base Coat: An Exterior Insulation and Finish System (EIFS) consisting of channeled Expanded Polystyrene Insulation (EPS) Board, Mechanical Fasteners, Vented Track, Cementitious Base Coat with embedded Reinforcing Fabric Mesh, Primer (Optional), and Finish Coat installed with sheathing paper and flashing membrane to form a water-draining assembly.
- B. Parex EIF System Functional Criteria:
1. General:
 - a. Insulation Board: At system termination, completely encapsulate insulation board edges by mesh reinforced base coat, substrate, or Parex track. The use of and maximum thickness of insulation board shall be in accordance with applicable building codes and Parex requirements.
 - b. Flashing: Flashing shall be continuous and watertight. Flashing shall be designed and installed to prevent water infiltration behind the Water Master™ House Wrap. Refer to Division 7 Flashing Section for specified flashing materials.
 2. Substrate Systems:
 - a. Shall be engineered to withstand applicable design loads.
 - b. Maximum deflection of substrate system under positive or negative design loads shall not exceed 1/240 of span except as otherwise approved in writing by Parex prior to installation.
 - c. Design negative windload shall not exceed 30 psf. Contact Parex, Inc. for higher design negative windload.

EDITOR NOTE: COORDINATE BELOW IMPACT RESISTANCE CLASSIFICATION REQUIREMENTS RECOMMENDED BY EIMA INDUSTRY MEMBERS ASSOCIATION TEST METHOD AND STANDARD 101.86 - "STANDARD TEST METHOD FOR RESISTANCE OF EXTERIOR INSULATION FINISH SYSTEMS TO THE EFFECTS OF RAPID DEFORMATION (IMPACT)."

3. Impact Resistance Classification: Parex EIFS Water Master™ System shall be classified in accordance with EIMA for EIFS classification and impact ranges as follows:
 - a. Standard Impact Resistance, 25-49 inch-lbs Impact Range.
4. Expansion Joints: Continuous expansion joints shall be installed at locations in accordance with manufacturer's recommendations.
 - a. Substrate movement and expansion and contraction of Parex EIF System 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 recommended by EIFS manufacturer.
5. Building Code Conformance: Parex EIF System shall be acceptable for use on this project under building code having jurisdiction.

1.03 SUBMITTALS

- A. General: Submit Samples, Reports, Certificates and Manufacturer's Warranty in accordance with Division 1 General Requirements Submittal Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
 1. EIFS Manufacturer: Shall have marketed Exterior Insulation and Finish Systems in United States for at least ten years.
 2. EIFS Applicator: Shall have been trained by Parex in installation of Parex EIF Systems; Shall possess a current certificate of training; Shall be experienced and competent in installation of plaster-like materials.
- B. Regulatory Requirements:
 1. Insulation Board: Shall be produced and labeled under a third party quality program as required by applicable building code.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver EIFS materials supplied by Parex to site location in original unopened containers with labels intact. Upon arrival, materials shall be inspected for damage, and manufacturer notified of any discrepancies. Unsatisfactory materials shall not be used.
- B. Storage: Store EIFS materials supplied by Parex in a cool, dry location, out of sunlight, protected from weather and other harmful environment, and at a temperature above 40 degrees F and below 110 degrees F in accordance with manufacturer's instructions.

1.06 PROJECT / SITE CONDITIONS

- A. General: Provide access to electric power and clean potable water at area where Parex EIFS System materials are installed.
- B. Environmental Conditions: In accordance with manufacturer's requirements, comply with:
 - 1. Ambient air temperature: Minimum 40 degrees F and rising, and remain so for 24 hours thereafter.
 - 2. Do not apply Parex EIFS System materials to substrates whose temperature is below 40 degrees F.
 - 3. Do not apply Parex EIFS System during inclement weather unless appropriate protection is employed.
 - 4. Protect Parex EIFS System materials from weather and other damage.

1.07 WARRANTY

- A. Warranty: Upon request, at completion of installation provide Parex Standard Limited Warranty.

1.08 MAINTENANCE

- A. Maintenance Instructions: At completion of EIFS installation, provide manufacturer's maintenance instructions for EIFS installed.
 - 1. Refer to Division 1 General Requirements for requirements for submitting maintenance documentation.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturer: Parex, Inc., P.O.Box 189, Redan, GA 30074
 - 1. System: Parex Exterior Insulation & Finish System (EIFS) Water Master™ System.
 - a. Mechanical Fasteners: Manufacturer's specified fasteners for Water Master™ System.
 - b. Insulation Board: In compliance with manufacturer's requirements for Water Master™ EIFS.
 - c. Base Coat: Base Coat 301 (Cementitious), or Base Coat 301 Dry.

EDITOR NOTE: COORDINATE BELOW WITH PROJECT REQUIREMENTS.

- d. Mesh Reinforcement: Locations to achieve impact strength shall be as follows:

- 1) Locations (Not Otherwise Noted): EIMA Impact Classification: Standard.

EDITOR NOTE: RETAIN BELOW AND SPECIFY LOCATIONS TO RECEIVE EIFS WITH HIGHER THAN STANDARD IMPACT RESISTANCE CLASSIFICATION.

2) Locations: _____; EIMA Impact Classification:

EDITOR NOTE: CONSULT WITH PAREX AND COORDINATE BELOW TRACKS, SEAL TAPE AND BACKWRAPPING WITH REQUIREMENTS FOR PROJECT CONDITIONS.

- e. Tracks: Square Edge Track 361, Drip Edge Track 362, and Vented Track 363 as required for EIFS.
 - f. Seal Tape: Seal Tape 360.
3. Parex System Finish:

EDITOR NOTE: SPECIFY BELOW TYPES FROM MANUFACTURER'S TEXTURE FINISHES AND COLORS. REFER TO PAREX PRODUCT BINDER, FOR FINISH TYPE, TEXTURE, AND COLOR SELECTION.

a. Type:

b. Texture:

c. Color:

4. Product Performance Requirements: Refer to Product Performance Sheet as attached herein.

C. MATERIALS

- 3. Parex Water Master™ House Wrap 365: Grade D vapor permeable, asphalt impregnated sheathing paper.
- 4. Parex Water Master™ Flashing Membrane 366: Self-sealing, cross-laminated polyethylene backed rubberized asphalt membrane, 20 mils thick.
- 5. Water Master Insulation Board:
 - a. Shall be produced by a manufacturer approved by Parex.
 - b. Shall conform to ASTM C-578, Type I and the Parex specification for Molded Expanded Polystyrene Insulation board.
 - c. Maximum size shall be 2' x 4'.
 - d. Nominal thickness shall be 1-1/2" minimum.
 - e. Back of insulation board shall be configured with channels as per Parex Water Master™ design.
- 6. Parex Water Master™ Fasteners: Non-thermal bridging polypropylene plastic plates and corrosion-resistant screws.

EDITOR NOTE: RETAIN BELOW STANDARD NON-WOVEN MESH FOR PAREX EIFS STANDARD SYSTEM FOR STANDARD IMPACT RESISTANCE CLASSIFICATION.

5. Parex Reinforcing Mesh:
 - a. Standard Non-Woven Mesh 353: Weight 6 oz. per sq. yd.; standard non-woven mesh 353 protected against alkali with a 40 gram per square yard coating. Standard reinforcement of Parex EIFS, or for use with High Impact 14 Mesh, or Ultra High Impact 20 Mesh.
 - b. Long Detail Mesh 355: Weight 4.5 oz. per sq. yd. Reinforcing mesh used for walls with frequent details, or for use with High Impact 14 Mesh, or Ultra High Impact 20 Mesh.
 - c. Short Detail Mesh 356: Reinforcing mesh used for backwrapping and details.
 - d. Self Adhesive Detail Mesh 352: Reinforcing mesh used for complex details.

EDITOR NOTE: RETAIN BELOW MESH REQUIREMENTS AFTER DETERMINATION OF IMPACT RESISTANCE CLASSIFICATION.

- e. Intermediate Impact 10 Mesh 358.10: Weight 10 oz per sq. yd. Reinforcing mesh used with Parex EIFS Standard System, to achieve EIMA intermediate impact strength.
 - f. High Impact 14 Mesh 358.14: Weight 14 oz. per sq. yd. Reinforcing mesh used with Parex EIFS Standard System; to achieve EIMA high impact strength.
 - g. Corner Mesh 357: Reinforcing mesh used as a corner reinforcement; required with Ultra-High Impact 20 Mesh.
7. Parex Base Coat:
 - e. Base Coat 301: 100% acrylic polymer base, requiring the addition of Portland cement.
 - f. Base Coat 301 Dry: Copolymer based, factory blend of cement and proprietary ingredients.
 - g. Full Synthetic Base Coat 302: 100% acrylic polymer base; ready to use, applied without the addition of cement.
8. Parex Primers:
 - . Primer 310: 100% acrylic based coating to prepare surfaces for Parex finishes.
 - a. Sanded Primer 313: 100% acrylic based coating to prepare surface for Parex Cerastone finish.
9. Parex Finish Coat: Factory blended, 100% acrylic polymer based synthetic finish, integrally colored. Finish type, texture and color as selected by Architect.
10. Parex Vinyl Tracks: PVC plastic accessories, used for termination of Parex EIFS in lieu of backwrapping; provides straight termination and joint lines; facilitate sealant maintenance; Square Edge Track 361, and Drip Edge Track 362, as required for EIFS.
11. Vented Tracks 363: Exterior grade vinyl extrusion with vent holes for drainage and preformed front flange to key base coat.

12. Parex Seal Tape 360: Self adhering pre-compressed expanding tape for forming a weather seal.
13. Parex Silicone Sealant: One-part, ultra low-modulus, neutral curing, +100/-50% movement building sealant.
14. Water: Clean, potable water.
15. Portland Cement: ASTM C 150, Type I.

2.02 RELATED MATERIALS

A. Sheathing:

1. Plywood shall be not less than 7/16 inch thick, minimum 4-ply APA-Engineered Wood Association Exposure 1 or Exterior Grade C-D or better.
2. Oriented Structural Board (OSB) shall be Exposure 1; Thickness shall be not less than 7/16 inch.
3. For wood-based sheathing (Plywood and OSB) , comply with APA-Engineered Wood Association spacing recommendations for edge and end joints.
4. Sheathing shall be protected from weather before, during, and after application of Parex EIFS.

B. Flashing: Refer to Division 7 Flashing Section for flashing materials.

PART 3 - EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- #### **A. Compliance:** Comply with manufacturer's instructions for installation of exterior insulation & finish system.

REMINDER: PAREX EIFS WATER MASTER™ SYSTEM IS A DRAINABLE WEATHER BARRIER ASSEMBLY. SYSTEM PERFORMANCE DEPENDENT UPON, AMONG OTHER FACTORS, IMPORTANCE OF PROPER FLASHING AND JOINT SEALING, AND ATTENTION TO PROPER FLASHING AND JOINT SEALANT DETAILS INDICATED ON DRAWINGS.

3.02 INSTALLATION

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1. Install Water Master™ House Wrap and Water Master™ Flashing Membrane, making all laps weatherboard fashion to provide continuity of water shedding.
 2. Install tracks, back-wrap mesh, or edge-wrap mesh at system terminations.
 3. Install Parex Water Master™ Fasteners to secure insulation board to the wall.
 4. Rasp irregularities off insulation board.

5. Apply base coat and fully embed mesh in base coat; include diagonal mesh patches at corners of openings and reinforcing mesh patches at joints of track sections. Apply multiple layers of base coat and mesh where required for specified impact resistance classification.
6. Apply primer to base coat after drying. Primer may be omitted if it is not required by the manufacturer's primer and base coat product data sheets for the specified finish coat.
7. Finish Coat: Apply finish coat to match specified finish type, texture, and color. Apply finish except at base coat areas to receive sealant.
8. Install Parex sealant in accordance with Parex details and instructions. Apply sealant to base coat.

END OF SECTION