CSI SECTION 07 25 00 – Weather Barriers
CSI SECTION 07 27 26 – Fluid Applied Membrane Air Barriers

PART 1 - GENERAL

1.1 SECTION INCLUDES
A. Manufacturer’s requirements for the proper design, use, and installation of a 100% acrylic based, spray or roller-applied water-resistive membrane and air barrier coating.

1.2 RELATED SECTIONS
A. Section 03 30 00 - Cast-in-Place Concrete
B. Section 04 20 00 - Unit Masonry
C. Section 06 16 00 - Sheathing
D. Section 07 62 00 - Sheet Metal Flashing and Trim
E. Section 07 90 00 - Joint Protection
F. Section 08 50 00 - Windows
G. Section 09 21 16 - Gypsum Board Assemblies

1.3 REFERENCES
A. ASTM B117  Test Method for Salt Spray (Fog) Testing
B. ASTM C1135  Test Method for Determining Tensile Adhesion Properties of Structural Sealants
C. ASTM D522  Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings
D. ASTM D2247  Practice for Testing Water Resistance of Coatings in 100 Percent Relative Humidity
E. ASTM D4541  Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
F. ASTM E72  Test Methods of Conducting Strength Tests of Panels for Building Construction
G. ASTM E84  Test Method for Surface Burning Characteristics of Building Materials
H. ASTM E96  Test Method for Water Vapor Transmission of Materials
I. ASTM E283  Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
J. ASTM E331  Test Method for Water Penetration by Uniform Static Air Pressure Difference
M. ASTM E2178  Standard Test Method for Air Permeance of Building Materials
1.4 ASSEMBLY DESCRIPTION

A. Parex USA WeatherSeal Spray & Roll-On: 100% acrylic based water-resistive membrane and air barrier coating. Designed for use as water-resistive barrier and air barrier behind EIFS and other cladings. This product is installed over glass mat gypsum sheathing, cement board sheathing, CDX plywood, OSB*, concrete or CMU. *The system is qualified for application to OSB (oriented strand board) sheathing only in areas shown in the Parex USA Acceptable Substrates and areas of use Technical Bulletin.

B. Functional Criteria:

1. General:
   a. Flashing: Flashing shall be continuous and watertight. Flashing shall be designed and installed to prevent water infiltration behind the cladding. Refer to Division 07 Flashing Section for specified flashing materials.
   b. The configuration of the water resistive barrier, drainage plane, flashing and Parex USA materials, must allow for the egress of incidental moisture.

2. Performance Requirements:
   a. System to meet the performance and testing requirements of the International Code Council Acceptance Criteria AC 212 and ASTM E 2570.

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
<th>ICC and ASTM E2570 Criteria</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Weathering</td>
<td>AC 212</td>
<td>25 Cycles followed by Hydrostatic Pressure Test: No water penetration on the plane of the exterior facing side of the substrate.</td>
<td>Pass: no water penetration</td>
</tr>
<tr>
<td>Air Infiltration</td>
<td>ASTM E2178</td>
<td>Calculated flow Rate at 75 Pa (1.57 lb/ft², 0.3 in H₂O) = ( &lt; 0.02 \text{ L/m}²\text{s} (&lt; 0.004 \text{ cfm/ft}²) ) at 75 Pa (1.57 lb/ft², 0.3 in H₂O)</td>
<td>(&lt; .00001 \text{ L/m}²\text{s} (&lt; 0.00001 \text{ cfm/ft}²))</td>
</tr>
<tr>
<td>Air Leakage of Air Barrier Assemblies</td>
<td>ASTM E2357</td>
<td>Pass ( &lt; 0.2 \text{ L/s.m}²) at 75 Pa) ( &lt; 0.04 \text{ cfm/ft}²) at 1.57 psf</td>
<td>Pass</td>
</tr>
<tr>
<td>Air Leakage</td>
<td>ASTM E283</td>
<td>No Criteria</td>
<td>(&lt; 0.004 \text{ cfm/ft}²)</td>
</tr>
<tr>
<td>Freeze-Thaw Resistance</td>
<td>ASTM E 2485</td>
<td>10 Cycles</td>
<td>Pass – No Deliberious Effects</td>
</tr>
<tr>
<td>Hydrostatic Pressure Test</td>
<td>AATCC 127 (Water Column)</td>
<td>Resist 21.6 in (55cm) water for 5 hours before and after aging</td>
<td>Pass: no water penetration</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D412</td>
<td>No Criteria</td>
<td>360%</td>
</tr>
<tr>
<td>Flexibility</td>
<td>ASTM D522</td>
<td>No Criteria</td>
<td>No Cracking at 1/8&quot; (3mm)</td>
</tr>
<tr>
<td>Nail Seal Ability, Head of Water</td>
<td>ASTM D1970</td>
<td>No Criteria</td>
<td>Pass 5 inches of water</td>
</tr>
<tr>
<td>Evaluation of Fire Propagation</td>
<td>NFPA 285</td>
<td>In Accordance with IBC Chapter 26</td>
<td>Meets requirements for use on all Types of construction</td>
</tr>
<tr>
<td>Radiant heat exposure</td>
<td>NFPA 268</td>
<td>In Accordance with IBC Chapter 26</td>
<td>No ignition upon 20 minute radiant heat exposure at 1.25 w/ in².</td>
</tr>
</tbody>
</table>

1.5 SUBMITTALS

A. General: Submit Samples, Evaluation Reports and Certificates in accordance with Division 01 General Requirements Submittal Section.

1.6 QUALITY ASSURANCE

A. Qualifications:

1. All materials must be manufactured or sold by Parex USA and must be purchased from Parex USA or its authorized distributor.

2. Application:
   a. Shall have attended manufacturer’s Educational Seminar.
   b. Shall possess a current manufacturer’s certificate of education.
   c. Shall be experienced and competent in installation of plaster-like materials and liquid-applied weather-resistive membranes.
1.7 DELIVERY, STORAGE, AND HANDLING
A. Delivery: Deliver water-resistive membrane & air barrier coating materials in original packaging with manufacturer’s identification.
B. Storage: Store materials in a cool, dry location, out of sunlight, protected from weather and other harmful environment, and at a temperature above 40°F (4°C) and below 110°F (43°C) in accordance with manufacturer’s instructions.

1.8 PROJECT / SITE CONDITIONS
A. Installation Ambient Air Temperature: Minimum of 40°F (4°C) and rising, and remain so for 24 hours thereafter.
B. Substrate Temperature: Do not apply materials to substrates whose temperature are below 40°F (4°C) or contain frost or ice.
C. Inclement Weather: Do not apply materials during inclement weather unless appropriate protection is employed.
D. Materials shall not be applied if ambient temperature exceeds 120°F (49°C) or falls below 40°F (4°C) within 24 hours of application. Protect materials from uneven and excessive evaporation during hot, dry weather.
E. Prior to installation, the wall shall be inspected for surface contamination, or other defects that may adversely affect the performance of the materials and shall be free of residual moisture.

1.9 COORDINATION AND SCHEDULING:
A. Coordination: Coordinate water-resistive membrane & air barrier coating materials installation with other construction operations.

1.10 WARRANTY
A. Warranty: Upon request, at completion of installation, provide manufacturer’s Standard Limited Warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS
B. Components: Obtain components from authorized distributors. No substitutions or additions of other materials are permitted without prior written permission from Parex USA for this project.

2.2 MATERIALS
A. Water-resistive Membrane & Air Barrier Coating:
   2. Parex USA 396 Sheathing Tape: Non-woven synthetic fiber tape to reinforce the membrane at sheathing board joints, into rough openings and other terminations into dissimilar materials.
   3. Flashing Membrane: Self sealing, polyester faced, rubberized asphalt membrane, 30 mils (0.76 mm) thick.
B. Related Materials and Accessories:
   1. Substrate Materials:
   2. Gypsum Sheathing: Minimum 1/2" (13mm) thick, core-treated, weather-resistant, exterior gypsum sheathing complying with ASTM C 79.

2.3 MIXING
A. Mix water-resistive membrane & air barrier materials in accordance with manufacturer’s instructions.
3.4 APPLICATION
A. General: Installation shall conform to this specification and manufacturer’s written instructions.
   1. Flash all rough openings with water-resistive membrane & air barrier coating material embedded
      with sheathing tape or polyester backed peel and stick flashing membrane.
   2. Treat all sheathing joints with water-resistive membrane & air barrier coating material and embed
      sheathing tape.
   3. Apply water-resistive membrane & air barrier coating material to the surface of the substrate
      (Minimum 2 coats on plywood, OSB, concrete and masonry).
   4. Ensure that the water-resistive membrane & air barrier coating material laps onto all tracks and
      flashing to allow for any water to be drained into the tracks/flashing.
   5. Allow material to completely dry before proceeding with additional layers of the assembly.

3.5 CLEAN-UP
A. Removal: Remove and legally dispose of water-resistive membrane & air barrier coating material from
   job site.
B. Clean surfaces and work area of foreign materials resulting from material installation.

3.6 PROTECTION
A. Provide protection of installed materials from water infiltration into or behind them.
B. Provide protection of installed materials from dust, dirt, precipitation, and freezing during installation,
   and continuous high humidity until fully cured and dry.
C. Clean exposed surfaces using materials and methods recommended by the manufacturer of the material
   or product being cleaned. Remove and replace work that cannot be cleaned to the satisfaction of the
   Project Designer/Owner.

END OF SECTION
Rev. October 2011

Disclaimer: This guide specification is intended for use by a qualified designer. The guide specification is not intended to be used
verbatim as an actual specification without appropriate modifications for the specific use intended. The guide specification must
be integrated into and coordinated with the procedures of each design firm, and the requirements of a specific project. For additional
assistance, contact Parex USA’s Architectural Sales (866.516.0061) or Technical Support (800-224-2626).