**BUILDING PRODUCTS PROGRAM**

**Class:** Plumbing – Plastic Piping and Accessories

**Customer:** UPONOR, INC.

**Location:**
- Apple Valley, Minnesota
- Northeast Hutchinson, Minnesota

**Listing No.:** P321-5

**Effective Date:** October 15, 2020

**Last Revised:** October 15, 2020

**Expires:** N/A

**Website:** [www.uponor-usa.com](http://www.uponor-usa.com)

**Product(s):** PP-RCT Polypropylene Piping, Fittings and Valves.

**Standard(s):**

**Models:**
- PP-RCT Piping
- PP-RCT Fittings and Valves

**Marking(s):** All PP-RCT tubing, connectors, angle stop valves, and other accessories (if sufficient space available) shall be permanently marked with the following content applied to an area that is readily visible after installation:

- Manufacturers name or trademark
- Model Name
- Standard: ASTM E84
- Flame Spread Rating < 25, Smoke Developed Rating < 50
- Nominal Size
- QAI Logo with ‘us’ indicator on UPONOR PP-RCT pipe products where appropriate.
- Manufacturing Traceability Label - Production date code

**Rating(s):** The following outlines the performance of UPONOR PP-RCT pipes, fittings and valves determined in accordance with the noted standards

<table>
<thead>
<tr>
<th>Products</th>
<th>Limitations</th>
<th>Flame Spread Index</th>
<th>Smoke Developed Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP-RCT Pipes</td>
<td>Maximum 12-inch nominal diameter with maximum 1-½-inch wall thickness pipe products and accessories, installed with rated ½-inch pipe insulation²; No spacing requirements between adjacent runs.</td>
<td>&lt; 25</td>
<td>&lt; 50</td>
</tr>
<tr>
<td>PP-RCT Fittings and Valves</td>
<td></td>
<td></td>
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</tbody>
</table>

**Note 1:** Different sizes corresponding to different colors of PP-RCT pipe and accessories are dependent on manufacturer’s availability

**Note 2:** List of approved pipe insulation providers:

The following list of fiberglass insulation types (at minimum thickness of ½”) are approved for use with Uponor’s PP-RCT pipes, fittings and accessories when installed to maximum sizes outlined in tables above. The insulations noted must be Listed to ASTM C547 by an approved agency and are approved for use at the dimension specified above.
<table>
<thead>
<tr>
<th>Insulation</th>
<th>Flame Spread Rating</th>
<th>Smoke Developed Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manson Alley-K</td>
<td>&lt; 25</td>
<td>&lt; 50</td>
</tr>
<tr>
<td>Johns Manville Micro-Lok</td>
<td></td>
<td></td>
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<tr>
<td>Johns Manville Micro-Lok HP</td>
<td></td>
<td></td>
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<tr>
<td>Owens Corning Vapor Wick</td>
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<tr>
<td>Owens Corning Fiberglass</td>
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<tr>
<td>GLT Pipe and Tank</td>
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<tr>
<td>Knauf Earthwool Redi-Klad</td>
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</tbody>
</table>

Note: These products are subjected to limitations as specified above and must be installed in accordance with the manufacturers’ instructions. Authorities having jurisdiction should be consulted regarding allowable applications. See manufacturer’s listings for other standards listed under QAI certification programs.

The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under the conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI.

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