Hi. My name is Jordan Palmeri

Materials Management Program

Focus = building material impact reduction
2014 Environmental Footprinting project w/ OSB

1. Business Case Studies
2. Food Footprinting profiles
3. Concrete
Environmental Product Declarations (EPDs)

RiverBend Materials
Environmental Product Declaration
Mix 313061 • Corvallis Plant

This Environmental Product Declaration (EPD) reports the impacts for 1 m³ of ready mixed concrete mix, meeting the following specifications:
- ASTM C94: Ready-Mixed Concrete
- UNSPSC Code 30111505: Ready Mix Concrete
- CSA A23.1/A23.2: Concrete Materials and Methods of Concrete Construction
- CSI Division 03-30-00: Cast-In-Place Concrete

COMPANY
RiverBend Materials
3723 Fairview Industrial Dr SE, Suite 160
Salem, OR 97302

PLANT
Corvallis Plant
28054 Payne Road
Corvallis, OR 97333

EPD PROGRAM OPERATOR
National Ready Mixed Concrete Association
900 Spring St
Silver Spring, MD 20910

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Declared Product:</strong></td>
</tr>
<tr>
<td>Mix 313061 • Corvallis Plant</td>
</tr>
<tr>
<td>3000 PSI 3/4&quot; INTERIOR WRA</td>
</tr>
<tr>
<td>Compressive strength: 3000 psi at 28 days</td>
</tr>
<tr>
<td><strong>Declared Unit:</strong> 1 m³ of concrete</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
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<tbody>
<tr>
<td>Global Warming Potential (kg CO₂-eq)</td>
<td>240</td>
</tr>
<tr>
<td>Ozone Depletion Potential (kg CFC-11-eq)</td>
<td>3.66</td>
</tr>
<tr>
<td>Acidification Potential (kg SO₂-eq)</td>
<td>1.18</td>
</tr>
<tr>
<td>Eutrophication Potential (kg N-eq)</td>
<td>0.13</td>
</tr>
<tr>
<td>Photochemical Ozone Creation Potential (kg O₃-eq)</td>
<td>24.3</td>
</tr>
<tr>
<td>Abiotic Depletion, non-fossil (kg Sr-eq)</td>
<td>2.35</td>
</tr>
<tr>
<td>Abiotic Depletion, fossil (MJ)</td>
<td>404</td>
</tr>
<tr>
<td>Total Waste Disposed (kg)</td>
<td>0.43</td>
</tr>
<tr>
<td>Consumption of Freshwater (m³)</td>
<td>3.48</td>
</tr>
</tbody>
</table>

**Product Components:** natural aggregate (ASTM C33), type 1L cement (ASTM C95), fly ash (ASTM C618), batch water (ASTM C192), admixture (ASTM C494)

Additional detail and impacts are reported on page three of this EPD.
Oregon Concrete EPD Program

CalPortland Company
Front Avenue, Hillsboro and
West Vancouver Plants
Ready Mixed Concrete

Knife River
Environmental Product Declaration
Coffee Lake, Hillsboro,
Limton and Sundial Plants

RiverBend

Reimbursements:
• $2,500 / plant
How are EPDs being used?
Oregon Department of Treasury – new construction
Concrete + rebar 52%
Other materials 35%
PV panels 13%
Low carbon concrete-related policies
City of Portland - Concrete Procurement Policy

• Jan 1, 2020 - Require concrete EPDs on all City projects
• April 1, 2021 – City publishes global warming potential threshold
• Jan 1, 2022 – All EPDs must be below threshold

Policy: https://www.portlandoregon.gov/brfs/article/731696
Response to Comments: https://www.portlandoregon.gov/brfs/article/731698
EPDs for public purchasing

**EPDs required for:**
- Structural steel
- Re-bar steel
- Mineral wool insulation
- Flat glass

**Other State Efforts:**
- Oregon
- Washington
- Minnesota
- New York

**Federal Efforts:**
- Buy clean Procurement Requirements
Thanks Oregon Sustainability Board!

OSB played a crucial role in:

• Convening
• Endorsing research
• Connecting partners
materials management

conserving resources · protecting the environment · living well

Jordan Palmeri | jordan.palmeri@state.or.us
503-229-6766