ResinDek® Mezzanine Flooring Panels Come Out on Top in Environmental Research

Cincinnati, OH – February 2011 – Cornerstone Specialty Wood Products, LLC recently completed a study to evaluate the environmental impact of their mezzanine flooring product ResinDek® (an engineered wood product) versus concrete in the construction of mezzanines and industrial platforms.

The study concluded that when engineered wood products such as ResinDek® are used instead of concrete, the environmental impact is decreased in every Life Cycle Assessment category.

Life Cycle Assessment (LCA) for construction products is a systematic approach to quantify the environmental impacts associated with a product through its entire life, from initial extraction of the raw materials to manufacturing, use, and eventual disposal or recycling of it.

The research compared the use of 4,000 psi and 3,000 psi concrete mix to ResinDek® panels in 5 different categories:

- CO₂ Emissions
- Acid Rain Potential
- Smog Production
- Nitrogen Contamination in Water
- Energy Consumed

ResinDek® panels proved to be carbon negative over their life cycle compared to concrete for mezzanine flooring. Up to 45% more carbon is sequestered in ResinDek® products than is emitted over the rest of the product’s life cycle.

ResinDek® was also defined as a net energy producer when burned at the end of its life cycle since very few fossil fuels were required to manufacture it, unlike concrete.

Because ResinDek weighs less than concrete, and allows for a more resilient flooring system, fewer and lighter supports were required for this product for industrial platforms. Since mezzanines or industrial platforms are commonly added within distribution centers to increase space without using more land, the
shift from concrete to engineered wood mezzanine flooring starts adding up quickly in several areas.

**Life Cycle Assessment Comparison of Concrete & ResinDek when Recycled**

<table>
<thead>
<tr>
<th>Concrete Mezzanine</th>
<th>ResinDek (Engineered Wood Product)</th>
<th>No. Trucks</th>
<th>Item Description</th>
<th>35.0</th>
<th>No. Trucks</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Flooring/Decking</td>
<td>35.0</td>
<td>3.5</td>
<td>Concrete Flooring/Decking</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Footings</td>
<td>18.0</td>
<td>14.0</td>
<td>Concrete Footings</td>
<td>14.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel Framing</td>
<td>8.5</td>
<td>7.3</td>
<td>Steel Framing</td>
<td>7.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Total Trucks to Recycling Landfill: 61.5

ResinDek (engineered wood flooring/decking) requires 36.7 fewer truckloads for the recycling landfill trip, using less landfill space and transportation energy.

*Please note the above truckloads were based upon 44,000 lb. tractor-trailers. It would not be uncommon for dump trucks to be used instead, creating even a greater difference.

“We are hoping with this added information that individuals building or specifying mezzanines for warehouses, distribution centers, manufacturing facilities, pick modules, and storage buildings will reconsider their common choice of concrete for mezzanines. Whatever your personal views may be regarding environmental controversial issues, the efficient use of resources becomes an obvious choice when the needs are fulfilled equally,” said Cornerstone Specialty Wood Products, LLC President Greg Doppler.

“As an industry leader, we want to do more than simply provide mezzanine flooring. We want to provide solutions that improve the ergonomics in work environments, save money, reduce environmental impacts, and bring significant value to the professionals in material handling and logistics. We will continue to invest in our people, partnerships, customers, products, research, testing, and engineering to keep delivering more than mezzanine flooring,” continued Greg Doppler, President of Cornerstone Specialty Wood Products, LLC.

More information about Cornerstone Specialty Wood Products, LLC services, and their product ResinDek can be found at [http://www.resindek.com](http://www.resindek.com) or at the upcoming ProMat® MHIA International Expo, McCormick Place, Chicago, March 21-24 in Booth No. MA 2252.
About Cornerstone Specialty Wood Products, LLC
As the market leader in mezzanine flooring products, their ResinDek® products are available with ESD certified static control, gray or clear Diamond Seal® finishes, and fastening systems that speed up installation while hiding fasteners and providing a smooth surface for ease of movement and cleaning. ResinDek® live/dead pallet jack limits range from 1,250 – 8,000 lbs. and all ResinDek® panels have been certified to contain a minimum of 46% Post-Industrial Recycled Content (dry weight basis) and can contribute towards LEED® 2009 v3 Certification Credits with points available for MR Credit 4 and MR Credit 5 where projects are located within a 500 mile radius of Louisville, Kentucky.

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Keywords: industrial mezzanine flooring; mezzanine decking; platforms; life cycle assessment; warehouses; distribution centers; recycling; engineered wood flooring; environmental research; green flooring products; material handling; logistics; flooring system.