



**To: All PNA Construction Technologies, Inc. Customers**  
**Re: 2017 Recycled Content of PNA Construction Technologies products**

PNA is the industry leader in performance solutions for concrete flatwork. The following information is available to help calculate the recycled content for PNA products utilized in “green building” applications or for projects seeking LEED® certification.

Calculations and percentages are approximate and are based the total weight of the 2016 materials purchased. PNA has relied upon the estimates provided by our suppliers to report the post and pre-consumer content for PNA’s products.

This information is applicable to LEED® rating systems including but not limited to New Construction v3 and Core & Shell v3.

**Recycled Content**

*LEED® MR Credit 4.1 and 4.2*

MR Credit 4.1 (1 point): “Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project.”

MR Credit 4.2 (1 point in addition to MR Credit 4.1): “Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes an additional 10% beyond MR Credit 4.1 (total of 20%, based on cost) of the total value of the materials in the project.”

Please use the table below to calculate project-specific totals and credit applicability:

<b>2017 Average Recycled* Content of PNA Products</b> (% by total weight)			
<b>Product Group</b>	<b>Post-Consumer</b>	<b>Pre-Consumer</b>	<b>Total Recycled Content</b>
Diamond Dowel® System - 1/4”	50%	42%	92%
Diamond Dowel® System – 3/8”	51%	43%	94%
Diamond Dowel® System – 3/4”	52.5%	44.5%	97%
CoVex® dowel	54%	46%	100%
PD <sup>3</sup> Basket® assembly	50%	50%	100%
Armor-Edge® joint assembly	50%	50%	100%
Load Plate Basket® assembly	53%	45%	98%
Round dowels & round dowel basket assembly	50%	50%	100%
Square dowels & square dowel basket assembly	49%	49%	98%
Bollard base	50%	50%	100%
HydraCure™ S16	0%	0%	0%
HydraCure™ M5	0%	0%	0%
CL95™ macro fibers	0%	0%	0%

\*For the mills from which PNA procures steel, the predominant source of raw material for the melting process is derived from recycled steel (ferrous) scrap. Remaining resources added to the molten metal include fluxes and alloys to establish the final chemistry of the heat of the steel.

## **Regional Materials**

*LEED® MR Credit 5.1 and 5.2*

### MR Credit 5.1 (1 point):

“Use materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% (based on cost) of the total materials value. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.”

### MR Credit 5.2 (1 point in addition to MR Credit 4.1):

“Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for an additional 10% beyond MR Credit 5.1 (total of 20%, based on cost) of the total materials value. If only a fraction of the material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.”

PNA purchases materials from and manufactures product at numerous facilities throughout the United States. Please contact (800) 542-0214 for project-specific harvest and manufacture locations.