

# What Do EPDs Look Like?

ENVIRONMENTAL IMPACTS	
<b>Declared Product:</b> Description: Exterior 4000 PSI Compressive strength: 4000 PSI at 28 days	
<b>Declared Unit:</b> 1 m <sup>3</sup> of concrete	
Global Warming Potential (kg CO <sub>2</sub> -eq)	318
Ozone Depletion Potential (kg CFC-11-eq)	7.15E-6
Acidification Potential (kg SO <sub>2</sub> -eq)	0.95
Eutrophication Potential (kg N-eq)	0.24
Photochemical Ozone Creation Potential (kg O <sub>3</sub> -eq)	20.7
Abiotic Depletion, non-fossil (kg Sb-eq)	5.82E-5
Abiotic Depletion, fossil (MJ)	658
Total Waste Disposed (kg)	94.2
Consumption of Freshwater (m <sup>3</sup> )	2.40
<b>Product Components:</b> natural aggregate (ASTM C33), Portland cement (ASTM C150), fly ash (ASTM C618), batch water (ASTM C1602), admixture (ASTM C494), admixture (ASTM C260)	

In June, we shared an Asphalt Magazine introduction to Environmental Product Declarations (EPDs). They have been called a nutrition label for construction materials by some and simplistically, the statements seek to capture cradle to grave assessments of environmental impact as a comparison tool for design and purchasing decisions. The International Organization for Standardization (ISO 14025) says an EPD "quantifies environmental information on the life cycle of a product to enable comparisons between products fulfilling the same function." Simply put, they are an Every Day Counts [initiative](#) and are going to be part of our professional lives.

But what exactly are they? What do they look like?

The Federal Highway Administration's (FHWA) Innovator [magazine](#) offers some insight into what these are, how they may be used, and what they may look like.

As part of the United States' pledge to lower greenhouse gas emissions, FHWA is looking to reduce, "embodied carbon associated with manufacturing, transporting, and producing construction materials such as aggregate, asphalt, cement, asphalt mixtures, concrete mixtures, and steel reinforcement." They provide a couple examples to show what a typical EPD will include. The EPD is a "third-party verified report used to document embodied carbon and communicate the GHG emissions of construction materials in a transparent and standardized manner."

The Inflation Reduction Act authorized \$2 billion for a Low-Carbon Transportation Materials program, and FHWA can use EPDs to reimburse or incentivize eligible recipients to use construction materials with substantially lower levels of embodied GHG emissions. Reportedly, California, Colorado, Minnesota, and Oregon are at the forefront of buy clean policies that require EPDs in the procurement of construction materials.

Other EPD examples can be found for asphalt production here in Delaware at the Emerald Eco-Label [website](#). These examples show much greater detail than the summary tables in the Innovator article and give greater insight into the depth of results reported. They have tons of examples from other [states](#) as well.

We are going to learn a great deal more about EPDs in months to come, but they are surely going to be part of our design and contracting toolkit, so take some time to browse these and others to start your familiarization.



**Company Information**  
Allan Myers is an asphalt mixture producer.  
Georgetown Asphalt Plant asphalt plant  
22351 Joseph Lane  
Georgetown, DE 19947  
USA



**Product Description**

This EPD reports the potential environmental impacts and additional environmental information for an asphalt mixture, which falls under the United Nations Standard Products and Services Code 30111959. Asphalt mixtures are typically incorporated as part of the structure of a roadway, parking lot, driveway, airfield, bike lane, pedestrian path, railroad track bed, or recreational surface.  
Mix Name: AM-GEO-29  
Specification Entity: DelDOT  
Specification: 19mm  
Gradation Type: dense  
Mix Design Method: superpave  
Nominal Maximum Aggregate Size: 19.0 mm  
Performance Grade of Asphalt Binder: PG 58-28  
Customer (Project/Contract) Number: Not Reported  
This mix producer categorizes this product as a Hot Mix Asphalt (HMA) asphalt mixture. This asphalt mixture was produced within a temperature range of 149 to 171°C (300.2 to 340.2°F). Energy and environmental impacts are based on a plant's average performance over a 12-month period and are not adjusted for mix-specific production temperatures.