

Paving with Concrete: Better Value for the Investment

When making pavement decisions, saving money and minimizing a project’s environmental footprint are top of mind considerations, as are improving safety and sparing drivers the aggravation of roads under constant repair.

With its proven durability, reduced maintenance, lower carbon footprint, energy and fuel efficiency benefits, and recyclability, concrete pavement delivers superior value and performance over its lifetime. Plus, concrete is a local material.

Durability & Reduced Maintenance

Concrete pavement stands the test of time and requires little maintenance over its 30–50 year service life. No other material matches concrete’s ability to handle day-to-day heavy traffic turning movements and withstand extreme weather.

Lower Carbon Footprint

Concrete has a “best-in-class” performance on many metrics and is on the path to net-zero by 2050. Today’s concrete mixes have a lower carbon footprint than ever before. Manufacturing facilities for cement — concrete’s essential ingredient — are highly energy-efficient. Lower carbon cements like Portland-limestone cement reduce emissions by up to 10%. Low-carbon supplementary cementitious materials replace 20% or more of the cement required to produce one cubic meter of concrete and are diverted from landfills. Plus, concrete sequesters carbon dioxide from the atmosphere over its whole life.



Improved Energy Efficiency

Concrete pavement requires significantly less energy to construct than an asphalt one. Its lighter color, reflective surface reduces night-lighting needs while improving visibility. And it absorbs less heat, helping prevent higher ambient air temperature and keep communities cooler.

Improved Fuel Efficiency

The rigid surface of concrete pavement improves the fuel efficiency of commercial vehicles by up to seven percent. This can significantly reduce carbon emissions over the lifespan of the pavement.



Improved Safety

Concrete pavement means virtually no potholes or ruts, a lower risk of hydroplaning caused by pooling surface water, less potential for flash freezing and black ice in winter, good skid resistance and more visible, safer roads and parking lots at night.

Local & Recyclable

Concrete is manufactured locally, reducing emissions from transportation. It’s 100% recyclable and re-usable, reducing the need to pollute landfills and extract new virgin aggregate material.

Cost-Effective & Sustainable

Durable and environmentally friendly over its long lifespan, concrete pavement reduces the need for expensive maintenance and repairs, and the environmental impact associated with resurfacing and reconstruction operations. This means better value for the money and for the environment.