

Recycled Warm Modified Asphalt Paving Mixtures



Definition of Recycled Warm Modified Asphalt Paving Mixtures

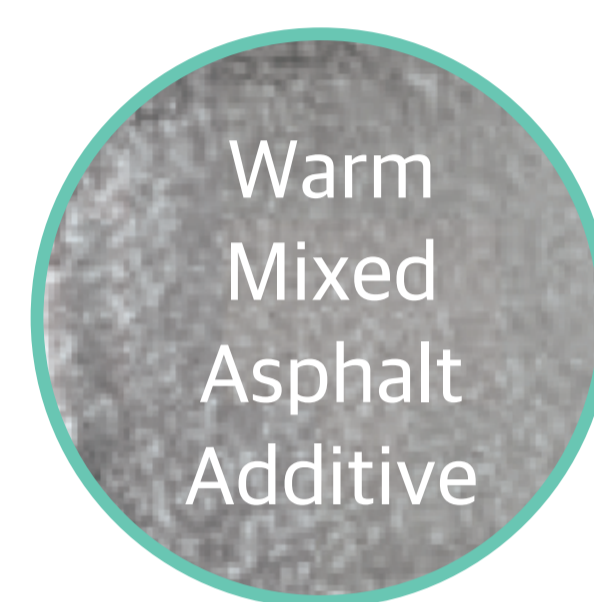


This asphalt concrete product achieves enhanced recycling rates by incorporating more than 50% recycled aggregates from reclaimed asphalt. It employs warm-mix additives and recycled-modified additives to ensure both a low-temperature production environment and high-performance quality. This results in an eco-friendly, low-carbon, and green product.

Description of the Patented Additive



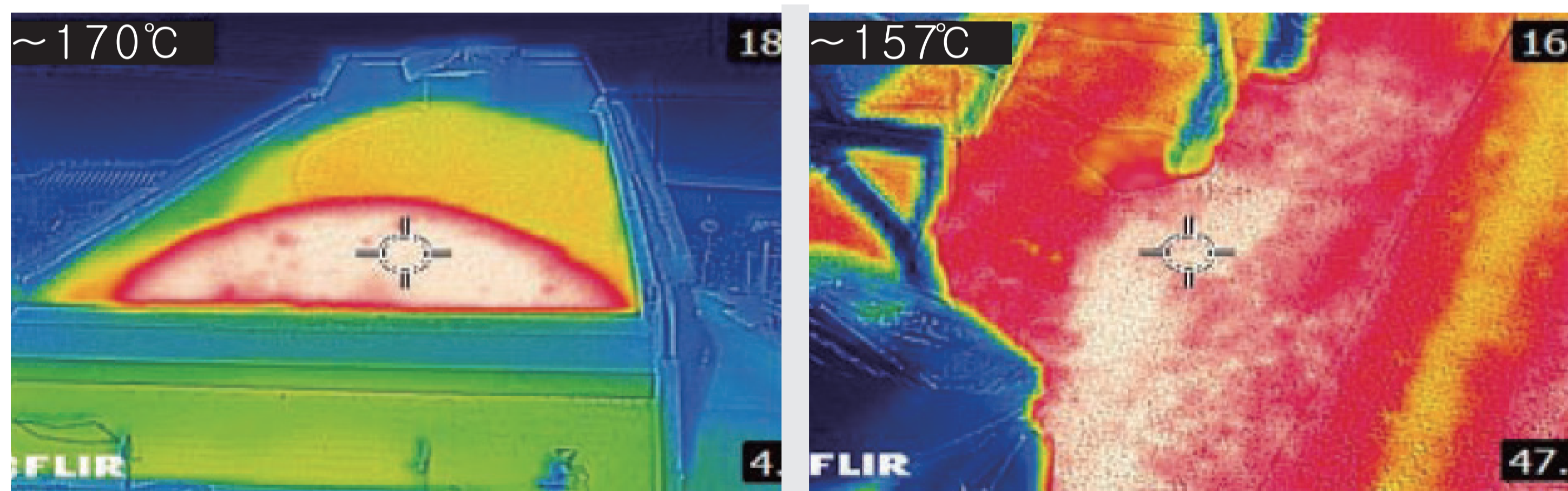
Adding recycled additives to porous polymers, we produce integral products, reducing the melting point of the polymer from high temperatures (above 170°C) to warm-mix temperatures (120~150°C). This multifunctional additive exhibits excellent performance.



Using a primary ingredient of diamine-based wax, with a melting point lower than 140°C, it is suitable for production at warm-mix temperatures. Its hydrophilic properties enhance adhesion with aggregates, resulting in excellent water resistance.

Environmental Benefits of Recycled Warm Modified Asphalt Paving Mixtures

Recycled Hot Mix Asphalt Paving Mixtures

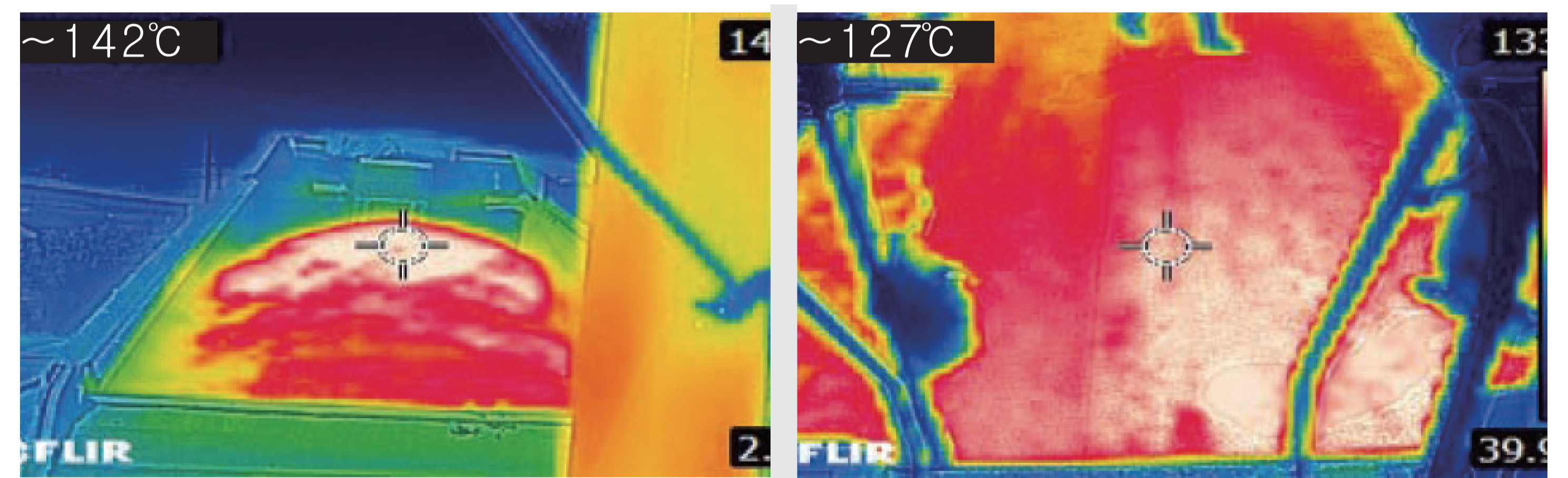


Product Manufacturing (170°C) Paving Temperature (157°C)

High Emission of Carbon and Air Pollutants During Production and Construction in High-Temperature Environments

Production and Construction: High-Temperature Conditions of 150°C to 170°C

Recycled Warm Modified Asphalt Paving Mixtures



Product Manufacturing (142°C) Paving Temperature (127°C)

Produced in a warm-mix environment to reduce carbon emissions and air pollutants

Production and Construction: Warm-Mix Temperature of 120-150°C

Comparison of Fuel Usage and Air Pollutant Emissions

Category	Fuel (L/ton)	Dust and Harmful Gases			
		Carbon Dioxide (%)	NOx(ppm)	SOx(ppm)	Carbon Dioxide (ppm)
Hot-Mix Asphalt Paving	9.3	3.2	963	75	60
Warm-Mix Asphalt Technology	6.3	1.9	262	21	35
Cost Savings	32.2	40.7	73.4	72	41.7

Source: Ministry of Land, Infrastructure, and Transport Press Releas, 2010

Comparison of Carbon Emissions

