

# DURA CLIME™



bringing materials to *life*™



Lafarge Asphalt is committed to being the leading developer and supplier in North America of innovative asphalt products designed to optimize quality, performance, durability and sustainability.

Duraclime uses warm mix asphalt technology to enable the production of asphalt mixes at reduced temperatures, while also incorporating higher levels of reclaimed asphalt pavement (RAP) and Asphalt Shingle Modifier (ASM).



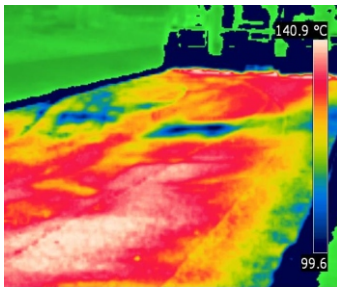
Conventional Hot Mix



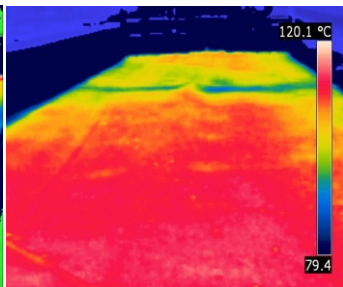
Duraclime

## Product Overview

Mixed at lower temperatures, DuraClime reduces emissions, fuel consumption, smoke and odors during the manufacturing process. This improves the comfort, safety and working environment of workers during the construction operations. Residents in local communities and the traveling public notice the improved air quality near asphalt plants and paving sites. A 10% to 25% reduction in the carbon footprint has been determined with the process. With widespread implementation at all asphalt plants in North America, this reduction is equivalent to removing the emissions from 200,000 to 500,000 cars per year.



Conventional Hot Mix



Duraclime



## Technical Details

- Reduced emissions
- Lower consumption of fossil fuels
- Reduced smoke and odors
- Improved comfort, safety and working environment
- Improved workability
- Extended compaction time
- More uniform compaction
- Reduced thermal segregation
- Proven performance in warm and colder climates
- Ability to incorporate high contents of recycled materials

## Performance

DuraClime exhibits the following exceptional performance characteristics: longer pavement life as light oils stay in the binder reducing age hardening; reduced thermal temperature segregation; more uniform compaction; and longer compaction times.

The superior performance of DuraClime has been demonstrated through extensive laboratory testing as well as on several in-service projects.

The DuraClime production process does not impact the asphalt binder rheology or Performance Grade (PG) classification. Additionally, DuraClime's lower mixing temperatures demonstrates reduced aging of the asphalt binder.

Asphalt Pavement Analyzer (APA) wheel rut testing and Tensile Strength Ratio (TSR) moisture susceptibility testing on DuraClime indicates comparable performance to conventional HMA. Furthermore, TSR results are higher than the minimum requirement of 80% showing DuraClime's high resistance to moisture induced damage.



### Lafarge's commitment to sustainability

DuraClime™ has the flexibility of incorporating high contents of Reclaimed Asphalt Pavement (RAP) and Asphalt Shingle Modifier (ASM) while still providing equivalent or better performance characteristics as conventional HMA. The use of these recycled materials saves road agencies and taxpayers money while conserving precious natural resources

Sustainable construction practices and products represent the future of our industry, and Lafarge is proud to offer the DURAPAVE line of asphalt products that contribute directly to the reduction of greenhouse gas emissions, reduced waste materials in landfills, and extended life spans for aggregate resources.

### For more information:

**R.W. (Bob) Forfylow, P.Eng.**  
Director of Quality - WCAN PAVE

**Email:** bob.forfylow@lafargeholcim.com

**Direct:** (403) 351-9023

**Cell:** (403) 861-0669

**Fax:** (403) 278-2738