

Project Profile – Warm Mix Additive, Palm Beach Co., FL

Project Location: Contractor Contact: Date Placed: Highway 700, Palm Beach County, FL Community Asphalt June 2012

As a field trial for the recently introduced AD-here 65-00 LOF with CECABASE RT warm mix additive blend, Community Asphalt Corporation in West Palm Beach Florida coordinated with Road Science[™], a Division of ArrMaz Custom Chemicals, to pave over a milled roadway section. The additive was added at 0.5% by weight of the virgin asphalt binder, with no foaming kits. Travel time from the plant was 35 minutes with each truck having to wait in gueue another

10 to 15 minutes to dump. The road had been milled, tacked and a lift of 1 $\frac{1}{2}$ " of asphalt was placed. It had rained the day before resulting in wet stockpiles. The ambient temperature at the jobsite was 88°F with 73% relative humidity. Pavement temperature was 80°F.

Design, Testing and Application Information: Two different mixes were produced. The first was a 12.5 mm recycle mix with 25% RAP using a PG64-22. The second mix was an airport service





surface mix (P-401) using a PG 67-22, with both mixes supplied by South Florida Materials. Approximately 140 tons of the 12.5 mm recycle mix were produced followed by 120 tons of the P-401 surface

mix. Temperatures were measured at the plant upon loading trucks then before dumping into the paver. Finally, temperatures were taken at the screed.



AD-here LOF 65-00[®] with CECABASE[®] RT 945

Project Profile - Warm Mix Additive, Palm Beach Co., FL

Results: Mix temperatures in the truck taken at the roadway site ranged from 240° to 260°. A standard rolling pattern of 3 passes with Bomag 190 steel wheel rollers in vibratory mode was employed. After the finish steel wheel, the gauge



yielded an in place



nuclear density of 94% to 95%. The field technician indicated that there was no observed difference in the compaction of this mix vs. regular hot mix. Temperatures at the screed for both mixes were consistently running from 234°F to 245°F with some as low as 220°F as new trucks were dumped into the paver. The mixes looked good and were placed with no fuming or smoking.

Conclusion: The additive performed well and was able to reduce plant temperatures 50 to 60° F from standard hot mix with no difficulty. Temperatures were started at the plant at 260 to 265° F and reduced slowly. The plant was able to produce mix as low as 240° F with

no problem. The mix rolled in well with the same patterns that they currently employ and densities were no more difficult to obtain than with their standard hot mix of the same design. The volumetrics of these warm mixes worked out to be similar to the hot mixes they currently use. Tim Fox, Plant Production Manager for Community Asphalt Corporation, considered



the trial a success and is looking forward to using the product on the Palm Beach International Airport in summer 2012.

To find out more, contact your local Road Science representative, or call 877-354-1851



www.roadscience.net © 2011 Road Science[™], Division ArrMaz Customer Chemicals