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Fractionating RAP



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What is Fractionating?

⇒ Processing RAP into multiple sizes

"Logic dictates that RAP should be treated like any other aggregate, sized and fed to the plant in multiple sizes."

Why Fractionate?

- ⇒ Liquid Binder & Gradation is more consistent
- ⇒ Improve overall quality of asphalt mix
- ⇒ Keep out of landfills
- ⇒ Reduce tons crushed

Mix Design Comparison

<i>Surface Type 1</i>	<u>Before</u>	<u>After</u>	<u>Variance</u>
#7	14%	12%	- 2%
#89	26%	24%	- 2%
Reg. Scr.	16%	12%	- 4%
Washed Scr.	31%	31%	---
RAP:	12%	20%*	+ 8%

*(+4 Material=12%, -4 Material= 8%)

Without Fractionating...

- ⇒ Limit Rap Percentage-15% in Intermediate Crs.
- ⇒ Inconsistent liquid binder & gradation
- ⇒ Resources are wasted

How Economical is Fractionating?

More Consistent Mix = Higher Quality Mix =

Elimination of Penalties!

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Results of Fractionating...

+4 RAP = 4.0% AC

-4 RAP = 6.5% AC

At 70% +4 RAP and 30% -4 RAP:

Average in RAP = 4.75%

Fractionating will be Required...

⇒ As percentage of RAP is increased

⇒ As quality of mix is rewarded more

Gradations



Seeing is believing...



+4 RAP

-4 RAP

Plant Upgrade



Questions?



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