

lowa Implementation

Adjusting PG Grade with RAP/RAS

- 2011/2012:

Binder Replacement (RAS=0%):

- $\leq 20\%$ No Change
- $> 20-30\%$ Adjust 1 Grade Softer
- 30% **Blending Chart**

Binder Replacement (RAS>0%):

- $\leq 15\%$ No Change
- $> 15-25\%$ Adjust 1 Grade Softer
- $> 25\%$ **DCT**

Adjusting PG Grade for RAP/RAS

- Proposed:

Binder Replacement (RAS = 0%):

- $\leq 20\%$ No Change
- 20-30% Adjust 1 PG Grade Softer OR *DCT
- $>30\%$ *DCT

Binder Replacement (RAS $> 0\%$):

- $\leq 15\%$ No Change
- 15-20% Adjust 1 PG Grade Softer OR *DCT
- $>20\%$ *DCT

*Both Mix Design and Field Production QA

DCT

Proposed

- Mix Design
 - Conditioning (AASHTO R30)
 - Contractor fabricate specimens @ 7% Voids
- QA
 - No conditioning
 - Collect loose mix behind paver (for QA)
 - Fabricate specimen (7% voids)
- PG Low Temp + 10C same temp
- Meet the following minimum fracture energy requirements tested at 10°C warmer than the low temperature PG Grade as follows:

The fracture energy of specimens containing binder that is 1 PG Grade softer than the contract binder grade or:

>30M ESALS	690 J/m ²
10-30M ESALS	460 J/m ²
<10M ESALS	400 J/m ²

whichever is lower

Other uses

- PPA Modified Binders
 - PG **XX-28** or PG **XX-34**
- Collect data and move towards broader implementation

SPR Funds

- Retrofit Nottingham Asphalt Tester
- \$55K approved
- In process of writing RFP
- Saws/jigs TBD