

## Shingles Material Specifications

- Tear-off shingle scrap must be sorted and any other roofing debris removed:
  - nails, plastic, metal, wood, coal tar epoxy, rubber materials, etc.
- Deleterious Materials
  - Maximum 0.5% by Total Weight:
    - excessive dirt, debris, concrete, metals, glass, paper, rubber, wood, plastic, soil, brick, tars, or other contaminating substances.

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## Shingles Material Specifications

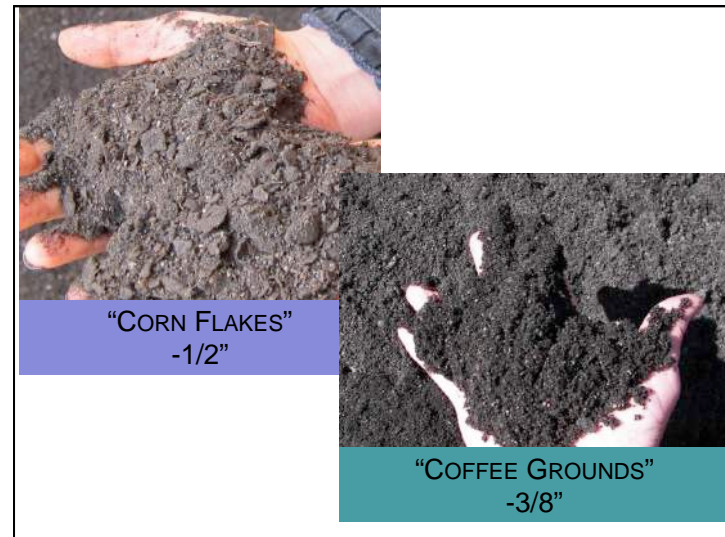
- Sample and Test for Asbestos
  - Less than one (1%) percent of asbestos containing material
    - » In accordance with Federal, North Carolina, and Local regulations.
  - Use NC-accredited Asbestos Inspectors or Roofing Supervisors to sample
    - » Asphalt Contractor must maintain records
    - » All documentation will be subject to review by the Department.

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## Shingles Material Specifications

- Stockpile Gradation Testing
  - Tests Done AFTER the Grinding Process
    - For Checking Adequacy of Grinding Process
  - Specification: 100% passing 3/8" sieve

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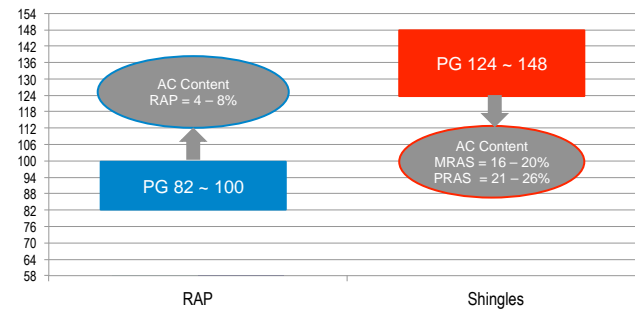
## Mix Specifications

- With RAS, Must Meet Both of the Following Requirements:
  1. Maximum by Weight of Mix = 6%
  2. Contributed/Recycled Binder Content
 

≤20%	Base PG Binder Required
21 – 30%	Grade Bump (Softer) Required
>30%	Engineer will determine

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## RAS Contributed Binder



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