

**OKLAHOMA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
FOR
RECLAIMED ASPHALT PAVEMENT AND SHINGLES**

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

708.04 COMPOSITION OF MIXTURES

(Revise as follows:)

C. Reclaimed Asphalt Pavement and Shingles *(Replace paragraph one, paragraph two, and Table 708:5 with the following:)*

Unless otherwise shown on the Plans, superpave mixtures containing reclaimed asphalt pavement (RAP) and/or reclaimed asphalt shingles (RAS) will be accepted in accordance with Table 708:5 if the mixture meets the Contract requirements for the type or grade.

Table 708:5 Reclaimed Asphalt Pavements and Shingles		
Superpave with Binder Type	Max. RAP/RAS^{a, c}, %	Max. RAS^{b, c}, %
PG 64-22 OK	30	5
PG 70-28 OK	30	5
PG 76-28 OK	30	5
Surface Courses (All Binders Above) ^d	12	0
Temporary Detours	40	5

a. Percent by binder replaced.
b. Percent by total weight.
c. Must meet air quality standards set by ODEC. Remove temporary pavements at end of project.
d. Excludes shoulders and driveways.

Process the RAS by ambient grinding or granulating such that 100 percent of the particles pass 3/8 in [9.3 mm] sieve and 95 percent to 100 percent pass the No. 4 [4.75 mm] sieve. Prior to use, remove all materials that are not part of the shingle, such as wood, paper, metal, plastic and felt paper. Determine the deleterious substances content of RAS material for mixture design purposes in accordance with AASHTO MP 15, Section 8. Do not use RAS if deleterious extraneous materials such as metals, glass, rubber, soil, brick, tars, paper, wood and plastic exceed 1.5 percent by mass as determined on material retained on the No. 4 [4.75 mm] sieve, or lightweight material such as paper, wood, and plastic exceeds 0.5 percent by mass as determined by material retained on the No. 4 [4.75 mm] sieve. Comply with all regulatory requirements stipulated for asbestos as required by the State of Oklahoma. Comply with SB 1042, Oklahoma Solid Waste Management Act. Stockpile shall be approved by the ODOT Materials Division.

The asphalt producer may elect to uniformly blend fine aggregate or fine RAP with the RAS stockpile if needed to keep processed material workable. Blending process shall be approved by the ODOT Materials Division prior to stockpiling. When RAS is pre-blended with fine aggregate or fine

RAP, show the materials as two separate bins on the mixture design job mix formula (JMF) even though the combined materials are added using a single cold feed bin.

Perform mix designs with RAS using AASHTO MP 15 and AASHTO PP 53 as guides. Contact the Materials Engineer for exceptions or additions. Determine asphalt content and gradation of the RAS material for mix design purposes. Contact the ODOT Materials Division for asphalt content determination prior to performing the mix design. Asphalt binder from RAS and RAP is designated as reclaimed asphalt binder. When RAS or RAP is used, calculate and ensure that the ratio of reclaimed asphalt binder to total binder does not exceed the percentages shown in Table 708:5 as maximum binder replacement, nor total percent of RAS allowed is exceeded.

708.06 SAMPLING AND TESTING (*Amend Table 708:13 to add the following:*)

Table 708:13	
Sampling and Testing of Aggregates, Bituminous Mixtures, and Asphalt Materials	
Materials	Testing Method
Use of Reclaimed Asphalt Shingles as an Additive in Hot Mix Asphalt (HMA)	AASHTO MP 19
Design Considerations When Using Reclaimed Asphalt Shingles (RAS) in New Hot Mix Asphalt (HMA)	AASHTO PP 53

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