



# Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, UTBWC, Type C Mat'l. Code: asco038

Insoluble ID: I1

(Material Full Name and Material Code)

(Design Type and Design Type ID)

APAC Central - (Arkholas S & G Asphalt) P/S # m00553

U3c00931800100

(Producer/Supplier Name and Producer/Supplier Code)

(Mix ID)

APAC - Central (Mcalester, OK) Formerly Glover PLANT ID # m00553-07

(Plant Name and Plant ID)

Aggregate	Producer/Supplier		% USED
3/4" Chips	Dolese Co (Hartshorne, OK)	P/S # m002756101	10
5/8" Chips	Martin-Marietta (Mill Creek, OK)	P/S # m002303502	55
3/8" Chips	Dolese Co (Hartshorne, OK)	P/S # m002756101	13
Scrns.	Dolese Co (Hartshorne, OK)	P/S # m002756101	22

**Asphalt Cement:** Asphaltic Cement Type PG 76-28 OK, acem001, Lion Oil Frontier (Muskogee, OK), m01021  
(Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)

Producer/Supplier:	Dolese Co (Hartshorne, OK) P/S # m002756101				Martin-Marietta (Mill Creek, OK) P/S # m002303502				Dolese Co (Hartshorne, OK) P/S # m002756101				Dolese Co (Hartshorne, OK) P/S # m002756101				Comb. Agg.	JMF	Min.	Max.	% Tol. (±)														
	3/4" Chips	5/8" Chips	3/8" Chips	Scrns.	3/4" Chips	5/8" Chips	3/8" Chips	Scrns.	3/4" Chips	5/8" Chips	3/8" Chips	Scrns.	3/4" Chips	5/8" Chips	3/8" Chips	Scrns.																			
	100	100	100	100	80	75	85	5	57	57	24	32	4	28	28	19	15	23	4	15	15				10	10	8	8	6	6	4.4	4.4	3.4	5.4	1.0
3/4 in (19 mm)	100	100	100	100	80	75	85	5	57	57	24	32	4	28	28	19	15	23	4	15	15				10	10	8	8	6	6	4.4	4.4	3.4	5.4	1.0
1/2 in (12.5 mm)	45	73	100	100	57	57	24	32	4	28	28	19	15	23	4	15	15				10	10	8	8	6	6	4.4	4.4	3.4	5.4	1.0				
3/8 in (9.5 mm)	12	38	98	100	28	28	19	15	23	4	15	15				10	10	8	8	6	6	4.4	4.4	3.4	5.4	1.0									
#4 (4.75 mm)	6	7	20	97	19	19	15	23	4	15	15				10	10	8	8	6	6	4.4	4.4	3.4	5.4	1.0										
#8 (2.36 mm)	4	4	6	72	15	15				10	10	8	8	6	6	4.4	4.4	3.4	5.4	1.0															
#16 (1.18 mm)	4	3	3	55	10	10	8	8	6	6	4.4	4.4	3.4	5.4	1.0																				
#30 (.600 mm)	4	2	3	36	8	8				6	6	4.4	4.4	3.4	5.4	1.0																			
#50 (.300 mm)	4	2	2	28	6	6				4.4	4.4	3.4	5.4	1.0																					
#100 (.150 mm)	3	2	2	20	4.4	4.4	3.4	5.4	1.0																										
#200 (.075 mm)	2.1	1.6	1.6	14.3	4.7	4.7	4.4	5.0	0.3																										
AC Content %																																			

Requires Form 93-E0 signed by the Department for production use. -Oklahoma D.O.T. Materials-

**°F (°C) Required**  
 Mix temperature @ discharge from mixer: 325 (163) ± 20 °F (± 10 °C)

Optimum roadway compaction temperature: 300 (149)  
 Laboratory mixing temperature: 325 (163)  
 Laboratory compaction temperature:

Tests on Asphalt Cement	Found
Specific Gravity @ 77 °F	1.0100

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Tests on Aggregates	Required	Units
Contabro	12.3	N/A
F.A.A. %U	41	40 min. %
Flat and Elongated	22	max. %
Fractured Faces	100/100	100/85 min. %
Insoluble Residue	68.1	65 min. %
LA Abrasion	31	35 max. %
Micro-Deval	12.6	18 max. %
Sand Equivalent	89	45 min. %
IOC	-0.28	%
Gse	2.668	
Gsb	2.632	

TSR 0.81 0.80 max. (Design)  
 Compacted Wt. (lbs/sy/1" thick) = 109.0 @ 4.7 % Asphalt Cement

Drain-down(%) = 0.08 0.10 max.

MEETS SPECIFICATION REQUIREMENTS PER SPECIAL PROVISION 708-26(a-f) 09

Comments:

Last Modified By: Vivanco, David dvivanco  
(User Name and User ID)

Date: 8/9/2018  
(mm/dd/yyyy)