



Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, Type S4 (PG 64-22 OK) Mat'l. Code: asco012
 (Material Full Name and Material Code)
 B & S Construction and Truncking P/S # m01082
 (Producer/Supplier Name and Producer/Supplier Code)
 B&S Construction and Trucking PLANT ID # m01082-01
 (Plant Name and Plant ID)

Insoluble ID: I1
 (Design Type and Design Type ID)
 S4pv0261600800
 (Mix ID)

Aggregate	Producer/Supplier	% USED
5/8" Chips	Dolese Co (Hartshorne, OK) P/S # m002756101	35
3/8" Chips	Dolese Co (Hartshorne, OK) P/S # m002756101	20
Scns.	Stigler Stone (Enterprise, OK) P/S # m002623102	30
Sand	Pryor Sand (Whitefield, OK) P/S # m002455105	15
Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, Asphalt & Fuel Supply (Catoosa, OK), m00850 (Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)		

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

Sieve Size	Producer/Supplier				Comb. Agg.				% Tol. (±)
	Dolese Co (Hartshorne, OK) P/S # m002756101	Dolese Co (Hartshorne, OK) P/S # m002756101	Stigler Stone (Enterprise, OK) P/S # m002623102	Pryor Sand (Whitefield, OK) P/S # m002455105		JMF	Min.	Max.	
5/8" Chips									
3/8" Chips									
Scrns.									
Sand									
3/4 in (19 mm)	100	100	100	100	100	100	100	100	0
1/2 in (12.5 mm)	98	100	100	100	99	99	92	100	7
3/8 in (9.5 mm)	59	94	100	100	84	84	77	91	7
#4 (4.75 mm)	11	12	86	96	46	46	39	53	7
#8 (2.36 mm)	3	2	62	90	34	34	29	39	5
#16 (1.18 mm)	2	1	47	79	27	27	23	31	4
#30 (.600 mm)	2	1	39	48	20	20	16	24	4
#50 (.300 mm)	1	1	34	6	12	12	8	16	4
#100 (.150 mm)	1	1	24	1	8	8	5	11	3
#200 (.075 mm)	1.2	0.6	13.1	0.2	4.5	4.5	2.5	6.5	2
AC Content %					4.9	4.9	4.5	5.3	0.4

Mix temperature @ discharge from mixer: 305 (152) ± 20 °F (± 10 °C) **Required**
 Optimum roadway compaction temperature: 290 (143)
 Laboratory mixing temperature: 325 (163)
 Laboratory compaction temperature: 300 (149)

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

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Tests on Compressed Mixtures (@ Design AC)			
# Gyr.	% Density		% Density Required
	of Gmm	% Density	
Nini	6	88.7	85.5 - 91.5
Ndes	50		96.0

Tests on Aggregates	Required	Units
Durability Index	60	40 min. %
F.A.A. %U		N/A %
Flat and Elongated	0	10 max. %
Fractured Faces	100/100	85/80 min. %
Insoluble Residue	52.2	30 min. %
LA Abrasion	36.6	40 max. %
Micro-Deval	34	N/A %
Permeability	1.4	12.5 max. 10 ⁻⁵ cm/s
Sand Equivalent	52	40 min. %
IOC	0.79	%
Gse	2.643	
Gsb	2.615	
Specimen Weight	4780	g

Tests on Compressed Mixtures							
%AC	Gmb	% Density		% VMA	% VMA Required	% VFA	% VFA Required
		of Gmm	% Density				
4.8	2.346	2.453	95.6		Design / Field	14.6	Design / Field
5.3	2.368	2.434	97.3	96.0 / 94.5 - 97.4	14.2	14.5 / 14.0	81.0
5.8	2.390	2.416	98.9		13.9		92.1

Dust Prop.
 1.0
 0.9
 0.8

Dust Prop. Req.
 0.6 - 1.6

ITS (PSI) 148.7 N/A min.
TSR 0.80 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 107.7 @ 4.9 % Asphalt Cement

Hamburg Rut Test Depth (mm) 2.60 12.50 max. @ 10,000 cycles

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

Comments: _____

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 (User Name and User ID)

Date: 6/30/2016
 (mm/dd/yyyy)