Version: V03.40

Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, Type S3 (PG 64-22 OK) Mat'l. Code: asco009
(Material Full Name and Material Code)

Binder - Recycled ID: B2
(Design Type and Design Type ID)

J.O.B. Const Co P/S # m00562
(Producer/Supplier Name and Producer/Supplier Code)

S3c00931800700
(Mix ID)

J.O.B Const Co #27-2 (Hartshorne) - 350TPH PLANT ID # m00562-02
(Plant Name and Plant ID)

Aggregate	Producer/Supplier	% USED
3/4" Chips	Dolese Co (Hartshorne, OK) P/S # m002756101	40
5/8" Chips	Dolese Co (Hartshorne, OK) P/S # m002756101	15
Scrns.	Dolese Co (Hartshorne, OK) P/S # m002756101	10
Sand	Muskogee Sand - West Plant (Muskogee, OK) P/S # m007067309	10
Fine R.A.P.	Contractor / Project Site P/S # Contractor	25

Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, Lion Oil Co. (Muskogee, OK), m00511
(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-

Producer/Supplier:	Dolese Co (Hartshorne, OK) P/S # m002756101	Dolese Co (Hartshorne, OK) P/S # m002756101	Dolese Co (Hartshorne, OK) P/S # m002756101	Muskogee Sand - West Plant (Muskogee, OK) P/S # m007067309	Contractor / Project Site P/S # Contractor								
Sieve Size	3/4" Chips	5/8" Chips	Scrns.	Sand	Fine R.A.P.				Comb. Agg.	*JMF*	*Min.*	*Max.*	*% Tol. (±)*
1 in (25 mm)	100	100	100	100	100				100	***100***	*100*	*100*	*0*
3/4 in (19 mm)	100	100	100	100	100				100	***100***	*93*	*100*	*7*
1/2 in (12.5 mm)	73	95	100	100	100				88	***88***	*81*	*95*	*7*
3/8 in (9.5 mm)	45	73	99	100	95				73	***73***	*66*	*80*	*7*
#4 (4.75 mm)	6	11	94	100	74				42	***42***	*35*	*49*	*7*
#8 (2.36 mm)	1	2	61	100	60				32	***32***	*27*	*37*	*5*
#16 (1.18 mm)	1	1	39	99	50				27	***27***	*23*	*31*	*4*
#30 (.600 mm)	1	1	27	93	41				23	***23***	*19*	*27*	*4*
#50 (.300 mm)	1	1	20	66	31				17	***17***	*13*	*21*	*4*
#100 (.150 mm)	1	1	15	11	22				9	***9***	*6*	*12*	*3*
#200 (.075 mm)	0.6	0.8	10.6	0.5	12.7				4.6	***4.6***	*2.6*	*6.6*	*2*
AC Content %					5.4				4.3	***4.3***	*3.9*	*4.7*	*0.4*

	°F (°C)	Required
Mix temperature @ discharge from mixer:	305 (152)	± 20 °F (± 10 °C)
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 of Gmm	% Density Required
Nini	6	89.1	85.5 - 91.5
Ndes	50		96.0

Tests on Aggregates		Required		Units
Durability Index	66	40	min.	%
F.A.A. %U		N/A		%
Flat and Elongated	0	10	max.	%
Fractured Faces	100/100	85/80	min.	%
Insoluble Residue		N/A		%
LA Abrasion	22	40	max.	%
Micro-Deval	12.4	N/A		%
Permeability	5.2	12.5	max.	10^{-5}cm/s
Sand Equivalent	82	40	min.	%
IOC	0.53			%
Gse	2.629			
Gsb	2.607			
Specimen Weight	4800			g

Tests on Compressed Mixtures

%AC	Gmb	Gmm	% Density of Gmm	% Density Required	% VMA	% VMA Required	% VFA	
4.3	2.355	2.459	95.8	Design / Field	13.6	Design / Field	69.1	% VFA Required
4.8	2.363	2.441	96.8	96.0 / 94.5 - 97.4	13.7	13.5 / 13.0	76.6	70 - 75
5.3	2.383	2.423	98.3		13.4		87.3	

Dust Prop.
1.2
1.0
0.9

Dust Prop. Req. 0.6 - 1.6

ITS (PSI) 184.3 N/A min.
TSR 0.85 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 108.2 @ 4.3 % Asphalt Cement
2.9 % New Asphalt Cement

Hamburg Rut Test Depth (mm) 3.98 12.50 max. @ 10,000 cycles

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

Comments: Similar to S3pv0261300500 (Plant ID Change)

Last Modified By: McComack, Hunter J. hmccomac
(User Name and User ID)

Date: 4/24/2018
(mm/dd/yyyy)