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 ID: B1
(Design Type and Design Type ID)

Circle S Paving P/S # m00555
(Producer/Supplier Name and Producer/Supplier Code)

S3pv0261700600
(Mix ID)

Circle S Paving (Clinton, OK) - 200TPH PLANT ID # m00555-01
(Plant Name and Plant ID)

Aggregate	Producer/Supplier	% USED
#67 Rock	Dolese Co (Cooperton, OK) P/S # m002723801	25
3/8" Chips	Dolese Co (Cooperton, OK) P/S # m002723801	20
Scrns.	Dolese Co (Cooperton, OK) P/S # m002723801	22
Man. Sand	Martin-Marietta (Snyder, OK) P/S # m002323802	18
Sand (Unlisted Source)	McClemore Sand @ Elk City, OK	15

Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, Coastal Energy (Miller, MO), m00305
(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 (Cooperton, OK) P/S # m002723801	Dolese Co (Cooperton, OK) P/S # m002723801	Dolese Co (Cooperton, OK) P/S # m002723801	Martin-Marietta (Snyder, OK) P/S # m002323802	McClemore Sand @ Elk City, OK								
Sieve Size	#67 Rock	3/8" Chips	Scrns.	Man. Sand	Sand (Unlisted Source)				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)	92	100	100	100	100				98	98	91	100	7
1/2 in (12.5 mm)	46	100	100	100	100				87	87	80	94	7
3/8 in (9.5 mm)	17	97	100	100	100				79	79	72	86	7
#4 (4.75 mm)	2	12	98	96	99				57	57	50	64	7
#8 (2.36 mm)	1	2	67	67	98				42	42	37	47	5
#16 (1.18 mm)	1	1	44	39	97				32	32	28	36	4
#30 (.600 mm)	1	1	31	22	88				24	24	20	28	4
#50 (.300 mm)	1	1	23	10	40				13	13	9	17	4
#100 (.150 mm)	1	1	18	3	14				7	7	4	10	3
#200 (.075 mm)	1.0	1.0	14.3	1.2	5.6				4.7	4.7	2.7	6.7	2
AC Content %									4.8	4.8	4.4	5.2	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	89.0	85.5 - 91.5
Ndes	50		96.0

Tests on Aggregates		Required		Units
Durability Index	80	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	26	40	max.	%
Micro-Deval	9.8	N/A		%
Permeability	6.6	12.5	max.	10^{-5}cm/s
Sand Equivalent	72	40	min.	%
IOC	0.35			%
Gse	2.686			
Gsb	2.654			
Specimen Weight	4850			g

Tests on Compressed Mixtures

%AC	Gmb	Gmm	% Density of Gmm	% Density Required	% VMA	% VMA Required	% VFA	% VFA Required
4.3	2.369	2.507	94.5	Design / Field	14.6	Design / Field	62.3	
4.8	2.388	2.488	96.0	96.0 / 94.5 - 97.4	14.3	13.5 / 13.0	72.0	70 - 75
5.3	2.409	2.469	97.6		14.0		82.9	

Dust Prop.	Dust Prop. Req.
1.2	0.6 - 1.6
1.1	
1.0	

ITS (PSI) 163.2 N/A min.
TSR 0.83 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 109.4 @ 4.8 % Asphalt Cement

Hamburg Rut Test Depth (mm) 2.24 12.50 max. @ 10,000 cycles

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

Comments:

Last Modified By: Williams, Bobby Ray bwilli01
(User Name and User ID)

Date: 4/26/2017
(mm/dd/yyyy)