Version: V03.40

Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, Type S3 (PG 70-28 OK) Mat'l. Code: asco008
(Material Full Name and Material Code)

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

Tulsa Asphalt Co P/S # m00355
(Producer/Supplier Name and Producer/Supplier Code)

S3c00931370700
(Mix ID)

Tulsa Asphalt Co #2 (Tulsa, OK) 300TPH PLANT ID # m00355-02
(Plant Name and Plant ID)

Aggregate	Producer/Supplier	% USED
#67 Rock	Anchor Stone (Owasso, OK) P/S # m001156603	28
1/2" Chips	Anchor Stone (Owasso, OK) P/S # m001156603	10
Man. Sand	Anchor Stone (Owasso, OK) P/S # m001156603	25
Sand	Anchor Sand, Delaware Ave. (Jenks, OK) P/S # m001137217	11
Fine R.A.P.	Contractor / Project Site P/S # Contractor	25
B. H. Fines	Contractor / Project Site P/S # Contractor	1

Asphalt Cement: Asphaltic Cement Type PG 70-28 OK, acem002, HollyFrontier (Catoosa, OK), m01028
(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:	Anchor Stone (Owasso, OK) P/S # m001156603	Anchor Stone (Owasso, OK) P/S # m001156603	Anchor Stone (Owasso, OK) P/S # m001156603	Anchor Sand, Delaware Ave. (Jenks, OK) P/S # m001137217	Contractor / Project Site P/S # Contractor	Contractor / Project Site P/S # Contractor							
Sieve Size	#67 Rock	1/2" Chips	Man. Sand	Sand	Fine R.A.P.	B. H. Fines			Comb. Agg.	JMF	Min.	Max.	% Tol. (±)
1 in (25 mm)	100	100	100	100	100	100			100	100	100	100	0
3/4 in (19 mm)	99	100	100	100	100	100			100	100	93	100	7
1/2 in (12.5 mm)	62	100	100	100	100	100			89	89	82	96	7
3/8 in (9.5 mm)	26	98	100	100	99	100			79	79	72	86	7
#4 (4.75 mm)	3	41	93	98	87	100			62	62	55	69	7
#8 (2.36 mm)	2	5	66	87	64	100			44	44	39	49	5
#16 (1.18 mm)	2	3	40	70	48	100			32	32	28	36	4
#30 (.600 mm)	2	2	21	46	37	100			21	21	17	25	4
#50 (.300 mm)	2	1	10	17	27	100			13	13	9	17	4
#100 (.150 mm)	2	1	5	2	18	100			8	8	5	11	3
#200 (.075 mm)	1.0	0.7	3.3	0.3	13.4	100.0			5.6	5.6	3.6	7.6	2
AC Content %					5.2				4.7	4.7	4.3	5.1	0.4

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

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

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

Tests on Compressed Mixtures (@ Design AC)	# Gyr.	% Density of Gmm	% Density Required
Nini	7	89.8	85.5 - 90.5
Ndes	65		96.0

Tests on Aggregates		Required		Units
Durability Index	40	40	min.	%
F.A.A. %U		N/A		%
Flat and Elongated		10	max.	%
Fractured Faces	100/100	95/90	min.	%
Insoluble Residue	3.1	N/A		%
LA Abrasion	32	40	max.	%
Micro-Deval	20.8	N/A		%
Permeability	8.3	12.5	max.	10^{-5}cm/s
Sand Equivalent	70	45	min.	%
IOC	0.26			%
Gse	2.661			
Gsb	2.626			
Specimen Weight	4750			g

Tests on Compressed Mixtures

%AC	Gmb	Gmm	% Density of Gmm	% Density Required	% VMA	% VMA Required	% VFA	% VFA Required
4.7	2.370	2.471	95.9	Design / Field	14.0	Design / Field	70.7	
5.2	2.380	2.453	97.0	96.0 / 94.5 - 97.4	14.1	13.5 / 13.0	78.7	70 - 75
5.7	2.422	2.434	99.5		13.0		96.2	

Dust Prop.	Dust Prop. Req.
1.3	0.6 - 1.6
1.2	
1.1	

ITS (PSI) 102.1 N/A min.
TSR 0.81 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 108.7 @ 4.7 % Asphalt Cement
3.4 % New Asphalt Cement

Hamburg Rut Test Depth (mm) 7.89 #N/A

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

Comments:

Last Modified By: Suitor, Kevin ksuitor
(User Name and User ID)

Date: 11/17/2017
(mm/dd/yyyy)