



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)
 J.O.B. Const Co P/S # m00562
 (Producer/Supplier Name and Producer/Supplier Code)
 J.O.B Const Co (Hartshorne) - 350TPH PLANT ID # m00562-02
 (Plant Name and Plant ID)

Binder ID: B1
 (Design Type and Design Type ID)
 WS3qc0101294800
 (Mix ID)

Aggregate	Producer/Supplier	% USED
3/4" Chips	Dolese Co (Hartshorne, OK) P/S # m002756101	40
3/8" Chips	Dolese Co (Hartshorne, OK) P/S # m002756101	10
Scrs.	Dolese Co (Hartshorne, OK) P/S # m002756101	35
Sand (Unlisted Source)	Arkansas River Sand (Spiro, OK)	15
Warm Mix Asphalt (WMA) Technology: TEREX (Foaming Process) qual028 Terex Roadbuilding m00801 (Product Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)		
Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, HollyFrontier (Catoosa, OK), m01028 (Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)		

Sieve Size	Producer/Supplier:				Sand (Unlisted Source)	Comb. Agg.	%			Tol. (±)
	3/4" Chips	3/8" Chips	Scrs.	Arkansas River Sand (Spiro, OK)			JMF	Min.	Max.	
1 in (25 mm)	100	100	100	100	100	100	100	100	0	
3/4 in (19 mm)	100	100	100	100	100	100	93	100	7	
1/2 in (12.5 mm)	64	100	100	100	86	86	79	93	7	
3/8 in (9.5 mm)	37	95	100	100	74	74	67	81	7	
#4 (4.75 mm)	5	25	94	96	52	52	45	59	7	
#8 (2.36 mm)	4	6	64	94	39	39	34	44	5	
#16 (1.18 mm)	3	3	41	91	30	30	26	34	4	
#30 (.600 mm)	3	3	26	79	22	22	18	26	4	
#50 (.300 mm)	3	2	19	31	13	13	9	17	4	
#100 (.150 mm)	2	1	14	4	6	6	3	9	3	
#200 (.075 mm)	1.7	1.2	10.1	0.6	4.4	4.4	2.4	6.4	2	
AC Content %					4.7	4.7	4.3	5.1	0.4	

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

Warm Mix Asphalt (WMA) Additive %

2.0

Mix temperature @ discharge from mixer: 275 (135) ± 20 °F (± 10 °C) **Required**
 Optimum roadway compaction temperature: 260 (127)
 Laboratory mixing temperature: 325 (163)
 Laboratory compaction temperature: 300 (149)

Tests on Aggregates	Required	Units
Durability Index	66	40 min. %
F.A.A. %U	N/A	%
Flat and Elongated	10	max. %
Fractured Faces	100/100	85/80 min. %
Insoluble Residue	15.4	N/A %
LA Abrasion	19.7	40 max. %
Micro-Deval	14.1	N/A %
Permeability	4.1	12.5 max. 10 ⁻⁵ cm/s
Sand Equivalent	59	40 min. %
Pba	0.57	
IOC	0.29	%
Gse	2.603	
Gsb	2.565	
Specimen Weight	4650	g

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	89.2	85.5 - 91.5
Ndes	50		96.0

Tests on Compressed Mixtures							
%AC	Gmb	Gmm	% Density of Gmm	% Density Required	% VMA	% VMA Required	% VFA
4.2	2.299	2.441	94.2	Design / Field	14.1	Design / Field	58.9
4.7	2.325	2.423	96.0	96.0 / 94.5 - 97.4	13.6	13.5 / 13.0	70.6
5.2	2.349	2.406	97.6		13.2		81.8

Dust Prop.
 1.2 **Dust Prop. Req.** 0.6 - 1.6
 1.0
 0.9

ITS (PSI) 156.6 N/A min.
TSR 0.91 0.80 / 0.75 min. (Design / Field)
 Compacted Wt. (lbs/sy/1" thick) = 106.6 @ 4.7 % Asphalt Cement

Hamburg Rut Test Depth (mm) 1.86 12.50 max. @ 10,000 cycles

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

Comments:

Last Modified By: Schratwieser, Edward P. eschratw
 (User Name and User ID)

Date: 11/25/2014
 (mm/dd/yyyy)