



**DEVELOPMENTAL SPECIFICATIONS  
FOR  
HIGH PERFORMANCE THIN LIFT OVERLAY**

**Effective Date  
October 17, 2017**

**THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**15057.01 DESCRIPTION.**

These specifications describe requirements for a highly polymer modified asphalt thin lift surface course. Apply Section 2303 of the Standard Specifications unless otherwise directed in these specifications.

**15057.02 MATERIALS.**

**A. Asphalt Binder.**

Use PG 58-34E with a minimum percent recovery of 90% when tested at 58°C per AASHTO T 350 at 3.2 kPa.

**B. Mix Design.**

1. Design Gyration 50  
Design Target (%Gmm) 3.0  
Film Thickness 8.0 – 13.0  
Aggregate Quality A  
Crushed Content (minimum) 50%  
FAA (minimum) 40  
Sand Equivalency (minimum) 50  
VMA (minimum) 16%
2. **Friction Aggregate.**  
Interstates: minimum 30% of Total Aggregate shall be Type 2 or better  
Non-Interstates: minimum 50% of Total Aggregate shall be Type 4 or better
3. **Hamburg Testing (AASHTO T324).**  
Compact to 3.5% air voids. No more than 8 4 mm rutting in the first 8000 passes.
4. Do not use more than 15.0% binder replacement. Do not use RAS.

**5. Gradation.**

**Table DS-15057: Thin Lift Overlay Gradation**

<b>Sieve Size</b>	<b>Min % Passing</b>	<b>Max % Passing</b>
1½ inch		
1 inch		
3/8 inch	91	100
#4		90
#8	27	63
#16		
#30		
#50		
#100		
#200	2	10

**15057.03 CONSTRUCTION.**

- A.** Apply tack coat prior to placement of thin lift overlay according to Section 2303 of the Standard Specifications.
- B.** Pave when ambient temperatures are at least 60°F and rising
- C.** Compact with steel wheeled roller.
- D.** Do not open to traffic until the entire mat has cooled below 150°F.
- E. Quality Assurance/Quality Control.**
  - 1. Field Voids Acceptance.**

Acceptance for field voids shall be Class II compaction defined in Section 2303 of the Standard Specifications.
  - 2. Lab Voids Acceptance.**

Sample from windrow or hopper. Apply Article 2303.05, A, 3, a, 2 of the Standard Specifications for AAD acceptance. Air void target is based on approved JMF.
  - 3.** Take at least one cold feed for gradation control each day of production.

**15057.04 METHOD OF MEASUREMENT.**

Hot Mix Asphalt Thin Lift Overlay will be measured according to Article 2303.04 of the Standard Specifications.

**15057.05 BASIS OF PAYMENT.**

Hot Mix Asphalt Thin Lift Overlay will be paid for according to Article 2303.05 of the Standard Specifications.