



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

**Effective Date  
December 15, 2020**

**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.**

**15086.01 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.

**15086.02 MATERIALS.**

**A. Asphalt Binder.**

Use PG 64-34E+ with a minimum percent recovery of 90% when tested at 64°C per AASHTO T 350 at 3.2 kPa.

**B. Mix Design.**

1. Design Gyration	50
Design Voids Target (Based on %Gmm)	≤ 2.0
Film Thickness	8.0 – 15.0
Aggregate Quality	A
Crushed Content (minimum)	50%
FAA (minimum)	40
Sand Equivalency (minimum)	50

**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).**

Required only for Interstate paving mixes. Compact to 3.5% air voids. No more than 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-15086: Thin Lift Overlay Gradation**

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

**15086.03 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.~~

~~**B.** Compact with static steel wheeled roller.~~

~~**C.** Do not open to traffic until the entire mat has cooled below 150°F.~~

**E D. 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.

**15086.04 METHOD OF MEASUREMENT.**

Hot Mix Asphalt Thin Lift Overlay will be measured according to [Article 2303.04](#) of the Standard Specifications.

**15086.05 BASIS OF PAYMENT.**

Hot Mix Asphalt Thin Lift Overlay will be paid for according to [Article 2303.05](#) of the Standard Specifications.