



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

**Effective Date  
June 17, 2025**

**THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**23075.01 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.

**23075.02 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.**

**Table DS-23075.02-1: Mix Design**

Test or Quality	Value
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

**1. 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

**2. 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.

**3. Do not use more than 15.0% binder replacement. Do not use RAS.**

**4. Gradation.**

**Table DS-23075.02-2: 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

**23075.03 CONSTRUCTION.**

- A. Apply tack coat prior to placement of thin lift overlay according to [Section 2303](#) of the Standard Specifications.
- B. Keep the production temperature of HMA mixtures between 225°F and 335°F until placed on the grade.
- C. Compact with static 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~~ based on visual field observations. Should problems be observed, the Engineer may require density gauge readings to verify field voids are less than or equal to 2%.

**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.

**23075.04 METHOD OF MEASUREMENT.**

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

**23075.05 BASIS OF PAYMENT.**

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