

MATERIALS ENGINEERING BRANCH

Standard No.: MEB-P043

Effective Date

Current: March 2020

Previous: N/A

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Standard Practice For: Sampling Compacted Bituminous Mixtures for Laboratory Testing

1.0 SCOPE

This Standard Practice outlines the procedure for collecting samples of compacted bituminous mixture for laboratory testing.

2.0 REFERENCE STANDARDS

ASTM Standard

D5361 Sampling Compacted Asphalt Mixtures for Laboratory Testing

MEB Standards

P044 Random Sampling for Acceptance Testing

3.0 PROCEDURE

3.1 Sample Location

The location of the sample shall be determined by *MEB P044 Random Sampling for Acceptance Testing*, or as directed by the Contractor Administrator.

3.2 Core Extraction

The full thickness of the layer or lift being extracted shall be cut with the core barrel.

Ensure the cut edge of the core is perpendicular to the surface.

A lifting tool should be used to extract the core from the core hole, to eliminate damage.

Cooling water shall be used during all cutting operations.

Once extracted, wash the core sample with clean water and wipe immediately with a clean, dry towel to minimize water absorption into the core.

Visually inspect the core sample and core hole and record observations.

Mark the sampling sequence number or any other specified designation directly on the core sample.

3.3 Slab Extraction

Cold Recycled Pavements require slab cutting for density and moisture determination.



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The full thickness of the layer being extracted shall be cut with a concrete saw without using water.

Ensure the cut edge of the blade is perpendicular to the surface. A relief cut is necessary to remove slabs without damage.

Extract two (2) square samples from each test site. Sample sizes shall be in accordance with Table 3.1.

A lifting tool shall be used to extract the slab from the surface, ensuring the removal of the full layer without damage to the samples.

Visually inspect the slabs and record observations. Mark the sampling sequence numbers or any other specified designation directly on the sample.

Wrap the samples in plastic film and place the samples in a waterproof bag and/or container so no moisture escapes the samples. Re-mark the wrapped samples if necessary.

Table 3.1 Slab Sample Size Requirements

Dimension	Minimum (mm)	Maximum (mm)
Width	100	150
Length	100	150

3.4 Sample Identification

The following information shall be included with the sample:

- Contract number
- Location (PTH or PR)
- Date and time sampled
- Sampled by
- Lift number
- Lane
- Station
- Wheel path
- Offset from centreline
- Sampling sequence number or other specified designation

3.5 Backfilling Holes

The sample hole shall be backfilled before proceeding to the next sample location.

Backfill the sample holes with hot mixed bituminous or alternate materials as approved by the Contract Administrator, and compact the mix in layers with a mechanical compaction hammer.



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Ensure that the finished surface is smooth and fully sealed.

4.0 CHAIN OF CUSTODY

Each sample must be recorded on the Chain of Custody form.