



TEX-222-F

Sampling Bituminous Mixtures



Why

Proper procedures for sampling representative materials from what is being delivered and placed on the roadway for laboratory testing.

Testing samples that are representative of what is being placed on the roadway is important to ensure quality material is delivered to the project.



When

Sampling of materials for specification compliance and acceptance is required during production. Samples may also be obtained during hauling, placement at the project site, or at the stockpile.



How

Sampling Locations

1. Plant-Mixed Mixtures
 - Method A - Trucks
 - Method B - Front-end loader
2. Stockpiles at the plant
3. Windrows
4. Cores from the roadway
5. Behind the laydown machine (paver)

Sampling

- Obtain representative samples to avoid segregation and contamination of the mixture.

Sample Size

- Minimum amount of mixture needed to sample is determined by the applicable specification and testing procedures.
- Amount of mixture will vary by each testing procedure and the number of tests required.
- The diameter of roadway cores is specified by specification.

Sample Splitting

- Combine all of the mixture sampled and thoroughly mix it all together.
- Split the material into individual samples in accordance with Tex-200-F.

Transporting Samples

- When mix is allowed to be cooled down and brought to another laboratory for testing, place the mixture in paper bags or cardboard boxes.
- Do not exceed a thickness of three inches in any of these containers.

 **QUICK FACTS: LEVEL 1B****Plant-Mixed Mixtures**

- Method A - Sampling from Trucks
 - *Use a proper sampling stand, following all safety precautions.*
 - *Select a minimum of three sections.*
 - *Divide the sample size by three.*
 - *Dig a minimum of 12 inches below the surface and remove the amount of material needed from each section.*
- Method B - Sampling from a Front-End Loader
 - *Clean the bucket of material that may contaminate the sample.*
 - *Fill the bucket of the front-end loader with mix directly from the discharge chute.*
 - *Take mix from several locations in the bucket to make a composite sample of a minimum of 30 lbs.*

Stockpiles of Mix at the Plant

- Sample equal quantities from holes dug into points near the top, middle, and bottom of the stockpile.

Mix from Windrows

- Sample mixtures at intervals of no more than 500 feet.
- When possible, sample from a complete cross-section of the mixture approximately one foot wide.

Roadway Cores

- Take cores during the cool part of the day to minimize the possibility of damage to the cores.
- Use ice, dry ice, or carbon dioxide to cool the pavement when taking samples in full heat.
- Take a minimum of two cores from each location and wipe the surface of the cores dry with a cloth.
- When shipping to a central lab for testing, wrap the cores individually with paper or rags and pack tightly in one-gallon buckets.

Loose Material Behind the Laydown Machine (Paver)

- Sample after approximately half of the truck load has passed through the paver.
- Sample from different areas in front of the screed on the paver or from different areas immediately behind the paver.