

**STATE OF OHIO
DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENT 1035
FIELD SAMPLING ASPHALT CONCRETE**

April 18, 2008

1035.01 General. Field samples of asphalt concrete will be selected by a stratified random sampling procedure and taken from the mat behind the paver. If the mat thickness is less than 1.25 inch (32 mm) the samples will be taken from the paver hopper. A sample form for determining and documenting the location of material in each subplot to be sampled is attached.

1035.02 Equipment. The equipment required for taking samples includes:

1. Spatula or scraping device
2. Clean sample pan
3. Asphalt concrete mix sampling tube
4. Clean metal plates, Three 10" x 10" (250 mm x 250 mm) for mat thickness of 1.25 to 2 inches (32 to 50 mm)
5. Nails
6. Trowel or other form of lifting device

1035.03 Random Selection of Sample. Obtain four random samples, taken from within four sublots or partial lots, to represent each specified lot. Determine the particular location of material to be sampled by applying a random percent number, as obtained from the random number table, to the total tonnage in the subplot or partial lot. The location of production material selected shall be anticipated in its particular truck and in the first, second, or last third fraction of that load. When the approximate location of material is being placed, the sample shall be taken.

1035.04 Taking Samples

1. **Mat** - Place the plate in the path of the paver so the sample will be obtained when the desired ton is fed into the spreading screws. Determine where the plate will be located transversely from the edge of pavement by applying a second random percent number to the total width of the mat. If the transverse location selected is in imminent conflict with the paving equipment, the plate shall be moved laterally to the nearest suitable location within the mat width. Nails should be used to prevent the plate from sliding. Mark the location of the plate so that after the paver has passed, the plate may be found by probing the mat with a trowel. The trowel may then be used to lift the plate and sample from the mat. The plate and sample should be placed into the sample pan.

2. **Paver hopper** - Samples are taken alternately from over right and left flight feeders when the desired ton is in the hopper. With the loading interrupted and the truck pulled away from the paver, the correct size of sampler is sunk into the mix to collect a proper sample. Material is deposited from the sampler into the sample pan. Fine materials are scraped from inside the sampler, placed in the pan, and the spatula is scraped on the side of the pan. Sample size shall not be less than 22 lbs (10 kg).

1035.05 Identification and Shipment The sample data card (TE-10) is completed, placed in an envelope and wrapped up with the pan. The sample no will also be created in CMS; the information completed in CMS; and a copy of the sample screen submitted with the sample. The wrapped sample shall be tagged and shipped to the District Testing Engineer.

C-147A
Supplement 1035

OHIO DEPARTMENT OF TRANSPORTATION
RANDOM SELECTION OF ASPHALT CONCRETE FIELD SAMPLES

Project No. _____
 Reference No. _____

Item Type _____
 Lot No. _____

	SUBLOT			
	A	B	C	D
1. Initial accumulative total of weight laid				
2. Sublot size or partial estimate				
3. Random percentage number from table				
4. Location in subplot to be sampled (2 X 3)				
5. Accumulative weight at sample location (1 + 4)				
6. Initial accumulative total for next subplot (1 + 2)				
7. Station where sample taken				
8. Lane				
*9. Width of mat				
*10. Random percentage number from table				
*11. Distance from edge (right or left) or pavement (9 X 10)				
12. Location of subplot				
13. Dates Placed				

**Used when taking mat samples.*