

Quartermaster™ Asphalt Sample Divider

AASHTO R 47

INTRODUCTION:

The Quartermaster™ Asphalt Sample Divider is a fixed, four-chute splitter with a gate-release hopper designed to reduce bulk samples of hot-mix asphalt and aggregate materials to four equal specimens. Aggregate materials larger than 2in or hot-mix asphalt of insufficient temperature to be free-flowing may cause bridging in the fixed chutes, causing blockages and uneven sample distributions. Splitting accuracy can only be as good as the methods employed. We suggest following the guidelines in ASTM and AASHTO procedures to achieve accurate, representative samples.

ASSEMBLY:

1. Place the base unit of the Quartermaster™ Asphalt Sample Divider with four adjustable threaded feet on a smooth, rigid surface.
2. Place a level across the corners of the base unit, and adjust the threaded feet so the base is stable and level.
3. Place the hopper section of the Sample Divider on top of the base. Verify the assembled unit remains stable and level.
4. Slide the four included Galvanized Pails under the base, so that each makes contact with two adjacent legs and is positioned beneath the chutes. The handles of the buckets should be facing away from the center of the unit for ease of handling after splitting.
5. Close the hopper by swinging both hopper doors upward and engaging the release handle under the hopper door catch mechanism.

OPERATING INSTRUCTIONS:

1. Check that the hopper doors are closed and secured with the handle/door catch mechanism.

2. Obtain the aggregate or hot-mix asphalt sample to be quartered. (See WARNING!)
3. Place the sample into the hopper, distributing evenly as you pour. Make sure the sample is level from side-to-side and from front to back with a small scoop or trowel.
4. Make sure all four buckets are positioned properly below each corner of the Sample Divider base.
5. Turn the Release Handle in a smooth, quick motion, allowing the hopper gates to open simultaneously.
6. Remove samples for testing.



(Continued on back.)

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NOTE: For accurate dividing of smaller bulk samples, the optional Quick Funnel inserts into the Hopper.

For further reductions in sample size, use samples from two opposite corners, combine in hopper and repeat splitting process until the desired fraction is reached 1/8, 1/16, 1/32, etc.

For easier clean-up of hot-mix asphalt samples, apply a coat of release agent on all surfaces that are likely to come in contact with the asphalt. Please make sure release agents are approved for use with asphalt and will not change the characteristics of the mix being tested.

WARNING!

1. Asphalt paving materials are hot! Please use EXTREME CAUTION! ALWAYS wear protective clothing and safety equipment to prevent burns and serious injury.
2. ALWAYS practice proper lifting techniques when handling large samples.
3. Use CAUTION when opening the hopper door to prevent injuries from pinching action of the hopper door and the release handle mechanism.
4. Proper attention to safety is the responsibility of the operator.

ACCESSORIES:

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Description

Material Handling Chute
Quick Funnel Insert
Galvanized Pail