

ALDOT-435

AGGREGATE SLOPE PROTECTION TESTING & FREQUENCY

1. Scope

- 1.1. This procedure describes the field method used to verify the aggregate gradation specified for Aggregate Slope Protection.

2. Equipment

- 3.1. The contractor shall make available to the project personnel the testing equipment prior to starting of the job. The contractor shall make available and assist to operate any handling equipment required for sampling, sorting, and transporting materials to be tested. Miscellaneous equipment and safety equipment will be provided by the Department
- 3.2. Scales of adequate capacity to determine the mass of the material. The scale shall be accurate to 1% of the indicated mass.
- 3.3. Sieves and/or templates meeting the requirements of ASTM E 11, *Standard Specification for Wire Cloth and Sieves for Testing Purposes*, for sizes up to 5 inches. For sizes above 5 inches single-opening templates may be fabricated for the required sizes. For template openings from 5 inches to 16 inches, the openings shall be within $\pm 2\%$ of the required size. Multiple-opening templates may be fabricated for use on field benches or pickup truck beds. Sieves and templates shall be checked prior to use for squareness, straightness, and conformance to opening tolerance. Figure 1 shows other requirements for single-opening and multiple-opening templates.
- 3.4. A 5 gallon bucket.
- 3.5. A rock hammer.
- 3.6. A 10 ft X 10 ft minimum 6 mill (0.006") contractor grade plastic sheeting.
- 3.7. Miscellaneous equipment such as cameras for documentation and tags for labeling.
- 3.8. Safety equipment, such as heavy duty gloves, safety goggles, respirators or dust masks, steel-toed boots or caps, and hard hat.
- 3.9. Handling equipment such as loaders, dozers, excavators, and/or trucks required for sampling, sorting, and transporting materials.

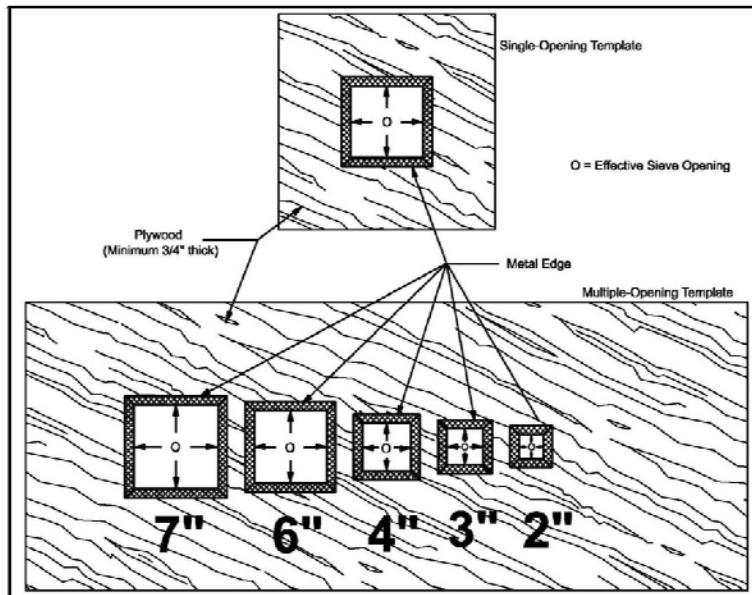


Figure 1: Single and multiple opening templates

3. Sampling

- 4.1. A sample shall be obtained at the job site from a randomly chosen truck.
- 4.2. Allowed the truck load to be dumped as close to the testing site as possible.
- 4.3. With a dozer or loader scalp level the top of the stockpile.
- 4.4. A minimum sample of 1,000 pounds will be required. The sample shall be obtained from the center of the pile.

4. Procedure

- 5.1. Place the representative sample on the plastic sheeting.
- 5.2. Weight the 5 gallon bucket and place it under the smaller sieve or template opening.
- 5.3. Pick up each rock and pass it through the openings. Record the weight of the rock on form BMT-192, *Field Gradation for Aggregate Slope Protection*, under the largest opening that the rock would not pass through (weight retained)
- 5.4. Any rock passing through the smallest opening shall be deposited into the 5 gallon bucket without being weighed.
- 5.5. After all rocks have been processed, funnel any remaining material on the plastic sheeting through the smaller sieve or template opening into the 5 gallon bucket.
- 5.6. Weight the 5 gallon bucket with its content. Subtract the weight of the bucket to determine the weight of the material in the bucket. Record the total amount of material in the bucket on form BMT – 192.
- 5.7. Determine the total weight of the sample from the information in form BMT-192.
- 5.8. Determine the percent retained and percent passing for each sieve.
- 5.9. Compare the calculated percent passing by weight with the specification requirements.

5. Report

- 6.1. Attach to form BMT-192 any pictures and notes relevant to the field testing.