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**DETERMINING WEIGHT (MASS) OF  
DITCH & SLOPE PROTECTION MATS**

**SCOPE**

This method of test is intended to determine the weight (mass) in pounds per square yard (kilograms per square meter) of ditch and slope protection mat in the field. This determination would normally be a responsibility of District Materials.

**PROCEDURE**

A. Apparatus

1. Balance - Minimum capacity 100 lbs. (50 kg) accuracy 0.5 lbs. (0.25 kg)
2. Tape measure

B. Sample Procedure

1. Secure a full roll sample that has not been unrolled or damaged at the project site. Do not remove the protective covering.
2. If large quantities of wood excelsior mat are being used, more full-roll samples should be taken and the results averaged.

C. Test Procedure

1. Carefully place the full roll sample with the protective covering on the balance and weigh to the nearest 0.5 lb. (0.25 kg)
2. Remove protective covering and check the length and width of the mat with a tape measure to make sure the sample roll meets the minimum dimensional tolerances. The minimum width is 47 inches (1.19 m) and the minimum length is 80 feet (24.4 m).
3. Repeat procedure for additional samples.

D. Calculations

$$S = \frac{M}{A}$$

Where: A = Area of roll in square yards (square meters)  
M = Weight (Mass) of full roll of wood excelsior mat in pounds (kilograms)  
S = Weight (Mass) in pounds per square yd (kilograms per square meter)

E. Report

Report weight (mass) in pounds per square yd (kilograms per square meter) of the mat.