

UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE

**MATERIAL SPECIFICATION**  
**MS-212: "ROCK"**

212.1 SCOPE

This specification governs the quality of rock to be used for rock structures or rock surfacing.

212.2 QUALITY

Individual rock fragments shall be dense, sound and free from cracks, seams and other defects conducive to accelerated weathering. The rock fragments shall be angular to sub-rounded in shape. The least dimension of an individual rock fragment shall be not less than one-third the greatest dimension of the fragment. Rounded river rock is not acceptable for material used as rock riprap.

The rock shall have the following properties:

- a. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.
- b. Absorption not more than 2 percent by weight.

The bulk specific gravity and absorption shall be determined by ASTM Method C-127.

Rock that fails to meet these requirements may be accepted only if similar rock from the same source has been demonstrated to be sound after 5 years or more of service under conditions of weather, wetting and drying, and erosive forces similar to those anticipated.

212.3 GRADATION

The rock shall conform to gradation limits shown on the plan.