

TECHNICAL SPECIFICATIONS
FOR
RIP RAP

1. Description

This work shall consist of furnishing and placing one or more classes of crushed or fractured limestone on a prepared surface in accordance with these Specifications and in reasonably close conformity with the sizes, thicknesses and typical cross-section shown on the Plans or established by the Engineer.

2. Materials

All materials used in this construction, in addition to the general requirements of these Specifications, unless otherwise stipulated, shall conform to the following:

Class I

Stones ranging from 1 ½" to 5" with 75% greater than 4".

Class II

Stones ranging from 6" to 10" with 75% greater than 8".

Class III

Stones ranging from 9" to 12" with 75% greater than 11".

Class IV

Stones ranging from 12" to 18" with 75% greater than 15".

3. Preparation of Foundation

Immediately prior to the construction of rip rap, the sand filter bed, filter fabric surface or natural ground surface shall be trimmed within reasonably close conformity to the lines and grades indicated on the Plans or as directed by the Engineer. The natural ground or sand filter bed shall be thoroughly compacted by the use of hand or mechanical tamps. On slopes, the bottom of the rip rap shall be placed at least 2 feet below the natural ground surface, unless otherwise directed.

4. Construction

Rip rap shall be constructed upon the prepared foundation by hand placing, so that the stones shall be as close together as is practicable, in order to reduce voids to a minimum.

When rip rap is constructed in more than one layer, it shall be placed so that it will be thoroughly tied together with the larger stone protruding from one layer into the other.

The standard depth of rip rap shall be 12 inches for Class I, and Class II, 18 inches for Class III and 24 inches for Class IV, unless otherwise directed; and in no instance shall be less than 10 inches in depth.

The main stones shall be thoroughly "chinked" and filled with the smaller stones by throwing them over the surface in any manner that is practical to fill the voids. Napping the stones will not be required, except stones protruding more than 4 inches above what is considered normal surface of the stones.

5. Method of Measurement

Rip rap will be measured by the ton, complete in place. The volume shall be obtained from the thickness shown on the Plans and surface measurement. No measurement for payment will be made for excavation or for preparing the foundation for rip rap.

6. Basis of Payment

Accepted quantities of rip rap will be paid for at the Contract unit price per ton, and measured as set out above, complete in place.

Payment will be made under:

<u>Description</u>	<u>Unit</u>
Rip Rap Class I	Tons
Rip Rap Class II	Tons
Rip Rap Class III	Tons
Rip Rap Class IV	Tons