
CONSTRUCTION SPECIFICATION
INSTRUCTION FOR USE
CS-I-OR-062 GROUTED ROCK RIPRAP

062.1 APPLICABILITY

Construction Specification CS-OR-062 is applicable to the placement of grouted rock riprap on channel slopes and in other designated areas.

062.2 MATERIAL SPECIFICATIONS

The following material specifications complement Construction Specification CS-OR-062:

- a) MS-OR-531—Portland Cement
- b) MS-OR-521—Aggregates for Drainfill and Filters
- c) MS-OR-523—Rock for Riprap
- d) MS-OR-592—Geotextile
- e) MS-OR-522—Aggregates for Portland Cement Concrete
- f) MS-OR-533—Chemical Admixtures for Concrete
- g) MS-OR-534—Concrete Curing Compound
- h) MS-OR-532—Supplementary Cementitious Materials

Material Specification CS-OR-548, Corrugated Polyethylene Tubing, and Construction Specification CS-OR-095, Geotextile, also complement Construction Specification CS-OR-062.

The following construction specifications complement Construction Specification CS-OR-062:

- a) MS-OR-548—Corrugated Polyethylene Tubing
- b) CS-OR-095—Geotextile

062.3 INCLUDED ITEMS

Items to be included in construction specifications and drawings follow:

- a) Complete plans and cross-sections clearly defining the grouted rock riprap requirements.
- b) Gradation of rock.

- c) Gradation of filter or bedding materials, if used.
- d) Location of weep holes and pipe material for weep holes, if used.
- e) Placement tolerances.
- f) Design of grout mix together with the slump range and amount of air content.
- g) Type of cement.
- h) Type of admixtures, if any.
- i) Gradation of coarse aggregate.
- j) Designate equipment-placed or hand-placed rock.
- k) Designate if grout is to be placed or pumped.

062.4 METHODS SECTION 4, PLACEMENT OF ROCK RIPRAP

Method 1—Intended for use when rock placement operations that may cause some displacement of the filter or bedding material is not critical. Access to the site for dumping by hauling and placing equipment is reasonable.

Method 2—Intended for sites with limited access by hauling and placement equipment. This method should be considered when using geotextile filter material and sharp angular rock so puncture of the geotextile can be minimized. Hand-placed operations should be considered on steeper slopes.

062.5 ITEMS OF WORK AND CONSTRUCTION DETAILS

Starting at the top of page 062–6, prepare and outline job specific "Items of Work and Construction Details" (IWCD) in accordance with these instructions.