

SECTION 830 RIPRAP

830.1 REQUIREMENTS

- A. Riprap:** Stone for riprap shall be hard and durable and shall have a minimum weight of 155 pounds per cubic foot (2500 kilograms per cubic meter). **Class A and B riprap may be either quarried ledge rock or field stone. Class C, D, E & F riprap shall be quarried ledgerock.** Stone shall be free from overburden, spoil, shale, and organic material. The riprap stone shall meet the following gradation requirements:

TABLE 1

Riprap Class	Rock Size ¹ in feet (mm)	Rock Size in pounds (kg)	Percent of Riprap Smaller Than
A	1.30 (400)	200 (90)	100
	0.95 (290)	75 (35)	50
	0.40 (120)	5 (2)	15
B	1.80 (550)	500 (225)	100
	1.30 (400)	200 (90)	50
	0.40 (120)	5 (2)	15
C	2.25 (690)	1000 (455)	100
	1.80 (550)	500 (225)	50
	0.95 (290)	75 (35)	15
D	2.85 (870)	2000 (910)	100
	2.25 (690)	1000 (455)	50
	1.80 (550)	500 (225)	15
E	3.60 (1100)	4000 (1815)	100
	2.85 (870)	2000 (910)	50
	2.25 (690)	1000 (455)	15
F	4.50 (1370)	8000 (3630)	100
	3.60 (1100)	4000 (1815)	50
	2.85 (870)	2000 (910)	15

1. Based on a specific gravity of 2.65 and spherical shape.

The riprap class is the median particle weight with 50% of the material smaller and 50% of the material larger.

Each load of riprap shall be well graded from the smallest to the maximum size specified.

RIPRAP

B. Testing:

Specific Gravity SD 210