

2. Min compressive strength: 35 N/mm² at 28 days.
 3. Water permeability when tested to DIN 1048 shall not exceed 15 mm.
- B. Bulk mixed shotcrete compliant with the recommendation of ACI 506.2 may be utilized in lieu of pre-bagged shotcrete by the Engineer.
1. Aggregates shall meet the requirements in section 03300 except as modified hereunder.
 2. The combined grading shall be within the following limits, unless otherwise agreed by the Engineer:

Table 13-1: Combined Grading

Sieve Size	Percent Passing
12.50 mm	100
9.50 mm	90-100
4.75 mm	70-85
2.36 mm	50-70
1.18 mm	35-55
0.60 mm	20-35
0.30 mm	8-20
0.15 mm	2-10

3. A suitable approved fibre shall be added to the shotcrete to reduce crack propagation.
 - a. The use of fibre shall be strictly in accordance with the manufacturer's instructions and as approved by the Engineer.
 - b. Prior to the approval of shotcrete, the Contractor shall carryout trials mixes in the presence of the Engineer.
4. Minimum cement content shall be 415 Kg/m³.
 - a. Type of cement shall be ASTM Type I, unless otherwise approved by the Engineer.
5. Minimum compressive strength shall be 35 N/mm² at 28 days.
6. Water permeability when tested to DIN 1048 shall not exceed 15 mm.
7. Chloride ion content is less than 0.10 % by weight of cement.
8. The temperature of the mix shall not be more than 32°C.