

Section 4133. Granular Backfill Material

4133.01 DESCRIPTION.

Crushed stone or natural sand and gravel.

4133.02 GRADATION.

Meet the requirements for Gradation No. 32 of the Aggregate Gradation Table, [Article 4109.02](#), except when used as backfill material under flowable mortar or as floodable backfill material.

4133.03 QUALITY.

For crushed stone, meet the requirements of Table 4133.03-1:

Table 4133.03-1: Aggregate Quality (Granular Backfill Material)

Coarse Aggregate Quality	Maximum Percent Allowed	Test Method
Abrasion	55	AASHTO T 96
C Freeze	20	Office of Materials Test Method No. Iowa 211, Method C
Total of Abrasion & C Freeze	65	---
Clay Lumps and Friable Particles	4	Materials I.M. 368

4133.04 BACKFILL MATERIAL UNDER FLOWABLE MORTAR.

Use one of the following:

- A. Natural sand complying with the requirements for Gradation No. 1 of the Aggregate Gradation Table, [Article 4109.02](#), with a maximum of 4% passing the No. 200 (75 µm) sieve.
- B. Porous Backfill Material complying with [Section 4131](#).
- C. Floodable Backfill Material complying with [Section 4134](#).
- D. Granular Subbase Material complying with [Section 4121](#).