
CONSTRUCTION SPECIFICATION
INSTRUCTION FOR USE
CS-I-OR-024 DRAINFILL

024.1 APPLICABILITY

Construction Specification CS-OR-024 is applicable to the placing of drainfill in all types of structure drainage systems, such as:

- a. Drainage systems installed beneath concrete structures, lining, or pavements
- b. Wall drains for concrete structures
- c. Embankment drainage systems
- d. Interceptor drains installed adjacent to structures
- e. Foundation drains

024.2 MATERIAL SPECIFICATIONS

The following material specification complements Construction Specification CS-OR-024:

- a) MS-OR-521— Aggregates for Drainfill and Filters

024.3 INCLUDED ITEMS

Items to be included in contract specifications and drawings

- a. The location, extent, and dimensions of each drain.
- b. The grading limits of each type of drainfill.
- c. The allowable percentage of material (nonplastic) passing No. 200 Sieve.
- d. The source of drainfill materials, when applicable.
- e. Specifications for control of moisture if required.
- f. Class of compaction. Also specify the weight and number of passes of the compacting equipment required if more than the minimum amounts specified in Section 024.6 Compaction. Class A provides for control of compaction by minimum density requirements determined by ASTM D 698 for fine grain material. Classes I, II, and III specify the method of compaction. Relative density tests during construction generally should be made in connection with the method specifications to evaluate the compaction

being accomplished and be compared to test data outlined in ASTM D4254. Class I is intended for use where highest densities are required, Class II is intermediate, and Class III may be used for wall drains in uncompacted backfill or for other applications where strength is not important.

Specify in Section 024.8 Items of Work and Construction Details, the ASTM D 698 procedure to be modified to consist of one point value for maximum dry density determined on an oven-dried representative sample of the drainfill material. The procedure shall be repeated three times to obtain an average value for the one point.

- g. When specifying Class II compaction, note in Section 024.8 Items of Work and Construction Details the method (a, b, or c) that applies. Note also if one or more of the methods are to be excluded.
- h. Special requirements for placing drainfill adjacent to new concrete as set forth in Section 024.4 Placement.

024.4 METHODS SECTION 2, MATERIAL

Method 1—Intended for use in specifications for drainage systems in areas where commercial aggregate is available in sufficient quantity to meet project needs.

Method 2—Intended to be used in specifications for drainage systems in areas where the contractor will need to process the material from designated sources.

024.5 ITEMS OF WORK AND CONSTRUCTION DETAILS

Starting at the top of page 024–5, prepare and outline job specific "Items of Work and Construction Details" (IWCD) in accordance with these instructions.