Anderson County

South Carolina



BUILDING CODES ADMINISTRATION • DEVELOPMENT STANDARDS



Requirements for placing "Fill" for foundation systems:

Prior to Fill

An applicant shall demonstrate that fill is the only alternative to raising the building to meet the residential and non-residential construction requirements of section 38-444(1) or (2), and that the amount of fill used will not affect the flood storage capacity or adversely affect adjacent properties. If fill is placed in the special flood hazard area:

- Fill may not be placed in the floodway unless it is in accordance with the requirements in section 38-444(5) a.
- Fill may not be placed in tidal or non-tidal wetlands without the required state and federal permits.

Compaction

All fill material shall be compacted to 90 percent of maximum density as determined by ASTM D1557, Modified Proctor, in lifts not exceeding 12 inches (305 mm) in depth.

Soils

Fill must consist of soil and rock materials only. A registered professional geotechnical engineer may use dredged material as fill only upon certification of suitability. Landfills, rubble fills, dumps, and sanitary fills are not permitted in the floodplain.

Site preparation.

Prior to placement of the prepared fill, the special inspector shall determine that the site has been prepared in accordance with the approved soils report.

Fill used to support structures must comply with ASTM Standard D-698, and its suitability to support structures certified by a registered, professional engineer. In addition, Fill slopes shall be no greater than two horizontals to one vertical. Flatter slopes may be required where velocities may result in erosion. The use of fill shall not increase flooding or cause drainage problems on neighboring properties. Fill may not be used for structural support in the coastal high hazard areas.

ASTM D 1557 = 97.5% of the ASTM D6998 value plus 10.75 pounds and ASTM D 698 are similar standards and are used interchangeably for compaction requirements. ASTM D 1557 as referred to in the Building Code is the Modified Proctor method. ASTM D 698 is the Standard Method (12400 ft-lbf/ft3) and ASTM D 1557 is the Modified Method (56000 ft-lbf/ft3).

Anderson County will meet the requirements of FEMA Technical Bulletin 10-01, Ensuring That Structures Built on Fill In or Near Special Flood Hazard Areas are Reasonable Safe from Flooding. Please refer to our website to see the Technical Bulletin 10-01.