**Embankment dam**

An **embankment dam** is a massive [artificial dam](https://en.wikipedia.org/wiki/Dam). It is typically created by the placement and [compaction](https://en.wikipedia.org/wiki/Soil_compaction) of a complex semi-[plastic](https://en.wikipedia.org/wiki/Plasticity_%28physics%29) mound of various compositions of soil, sand, clay and/or rock. It has a semi-pervious waterproof natural covering for its surface and a dense, impervious core. This makes such a dam impervious to surface or [seepage](https://en.wikipedia.org/wiki/Soil_mechanics) [erosion](https://en.wikipedia.org/wiki/Erosion).[[1]](https://en.wikipedia.org/wiki/Embankment_dam#cite_note-1) Such a dam is composed of fragmented independent material particles. The friction and interaction of particles binds the particles together into a stable mass rather than by the use of a cementing substance

Types

Embankment dams come in two types: the **earth-filled dam** (also called an earthen dam or terrain dam) made of compacted earth, and the [**rock-filled dam**](https://en.wikipedia.org/wiki/Dam#Rock-fill_dams). A cross-section of an embankment dam shows a shape like a bank, or hill. Most have a central section or core composed of an impermeable material to stop water from seeping through the dam. The core can be of clay, concrete, or [asphalt concrete](https://en.wikipedia.org/wiki/Asphalt_concrete). This dam type is a good choice for sites with wide valleys. They can be built on hard rock or softer soils. For a rock-fill dam, rock-fill is blasted using explosives to break the rock. Additionally, the rock pieces may need to be crushed into smaller grades to get the right range of size for use in an embankment dam.[[3]](https://en.wikipedia.org/wiki/Embankment_dam#cite_note-3)