

Internal Erosion

Internal erosion occurs when the hydraulic gradient, ($\nabla\phi$) become too large. Soil particles are transported with the water flow and sink holes may arise. The figures below show sink holes in Guatemala City after tropical storms. Soil particles are transported into the sewer pipes, or into cracks in the bedrock and large cavities are developed that eventually collapses. The table at the bottom on the next side shows allowed gradients for different soil types.



Recommended allowed maximum gradients in various soil types to prevent erosion:

Tabell G22:32 Rekommenderade tillåtna gradienter vid grundläggning av damm på jordgrund [18]

	Hydraulisk gradient
Grovsilt	1:8,5
Finsand	1:7
Mellansand	1:6
Grovsand	1:5
Fint grus	1:4
Grovt stenigt grus	1:3
Lös lera	1:3
Medelfast lera	1:2
Fast lera	1:1,8