

Fracture (rock)

A narrow vertical or slanted opening in solid [rocks](#), filled with [fluid](#) and coarse [sediments](#).

The term "narrow" means that elongation of the [fracture](#) is much longer than its transversal size, called [fracture width](#) or [fracture aperture](#).

The contact area between the [fracture](#) opening and the [rocks](#) is called [fracture plane](#).

All [fractures](#) are normally divided into two groups:

Natural fractures	Induced Hydraulic Fractures
which are naturally created, as a result of sedimentation and tectonic activities	which are created as a result of anthropogenic invasion , called Hydraulic Fracturing

The difference between the origin of [Natural fractures](#) and [Induced Hydraulic Fractures](#) translates to the difference in [fracture](#) geometry and its dynamic behaviour.

This is why the two categories of [fractures](#) are normally covered by different [Subsurface E&P Disciplines](#).

See Also

[Geology / Rocks](#)

[[Natural fracture](#)]

[[Petroleum Industry / Upstream / Well / Well-Reservoir Contact \(WRC\) / Hydraulic Fracture](#)]

[[Production / Subsurface Production / Well & Reservoir Management \(WRM\) / Well stimulation / Hydraulic Fracturing](#)]

[[Hydraulic Fracture @model](#)]

[[Infinite conductivity fracture](#)] [[Finite conductivity fracture](#)]

[[Fracture conductivity \(\$F_C\$ \)](#)] [[Dimensionless fracture conductivity \(\$F_{CD}\$ \)](#)]

[[Fracture half-length \(\$X_f\$ \)](#)] [[Fracture width \(\$k_f\$ \)](#)] [[Fracture volume \(\$V_f\$ \)](#)] [[Fracture pore volume \(\$V_{ef}\$ \)](#)] [[Fracture permeability \(\$k_f\$ \)](#)] [[Fracture width \(\$w_f\$ \)](#)] [[Fracture height \(\$h_f\$ \)](#)]