

Plane stress modulus = E'

@wikipedia

Material property of a solid body measuring as

proportionality coefficient between [tensile stress](#) σ (force per unit area) and [axial strain](#) ϵ (proportional deformation) in the [linear elastic](#) region of a material:

$$(1) \quad E' = \frac{E}{1 - \nu^2}$$

where

E	Young modulus
ν	Poisson's ratio

It has a meaning of proportionality coefficient between plane stress and plane strain under plane stress conditions (when [stress vector](#) is zero across a particular plane).

See Also

[Physics](#) / [Mechanics](#) / [Continuum mechanics](#)

[[Compressibility](#)][[initial pore compressibility](#)][[Young modulus \(E\)](#)][[Poisson's ratio \(\)](#)]

[[Geomechanical Rock Modelling](#)]