

PRECIS

This volume contains descriptions of the constitutive models in *UDEC*.

The formulation and implementation of the built-in block constitutive models are discussed in [Section 1](#).

The continuously yielding joint model available in *UDEC* is described in [Section 2](#). This model calculates an accumulated damage to produce peak and residual joint behavior. The model can also have nonlinear stiffness.

The optional Barton-Bandis joint model is described in [Section 3](#). This joint model is an empirical model based on the statistical analysis of joint shear lab data. The Barton-Bandis model must be purchased as an optional feature of *UDEC*.

[Section 4](#) describes the process that allows users to write their own models, which are compiled and included as DLLs.

