

## **The QzSimple1 Material**

uniaxialMaterial QzSimple1 matTag? qzType? qult? z50? <suction? c?>

## **Appendix: Equations and Example Responses for the QzSimple1 Material**

Viscous damping on the far-field (elastic) component of the q-z material is included for approximating radiation damping. For implementation in OpenSees the viscous damper is placed across the entire material, but the viscous force is calculated as proportional to the component of velocity (or displacement) that developed in the far-field elastic component of the material. For example, this correctly causes the damper force to become zero during load increments across a

