

Section cut

[SAP2000](#) calculates section-cut forces by summing the forces which act on member [joints](#) within the group of [frame](#), [shell](#), and [link](#) objects which define the section cut. During summation, the forces and moments at joint locations are transformed into equivalent conditions at a point of summation. They are then transformed into the local coordinate system which is specified for the reporting of section-cut forces. Section cuts may be defined by group, by cutting plane, or within the graphical user interface.

Articles

Tutorials

Title	Description	Program
Section-cut first steps	Introductory tutorial for using section cuts.	SAP2000

Test Problems

Title	Description	Program
Frame and shell section cuts	Section cuts are defined through a simply-supported beam which is modeled using frame and shell objects.	SAP2000
Moving-load analysis section cuts	Verification of section-cut forces generated during moving-load analysis.	SAP2000
Saving section cuts during moving-load analysis	Sections cuts may be saved during moving-load analysis through this procedure.	SAP2000
Section cuts drawn within the graphical user interface	Draw section cuts within the graphical user interface using either 2D or 3D views.	SAP2000
Tendon force vs. frame response	Tendon application is validated by comparing tendon forces to those in an equivalent frame system.	SAP2000