

Design first steps

Tutorial

Name:	Design first steps
Description:	An overview of the design-check procedure for steel-frame structural systems.
Program:	SAP2000
Version:	all
Model ID:	na

A brief overview of the steel design-check procedure is as follows:

1. Define design [load combinations](#) through the Define > Load Combinations menu. These design combinations may be defined manually or using the Add Default Design Combos option.
2. Specify the design code to be used through the Design > Steel Frame Design > View/Revise Preferences menu.
3. Review the load combinations that will be used for design, making changes if necessary, through the Design > Steel Frame Design > Select Design Combos menu.
4. Run the design by selecting the Design > Steel Frame Design > Start Design/Check of Structure option. Please note that analysis must be run prior to design.
5. Review the design results either graphically, by right-clicking on a member for more detailed information, or in tabular format by selecting the Display > Show Tables > Design Data option.
6. Check design by using commands on the Steel > Steel Frame Design menu. Here, information is presented on passing / failing members, etc.

The [SAP2000](#) Introductory Tutorial of the CSI [Watch & Learn](#) video series presents a useful demonstration on this topic. Another useful resource is the [CSI Steel Frame Design Manual](#), available within the software interface through Help > Documentation > Design > Steel Frame Design. Here, users may find information on design codes and their computation.