



GSE SOFTWARE

General Structural Engineering

APPLICATION

GSE Steel

FUNCTIONALITY

Enables the design of cold formed steel members

COLD FORMED STEEL DESIGN

The latest revision of SAFI GSE STEEL enables structural steel designers to design cold-formed steel members based on the North American specification for the design of cold-formed steel structural members covering **Canada (CSA S136-16)**, the **United States and Mexico (AISI S100-16)**.

Cold-formed steel sections can be mixed with regular steel shapes in a model allowing to design hybrid structures.



SUPPORTED SECTION SHAPES

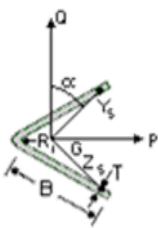
Effective section properties are calculated using the effective width of elements method for the following section shapes:

- 60° and 90° angles
- 90° angles with lips
- Channel with or without lips
- Z sections with or without lips
- U (Hat) sections

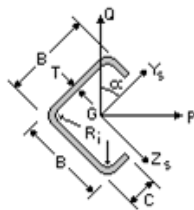
PERFORMED DESIGN CHECKS

The following parts of the standard are covered:

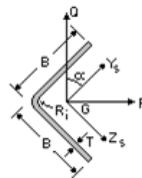
- Tension resistance (Chapter D)
- Compression resistance including distortional buckling (Chapter E)
- Bending resistance including distortional buckling (Chapter F)
- Shear resistance (Chapter G)
- Combined forces (Chapter H)
- Web yielding and web crippling at supports (Chapter G)



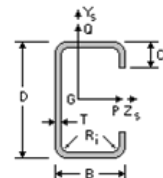
Cold formed 60° angle



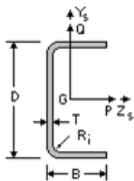
Cold formed 90° angle with lips



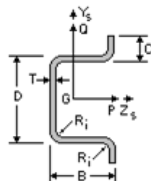
Cold formed 90° angle



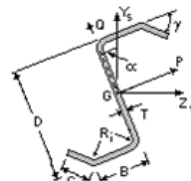
Cold formed Channel with lips



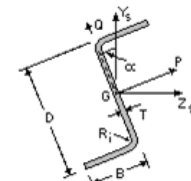
Cold formed Channel



Cold formed U Hat sections



Cold formed Z sections with lips



Cold formed Z sections