Evaluation of connection in two-story X-brace configuration of Ordinary Concentrically Braced Frame (OCBF) - CBFEM

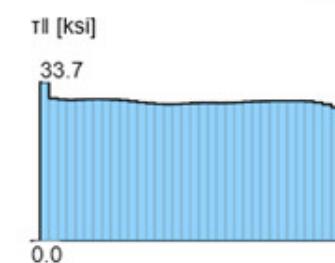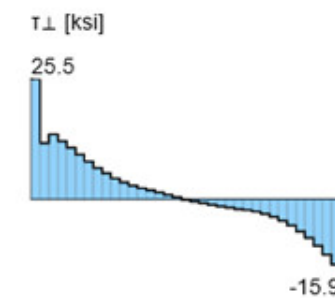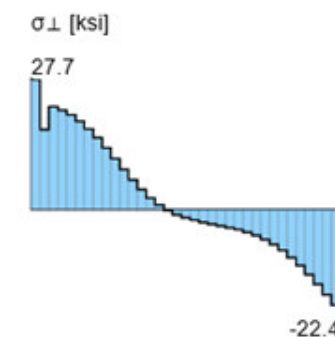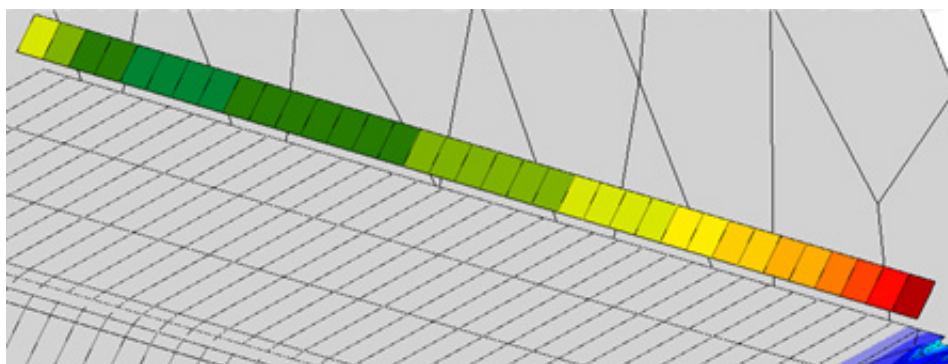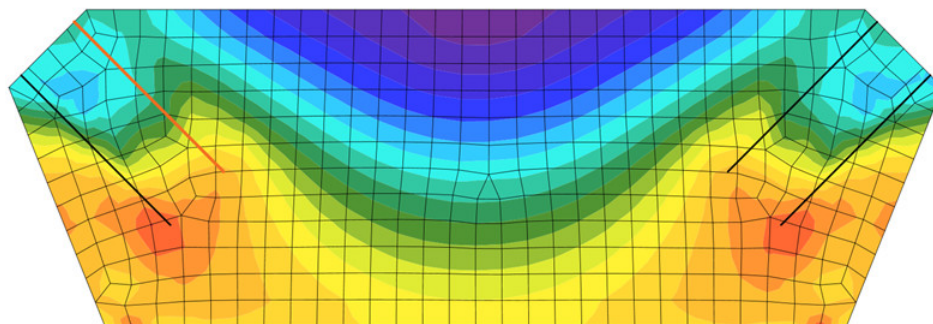|		
Analysis	✔️	100.0%
Plates	❌	24.6 > 5.0%
Welds	❌	100.0 > 100%
Buckling		Not calculated

D

Evaluation of Limit states of **welded connection in CBFEM [Chapter J2 , AISC 360-16]**

Increase the axial tension load in brace in CBFEM model of **IDEA StatiCa Connection** (balance the forces on beam as per loads in equilibrium), unless **at least 100% utilization is reached in welded connection**

Evaluation of weld connecting gusset plate to brace

Analysis	✔️	100.0%
Plates	❌	24.6 > 5.0%
Welds	❌	100.0 > 100%
Buckling		Not calculated

σ⊥ [ksi]
27.7
-22.4

τ⊥ [ksi]
25.5
-15.9

τ‖ [ksi]
33.7
0.0

Equivalent stress [ksi]
33.3
25.1