

SimOps Structural Report

Component: L_bracket

PASSED

Date: 2025-12-28 19:25

Analysis Metrics

Strategy:	Default
Load Case:	1.0G Z-Load
Max Von Mises Stress:	3.9336E-02 MPa
Max Displacement:	127.24 μm
Safety Factor:	7016.45
Elements:	422
Nodes:	937

Physics Validation

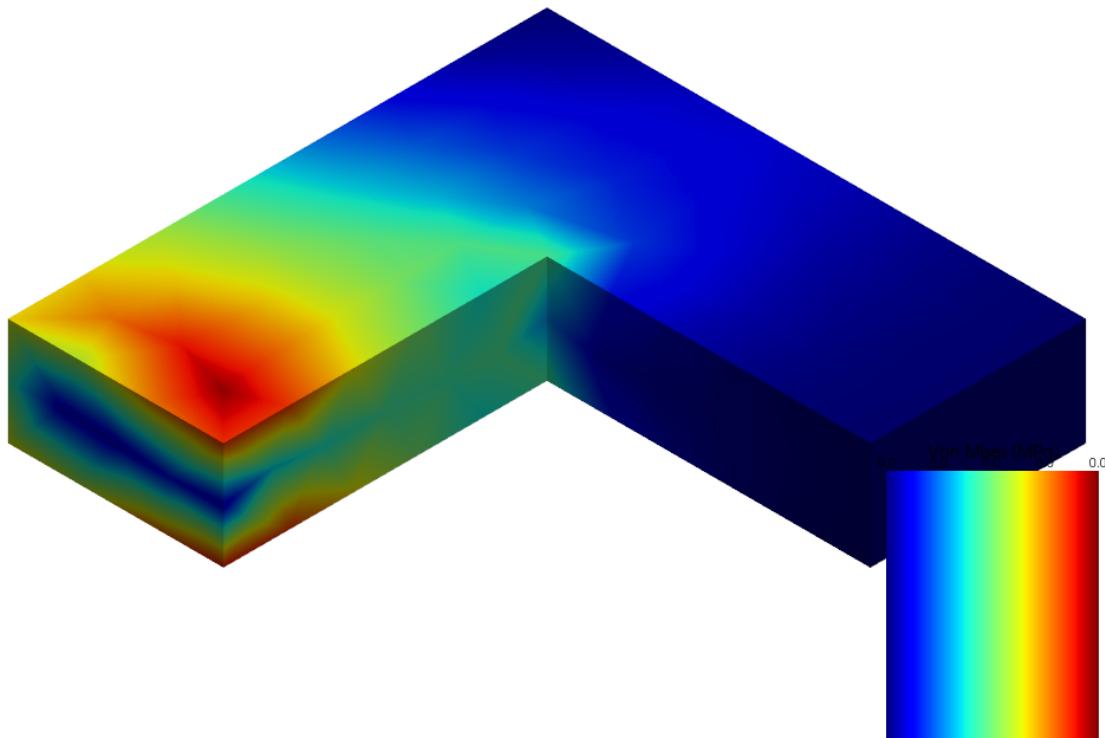
Stress Margin: ✓ PASS ($0.04 < 184.0 \text{ MPa}$)
Displacement: ✓ PASS ($127.24 \mu\text{m} < 50.00 \mu\text{m}$)

Material: Al6061-T6

Yield Strength: 276 MPa

Static Structural: 1G Z-Load (Iso View)

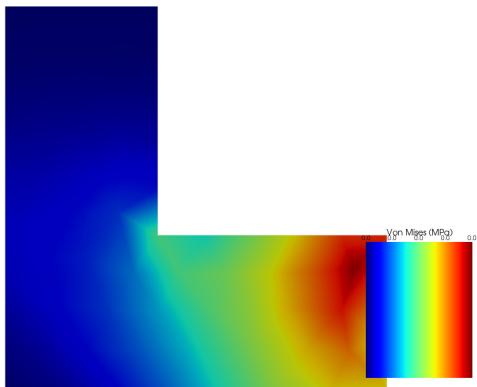
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Additional Views

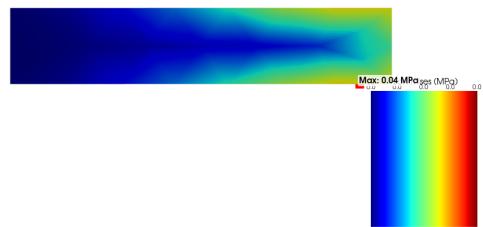
Top

Static Structural: 1G Z-Load (Top View)



Front

Static Structural: 1G Z-Load (Front View)



Side

Static Structural: 1G Z-Load (Side View)

