

# SimOps Structural Report

Component: L\_bracket

PASSED

Date: 2025-12-28 00:03

## Analysis Metrics

Strategy:	Default
Load Case:	1.0G Z-Load
Max Von Mises Stress:	3.9247E-02 MPa
Max Displacement:	127.17 $\mu$ m
Safety Factor:	7032.40
Elements:	419
Nodes:	931

## Physics Validation

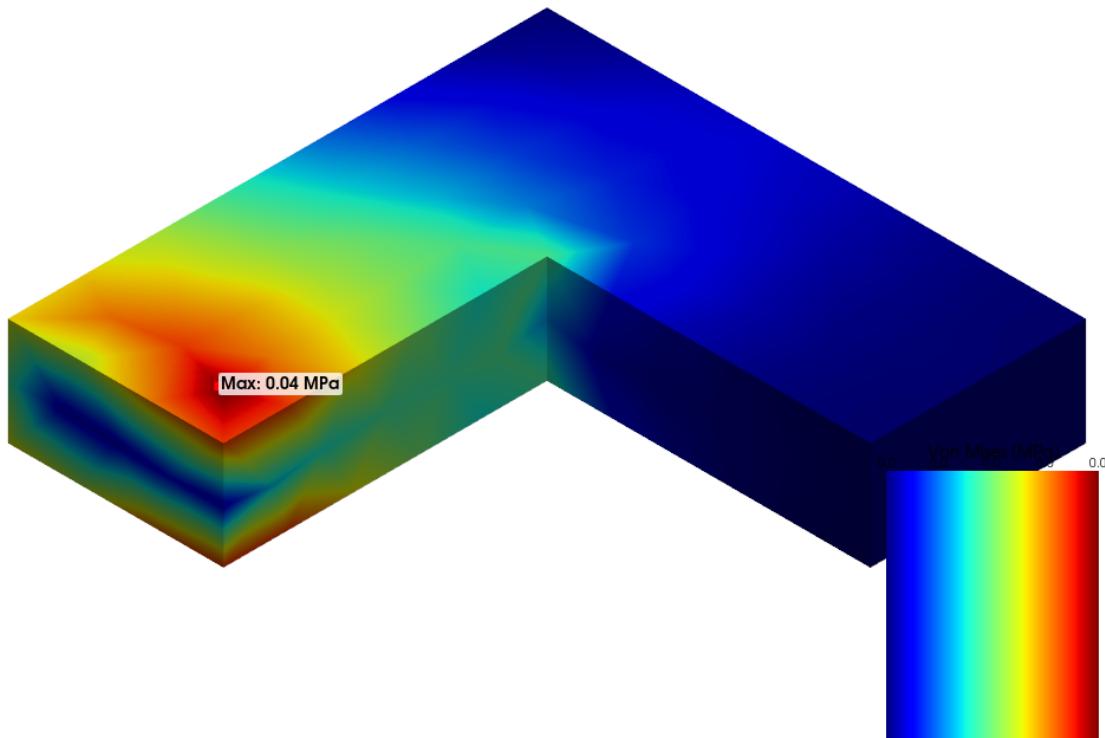
Stress Margin: ✓ PASS (0.04 < 184.0 MPa)  
Displacement: ✓ PASS (127.17  $\mu$ m < 50.00  $\mu$ m)

## Material: Al6061-T6

Yield Strength: 276 MPa

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

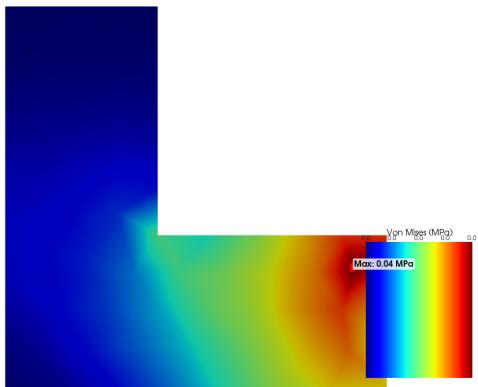
St



## Additional Views

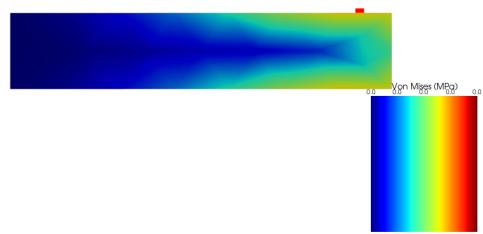
### Top

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



### Front

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



### Side

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

