

# SimOps Structural Report

Component: L\_bracket  
Date: 2025-12-28 00:03

PASSED

## 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

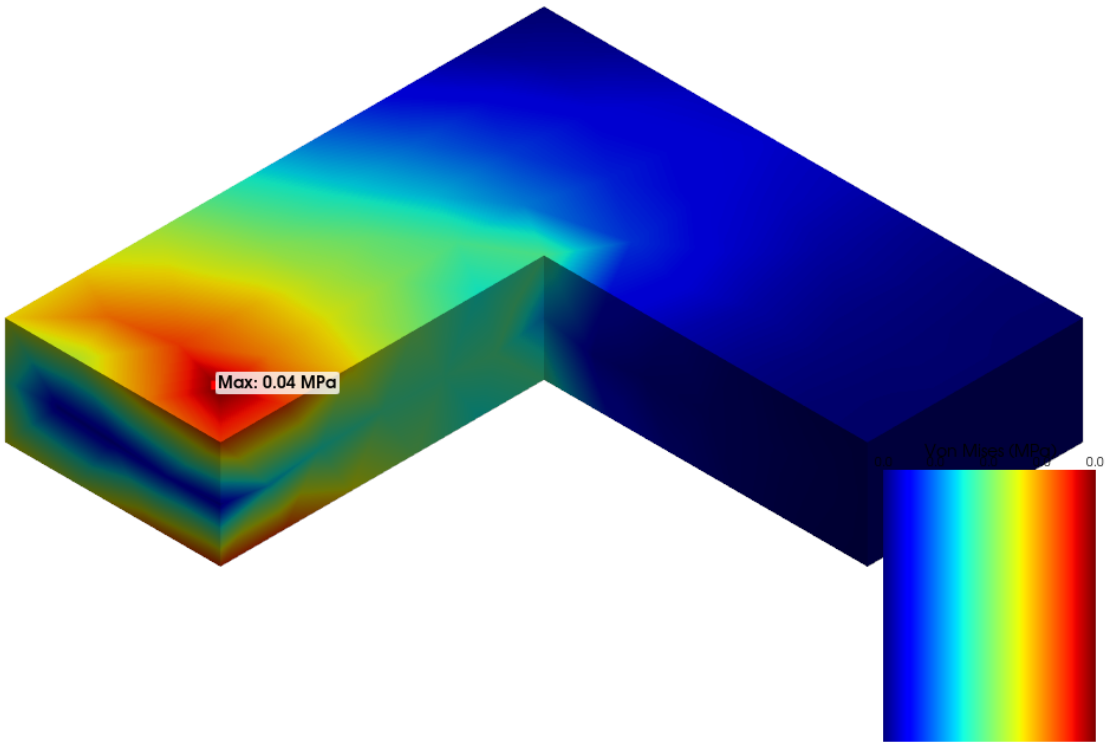
## Physics Validation

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)

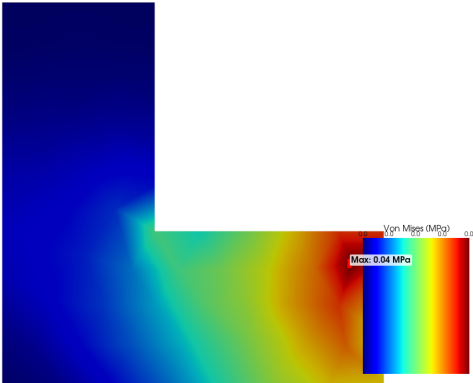
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# Additional Views

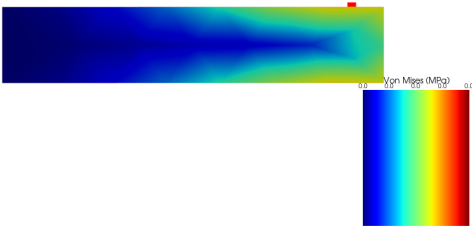
## Top

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



## Front

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



## Side

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

