

ANSYS AIM - Cantilever Beam Modal Analysis

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Problem Specification

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2. Geometry

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Cantilever Beam Modal Analysis

Created using ANSYS AIM 17.1

Problem Specification

Consider an aluminum beam that is clamped at one end, with the following dimensions.

Length	4 m
Width	0.346 m
Height	0.346 m

The aluminum used for the beam has the following material properties.

Density	2,700 kg/m^3
Youngs Modulus	70x10^9 Pa
Poisson Ratio	0.35

Using ANSYS AIM find the first six natural frequencies of the beam and the mode shapes.

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