

Question 11

Q: Can Femtet set an anisotropic coefficient of linear thermal expansion?

A: Yes, Femtet can do. Select [Anisotropic] for the anisotropy in the [Coefficient of Linear Thermal Expansion] dialog box and enter x, y, z components of the coefficient of linear thermal expansion.

The local coordinate system xyz of a material is consistent with the coordinate system XYZ in the analysis space by default. If you change the coordinate system, change the coordinate system on the [Direction] tab of the body attribute.

Coefficient of Linear Thermal Expansion

Temperature Dependency: No Yes ...

Anisotropy: Isotropic Anisotropic

Thermal Expansion Coefficient Vector

X: [1/deg]

Y: X10 [1/deg]

Z:

Direction

Specified by: Vector Centripetal Direction (Radial) Polar Anisotropy Euler Angle Circumferential Direction Halbach

Z Vector

X:

Y:

Z:

Enter two vectors and specify 3 directions

X Vector:

XYZ is a coordinate system of the modeling window.
xyz is a coordinate system of material property.

