

# VHETVAL

User subroutine [VHETVAL](#):

- can be used to define a heat flux due to internal heat generation in a material (for example, as might be associated with phase changes occurring during the solution);
- will be called for blocks of material calculation points for which the material definition contains internal heat generation;
- can be useful if it is necessary to include a kinetic theory for a phase change associated with latent heat release (for example, in the prediction of crystallization in a polymer casting process);
- can use and update solution-dependent state variables as an alternative to user subroutine [VUMATHHT](#) without a requirement to completely define material thermal behavior;
- can use any field variables that are passed in; and
- can be used with thermally coupled continuum elements and Eulerian elements.

This page discusses:

- [User Subroutine Interface](#)
- [Variables to Be Defined](#)
- [Variables Passed in for Information](#)





Is this page useful?

- See Also
- In Other Guides
- [Fully Coupled Thermal-Stress Analysis](#)
- [\\*HEAT GENERATION](#)
- [VHETVAL](#)

**Products:** [Abaqus/Explicit](#)

## User Subroutine Interface

subroutine vhetval (