

EXAMPLE 1-7 Conversion between SI and English Units

Modelica code

```
model Example_1_7 "Conversion between SI and English Units"
  import Modelica.SIunits;

  constant Real WtoBtu = 3.41214 "W to Btu";
  constant Real mtoft = 3.2808 "m to ft";
  constant Real CtoF = 1.8 "C to F";

  parameter SIunits.ThermalConductivity k_SI(min=0) = 0.72 "Thermal cond. (W/(m C))";

  output Real k_IMP "Thermal conductivity (Btu/(h ft ÂžF))";

equation
  k_IMP = k_SI*WtoBtu/(mtoft*CtoF);

end Example_1_7;
```