

# ANSYS Applications: Basic Grid Refinement

(Because this presentation uses problems from a textbook, the video is private.)

## 1 Problem 9-14

Using ANSYS, determine the temperature distribution in the window assembly shown in the accompanying figure. During the winter months, the inside air temperature is kept at  $68^{\circ}\text{F}$ , with a corresponding heat transfer coefficient of  $h = 1.46 \text{ Btu/hr}\cdot\text{ft}^2\cdot^{\circ}\text{F}$ . Assume an outside air temperature of  $10^{\circ}\text{F}$  and a corresponding heat transfer coefficient of  $h = 6 \text{ Btu/hr}\cdot\text{ft}^2\cdot^{\circ}\text{F}$ . Show the temperature and heat flux contours, if 6 in thick.

