

# Spacer Grouping

Presented by:

Jeff Baker

WESTLab

# Spacer Grouping

- Need for three approaches
- Simple method of spacer grouping
- Simple method of grouping spacer sealant systems (sealant grouping)
- Detailed modeling of spacer bar and sealant systems

# Simple Method of Spacer Grouping

- Need for visual inspection of a spacer bar to define the group the spacer is included in
  - Group 1 - Aluminum spacer bars with any sealant system.
    - The Group 1 spacer system  $k_{\text{eff}}$  will need to be defined
  - Group 2 – All non aluminum spacer bars with any sealant system.
    - The Group 2 spacer system  $k_{\text{eff}}$  will need to be defined

# Simple method of grouping spacer sealant systems (sealant grouping)

- Need to define a spacer bar specific  $k_{\text{eff}}$  with any sealant system
  - Model the specific spacer bar with a generic sealant system that results in a worst case thermal performance
    - The generic sealant system will need to be defined

# Detailed modeling of spacer bar and sealant systems

- Component Modeling Approach will need to provide a method for spacer bar manufacturers to submit the detailed geometry and material properties of their spacer bars
- With this detailed spacer bar data the spacer bar will be able to be combined with the appropriate sealant system to determine the specific spacer system  $k_{\text{eff}}$