

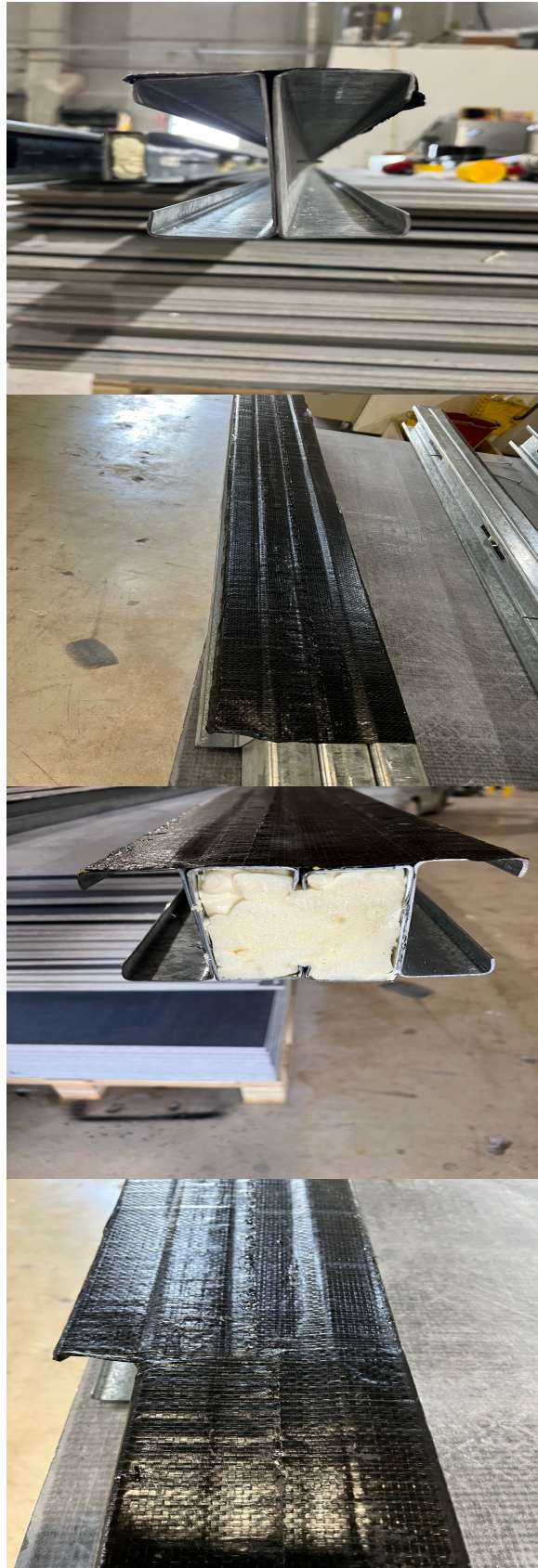
**THERMAL BRIDGING MITIGATION FOR LIGHT GAUGE STEEL
FRAMING**

Manufacturer Recommended Practices for SIP, MgO and High-Performance Wall Systems

PROBLEM vs. SOLUTION

PROBLEM	SOLUTION
Steel framing transfers heat and cold through the wall assembly.	Apply vapor barrier tape to steel flanges and fill cavities with foam.
Ghosting and condensation may appear over studs.	Create thermal breaks and maintain a continuous air barrier.
Reduced whole-wall R-value and energy efficiency.	Improve overall wall performance, comfort and durability.

FIELD INSTALLATION SEQUENCE



Step 1: Fill open framing cavities with approved expanding foam.

Step 2: Apply vapor barrier tape to interior and exterior framing flanges.

Step 3: Maintain a continuous air barrier throughout the building envelope.

Step 4: Optional furring systems may be used where condensation concerns exist.

ARCHITECT / ENGINEER NOTES

Where condensation concerns exist, optional furring channels may be installed on exterior walls, followed by gypsum board, MgO board, or other approved finish materials. The resulting air space allows incidental vapor dissipation and reduces thermal transfer.

CSI References

06 12 00 – Structural Insulated Panels

07 21 00 – Thermal Insulation

07 27 00 – Air Barrier Systems

09 29 00 – Gypsum Board

Manufacturer Recommendation

1. Fill steel cavities with foam insulation.
2. Apply vapor barrier tape to steel framing members.
3. Maintain continuous air barrier systems.
4. Consider optional furring systems on exterior walls where condensation concerns exist.
5. Seal all penetrations and transitions.

Benefits

- Reduced thermal bridging
- Reduced ghosting
- Reduced condensation risk
- Improved energy efficiency
- Improved occupant comfort
- Enhanced building durability

INNOVAPANEL®

Building Science. Better Buildings. Better Performance.

A Better Way To Build.