Rain enters cup due to momentum ("kinetic energy")

Cup can still drain water to exterior

Wind enters cup—pressurizing cup; no rain entry due to wind driven rain

Entire wind pressure taken here
Intent of sealant is to limit this lateral flow of water between sheathing and building wrap.

- Flashing tape
- Sealant “bedding” joint
- Building wrap “wrapped” into opening
Innies
Outies
Head trim flashing
Head trim
Horizontal return trim
Drainage “gap”
Window flange flashed to face of structural sheathing with flashing tape
Sealant
Games People Play

We assume a window unit is a single layer.

Under this assumption, it does not matter which side of the assembly we establish the \( \Delta P \).
\[ P_t = P_c + P_{int} + P_{o} + P_{int} - P_{out} \]

Not all layers equally “tight”

\( \Delta P \) across each layer depends on the side of the wall the pressure is induced

Removing a layer changes everything
Other Stuff

More Frames = More Heat flow

Spec. one large window rather than many small ones

OVERALL WINDOW U-VALUE (U_{ew})
For fixed window configurations as shown with height (h) equal to width (w)

SEALED UNIT GLAZING TYPE
A = 9mm clear / 5/8” air / 9mm clear / metal spacer
B = 9mm clear / 5/8” argon / 9mm clear / metal spacer
C = 9mm clear / 5/8” argon / 9mm clear / high-performance spacer
D = 9mm clear / 5/8” argon / 9mm clear / high-performance spacer
F = 9mm clear / 5/8” argon / 9mm clear / low-e glass with high-performance spacer

1. low-e coating emissivity = 0.10
2. low-e coating emissivity = 0.05

Kawneer Isoport 518
Beware Thermal Flanking

- Beware heat flow around window frame

![Figure 1: Thermal Flanking](image1)

![Figure 2: Flanking Reduced](image2)

- Sill beyond
- Carry membrane onto curtainwall shoulder, seal and mechanically clamp in place.
- Water, air and vapor control membrane
- Metal brake shape over rigid insulation
- Sealant and backer rod
- Thermal control (insulation) layer