What is a Building?
A Building is an Environmental Separator

- Control heat flow
- Control airflow
- Control water vapor flow
- Control rain
- Control ground water
- Control light and solar radiation
- Control noise and vibrations
- Control contaminants, environmental hazards and odors
- Control insects, rodents and vermin
- Control fire
- Provide strength and rigidity
- Be durable
- Be aesthetically pleasing
- Be economical
Water Control Layer
Air Control Layer
Vapor Control Layer
Thermal Control Layer
Configurations of the Perfect Wall
Enclosures

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Commercial Enclosure: Simple Layers

- Structure
- Rain/Air/Vapor
- Insulation
- Finish
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Rain enters cup due to momentum ("kinetic energy")

Cup drains water to exterior

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

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

Entire wind pressure taken here

Cup can still drain water to exterior
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
Exterior seal with weeps
Synthetic stucco
rendering wrapped
around opening
creating "pan flashing"

Triple glazed window
Interior air seal
20 ga angle supporting
back dam of synthetic stucco
"Pan flashing"
Life is Tough Enough As it Is…
Life is Tough Enough As it Is…
It’s Harder When You Are Stupid

Don’t Do Stupid Things