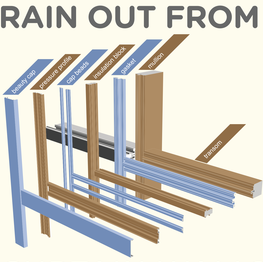
HOW DOES WATER DRAIN OUT FROM A

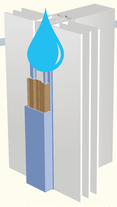


CURTAIN WALL?

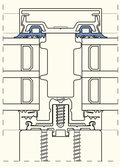
WATER ENTRY

START

ENTER



WATER ENTERS THROUGH THE CAP BEAD



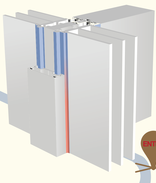
THE CAP BEAD FILLS THE VOID IN-BETWEEN THE PRESSURE PROFILE AND THE GLASS

The cap bead needs to be soft enough to accomodate shifts in the system, but rigid enough to resist damaging environmental effects. It's usually made of neoprene, EPDM, or silicone. Since it is the first level of protection for the curtain wall, it is the area most prone to water infiltration.

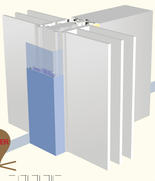
Silicone is the best material to use because of its excellent resistance to UV damage, while neoprene is the worst because it is prone to being stuck in compression - commonly referred to as

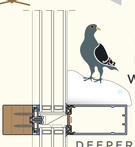
COMPRESSION SET

THE CAP BEAD MUST BE INSTALLED IN **COMPRESSION**



TO ALLOW FOR **EXPANSION** OF THE METAL BEAUTY CAP





THE CHOICE OF BEAUTY CAP ALSO HAS AN IMPACT ON WATER INFILTRATION

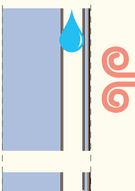
DEEPER beauty caps can't clamp as well onto the pressure profile because they expand when heated. They also collect ice and snow.

PRESSURE EQUALIZATION

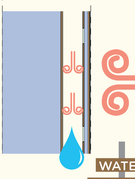
HOLES IN THE PRESSURE PLATE ALLOW FOR PRESSURE EQUALIZATION OF THE INNER CAVITY

This means that the built-up air pressure is allowed to flow through and drain the cavity rather than drive water further into the system.

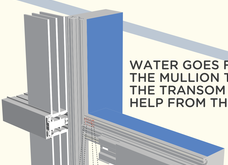
WITHOUT HOLES IN THE PRESSURE PROFILE, AIR PRESSURE FROM WIND AND HEAT WILL DRIVE WATER FURTHER INTO THE SYSTEM



WHEN HOLES ARE ADDED TO THE PRESSURE PROFILE, THE AIR FLOWS IN THE DIRECTION OF THE WATER DRAINING

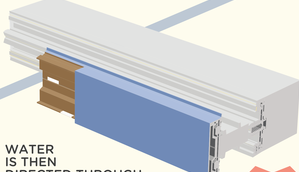


WATER ESCAPES



WATER GOES FROM THE MULLION TO THE TRANSOM WITH HELP FROM THE

CORNER BLOCK



WATER IS THEN DIRECTED THROUGH HOLES IN THE PRESSURE PROFILE. FROM THE PRESSURE PROFILE, WATER TRAVELS TO HOLES IN THE BEAUTY CAP AND CAN, AT LAST, ESCAPE

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