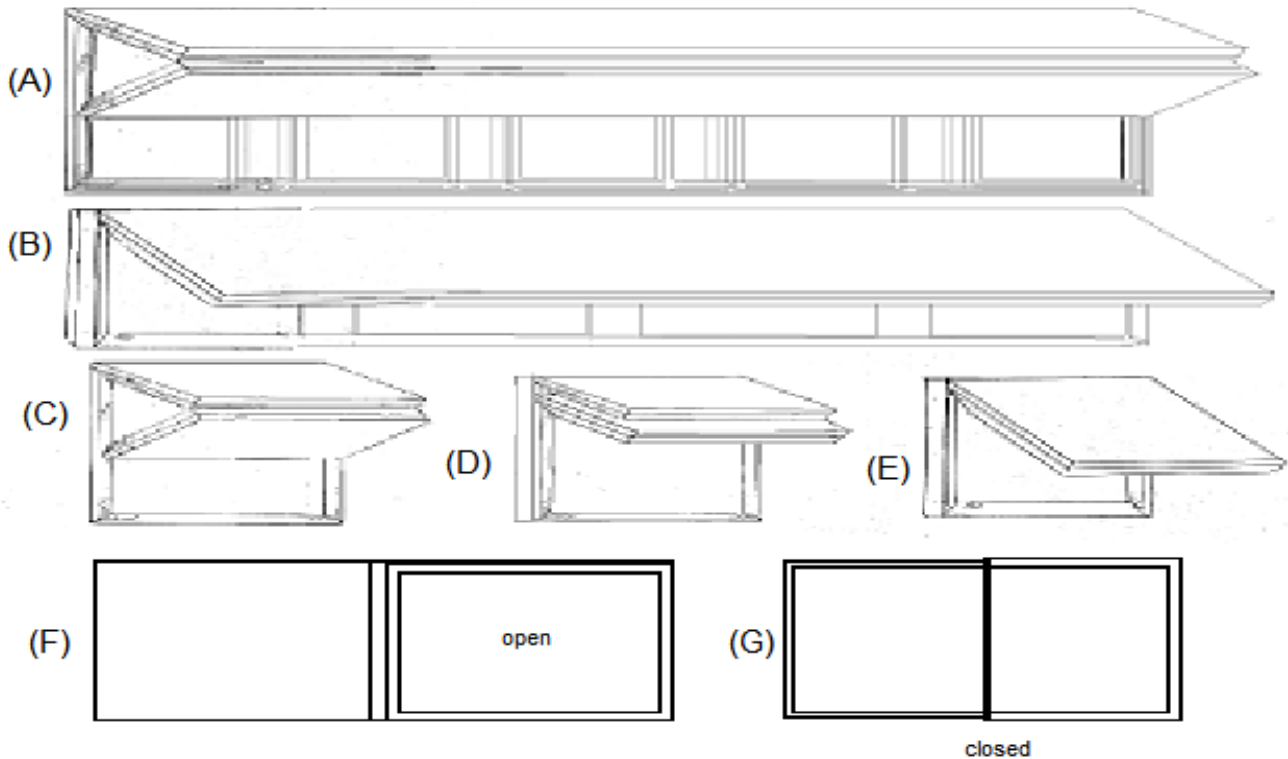


*Automated Window Enclosure models  
(Partially raised position)*



Patent pending: Canadian 2705085; International PCT/IB 2010/053722

The concept of being able to turn window glass space into a virtual exterior wall with the touch of a switch is the conceptual basis of this device, which promises to redefine the way daylight is used for interior lighting purposes during extreme weather days -- hot or cold. These six inch thick, exterior mounted, Automated Window Enclosure panels are designed to close securely with their insulated frame -- which is thermally bonded to the building around the respective window in retrofits, and built-in to new construction projects -- in order to optimize energy efficiency while achieving unprecedented building security.

When closed, Window Enclosure panels offer no building intrusion opportunities short of using demolition tools, which would make exterior walls of most buildings equally vulnerable. Thus, in effect, their security and thermal resistance attributes are exterior wall equivalent. These fully automated panels are typically programmed to close at night and open at sunrise, in order to conserve 94% of window glass heat loss throughout the night. But during extreme weather periods, entire portions of building Enclosure panels can be programmed to remain closed -- little used rooms for example, or windward rooms during blizzard conditions, etc. Multiple electronic devices are easily plugged into this system to continually expand its functionality. Thus panels can be programmed to respond when temperature sensors reach certain thresholds for example -- to opportunely harvest window sunlight, or capture outdoor cooling -- or they'll close if the attached barometer signals an approaching storm or the temperature plummets, even if nobody's home. Thus optimizing energy efficiency.

As well, in high security zones, a simple connection with security cameras permits automatic closing of panels when perimeter intrusion is detected, thus making the building virtually impenetrable before potential harm even arrives.

In hot weather conditions the Window Enclosure panels are best programmed to open at night, in order to cool the building, and then to close target sections automatically as the sun advances. This management strategy works very well, and in combination with the built-in awning function of most Window Enclosure models, keeps buildings surprisingly cool during summer days: naturally.