



## WIND LOAD:

In addition, a 'ventilated' rain screen siding allows ventilation of the rear air chamber, as required by the National Building Code. When external air pressure (such as wind) is detected, aeration of this chamber automatically balances the pressure between the two surfaces (exterior / interior) of the facing. This, only  $\pm 2\%$  of the pressure acts on the facing itself.

The air barrier undergoes 100% of this pressure, which it transmits to 'sheathing' panel, which transmits it to the wall stud. Assuming that the air barrier is 100% effective, it is the wall stud that will determine the ability to withstand external pressures in both positive and negative pressure. At very high pressure (such as 90 lbs / ft.sup.2, 20 ga gauge), standard pressure tests showed that the metal framework of the wall could deform up to  $\pm 13$  mm at its center (vertically / horizontally ). Therefore, this deformation under pressure automatically enters all the other materials directly or indirectly attached thereto, thus including the facing.

The ALUPLANK siding performs well-beyond! In consideration :

- Frame to the vertical deformation of the metal framework: The very large quantity of non-integral joint of the horizontal joints (every 150 mm) allows a much greater flexibility of the assembled cladding!
- Foam to horizontal deformation: The legendary flexibility of aluminum allows this deformation and much more!
- The 'memory' of metal (including aluminum) is well proven and known.