

## Protecting your door from natural thermal distortion

### *What is thermal movement?*

Doors made of all materials experience thermal movement. The composite door will recover to its flat plane, to maximum bow of 3mm side to side, and 5mm top and bottom, when the installation recommendations are applied.



#### **Vertical**

Deflection of the slab inwards and outwards from top to bottom.

Maximum bow permitted is 5mm measured from the middle of the slab



#### **Horizontal**

Deflection of the slab inwards and outwards from side to side.

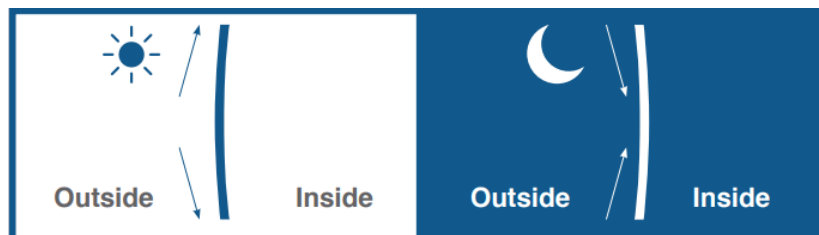
Maximum bow permitted is 3mm measured from the middle of the slab

Slackening off the lock keeps will compensate for the movement of the slab within these tolerances. The hooks of the multipoint lock must be in compression with the inner edge of the pocket keep. If this does not happen the door may move to the inside of the property (towards the cold side) and give the impression the door is bowed.

It is important to ensure the centre keep for the latch only allows the door to become flush with the inner face of the outer frame and not any tighter as this could also cause the door to appear bowed.



Make sure the top and bottom locking points are engaged by closing firmly and by pulling the handle up each time you shut the door.  
This will engage lock security and minimise distortion issues.  
Note: This is not necessary with slam shut locks.



If the hooks on the multipoint lock are not engaged throughout the day and the centre keep setting is too tight, the top and bottom of the door will be in unsupported tension and will eventually stand proud of the inner face of the profile. This will make the hooks on the lock become stiff, as they cannot draw themselves into the hook keep. If these points are not observed, the warranties on the functionality and operation of the door could be affected.  
Condensation issues are typically building ventilation related, not product related.