



Troubleshooting

DECKING, CLADDING

& PORCH FLOORING

THE THERMORY®

LEAVE A LASTING IMPACT

Thermory is committed to providing you with a quality product that performs exactly as we say it should. Thermory decking, cladding and porch flooring products are real wood which is likely one of the reasons you chose Thermory. Like any real wood product, it's not perfect. Wood products can react to their surrounding environment in natural ways that result in a less than perfect appearance. Our thermal modification process reduces common issues such as of severe cracks and moisture related movement, but will not prevent them completely. In comparable situations, Thermory will always perform better than other wood products in terms of rot and moisture related movement.

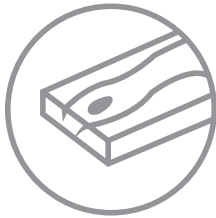
If you're experiencing issues with your Thermory project, we'd like for you to read through the installation guide again to ensure that the recommended guidelines were followed.

HERE ARE SOME COMMON CONCERNS AND THE REASONS FOR THE PRODUCT'S REACTION.



▶ CUPPING & CROWNING

Most cracks or warping occur with an imbalance of relative humidity above and below the deck. When the humidity below the deck is higher than the relative humidity of the ambient surroundings, the wood's cells on the bottom of the board will swell, causing cupping, evident when the board makes a "smiley face." Adversely when wood releases excess moisture this causes the wood to crown and cause a "frown face".



▶ CRACKING

Cracking and swelling in the opposite direction is most often because the exposed surface of the wood has been finished with a "film forming" or non-penetrating oil. Film forming finishes can cause the wood to trap moisture within the fiber over time, preventing the wood to "breathe" naturally and expel excessive moisture.



▶ COLOR CHANGE

All wood products will experience color change, even if they have been treated with a UV protectant product such as CUTTEK™ Extreme with colortones. The surface of wood can be considered similar to our skin. Even if we put an excessive amount of sunblock on our skin, under prolonged conditions our skin will eventually tan or burn. UV protectant will slow this dramatically but will never stop it all together. Without CUTTEK™ Extreme plus colortone, the color change will happen drastically faster. The color can be renewed completely, please refer to our website's [Maintenance Page](#).

The specific project application will make the speed of color change happen at considerably different rates. Decking will change in color much faster than cladding or fencing since the UV exposure to decking is more direct than cladding. Soffits and porch flooring will only turn grey when exposed to the combination of all three elements; water, sun and oxygen. When one is missing, wood may fade, but will not turn grey. Cladding will still turn grey, but at a slower rate, approximately half the rate of decking.





▶ **BLACK STAINING AT SCREW HOLES**

Stainless steel fasteners are required with Thermory products. Thermally modified wood has a higher acidity than non-modified wood or pressure treated wood and can cause non-stainless screws to corrode quickly. This corrosion can be seen as the chemical reaction bleeds into the grain with black staining.



▶ **CLADDING IS EXPANDING/BUCKLING OFF THE WALL**

When there is an imbalance in the relative humidity on the backside of the board versus the front of the board, this will cause the wood to cup. In most cases, the boards will swell on the back side of the board which means the top edges of the board will point outward. When the swelling is severe enough, and no longer has room to expand - the boards will eventually break.

This imbalance of relative humidity happens because there is a lack of ventilation behind the cladding. There needs to be clear and open ventilation at the bottom of the wall and running the entire height, venting at the top or into the soffit. Drainage mats historically do not provide adequate ventilation and free air movement.

If you feel adequate ventilation has been observed in the installation, then there is likely a source of water behind the wall, such as poor flashing at the soffit/cladding transition or around the windows.

In most cases, if breakage has not occurred, the cladding will right itself over time if the venting mistake has been corrected. The correct ventilation, or fixing the incorrect flashing installation will reduce the moisture behind the cladding, rebalancing the relative humidity and allowing the cladding to equalize and lay flat again.



▶ **COLOR IS BLEEDING FROM BOARDS AND STAINING LIGHT-COLORED SURFACES**

There are no chemicals in any of the Thermory species, however bleeding can still occur. As water, sun and oxygen engage with the surface of the wood, specific cells holding the wood's tannin become water soluble. This tannin is what gives the wood its color. As rain occurs, those tannins will bleed off the surface and run down the face of a building or drip to a surface below.

This will be more apparent on lighter colors, such as stone, marble or stucco. The tannins are completely organic and will likely wash away within a season. If nature's process isn't fast enough, a cleaner approved by the surface manufacturer may be used.





▶ **DRIFT PRODUCT LINE**

Drift products, such as Platinum and Black Pearl have a light finish applied and are intended to be an alternative to the look of reclaimed lumber. Over time, the initial coating on Drift will weather, exposing the thermally modified fiber beneath. This fiber will eventually take on a natural silver patina, ensuring an old-world reclaimed look that will endure for many years with minimal maintenance.



▶ **BLACK AND/OR GREEN SURFACE STAIN AND MOLD**

Black surface stains are caused by dirt, debris, pollen and other airborne and microscopic elements resting on the surface of the deck. Certain environments provide exceptional growing conditions for mold and fungus, conditions that often fall within, but are not limited to shaded decks or cladding. The black or green staining you are experiencing is likely this mold and fungus.

This is not a cause for concern, but it does mean you should be clearing the surface of your deck more often and taking additional preventative care considering surrounding conditions. It is important to remember the same occurrence can happen on any surface, such as rocks, glass, PVC, and composite products.

This staining is removable with light pressure washing and a renewing/cleaning agent. Cutek is the Thermory recommended product line and you can find cleaning options on our [CUTEK™ Page](#).

With proper installation and maintenance your Thermory product can perform well, but as with anything else in life there are always mishaps that can happen. We are here for any problems that may arise with your product and want to make sure you're satisfied while understanding the natural occurrences that can happen to real wood products.

