Dimensional Stability

Architectural Traffic Classes allow us and our customers to compare flooring products for many different functions. The most important one for loose lay, TIGHT-FIT™ flooring is **Dimensional Stability.**

ASTM F2199 is a standard test method for determining dimensional stability of Resilient Floor Tiles/Planks using exposure to heat.

Originally, our products were created to lay on a Concrete Radiant Heated Floor. The temperature of the heater directly below the Resilient Floor (LVT) fluctuates 8 to10° Celsius. (up to 27°). The amount of change exhibited in the plank is translated to a percentage of an inch over one foot.

> Example: Flexiplank or Drop & Done have ASTM F2199 rating for dimensional Stability of 0.0039 of an inch per lin. foot. On a four foot plank that translates to 1/64th of an inch.

Armstrong Natural Creations has a stabilizing core of 85% limestone and Mohawk's new Hot and Heavy, (loose lay) with a stabilizing backing are ASTM F2199 = 0.024 resulting in a gap 6 times wider.

Any gaps in our products larger than 1/64th are therefore caused by other factors.

Acclimation is important to establish installed temperature and avoid shifting. Always install in room temperature between 18 – 20°C and give all the product time to **acclimate.**

Allow the product time out of the carton. At the mill the planks are tightly boxed immediately after production when they are still warm. Therefore, there are sometimes minor shifts within the product the first few hours after being released from the packaging and their subsequent bond to each other.

Moving or shifting of the substrate. Wood & concrete expand and contract at a higher rate than our flooring. Particularly wood in new construction is adversely affected by extreme shifts in humidity or temperature. We are not talking replacement, just simple repositioning.

In all pressure sensitive installations, (perimeter or full spread), the adhesive must be fully flashed off. For perimeter installs if the adhesive is wet it may pull towards the adhesive as the glue dries. This is obvious if you lift the board and find it will not release.

Insufficient adhesive, or poor tape can cause creeping or gradual shifting in the adhesive, particularly if there is torsion or twisting in an area or a slope in the substrate.

Start Stable, Start Smart... Know your Dimensional Stability.