



EXPERT SERIES

By Ed Van Oene, Bay Resource Group Inc.

Chris: What significant changes have you seen in LVT/P design changes over the last 2 years?

Ed: The introduction of rigid core floating LVT/LVP, thicker “loose lay” segment expands, highly improved film technology and improved embossing textures to meet the demand for higher end applications and heavy investment in the production for large format tiles and planks.

Chris: What should we be aware of regarding Chemical ingredients used in the manufacturing of LVT/P?

Ed: Virgin material vs. recycled and how they relate to toxic carcinogens, heavy metals, phthalates, and dimensional stability. As well, how to evaluate Floor Score and other 3rd party certifications.

Chris: Do you recommend floating or glue down as the preferred method of installation? If one over the other, why?

Ed: I am still a big fan of glue down in most applications but depending on IIC requirements and substrate conditions floating, or “loose lay” products may be appropriate.

Chris: What is the main cause of problems for this type of flooring?

Ed: There are several causes, from improper acclimatization, incorrect adhesives and applications, improper substrate preparation and the category being oversold as “bulletproof”.

Chris: LVT and direct sunlight, what do you recommend to ensure the flooring doesn't buckle?

Ed: This is a slippery slope and a significant cause of failures. A very important question to ask during the sales process is whether it's a DIY or professional installation, as many manufacturers have limitations and exclusions for direct sunlight exposure. Start by selecting the appropriate product and adhesive for the substrate and sunlight exposure. Follow manufacturer's recommendations as far as direct sunlight applications and surface temperatures. Does the site provide and does the end user understand the need for window coverings and/or low E glass? Make sure application guidelines are followed and documented with pictures. While many manufacturers use fiberglass mesh core for dimensional stability, even the best products can fail in the long term when surface temperatures hit over 50°C.

Chris: Will LVT expand when exposed to moisture?

Ed: LVT is water resistant, ideal for higher moisture areas with correct adhesives and application.

Chris: How long do you recommend acclimating the flooring on site for?

Ed: Remove material from packaging, spread out not higher than 1 box high and allow to condition in room where installation is to take place at a constant temperature of 18° - 25°C for a period of 48 hours prior to installation. This temperature should be maintained during installation, and for a 24-hour period after installation. HVAC and heating should be kept within livable room temperatures.

Chris: Is the wear surface of LVT as durable as Laminate?

Ed: Both products require proper floor protectors on furniture as well as proper maintenance. Laminate is a hard and typically scratch resistant product typically made with high-density fiberboard thus not waterproof. LVT is more flexible and resilient thus quieter and can be recoated with finishes many times over even in commercial applications where wet cleaning and high traffic are typical

Chris: Is there an Abrasion Class system (AC) for identifying LVT/P wear layers like there is for Laminate?

Ed: Although not included in the ASTM F1700-13 ASTM Standard Specification for Solid Vinyl Floor Tile. The F510/F510M-14 Standard Test Method for Resistance to Abrasion of Resilient Floor Coverings using an Abrader with a Grit Feed Method is the correct test for resilient flooring. However, many labs are not equipped to perform this test. Some labs will use the ASTM D4060-10 Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser. However, this is a coatings test usually used for metal panels and must be adapted to use the H18 abrasion wheel. It is not approved for the category and should be used for comparison only.

Chris: What are the advantages of LVT over laminate?

Ed: Water resistance would be number one, the ability to be refurbished in high traffic and high abuse areas. IIC ratings without underlays, LVT is made of PVC vinyl which makes it more flexible and comfortable underfoot. LVT installs in multiple configurations were as Laminate is floating only.

Chris: Should LVT be stored in a climate controlled warehouse, if not then why not?

Ed: If stored in an unheated warehouse for extended periods acclimation time could take weeks. General rule is store in warehousing above 16°C or 60°F. Even then you still need to allow LVT to condition in room where installation is to take place at a constant temperature of 18° - 25°C for a period of 48 hours prior to installation. Many manufacturers have extended this timeframe from 24 hours to 48 hours on thicker products. Lack of acclimation is said to be the number one cause of deficiencies/failures.

Chris: If LVT freezes or is overheated during its transport from the factory to the distributor, does this effect the performance of the product after it is sold by the dealer?

Ed: Product must be transported and stored flat and well supported. If allowed to “freeze” a much longer acclimation time will be required especially for palletized goods. As single boxes allow product to condition in room where installation is to take place for the appropriate amount of time (24-48 hours) and the product will not be affected. ◆