



Performance Superiority Pine Core Engineered Construction Over Multiply Construction



# CONSTRUCTION



## MIKASA ENGINEERED WOOD FLOORING IS MADE OF REAL WOOD

The flooring consists of a decorative hardwood veneer that is placed on top of the core, for premium quality HDF or Pinewood. Product is made using the latest technology to overcome any generic wood issues.

# PINE CORE ENGINEERED CONSTRUCTION VS MULTIPLY CONSTRUCTION

Apart from different variations of wood species, compositions, and designs, there is another factor that those looking for a new wood flooring, consider - product construction. Generally speaking, three main choices fall into this category: Solid Wood or Hardwood, Multiply, and 3-Layered Engineered Construction with Softwood Core.

The whole journey of wooden flooring started after World War II where post the mass devastation, rebuilding was the task at hand. This is when Solid Wood came to the rescue. These were used as load-bearing floors on wood frame buildings, 25-45mm thick and glued down or nailed together. But could not satisfy the needs for long due to messy installation, expansion and contraction, uneven gaps, bulging, and hard repair. This gave birth to the Multi-layer Parquet which started with Multiply Construction and post that came Engineered Wooden Floors with Pine or Softwood Cores.

With each passing year, Engineered Wooden Flooring is becoming a popular flooring solution for those seeking a wood floor. Simply because of its pure resilience against any moisture and temperature changes. Another major factor of why Engineered Wooden Flooring has become more popular because of its ability to be laid on top of underfloor heating. Underfloor heating is becoming more popular in many homes especially new builds.



## PINE CORE ENGINEERED CONSTRUCTION VS MULTIPLY CONSTRUCTION



## **Multiply Construction**

Multiply Engineered Wood Flooring is made up of 3-6mm Hardwood Veneer + quality plywood structure. The plywood is normally cross structured with 1.5mm thick of each ply in odd numbers (5-layer, 7-layer or 9-layer) and with the back layer same grain direction to the Hardwood Veneer/Lamellas. Just above the multiple layers of plywood, there is another layer of plywood that forms the tongue and groove that allows the board to be laid. Above the tongue and groove, the plank is then completed with a solid hardwood wear layer which will be finished and stained as per the user's requirement.

#### Pros

- High density of the product.
- Lower manufacturing cost.
- Perfect for the T&G locking system.

#### Cons

- Old technology and does not address stability at large.
- Higher chances of delamination.
- Plywood products are more prone to delamination due to multiple glue lines.
- Installation cost is at least 20% higher as these products use T&G locking that requires more glue for installation.
- Higher emission levels lead to bad indoor air quality.
- Due to high density, the dead weight on the building structure increases.
- Higher chances of attracting contaminations.



### **3-Layer Pine Core Construction**

3-Layer Engineered Flooring advances over the traditional Multiply Construction. With grains running in different directions, it reduces the natural expansion and Contraction of the wood. The surface layer, Lamella is normally 3-4mm sawn-cut premium hardwood, with 9mm cross structure softwood pine and 2mm back face poplar to achieve both economy and stability for the Engineered Wooden Flooring.

#### Pros

- Made using the latest technology, these floors are engineered for stability due to cross-grain construction.
- Gaps between the pine batons provide the expansion or contraction gaps making the floor more stable.
- Balanced surface tension performance due to Pinewood in core and pine backing.
- Floors with Pinewood 3-Layer construction have only 2 glue lines reducing the chances of delamination.
- UF emission: Mikasa product meets CARB 2 standards due to NAUF; all products are made using water-based glues which enhance the indoor air quality.

#### Cons

• In case it is laid floating installation, it requires an underlay to reduce noise.



