

## **Paint Grade Birch vs. Medium Density Overlay**

There are many questions asked as to what to use as a paintable substrate on a wood door, paint grade birch or Medium Density Overlay (MDO). This TechUpdate will compare the qualities of both products.

### **Paintability**

Paint grade birch is a wood product and will absorb more paint than MDO. The finish on an MDO door will last up to three times longer than a finish applied to untreated substrates.

### **Texture**

Since birch is a wood product you will have wood grain showing through the finish that is applied. MDO is a phenolic resin impregnated kraft paper and when applied to a door is a one piece face on which no lines or grain show through.

### **Hardness**

MDO is approximately 28% resin thus giving it a much harder surface than natural wood. It is not as hard as plastic laminate, however, it is more dent resistant than wood. Due to the smoothness of MDO any dent will be magnified.

### **Thickness**

Birch veneer can run from 1/1000 of an inch to 1/32 of an inch. MDO has a nominal thickness of 0.018 of an inch (0.457 mm).

### **Stability**

With any natural wood product you have the risk of splitting, cracking and/or checking. These problems are due to wood veneer having a memory. This memory causes the wood to move because of the moisture or the lack of moisture in the air. There is virtually no risk of the above problems with MDO because it is a composite material.

On all of the above features MDO outperforms paint grade birch and is by far the superior product to use when a paintable surface is required.

