

**DIRTT**  
Build better.™

# MATERIALS AND DIRTT



DIRTT offers a range of finishes and materials suitable for green projects. A full description of how DIRTT contributes to LEED is available from your local DIRTT Representative or Distribution Partner.

## WATER-BASED FINISHING

DIRTT is a leader in using water-based finishes and a UV curing process to eliminate the use of large electricity intensive ovens. A single coat suffices, eliminating the need for multiple coats. DIRTT finishes are applied in-house; most off-gassing occurs before shipping to the project site.

## VENEER WRAPPING

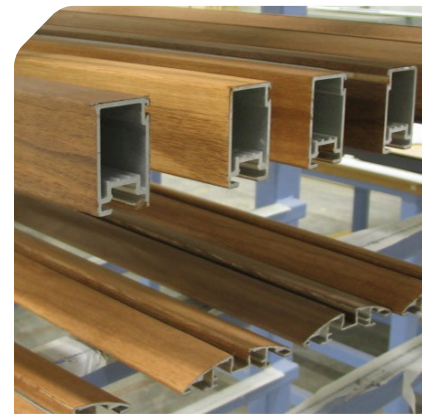
This innovative process takes the finest quality, thinly-sliced veneer and wraps it directly onto aluminum extrusions with a water-based top coat. An adhesive with zero VOC (volatile organic compounds) content is used, providing excellent adherence of the veneer to aluminum frame. At end of life, the veneer can be easily separated from the aluminum, facilitating recycling of both materials.

## FOREST STEWARDSHIP COUNCIL® (FSC®) WOOD

DIRTT is Forest Stewardship Council (FSC) Chain-of-Custody certified. DIRTT sources FSC-certified veneers and medium density fiberboard (MDF). As these materials go through the production facility, DIRTT guarantees to maintain a tracking and handling system to ensure the FSC products are not mixed in with other materials.

DIRTT's FSC trademark license code: FSC-C006900

DIRTT's FSC Chain of Custody certification code: SCS-COC-000848



### NO ADDED FORMALDEHYDE MDF

For clients particularly concerned with VOC content, DIRTT offers no added formaldehyde (NAF) MDF as an option in the material palette for Wall tiles and Millwork. The DIRTT Wall with NAF MDF and standard chromacoat is certified by SCS to Indoor Advantage® Gold, a designation that meets LEED IEQc4.5 and conforms to ANSI/BIFMA Furniture Emission Standard (M7.1/X7.1-2011) and ANSI/BIFMA e3-2012 (Credits 7.6.1 AND 7.6.3) for private office workstation parameters<sup>(1)</sup>; also, conforms to the CDPH/EHLB Standard Method v1.1-2010 (effective January 1, 2012) for the school classroom parameter<sup>(2)</sup>.

DIRTT's certification number is SCS-IAQ-02433.

1. Modeled as individual furniture components
2. Modeled as a wall covering

### POWDER COATING

Whereas some liquid finishes contain solvents with pollutants known as VOCs, powder coating on aluminum extrusions contains no solvents and is regarded as inert. Powder coat lines generally use 50% less energy than conventional systems.

### CHROMACOAT

Chromacoat is DIRTT's water-borne finish. Applied in DIRTT's factory, it dramatically reduces the time painters must be on-site. Only the base building will require paint and the painters will be working in a wide-open space for fast application. Chromacoat complies with the VOC requirements of SCAQMD as found in various green building rating systems. When applied to no added formaldehyde (NAF) MDF, it qualifies for IEQc4.5 in LEED and is a tested and certified assembly.

DIRTT's certification number is SCS-IAQ-02433.

### THERMOFOIL

A durable and attractive surface finish, Thermofoil is a 3D laminate material that is thermoformed to an MDF tile. The process is seamless, eliminating unsightly lines and sharp corners, and boosting infection prevention. DIRTT's Thermofoil tile wall on standard or NAF MDF is SCS Indoor Advantage® Gold certified and meets the requirements of LEED IEQ credit 4.5.

DIRTT's certification number is SCS-IAQ-02873.

### ALUMINUM

DIRTT uses aluminum in the Wall frame because of its light weight, strength and aesthetic properties. Frames manufactured in Calgary and Phoenix are made with mostly virgin content; our suppliers are introducing more recycled content each year. DIRTT's Savannah factory uses a higher percentage of post- and pre-consumer recycled aluminum because the right quality can be obtained from suppliers in close proximity. These manufacturers make their own billet and incorporate internal offcuts as pre-consumer recycled content.



### GLASS

Under LEED standards, recycled content in glass is usually discounted. Under LEED 2009 standards, it is possible to achieve a regional credit by sourcing glass from within 500 miles or 800 km (by truck) of a project site. DIRTT offers clients the option of sourcing COM glass for projects.

Joel Berman Glass works well with DIRTT's wall products. Editions™ glass is 20% post-industrial recycled materials and they can offer 100% post-consumer glass through reclamation of demolished office spaces. This product is available by request and has some size restrictions. [www.bermanglasseditions.com](http://www.bermanglasseditions.com)

DIRTT's glass and aluminum Wall is SCS Indoor Advantage® Gold certified, SCS-IAQ-02433.

### INSULATION

DIRTT uses cotton denim insulation that is 80% post-consumer recycled content. The final product is 100% cotton fiber, a rapidly renewable resource. Insulation scraps left over in DIRTT's manufacturing process are collected and periodically sent back to the manufacturer for reuse in new product, creating a zero waste stream.

### TRIMS and GASKETS

DIRTT uses gaskets between frames and for base and ceiling trim to provide an acoustical seal. Standard gaskets are PVC material, noted for its enduring characteristics and its excellent rating from a flame spread perspective. PVC in a DIRTT Wall accounts for 0.5% of the entire assembly. Santoprene is used for base trim and is PVC-free.

For clients who prefer alternatives to PVC, DIRTT offers Acrylonitrile Butadiene Styrene (ABS) for some trims as a custom order. ABS does not have the service life of PVC, which performs better mechanically. All PVC gaskets are made in North America at reputable manufacturers. Most green building rating systems, including the International Living Building Challenge and healthcare standards, allow for small quantities of PVC.

Please contact the [Green Team](#) at DIRTT to learn more about our other environmental initiatives.

