

Volta™ Dimensional Flex Sheets & Ceiling Tiles

Technical Information and Product Specs

Description

Volta Dimensional Flex Sheets are decorated thermoplastic sheets with high impact resistance and are available in a wide variety of patterns and colors with pressure-sensitive adhesive strips.

Panel Specifications

Sizes *(These are textured dimensional products, so actual pattern thickness varies)*

- 4' x 8' Panels
- 2' x 2' Ceiling Tiles
- 2' x 4' Ceiling Tiles

Panel Thickness

- 0.028" Volta Dimensional Flex Sheets
- 0.028" Volta Flex LITE Ceilings

Substrate

Thermoplastic

Fire Rating

Most Volta Dimensional Flex Sheets and ceiling tiles are fire rated and are designed to pass ASTM 84 Class A

Most product ships with clear protective film

UPS Shippable

Applications

Commercial Market Uses:

Office - desks, storage cabinets, reception, ceilings, etc.

Education – cabinets, high impact areas

Healthcare – furniture, equipment, high impact areas

Hospitality – restaurants, bar & counter fronts, hotels/motels, ceilings

Store & bank fixtures, interior doors, kiosk fronts & elevator cab interiors-including high impact areas, wall panels & signage

VoltaFlex® Wall Panels

Technical Data

Stain Resistance Properties

Stain Resistance Testing		Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
#	Materials	24 Hrs	7 Day	24 Hrs	7 Day	24 Hrs	7 Day	24 Hrs	7 Day	24 Hrs	7 Day	24 Hrs	7 Day
1	Wesson Oil	N	N	N	N	N	N	N	N	N	S	N	N
2	Household Ammonia	N	N	N	N	N	N	N	N	S	S	N	N
3	409 all purpose cleaner	N	N	S	S	N	N	N	N	N	N	N	N
4	"Tide" laundry detergent	N	N	N	N	N	N	N	N	N	N	N	N
5	Isopropyl Alcohol	N	N	S	S	N	N	N	N	N	N	N	N
6	Clorox	N	N	S	N	L	L	L	L	L	L	N	N
7	Grape Juice	N	N	N	N	N	N	N	N	N	N	N	N
8	Orange Juice Concentrate	N	N	N	N	N	N	N	N	N	N	N	N
9	Coffee	N	N	N	N	N	N	N	N	N	S	N	N
10	Mustard	N	N	N	N	N	N	N	N	S	S	N	N
11	Ketchup	N	N	N	N	N	N	N	N	N	N	N	N
12	Red wine	N	N	N	N	N	N	N	N	N	N	N	N
13	Coca-Cola	N	N	N	N	N	N	N	N	N	N	N	N
14	Water	N	N	N	N	N	N	N	N	N	N	N	N
15	Black crayon	N	N	N	N	N	N	N	N	N	N	L	L
16	Lipstick	N	N	N	N	N	N	N	N	N	N	L	L
17	Pine-Sol	N	N	S	S	N	N	N	N	N	N	N	N
18	Vinegar	N	N	N	N	N	N	L	L	N	N	N	N
19	Steel Wool	N	N	N	N	N	N	N	N	N	N	N	N
20	Tea	N	N	N	N	N	N	N	N	N	N	N	N
21	Windex® Surface Cleaner	N	N	N	N	N	N	N	N	N	N	N	N
22	Scotch-Brite® w/Soap	N	N	N	N	N	N	N	N	N	N	N	N

Group 1 - Patina, Brushed Aluminum, Paintable, Mirror Red, Argents
 Group 2 - Woodgrains
 Group 3 - Mirror Silver
 Group 4 - Mirror Gold
 Group 5 - Brushed Copper
 Group 6 - EcoFlex Paintable

N = no change
 S = slight change
 M = medium change
 L = large change
 *No Sign of Wear

Approvals & Certifications

Most Volta Dimensional Flex Sheets and ceiling tiles are fire rated and are designed to pass ASTM E 84 Class A.

Technical Information	Test	Results
Fire Retardant	ASTM E-84	Class A
QUV		Minimum of 100 hours
Solvent Resistance		50 MEK
Humidity		12 hrs 96-100% RH @ 40 degrees C on MDF
MEK Double Rubs/Crockmeter		Withstands 70 cycles
Impact Resistance	ASTM D5420	> 2-inch lbs per mill of thickness
Abrasion Resistance Patina with TuffCote Argent Finishes EcoFlex Paintable	TABER	4,700* 5,000* 1,000*

Storage & Preparation

- Store flat and acclimate for 24 hours prior to installation.
- Install between 65°F and 80°F and humidity of 80% or less is necessary.
- For every 4-foot wide sheet, an expansion space of 1/32" (8-foot sheet = 1/16") is necessary.

Installation Overview

Cutting/Fabricating: VoltaFlex can easily be cut to size with razor knife and scissors, saw blades, and drilling tools for thermoplastics. When fabricating VoltaFlex, always cut from the decorated side, through the finish. *Never cut from the back.* If routing, always use a down spiral bit.

VoltaFlex can be easily cut to size with a razor knife, scissors, router, Roto-Zip tool, and drilling tools designed for thermoplastics. When cutting VoltaFlex always cut from the decorated side.

Clean only with warm soapy water. Never use abrasive cleaners or chemicals on panel face.

Accessories

Adhesives:

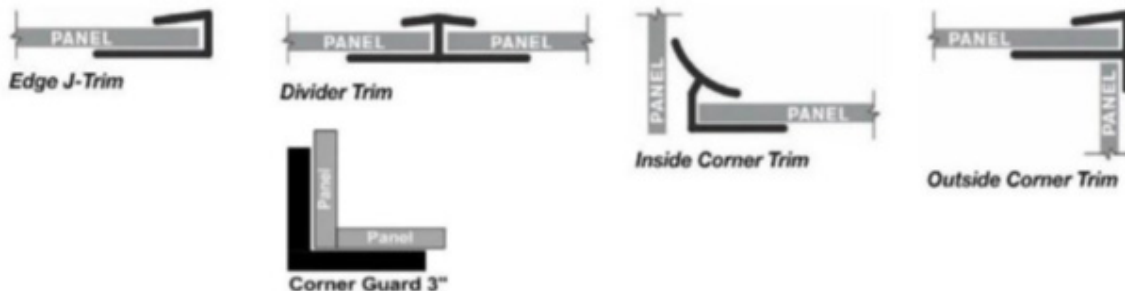
Trowel on latex adhesives are recommended for adhering VoltaFlex sheets for wall applications. The following is meant as a guideline for adhesives that have been tested, and work well with VoltaFlex product:

- Titebond® Advanced Polymer - Trowel on

Trims and Seams:

Trims are available in 96" lengths. Edge, inside corner, outside corner, division (special order requests) come in same finish or harmonizing finish to match panel.

Panels are designed to be "seamed" together using an overlap design. The overlap minimizes the panel seams to allow for a more monolithic install.



VoltaFlex® Wall Panels

Warranty

Marlite warrants to the original consumer purchaser for one (1) year after date of purchase that, under normal use and service of VoltaFlex products are free from manufacturing defects and conform to published specifications. This warranty applies as long as the consumer, purchaser, and/or installer follows the installation instructions (methods), which also includes using recommended adhesives, when adhering products to recommended surfaces. VoltaFlex is intended for primarily interior applications. Marlite believes all information contained herein to be correct. It is the responsibility of the fabricator/customer to completely test the adhesives and methods of fabrication to ensure that the results are satisfactory. The seller's only obligation will be to replace product on a one-to-one basis in the event it is covered under the above warranty. Neither the manufacturer nor the seller is responsible for any fabrication, ancillary, or labor costs involved with using its products, and shall not be liable for any additional damage or loss, directly or indirectly, arising as a result of using its products.

Marlite, Inc.
Attention: Customer Service
1 Marlite Drive, Dover Ohio 44622
330-343-6621
MLcustomerservice@marlite.com

VoltaFlex® Wall Panels

Installation

1. Before starting the installation, surface must be dry, smooth and free from dust, dirt, and debris.
2. VoltaFlex panels should be installed left to right, making sure the small flats of the panel are to the top and right. After applying the adhesive to the wall lay the first panel up applying pressure to ensure good bond to substrate. Verify the panel is straight and true before installing next panel.
3. After panels are installed promptly remove any excess adhesive that may have gotten on panel faces. Harsh chemicals will affect panel finish so check with manufactures reccomendation on clean up.

Adhesive

- Trowel on latex adhesive can be used for adhering VoltaFlex to a wall.
- For porous substrates use Marlite Brand C551 FRP Adhesive.
- For non-porous substrates use Titebond Advanced Polymer Panel Adhesive.
- Always trowel adhesive onto wall substrate first and then apply VoltaFlex Panel. We do not recommend applying adhesive to VoltaFlex panel back.
- Contact adhesives can be used to bond VoltaFlex to walls. A PVC compatible cement must be used to ensure proper bonding.

Painting Guidelines

VoltaFlex EcoFlex Paintable (beige) panels can be painted if a custom color is desired. Use recommended paints in accordance with manufacture's reccomendations. Due to the high chemical resistance of it, only certain paints adhere well. It is very important to us recommended panels to paint VoltaFlex EcoFlex Paintable panels.

The following paints have been tested and recommended:

Paint Manufacturer	Paint Product	Panel Prep	Application to Panel
Sherwin Williams	Super paint or duration or similar	To prepare the surface: EcoFlex panel can be wiped using Isopropyl Alcohol or rubbing alcohol prior to painting. This method of treatment helps paint attack the surface and create a strong bond to the panel.	Brush
Sherwin Williams	Polane series or similar		Spray
Cardinal	Polyurethane 6400 series		Spray

Paints not recommended: Epoxy paints, water-based latex paints, and oil-based enamels all proved to have poor adhesion to VoltaFlex EcoFlex Paintable panels. Use of these paints is at the sole risk of customer.

The following paints have been tested and are recommended:

VoltaFlex Paintable Painting Guide

Vendor	Product	Prep 1	Prep 2
Sherwin Williams	Acrolon 218HS	SSPC-SP1 Solvent Cleaner	DTM Bonding Primer
Lowes	Signature Interior or American Tradition Exterior Duramax Paints	TSP Cleaner	Plastic Primer Spray
Benjamin Moore	Benjamin Moore Latex or Oil Paint	TSP Cleaner	Fresh Start Primer
Pratt & Lambert	Pratt & Lambert Latex Paint	Scuff Sanding/TSP Cleaner	Supreme Interior/Exterior Multi-Purpose Primer

EcoFlex Paintable Painting Guide

Vendor	Product	Prep 1	Prep 2
Sherwin Williams	Superpaint® or Duration™ or similar	Wiping the sheet with Iso-propyl Alcohol (IPA) will help promote paint adhesion. To prepare the surface: Eco-Flex sheet surface can be wiped using IPA or rubbing alcohol prior to painting. This method of treatment helps paint attack the surface and create a strong bond to the EcoFlex sheet.	Brush Application

Sherwin Williams	Polane™ Series* or Similar	Spray Application
Cardinal	Polyurethane 6400 Series	Spray Application

*For external applications using Sherwin-Williams Polane Series, use exterior catalyst V66V27. The ratio is 6 parts paint, one part catalyst