

# Volta™ Dimensional Flex Sheets & Ceiling Tiles

## Technical Information and Product Specs

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### 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<br>Argent Finishes<br>EcoFlex Paintable | TABER      | 4,700*<br>5,000*<br>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:

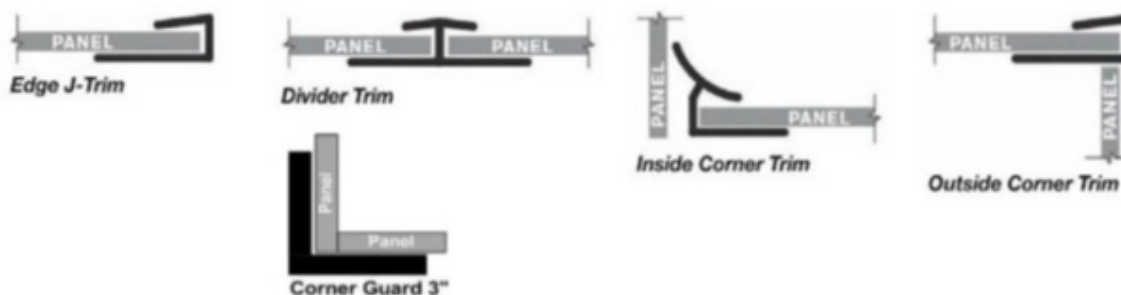
Trowel on latex adhesives are recommended for adhering VoltaFlex sheets for wall applications. The following is meant as a guideline for adhesives that have been tested, and work well with VoltaFlex product:

- 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

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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 recommendation 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 recommendations. 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 | <b><i>To prepare the surface:</i></b><br>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