Outdoor Graphics
Design to Installation
IFAI Expo 2017
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8:45 a.m.

Presented By
Valerie Cuchna,
FGA Chair
Material Resources Liaison
Fabric Images, Inc.

Mike VonVachenfeldt,
FGA Immediate Past Chair
Technical Service Manager
Glen Raven Custom Fabrics

Graphics Everywhere
Building Wraps

Building Wraps

Building Wraps
Overview of Materials

• Direct printing onto woven fabric
• Coated / Uncoated
• Vinyl films
• Urethane films

Overlaminates and Finishing Techniques to Increase Longevity

• Liquid laminates
• Pressure sensitive Films
• Thermal activated films

Liquid Laminates

• Water-based liquid coatings
• Solvent-based liquid coatings
• UV curable liquid coatings
Examples of Coatings

• Solvent-based laminates for water-sensitive inks or media
  - Available in aerosol cans, a spray-gun-ready formulation, and a brush and roll formulation

• UV-curable laminates
  - Must be applied with a UV-roller coater: these laminates will not cure under any other method
  - Durable and versatile

Application Methods

• Brush and Roll Application
  - With this, we do not recommend bristle brushes. For roll application, you’ll get the best results with a 3/16” short-nap roller (not mohair) or a high-density white foam roller. We do not recommend black foam brushes or rollers because they occasionally bleed.

• Spray Application
  - Maribu recommends Husky brand HVLP gravity fed spray gun with a 1.4 mm tip size. The Husky gun is an economical, high quality gun that yields excellent results. If you choose to use a different gun, we still recommend use of a Teflon-coated or stainless steel gun. When using an HVLP gun make sure that you have 45 – 55 pounds of air at the gun.

Application Methods

• StarLam 1600R
  - Maribu’s Roll-to-Roll Liquid
  - ClearShield use on other liquid
Pressure Sensitive Films

- Formulations
- How to determine compatibility
  - Rigid structures
  - Flexible structures
- Application methods

Thermal Activated Films

- Typical sign applications
- Canvas applications
- Other application methods
- Urethane vs Vinyl

How they work – P/S vs Thermal

Pressure Sensitive
- Always active
- Longer dwell time

Thermal
- "Dry" to the touch
- Shorter dwell time
How to Determine Compatibility

- Scope of the project
- Type of ink
- Method of application

Wind Load and Installation Issues for Outdoor Graphics

Wind Load Overview
Environmental Effects on Installations

Open Areas versus Protected Areas

Calculating Wind Load
Effective Project Area on Light Poles

Installations that Spill Wind Load

WIND FORCE CALCULATOR

https://www.bannerflex.com/resources/wind-force-calculator
Effect of Wind Slits on Banners

Mesh Fabrics at Ground Level

Proper Fastening for Pole Banners
Wall Mounting Graphics

Tie Down to Increase Wind Load

Sydney's Festive Flag Banners
Flagtrax Changes Flag Banners from Ground Banners

Wind Loads-Awnings

Awning application—best practices

- Proper rafter/lacing bands
- Spacing
- Attachments
- Secure fabric
- Preventing wind whip

How to Calculate Wind Load

Wind is a mass of air that moves; it is a nearly horizontal direction from an area of high pressure to an area with low pressure. High winds can be very destructive because they generate pressure against the surface of a structure. The intensity of this pressure is the wind load. The effect of the wind is dependent upon the size and shape of the structure. Calculating wind load is necessary for the design and construction of safer, more wind-resistant buildings and placement of objects such as antennas on top of buildings.

http://www.wikihow.com/Calculate-Wind-Load
Beyond Wind Load

- Improper rafter spacing
- Guy wires do not support fabric
- No continuous attachment to front bar
- Water will pool
- Cause sagging
- Leakage
- Worse

Questions?

Thank you!

FGA is always interested in new and returning voices that are geared towards making programming and events successful.

If you're interested in participating as a speaker/presenter at a workshop or in a webinar, or in membership with IFAI, please contact Christine Gerard, Fabric Graphics Association Division Supervisor.

Christine Gerard
cmgerard@ifa.com
651-225-6926