



AlumiGraphics® is a versatile wide-format substrate made of pliable aluminum foil with a white finish that accepts solvent, eco-solvent, latex and UV inks. The result is a durable, easy to use media that is printed direct to the surface with no over laminate required. It naturally molds without heat to rough or smooth textured surfaces.

AlumiGraphics® is a technically advanced media with unique properties that makes it superior to vinyl. It can be used for many customary applications such as exterior walls and is the most reliable material for outdoor walkways.

AlumiGraphics® opens the door to new territory for print service providers, **creating new profit centers** by easily **transforming non-utilized spaces** into cost effective, **mass marketing platforms**.



SUGGESTED APPLICATIONS

- Sidewalks & Walkways
- Entrances & Vestibules
- Stairs, Aisles & Rows
- Patios & Courtyards
- Parking Garage Walls

- Elevator & Escalator Entries
- Parking Wheel Stops
- Light Pole Bases & Columns
- Concourse & Landings
- Exterior Walls & Facades

LOCATIONS

- Stores & Shopping Malls
- Airports & Transit Facilities
- Races, Walks & Marathons
- Concert & Theater Venues
- Colleges & Universities
- Amusement Parks & Fairs
- Stadiums & Arenas
- Corporate Offices
- Special Events

- Warehouse & Manufacturing
- Museums & Zoos
- Golf Course / Tennis Centers
- Restaurants & Bars
- Government & Military Facilities
- Hospitals & Medical Centers
- Bike / Walk Paths & Parks
- Car Parks & Parking Garages
- Schools & Churches



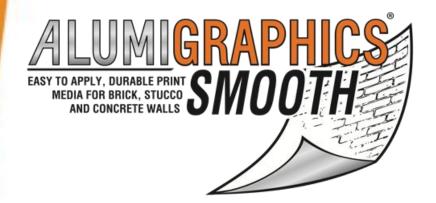
- 1. One step production process = saves time and money Print direct to the surface, no over laminate necessary.
- 2. Versatile media = compatible with a wide array of printers
 Use on solvent, eco-solvent, latex, and UV printers; many profiles are available.
- 3. No memory & no shrinkage = foil characteristics are different than vinyl Aluminum foil base material is durable and naturally conforms to the texture of rough or smooth surfaces, appears as a painted graphic.
- 4. Easy application & removal = savings on labor and keeps costs down No heat source for application, no professional installers. The specially formulated pressure sensitive adhesive allows for simple application and removal.
- 5. Environmentally friendly = prefect for companies with a green initiative Contains no PVC or hazardous elements and it can be disposed with aluminum recycling.
- 6. Proven durability = expected performance life of 1 year
 Use for long term and short term applications in hot, cold and wet weather environments.



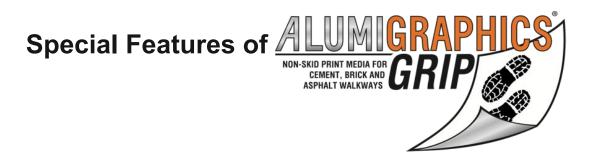
Available in Two Finishes



Slip-resistant, reflective surface ideal for exterior walkways such as concrete and asphalt.



Smooth finish that is ideal for exterior wall surfaces such as brick, stucco and concrete block.



- 1. Outdoor and indoor graphics applications on sidewalks and exterior walls including on sealed and unsealed concrete, asphalt, brick, tile, terrazzo, marble, and vinyl flooring.
- 2. Print direct to the slip-resistant surface, no over laminate needed.
- 3. Slip-resistant surface exceeds ASTM slip resistant standards making it safe to walk on both dry and wet.
- 4. Withstands heavy pedestrian traffic and harsh weather environments; 1 year expected life performance.
- 5. Textured surface is reflective with a reading of 130 mcd (millicandelas) equates to 3.25 lux, making it highly visible when lights are directed towards it.



vs. Alternative

When comparing AlumiGraphics® Grip to alternative;

- 1. On the short rolls; AlumiGraphics Grip has 10% more material and costs 30% less per square foot.
- 2. The alternative does not have a medium roll; AlumiGraphics Grip has a 75 ft. roll.
- 3. On the long rolls; AlumiGraphics Grip has 60% more material and costs 30% less per square foot.

*prices based on single roll quantities.

Additionally;

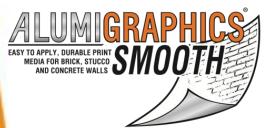
- 4. AlumiGraphics Grip has a different adhesive = stronger hold
- 5. AlumiGraphics Grip has a unique surface that provides better slip resistance when wet = safer
- 6. AlumiGraphics Grip is compatible with a wider range of printers (ecosolvent, solvent, latex and UV) = more versatile
- 7. AlumiGraphics Grip is reflective = more visible
- 8. AlumiGraphics Grip has a thinner profile that conforms better to any surface = less likely to be a trip hazard

The alternative sells two versions of material; one warranted for 3 month and another with 6 month warranty. AlumiGraphics® Grip expected durability is 1 year.

ALUMIGRAPHICS* NON-SKID PRINT MEDIA FOR GRIP CEMENT, BRICK AND ASPHALT WALKWAYS	Alternative	Vinyl Media
Compatible with eco-solvent, solvent, latex and UV printers	UV and latex only	Varies and requires over laminate
One step production process, print direct to slip resistant surface	V	No, requires over- laminate
Recommended for use on asphalt, sealed & unsealed concrete, stone, marble, tile, or brick floor surfaces	√	Intended for unsealed asphalt and concrete
Withstands heavy pedestrian and rolling vehicular traffic	√	Pedestrian only
Passed independent ASTM slip-resistance test for dry and wet conditions	Dry only	Dry Only
Holds up to rain, sleet, snow, and intense sun	√	Moderately
Expected durability up to 12 months	3 – 12 months	Up to 3 months
Applies simply by sweeping surface, peel-off liner and press down or use a roller to compress	V	Requires professional with heat and over laminate
Can be installed at outside temperatures as low as 32°	50° +	70° +
Can be tiled together edge to edge	Edge to edge	Must overlap 3/8" – 1/2"
Naturally molds to the grooves and crevices of smooth or rough surfaces	V	Requires heat to conform to textured surfaces
Special high friction surface provides reflectivity making it highly visible at night	No	No
Cleans easily with hose & broom, mopping or gentle power washing	No power washing	No power washing
Easily removed by peeling off from surface – typically leaves no residue	May leave residue	Requires heat to remove, may leave residue
Can also be applied on exterior walls such as brick, cinder block stucco and other masonry surfaces	No	Requires heat to apply, and an over laminate
Made in the U.S.A.	No	No
Can be disposed of with aluminum recycling	No	No



- 1. Outdoor applications on brick, cinder block, stucco and other masonry materials, a great alternative to vinyl banners.
- 2. Print direct to surface, no over laminate needed.
- 3. Because it has no memory, it naturally molds without heat.
- 4. Typically installs in $\frac{1}{4}$ of the time it takes to install outdoor vinyl.
- 5. Durable aluminum foil base media withstands harsh weather environments with no shrinkage; 1 year expected life performance.
- 6. Simple peel off removal typically with no residue.



vs. Vinyl

- 1. Vinyl has 'memory' and will try to lift up, 'straighten' or 'flatten' itself, when applied to a uneven or rough textured surface. This allows moisture and debris to get underneath causing the adhesive to deteriorate and loose its adhesion.
- Vinyl is a petroleum based product; with time and exposure to sunlight and weather will cause the graphics to fade and the material to 'leech' oils that deteriorate the bond to the adhesive.
- 3. When vinyl is used outdoors vinyl requires an over laminate to protect the graphic and make it less slippery. This step adds time and labor to the cost and the need for trained personnel to install and remove.
- Vinyl does not hold up well to heavy pedestrian traffic or vehicle traffic. It is common for vinyl to tear, peel or chip off without much force in the days or weeks after installation.
- 5. Vinyl has two standard installation methods and challenges:
 - a. The self adhesive typically uses an adhesive that is weaker than the 'memory' of the vinyl. This means the vinyl will eventually lift up allowing moisture to get underneath and deteriorate the adhesive. If a super strong adhesive is used, the vinyl will typically tear into small pieces causing removal to be difficult and timely.
 - Heat application requires a commercial dryer and trained professional to install and remove; expensive and expertise varies.

ALUMIGRAPHICS EASY TO APPLY, DURABLE PRINT SMOOTH MEDIA FOR BRICK, STUCCO SMOOTH AND CONCRETE WALLS	Vinyl Media
Compatible with eco-solvent, solvent, latex and UV printers	Varies and requires over laminate
One step production process, print direct to surface	No, requires over- laminate
Easily applies on exterior walls such as brick, cinder block stucco and other masonry surfaces	Requires heat to apply, and an over laminate
Holds up to rain, sleet, snow, and intense sun	Moderately
Expected durability up to 12 months	Up to 3 months
Applies simply by sweeping surface, peel-off liner and press down or use a roller to compress	Requires professional with heat and over laminate
Can be installed at outside temperatures as low as 32°	70° +
Can be tiled together edge to edge	Must overlap 3/8" - 1/2"
Naturally molds without heat to the grooves and crevices of smooth or rough surfaces	Requires heat to conform to textured surfaces
Cleans easily with hose & broom or gentle power washing	No power washing
Easily removed by peeling off from surface – typically leaves no residue	Requires heat to remove, may leave residue
Made in the U.S.A.	No
Can be disposed of with aluminum recycling	No



Printer Profiles Available

Contact a distributor or FloorSignage, LLC for profiles

Profiled Printers; printer/ink set combinations:

1	Enson Stylus Pro	GS6000 - UltraChrome	GS	(CMYKcmOG)
1 .			\sim	

2. Epson SureColor 30670 – UltraChrome GS2 (CMYK)

3. HP DesignJet L 25500 60" – HP789 (CMYKcm)

4. HP DesignJet L26500 61" – HP 792 (CMYKcm)

5. HP DesignJet L28500 – HP 792 (CMYKcm)

6. Mimaki JV33 160 – SS21 (CMYK x2)

7. Mimaki CJV30 160 - SS21 (CMYK x2)

8. Mutoh ValueJet 1304 – Eco-Solvent ULTRA (CMYK)

9. Mutoh ValueJet 1604 – Eco-Solvent ULTRA (CMYK)

10. Mutoh ValueJet 1614 – Eco-Solvent ULTRA (CMYK)

11. Roland SolJet Pro III XC-540 – Eco-Sol MAX (CMYKcm x2)

12. Roland SolJet Pro III XJ Series VP-540/640/740 (CMYKcm x2)

13. Roland VersaCAMM VP-540 Eco-Sol MAX (CMYK)

14. Roland VersaCAMM VS-640 – Eco-Sol MAX (CMYKcmWMt)

15. Roland VersaCAMM VS-640/CMYK (x2) / Eco-Sol MAX

16. Roland VersaCAMM VS-640 (CMYKcmMC)

Resolutions:

1. 720x720 dpi (all printers excluding HP DesignJet)

2. 600x600 dpi (HP DesignJet only)

RIP Software:

1. Onyx 10.2.5 – Epson, HP, Mimaki, Mutoh printers only

2. Roland VersaWorks 4.8.3 – Roland printers only

3. ColorBurst on the GS6000



Production Recommendations

A. Handling Suggestions

- 1. Handle rolls with care, keep elevated, do not set flat on table.
- 2. Dents can typically be rolled out.
- 3. Use a retrieval / pick-up roller on roll-roll and hybrid printers to protect material and avoid head strikes.
- 4. On flatbed printers use the vacuum system and flatten any wrinkles or raised areas to be flush with the table bed.

B. Loading Suggestions

- 1. Always use printer profiles provided by manufacturer or distributor.
- 2. Do not Auto Load. Select Manual Load.
- 3. Select vacuum for poster board or low vacuum setting
- 4. On some latex models it is recommend to tape a leader piece of material (vinyl) long enough to go through the load process without pulling the media through during loading. After it is completed with the loading, then advance the media forward. Important for HPL 25500 to use edge guards.
- 5. On some solvent models it is recommended to set the head on high before loading. Load the media pulling enough through so that it hangs out the front a bit, and use the edge guards. On some units the edge guards can be taped to the platen with blue painters tape to be sure it does not move. There is not an issue with latex which has more extreme heat.
- 6. Head height should be set at approximately ¼" for detailed printing and higher if not as much detail is required.

C. Cutting Suggestions

- 1. Flatbed Plotter (titanium blades are recommended when available).
- 2. Die cut.
- 3. Guillotine.
- 4. Manually with scissors.



Installation Instructions

Easily applies direct to an infinite variety of surfaces including sealed and unsealed concrete, asphalt, brick, tile, terrazzo, marble, and vinyl flooring plus vertically on brick, stucco, cinderblock and other exterior masonry wall surfaces.

A. Surface Preparation

- 1. The surface must be clean and thoroughly dry for proper performance.
- 2. Usually, thorough sweeping is sufficient, but if the surface is oily, it may need to be power washed with a commercial degreaser.
- 3. Avoid applying over loose or caked dirt, gravel, oily residues, flaking paint or other foreign substances that will interfere with proper bonding.

B.Standard Application

- 1. Recommended surface temperate should be 32 degrees Fahrenheit or higher.
- 2. Sweep dry surface clean of dirt & debris.
- 3. Peel off the backing paper (release liner) from the pressure sensitive adhesive.
- 4. Lay down flat on the selected location.
- 5. Smooth by hand from the center to outer edge, be sure all edges lay flat then firmly press down, step on or use any type of roller to compress to the surface make sure all edges are completely adhered.
- 6. Large scale graphics should be tiled edge to edge with no overlapping.









Maintenance & Removal Instructions

A. Routine Maintenance

- 1. Wet the graphic and sweep with a broom; avoid harsh cleaning chemicals to extend the product life.
- 2. Can withstand limited power washing, intense power washing can cause the edges to come loose.
- 3. To avoid risk of trip hazard injury, immediately remove graphics if any edge of the graphic lifts and replace with a new graphic.

B. Removal Instructions

- 1. Generally easy to remove on wall and pedestrian walkway applications; rough surfaces and/or vehicular traffic may increase the difficulty in removal.
- 2. Simply peel off at an angle less than 45 degrees for best result; typically leaves no residue.
- 3. Use power washer at a low angle to remove well-worn graphics.
- 4. Severely worn-in graphics on rough textured surfaces may require combination of scrubbing with wire bristle brush and rinsing from hose or power washing.
- 5. If there is adhesive residue; remove with cleaning solvents, mineral spirits or burn with gas flame.
- 6. Green Credentials: contains no PVC or hazardous ingredients; dispose with aluminum recycling.

Important: graphics placed on asphalt or other rough surfaces in locations where heavy vehicle traffic is present could be difficult to remove.



THE WORLD'S MOST VERSATILE PRINT MEDIA FOR BRICK, ASPHALT AND CONCRETE

Product Specifications:

Physical Properties Thickness:

> Film 8 mil. Adhesive 2 mil. Liner 5 mil.

Storage Product can safely be stored for twelve (12) months in

original packaging, in a cool, dry area

50° - 90°F / 10° - 32°C.

Service Temperature

-40° - 176°F / -40°C - 80°C Range

Premium Application

Temperature 32°F / 0°C or warmer







PRECISION TESTING LABORATORIES, INC.

313 Hill Avenue, NASHVILLE TN 37210-4711 PHONE 615-254-3401 FAX 615-254-3488 www.precisiontesting.com

14001 Laboratory Report No. 30-Oct-12

Mr. Bob Wright

Floor Signage, LLC 6264 Proprietors Rd. Worthington, OH 43085

Sample ID: AlumiGraphics® GRIP - White non-skid One (1) floor tile sample (qty. 4 tiles) Identification: Item:

Slip Resistance, ASTM F 1677-05 Rubber Property, Durometer Hardness, ASTM D 2240-05 Purpose:

Test	on to the second		Sp	Specimen Results	lts	Average	Stdev	_
Resistance N F 1677-05, Mark ite Fineline - J & M	Measure 10 Measure							1
Heel	i i	ΚI	œ۱	O	Q			
	Dry Wet	0.59 0.52	0.59	0.58 0.51	0.59 0.52	0.59	0.00	
	Tile # 2 Dry Wet	0.60	0.61	0.60	0.60 0.51	0.60	0.00	
	Tile # 3 Dry Wet	0.60	0.60	0.60	0.61 0.52	0.60	0.00	
	:				Dry Average (3 tiles) Wet Average (3 tiles)	0.60	n/a n/a	
Slip Resistance, Test Description Dry = Dry Wet = Dry Greasy = 3.0 gr Greasy/Wet = 25 mls	zription Dry 25 mls distilled water 3.0 grams Crisco brand shortening applied until just opaque 25 mls of distilled water w/ 3.0 grams Crisco brand shortenin	d water sco brand sh illed water w/	ortening app ' 3.0 grams C	lied until just risco brand s	iption Dry 25 mls distilled water 3.0 grams Crisco brand shortening applied until just opaque 25 mls of distilled water w/ 3.0 grams Crisco brand shortening applied until just opaque	t opaque		
Rubber Property, Durometer Hardness ASTM D 2240-05 Shore Instrument Durometer Type A as received	ter Hardness ter Type A							
Neolite Fi	Neolite Fineline - J & M	06	92	06	06 68	06	-	
A Shore Instrument Durometer Type "A", serial # 88533, utilizing a Shore Type 1 operating stand with a constant contact pressure of 865 grams was used for the test sequence. All readings are taken at a 1 second timed interval after specimen contact in a controlled atmosphere of 72° F and 50% RH. Meter calibrations are conducted prior to test.	ter Type "A", se the test sequenc " F and 50% RI	rial # 88533, ce. All readin H. Meter calii	utilizing a Sł gs are taken brations are o	nore Type 1 c at a 1 second conducted pri	perating stand with a con I timed interval after speci or to test.	stant contact press men contact in a	sure	

14001 Laboratory Report No.

I certify that the above tests under my supervision were performed in accordance with the specification test requirements and that the reported results are true, valid and applicable to the samples tested. I further certify that these samples were the only samples tested from the lot of end items identified above.

Suzante Hilporer Suzante Pispanen, VP Operations Signed:_

Don G. Roney, Laboratory Manager 16. for Signed:

This report is limited to and related only to the particular instrument, material or other subject to which it refers. These test results can not be compared to results obtained using different methods or under different conditions. No representation is made that similar articles will be of like quality. Neither Precision Testing Laboratories, Inc (treeinafter "Precision Testing") nor their officers, directors, managers or employees, shall be responsible for any loss or damage resulting directly or indirectly from any failure, error or omission in testing, or in the reporting of test results. Precision Testing has no controls, and assumes no responsibility for the tested product's functionality or use. Precision Testing observes and maintains client confidentiality, and limits reproduction of this report, except in full, without prior approval of Precision Testing.