

## Sign making with the



## GRAFISOFT Series.

### Introductory remarks.

A brief preceding study will save you a lot of time and will guarantee a better end result. Always check the following points :

- What kind of surface do you want to apply the vinyl on, and is it suitable for vinyl applications ? Please check the list at the end of this document to find out the suitability.
- This vinyl is ideal for sign making on flexible banners.
- Check your plotter's knife pressure before starting to cut.

Make sure all necessary equipment and materials are ready at hand before starting the job.

Pay attention to your own safety and health. Take into account all safety prescriptions of the suppliers when using electric equipment and products that are necessary to complete the job successfully.

### The Preparation.

**Tip 1:** Always use Grafityp materials of the same kind in one job. Don't combine Grafisoft films with e.g. Grafitack 200-300 Series films, applying one kind on top of the other. These films have different characteristics, which may have a negative influence on the end result.

Cleaning.

- The surface always needs to be cleaned thoroughly.
- Avoid damage when using some corrosive products.
- When everything is completely clean, the complete surface needs to be cleaned once again with isopropanol. Isopropanol removes all detergents that stayed behind on the surface.

**Tip 2:** Keep your material, with the application film on top of it, flat and on top of each other, making sure it is deformed as little as possible. If you need to enroll the material, make sure the material is enrolled with the application film at the outside.

### The Application.

**Tip 3:** Make sure the workshop is dust-free, that the necessary ambient temperature has been reached, and that the job can not be complicated by direct sunlight or by a heat source. Also make sure the floor is completely clean, as the vinyl gets statically loaded during the application process, thus attracting dust very easily.

**Tip 4:** Make sure the banner is laying flat, without any folds, before you start applying the films. Repositioning the film is not always easy on a banner. So we advise you to work in smaller steps than normally.

The vinyls are always applied dry.

- Run a couple of tests first. They can save you a lot of work. Apply a test strip on the banner and check the adhesion.

The tools:

- Squeegee
- Cutting knife
- Heat gun
- Extension cord
- Sufficient light
- Roll of tape
- Electric current
- Meter, felt-tip, pencil, ...

#### The preparation:

- Place the vinyl (with its backing paper) on the surface. Use paper tape, a pencil crayon or magnetic holders to do so.
- Always avoid cutting in the banner.
- Apply some reference points where vinyl and banner meet, so you can easily place the vinyl at its exact position again.

#### The application of the vinyl:

- Remove the backing paper from the vinyl.
- Position the vinyl without folds against the reference points you applied earlier.
- Rub the vinyl smoothly by means of the squeegee. Make sure that the air between the object and the vinyl can always escape.
- A detailed manual on applying Grafitack films, provided with a mounting film, can be found on our website <http://www.grafityp.com>.

### The finishing.

The exact removal of the mounting film determines the quality of the end result to a large extent.

- Allow the film to adhere to its surface for as long as possible before removing the mounting film.
- Remove the mounting film under an angle of 180°. In this way, the pulling strength on the vinyl will be a lot less, and less air bubbles will be "sucked" under the vinyl.
- Small air bubbles will disappear automatically after a certain period of time. Larger air bubbles need to be punctured.

### Cleaning and Maintenance.

We advise you not to clean the film with a high-pressure cleaner.

Maintenance : Banners that are placed at the side of the road are exposed to water and dust day after day. Vinyl is a soft material. Therefore the cleaning and maintenance shall only be executed with non-scouring cleaning agents, without strong solvents or corrosive ingredients.

Banners always have to be enrolled with the signs at the outside.

### Removal of the vinyl.

The Grafisoft Series has been developed especially not to leave behind any glue residues after removing the vinyl. If you wish to remove the vinyl, we advise you to heat it with a heat gun. Pull off the vinyl under an angle of 90°. If any glue residues stay behind on the surface, this is caused by the composition of the surface. The glue can be removed with isopropanol.

**Tip 6:** If any glue residues stay behind, this is often because the vinyl is too warm and the adhesive is too cold. Just wait for a moment until the heat has reached the area between the adhesive layer and the banner, and things will become much easier. You will find the right balance between heating and removing the vinyl after some practice.

**Tip 7:** If you made a banner on which you only have to change the date every year (e.g. for an open house), we advise you to remove the date immediately after using the banner, and not to wait for a year to do so.

## ADHESIVE STRENGTH OF THE GRAFISOFT SERIES ON BANNER MATERIALS

MANUFACTURER	BRAND	TYPE	ADHESIVE STRENGTH after 20 min.	ADHESIVE STRENGTH after 24 hours	Bubbles	Result
Grafityp Selfadhesive Products	Grafibanner		✓	✓	none	✓
	Complan Banner	Type 52			none	X
	Concord banner				none	X
TTT France	Estoryl banner	Glossy green	✓	✓	none	✓
TTT France	Estoryl banner	Glossy black	✓	✓	none	✓
	Haku Polymard	660 g/m <sup>2</sup>				
LG Chem	Ultra Smooth Banner		✓	✓	none	✓
Protan AS		Light tight polyester, two sides, dim sprayed	✓	✓	none	✓
Cotonnière Lyonnais		Light tight opaque sprayed	✓	✓	yes	X
Cotonnière Lyonnais		Type 650, sprayed	✓	✓	none	✓
Lystill SA Sibille-Dale	Lystill banner	Type 7005	X	X	yes	X
3M	Panaflex banner		✓	✓	none	✓
	Polymar banner	Type 8210	X	X	yes	X
	Polymar banner	Type 8202	X	X	yes	X
	Polymar banner	Type 8556	X	X	yes	X
American Biltrite	PVC Bannerrite	Type PV 20	X	X	small	X
American Biltrite	PVC Bannerrite	Type PV 21	X	X	none	X
American Biltrite	PVC Bannerrite	Type PV 10	X	X	bubbles	X
Bruin Plastics Co Inc.	Bruin Screenshot		✓	✓	none	✓
Vynide SA Ltd.	Sterkolite Banner	V1168 dip coated	✓	✓	some	X
Vynide SA Ltd.	Sterkolite Banner	V0239 laminated	✓	✓	none	✓
Vynide SA Ltd.	Sterkolite Banner	V0240 laminated	✓	✓	none	✓
Vynide SA Ltd.	Sterkolite Banner	V0238 laminated	✓	✓	none	✓
Vynide SA Ltd.	Sterkolite Banner	V1168 lacquered	✓	✓	none	✓
	TIS banner	Type PP66, finish BAA03, colour 55003			none	X
	Uniflex banner	Type FR	X	X	none	X

### **Remark:**

The above-mentioned results are relevant only as long as the manufacturers of the above-mentioned banner materials do not change the composition of their material and on condition that the Grafisoft are applied on the correct side of the banners.

### **Adhesive Strength:**

✓ good (the limit value that Grafityp consider as acceptable is 8,5 N / 25 mm after 24 hours.)

X insufficient

### **Result:**

✓ good (the adhesive strength is sufficient and no bubbles are visible)

X insufficient (the adhesive strength is insufficient or bubbles appear)

This GrafiManual is not to be considered as a complete product manual. It is only meant as a tool, to give you an idea of the possibilities and the application of the above-mentioned products. More detailed information about these products can be found in the product data sheets and on [www.grafityp.com](http://www.grafityp.com).