

REVLAR[®]

WATERPROOF SYNTHETIC PAPERGUIDE



THIS COMPREHENSIVE GUIDE WILL:

- Explain the benefits of waterproof synthetic paper
- Provide printing tips and suggestions
- Feature real-life examples of companies that use the paper

Brought to you by:

RELYCO

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Why Waterproof Synthetic Paper?

Whenever printed materials will be subject to frequent handling, wet surroundings or extreme environmental conditions, waterproof paper is the best option. It holds up better than standard paper or lamination because it's a synthetic material that is made of plastic, yet it has the appearance, smoothness and printability of paper.

REVLAR paper is waterproof, tear-proof, durable, impervious to grease and chemicals, weatherproof and specifically designed to withstand high/low temperature fluctuations. Yet, it can still be scored, punched or die-cut, which makes it versatile.



DURABLE



WATERPROOF



TEAR-PROOF



REPELS GREASE



WASHABLE



FADE RESISTANT



HIGH/LOWTEMPS

DURABLE & WASHABLE

REVLAR waterproof synthetic paper is so durable that even complete and lengthy submersion in liquid has no effect. Because of this tolerance for water, it's easy to clean! If REVLAR gets dirtied, you can just wipe it down with a wet cloth or use a mild cleanser.



HOW IS IT DIFFERENT FROM LAMINATING?

Lamination is an outdated practice to help strengthen standard paper. But laminating is a time-consuming and costly process that does not ultimately hold up over time.

Why would you take extra steps when a more efficient shortcut already exists?

Work smarter, not harder!

REVLAR waterproof paper is already durable, tear-proof, chemical-proof and fade-resistant right out of the package, so there is no additional process necessary.


Here are 5 reasons you should back away from that laminator:





Cost - REVLAR waterproof paper can be more cost-effective than laminating. How? Essentially, a project printed on waterproof paper is quick to produce and will outlast laminated pieces over the long-term. Creation time and the piece's durability are the key factors, which we'll explore in more depth below. These features are important to consider, especially if your project is large-scale.



Your time matters - If you were to laminate a sheet of standard paper or card stock, you would have to perform the additional steps of inserting the paper into a pouch and running it through a laminating machine. This may not seem like it takes much time, but when you combine all of the seconds it took to perform those steps, they quickly add up. Once a sheet of waterproof paper runs through a dry toner printer, it's ready to go.

 **It's more durable** - REVLAR waterproof paper is stronger than laminated paper. Laminated pieces will eventually break down as peeling occurs and moisture seeps in. Waterproof paper, on the other hand, can withstand tearing, pounding rains, complete submersion underwater, sub-freezing and high heat temperatures without breaking down.

 **Folding** - Laminated pieces can't be easily folded. Even if you use a thin laminate and force a fold, there will inevitably be cracking along that seam. Meanwhile, waterproof paper does not fail or become weakened by folding; it can be folded or scored by hand or machine, depending on its weight.

 **Appearance matters** - Lamination can peel, bubble or crease, which allows moisture to penetrate and damage the finished piece. Aesthetics are important and, let's face it, lamination just doesn't look good in the long term. On the other hand, waterproof paper always bears a clean, professional appearance.

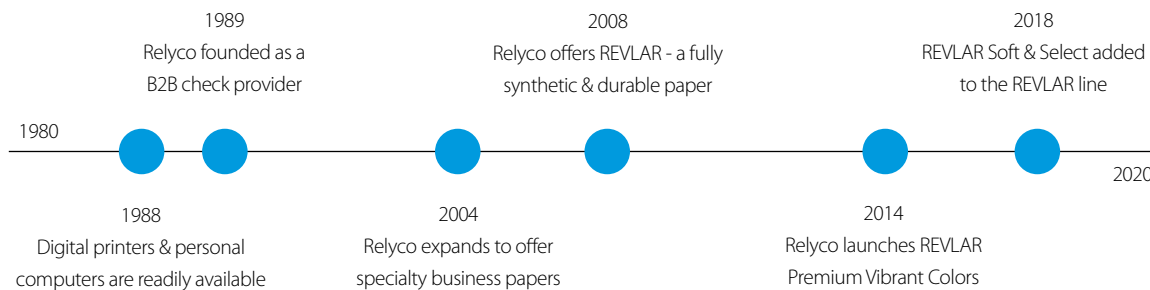


Example of lamination gone wrong

WHY CHOOSE RELYCO FOR YOUR SYNTHETIC PAPERS?

Our origins

RELYCO was founded in 1989. We began as a B2B check provider before expanding into specialty business paper. As the company grew, so did the product offerings. We were one of the first in the industry to explore synthetic waterproof, tear-proof paper. For ten years, we have offered REVLAR Premium as the elite synthetic solution on the market. As our customers' needs evolved, we expanded our REVLAR offerings to align with those changes.



Today, we have a growing family of 30,000 customers. Our headquarters are in Dover, New Hampshire and we have five major warehouse facilities located in Texas, New Jersey, Utah, Maine and New Hampshire.



RELYCO's headquarters, Dover, New Hampshire

What it's like to work with us

We value personal relationships and open communication. Our product experts will work with you to understand your challenges, your timeline, the product you're looking for and how you plan to use it. We'll take that information and work with you to develop a solution, whether it's one of our stock products or a custom job. When you trust us with your business, we'll work hard to exceed your expectations, while keeping you updated on the progress of your order every step of the way.

The REVLAR Family

One brand, three outstanding products

The REVLAR brand includes three of our synthetic paper products. Each product has the same durable characteristics, but they differ in how they align with specific customer needs, applications and budgets.

	REVLAR Premium	REVLAR Select	REVLAR Soft
Durability	waterproof & tear-proof	waterproof & tear-proof	waterproof & tear-proof
Stiffness	rigid	rigid	soft
Foldability	scoring recommended	scoring recommended	easy to fold
Base Material	polyester	polyester	polyolefin
Coating	aqueous	solvent	aqueous
Thickness	3.7 - 13.7 mil	4.7 & 7.7 mil	8 - 12 mil
Weight	125 - 510 gsm	150 & 250 gsm	200 - 300 gsm
Printer Compatibility	laser, offset & flexo	laser, offset & flexo	production laser, offset & flexo
Melting Point	450° F	450° F	302° F
Opacity	96%	95%	90%
Brightness	95%	94%	93%
Price Point	\$\$\$	\$\$	\$

Explore each waterproof option in more depth in the coming pages.

REVLAR PREMIUM

What sets REVLAR Premium apart?

REVLAR Premium is our elite durable synthetic paper. It is the brightest white and most opaque synthetic paper on the market. Images printed on this paper are crisp, clear and have the most pop! Individuals and businesses in the following industries have found great success with Premium:



How is REVLAR Premium used? What can you make with it?

- | | | | |
|------------------|----------------------|------------------|---------------------|
| Food safe menus | Food safe deli picks | Notices | Emergency guides |
| Recipe cards | Bottle neckers | Fishing licenses | Blueprints |
| Placemats | Retail tags | Maps | Drum labels |
| Door hangers | Loyalty/reward cards | Parking passes | Service tags |
| Removable labels | Bookmarks | Training manuals | Growler tags |
| Shelf wobblers | Signage/posters | ID tags/cards | Temp license plates |



Top product features:



Best coating

The coating on Premium is best in class. This superior coating contributes to Premium's excellent printer runnability and static resistance, which is a common problem with other synthetic papers.



FDA compliant

REVLAR Premium is FDA compliant as a food contact substance (FCS), which means it can be used safely around food. This attribute is critical for circumstances when REVLAR may have direct contact with food, such as labeling or signage within prepared food sections in grocery stores or restaurants.



Printer certified

REVLAR Premium has been tested and certified to run smoothly on all brand-name laser printers.

Check out what we've got:

Item No.	Thickness	Weight	8.5" x 11"	8.5" x 14"	11" x 17"	12" x 18"	13" x 19"
504	3.7 mil	125 gsm	•			•	
505	4.7 mil	155 gsm	•	•	•	•	•
506	5.7 mil	198 gsm	•		•	•	
508	7.7 mil	258 gsm	•	•	•	•	•
511	10.7 mil	368 gsm	•	•	•	•	•
514	13.7 mil	510 gsm	•			•	

Options galore

In addition to the traditional white, REVLAR Premium stock options also include specialty colors and finishes, such as vibrant colors, pastel colors, clear finish, matte finish and frosted finish. We also offer perforated die-cuts, removable labels and permanent labels in the same premium waterproof, tear-proof material. **Explore the options in the coming pages.**

REVLAR PREMIUM COLORS

Make life brighter with REVLAR Premium Colors









REVLAR Premium vibrant and pastel colors offer more versatility and opportunity to bring your projects to life. They have the same durable characteristics and printability as the traditional white Premium paper.

Say goodbye to flood coating

With REVLAR Colors, you can save toner, time and resources because there is no longer a need to flood coat a sheet of white paper. REVLAR Colors can last for up to a year with exposure to UV rays without any fading. They can also be folded, punched or die-cut! Additionally, if you have a printer with white toner, these colors are a perfect way to utilize that feature.

These vibrant and pastel colors are wonderful for creating signage, advertisements, tags, labels, posters, flyers, crafts and more!

Available colors:

Item No.	505P	505B	505Y	505G	505VB	505VO	505VY	505VR
Color:								
Thickness	5 mil	5 mil	5 mil	5 mil	5 mil	5 mil	5 mil	5 mil
Weight	172 gsm	172 gsm	172 gsm	172 gsm	172 gsm	172 gsm	172 gsm	172 gsm
8.5" x 11"	•	•	•	•	•	•	•	•
12" x 18"				•	•			•



REVLAR PREMIUM DIE-CUTS

Perforated to please

REVLAR Waterproof Perforated Die-Cuts are sheets of Premium paper that have perforated shapes specifically designed for various applications.

Design, print & go

REVLAR Die-Cuts are engineered to make your life easier. It's very simple: use our free design templates and then print the die-cuts on your laser printer, offset printer or flexo printer. REVLAR Die-Cuts are ready to run; say goodbye to the hassle of hand-cutting, getting a custom die-cut made or meeting a minimum quantity! These 8.5" x 11" Premium Die-Cuts are available in 100 or 500 sheet packs.



Available templates:

Item No.	Name	Thickness	Weight	8.5" x 11"	12" x 18"
508 LT	4 up Luggage Tag	7.7 mil	258 gsm	•	
508 LH	3 Up Door Hanger	7.7 mil	258 gsm	•	
508 SH	6 Up Door Hanger	7.7 mil	258 gsm	•	
508 LB	8 Up Lanyard Badge	7.7 mil	258 gsm	•	
508 LB	8 Up Lanyard Badge	7.7 mil	258 gsm	•	
508 HT	8 Up Hang Tag	7.7 mil	258 gsm	•	
508 BM	8 Up Curved Bookmark	7.7 mil	258 gsm	•	
508 IDC	6 Up ID Card	7.7 mil	258 gsm	•	
508 TP	1 Up License Plate	7.7 mil	258 gsm	•	
508 SW	2 Up Shelf Wobbler	7.7 mil	258 gsm	•	
CP-106	8 Up Wristband	3.7 mil	125 gsm	•	
508 TT	2 Up Table Tents	7.7 mil	258 gsm		•

REVLAR WATERPROOF PREMIUM LABELS

These labels can be printed on laser printers, offset printers and flexo printers and cut down to any size.

Waterproof Removable Labels



Low Tack Removable Labels are flexible enough to allow ongoing repositionability and ultra-removability. As a result, the labels can be reused over and over again. Think of REVLAR Low Tack Labels as “signage anywhere!”

Waterproof Permanent Labels



Permanent Waterproof Labels have a long-lasting adhesive to guarantee your label will stay in place! These labels are tear-proof and waterproof, which means they can handle rain, ice or heat.



Marine & Laboratory Grade Labels are the industry’s most durable labeling products available. They are certified for British Maritime Standard 5609:1986 Section 2 and 3 marine and laboratory immersion. These labels are designed to withstand wash-downs as well as total seawater immersion. Their uses include chemical drum labels, drums and containers used to transport petroleum, paint, liquid or powder chemicals.

Label options:

Item No.	Thickness	Weight	Finish	8.5" x 11"	12" x 18"
Waterproof removable labels					
504WVMA	4 mil	294 gsm	Matte	•	•
Waterproof permanent labels					
502D	2 mil	198 gsm	Gloss	•	•
502E	2 mil	198 gsm	Matte	•	•
502F	2 mil	198 gsm	Clear	•	•
Marine & Laboratory Grade labels					
502MGDL	2 mil	245 gsm	Matte	•	•

REVLAR SELECT

What makes REVLAR Select stand out?

REVLAR Select is a rigid synthetic paper that is manufactured with the same base/core material as REVLAR Premium, but the difference is in an industrial coating, which results in a significant cost reduction.

Select is available in two thicknesses. If you need a standard and sturdy waterproof, tear-proof paper that will get the job done, Select is a solid option. Individuals and businesses within the following industries have benefited from the savings Select provides:



How is REVLAR Select used? What can you make with it?

- | | | | |
|----------------------|------------------|------------------|----------------------|
| Menus | Bookmarks | Parking tickets | Blueprints |
| Event passes | Signage | Parking passes | Manuals |
| Shelf strips/sliders | Fishing licenses | ID tags/cards | Growler tags |
| Retail tags | Maps | Emergency guides | Loyalty/reward cards |



Top product features:



Industrial coating = cost-effective

As we mentioned above, for Select we use an industrial coating that is thinner compared to the coating on REVLAR Premium. Through this key difference, the same level of durability and printability is maintained, but cost savings are possible.



Quality manufacturing

Some synthetic paper providers have developed similar cost-effective solutions to offer customers, but they have sacrificed on the quality of their manufacturing practices. This results in many “select” or “performance” grade materials that cause printing jams and severe static issues. This is not the case with REVLAR Select. REVLAR Select is able to smoothly and consistently run through printers with ease.

Available stock:

Item No.	Thickness	Weight	8.5" x 11"	11" x 17"	12" x 18"
505 USSG	4.7 mil	150 gsm	•	•	•
508 USSG	7.7 mil	250 gsm	•	•	•

REVLAR SOFT

What's so special about REVLAR Soft?

REVLAR Soft is a truly unique product in the synthetic market. Most synthetics are rigid, whereas Soft is pliable. REVLAR Soft serves as an excellent alternative to traditional rigid synthetics because it addresses the challenges with foldability, writability, cost and printability that some customers face with their projects.


Additionally, Soft feels remarkably silky and smooth to the touch, which makes a difference for folks who are tactile and care a lot about the feel of a material. Soft is popular amongst individuals and businesses within the following industries:




How is REVLAR Soft used? What can you make with it?

Folded menus	Charts	Parking passes	Medical logs/forms
Event passes	Signage/posters	Training manuals	Manuals
Retail tags	Folded maps	ID tags/cards	Keg collars
Bookmarks	Parking tickets	Emergency guides	Growler tags

Top product features:

 **Fold & go!** REVLAR Soft is extremely easy to fold by hand, unlike a traditional rigid synthetic. Its flexibility allows it to fold (and hold that fold) well. Some customers have even found that pre-scoring is not necessary for their menus and maps.

 **Writable** You can write with pens/markers and stamp on REVLAR Soft the way you would with a standard paper - no dry time needed!



Cost-effective

There are several elements that impact the cost of a synthetic paper, but the main driver is the cost of the base material. Soft is made from polyolefin, which is a unique plastic material that is just as durable as polyester and other plastics, but is much more cost-effective.



Low gsm means more printer options

Polyolefin is not as dense as polyester, which results in a lower gsm for REVLAR Soft compared to all other synthetic papers in the market.

What is gsm?

Grams per square meter (gsm) measures the density or how heavy a paper is. Mil size correlates to the thickness of a paper. Typically, if a mil size is higher, the gsm will also be higher.

All printers have a maximum gsm threshold. Because of how gsm and mils typically correlate, when a gsm threshold is reached, that usually precludes thicker mils from being run as well.

Why does this matter for you?

REVLAR Soft is unusual because its gsm remains relatively low, even in thicker mils. This makes it possible for thicker mils of Soft to be run, even when a production printer has a lower gsm threshold. Ultimately, this means Soft can be run on a wider variety of production printers.

Thicker mils are more desirable for certain projects. For example, sometimes you might choose a thicker paper in order to convey a specific message, create a particular look or feel significant in someone's hand.

Your choices:

Item No.	Thickness	Weight	8.5" x 11"	11" x 17"	12" x 18"	13" x 19"
708	8 mil	200 gsm	•	•	•	•
710	10 mil	250 gsm	•	•	•	•
712	12 mil	300 gsm	•	•	•	•

How to Print on REVLAR

REVLAR is compatible with laser printers, offset printers and flexo printers. The key is making sure that you use a printer that is equipped to run the product's gsm (weight).

Our product specialists are always happy to work with you to make sure that you get the right product for your printer. Please don't hesitate to reach out to us if you have questions.

Most desktop laser printers will run our 8.5" x 11" 3.7mil - 7.7mil REVLAR without a setting adjustment. Larger sizes or higher mils will need to be printed on a larger printer and you might need to adjust your print settings in order to ensure optimum printability with REVLAR. We recommend that you do some test printing to see which settings give you the best results. In general, if your printer has a synthetic paper setting, that's the one to use.

Pro tips for printing:

If you don't have a synthetic paper setting, we recommend that you choose settings that maintain:

- Lower fuser temperature
- Slower run
- Straight path through the printer

DON'T FORGET...TO RECYCLE IT!



REVLAR can be recycled as a plastic, not as a paper. We recommend you check in with your local recycling services for your options. REVLAR Premium & REVLAR Select are classified as a #1 plastic. REVLAR Soft is a #7 plastic.

Application Ideas

There are many ways to use REVLAR. Check out some examples where REVLAR has been used in the past.

Hospitality	Retail	Education	Government
<ul style="list-style-type: none"> • Menus • Recipe cards • Placemats • Door Hangers • Water-bottle labels • Event passes 	<ul style="list-style-type: none"> • Shelf wobblers • Shelf strips/sliders • Bottle neckers • Retail tags/ labels • Banners/signs • Loyalty/reward cards 	<ul style="list-style-type: none"> • Manuals • Bookmarks • Student ID cards • Parking passes • Charts • Posters 	<ul style="list-style-type: none"> • Temporary license plates • Fishing license • Transit/city maps • Parking tickets • Training/field manuals • Signage/notices
Grocery	Manufacturing	Healthcare	Food & Beverage
<ul style="list-style-type: none"> • Food safe deli picks • Signage/posters • Bottle neckers • Price labels • Recipe cards • Loyalty/reward cards 	<ul style="list-style-type: none"> • Blueprints • Badges • Chemical drum tags • Parts/maintenance manuals • Service tags • Construction signage 	<ul style="list-style-type: none"> • Manuals • Charts • ID tags/cards • Signage • Emergency guides • Medical lab logs/forms 	<ul style="list-style-type: none"> • Menus • Keg collars • Back kitchen signage • Recipe cards • Labels • Growler tags



Success Stories

As a premier synthetic paper supplier, Relyco has seen firsthand how waterproof paper has improved and simplified processes for businesses across a range of industries. Waterproof paper can be used for so many different types of projects - the possibilities are endless!

Here's a sampling to demonstrate how these businesses have utilized REVLAR waterproof synthetic paper.

ATLANTIC GRILL

Atlantic Grill Loves the Look, Feel and Ease of Waterproof Menus

Atlantic Grill is a restaurant that is open year-round, but because they are located in a seasonal community, they receive an influx of customers during the summer months. As the number of patrons increases, the need for durable menus becomes even more critical:



"We didn't like the look of paper menus in plastic sleeves. That's what we had when we first opened. We wanted something that was just a little more different. We needed something durable, that didn't need additional protection. We wanted something that could handle a lot of use, especially in the summer when we have a high volume of customers. [We like REVLAR because of] the ease for the staff to clean them. It's super easy to just sanitize them. Wipe them. Done...They last a long time.

We have two different menus that change seasonally and we typically print those twice for a refresh. It's very rare to have to replace these. It really only happens if kids color on them, but now we have coloring books to solve that problem!"

- Becky Donovan, General Manager

YMCA

YMCA Makes a Splash with Waterproof Paper

This YMCA uses our REVLAR waterproof paper for their swim lesson program, where the instructors need to be able to use their printed guides right in the water:



“At the YMCA we are currently revamping our swim lesson program to a new, more streamlined program. The use of waterproof paper in the water during our lessons will help us provide a more consistently delivered program. I share that with you because I honestly believe you’re helping us make a difference in many children’s lives. I use the Canon IR V to print the lesson guides and skill guides to be able to use them in the water. So far they’ve lasted over 8 hours in the water consistently.”

- Christina Weiss, Aquatics Director

BRIGHAM YOUNG UNIVERSITY (BYU)

BYU Football Team Finds Success with Waterproof Paper

Coaches in virtually every sport use some type of heavy paper (usually laminated) to create call sheets for games and practices and the BYU Cougars football team is no exception:

“We wanted a paper for all uses that didn’t require lamination, was waterproof—and sweat proof—and was durable and easy to use. And we wanted our coaches to be able to write on it without using a special pen...With REVLAR, we’ve saved hours of laminating time and can print call sheets our coaches can write on, making the coaches more effective on the field. The fact that REVLAR is durable and tear resistant is a bonus.”

- Duane Busby, Director of Football Operations



MCDONALD GARDEN CENTER

REVLAR Waterproof Paper Helped McDonald Garden Center Grow

McDonald Garden Center operates three year-round garden centers and 12 seasonal garden markets. With such a wide variety of plants and plant material available, McDonald has serious signage needs. But the conditions of a garden center are not exactly conducive to traditional paper:



"These signs are exposed to the elements, both inside and outside our facilities, where they can be damaged by wind, rain or watering, as well as from sitting within the plant material itself. In the past, we were able to produce the signs we needed using just card stock and lamination, but as we opened more and more locations and had more facilities requiring signage, we found that our approach was becoming time consuming and costly...in the more than four years that we've been

working with RELYCO and using REVLAR, we've never been disappointed. The product is excellent and ideally suited to our environment, and we have a great relationship with the company. RELYCO's service is unmatched and we absolutely trust that RELYCO will do a good job for us."

- Sherry Connell, Promotions Coordinator

Your Options

We offer different materials, sizes, colors and thicknesses allowing for a wide variety of high quality durable printed products.

AVAILABLE STOCK:

Item Number	Paper Type	8.5"x11"	8.5"x14"	11"x17"	12"x18"	13"x19"
REVLAR Premium						
504	Premium White 3.7 mil (125 gsm)	•			•	
505	Premium White 4.7 mil (155 gsm)	•	•	•	•	•
506	Premium White 5.7 mil (198 gsm)	•		•	•	
508	Premium White 7.7 mil (258 gsm)	•	•	•	•	•
511	Premium White 10.7 mil (368 gsm)	•	•	•	•	•
514	Premium White 13.7 mil (510 gsm)	•			•	
505P	Premium Pastel 5 mil (172 gsm)	•			•	
505V	Premium Vibrant 5 mil (172 gsm)	•			•	
Die-Cut	Premium Die-Cut 7.7 mil (258 gsm)	•			•	
504WVMA	Low Tack Removable Label 4 mil (294 gsm)	•			•	
502D	Permanent Gloss Label 2 mil (198 gsm)	•			•	
502E	Permanent Matte Label 2 mil (198 gsm)	•			•	
502F	Permanent Clear Label 2 mil (198 gsm)	•			•	
502MGDL	Permanent Marine Grade Label 2 mil (245 gsm)	•			•	
REVLAR Select						
505 USSG	Select White 4.7 mil (150 gsm)	•		•	•	
508 USSG	Select White 7.7 mil (250 gsm)	•		•	•	
REVLAR Soft						
708	Soft White 8 mil (200 gsm)	•		•	•	•
710	Soft White 10 mil (250 gsm)	•		•	•	•
712	Soft White 12 mil (300 gsm)	•		•	•	•

Talk to us!

Chat with one of our knowledgeable paper experts to see which REVLAR waterproof synthetic paper solution aligns best with your needs. If our stock items don't match your needs, we can do a custom order to achieve your goals.

Contact us:

P: 800.777.7359 | E: info@relyco.com | W: www.relyco.com

