



Vacuum
Bagging
Materials

www.pro-vac.eu

INTRODUCTION

The PRO-VAC team is very proud that we have grown our brand and offering on the international stage with our outstanding distribution network and especially with the great work of our partners at PRO-VAC USA. We are always looking to challenge ourselves with innovative technology to aid existing and new process methods around the globe.

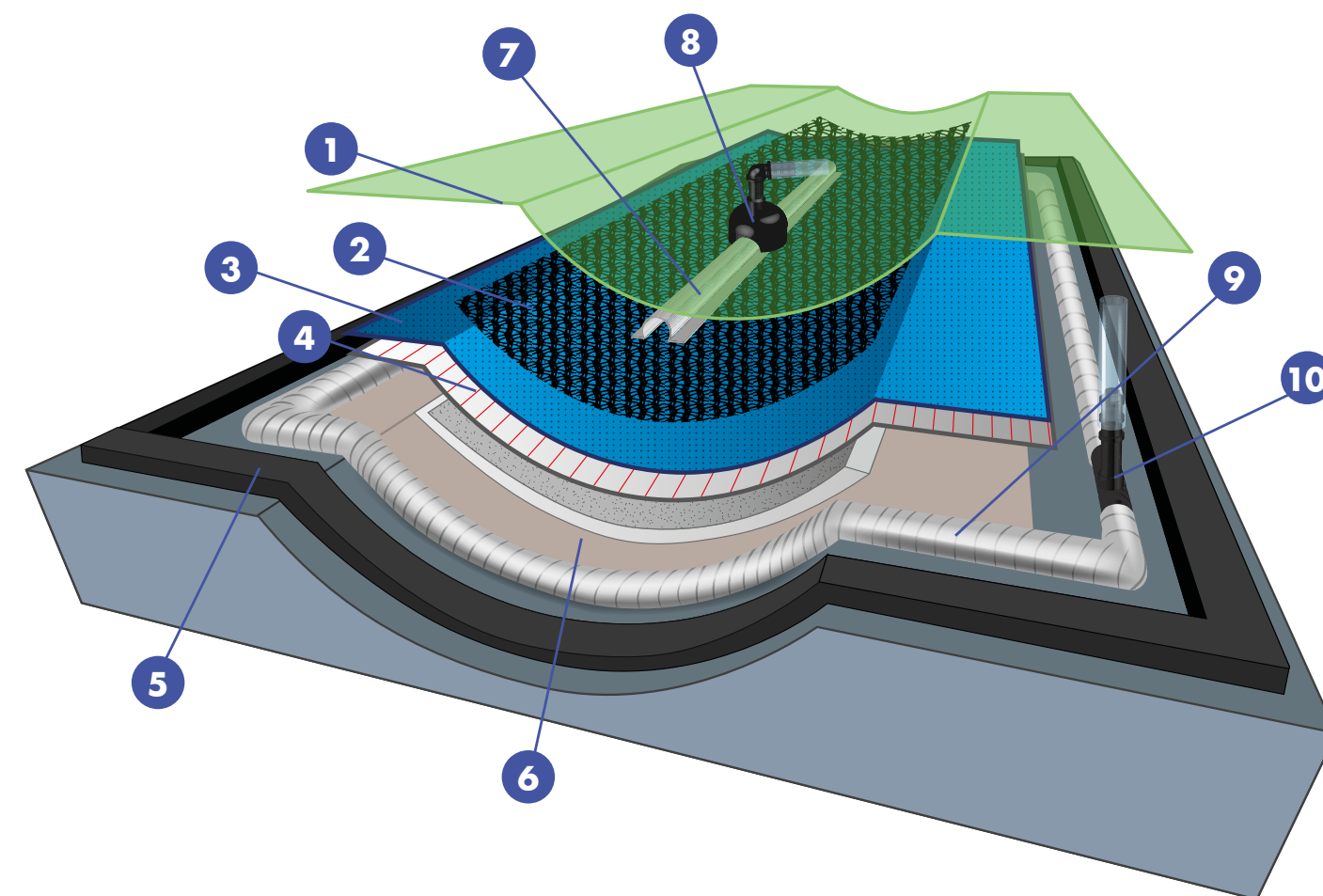
This PRO-VAC brochure is a guide of our standard products. It was designed with a background of 20 years' experience within the vacuum bagging industry. The range is a quality driven condensed offering where products have been chosen to span different process across the composite manufacturing spectrum. We have de cluttered and simplified the huge offerings that are out in the marketplace and have produced a

user friendly easy selectable range of products.

Of course, it does not stop there, we have developed a multitude of special items for our customers to help them find that missing pieces to increase the performance of their production, whether it be cost saving, takt times, cosmetic finish, weight saving etc.

We understand that in this every more competitive marketplace we must be ahead of the curve. By doing this we have carved ourselves a niche with our excellent technical knowledge of the materials and process, unrivalled customer service and a direct line to the decision makers.

We are much more than just a Vacuum bagging materials supplier; we are your technical partner.



1) Vacuum bagging film

2) Infusion mesh

3) Release film

4) Peel ply

5) Sealant tape

6) Mould release

7) Omega profile (resin inlet line)

8) Infusion block, L connector and resin hose

9) Spiral wrap

10) T-piece and vacuum hose





VACUUM BAGGING FILMS

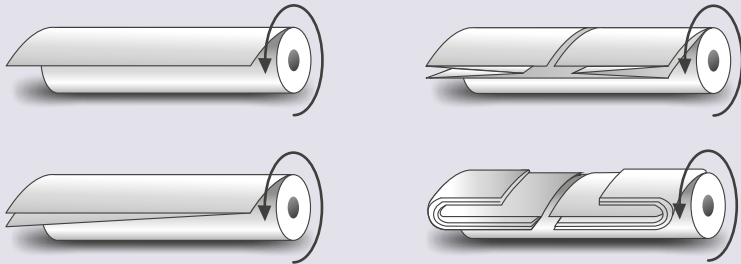
Vacuum films are a key part of our range, the films have been developed very closely with the manufacture to produce high performance cost effective co extruded and mono films to match any current product in the marketplace.

PRO-VAC multilayer films have been specifically engineered from different nylons (PA) and polyolefin's (PO) to create the best possible performance films in their respective class.

Film formats

PRO-VAC films are being used to make the biggest blade in the world as well many of the other massive blades currently in serial production.

We are extremely honoured be supplying the markets widest Nylon/Polyolefin co extruded film to blades produced for the offshore market.



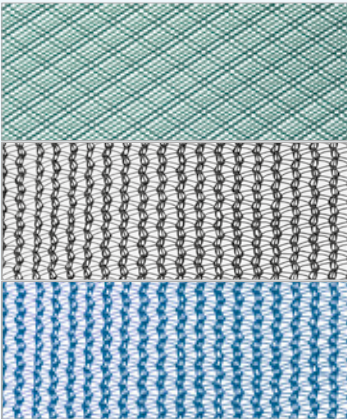
Part number	Description	Temp (°C)	UOM
PRO-VAC 150-LG-75	PO/PA/PO - 75 micron thick green vacuum bagging film Available from 2 m wide up to 10 m wide	120	sqm
PRO-VAC 150-LG-80	PO/PA/PO - 80 micron thick green film vacuum bagging film Available in 12 m and 16 m wide gusseted tube	120	sqm
PRO-VAC 100-LB-50	PA/PO/PA - 50 micron thick blue vacuum bagging film Available in 3 m, 4 m and 6 m wide	177	sqm
PRO-VAC 100-LB-65	PA/PO/PA - 65 micron thick blue vacuum bagging film Available in 4 m, 6 m, and 8 m wide	177	sqm
PRO-VAC 100-LB-75	PA/PO/PA - 75 micron thick blue vacuum bagging film Available in 2 m, 4 m, 6 m, 8 m, 10,5 m and 12 m wide	177	sqm
PRO-VAC 200-O-50	PA/PO/PA - 50 micron thick orange vacuum bagging film Available from 0.203 m up to 3 m	170	sqm
PRO-VAC 200-O-75	PA/PO/PA - 75 micron thick orange vacuum bagging film Available from 0.3 m up to 3 m wide	170	sqm
PRO-VAC 200-O-125	PA/PO/PA - 125 micron thick orange vacuum bagging film Available from 0.3 m up to 3 m wide	170	sqm



Part number	Description	Temp (°C)	UOM
PRO-VAC 164-R-70	Self-releasing vacuum bag, 70 micron thick red vacuum bagging film Available from 0.086 m up to 2.3 m wide	170	mtr
PRO-VAC 333-G-50	Mono layer PA - 50 micron thick green vacuum bagging film Available from 0.025 m up to 2.3 m wide	200	sqm
PRO-VAC 333-G-75	Mono layer PA - 75 micron thick green vacuum bagging film Available from 0.025 m up to 2.3 m wide	200	sqm
PRO-VAC 225EX-P-50	Mono layer modified PA for flexibility - 50 micron thick pink vacuum bagging film Available up to 2.3 m wide	204	sqm
PRO-VAC 225EX-P-75	Mono layer modified PA for flexibility - 75 micron thick pink vacuum bagging film Available up to 2.3 m wide	204	sqm

INFUSION MESH

Infusion meshes are designed to aid the flow of the resin systems across the surface of the laminate to allow affective penetration through the laminate stack. PRO-VAC meshes have been developed as equivalents to the standard grid and knitted meshes available in the market, the speeds have been tested side by side with comparative results.



Part number	Description	Temp (°C)	UOM
PRO-VAC BM230P	Green grid (extruded) mesh, 1.2 m x 50 m	120	sqm
PRO-VAC KM160E1	Black knitted mesh, 2000 mm x 100 m	120	sqm
PRO-VAC KM160E1	Black knitted mesh, 1000 mm x 100 m	120	sqm
PRO-VAC KM150B150	Blue knitted mesh, 1.5 m wide x 100 m long rolls	120	sqm

RELEASE FILM

Developed with the same manufacture of the bagging film as the products are specifically engineered for the composite market segments. Tight specifications have been put in place for the different perforations offered – P3, P31 and P16
Release films can be used as a cost-effective alternative to peel ply



Part number	Description	Temp (°C)	UOM
PRO-VAC 500-B-28-NP	Polyolefin release film, 28 micron thick x 4.0 m wide x 500 m	120	sqm
PRO-VAC 500-B-28-P3	P3 perforated Polyolefin release film, 28 micron thick x 1,5 m wide x 500 m	120	sqm
PRO-VAC 500-B-28-P31	P31 perforated Polyolefin release film, 28 micron thick x 1,5 m wide x 500 m	120	sqm
PRO-VAC 550-Y-30-NP	Yellow PP release film, 30 micron thick x 1.5 m wide x 250 m	150	sqm
PRO-VAC 550-Y-30-P3	P3 perforated Yellow PP release film, 30 micron thick x 1.5 m wide x 250 m	150	sqm
PRO-VAC 550-Y-30-P31	P31 perforated Yellow PP release film, 30 micron thick x 1.5 m wide x 250 m	150	sqm
PRO-VAC 575-B-15-NP	Blue ETFE release film, 15 micron thick x 1.53 m wide x 153 m	230	sqm
PRO-VAC 575-B-15-P3	P3 perforated Blue ETFE release film, 15 micron thick x 1.53 m wide x 153 m	230	sqm

PEEL PLY

Our peel plies are sourced from established manufactures who only produce to the highest level of quality control throughout the weaving, cleaning, and setting/drying phases of production.

We have a Nylon 66 to offer as a direct alternative to current products in the market and we are introducing a polyester peel ply as an even more cost-effective product however this product must be tested for compatibility.



Part number	Description	Temp (°C)	UOM
PRO-VAC N85	85 gsm nylon 66 peel ply fabric with Red pinstripe Available in widths from 0.05 m up to 1.52 m wide	180	sqm
PRO-VAC P85	85 gsm polyester (PET) peel ply fabric with a light red pinstripe Available in widths from 0.05 m up to 1.52 m wide	180	sqm

Other widths can be available upon request, contact our technical department for details

SEALANT TAPE

Very difficult product to develop as a ‘general purpose’ tape that fulfils the requirements for handling, tack (to bag and mould), snap back, mould and film compatibility and temperature resistance. After years of work we have developed products to compete in the global.



Part number	Description	Temp (°C)	UOM
PRO-VAC B1191	Black low temperature sealant tape, 3 mm x 12 mm x 15 m, 22 rolls per case	150	mtr
PRO-VAC G1191	Grey low temperature sealant tape, 3 mm x 12 mm x 15 m, 22 rolls per case	150	mtr
PRO-VAC W1200	White low temperature sealant tape, 3 mm x 12 mm x 15 m, 22 rolls per case	150	mtr
PRO-VAC C2180	Cream high temperature sealant tape, 3 mm x 12 mm x 15 m long rolls, 22 rolls per case	180	mtr

Other sizes and profiles of tape are available upon request, contact our technical department for details

SELF ADHESIVE TEFLON COATED GLASS FABRIC

PRO-VAC MLR range is tough self-adhesive Teflon coated glass fabric that is used for covering moulds or tables for easy release and cleaning. It also helps prevent mould damage therefore can increase the life of the mould.



Part number	Description	Temp (°C)	UOM
PRO-VAC MLR-5	Silicone adhesive 1000 mm wide x 30 m long rolls	180	sqm
PRO-VAC MLR-3	Silicone adhesive 1000 mm wide x 30 m long rolls	180	sqm

INFUSION ANCILLARIES



Part number	Description	Temp (°C)	UOM
PRO-VAC RE-MESH	Combination product, PRO-VAC 500-B-28-P31/ KM160E1, 1.4 m wide x 100 m	120	sqm
PRO-VAC HFVL-2	Micro porous vacuum line, 150 mm x 100 m	n/a	mtr
PRO-VAC O-16	Omega profile, 16 mm x 2.5 m	n/a	mtr
PRO-VAC SW	PE Spiral wrap for resin infusion Available in 10 mm, 12 mm and 18 mm i/d	n/a	mtr
PRO-VAC I	PE hose for resin Infusion Available in 10 mm and 12 mm i/d	n/a	mtr
PRO-VAC RHOSE-13	Vacuum hose - reinforced 13 mm i/d	n/a	mtr
PRO-VAC RHOSE-19	Vacuum hose - reinforced 19 mm i/d	n/a	mtr
PRO-VAC RSHOSE-18	Vacuum hose - plastics spiral reinforcement 18 mm i/d	n/a	mtr
PRO-VAC V	PE infusion valve Available in 10 mm, 12 mm and 18 mm o/d	n/a	Each
PRO-VAC INB-16	Infusion inlet block, 16 mm dia to suit PRO-VAC L connectors	n/a	Each
PRO-VAC L-12	L connector for PRO-VAC INB-16 inlet block reducer to 12 mm o/d	n/a	Each
PRO-VAC L-18	L connector for PRO-VAC INB-16 inlet block expander to 18 mm o/d	n/a	Each
PRO-VAC T	T connectors for resin infusion Available in 10 mm, 12 m and 18 mm o/d	n/a	Each

Other sizes, widths and dimensions can be available upon request, contact our technical department for details



PRESSURE SENSITIVE TAPES

Developed as a direct alternative to the current products on the market. Used for fixing consumables into the moulds, easy to remove and replace, mainly used in pre preg applications. Advantages are that the adhesive does not leach out or run at high temperature and pressure



Part number	Description	Temp (°C)	UOM
PRO-VAC 16-25	Blue pressure sensitive adhesive tape, 25 mm x 66 m	180	Roll
PRO-VAC 16-50	Blue pressure sensitive adhesive tape, 50 mm x 66 m	180	Roll
PRO-VAC T-TAPE25	Grey Teflon pressure sensitive tape, 25 mm wide x 30 m long	260	Roll
PRO-VAC T-TAPE50	Grey Teflon pressure sensitive tape, 50 mm wide x 30 m long	260	Roll

SPRAY ADHESIVE

Developed as a direct alternative to the current products on the market. Used for fixing consumables into the moulds, easy to remove and replace, mainly used in pre preg applications. Advantages are that the adhesive does not leach out or run at high temperature and pressure



Part number	Description	Temp (°C)	UOM
PRO-FIX 2	Spray glue x 500 ml can	n/a	Can
PRO-FIX 51	Epoxy compatible spray glue x 500 ml can	n/a	Can



BREATHER FABRIC

Breather fabric is used to evacuate air from a laminate before and during cure. We offer a 150gsm and a 300gms PET needled fabric. Its' most common use is with pre-preg products in the de bulking and curing steps







Part number	Description	Temp (°C)	UOM
PRO-VAC B-150	PES breather fabric, 150 gsm x 1,52 x 100 m long	210	sqm
PRO-VAC B-300	PES breather fabric, 300 gsm x 1,52 x 50 m long	210	Sqm



Part number	Description	Temp (°C)	UOM
Enka profile 50	Resin inlet 50 mm wide	n/a	mtr
Enka profile 100	Resin inlet 100 mm wide	n/a	mtr

HIGH TEMPERATURE FITTINGS

	Part number	Description	Temp (°C)	UOM
	PRO-VAC PLUGBV	High temperature vacuum plug 1/4" BSP	210	Each
	PRO-VAC SOCBV	High temperature vacuum socket 1/4" BSP	210	Each
	PRO-VAC BREACH75	High temperature breach unit 1/4" BSP - 75 mm base plate	232	Each
	PRO-VAC BREACH50	High temperature breach unit 1/4" BSP - 50 mm base plate	232	Each
	PRO-VAC HTHOSE	High temperature silicone hose, 8 mm i/d x 18 mm o/d	232	mtr
	PRO-VAC HOSEEND	High temperature hose end 1/4" BSP	232	Each
	PRO-VAC HOSECLIP	High temperature hose clip	232	Each
	PRO-VAC HOSESPRING	High temperature metal spring	232	mtr

Hoses can be made up to required lengths with any combination of fitting





KITTING

Kitting has been a key part of our growth, with the increasing trend for OME's using subcontracts for kitting to reduce Takt time and stock levels, it has been very important for PRO-VAC to follow this trend. Development of kits has driven the demand for novel products to fit the requirements of the end customer. PRO-VAC has access to large scale vacuum bagging kits and cut shape formats, welded and/or sealant tape joined, for the wind energy and marine markets down to ancillaries and solutions for small scale infusions. We are always looking for new ideas and find great satisfaction in innovating with new and existing customers.

Examples of kitting projects:

Cut shaped vacuum bags

- Straight and/or curved lines

Cut and sealed vacuum bag

- Sheets and tubes
- Largest vacuum bag sheet produced – 40 m x 80 m sheet

Welded vacuum bags

- Small and large scale

Combination products

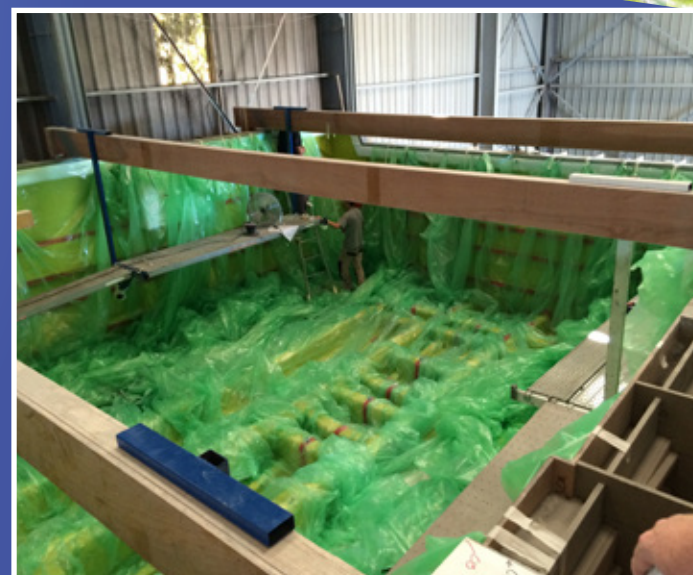
- Release film/infusion mesh
- Peel ply / Release film / infusion mesh
- Release film / mesh for infusion lines
- Micron porous products for vacuum lines

Process material kits for wind blade repair

- Vacuum film, peel ply, release film, sealant tape, ancillaries, resins, carbon and glass fibres.

Together with innovated and creative kitting partners we are equipped to tackle every challenge in the marketplace.





"Connecting composites with our Global Partners"



With our excellent supply chain it is possible for us to manufacture and develop new and novel materials within a reasonable time frame and without restricting minimum order quantities; therefore if you are struggling to find a product that suits your process we will be more than happy to open a technical discussion and work with you on a solution. We are also working very hard with our strategic partners to develop greener more sustainable materials and solutions for our customers.



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