

aalco®

GRP Panels

Carrier PANOLIT® GRP Panels for the Road Transport Industry from Aalco

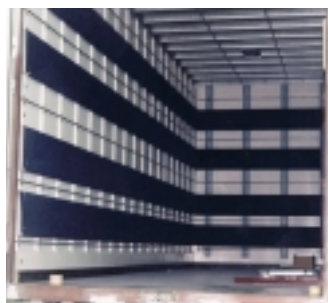


aalco®

delivering customer service, investing in capability



Aalco, the UK's leading independent aluminium and stainless steel stockholder, has a well-established reputation in supplying the RT sector.



Aalco is the fastest growing supplier of aluminium to the Road Transport Industry, providing a complete range of extrusions, treadplate, sheet, plate and shate through 13 branches nationwide. As well Carlier PANOLIT® GRP Panels, Aalco stock a complete range of standard RT sections, plus a number of other special products for the RT sector, including ABS Cappings and a selection of treadplate patterns.

In addition, Aalco has recently launched the LoadsMORE® lightweight body system for 3.5 tonne GVW vehicles. *Please see inside back cover for more details of the full range of Aalco RT products.*



This unique new 'light curtain side' system means up to 40% more payload on Ford Transit, Mercedes Sprinter and VW Transporter vehicles. LoadsMORE® is constructed from lightweight, corrosion-resistant anodised

aluminium and is available with rear doors or rear curtains. A drop-side system is also available offering smaller payload improvement. www.loadsmore.co.uk



Information on all products, including prices and stock availability throughout the UK can be obtained by contacting one of the 13 Aalco branches specialising in RT products as listed on the back of this brochure. Full details are also on the website at

www.aalco.co.uk

Carrier GRP – User Guide

Appearance of GRP Panels

As a result of raw materials used and the manufacturing process, the surface finish, of the interior and the exterior of the panel, may show some marks – This will not affect the mechanical properties of the panel.



Painting

GRP Panels can be painted with polyurethane painting systems. It is important to carry out a thorough cleaning and degreasing of the surface before painting. Grinding of the gel-coat is should be avoided at all costs. A soft rub down with household abrasive pad such as 'Scotchbrite' is sufficient. For a high quality final finish, please follow the procedures provided by the paint manufacturers.

Important: In the production of glass reinforced polyester in any form, it is not always possible to guarantee a totally defect free surface.

Colour impregnated gel-coat

On request, panels can be manufactured with a colour impregnated gel-coat on the exterior face. We strongly recommend that these panels are ordered with a protective film coating. With such panels, great care must be taken when unloading and storing the panels. The panels must also be handled with care during production. It should be noted that the final colour and lustre of impregnated panels does not match that of a painted panel.

Storage

The panels must be stored flat on wooden struts placed at least every 1500 mm. They must be sheltered from bad weather and kept in a dry place. As the process of polymerization can continue for several weeks, we recommend very careful storage and handling. In case of extended storage periods of panels covered with a protective coating, we recommend removal of the coating to avoid any colour variation.

Handling and Unloading

We recommend that the panels be unloaded using an overhead crane and that during the unloading the panels be fully supported – either by a purpose-built frame or by load straps positioned a minimum of every 2500mm along the full length of the panel.

Neither the manufacturer, Carrier Plastiques, nor Aalco will accept any responsibility for the consequences of poor handling by any other method, which can lead to cracks, surface damage or broken panels. For handling small panels, such as those used for door blanks or bulkheads, it is possible to use a forklift, but in this case the lower and the upper side of the panel should be protected.

Identifying Internal and External Faces

All panels are supplied with a sticker applied clearly showing the "INTERIOR SURFACE". Please ensure that all panels are used in the correct orientation. In the case of panels higher than 2440 mm, also ensure that the "TOP" sticker is correctly oriented in order to ensure that the horizontal joint of the panel is always at the top.

Cutting

GRP panels can be cut using a circular saw with carbide-tipped blades. For cutting out an opening use a carbide-tipped jig saw. Always follow the guidelines from the cutting system manufacturer, especially for advice on the type of blade (number of teeth) required and the cutting speed.

Cleaning

When the vehicle is delivered to the customer, it is important to advise the customers on the washing of GRP panels. The wrong pH of the detergent, together with an excessive pressure, or an excessive temperature at too short a distance to the panel may destroy its surface. The following general instructions should be adhered to:

- Maximum temperature: 70°C (158°F)
- Maximum pressure: 80 bar (1160 psi)
- Minimum distance between sprayer and panel: 30 cm (12")
- Soft soaps or basic detergent: pH lower than 10
- Acid solutions: pH higher than 2

Repairing

In case of accidental damage to a GRP panel, it is possible to effect a repair. This repair should be performed very quickly, as the ingress of moisture will alter the mechanical characteristics of the panel, and invalidate the guarantee.

A copy of the Repair Procedures is given at the end of this publication. In addition, do not hesitate to contact the panel manufacturer for further advice.

Applications

General information can be found on the manufacturer's web site:
www.carlier-plastiques.com

To determine side-wall thickness dimensions, please use following rules:

Thickness	Body Dimensions
6 to 11mm	Depending on the specific use
14mm	3.5 tonnes
17mm	13600 x 2440mm
20mm	13600 x 3150mm

No guarantee will be given outside of the above limits.

In the case of refrigerated vehicles, type and thickness of panels is governed by the use of the vehicle (refrigerated or chilled) and the type of refrigeration unit required for the operation.

Internal Equipment

It is possible to fit equipment on the inside of the panels according to the customer's requirements, including:

- Metallic or GRP rub strip
- Horizontal load restraint rails
- Vertical rails for double deck
- Meat hanging device on the roof
- Fridge units and evaporator on the bulkhead or on the roof

The body builder must ensure that the panels specified are adequate for the purpose for which they are to be used. The fixation by screwing or riveting, with or without bonding, must be made in accordance with the specifications issued by the manufacturers.

In case of fixing equipment with screws on a panel with plywood core, carefully check the length of the screw - The end of the screw must stop before the 2nd ply from the outside. Fitting of load restraint rails must be undertaken carefully, to avoid waves on the side walls.

The manufacturers usage specifications of all equipment fitted must be followed.

Return of Panels

In the case that any panel must be returned to the supplier, it must be handled stored and loaded in the correct manner. Damage caused by loading, storage and transportation whilst in the care of the customer will not be covered by the supplier.

The customer should note on the return paperwork, that the panel has been passed to the haulier in good condition (except for the reason of the return). It may be advisable for the supplier to ask the haulier for indemnity should any damage occur during the return transport.

Repair procedure for small blemishes

(scratches, small gelcoat cracks, small impacts)

Required products:

- Thickened and pre-accelerated gelcoat
- Polyester film
- Catalyst (do not forget to protect your eyes, and wear gloves)
- Wax

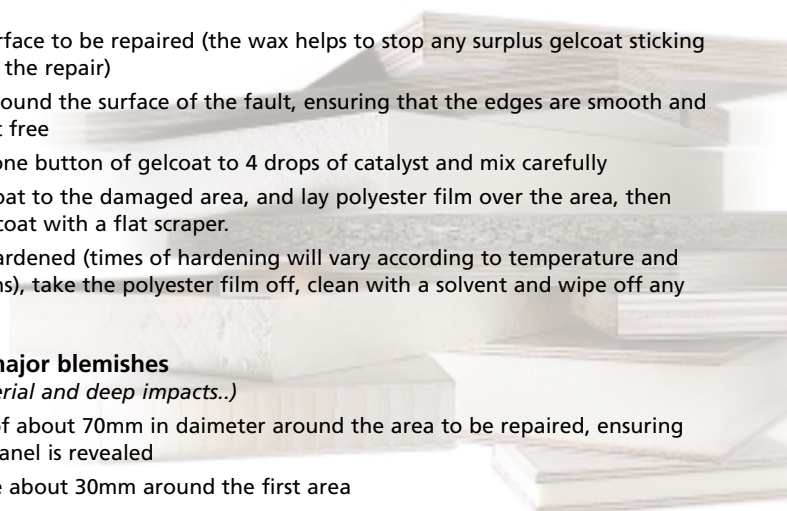
Procedure:

1. Wax and shine the surface to be repaired (the wax helps to stop any surplus gelcoat sticking to the surface around the repair)
2. Rub down the area around the surface of the fault, ensuring that the edges are smooth and the whole area is dust free
3. Prepare the gelcoat: one button of gelcoat to 4 drops of catalyst and mix carefully
4. Apply the mixed gelcoat to the damaged area, and lay polyester film over the area, then level the film and gelcoat with a flat scraper.
5. After the gelcoat is hardened (times of hardening will vary according to temperature and atmospheric conditions), take the polyester film off, clean with a solvent and wipe off any excess gelcoat.

Repair procedure for major blemishes

(cracks into the core material and deep impacts..)

1. Grind down an area of about 70mm in diameter around the area to be repaired, ensuring that the core of the panel is revealed
2. Grind down in a slope about 30mm around the first area
3. Dry the core if necessary
4. Apply a 300g/m² woven roving glass against the core, over the 70mm
5. Impregnate with white resin
6. Apply a 450g/m² chopped strand mat glass over the whole area of the repair (100mm)
7. Impregnate with white resin
8. Equalise and roll out the air bubbles
9. After the repair has hardened (times of hardening will vary according to temperature and atmospheric conditions) grind down in order to obtain a flat surface
10. Cover and fill the area with polyester mastic, then rub down with a fine sheet of wet and dry paper in order to obtain a good finish
11. Finish with white gelcoat using the same procedure as for small blemishes



C.P.R. Panels with Plywood core, GRP coating and gelcoat on both sides.

Specifications From the outside to the inside

Gelcoat	White			Plywood: WBP	Polyester Resin			
Glasstissue	30g/m ²				Types	CPR	CPRS	CPRSR
Types	CPR	CPRS	CPRSR		Glassfibre g/m ²	300	450	840
Glassfibre g/m ²	300	450	840		Glasstissue	30g/m ²		
Polyester Resin					Gelcoat white	White		

Thicknesses

STANDARD mm	6	8	10	11	14	17	20	24	27	30
WEIGHT kg/m ² CPR	5.5	6.5	8.5	9	11	13	14.5	17	18.5	20.5
WEIGHT kg/m ² CPRS	6.2	7.3	9.1	9.6	12	13.7	15.3	17.6	19.3	21.3
WEIGHT kg/m ² CPRSR	6.8	7.8	9.8	10.3	12.3	14.3	15.8	18.3	19.8	21.8

Dimensions

STANDARD WIDTH	2440mm	LENGTH	up to 13550mm
MAXIMUM WIDTH	3150mm	SPECIAL SIZES	on request

Tolerances

LENGTH	± 5mm	THICKNESS	± 1mm
WIDTH	± 3mm	DIAGONAL DIFFERENCE	± 6mm

These panels fulfil the specifications of the NF Standard XP T 57-950-1

Aalco stock of PANOLIT® CPR Panels

Thickness mm	Length mm	Width mm	Weight kg
14	2438	2438	65
14	4877	2438	131
14	6096	2438	163
14	7315	2438	196
17	2438	2438	77
17	2743	2438	87
17	3048	2438	97
17	5486	2438	174
17	6096	2438	193
17	6705	2438	213
17	7315	2438	232
17	7925	2438	251
17	8534	2438	270
17	9144	2438	290





Aalco – First Choice for RT Supplies

GRP Panels are just the latest addition to Aalco's rapidly expanding range of products for the RT industry. As one of Europe's leading independent multi-metal distributors Aalco has a thirty-year history of supplying a wide range of products to the RT sector. With a choice of 13 locations throughout the UK, an increasing number of customers are sourcing more of their requirements from the local Aalco branch:

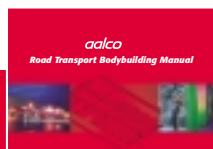
- Aluminium Rolled Products – sheet & patterned sheet, plate & treadplate, shate Standard Extrusions – angle, channel, tee, tube & box section, flat/square/round bar
- Extruded Aluminium Sections – Bearers/Runners, Floor Planks, Side Raves & Guards, Corner Pillars, Cant Rails, Top Hats, Zeds, Mouldings, Kick Strips
- Dropside Sections & Systems
- Slip-resistant flooring – Phenolic mesh faced Birch plywood
- Cappings – ABS & Aluminium/ABS
- Aluminium Decking Planks
- Type 4003 Stainless
- The NEW LoadsMORE® light-weight body system for 3.5 tonne GVW vehicles. See: www.loadsmore.co.uk



LoadsMORE® is a registered Trade Mark of Amari Metals Ltd



Road Transport Brochure



Road Transport Bodybuilding Manual



Aalco Stock List



Complete Product Catalogue

Visit the Aalco website to download our full range of literature. For hard copies, prices & stock availability and to place an order please contact your local branch as listed overleaf

www.aalco.co.uk

The information contained herein is based on our present knowledge and experience and is given in good faith. However, no liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

As the products detailed herein may be used for a wide variety of purposes and as the Company has no control over their use, the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or their fitness for any particular purpose. Any advice given by the Company to any third party is given for that party's assistance only and without any liability on the part of the Company. Any contract between the Company and a customer will be subject to the Company's Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.

WEIGHTS

All weights shown in this publication are for guidance only. They are calculated using nominal dimensions and scientifically recognised densities. Please note that in practice, the actual weight can vary significantly from the theoretical weight due to variations in manufacturing tolerances and compositions.

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