



AGRICULTURE



CONSTRUCTION



DIY

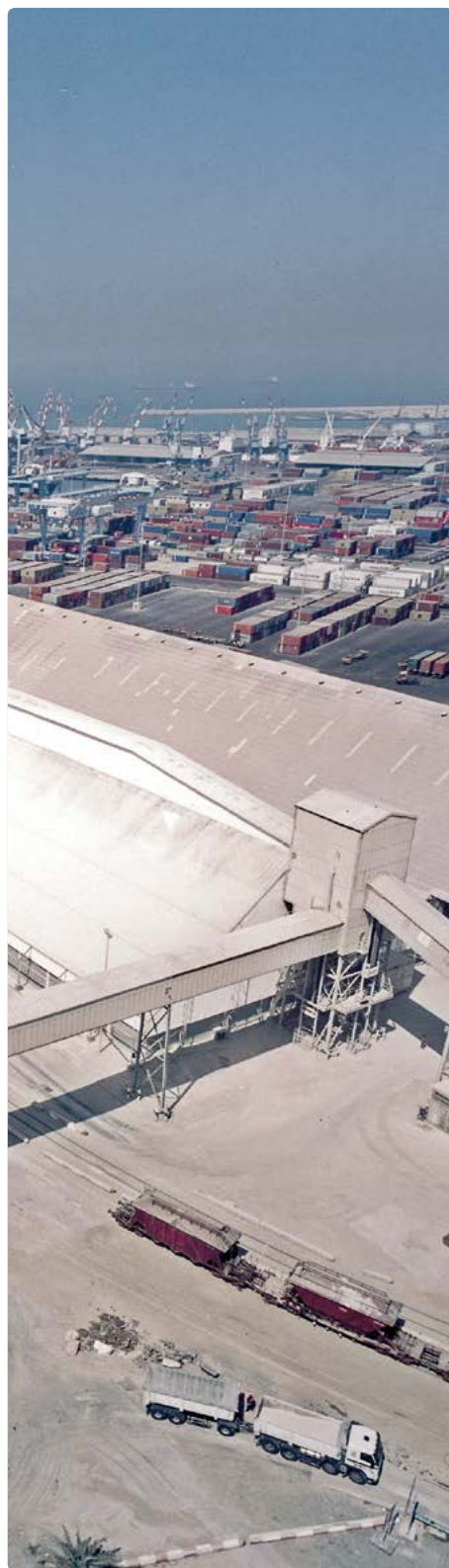


# PALRUF<sup>®</sup>

Corrugated PVC Sheet



# PALRUF® Corrugated PVC Sheet



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## PALRUF® - For the Long Term

PALRUF corrugated PVC panels combines excellent resistance to chemicals, fire and impact, resulting in an extremely durable roofing solution. PALRUF withstands harsh chemical environments where conventional roofing quickly corrodes, which makes it ideal for long-term use in demanding industrial applications such as chemical plants and storage facilities, mines and ports. For domestic applications, it is ideal as a clear (in cold northern climates) or opaque roofing material that is easy to install and maintain. PALRUF evolved into the high quality product it is today based on the experience of 50 years of service. It is lightweight, safe, extremely easy to handle and install using conventional tools and requires minimum maintenance.

Replacing asbestos with PALRUF® in the roof of a chemicals warehouse.



## Livestock and Farming Applications

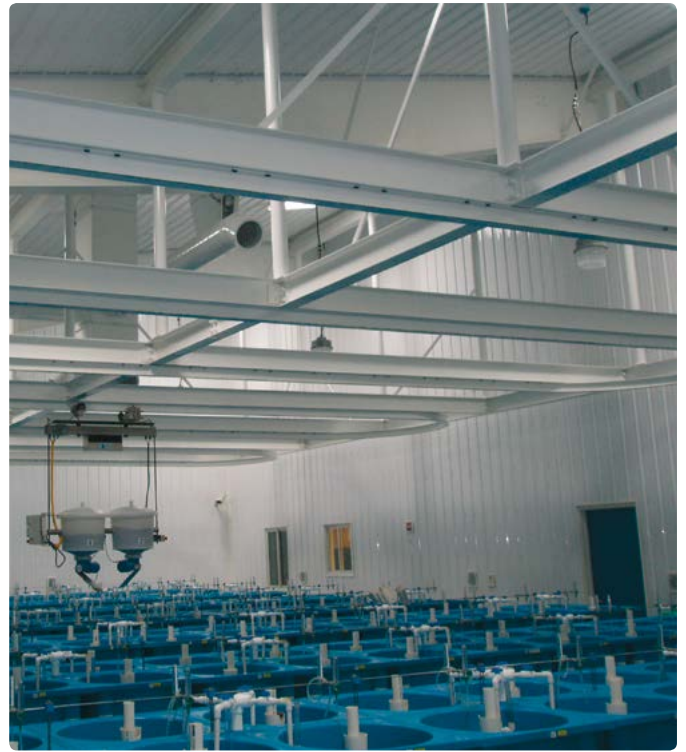
PALRUF withstands aggressive chemical environment typical of livestock structures. It would make an ideal roofing, siding and internal cladding solution for a long service period.

- Poultry farms
- Pig farms
- Dairies
- Fish farms
- Barns
- Fertilizer warehouses

**Project:** Pig Farm - Middle East | **Type:** PALRUF® White Opaque 2mm



**Project:** Fish Research Farm - University of Maine, USA  
**Type:** PALRUF® White Opaque 3mm



**Project:** Unicoop Planta UPM Pig Breeding Farm - Paraguay (8,900sqm) | **Type:** PALRUF® Opaque White 3mm



## Do It Yourself (DIY) Applications

PALRUF® is lightweight and extremely easy to handle and install around the house. The sheets will maintain their appearance with minimum maintenance and withstand extreme weather conditions for a long period.

- Pergolas
- Small warehouses
- Carports
- Canopies
- Patios

Project: Residential Carport - Middle East | Type: White 1mm



Project: Residential Pergola - Canada | Type: PALRUF® Clear 1mm




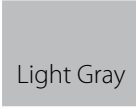
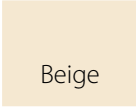
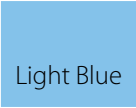


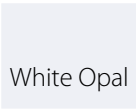


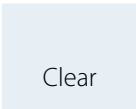
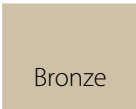
Project: Residential Pergola - Germany | Type: PALRUF® Clear 0.8mm



Project: Residential Pergola - USA | Type: PALRUF® Clear 0.8mm



## Colors

Group	Description	Colors
White Opaque	Ideal for any climatic conditions. Does not transmit light.	
Opaque Colors	Suitable for most regions - please consult with your Palram distributor before specifying. Does not transmit light.	 
Special Cool Opaque	Suitable for any climatic conditions due to a unique feature that stabilizes the sheet's temperature. Available with any color on special orders only, subject to a minimum order.	  
Opal	Suitable for cold climates only. PALRUF Opal sheets transmit 20-40% of incident light.	  
Transparent	Suitable for cold climates only. Transparent colors offer good light transmission and clarity, and can be either clear or tinted.	 

Please consult your Palram distributor on the following:

- Select the right color for your location and application
- Receive a sample color chip
- Order custom colors

## Physical Properties

Property	Method*	Conditions	Units	Value
Density	D-792		g/cm <sup>3</sup>	1.4
Heat deflection temperature (H.D.T)	D-648	Load: 1.82 MP	°C	61 - 67
Service Temperature Range			°C	-20 to +50
Thermal conductivity	C-177		W/m K	0.16
Coefficient of linear thermal expansion	D-696		cm/cm°C	6.3 x 10 <sup>-5</sup>
Impact strength	ISO 6603/1	2 mm sheet	J	45 - 60
Tensile strength at yield	D-638	10 mm/min	MPa	50 - 66
Tensile strength at break	D-638	10 mm/min	MPa	39 - 53
Elongation at yield	D-638	10 mm/min	%	3
Elongation at break	D-638	10 mm/min	%	>80
Tensile modulus of elasticity	D-638	1 mm/min	MPa	2,900
Flexural strength	D-790	1.3 mm/min	MPa	90 - 100
Flexural modulus	D-790	1.3 mm/min	MPa	2,700
Rockwell hardness	D-785		R Scale	105 - 115

\* ASTM method except where noted otherwise.



## Flammability, Building and Construction Standards

PALRUF complies with stringent international building and construction standards shown in the table below.

Standard	Country	Method	PALRUF® Type	Designation or Rating
Cyclonic Test	Australia	AS2424	Industrial Profile	Passed
Flammability	Australia	AS1530-3		Conforms*
Flammability	France	NFP 92501, NFP 92505		M-1*
Flammability	Germany	DIN 4102		B-1*
Flammability	UK	BS 476/7		Class 1*
Flammability	USA	ASTM D-635		CC1*
Flammability	USA	ASTM E-84, D-3286, D-1929		Class 1*
Flammability	USA	Flame Spread Rating		12 – Class A*
Flammability	Israel	755		V 2 3*
Retention of Profile and Impact Resistance	Australia	AS2376-1980		Complies
ITB	Poland	AT-15-5324/2002		Approved
Static and Impact Tests	Australia	AS2424-91	American Industrial	Passed*
Windstorm Classification	UK	FMRC 4470 Approval Requirements		I-60 and I-90*

## Weather Resistance

PALRUF sheets retain their physical properties and attractive appearance despite exposure to various climactic conditions. They withstand humidity, rain and snow and provide weather protection over a large temperature range, from -20°C to 50°C (-4°F to 120°F). Proven weather resistance ensures the long-term flawless performance of PALRUF sheets.



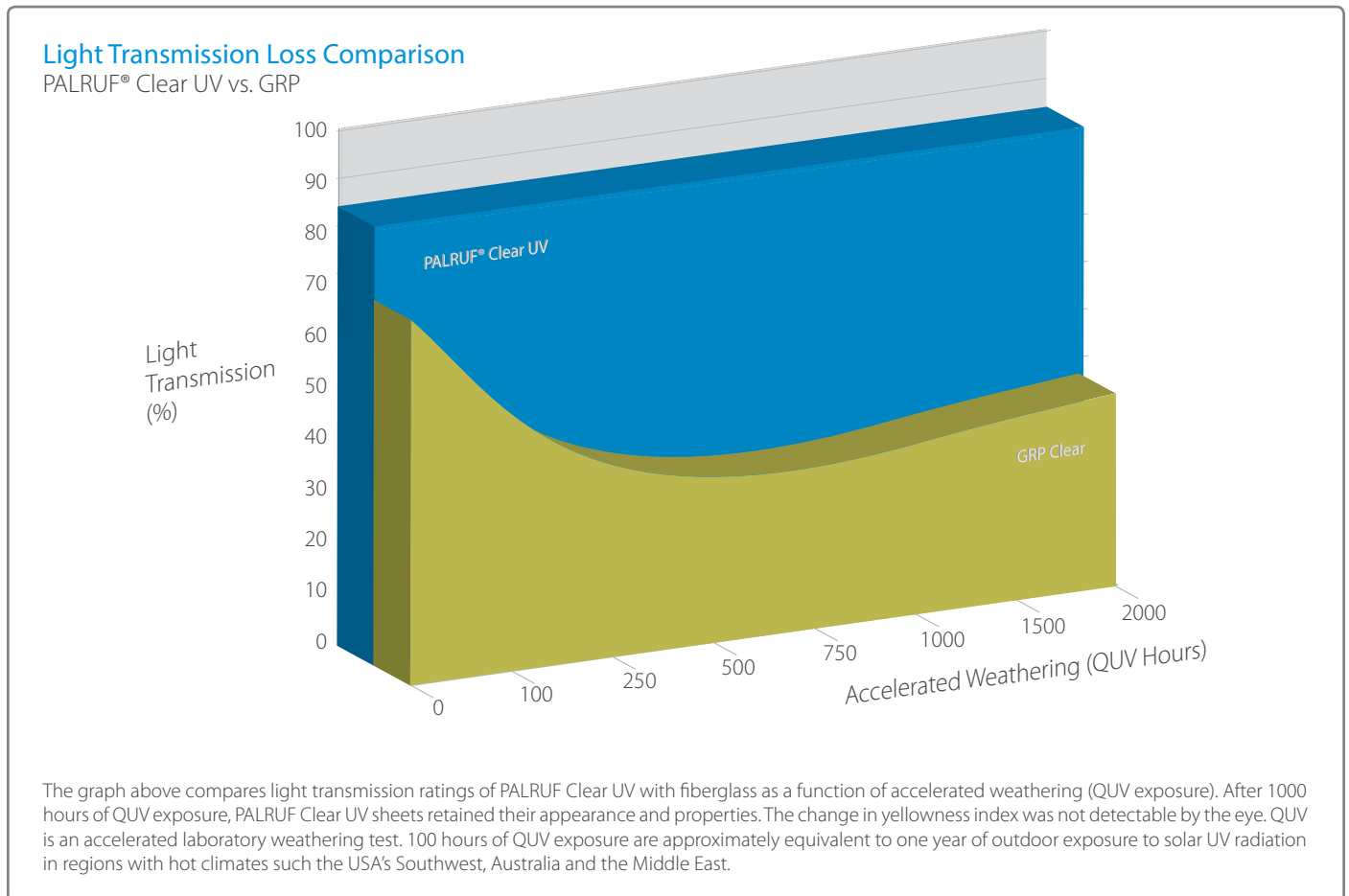
## Resistance to UV Radiation

**PALRUF® Opaque** - Inherently protected by an internal UV absorber and offered in White, Light Grey and Beige colors.

**PALRUF® Clear** - UV stabilized sheet, recommended for use in regions where heat and the sun's radiation are limited.

**PALRUF® UV** - A protective layer on the outer side makes this sheet resistant to UV radiation and helps it retain its properties for many years. PALRUF UV is recommended for regions characterized with intense UV radiation.

**PALRUF® Clear UV** - UV stabilized sheet with protective layer on the outer side for outdoor use in any climate. This sheet will resist hard chemical environments and maintain its clarity far better than some alternatives, as seen in the graph below.



## Chemical Resistance

The mechanism of chemical attack on thermoplastics in general, and Palram PVC sheets in particular, differs significantly from the mechanism of corrosion of metals. Corrosion of metals results in a gradual loss of surface material as a result of electrolytic action by the relevant chemicals. Chemical attack on Palram PVC sheet, where it occurs, consists generally of absorption of the chemical by the PVC sheet and its subsequent swelling.

PALRUF corrugated pvc sheets provide exceptional resistance against the following classes of chemicals in both liquid and vapor form: mineral acids, alkalis plating solutions, paper making chemicals, pickling solutions, most inorganic compounds, alcohols aliphatic hydrocarbons, glycols, amines and phenols. PALRUF PVC sheets should not come into contact with acetone, ethers, esters or aromatic hydrocarbons.

A detailed chemical resistance list is available in the "Chemical Resistance of Palram PVC Sheets" file, available at your Palram distributor and the Palram international website.

Detailed information on sealants chemically compatible with PALRUF is available in the "Adhesives and Sealants for Palram PVC Sheets" list, which is available for download from the PVC product pages in all Palram websites.

# Standard Profiles\*

\*Custom designed profiles are available upon request, subject to a minimum order.

PALRUF®	Designation	Cover Width mm (Inch)	Standard Width mm (Inch)	Drawing
100	40/250	1000 (39.4")	1063 (41.8")	
2800	14/67.8	610 (24")	660 (26")	
5100	DV4	1000 (39.4")	1090 (42.9")	
6500	36.5/171.5	686 (27")	756 (29.8")	
5,6 Wave	51/177	1062 (41.8") 1062 (41.8") 885 (34.8") 708 (27.9")	1170 (46") 1100 (43.3") 1020 (40.1") 920 (42.9")	
American 2.6"	20/68	949 (37.4")	1020 (40")	
American 4.2"	27/107	1284 (50.6") 963 (37.9") 856 (33.7")	1390 (55") 1070 (42.1") 1017 (40")	
Big 6	48/146	1025.8 (40.3")	1086 (42.7")	
Big 6 IM Sunlux	38.8/146.5	1016 (40")	1086 (42.7")	
Astoria	38/305	915 (36")	1025 (40.4")	
B5 130/30	30/130	910 (35.8")	1020 (40")	

\*Custom designed profiles are available upon request, subject to a minimum order.

PALRUF®	Designation	Cover Width mm (Inch)	Standard Width mm (Inch)	Drawing
Greca 70	18/70	1120 (44.1")	1160 (45.5")	
		1120 (44.1")	1140 (45")	
		1050 (41.3")	1103 (43.4")	
		1050 (41.3")	1090 (42.9")	
		700 (27.6")	765 (30.1")	
		490 (19.3")	550 (21.7")	
Greca 70 Ond	18/70	1050 (41.3")	1090 (42.9")	
Greca 75	20/75	1275 (50.2")	1285 (51.6")	
		1200 (47.2")	1274 (50")	
		1125 (44.3")	1135 (44.7")	
		1050 (41.3")	1060 (41.7")	
		600 (23.6")	642 (25.3")	
		600 (23.6")	637 (25")	
Greca 76	18/76	1140 (44.9")	1190 (46.8")	
		1140 (44.9")	1145 (45")	
		988 (38.9")	1060 (41.7")	
		988 (38.9")	1045 (41")	
		912 (35.9")	980 (38.5")	
		912 (35.9")	963 (38")	
Iron 76	18/76	1140 (44.9")	1150 (45.3")	
		988 (38.9")	1067 (42")	
		836 (32.9")	900 (35.4")	
		836 (32.9")	860 (33.8")	
		608 (23.9")	660 (26")	
Mini	8/32	1024 (40.3")	1040 (41")	
		732 (28.8")	750 (30")	
		640 (25.2")	660 (26")	
3"	19/72	648 (25.5")	755 (29.7")	
7.2"	38.1/82.9 (1.5"/7.2")	1098 (43.2")	1217 (47.9")	
		1098 (43.2")	1150 (45.3")	
		915 (36")	967 (38.1")	
		915 (36")	965 (38")	
9"	3/4" / 9"	914 (36")	965 (37.8")	