

# CROWN PVC THERMAL ROOFING

**uPVC & ASA LAMINATED** 

No matter what the weather is, Crown PVC Thermal Roofing got you covered.

### Features:

- UV PROTECTED
- **HEAT DEFLECTIVE**
- NON-CORROSIVE
- IMPACT-RESISTANT
- DURABLE
- NON-FLAMMABLE
- EASY TO INSTALL
- COST-EFFICIENT
- EXTRA WIDTH ADVANTAGE

uPVC ROOFING
(Unplasticized PolyVinyl Chloride)
CROWN CorrWave **CROWN** StrongRib

ASA LAMINATED

uPVC ROOFING
(Acrylic Styrene Acrylonitrile)

CROWN SmartRoof CROWN HeatProtect CROWN Tile Tech

YOUR ALL-WEATHER COOL ROOFING



Effective Width (2 1/2 lapping) 0.965m Effective Width (1 1/2 lapping) 1.04m

Nominal Width 1.14m

Thickness : 1.0 mm, 1.5mm, 2mm, 2.5mm, 3mm, 3.5mm Commercial: 4ft(1.22m), 5ft(1.52m), 6ft(1.83m), 7ft(2.13m), 8ft(2.44m), 10ft(3.04m), 12ft(3.66m), 14ft(4.27m), 16ft(4.88m)

Crest Height: 16mm

StrongRib

CORRUGATED

**RIB TYPE** 

Effective Width 1.12m Nominal Width 1.205m

Thickness : 1.0mm, 1.5mm, 2mm, 2.5mm, 3mm, 3.5mm Commercial: 4ft(1.22m), 5ft(1.52m), 6ft(1.83m), 7ft(2.13m), 8ft(2.44m), 10ft(3.04m), 12ft(3.66m), 14ft(4.27m), 16ft(4.88m)

Rib Height: 30mm

## ASTM D4434-04 STANDARD SPECIFICATION

PROPERTIES	VALUE		UNIT	TEST METHOD
Mechanical Properties				
Tensile Strength at Break Machine direction	33.3		MPa	ASTM D 638
Elongation at Break Machine direction	52		%	ASTM D 638
Seam Strength	75		%	<b>ASTM D 638</b>
Tear Resistance	2,599		N/cm	ASTM D 1004
Retention of Properties after Heat Aging:				
Tensile Strength, min, % of original Elongation, min, % of original	90 90		%	Practice D 3045
Low Temperature Bend	3783	Passed	A DEA	ASTM D 2136
Accelerated Weathering Test: Cracking (7x magnification) Crazing (7x magnification)		None None		Practice G151
Linear Dimensional Change	0.1	100000000000000000000000000000000000000	%	ASTM D 1204
Change in weight after immersion in Water	<u>+</u> 3.0		%	ASTM D 570
Static Puncture Resistance		Passed		ASTM D 5602
Dynamic Puncture Resistance		Passed		ASTM D 5635

### **AVERAGE WEIGHT of CROWN uPVC ROOFING**

Weight per Linear Meter (kg/m)			
Thickness (mm)	CorrWave	StrongRib	
1.0mm	2.179	2.510	
1.5mm	3.268	3.765	
2.0mm	4.357	5.020	
2.5mm	5.447	6.275	
3.0mm	6.391	7.530	
3.5mm	7.625	8.786	

### TOUGHNESS & DURABILITY



NO DENT • NO CRACK • NO DAMAGE

### COMPARATIVE CHALLENGE CROWN uPVC VS CONVENTIONAL METAL ROOFING



(Conventional Metal Roofing)



(Crown uPVC Roofing) (1.5mm Thick)

### uPVC Ridge Roll



-			
		7	
		7	



PURLIN SPACING			
Thickness of PVC	Recommended Purlins Spacing		
Roofing			
1.0mm	0.30 meter		
1.5mm	0.30 to 0.40 meter		
2.0mm	0.60 to 0.70 meter		
2.5mm	0.70 to 0.80 meter		
3.0mm	0.90 to 1.00 meter		
3.5mm	1.00 to 1.10 meter		

To prevent the uPVC Roofing panels from sagging, recommended purlin spacing shall be followed:

#### Crown CorrWave Crown StrongRib 1.0mm, 1.5mm, 2.0mm, 2.5mm, 3.0mm, 3.5mm 0.60m 1.0mm, 1.5mm, 2.0mm, 2.5mm, 3.0mm, 3.5mm 0.60m Thickness: Ridge Roll Width: Ridge Roll Width: Ridge Roll Length: 1.115m Ridge Roll Length: 1.185m ±16 degrees ±16 degrees

# HeatProtect

CORRUGATED

Effective Width (2 1/2 lapping) 0.965m

Effective Width (1 1/2 lapping) 1.04m Nominal Width 1.14m

Thickness : 1.5mm, 2mm, 2.5mm, 3mm, 3.5mm

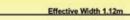
1.0mm available upon request

Commercial: 4ft(1.22m), 5ft(1.52m), 6ft(1.83m), 7ft(2.13m),8ft(2.44m), 10ft(3.04m), 12ft(3.66m),

14ft(4.27m), 16ft(4.88m) Crest Height: 16mm



**RIB TYPE** 



: 1.5mm, 2mm, 2.5mm, 3mm, 3.5mm Commercial: 4ft(1.22m), 5ft(1.52m), 6ft(1.83m), 7ft(2.13m), 8ft(2.44m), 10ft(3.04m), 12ft(3.66m),

Nominal Width 1.205m

14ft(4.27m), 16ft(4.88m) Rib Height: 30mm



TILE TYPE



Effective Width 0.963n Nominal Width 1.07m

Thickness : 1.5mm, 2mm, 2.5mm, 3mm, 3.5mm Commercial: 4ft(1.22m), 5ft(1.52m), 6ft(1.83m), 7ft(2.13m), 8ft(2.44m), 10ft(3.04m), 12ft(3.66m),

14ft(4.27m), 16ft(4.88m)

Fasteners : Tekscrew-Wood / Metal

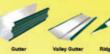
Module Distance: 220mm Crest Height : 31mm Step Height : 20mm

### Bended Materials (Stainless / Pre-painted Metal)













TileTech Accessories









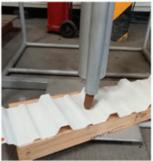


31mm

### CROWN uPVC ROOFING IMPACT TEST

To determine strong resistance to external blows of falling objects from different heights of 1.0 meter up to 3.0 meters.

NO CRACK, NO HOLE, NO PHYSICAL DAMAGE.



**BULLET IMPACT TEST** (0.755kg)



**BALL IMPACT TEST** (2.495kg)

Crown PVC Roofing is effective in resisting impact from falling objects. They do not break nor acquire holes as our bullet and ball impact tests different falling heights demonstrate. from

### COMPARATIVE TEMPERATURE TEST RESULTS

CROWN uPVC ROOFING vs PRE-PAINTED METAL ROOFING

CROWN uPVC ROOFING color	CROWN uPVC ROOFING Temperature	PRE-PAINTED METAL ROOFING Temperature	TEMPERATURE DIFFERENCE
Warm White	42.2℃	63.1°C	20.9℃
Ivory White	45.6°C	63.1°C	17.5℃



**CROWN uPVC ROOFING** 



PRE-PAINTED METAL ROOFING

\* LONG SPAN AVAILABLE IN TRANSPORTABLE LENGTH / BY SPECIAL ORDER ACCEPTABLE LENGTH AND WIDTH VARIANCE ± 10 MM.



# PVC THERMAL ROOFING

# uPVC Roofing

(Unplasticized PolyVinyl Chloride)

Crown uPVC corrugated and rib-type roofing are quality made from Unplasticized PolyVinyl Chloride They have UV Protection and performance advantage of heat insulation, sound absorption and non-corrosion, better than conventional roofing materials. Suitable for warehouse, agricultural, industrial and household requirements.

## **ASA LAMINATED** uPVC Roofing

(Acrylic Styrene Acrylonitrile)

Crown ASA corrugated, rib and tile-type roofing are made of Arcylic Styrene Acrylonitrile. Have significantly improved weatherability performance compared to other styrene materials. Better resistance to UV radiation and attack from atmospheric oxygen. High retention of physical properties that makes them extra tough! Ideal for commercial, industrial and agricultural applications.



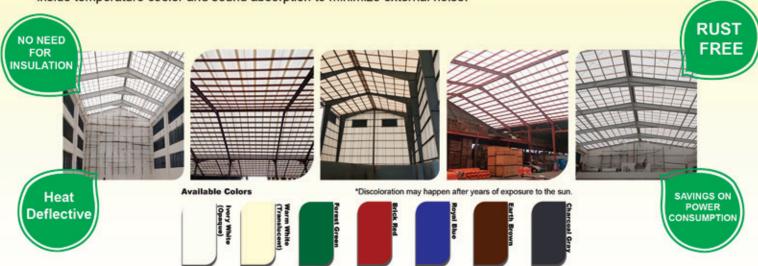








Crown PVC Thermal Roofing is safety-engineered with lasting durability that remains strong for many years. It has better protection against harmful UV rays and highly resistant to extreme weather and environment conditions. Ideal choice for structures near the sea - won't rust because it is non-corrosive. It has quality properties for effective heat insulation to keep inside temperature cooler and sound absorption to minimize external noise.



A QUALITY PRODUCT MANUFACTURED BY:

# ROWN ASIA CHEMICALS CORPORATION<sup>®</sup>

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