



# DURASHIELD®

## Corrugated Industrial PVC Sheet

DURASHIELD corrugated PVC panels combine high structural performance with excellent chemical and flammability resistance.

It is a heavy-duty, lightweight, corrosion-free alternative to corrugated metal roofing. Ideal for harsh environments, DURASHIELD is used in industrial construction in mines, petroleum refineries, seaports, and livestock facilities.

Wide-span structures, cold bending, heavy loads, and impacts are just a few of the engineering challenges DURASHIELD meets. Various industrial profiles are available, easy to install and maintain.



### Typical Applications

#### Construction

- Coastal construction
- Public buildings
- Parks
- Sports
- Recreation facilities

#### Agriculture

- Greenhouses
- Cow sheds
- Henhouses
- Piggens, barns and machinery sheds

#### Industry

- Chemical and pharmaceutical plants
- Ports
- Pulp and paper plants
- Power stations
- Mines
- Metal processing facilities



Chemical Resistant



High Fire Rating



Corrosion-Free



Durable Against Impact


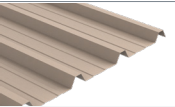


UV Protection




Low Maintenance

### Colours

| Colour  | LT [%] |
|---|--------|
|  White Opaque | 0      |
|  Beige        | 0      |

\* Additional colours are available under minimum quantities.  
 \* Color application: white color is recommended for roofs; for walls - white or beige are recommended.

### Profile Availability




 DURASHIELD can ideally integrate with almost any roof type, using Palram's proprietary MetalMatch™ profile matching technology, which allows it to be matched to existing or new corrugation profiles. DURASHIELD is available in over 550 existing profiles.

### Weather and UV Resistance

DURASHIELD maintains its physical properties and attractive appearance despite exposure to all types of climatic conditions. These include harmful UV radiation, humidity, rain and snow. DURASHIELD also provides weather protection over a large temperature range, from -20°C to 50°C. DURASHIELD should not be used in the vicinity of chimneys where soot may fall on the sheets.

- Do not install DURASHIELD over existing roof, without prior consultation with the manufacturer PALRAM.
- For contact details please refer to PALRAM's official website at [www.palram.com](http://www.palram.com).

### Profile Range

| Profile  | Thickness | Width                               |
|--|-----------|-------------------------------------|
|  Industrial Rib  | 2.0 mm    | Width: 1063 mm<br>Coverage: 1000 mm |
|  Industrial Wave | 2.0 mm    | Width: 1070 mm<br>Coverage: 963 mm  |
|  Wide Greca      | 1.3 mm    | Width: 1190 mm<br>Coverage: 1064 mm |

### Typical 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

DURASHIELD complies with the most demanding international fire resistance standards in the field of plastics, as indicated in the detailed table herein. The classification is subject to product type, thickness and color.

#### Australian standard early fire hazard test results

| Method         | Test                  | Range  | Result |
|----------------|-----------------------|--------|--------|
| AS/NZ 1530 - 3 | Ignitability index    | 0 - 20 | 8      |
|                | Spread of flame index | 0 - 10 | 0      |
|                | Heat evolved index    | 0 - 10 | 1      |
|                | Smoke developed index | 0 - 10 | 7      |

### DURASHIELD Product Range

| Product                | Description   |
|------------------------|---|
| DURASHIELD Opaque      | Opaque sheet inherently UV resistant, suitable for all applications |
| DURASHIELD High Impact | With increased impact resistance and durability                     |

\* For more detailed information please contact your Palram distributor.

**Warranties only apply to installations and maintenance that follow Palram installation instructions and specifications.**