

# DuraGal<sup>®</sup> Profiles

New improved DuraGal<sup>®</sup> Profiles are high strength roll-formed sections made from strip pre-coated with the innovative Magnelis<sup>®</sup> Coating, designed for improved corrosion resistance.

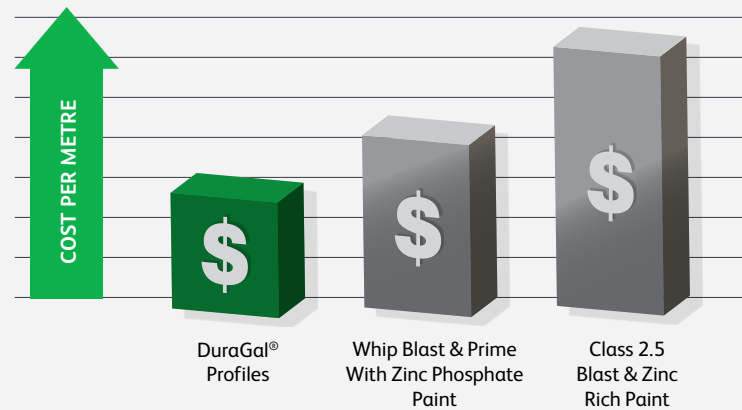


Improved Corrosion Resistance | Greater Strength | Convenience

## Key Benefits of Using DuraGal® Profiles

- 1. Quality improvement**
  - prepared surface and corrosion resistance can alleviate the need for blasting and priming
- 2. Lighter**
  - average 15% savings in weight
  - less freight costs
- 3. Improved business management**
  - no outsourcing for coating preparation means less material management
- 4. Reduced inventory**
  - no outsourcing means less stock in the system = space and cost savings
- 5. Kinder to the environment**
  - no wire brushing or priming pollutants
- 6. Reduced process time**
  - clean and better to handle
- 7. Availability**
  - stocked throughout the extensive InfraBuild distribution network
- 8. Lower total cost potential**

### DuraGal® profiles vs a comparable primed hot rolled section



### Cost effective

DuraGal® Profiles with the new Magnelis® coating are a cost-effective way to work with steel.

As demonstrated in the graph, when it comes to achieving comparable levels of strength and surface protection, experience has shown that it can be more economical to simply switch to profile sections, delivering greater value for money to help your business grow.

### Versatile

Profiles are versatile and can be adapted into all industries. Whether it be in mining, house frames, materials handling, racking (particularly in cold rooms), access walkways, truck & trailer bodies or transmission towers. Conversion to profiles can save you time and money.

## DuraGal® Profile Suggested Applications

- |                             |                          |                      |                          |
|-----------------------------|--------------------------|----------------------|--------------------------|
| 4 Bracing in buildings      | 4 Shed cleats and frames | 4 Ramps              | 4 Playground equipment   |
| 4 General fabrication       | 4 Roofing supports       | 4 Ladder cages       | 4 Transport equipment    |
| 4 Gates                     | 4 Kick plates            | 4 Greenhouse frames  | 4 Agricultural equipment |
| 4 Animal handling equipment | 4 Air duct components    | 4 Silo frames        | 4 Sliding door track     |
|                             | 4 Door brackets          | 4 Racking / Shelving | 4 Supports               |



## Surface protection

InfraBuild now offer an even better barrier against corrosion which still demonstrates the same processing capability end-users have grown to trust with DuraGal® profiles. Magnelis® zinc, aluminium and magnesium coating is well suited to moderate and severe environments with 250g/m<sup>2</sup> of self-healing protection.

Our profiles surface finish is smooth, clean, free from mill scale, rust and dirt making our range of Angles, Channels and Flats ready to use, so there is no need to waste time and money on shot blasting, wire brush cleaning or priming after fabrication.

## High strength performance

DuraGal® profiles feature high tensile strength properties.

Angles, Flats and Channels achieve 450 MPa.

So, in many applications, a lighter profile may be substituted for Grade 250/300 hot rolled steel, without making any compromises in compression, tension or bending performance. Providing opportunities for significant reductions in material and fabrication costs.

## Kinder to the environment

Because our profiles don't need to be blasted, wire brushed or primed, the pollutants normally associated with these processes are a thing of the past. This is not only good news for you and your workforce, it's good news for the environment as well.

## How to specify

Specifying profiles to ensure you get the strength, tolerances and Magnelis® coating is as easy as ensuring you ask for DuraGal®.

DuraGal® profiles are the only ones you can rely on to meet strict specifications and quality you know will last

Specify like this example:

**50 x 50 x 4.0mm DuraGal® Angle**

## Welding Performance

DuraGal® Profiles are made from low carbon structural steel, and the Magnelis® coating is readily weldable.

Welding points will also benefit from the self-healing properties from the Magnelis® coating where the Mg transfers in to the welding zone inhibiting production of red oxide.



# Profile Range, Steel Grades and Availability



Angles			Nominal Thickness - mm			
Size	SAP Prefix	Standard Length m	2.5	4.0	5.0	6.0
Grade HX420LAD ZM250						
25 x 25	AND -	6.0	0.894 kg/m	-	-	-
30 x 30		6.0	1.093 kg/m	-	-	-
40 x 40		6.0	1.490 kg/m	2.310 kg/m	-	-
		6.8	1.490 kg/m	-	-	-
45 x 45		6.0	1.689 kg/m	-	-	-
50 x 50		6.0	1.888 kg/m	2.943 kg/m	3.594 kg/m	-
		9.0	1.888 kg/m	2.943 kg/m	3.594 kg/m	4.249 kg/m
		12.0	-	-	3.594 kg/m	-
65 x 65		9.0	-	3.892 kg/m	4.779 kg/m	5.698 kg/m
75 x 75		6.0	-	4.525 kg/m	5.569 kg/m	-
		7.5	-	4.525 kg/m	5.569 kg/m	6.664 kg/m
		9.0	-	4.525 kg/m	5.569 kg/m	6.664 kg/m
90 x 90		9.0	-	-	6.754 kg/m	8.112 kg/m
100 x 100		12.0	-	-	-	9.078 kg/m
150 x 150		12.0	-	-	-	13.907 kg/m

Channel			Nominal Thickness - mm			
Size	SAP Prefix	Standard Length m	2.5	4.0	5.0	6.0
Grade HX420LAD ZM250						
75 x 40	CHD -	9.0	-	4.430 kg/m	-	-
100 x 50		9.0	-	5.584 kg/m	-	-
125 x 65		9.0	-	7.595 kg/m	-	-
150 x 75		12.0	-	-	11.177 kg/m	-
180 x 75		12.0	-	-	12.362 kg/m	-
200 x 75		12.0	-	-	13.152 kg/m	15.742 kg/m
230 x 75		12.0	-	-	-	17.190 kg/m
250 x 90		12.0	-	-	-	19.605 kg/m
300 x 90		12.0	-	-	-	22.019 kg/m

Unequal Angles			Nominal Thickness - mm		
Size	SAP Prefix	Standard Length m	4.0	5.0	6.0
Grade HX420LAD ZM250					
75 x 50	AND -	9.0	3.734 kg/m	4.581 kg/m	5.456 kg/m
90 x 75		9.0	-	-	7.436 kg/m
100 x 75		12.0	-	-	7.871 kg/m
125 x 75		12.0	-	7.544 kg/m	9.078 kg/m
150 x 100		12.0	-	-	11.492 kg/m

Flats			Nominal Thickness - mm		
Size	SAP Prefix	Standard Length m	4.0	5.0	6.0
Grade HX420LAD ZM250					
50	FLD -	6.0	1.582 kg/m	1.975 kg/m	-
65		6.0	-	2.567 kg/m	-
75		6.0	2.373 kg/m	2.962 kg/m	-
90		6.0	-	-	4.346 kg/m
100		6.0	3.165 kg/m	3.950 kg/m	4.829 kg/m
130		6.0	-	5.134 kg/m	-
150		6.0	-	5.924 kg/m	7.243 kg/m
200		6.0	-	7.899 kg/m	9.657 kg/m
250		6.0	-	9.874 kg/m	-
300		6.0	-	11.849 kg/m	-

- Not stocked or planned to manufacture
- Sizes Stocked
- Feed available but only manufactured on special request

Note: InfraBuild reserve the right to change specifications without notice.

# Profiles With the DuraGal® Advantage

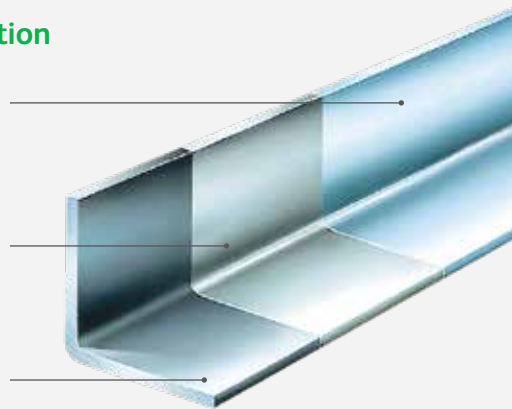
DuraGal® Profiles are high strength roll-formed sections made from pre-coated strip with the innovative Magnelis® coating. This strip is then roll-formed in Australia by ARM (Australian Rollform Manufacturers).

## DuraGal® Surface Protection

E-Passivation Coating. Temporary protection of Metallic coating during handling, transport and storage

In-line galvanising line during coil stage. Innovative Magnelis® coating containing Zinc, Aluminium and Magnesium — 250g/m<sup>2</sup> average coating mass.

Shot Blasted and Chemically Cleaned Bright Metal Surface



## Magnelis® Technology

Magnelis® is produced on a classic industrial hot dip galvanising line, but dipped in a molten bath with a unique metallic chemical composition of zinc with 3.5% aluminium and 3% magnesium.

The 3% magnesium is crucial as it creates a stable and durable layer across the entire surface and gives a far more effective corrosion protection than coatings with a lower magnesium content.

## Durable

The Magnelis® coating provides a smooth surface with a uniform coating thickness, purpose designed to perform in general, and construction applications.

Magnelis® is an exceptional, new metallic steel coating providing surface protection in a variety of applications against long term wear and tear.

This unique coating offers a combination of attributes.

- The best corrosion resistance performance; up to 10 times better than galvanised steel
- The best suited protection to withstand harsh environments
- The most cost-effective alternative to the post-galvanised process

Magnelis® has a natural dark grey, spangle-free smooth aesthetic appearance.

Magnelis® is the optimal coating to protect against atmospheric corrosion, it:

- Withstands the harshest of environments (the destruction of coating that occurs in an ammonia environment is seven times less with Magnelis® than with a standard zinc coating and in highly alkaline environments – those with a pH between 10 and 13 – Magnelis® corrosion resistance trumps other metallic coatings)
- Protects exposed cut edges from corrosive reactions thanks to a thin zinc-based protective film with magnesium
- Guarantees a longer-lasting, active coating protection over time





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