



Data Sheet

G300M

Metal-Coated – GALVSTEEL™

Revision: 7/12/2021

MC

GENERAL DESCRIPTION

GALVSTEEL™ G300M steel is a hot-dipped zinc-coated structural steel with a spangled surface and guaranteed minimum yield strength of 290MPa with good ductility. Suitable for roll forming to a minimum internal diameter of 1t.

APPLICATIONS

- Roll-formed sections
- Nail plates
- Tube making

STANDARDS

- NZSteel Standard
- AS/NZS 1365:1996

| CHEMICAL COMPOSITION | TYPICAL (wt %) | EXPECTED MAXIMUM (wt %) [1] |
|----------------------|----------------|-----------------------------|
| Carbon (C) | 0.075 | 0.100 |
| Silicon (Si) | 0.011 | 0.030 |
| Manganese (Mn) | 0.600 | 0.700 |
| Sulphur (S) | 0.016 | 0.030 |
| Phosphorus (P) | 0.013 | 0.030 |
| Vanadium (V) | 0.009 | 0.017 |
| Nitrogen (N) | 0.0055 | 0.0084 |

| MECHANICAL PROPERTIES | 1.00mm - 1.50mm | 1.50mm - 1.55mm | EXPECTED MINIMUM |
|--|-----------------|-----------------|------------------|
| | TYPICAL | | |
| Yield strength, MPa | 304 | 302 | 290 |
| Tensile strength, MPa | 420 | 409 | 340 |
| Elongation, % on L ₀ = 50mm | 34 | 35 | 20 |
| 180° transverse bend | 1t | 1t | 1t |

Material should be used promptly (within 6 months) to avoid the possibility of storage related corrosion and degradation. Mechanical properties are guaranteed at ambient/room temperatures. Please consult technical representatives at New Zealand Steel for high/low temperature use.

In the as-oiled state, long-term corrosion resistance cannot be guaranteed. Further surface treatment/coating is required.

GALVSTEEL™ is a trademark of New Zealand Steel Limited.

New Zealand Steel Limited

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| FABRICATING PERFORMANCE 1 = Limited 5 = Excellent | |
|--|--------|
| Method | Rating |
| Drawing | 5 |
| Pressing | 3 |
| Bending | 4 |
| Roll-forming | 5 |
| Welding | 5 |
| Painting (Pre-treatment) | 5 |

| COATING ADHESION - 180° BEND TEST | |
|-----------------------------------|------------|
| COATING CLASS | GUARANTEED |
| Z100 | 0t |
| Z200 | 0t |
| Z275 | 1t |
| Z450 | 1t |
| Z600 | 2t |

Other coating classes may be available by enquiry

| DIMENSION CAPABILITIES | |
|------------------------|------------------|
| THICKNESS (mm) | WIDTH RANGE (mm) |
| 1.00 - 1.55 | 70 - 1230 |

These dimensions are a reflection of technical capability to produce. Supply conditions may be subject to dimensional restrictions and is subject to New Zealand Steel Marketing confirmation. Other dimensional combinations may be available by enquiry.

| AVAILABLE FINISHES | | |
|--------------------|------------|-------------------|
| | NORMAL | OPTIONAL |
| Surface Condition | Spangled | Minimised spangle |
| Surface Treatment | Passivated | Oiled |
| Branding | Branded | Unbranded |

PACKING

Despatched material will be packed appropriately providing protection against weather and transit damage.

TYPICAL PROPERTY RANGES

| Thickness mm | Yield Strength & Tensile Strength MPa | | | | | | | | | | | | | | | | | | |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 280 | 290 | 300 | 310 | 320 | 330 | 340 | 350 | 360 | 370 | 380 | 390 | 400 | 410 | 420 | 430 | 440 | 450 | 460 |
| 1.00 - 1.55mm | | | | | | | | | | | | | | | | | | | |

| Key | | Yield Strength (YS) | | Tensile strength (UTS) |
|-----|--|---------------------|--|------------------------|
| | | | | |

| Thickness mm | Total Elongation (%) | | | | | | | | | | | | | | | | | |
|-----------------|----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| 1.00 - 1.55mm | | | | | | | | | | | | | | | | | | |

| Key | | GL= 50mm | | GL= 80mm |
|-----|--|----------|--|----------|
| | | | | |

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