

Product Technical Statement

Gerard Roofs Pressed Steel Tiles

Statement of Building Code Compliance

This system if designed, used, installed and maintained in accordance with the supporting technical information and additional conditions and limitations will meet the following provisions of the New Zealand Building Code:

- B1 Structure
- B2 Durability
- E1 Surface Water
- E2 External Moisture

Evidence Base to Support Compliance

This system has the following evidence to support the above solution type declaration:

- Independent technical opinion
- In-house technical opinion
- Independent testing
- In-house testing
- Industry-based scheme
- Historical proof of performance

B1, B2, E1 & E2 reference NZ Metal Roofing & Wall Cladding Manufacturers Code of Practice. Section 10 relates to Pressed Metal Roofing Tiles.

Compliance with NZS4217 Pressed Metal Tile Roofs

Aluminium-zinc coated steel complies with AS1397, not NZS3441 as prescribed in NZS4217. We are also comfortable that we meet the requirements of B2 based on the In-service History Evaluation allowed under B2/VM1. At two severe marine testing sites we have roofs which are in good condition after 23 and 25 years respectively. Evaluations continue on other roofs which are in excess of 30 years.

Scope of Use

Buildings that comply with NZS3604 with a minimum roof pitch which is profile dependent of between 12 and 20 degrees.

Environmental Conditions

This system is code-compliant for the following environmental conditions:

- Wind Zone - Specific Design
- Corrosion Zone - Sea Spray Extreme
- Seismic Zone - High

Specific design can allow higher wind speeds - batten rafter connections are the limitation.

Installation Conditions

This system is code-compliant on the condition that it has been installed by:

- Licensed Applicator / Installer

Additional Conditions & Limitations

A warranty for the system is supplied with 50 year pro-rated duration.

Material Compatibility with Modern Roofing Materials

If alterations are made to the home after the installation of the roof, such as fitting of chimneys, extensions, installation of skylights, etc., it is important to ensure that the materials that are used are compatible with the roofing material. Gerard Roofs' steel tiles are manufactured from 55% aluminium- zinc coated steel and then post coated with a protective and decorative coating system.

Dissimilar Metal Corrosion

When two different metals are in contact and moisture is present, one metal is relatively protected while the other suffers accelerated corrosion. A similar effect commonly occurs with water flowing over dissimilar metals. This form of corrosion is commonly found where:

- Water is discharged from copper or brass systems over a galvanised or 55% aluminium-zinc coated steel roof
- Unpainted lead flashings are applied directly to 55% aluminium-zinc coated steel products, or
- Where fasteners are incompatible with the roofing material

Any electrical contact between dissimilar metals should be avoided.

Consenting Instructions

Where Gerard Metal Roofing Tiles are specified on plans these must be installed by a trained installer. Substitution is not allowed.

Critical Maintenance

As detailed in our warranty: "It is best to chemically clean the roof before growths are seen as a preventative maintenance measure. Spores may be present on the roof for up to two years before any visible organic growths are noticed. Treating the roof will not only kill the organic growths, but also the spores that lead to them. We suggest treating the roof every three to five years, however if you see growth occurring treat the roof more frequently."