#### 1.1 Technical Details

The technical details provided in this brochure comply with all legislative requirements and industry-accepted good practices. While intended as a guide, additional project-specific detailing should be incorporated by qualified designers, applying common sense based on individual project needs.

### 1.2 Limitations

The use of Designa Schist cladding is subject to the limitations outlined in the following standards:

- NZS3604: Timber Frame Buildings
- NZS 4229: Concrete Masonry Buildings (not requiring Specific Design)
- NZS 4210: Masonry Materials and Workmanship, concerning the installation of masonry veneer.

# 1.3 Acceptable Solution

Designa Schist meets the requirements of **NZBC Clause B2** based on the proven performance of similar masonry units and veneers installed with a drained and ventilated cavity. The units are manufactured according to **AS/NZS4455** standards and provide sufficient weather-tightness for residential and commercial buildings in New Zealand.

# 1.4 Product Specifics

To ensure cost efficiency and aesthetic appeal, it is essential to consider the dimensions of Designa Schist in the project design. Utilizing full modules minimizes waste, avoids unnecessary cutting, and maintains a natural appearance with minimal mortar joins. It is critical that builders, bricklayers, and all parties involved in the construction process are informed of these specifications.

### 1.5 Colour Variation

Designa Schist is a natural stone, and variations in texture and colour are part of its unique beauty. While photographs and samples offer an idea of the schist's range, variations may still occur. Colour consistency is a priority in manufacturing, but due to the natural characteristics of the stone, there may be some variation. Any concerns regarding the product's colour or quality should be addressed at the time of delivery.

Designa Schist Handling, Installation, and Maintenance Instructions

## 1. Product Overview

Designa Schist is a premium stone veneer, designed to give your building a stunning, natural stone look. Proper handling, installation, and care ensure that it performs optimally for years to come.

## 2. Handling Instructions

- Work Area Preparation: Ensure the area is clean, dry, and even before starting the installation process.
- Use Gloves: Always wear gloves and avoid metal tools to prevent damage.
- **Carry Properly:** Hold Designa Schist by the concrete portion and avoid gripping the stone face to prevent breakage.
- **Protect During Setup:** Place Designa Schist on its back to protect edges and faces while setting out for installation.

### 3. Product Preparation

- Check for Damage: Inspect each unit for cracks or damage before laying.
- Clean Surfaces: Designa Schist must be dry and clean, with any packaging removed.
- **Loose Pieces:** Loose stone pieces that come off during transit can be re-attached using glue or mortar.

#### 4. Installation Instructions

# 4.1 Laying of Designa Schist

- **Skilled Workmanship:** Install in a tradesman-like manner with a firm mortar mix to prevent squashing and ensure mortar joints remain between 7-11mm.
- **Control Joints:** Install control joints where necessary.
- **Cut to Fit:** If full Designa Schist units don't fit the space, they can be cut with a brick saw, while keeping the same Z-pattern alignment.

### 4.2 Brick Ties

- **Type and Material:** Use Earthquake Medium (EM) galvanized screw-fixed ties, and stainless steel ties in sea-spray zones.
- **Placement:** Brick ties must be placed every 400mm vertically and into studs spaced 600mm horizontally. For bricks over 4.8m, install ties on every course.
- Insertion: Ensure the ties are embedded at least 40mm into the mortar bed.

## 4.3 Veneer Cavity

- Cavity Width: Maintain a cavity width between 40mm and 75mm.
- **Brick Tie Length:** If the cavity exceeds 45mm, use longer brick ties (110mm) to ensure compliance.

## 5. Cleaning Instructions

- Water and Brush Cleaning: Use clean water and a stiff bristle brush to remove any fresh mortar splashes immediately.
- Final Cleaning: On completion, wash all surfaces thoroughly with clean water.
- Acid Cleaning: For persistent cement or mortar stains, use a light acid wash (Hydrochloric Acid or Spirit of Salts). Follow safety guidelines (1:20 or 1:10 dilution) and wash off with large volumes of water after use.

#### 6. Maintenance Instructions

- Low Maintenance: Designa Schist is virtually maintenance-free.
- **Annual Check-Up:** Clean the surface annually with a soft bristle brush and rinse with water.
- **Weep Holes:** Ensure weep holes are cleaned regularly to maintain ventilation and prevent moisture buildup.

## 7. Addressing Lichen and Moss Growth

- **Preventative Measures:** In areas prone to dampness, lichen and moss can form. Use copper or ammonium sulphate, or a proprietary cleaner for treatment.
- **Waterproofing:** In moisture-prone areas, consider using Surfapore C waterproofing products to prevent further growth.

### 8. Additional Acid Washing Guidelines

- **Careful Use of Acid:** When using acid for cleaning, always wet the area beforehand and follow all safety measures (gloves, boots, etc.).
- **Test First:** Test on a small area to determine the right strength for your cleaning solution (1:20 ratio for light stains, up to 1:10 for heavier stains).
- Brush Selection: Use a medium bristle brush for best results.
- **Immediate Clean-Up:** After application, wash the surface with plenty of water and remove any residue promptly to avoid permanent damage.