

Roof Inspection Report

Property Address: [REDACTED] Lindenow VIC 3865 (Lindenow Primary School)

Prepared By: Holymess Repairs

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Introduction

As a licensed and qualified roof plumber registered with the Victorian Building Authority (VBA), I have conducted a thorough inspection of the toilet block roof at Lindenow Primary School. This report provides a detailed, unbiased analysis of the roof's condition, including its guttering system, roofing materials, and associated components. My goal is to equip you with all the necessary information to make an informed decision based on your preferences, priorities, and budget.

This inspection adheres to the standards outlined in the **Victorian Building Authority Plumbing Regulations 2018** and the **National Construction Code (NCC) 2022**, specifically Volume Two, Part 3.5.2 (Gutters and Downpipes) and Part 3.5.1 (Roof Cladding). These regulations ensure that all recommendations align with safety, durability, and compliance requirements for roofing in Victoria.

I have outlined multiple options for addressing the identified issues, ranging from cost-effective repairs to comprehensive replacements. Each option includes a detailed explanation of its benefits, risks, and potential consequences, ensuring you have a clear understanding of the trade-offs. My role is to provide expert advice without bias, allowing you to choose the path that best suits your needs. I will also explain the urgency of taking action and the risks of inaction to highlight the importance of addressing these issues promptly.

Property Overview

The toilet block at Lindenow Primary School features a lean-to roof attached to a brick building. The roof has a single pitch, sloping from a high end to a low end, draining into an external square-line gutter with two 100 mm downpipes. The surrounding environment includes large gum trees, contributing to significant leaf and debris

accumulation in the guttering system. The roof appears to be an older metal roof with multiple patches and penetrations, showing signs of rust and deterioration.

Overview Video:







Key observations include:

- **Guttering:** Evidence of frequent overflows, staining, and damage to the fascia due to blockages and inadequate overflow provisions.
- **Roofing:** Extensive rust, poorly executed repairs, and non-compliant modifications (e.g., grinding of sheet ends), leading to leaks and reduced roof lifespan.
- **Fascia and Paintwork:** Damage from water overflow, with signs of rot and peeling paint, some timbers previously replaced.

The following sections provide a detailed analysis of these findings, regulatory context, and recommended options.

Regulatory Compliance

As a licensed roof plumber, I am bound by the **Victorian Plumbing Regulations 2018**, which require all roofing work to comply with the **NCC 2022** and relevant Australian Standards, including:

- **AS 3500.3: Plumbing and Drainage – Stormwater Drainage**, which mandates adequate gutter and downpipe sizing, overflow provisions, and maintenance to prevent water ingress.
- **AS 1562.1: Design and Installation of Sheet Roof and Wall Cladding – Metal**, which specifies proper installation, flashing, and maintenance of metal roofing to ensure durability and safety.
- **NCC Volume Two, Part 3.5.2**: Requires gutters to handle a 1-in-20-year rainfall event and include overflow measures to prevent water damage to buildings.
- **NCC Volume Two, Part 3.5.1**: Mandates that roof cladding be installed to prevent water penetration and ensure structural integrity.

Non-compliance, such as the grinding of roof sheet ends observed on this roof, violates **AS 1562.1** and accelerates corrosion, posing safety risks (sharp edges) and reducing the roof's lifespan. All recommendations in this report are designed to restore compliance with these standards while addressing the specific issues identified.

Detailed Findings

1. Guttering System

The guttering system is a square-line gutter with two 100 mm downpipes, which is appropriately sized for the roof's catchment area per **AS 3500.3**. However, several critical issues were identified:

Guttering Video:



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- **Overflow Evidence:** Staining, peeling paint, and fascia damage indicate frequent overflows, particularly at the low end near the downpipes. This is likely due to blockages from leaves and debris, exacerbated by nearby gum trees.
- **Lack of Overflow Provisions:** The gutter lacks overflow slots or high-fronted designs, violating **NCC Part 3.5.2**, which requires measures to safely redirect excess water during heavy rain.
- **Fascia Damage:** Water has penetrated behind the paint, causing rot and necessitating prior timber replacements. The current paint application (up to the gutter edge) allows water to seep behind, accelerating deterioration.
- **Inadequate Leaf Protection:** Existing leaf guards have small openings (100 mm x 75 mm), which block easily, contributing to overflows.

2. Roofing Condition

The metal roof exhibits significant deterioration, compromising its functionality and compliance with **AS 1562.1**:

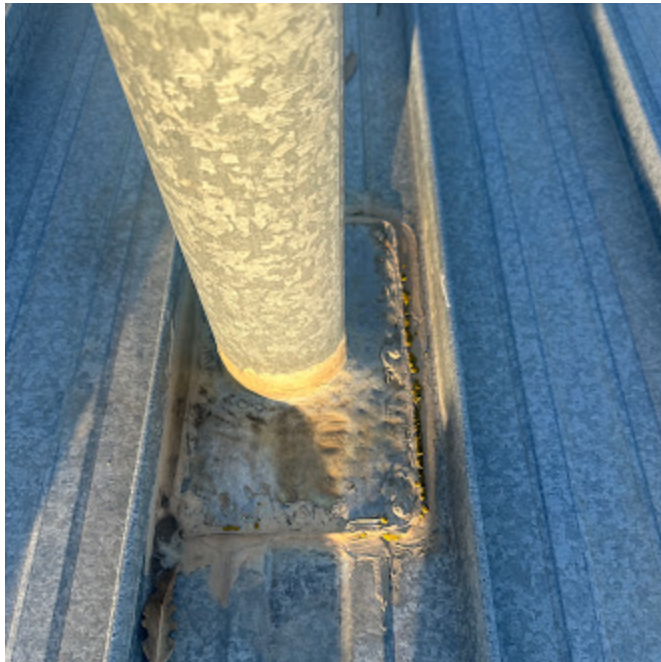
- **Rust and Corrosion:** Extensive rust is present, particularly at the bottom of sheets and around penetrations. This is accelerated by non-compliant modifications, such as grinding the sheet ends, which removes protective coatings and exposes raw metal to moisture.
- **Poor Patching:** Multiple patches, primarily lead-based, are cracked or deteriorating. Some penetrations lack proper back flashing, allowing water ingress.
- **Improper Sheet Termination:** The grinding of sheet ends prevents proper folding or capping, causing leaks and fascia damage. This practice is illegal under **AS 1562.1** due to its impact on roof integrity and safety (sharp edges pose risks during maintenance).
- **Debris Accumulation:** Debris buildup under cappings and in valleys contributes to rust and water pooling, further reducing the roof's lifespan.

Roofing Video:

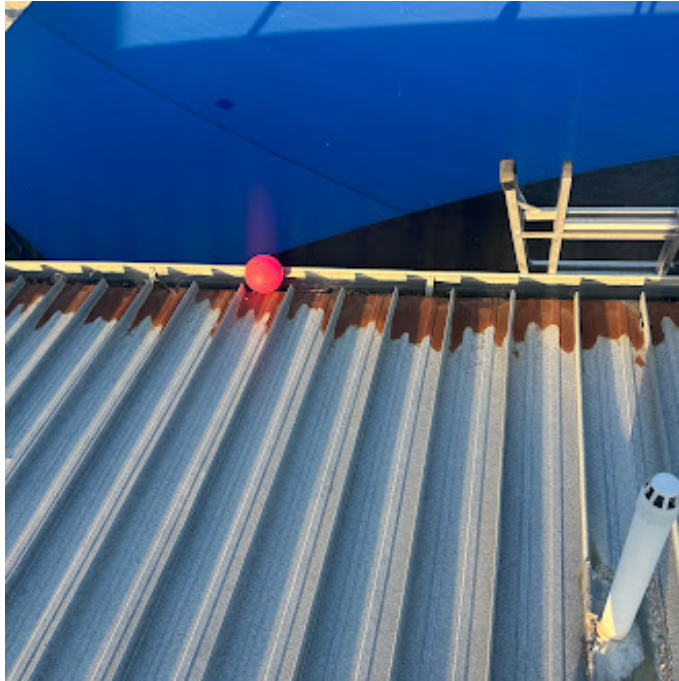


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3. Fascia and Paintwork

The fascia shows significant water damage, with evidence of rot, peeling paint, and prior timber replacements. This is directly linked to gutter overflows and poor roof sheet termination. The current paint application exacerbates the issue by allowing water to penetrate behind the fascia.

Consequences of Inaction

Failing to address these issues poses significant risks to the toilet block's structural integrity, safety, and functionality:

1. **Water Ingress:** Continued leaks from the roof and gutter overflows will penetrate the building, causing internal damage to ceilings, walls, and fixtures. This could lead to costly repairs and potential mold growth, posing health risks.
2. **Fascia and Structural Damage:** Ongoing water exposure will further rot the fascia and potentially affect the building's structural timbers, increasing repair costs.
3. **Safety Hazards:** Sharp, rusted roof edges and deteriorating penetrations pose risks to maintenance workers and anyone accessing the roof.

4. **Regulatory Non-Compliance:** The current roof condition violates **NCC** and **AS 1562.1** standards, potentially leading to penalties or mandatory repairs if inspected by the VBA.
5. **Increased Costs Over Time:** Delaying action will accelerate deterioration, making repairs or replacements more expensive in the future. For example, rust spreading to internal structures could double repair costs within 2–3 years.

Prompt action is critical to mitigate these risks, protect the building, and ensure compliance with Victorian regulations.

Recommended Options

Below are three options to address the identified issues, tailored to different budgets and priorities. Each option includes pros, cons, and risks, ensuring you can make an informed decision. My primary recommendation is a full roof and gutter replacement, but I have included cost-conscious alternatives for your consideration.

Roofing Conclusion Video:



[sharing](#)

Option 1: Full Roof and Gutter Replacement (Recommended)

Description: Replace the existing metal roof with a 0.48 mm thick flat-tray roofing profile (e.g., Clip Lock or Trimdek) and install a new overflow gutter system with leaf eaters. Repaint or cover the fascia before installation to prevent future water damage.

Regulatory Compliance:

- Meets **NCC Part 3.5.1** for roof cladding and **Part 3.5.2** for guttering.
- Complies with **AS 1562.1** for proper sheet installation and **AS 3500.3** for stormwater management.

Why Recommended:

- **Addresses All Issues:** Replaces rusted, non-compliant roofing and inadequate guttering, eliminating leaks and overflow risks.
- **Long-Term Durability:** Clip Lock or Trimdek profiles with 0.48 mm thickness offer superior strength and a 20–30-year lifespan in Victoria's climate.

- **Improved Maintenance:** Leaf eaters (100 mm x 50 mm x 175 mm openings) reduce blockages, and overflow gutters handle heavy rainfall, protecting the fascia.
- **Safety and Compliance:** Eliminates sharp edges and ensures compliance with VBA standards, reducing liability risks.

Pros:

- Comprehensive solution with minimal future maintenance.
- Extends building lifespan and prevents internal damage.
- Enhances property value and aesthetics with a modern roof profile.
- Full compliance with **NCC** and **AS** standards.

Cons:

- Higher upfront cost compared to repairs.
- Requires temporary disruption during installation (1–2 weeks).

Risks:

- Minimal, as this option fully resolves current issues.
- Budget constraints may require financing or prioritization over other projects.

Cost Consideration: While this is the most expensive option, it offers the best value over time by preventing recurring repairs and internal damage.

Option 2: Partial Roof Repair and Gutter Upgrade

Description: Patch existing roof leaks with compliant back flashing and sealants, replace damaged roof sheets where rust is severe, and install a new overflow gutter with leaf eaters. Repaint the fascia to protect against water ingress.

Regulatory Compliance:

- Partially meets **NCC Part 3.5.1** by addressing leaks but may not fully resolve non-compliant sheet terminations.
- Complies with **NCC Part 3.5.2** and **AS 3500.3** for guttering upgrades.

Why Recommended:

- **Cost-Effective Compromise:** Balances upfront costs with meaningful improvements, suitable for price-conscious clients.

- **Addresses Key Issues:** Gutter upgrades reduce overflows, and targeted repairs mitigate major leaks.
- **Extends Roof Life:** Proper patching and flashing can add 5–10 years to the roof's lifespan, depending on maintenance.

Pros:

- Lower cost than full replacement.
- Quick implementation (3–5 days).
- Reduces immediate risks of water ingress and fascia damage.

Cons:

- Does not address underlying rust in non-replaced sheets, which may spread.
- Non-compliant sheet terminations remain, posing ongoing leak and safety risks.
- Higher maintenance costs over time compared to full replacement.

Risks:

- Rust progression could necessitate a full replacement within 5–7 years, increasing long-term costs.
- Partial repairs may not fully prevent internal water damage if leaks persist.
- Non-compliance with **AS 1562.1** for sheet terminations may attract VBA scrutiny.

Cost Consideration: This option is budget-friendly but carries higher long-term risks and maintenance costs. Clients on a tight budget should weigh these trade-offs carefully.

Option 3: Minimal Repairs (Gutter Cleaning and Basic Patching)

Description: Clean gutters, install leaf eaters, and patch major roof leaks with sealants. Repaint damaged fascia areas to limit further deterioration.

Regulatory Compliance:

- Does not fully meet **NCC Part 3.5.1** due to non-compliant sheet terminations and ongoing rust issues.
- Partially complies with **NCC Part 3.5.2** by improving gutter maintenance but lacks overflow provisions.

Why Recommended:

- **Lowest Cost:** Ideal for clients with severe budget constraints seeking immediate relief.
- **Temporary Relief:** Reduces gutter blockages and seals major leaks, delaying more extensive repairs.

Pros:

- Minimal upfront cost.
- Quick execution (1–2 days).
- Improves gutter performance and reduces overflow frequency.

Cons:

- Does not address rust or non-compliant sheet terminations, leading to ongoing deterioration.
- High likelihood of recurring leaks and fascia damage within 1–3 years.
- Increased maintenance frequency (e.g., regular gutter cleaning).

Risks:

- Significant risk of internal water damage due to unresolved roof leaks.
- Rust progression will likely require a full replacement within 3–5 years, negating short-term savings.
- Non-compliance with **NCC** and **AS** standards increases liability and safety risks.

Cost Consideration: While the cheapest option, it offers limited longevity and high risks. Clients choosing this option should plan for future repairs or replacement to avoid escalating costs.

Why Action Is Necessary

As a qualified roof plumber, I approach inspections with a focus on long-term building protection, safety, and compliance. The toilet block's current condition—rusted roofing, overflowing gutters, and damaged fascia—presents immediate and escalating risks. Water ingress from leaks and overflows is already damaging the fascia and threatens internal structures. The non-compliant grinding of roof sheets accelerates rust and creates safety hazards, while the lack of gutter overflow provisions violates **NCC** standards.

Ignoring these issues will lead to:

- **Costly Repairs:** Internal damage and structural rot could cost thousands more than proactive roofing work.
- **Health and Safety Risks:** Mold growth and sharp roof edges pose risks to occupants and maintenance workers.
- **Regulatory Issues:** Non-compliance may result in VBA enforcement actions, including fines or mandatory repairs.

By acting now, you can protect the building, ensure compliance, and avoid significantly higher costs in the future.

Our Commitment to Unbiased Advice

As your roofing professional, my priority is to provide an honest, expert opinion without pushing any specific course of action. The options above are tailored to address the issues identified during the inspection, with clear explanations of their benefits and risks. Whether you prioritize cost, longevity, or compliance, you have the information needed to make the best decision for Lindenow Primary School.

I understand that budget constraints may influence your choice, and I've included cost-effective options to accommodate this. However, I've also highlighted the risks of cheaper solutions to ensure you're fully informed. My role is to empower you with knowledge, not to steer you toward any particular option. If you have questions or need further clarification, I'm here to assist.