Weatherboards - How to deal with problems

Some tiny tips on what you might expect

Right, rotten weatherboards. A classic. As you know, the best way to remedy any building problem is always to ensure the fix meets the minimum standards set out in the **New Zealand Building Code (NZBC)**.

Simply bogging and painting over the rot might seem cheap, but it's just hiding the problem. It doesn't meet the NZBC's durability requirements (Clause B2) and will fail, likely causing more damage to the framing behind. We must address the *cause*, which is almost always water ingress.

Here are the remedy options, based on budget, that you can discuss with the client.

Remediation Options & Approximate Costs

These are Wellington-region estimates and will vary based on the extent of the rot, access (scaffolding), and the condition of the underlying framing and building wrap.

1. Economical (Patch Repair - *Not Recommended*)

- **Method:** This is a temporary cosmetic fix. Scrape out the soft, rotted wood, apply a wood hardener, and then rebuild the profile with an exterior-grade filler (like builder's bog) before sanding and painting.
- **NZBC Alignment:** This **does not** comply with the NZBC for durability. It fails to remove the defect or address the cause of the water ingress. The rot will almost certainly continue to grow underneath the filler.
- **Approximate Cost: $250 - $500**. (Materials and 2-3 hours of labour).

2. Medium (Sectional Replacement - *Compliant*)

- **Method:** This is the most common compliant repair. Carefully cut and remove the rotten sections of the weatherboards, extending back to sound timber. Inspect the building wrap and framing behind for any rot; if framing is damaged, that *must* be replaced. A new, treated (H3.2) section of weatherboard is then scarfed or butt-joined in. All cut end-grain **must** be sealed with a primer/sealer.
- **NZBC Alignment:** This is compliant with the NZBC (B2, E2) *if* done correctly. It removes the defect, allows for inspection of the substrate, and uses durable, new materials.

- **Approximate Cost: $1,500 - $4,000**. (Assumes 1-2 days for a carpenter, plus a painter's visit. This can rise quickly if multiple areas are affected or framing needs repair).

3. High (Full Board / Wall Replacement - *Best Practice*)

- **Method:** Remove the entire length of the affected weatherboards (from corner to corner) or, in severe cases, reclad the entire wall elevation. This allows for a full inspection and replacement of building wrap, installation or upgrade of wall insulation, and checking of all flashings.
- **NZBC Alignment:** This is the best-practice solution. It guarantees the entire repaired area forms a new, fully compliant system under NZBC Clause E2 (External Moisture) and B2 (Durability).
- **Approximate Cost: $8,000 - $20,000+ per wall**. (This depends heavily on the wall size. A full reclad is a major job, often costing $150-$250 per m² just for the install, let alone the removal, remediation, and scaffolding).

General Defect Remediation Process

Here is the formal process to follow:

1. **Identify the Defect:** Rotten timber weatherboards, likely caused by water ingress.
2. **Refer to Documentation:** The primary reference is **NZBC Acceptable Solution E2/AS1** (External Moisture). Also, refer to **NZS 3604** (Timber-Framed Buildings) for framing requirements.
3. **Address the Cause:** Investigate *why* the rot occurred. Check for failed flashings (windows, corners), boards installed too close to the ground (E2/AS1 requires **100mm clearance** from paved surfaces, **175mm** from unpaved), unsealed end-grain, or paint failure. This underlying fault *must* be remedied.
4. **Formal Notice:** If this is a new build, remind the client they are covered by the 12-month defect liability period. If the work is a clear breach of the code, a **Notice to Fix** may be relevant, but our goal is to remedy it.
5. **Use Appropriate Materials:** All replacement timber must be new, treated to at least **H3.1** (or H3.2, as per NZS 3602), or be a naturally durable species (e.g., cedar). All fixings must be stainless steel or hot-dip galvanized. All cut timber (especially end-grain) **must be sealed** with a quality primer.
6. **Difficulty Rating: Medium to High**. This work is critical to the building's weathertightness and involves Restricted Building Work (RBW) if it's a structural repair, so it must be done by an LBP.

Summary Report: Remediation Checklist (The 4 D's)

Here is the checklist for the remediation work.

Step	Principle	Required Action (Standard Remedy)	Source
1	**Deflection**	Inspect, repair, or replace all window, door, and corner flashings to ensure they actively deflect water *away* from the cladding system. Ensure weatherboard laps are correct.	E2/AS1
2	**Drainage**	Remove rot and replace boards. Ensure correct ground clearances (100mm paved / 175mm unpaved). If a cavity system is present, ensure the cavity base is clear of debris and vented to allow water to drain *out*.	E2/AS1
3	**Diffusion**	Inspect the building wrap (wall underlay) for damage or rips and repair as needed. Ensure the wall assembly (especially if a cavity is present) can dry out if it gets wet.	E2/AS1
4	**Durability**	Use new, H3.2-treated timber. **Seal all cut end-grain** with primer before installation. Use new, compliant fixings (stainless or hot-dip galv.). Apply a full paint system (primer, 2x topcoats) as per the manufacturer's specs.	NZBC B2