

Maintenance of Metal Roofing and Cladding

Most products used in the construction sector need some form of regular maintenance to ensure life of the products meet performance and warranty expectancy and most certainly metal roofing, cladding and rainwater products are no different. The cumulative effects of weather, airborne contaminants, grime and debris coupled with New Zealand's extensive coastline and associated corrosive atmosphere can create degradation without programmed maintenance.

Whilst normal rain washing will assist in the prevention of product degradation, unfortunately variance in building design does not always allow for this. "Unwashed" areas such as under eaves, spouting guttering and fascia etc are just some that require ongoing fresh water washing to remove contaminants. The following minimum guidelines should be followed to ensure product and system warranty conditions are not voided:

- Particular care of unwashed areas which require extensive manual washing. These areas include (but not limited to) soffits, wall cladding under eaves, undersides of gutters, fascias, garage doors, around flues, under television aerials and solar panels. Where solar panels, walkways and platforms are installed either on or above the roof/cladding, additional maintenance of the roof and cladding material is required. Any areas subject to bird droppings should be regularly cleaned.
- Guttering and spouting systems should be cleaned on a regular basis to remove dirt, grime, debris and airborne contaminants.
- Products should either be manually washed using fresh water, soft bristled nylon type brush and/or by water blasting at pressures of no more than 1000 psi in accordance with the maintenance programme chart.

RECOMMENDED MINIMUM MAINTENANCE PROGRAMME

MATERIAL	ENVIRONMENT	MINIMUM MAINTENANCE REQUIREMENT			
		Roof	Walls	Rainwater systems	Unwashed & high risk areas
Prepainted Steel	Moderate	Rainwashing only	Wash every 12 months	Wash every 6 months	Wash every 3 months
	Severe	Rainwashing only	Wash every 6 months	Wash every 3 months	Wash every 3 months
	Very Severe	Rainwashing only	Wash every 3 months	Wash monthly	Wash monthly
Zincalume	Moderate	Rainwashing only	Wash every 6 months	Wash every 3 months	Wash every 3 months
	Severe	Not recommended			
	Very Severe	Not recommended			
Galvanised	Moderate	Rainwashing only	Wash every 6 months	Wash every 3 months	Wash every 3 months
	Severe	Not recommended			
	Very Severe	Not recommended			
Prepainted Aluminium	Moderate	Rainwashing only	Rainwashing only	Wash every 6 months	Wash every 3 months
	Severe	Rainwashing only	Wash every 6 months	Wash every 3 months	Wash every 3 months
	Very Severe	Wash every 6 months	Wash every 6 months	Wash every 3 months	Wash every 3 months

NOTE: Environment categories can be viewed in the Environment Categories bulletin on our website www.roof.co.nz



Lichen and Fungus Growth

Where lichen is suspected as being attached to the roof/cladding material, the following action should be undertaken:

- ▶ We recommend a spot test to confirm. Apply a 3-5% solution of Sodium Hypochlorite (house bleach in water) to the area and leave for a few minutes. If lichen/fungus is present, the dark area will be destroyed by the bleach
- ▶ Wash the roof down with a 2% Sodium Hypochlorite solution. The table below shows the dilution required for differing strength bleaches to give a 2% solution. A small amount of household detergent (no more than 5-7 ml per litre of water) may be added to the solution to improve wetting
- ▶ Apply bleach solution with a nylon soft bristle broom and leave for up to 5 minutes
- ▶ Following removal of the lichen, wash all roofing and cladding down with copious amounts of clean fresh water. A low pressure water blaster up to 1000 psi may also be used at this stage.

% SODIUM HYPOCHLORITE OR % AVAILABLE CHLORINE IN BLEACH	DILUTION REQUIRED FOR 1L OF 2% SODIUM HYPOCHLORITE SOLUTION
10%	200ml bleach + 800ml water
5%	400ml bleach + 600ml water
4%	500ml bleach + 500ml water
3%	670ml bleach + 330ml water
2%	No dilution

IMPORTANT. If rainwater is being collected from the roof, ensure the lines between the gutters and water collection tanks are disconnected to avoid contamination.

Pollen Deposits

Where pollen deposits need to be removed from the roof, the following process should be followed:

- ▶ As for lichen and fungus removal, wash down the roof or wall cladding to remove any loose or non-adhered pollen. A low pressure water blaster up to 1000 psi is appropriate
- ▶ Wash the roof down with an effective detergent-based cleaning product such as "Simple Green" available through most hardware and DIY outlets
 - Always use cleaning agents to the manufacturer's instructions, taking particular care to adhere to the recommended dilution levels
 - These products should be applied using a soft nylon bristle broom or low pressure water blaster up to 1000 psi
- ▶ Following removal of the pollen, wash all roofing and cladding down with copious amounts of clean fresh water. Failure to do this may result in "streaking" on the product surface
- ▶ Important! If rainwater is being collected from the roof, ensure the lines between the gutters and water collection tanks are disconnected to avoid contamination.

NZ Building Code

- ▶ The minimum maintenance requirements referred to in this document apply to the standard provisions of the NZ Building Code, Section B2, Durability. Note: The New Zealand building code durability does not extend to include aesthetic appearance. It requires durability of 15 Years minimum (with maintenance) for non structural roofing and cladding
- ▶ In some industrial locations, variation in environment conditions may alter the recommendations contained in this document. Please contact Roofing Industries Technical helpline 0800 844 822 for clarification.

The maintenance information in this document is intended as a guide and is NOT a warranty. For more detailed information please refer to the environmental categories literature and warranty information contained in our website www.roof.co.nz