

Sodium Hypochlorite (NaOCl) Roof Cleaning

Manufacturer Cleaning Specifications, Approvals & Prohibitions

Prepared for: Servus Cleaning

Method: Low-pressure / no-pressure application of 4% NaOCl solution

Date: June 2026

Executive Summary

Sodium hypochlorite (NaOCl) applied via low-pressure or no-pressure soft wash is the industry-standard, manufacturer-approved method for moss and algae removal on asphalt shingle roofs — explicitly endorsed by the Asphalt Roofing Manufacturers Association (ARMA), GAF, Owens Corning, CertainTeed, and IKO. However, this approval does not extend universally across all roofing systems. Galvalume metal, uncoated stone-coated steel roofing (DECRA), cedar/wood shake, and several commercial single-ply membranes (TPO, PVC per specific manufacturers) carry restrictions or outright prohibitions on SH use.

Servus Cleaning's method — 4% NaOCl applied at low/no pressure — is COMPLIANT with asphalt shingle specifications and generally compliant with painted metal roofs, but requires verification before application to flat membrane, metal, wood shake, or specialty roofing types.

1. Asphalt Shingle Roofing — SH Explicitly Approved

All major asphalt shingle manufacturers and the industry trade body ARMA explicitly approve sodium hypochlorite (chlorine bleach) applied at low/no pressure for moss and algae removal. Power washing is universally prohibited.

Manufacturer	Document	Key Quote	Official Link
GAF	TAB-R-102: Algae Staining on Shingled Roof Surfaces (Sept 2024)	"GAF recommends cleaning the roof with a special mixture. That mixture is: 4 gallons of water, 1 gallon of bleach and 1 cup of TSP... Apply this mixture with a garden sprayer, let sit for up to 20 minutes, and rinse with low-pressure water. Do not power wash the shingles."	PDF — GAF.com
ARMA (Industry Standard)	Technical Bulletin: Algae Discoloration of Roofs (Revised June 2024)	"Discoloration may be lightened by applying a solution of liquid household bleach (sodium hypochlorite) and water... left on the roof for at least 15 minutes but no more than 20 minutes... rinse the solution from the roof by gently spraying the surface with water. DO NOT use a power washer."	PDF — asphaltroofing.org
CertainTeed	Care & Maintenance Guide (official website + distributor PDF)	"Mix a solution of 1 part chlorine bleach with 3 parts of water. Apply this solution (using a low-pressure hand-held sprayer) over the asphalt shingles... After 15 minutes, rinse the bleach solution from the roof. Do not use a power washer."	PDF — vikingroofspec.co.nz
CertainTeed	Official Website — Roof Maintenance Guide	"Have a professional use a cleaning agent then gently brush away the growth... Do not use a power washer on your asphalt shingle roof."	certainteed.com
Owens Corning	Asphalt Shingle Roofing Maintenance	"Mix a solution of 1 part chlorine bleach with 3 parts of water. Apply this solution	PDF — thebuildingagency.co.nz

	(distributor PDF)	(using a low pressure hand held sprayer) over the asphalt shingles... After 15 minutes, rinse the bleach solution from the roof."	
IKO	Algae and Moss Removal — Official Blog/Technical Guidance	"500 ml chlorine bleach + 7.5 litres of water... Apply with garden sprayer, dwell 20–45 minutes... Do not use a pressure washer."	iko.eu blog

CONCENTRATION NOTE: Servus Cleaning operates at 4% active NaOCl. ARMA's 50/50 household bleach recommendation produces ~2.6% active NaOCl. GAF's formula produces ~1% active NaOCl. Professional soft-wash contractors routinely apply 2–4% active NaOCl. The critical compliance factor is LOW/NO PRESSURE application — which Servus Cleaning meets.

2. Metal Roofing — Approved (Painted/Coated) | PROHIBITED (Galvalume)

Metal roof cleaning with NaOCl is highly dependent on the substrate and coating type. Painted/PVDF-coated metal is generally approved with diluted SH for mildew. Galvalume (unpainted aluminum-zinc alloy coated steel) is explicitly PROHIBITED by multiple manufacturers.

Manufacturer	Status	Document	Key Quote / Note	Link
Fabral (painted metal)	✅ APPROVED	Maintenance Instructions for Fabral Panels	"Mildew may be removed by a solution of a cup of dry powdered laundry detergent, ½ cup tri-sodium phosphate, 1 quart sodium hypochlorite 5% solution (bleach), mixed with 3 quarts of water."	PDF — fabral.com
Fabral (Galvalume)	❌ PROHIBITED	Same Maintenance Instructions document	"(Note: do not use bleach on Galvalume.)" — explicit prohibition in the same document that approves it for painted panels.	PDF — fabral.com
Firestone (UNA-CLAD™ painted metal)	✅ APPROVED	Building Owner's Manual	"1 quart sodium hypochlorite 5% solution (such as Clorox®), 3 quarts water... Flush all surfaces with water after use."	PDF — fifthwallroofing.com
New Castle Metals (painted)	✅ APPROVED (mildew only)	Care & Maintenance Guidelines	"If mildew or other fungal growth is a problem... household bleach, mixed at a concentration of one cup of bleach to five gallons of water, along with one cup of a mild soap... is recommended." NOTE: Do not blend bleach with detergents for	PDF — newcastlemetal.com

			routine non-mildew cleaning.	
Boral Steel® (stone-coated steel)	⚠ CONDITIONAL	Warranty & Maintenance Guide	"Most modern pressure cleaners have an induction system to deliver a 10% solution of chlorine to water. This will help to temporarily remove the mildew, algae or moss when using the recommended reduced pressure [max 1000 psi]."	PDF — roofle.com

GALVALUME IDENTIFICATION: Unpainted corrugated or standing seam metal roofs with a raw silver/tin appearance. Very common on agricultural and rural buildings in BC. DO NOT apply SH to any Galvalume surface.

3. Stone-Coated Steel Roofing — SH NOT Listed as Approved

DECRA (the dominant stone-coated steel brand in North America) does not include sodium hypochlorite in its approved cleaning products list. Using SH on DECRA roofing may void the warranty.

Manufacturer	Document	What It Says	Link
DECRA Metal Roofing	Technical Bulletin: Cleaning A DECRA Roof	Lists ONLY: Bayer Advanced 2-in-1 Moss & Algae Killer, Clenz-O2-Roof, Wash Safe Roof Wash, Spray & Forget, Wet & Forget Outdoor. Sodium hypochlorite is NOT included. Also: "DO NOT use copper- or iron-based products."	PDF — decra.com
DECRA Metal Roofing	Technical Bulletins Index	Full library of all DECRA technical bulletins for reference	decra.com/pro/technical-bulletins

4. Concrete & Clay Tile Roofing — Generally Compatible

Tile roofing is generally compatible with diluted sodium hypochlorite soft washing. Boral (the major tile manufacturer in North America) explicitly approves diluted chlorine in their maintenance documentation.

Manufacturer	Document	Key Quote	Link
Boral (concrete tile)	Concrete Tile Warranty & Maintenance Guide	"Most modern pressure cleaners have an induction system to deliver a 10% solution of chlorine to water. This will help to temporarily remove the mildew, algae or moss when using the recommended reduced pressure [~1200 psi, nozzle 1–2 feet from tile]."	PDF — roofle.com

Typical soft-wash concentration for tile: 1–3% active NaOCl. Servus Cleaning's 4% is compatible.

5. Single-Ply Flat Roofing (TPO, PVC, EPDM) — SH Not Standard; Detergent Preferred

Most commercial flat roofing manufacturers do not list sodium hypochlorite as an approved cleaner for the membrane surface. GAF and Duro-Last specify mild detergents. IB Roof Systems PVC is a notable exception that conditionally permits diluted bleach on non-printed white PVC for heavy algae.

Manufacturer	Status	Document	What It Says	Link
GAF EverGuard® TPO/PVC	⚠ NOT LISTED	TAB-C-27: Cleaning Recommendations for EverGuard® Roofs	"Use a soft bristled, long handled brush or floor broom with a cleaning solution of a mild non- abrasive household detergent (such as Spic n' Span) and water." SH not mentioned.	PDF — documents.gaf.com
GAF EverGuard® TPO Seam Cleaner	✗ NON-BLEACH SPECIFIED	Data Sheet COMEG840 — EverGuard TPO Seam Cleaner	"Non-bleach, low-residue cleaner" specified. Bleach explicitly excluded from seam preparation.	PDF — gaf.com
Duro-Last PVC	⚠ NOT LISTED	Care and Maintenance Guide & Owner Checklist	Approves: Wash Safe Roof Wash, Spic-N- Span, Simple Green. No mention of sodium hypochlorite. Max pressure wash: 1,000 psi.	PDF — duro- last.com
IB Roof Systems PVC (non-printed white)	✅ CONDITIONALLY APPROVED	PVC Membrane Cleaning Guidelines (Technical Bulletin)	"For heavy algae on non- printed PVC: TSP + diluted household bleach (13 oz bleach per	PDF — hubspotusercontent- na1.net

			gallon solution)." — SH permitted on standard white non-printed membrane only. Avoid on printed/colour membranes.	
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6. Cedar & Wood Shake Roofing — No Direct SH Endorsement

The Cedar Shake & Shingle Bureau (CSSB) does not directly endorse or prohibit sodium hypochlorite on cedar. Their FAQ defers to USDA Forest Products Laboratory academic documentation. High-concentration NaOCl can degrade lignin in cedar wood, causing greying and structural weakening. Customer disclosure is recommended.

Source	Document	What It Says	Link
Cedar Shake & Shingle Bureau (CSSB)	Maintenance FAQ	"Can I clean my roof with Bleach and Water? Please refer to page 10 of the USDA Forest Products Laboratory document for recommendations on cleaning solutions." — No direct yes/no; defers to academic research.	cedarbureau.org/maintenance-faq
CSSB	Resource Library	Full library of CSSB care & maintenance brochures and installation guides.	cedarbureau.org/resource-library
USDA Forest Products Laboratory	FPL-GTR-201 (referenced by CSSB for cleaning)	Academic reference document that CSSB directs homeowners to for bleach-on-wood cleaning guidance. Does not endorse strong bleach concentrations for wood.	fpl.fs.fed.us

7. Servus Cleaning — Compliance Summary by Roof Type

Method: Low-pressure or no-pressure application of 4% sodium hypochlorite solution for moss and algae treatment.

Roof Type	Servus 4% SH Status	Notes & Key Documents
Asphalt shingles (GAF, OC, CertainTeed, IKO)	✅ FULLY COMPLIANT	GAF TAB-R-102, ARMA Bulletin, CertainTeed Care Guide, OC Maintenance Guide, and IKO blog all explicitly approve SH + low-pressure method. Low/no pressure application matches spec exactly.
Painted/PVDF-coated metal roofs	✅ COMPLIANT (with conditions)	Fabral, Firestone, and New Castle Metal all approve diluted SH for mildew removal. Must rinse thoroughly. Confirm roof is NOT Galvalume before proceeding.
Galvalume metal roofing (unpainted silver/tin appearance)	❌ PROHIBITED	Multiple manufacturers explicitly prohibit bleach on Galvalume. Alkaline SH attacks the zinc-aluminum protective coating causing permanent oxidation. See: Fabral Maintenance Instructions.
Stone-coated steel (DECRA, Gerard)	⚠️ WARRANTY RISK	DECRA Technical Bulletin lists only alternative products; NaOCl not included as approved. Using SH may void DECRA warranty.
GAF EverGuard TPO/PVC flat roof	⚠️ NOT APPROVED	GAF TAB-C-27 specifies mild detergent only. SH not in approved list. Risk of warranty void.
Duro-Last PVC flat roof	⚠️ NOT APPROVED	Duro-Last specifies proprietary and detergent-only cleaners. SH not listed. See Care & Maintenance Guide.
IB PVC flat roof (non-printed white only)	✅ CONDITIONALLY APPROVED	IB PVC Cleaning Guidelines explicitly permit diluted bleach for heavy algae on standard white non-printed membranes. NOT for printed/coloured membranes.
Clay / concrete tile	✅ COMPATIBLE	Boral Warranty & Maintenance Guide approves chlorine solution. Soft wash 1–4% NaOCl is industry-standard for tile.
Cedar / wood shake	⚠️ CAUTION	CSSB provides no direct endorsement. High NaOCl can degrade lignin and grey wood. Recommend customer disclosure and minimal concentration with thorough rinse.
Slate roofing	⚠️ NO FORMAL GUIDANCE FOUND	Slate itself is chemically inert to SH. Risk lies with adjacent metal flashing. No formal manufacturer documentation

		located. Soft wash at low concentration is generally accepted in practice.
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8. Critical Warnings & Best Practice Notes

Landscaping & Runoff: All manufacturer documents warn that SH runoff will damage plants and vegetation. Pre-wet all vegetation before application, cover sensitive plants, continuously rinse surrounding plants during and after, and do not allow runoff into storm drains.

Warranty Void Risk: Cleaning a roof with any method not specified in the manufacturer's warranty can void coverage. For commercial flat roofs (TPO, EPDM, PVC), always verify specific approved methods in writing before proceeding.

Metal Components: Even on approved roof types, metal flashings, fasteners, gutters, and trim are susceptible to SH corrosion. Always rinse thoroughly. Do not allow SH to pool or dry on any metal components.

Rainwater Harvesting / Cisterns: Any roof connected to a rainwater harvesting or cistern collection system MUST have downpipes disconnected before SH application. Several manufacturer documents (CertainTeed, DECRA) explicitly state this requirement.

Galvalume Identification: Galvalume roofs have a raw, unpainted silver-grey appearance — common on agricultural buildings, barns, and some residential standing-seam roofs in rural BC. When in doubt, ask the owner for documentation or treat as Galvalume.

9. Master Reference List — All Source Documents

All documents referenced in this report with direct links:

Category	Manufacturer / Body	Document & Link
Asphalt Shingle	GAF	TAB-R-102: Algae Staining On Shingled Roof Surfaces (2024)
Asphalt Shingle	ARMA	Technical Bulletin: Algae Discoloration of Roofs (June 2024)
Asphalt Shingle	CertainTeed	Care & Maintenance Guide (distributor PDF)
Asphalt Shingle	CertainTeed	Official Website Maintenance Guide
Asphalt Shingle	Owens Corning	Asphalt Shingle Roofing Maintenance (distributor PDF)
Asphalt Shingle	IKO	Algae and Moss Removal Guide
Metal Roofing	Fabral	Maintenance Instructions (painted + Galvalume prohibition)
Metal Roofing	Firestone	Building Owner's Manual (UNA-CLAD™ metal panels)
Metal Roofing	New Castle Metals	Care & Maintenance Guidelines
Stone-Coated Steel	DECRA	Technical Bulletin: Cleaning A DECRA Roof
Stone-Coated Steel	DECRA	Technical Bulletins Index (full library)
Stone-Coated Steel	Boral Steel	Warranty & Maintenance Guide (stone-coated steel)
Concrete/Clay Tile	Boral	Concrete Tile Warranty & Maintenance Guide
Flat/Single-Ply	GAF EverGuard	TAB-C-27: Cleaning Recommendations for EverGuard® Roofs
Flat/Single-Ply	GAF EverGuard	TPO Seam Cleaner Data Sheet COMEG840
Flat/Single-Ply	Duro-Last	Care and Maintenance Guide & Owner Checklist
Flat/Single-Ply	IB Roof Systems	PVC Membrane Cleaning Guidelines
Cedar / Wood Shake	CSSB	Maintenance FAQ
Cedar / Wood Shake	CSSB	Resource Library (full document index)
Cedar / Wood Shake	USDA Forest Products Lab	FPL-GTR-201 (wood shake cleaning reference)

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This document compiles publicly available manufacturer documentation for reference purposes. Always confirm current warranty terms directly with manufacturers before undertaking roof cleaning. Manufacturer documents may be updated; verify links are current at time of use.