

Roof Moss Clearance

Key Factors Contributing to Moss Build-up

- **Excessive Shade:** Moss prefers areas with limited sunlight. North-facing roof pitches are particularly susceptible because they receive the least direct sun, allowing them to stay damp for longer.
- **Persistent Moisture:** Moss requires water to thrive. If a roof does not dry out properly due to frequent rainfall, poor drainage, or low roof pitches, it creates a hospitable environment for moss to take root.
- **Porous Roofing Materials:** Many common roof materials, such as **concrete and clay tiles**, are naturally porous. As these tiles weather and age, they become rougher and absorb more water, making it easier for moss spores to anchor themselves into the surface.
- **Trees and Foliage:** Overhanging tree branches provide both shade and a constant source of moisture from leaf litter. Falling leaves, twigs, and organic debris trap moisture against the tiles and can also drop moss spores directly onto the roof.
- **Poor Ventilation:** If an attic or roof space is poorly ventilated, it can trap humidity and moisture internally, contributing to a damp external roof surface that promotes moss growth.

How Moss Spreads

Moss reproduces by releasing **tiny spores** into the air. These spores are carried by the wind or even by birds and settle into the dirt and dust that accumulates on tiles. Once settled in a moist, rough "nook or cranny," they quickly establish root-like structures (rhizoids) and begin to spread.

Project Specification: Roof Moss Removal & Maintenance

Property Baseline:

- **Property Type:** 3-Bedroom Semi-Detached
- **Estimated Roof Area:** ~75 - 85 m²
- **Estimated Duration:** 2 to 2 ½ Days effort
- **Methodology:** Manual Scrape & Biocide Treatment (Non-Pressure Wash)

PHASE 1: MOBILISATION & SITE PROTECTION

Estimated Effort: 1.5 Hours

- **Access Setup (1.0 Hr):** Setting up industrial ladders with standoff brackets and fall protection.

- **Perimeter Protection (0.5 Hr):** Covering downpipes to prevent blockages and tarping garden beds/ponds.

PHASE 2: MANUAL MOSS REMOVAL

Estimated Effort: 7 Hours

- **Manual Scrape (5.0 Hrs):** Using profiled scrapers to remove bulk moss from the main pitches.
- **Detailed Brushing (2.0 Hr):** Clearing tile joins and valleys where moss roots are deepest.

PHASE 3: BIOCIDES TREATMENT & CHEMICAL CLEAN

Estimated Effort: 6.0 Hours

- **Application (4.0 Hr):** Applying professional-grade biocide via low-pressure sprayer to kill remaining spores.
- **Dwell & Rinse (2.0 Hr):** Allowing the solution to penetrate and performing a light rinse of the property exterior.

PHASE 4: GUTTER MAINTENANCE & CLEARANCE

Estimated Effort: 3.5 Hours

- **Gutter Clear (2.5 Hrs):** Removing all debris fallen during the scrape and testing downpipe flow.
- **Site Demobilisation (1.0 Hr):** Final wash-down of driveways/patios and equipment pack-up.

TOTAL ESTIMATED EFFORT: 18.0 Hours / 2 to 2 ½ days.

TOTAL ESTIMATED COST (roof and gutter cleaning): £700

Important Note: Work is weather-dependent. High winds or heavy rain may require the project to be rescheduled to ensure safety and chemical effectiveness.

Estimated effort is based semi-detached house with easy access to roof and gutters for cleaning and ladder erection.

When it comes to cleaning moss off a roof, the debate usually comes down to **soft washing** versus **high-pressure washing**. While both will remove visible growth, they take fundamentally different approaches, and one is far safer for roofing materials than the other.

Here is a breakdown of how they compare across key areas:

1. Methodology

- **Soft Washing:** Uses **low pressure** (roughly equivalent to a standard garden hose or slightly higher, around 40–100 PSI) combined with specialized chemical solutions—typically biocide or sodium hypochlorite mixes. The solution does the heavy lifting by killing the moss, lichen, algae, and their root systems (rhizoids) at a microscopic level.
- **High-Pressure Washing:** Relies purely on **mechanical force** (often 2,000 to 4,000+ PSI) to blast the moss and dirt off the surface using water alone.

2. Roof Health & Tile Integrity

- **Soft Washing: Safe for tiles.** Because it uses almost no pressure, it won't dislodge the protective granules on asphalt shingles or erode the factory finish/coating on concrete and clay roof tiles. It also won't force water up and under the tiles into the roof cavity.
- **High-Pressure Washing: High risk of damage.** The intense water pressure acts like an abrasive. It strips away the top protective surface of tiles, making them more porous over time. It can also break mortar joints, dislodge tiles, and force water beneath the lap of the tiles, risking water ingress, rot, and damp inside the roof space.

3. Long-Term Effectiveness & Regrowth

- **Soft Washing: Longer-lasting results.** Because biocides kill the root systems and microscopic spores embedded deep within the porous tile, the roof stays clean significantly longer.
- **High-Pressure Washing: Faster regrowth.** Pressure washing blasts away the visible moss on top, but it leaves the microscopic roots and spores alive deep inside the pores of the tile. Combined with the fact that the high pressure makes the tile surface rougher and more porous, moss often returns much faster.

4. Visual Results (Instant vs. Progressive)

- **Soft Washing:** Results can be **progressive**. While manual scraping combined with soft washing removes bulk moss immediately, the biocide continues working over weeks or months. Dead lichen or stubborn spots gradually weather off with rain. This method does also take longer to execute.
- **High-Pressure Washing:** Provides **instant gratification**. The roof looks immediately clean the moment the water stops spraying.

5. Summary Comparison

Feature	Soft Washing (+ Manual Scrape)	High-Pressure Washing
Primary Mechanism	Chemical treatment + low pressure	Mechanical water force
Risk of Tile Damage	Very Low	High
Protective Granule Loss	Minimal	Severe
Kills Roots & Spores?	Yes (Chemical action)	No (Cleans surface only)
Longevity of Clean	2 – 5+ Years	6 – 18 Months
Water Ingress Risk	Very Low	High
Recommended by Tile Manufactures	Yes	No (Often voids warranties)