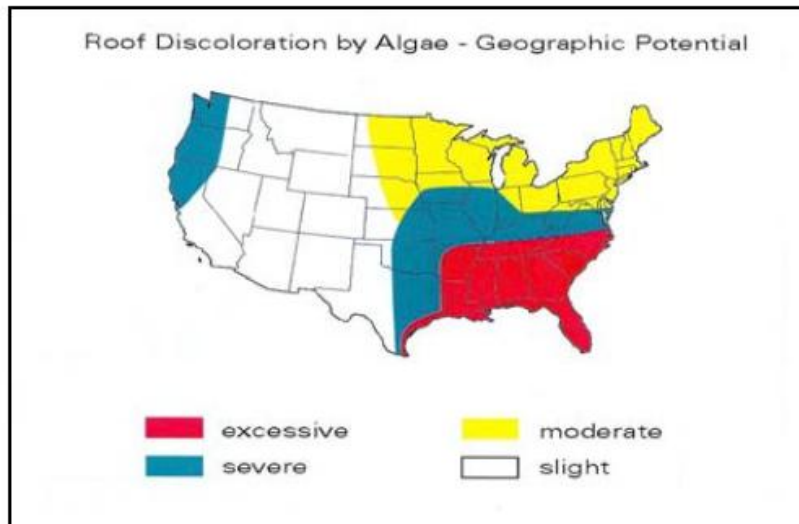




ROOF ISSUES - STAINS

<p>What Causes the Black Stains on My Roof?</p>	<p>Black staining is caused by Algae. Algae can appear as dark streaks on shingles. It usually appears on lower sections of the roof, and taper towards the ridge.</p>
<p>How Does Algae Arrive on My Roof?</p>	<p>Airborne spores spread from one infected roof to other roof, taking root randomly. The Algae produce a protective sheath in a dark colour to protect itself from the sun's UV rays.</p>
<p>How Does Algae Grow on My Roof?</p>	<p>Algae require two major things to grow: moisture and proper temperature. Western Coastal areas have a lot of Algae due to the temperate and humid climate. Also, Algae are predominantly found on North-facing roof areas, since there is less sunlight exposure. Once it is established on your roof, it will also adapt to extreme conditions easily.</p>
<p>What Options Do I Have for Protecting My Roof?</p>	<ol style="list-style-type: none"> 1. Have a new roof installed, using Algae Resistant Shingles. These utilize specially formulated granules which inhibit Algae growth. 2. Have your roof professionally steam cleaned (lower pressure than power washing, but higher temperature) and have an Anti-Algae Solution applied to the roof.
<p>What NOT To Do!</p>	<ol style="list-style-type: none"> 1. Do NOT power-wash <i>aged</i> shingles. Have algae removed by hand or with a steam cleaner to ensure the longevity of your roof. 2. Do NOT walk on your roof without Fall Protection! If you do not know what Fall Protection is, you should have a professional company complete all of your roof work.



The Western Coastal Regions of Canada fall under the same "severe" grade as that of the United States, seen here.

Geographic potential map.



North Shore Home Services

WHAT YOU NEED TO KNOW ABOUT YOUR ROOF: ALGAE, FUNGUS, MOSS, LICHEN				
Question	Algae	Fungus	Moss	Lichen
What Does It Look Like?	Dark green or black stains and/or streaks on roof; "Gloeocapsa Magma", "Cyanobacteria", or "Blue-Green Algae"	Green, spongy clumps, and may appear as mold & mildew.	Green, spongy clumps (which doesn't fall into Fungus or Algae categories)	Orange, yellowish, or white spots, usually in a starburst shape.
What Does It Need to Grow?	Inorganic food sources (ie: asphalt fillers), moisture, airborne spores, proper temperature	Organic food sources (ie: soil), moisture, spores, proper temperature (Between 4C and 38C)		
Where Does It Grow?	Nationwide in high humidity areas	High humidity, heavy shade, any exposure. Heavy and/or low tree coverage helps growth.		
Typical Roof Exposure?	Mainly North facing, but can occur on all exposures.	Any exposure. Heavy and/or low tree coverage aids growth.		
Impact on Roof?	Aesthetics Only	Aesthetics, poor drainage, slippery, potential to lift shingles, possible premature deterioration.		
Are Algae Resistant Shingles Effective?	Yes	No, may inhibit growth in early stages only, will not prevent growth entirely.		
How Do You Remove It & Inhibit Growth?	Wash the roof with Anti-Algae Solution	1. Remove large clumps and bulk of growth 2. Wash roof with Anti-Algae Solution		

Algae: Fact or Fiction?	
Fact:	Algae can spread from one infested roof to another via the release of airborne spores. As more homes are built closer together, Gloeocapsa Magma algae has been able to spread rapidly.
Fact:	Algae is well adapted to extreme conditions (such as heat, long dry spells, UV rays, heavy rain, intense cold, thick snow, and high winds).
Fact:	The dark colour of algae is a pigmented protective sheath that encapsulates each cell to protect it from the sun's UV rays
Fact:	Copper and Zinc can both inhibit algae growth. And Copper is 10 times more effective against algae than zinc.
Fact:	Dew is the dominant source of water for algae
Fact:	Algae can go for long periods of time without water, is unaffected by heat, and is dormant throughout the winter. Algae secretes a material that adheres them firmly to the shingle surface, so can be very difficult to remove.
Fiction:	Algae is killed immediately by copper. <i>FACT: Algae cells are poisoned over time</i>
Fiction:	Algae is a fungus. <i>FACT: Algae belongs to the Cyanobacteria branch in the Eubacteria family and is not a fungus.</i>
Fiction:	Installing a copper ridge or hip shingle on an existing roof may overcome an existing colony of algae. <i>FACT: Copper has not been proven to completely kill existing algae</i>