Recommended guidelines to insure your new metal roof provides years of trouble free service and maintains its appearance.

As an owner, you have invested a large portion of your time and financial resources into selecting a metal roof. With this large investment comes the added responsibility of making sure that you and those you may employ maintain the roof in a manner that will provide you with years of protection. All roofs, metal or shingle, require periodic maintenance. Obviously, an expert should perform any complex repair or addition; however, there are certain items that any owner can perform in order to maintain his roof in excellent condition.

PERSONAL SAFETY

Safety is the top priority for Coastal Metal Service and for you, the owner. Walking on any roof can be dangerous. Always use some method of fall protection that is approved by OSHA and any regulatory agency responsible for your building. Failure to provide the required safety equipment can result in serious injury or death. In addition, you may be subject to monetary fines for noncompliance. Always use extreme caution when working on any roof pitch. Be especially aware of steep slopes, near all edges and any wet, icy, or snow covered roof. It is your responsibility as an owner or employer to make sure that your maintenance personnel is adequately trained in safety procedures and that all safety equipment is in proper working condition.

During the roof inspection, remember to take the following precautions:

- 1. Use fall protection and all required safety equipment.
- 2. Never walk on eave or rake flashings, gutters, hip or ridge flashings.
- 3. Never walk on any skylight or fiberglass type panel. These items are not designed for the weight of a person.

ROOF MAINTENANCE

In order to provide years of trouble free service the owner should perform regular inspections for their roof. These inspections should meet the following criteria:

- 1. Inspect your roof system at least bi-annually.
- 2. The roof system in place on the owner's building is designed for years of protection. However, no roof is "maintenance free". All roof systems are exposed to severe weather and require periodic inspections and maintenance. To maintain your roof in a serviceable manner, Coastal Metal Service suggests that you establish a regular maintenance program.

Regularly scheduled maintenance is recommended and your roof should be inspected after any of the following:

- 1. Fire, vandalism, or damage from any adjacent roof area.
- 2. Severe weather, such as high winds, hail, heavy rain, ice or snowstorms. There are certain items to check after each of these weather conditions. Following high winds, check for debris from other structures or trees, look for loose flashings, roof sheets, fasteners, or punctures from falling objects. After a hailstorm, inspect the roof for punctures, damaged or loose flashings and loose fasteners. Following unusually heavy rains, check roof for clogged gutters or any "ponding" water. All curbs, roof penetrations, and special trim or flashing conditions should be thoroughly inspected to insure that water is not trapped or ponding around these areas. After heavy snow or ice storms, check all pipe protrusions, vents, and stacks for damage from sliding ice and snow. In general, "walk the roof" looking for loose or missing fasteners or anything out of the ordinary.
- 3. Access by other individuals for any reason. Untrained individuals can and do cause damage to roof systems, mostly it is unintentional, but just as damaging. Inspect the roof looking for any chemical or solvent spills, scratches in the finish of the panel, bent or depressed panel areas from excessive walking, or punctures from dropped tools or equipment. Clean off any debris or scrap material left behind from the workers. Never allow "hot saws", cutting torches, or welding equipment to be used on unprotected roof panels. Require all workers to immediately sweep, vacuum, or otherwise clean drill shavings, wire scraps, and all metal scraps from the roof surface. When possible, establish a "cutting and drilling" area to avoid tracking the shavings and scrap all over the roof. Should it be necessary to use mortar or concrete on the roof panels, the panels must be protected to avoid any chemical reaction from the mortar or concrete. Should these items be exposed to the roof, they must be immediately cleaned from the affected panels by flushing and scrubbing with clean water. Should solvents or chemicals be spilled on the panels, immediately clean with a mild detergent and flush with clean water.

PROTECTING YOUR INVESTMENT

Keep all foot traffic to a minimum. Only walk on the roof when absolutely required. If heavy foot traffic is anticipated, install properly designed and installed "walkways". Heavy and excessive foot traffic will cause ponding on low slope roofs, particularly at the eave and at all endlaps. NEVER walk or step on the panel ribs. Walk only in the flat of the panel. Always attempt to stay near a roof support member when walking the roof. The roof system was designed to drain water. It is imperative that the roof performs this important function properly. Avoid the following items that could hinder proper water drainage.

- 1. Never allow structures to be installed on the roof that will cause water to be trapped or to pond.
- 2. Never allow debris to collect on the roof or in the gutter that will prevent water from quickly draining from the roof.
- 3. Never allow wood blocking to be used for equipment supports, as this will block the flow of water. In addition, chemically treated wood contains salts or copper sulfates and will eat through the roof.
- 4. Never allow water from one roof to fall freely onto a lower roof.
- 5. Never allow air conditioning units condensate to drain onto the roof. Condensate contains dissolved copper and will cause galvanic corrosion. Always specify PVC pipe for drainpipes on HVAC units.
- 6. Never allow anything to collect or trap water between that object and the roof panel, as this will cause corrosion and panel failure. In heavy snow and ice areas, the owner should pay particular attention to his roof following storms. Excessive snow should be removed immediately to prevent damage and ice damming. Never use mechanical means to remove snow. Do not use metal tools to remove snow or ice. Exercise extreme caution around all pipes, stacks and vents. Always be aware of the position of skylights. Remember, skylights will not support the weight of an individual.

As mentioned elsewhere in this document, dissimilar metals and certain chemicals can be extremely harmful to your roof. Never allow metals such as copper, lead or graphite to contact your roof. Failure to protect your roof from these metals will cause your roof to deteriorate and is not covered by the finish warranty. Areas most likely to have this contact include lead hats for plumbing vents, copper lightening rods, copper trim, existing copper gutters allowed to drain onto your new roof, and as previously stated HVAC condensate. Proper maintenance of your roof coating is very important to maintain the new appearance of the coating. Black smudges on bare Galvalume are very difficult to remove. Formula 409 is marginally effective at removing them. Avoid wearing black-soled shoes that mark when walking on the roof. Note, no product will remove all of the mark once it is on the panel. Harsh chemicals or solvents may damage the panel finish and the panel itself. Rust is a common problem that can occur on any metal surface. The use of Soft Scrub is marginally effective at removing minor rust stains. Should the rust persist, contact the manufacturer for a consultation on the cause of the problem.

MAINTENANCE GUIDELINES

Do:

- Regularly inspect your roof.
- If you have an exposed fastener system, look for screws that have backed out and tighten them.
- Always walk in the panel flat and near the roof panel supports
- Remove all debris from the roof and the gutter to allow proper water drainage.
- Inspect roof for damage after heavy storms.
- Wash the roof with a power washer and mild detergent every 3 years to clean and maintain the appearance of your roof. If you live in a coastal region you must wash the roof annually with fresh water to clean any salt accumulations off your roof and trim.

Don't:

- Neglect your roof
- Stand or walk on high ribs or unsupported panels or trim
- Let storm debris or other debris collect on the roof
- Let storm damage go undetected and risk additional damage to the roof and the building contents
- Allow metal tools to be used on the roof for snow and ice removal
- Use any roof coatings, butyl caulk, or silicone caulk, not approved by the manufacturer on the roof
- Allow minor modifications or additions, such as TV dishes, to be installed and assume they will not cause a problem
- Never use zinc plated or carbon steel fasteners
- Allow rust to continue to appear without determining the cause