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OVERVIEW

Due to its constant exposure to heat, cold, ultraviolet radiation, rain, snow, hail, high winds and/or mechanical damage, a roof can be the most vulnerable component of a building's exterior. Despite these negative effects, long-term performance can be enhanced, and major roof problems avoided, through correct design, quality materials, proper installation procedures and workmanship, as well as a comprehensive roof maintenance program. The cost of a comprehensive maintenance program is minimal compared to the cost of repairing and/or removing and replacing a damaged roof.

The roof is a critical asset in the overall building envelope, and should be treated as such. Identifying and correcting potential problems early is paramount to ensuring that small problems do not become major issues. It is also essential in maintaining the integrity of the roof, protecting the building's contents, and avoiding interruption of the building’s intended function. A thorough and consistent maintenance schedule will not only extend the life of the roof and lower life cycle and replacement costs, but will help protect other building components as well.
GENERAL

Following is a list of general care and maintenance recommendations that will help achieve maximum performance of Duro-Shield™ products.

- **Proper drainage**
  - Minimize standing water on the roof. Keep the roof surface clean from leaves, pine needles, twigs, paper, accumulated dirt and other debris, which tend to accumulate at, and clog drains. Cut back trees or branches growing too close to the roof. Ponding water will increase the probability of moisture entering the structure in the event of a puncture or other mechanical damage to the Duro-Shield products.

- **Building exterior**
  - Check for settlement or movement. Cracks in the walls are a warning of possible cracks in the roof substrate and flashing. Ensure that overhangs, cornices, fascia, and edging are in good condition.

- **Avoid damage to Duro-Shield products by limiting exposure to any of the following:**
  - Liquids containing petroleum products
  - Solvents
  - Grease used for lubricating rooftop units or from restaurant vents
  - Oils (new or old) used for air conditioning or compressor units
  - Kitchen waste or other animal fats
  - Chemicals not found in nature

- **Catch pans**
  - May be used to protect Duro-Shield products from exposure to grease, chemicals, and other materials. Prolonged exposure to incompatible materials can cause possible degradation of Duro-Shield products if spills are not removed in a timely manner.

- **Unprotected traffic areas**
  - Additional measures must be taken to avoid damage of Duro-Shield products from heavy foot traffic. See options below and/or contact Duro-Last® for recommendations where heavy foot traffic is expected.

- **Snow removal**
  - Use plastic shovels and be careful not to damage Duro-Shield products. Snow blowers, picks, axes and shovels with sharp edges must not be used on the roof.

- **Foreign debris**
  - Remove glass, bolts, nails, screws, metal shavings, leaves, branches and any other materials that may cause punctures or cuts to Duro-Shield products.
• **Roof access**
  o Most roof damage is caused by individuals that are not authorized to access the roof, or by individuals that are not aware of the damage that can be caused when proper precautionary procedures are not followed. Roof access should be strictly limited to authorized personnel and outside personnel should be informed as to the precautions necessary when accessing the roof. Keep and maintain a log of all visitors and maintenance personnel accessing the roof.

• **Maintenance personnel**
  o Warn against dropping tools and equipment on Duro-Shield products. When servicing the rooftop HVAC units, antennas, solar panels, satellite dishes, etc., care should be taken when placing tools, metal doors, lids, pans, or sharp objects on Duro-Shield products. When moving roof-mounted units or equipment over Duro-Shield products, avoid damage by placing smooth plywood over Duro-Shield products prior to moving any equipment. Plywood shall be removed once all roof maintenance has been completed.

• **Repair of damage or alterations**
  o The building owner is responsible for damage or alterations of Duro-Shield products. The building owner is also responsible for ensuring that any such damage is properly repaired by either the original contractor of record or an approved Duro-Last contractor. If timely repairs are not made to rectify mechanical damage or other misuse of Duro-Shield products, this can result in the need for major repairs or replacement of Duro-Shield products at the owner’s sole expense.
INSPECTIONS AND REPAIRS

**CAUTION:** Duro-Shield products may be slippery when wet. Exercise caution when walking on Duro-Shield products during or after a rain shower, or if moisture is present in the form of dew, frost or ice. Pay attention while walking on light-colored surfaces as ice or frost build-up may not be as visible as on a dark surface.

**SEMI-ANNUAL INSPECTIONS**

- At least two visual inspections should be made every year. Ideally, inspections should take place in the spring to check on damage that may have occurred in the winter, so repairs can be scheduled during the fair weather, summer months. The second inspection should be in the fall to be sure that the roof is in good condition for the upcoming winter months. Inspection should also be made after any other occurrences that might affect the roof. Example: storm, hail or high wind events, construction activities, fires, etc.

- All components of the roof should be closely inspected and a record made of any signs of deterioration, unusual traffic patterns, poor drainage, accumulated debris, displacement or loss of ballast, or other conditions.

Please note that routine visual inspections are good roofing practice. They are not covered under the terms of your Duro-Shield Warranty.

**MINOR REPAIRS**

- Areas found to need minor repairs (e.g., small punctures and tears) during the inspection may be repaired with Duro-Shield Brush-Grade Mastic or Duro-Last Duro-Caulk® Advanced. More extensive repairs may be treated with Duro-Shield roof coatings. For project-specific recommendations, please contact the Duro-Last Quality Assurance Department.

**EMERGENCY REPAIRS**

- If emergency repairs are required, take immediate action to prevent water from entering into Duro-Shield products and building interior by utilizing EverSeal® Roof Repair Tape, EternaBond® RoofSeal, urethane-based caulk or similar products. Please notify the original contractor of record or an approved Duro-Last contractor of the repair as soon as possible, preferably no later than the next working day. Emergency repairs must be reasonably controlled so as not to significantly increase the scope of permanent repairs.

**NOTE:** These maintenance and inspection procedures are provided for guideline use only. The approved Duro-Last contractor or a professional roof consultant may provide a more detailed maintenance program. Maintain records of roof damage and maintenance inspections for each building roof.