

TECHNICAL BULLETIN: 15-01 REVISED 23-03

Cleaning IB PVC Roof Membranes

Cleaning an installed IB PVC Single Ply roof membrane is not generally needed for the longevity of the roof system but can be a part of routine Owner Maintenance to enhance a roof's appearance. Most IB membranes are manufactured with an acrylic finish that helps the roof remain cleaner for a longer period after installation. Dust and dirt may settle on the roof making it appear dirty. In humid, wet climates algae, bacteria, or other biologic growth can occur as local environmental contaminants and organic materials are deposited. Periodic cleaning will improve the appearance and assist the Owner in addressing normal exposure and weathering conditions that diminish a roof's aesthetics and desired reflectivity benefits.

Membrane cleaning during roof construction is typically unnecessary when laps and seams are completed before the close of each day, and the work area is kept clean and free of debris. Dust, tear-off debris, trafficked surface contaminants and adhesive residues should be kept from the membrane surface and particularly avoided within critical lap and seam areas. Laps which cannot be completed by the close of day or that exhibit evidence of moisture or condensation must be cleaned and prepared in accordance with the Pre-Welding procedure below prior to final welding.

Contamination of the roof surface and within seam areas can be encountered during installation, repair, and long-term maintenance of the roof. The following guidelines are intended as general recommendations for various IB membranes. Cleaning operations must be undertaken in a safe manner in compliance with applicable regulations and should avoid disruption or harm to the roofing assembly, building occupants, structure, and grounds.

CAUTION: Cleaning a roof can involve the use of cleaning compounds, detergents, solvents and / or water therefore safety must be a top priority. Roof surfaces can contain a variety of hazardous conditions and can be slippery particularly when wet. IB recommends strict adherence to safe roofing practices and following applicable governmental and OSHA guidelines including recommended Personal Protective Equipment (PPE) when necessary. Care must be taken to guard against falls or injury due to slips while using cleaning materials and equipment; and to avoid conditions that could result in fire, electrical shock, unsafe handling or personnel exposure and the uncontrolled run-off of cleaning materials.

| CLEANING IB PVC MEMBRANES: | | PROCEDURES: | MATERIALS: |
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| Light Cleaning: In-Seam / Lap Area - (Loose Dust, Dirt, Debris) | Contaminants such as loose dirt and debris located within lap can often be removed with only basic cleaning and seam preparation. | <ul style="list-style-type: none"> Remove loose contaminant, debris, or dirt from between laps. Wipe lap areas down with a wet rag (water only). Where needed, use a small amount of detergent and carefully clean with wet rags to remove all soap residues. Finish with a dry clean cloth | <ul style="list-style-type: none"> Clean water Cotton rags Powdered, plain soap detergent (e.g., Tide®) Acetone Denatured Alcohol |
| Pre-Welding: In-Seam / Lap Area - (Light Cleaning / Moisture Removal) | Laps not completed by close of day or that exhibit any evidence of moisture must be dried and prepared in accordance with this procedure before welding and completion. | <ul style="list-style-type: none"> Wipe all surfaces within lap areas with a clean dry cloth to remove any loose dirt, debris, or moisture. Follow with lightly dampened cloth using a small amount of Acetone applied to rag only. Do not use solvent outside of lap area as it can remove membrane finish or result in discoloration. Use of degreasers are NOT RECOMMENDED (e.g., Simple Green) which can leave a film residue. Where used, wipe all lap surfaces with a clean rag lightly dampened with Acetone or Denatured Alcohol. Finish with a dry clean cloth and allow to completely dry | <ul style="list-style-type: none"> Clean water Cotton rags Acetone Denatured Alcohol |
| General Surface Cleaning: Roof Maintenance - (Dirt, Stains, Light Algae) | Solvents and harsh cleaning compounds are NOT RECOMMENDED and should not be used for general cleaning of the roof membrane surface. Solvents may remove membrane finishes and result in discoloration or damage. | <ul style="list-style-type: none"> Sweep up and remove loose dirt, debris, and contaminants. Where heavy dirt and deposits exist use a mild soap detergent or cleaning compound with soft bristle brush or push broom. Follow manufacturer directions for prepared cleaners such as IB Roof Cleaner Concentrate. Fully rinse roof surface with a garden hose equipped with a spray nozzle to remove cleaning detergents and residue. Avoid damage to roof membrane and flashings from use of high-pressure power washers. Contact IB Technical Services for information on cleaning compounds and refer to the published IB Chemical Resistance Chart for additional information. IB Roof Systems assumes no responsibility for damage resulting from efforts related to cleaning operations. | <ul style="list-style-type: none"> Clean water Cotton rags Soft bristle broom/brush Powdered, plain soap detergent (e.g. Tide®) IB Roof Cleaner Concentrate |

| CLEANING IB PVC MEMBRANES: | | PROCEDURES: | MATERIALS: |
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| Heavy Cleaning: In-Seam / Lap and General Surface Areas - (Bitumen, Acids, Caustics, Oils) | <p>Contaminants such as asphalt, adhesives, primers, sealants, and similar materials require immediate removal before they set up, cure or dry in place.</p> <p>Certain contaminants can penetrate the membrane, become irremovable after drying, or require complete removal due to incompatibility. Contact IB Technical Services for membrane exposures to acids, caustics, refrigerant oils, masonry cleaners, solvents / fuels, and similar compounds.</p> | <ul style="list-style-type: none"> • Wipe-up immediately with a clean dry rag. • Depending on contaminant type: <ul style="list-style-type: none"> • Clean the remaining deposit with water and a mild detergent. • Use a light wipe of Acetone or Denatured Alcohol on heavier deposit. • Remove asphalt with Mineral Spirits; apply a small amount to a clean rag and dab or carefully wipe to remove deposit. Do not pour on membrane; use sparingly and avoid spreading contaminant. • Follow with a thorough cleaning to remove all residues using a clean rag lightly dampened with Acetone or MEK. • Change or turn rags frequently to ensure cleanliness, finish with a dry clean cloth and allow to dry. • Areas which cannot be effectively cleaned or that adversely affect welding quality must be replaced. • When solvents and cleaning compounds are used in the field of roof or on exposed surfaces it can result in membrane damage, discoloration, or loss of factory finish. • Consult IBRS Chemical Resistance Chart for additional information on cleaning materials. | <ul style="list-style-type: none"> • Clean water • Cotton rags • Soft bristle broom/brush • Powdered, plain soap detergent (e.g. Tide®) • Acetone • MEK • Mineral Spirits • Denatured Alcohol |
| Membrane Repair Cleaning: (Dirt, Debris, Weathered Membrane) | <p>Existing IB membranes typically remain weldable and repairable after careful cleaning and preparation.</p> <p>Where surface cleaning and preparation of weathered or aged membrane areas do not facilitate a suitable weld, new materials may often be welded to the nonexposed underside of the existing membrane after preparation.</p> | <ul style="list-style-type: none"> • Clean existing IB membrane with clean wet rag and detergent as needed to remove dirt and other contaminants. Remove residue with clean wet rags. • Follow with lightly dampened clean cloth using a small amount of Acetone applied to • rag only to remove heavier contaminant and to prepare weld areas for seaming. • Do not pour solvent onto membrane, use sparingly, and pour a small amount onto a clean rag. Wipe the upper and lower lap surfaces changing rags frequently to ensure cleanliness. • Clean only the area needed for welding new materials to the existing and avoid use solvent outside of lap area as it can remove membrane finish or result in discoloration. • Use of degreasers are <u>NOT RECOMMENDED</u> (e.g., Simple Green®) which can leave a film residue. Where used, wipe all lap surfaces with a clean rag lightly dampened with Acetone or Denatured Alcohol. • Finish with a dry clean cloth and allow to completely dry. | <ul style="list-style-type: none"> • Clean water • Cotton rags • Soft bristle broom/brush • Powdered, plain soap detergent (e.g. Tide®) • Acetone • MEK • Denatured Alcohol |