

## IB ROOF SYSTEMS WARRANTY PROGRAM

Eligible IB PVC membranes and roof assemblies can receive an IB Roof Systems Limited Material or Total System warranty when installed by an IB Authorized Applicator in accordance with the Specifications, Construction Details and terms of the IB Warranty Program. Installations eligible to receive an IB warranty are those which IB Roof Systems, in its sole judgment, has determined to have met the terms and conditions of our warranty program.

Lifetime Residential Limited, Commercial Limited and Warranty Plus Limited Warranties may be installed by IB Authorized Applicator and must be submitted to IB within 60 days through the required Warranty Registration Form.

Total System Warranties require a completed Notice of Award form submitted for review and approval of IB Technical Services prior to start of the project.

### General Guidelines:

- NOA's should be submitted two weeks prior to beginning work to allow adequate time for review and processing.
- Projects submitted less than 10 days prior to start are subject to rejection should IB determine insufficient time or information is available for review, or for scheduling required initial inspections or project start support from IB's Field Technical Representatives.
- Acceptance or rejection of a submitted Notice of Award will be based solely upon IB Roof System's judgment as to whether a project conforms to IB requirements and is eligible to receive an IB warranty.
- Notice of Award review and approval do not guarantee warranty issuance.
- Projects eligible to receive an IB Total System Warranty must conform with the following administrative requirements:
  - o Submittal, review and approval of a Notice of Award
  - o Verification of IB Authorized Applicator status and eligibility to purchase required materials
  - o Submittal of a detailed roof plan
  - o Completion of all required Warranty Inspections
  - o Completion of all IB required punch list corrections with signed inspection form
  - o Submittal of project photos (where required)
  - o Payment in full of applicable warranty fees, re-inspection fees, product / freight invoices and finance charges for materials supplied by IB Roof Systems in conjunction with the roof assembly.
  - o Submittal of required completion date of installation

Projects eligible for warranty issuance must be located in the United States or Canada unless approved in writing in advance of start of work by an IB Technical Services Manager. Warranties issued by IB Roof Systems will be subject exclusively to and governed by United States law, the laws of the State of Oregon and applicable local and state laws within the United States.

Projects with any of the following conditions are not eligible of an issuance of IB Total System Warranty:

- Roof decks or substrates other than detailed within our current edition Specification Manual unless approved in writing by an IB Technical Services Manager
- Assemblies incorporating incompatible or non-approved materials within the roofing or building envelope
- Partial roof replacements with tie-ins unless provision is made for complete, watertight separation between the IB Roof System and existing roof assembly
- Structures or facilities unavailable for access or inspection by IB Technical personnel
- Structures or facilities outside of IB service areas
- Existing sprayed-in-place polyurethane foam insulation without full tear-off
- Structures exposing the roof to routine elevated or extreme temperature conditions beyond its intended use
- Structures exposing the roof to a known incompatible chemical agent, other contaminant or condition
- Existing roofs containing unrepaired areas of elevated moisture content

## Warranty Selection Guide

|  | <b>Good</b>  | <b>Good</b>  | <b>Better</b>   | <b>Best</b>  |
|--|--|--|---|--|
|  | <b>Lifetime Residential Limited Material</b>             | <b>Commercial Limited Material</b>                       | <b>Warranty Plus Limited</b>  | <b>Total System<sup>1</sup></b>  |
| What does the warranty cover?                    | Replacement of defectively manufactured product          | Replacement of defectively manufactured product          | Replacement of defectively manufactured product<br>Including:<br>Labor to install the replacement product | All of the warranty terms and conditions of the Warranty Plus including:<br>workmanship to install/repair a covered leak<br>with:<br>No Dollar Limit (NDL) cap to repair a covered item under the total system for the life of the warranty! |
| Covers the entire roofing system?                | 100% Membrane Only                                       | 100% Membrane Only                                       | 100% of Supplied Materials  | 100% of Supplied Materials   |
| Covers labor cost?                               | No   | No   | Yes. Limited to the cost of replacing defective material per RS Means.                                    | Yes. Covers 100% of the cost of workmanship to repair leaks under the terms of the warranty.   |
| Are single-family residential projects eligible? | Yes  | No   | Yes   | Yes  |
| Are commercial projects eligible?                | No   | Yes  | Yes   | Yes  |
| Maximum Coverage Period                          | 50 Mil: Lifetime<br>60 Mil: Lifetime<br>80 Mil: Lifetime | 50 Mil: 15 years<br>60 Mil: 20 years<br>80 Mil: 25 years | 50 Mil: 15 years<br>60 Mil: 20 years<br>80 Mil: 25 years  | 50 Mil: 15 years<br>60 Mil: 20 years<br>80 Mil: 25 years   |
| Coverage for Ponding Water                       | Yes  | Yes  | Yes   | Yes  |
| Over Burden Installation allowed?                | Yes  | Yes  | Yes   | Yes <sup>2</sup>   |
| Transferable                                     | Yes  | Yes  | Yes   | Yes  |
| Hail Coverage                                    | No   | No   | No  | Yes <sup>3</sup>   |
| Wind Coverage                                    | No   | No   | No  | Yes <sup>4</sup>   |
| 5 Year Extended Warranty                         | No   | No   | No  | Yes <sup>5</sup>   |
| Consequential Damages                            | No   | No   | No  | Yes  |
| Cost   | Contact your IB Sales Representative                     |  |   |  |

<sup>1</sup> A Notice of Award must be submitted and accepted prior to the installation. Hail, Wind, Consequential Damages and 5-Year Extended Warranty Riders may be requested for approved IB assemblies and are limited to issuance of one Warranty Rider type per project.

<sup>2</sup> Overburden installations not eligible for 5 Year Extended Warranty. See Warranty Information section for limitations on warranty transfer.

<sup>3</sup> Hail Rider available for selected polyester reinforced fully adhered IB membranes installed over adhered Gypsum or HD ISO Cover Boards. (Contact IB for eligible assemblies.)

<sup>4</sup> Wind Riders available for IB Total System Warranty installations conforming to rated IB wind assemblies, components and construction details.

<sup>5</sup> Contact IBRS Technical Services for details and additional requirements. Prior approval is required.

## Warranty Information

| <b>Lifetime Residential Limited Material Warranty</b> |   |                       |   |
|---|---|-----------------------|---|
| <b>Warranty Type</b>                                  | <b>Membrane<sup>1</sup> (Thickness)</b>                     | <b>Warranty Terms</b> | <b>Transferable Warranty Term</b>   |
| Membrane Only   | 50 Mil<br>IB PVC Single Ply<br>ChemGuard                    | Lifetime              | Remainder of 15 year term from date of original installation to new owner |
| Membrane Only   | 60 Mil<br>IB PVC Single Ply<br>IB PVC GR Class<br>ChemGuard | Lifetime              | Remainder of 20 year term from date of original installation to new owner |
| Membrane Only   | 80 Mil<br>IB PVC Single Ply<br>ChemGuard                    | Lifetime              | Remainder of 25 year term from date of original installation to new owner |

| <b>Commercial Limited Material Warranty</b> |   |                       |   |
|---|---|-----------------------|---|
| <b>Warranty Type</b>                        | <b>Membrane<sup>1</sup> (Thickness)</b>                     | <b>Warranty Terms</b> | <b>Transferable Warranty Term</b>   |
| Membrane Only                               | 50 Mil<br>IB PVC Single Ply<br>ChemGuard                    | 15 years              | Remainder of unexpired term from date of original installation to new owner |
| Membrane Only                               | 60 Mil<br>IB PVC Single Ply<br>IB PVC GR Class<br>ChemGuard | 20 years              |   |
| Membrane Only                               | 80 Mil<br>IB PVC Single Ply<br>ChemGuard                    | 25 years              |   |

| <b>Total System Warranty (No Dollar Limit, Total System Coverage)</b> |   |   |  |
|---|---|---|--|
| <b>Warranty Type</b>  | <b>Membrane<sup>1</sup> (Thickness)</b>                     | <b>Warranty Terms</b>   | <b>Transferable Warranty Term</b>  |
| Repair Covered Leaks<br>Defective Material Replacement<br>Plus Labor  | 50 Mil<br>IB PVC Single Ply<br>ChemGuard                    | 15 years  | Transferable for remainder of unexpired term from date of original installation to new owner     |
| Repair Covered Leaks<br>Defective Material Replacement<br>Plus Labor  | 60 Mil<br>IB PVC Single Ply<br>IB PVC GR Class<br>ChemGuard | 20 years  |  |
| Repair Covered Leaks<br>Defective Material Replacement<br>Plus Labor  | 80 Mil<br>IB PVC Single Ply<br>ChemGuard                    | 25 years  |  |
| Hail Coverage   | 50/60/80 Mil<br>IB PVC Single Ply<br>ChemGuard              | Coverage for original standard warranty term up to 25 years. Not eligible / does not extend to 5 Year Extended Warranty | Not eligible for issuance with other Warranty Riders or Extensions                               |
| Wind Coverage   | 50/60/80 Mil<br>IB PVC Single Ply<br>IB PVC GR Class        |   | Available for IB Fully Adhered, Mechanically Attached and select Paver Ballasted roof assemblies |

| <b>Total System Warranty (No Dollar Limit, Total System Coverage)</b> |  |   |  |
|---|--|---|--|
| <b>Warranty Type</b>  | <b>Membrane<sup>1</sup> (Thickness)</b>              | <b>Warranty Terms</b>   | <b>Transferable Warranty Term</b>  |
| Consequential Damages   | 50/60/80 Mil<br>IB PVC Single Ply<br>IB PVC GR Class | Coverage for original standard warranty term up to 25 years. Not eligible / does not extend to 5 Year Extended Warranty | Not eligible for issuance with other Warranty Riders or Extensions           |
| 5 Year Extended Warranty  | 50/60/80 Mil<br>IB PVC Single Ply                    | Available for standard 15, 20 and 25 year Total System warranties   | Not eligible for issuance on Stone Ballasted, Solar or Overburden Assemblies |

| <b>Total System Overburden Installations (Roof-Top Garden, Paver Ballasted, Photo-Voltaic, Sun Deck, etc.)</b>                    |  |   |  |
|---|--|---|--|
| <b>Overburden Type</b>  | <b>Membrane<sup>1</sup> (Thickness)</b>        | <b>Warranty Terms</b>   | <b>Transferable Warranty Term</b>  |
| Roof-Top Garden   | 50/60/80 Mil<br>IB PVC Single Ply<br>ChemGuard | Overburden assemblies may be installed over approved IB roof assemblies.  | Not Transferable / Not eligible for 5 Year Extended Warranty   |
| Concrete / Rubber Paver Ballasted   | 50/60/80 Mil<br>IB PVC Single Ply<br>ChemGuard | IB roof assembly components eligible for standard 15, 20 and 25 year warranties. Contact IB for additional requirements and information | Not Transferable / Not Eligible for 5 Year Extended Warranty   |
| Solar / Photo-Voltaic   | 50/60/80 Mil<br>IB PVC Single Ply<br>ChemGuard |   | Transferable for remainder of unexpired term from date of original installation to new owner / Not eligible for 5 Year Extended Warranty |
| Sun Deck  | 50/60/80 Mil<br>IB PVC Single Ply<br>ChemGuard |   | Not Transferable / Not eligible for 5 Year Extended Warranty   |
| <sup>1</sup> IB PVC Single Ply, IB PVC GR Class available in Smooth or Fleece-Backed. IB ChemGuard available in Smooth Back only. |  |   |  |

| <b>Additional Requirements and Information</b>  |   |
|---|---|
| Note: A completed Notice of Award form must be submitted to IB Roof Systems Technical Services Department for review and approval 10 days prior to job start on all 'Total System' Warranty projects. Submittals with inadequate time for review may not be approved. |   |
| Lifetime Residential Limited Material<br>Commercial Limited Material<br>and Warranty Plus Limited<br>Warranty Transfer  | A valid material warranty may be transferred from the original owner to a new owner after submittal of the warranty transfer form and payment of \$250.00 transfer fee to IB Roof Systems. Submittal request and payment must be sent to IB Roof Systems Warranty Services Department.  |
| Total System<br>Warranty Transfer   | A valid Total System warranty may be transferred from the original owner to a new owner after submittal of the warranty transfer form and payment of \$750.00 transfer fee to IB Roof Systems. Submittal request and payment must be sent to IB Roof Systems Warranty Services Department.<br><br>At its sole discretion, IB Roof Systems may inspect the property and require needed corrective actions prior to the warranty transfer. Any deficiencies found during the inspection will be brought to the attention of the owner and must be completed (at the owner's sole financial responsibility) within 30 days of notification to qualify for warranty transfer. |
| All Warranty Alterations (includes reprinting of warranty, change of name of property, etc.)  | All additional alterations will be subject to a \$75 administration fee.  |
| Total System<br>Re-Inspection Charges   | Re-inspections due to excessive punch list items will be subject to a minimum \$300.00 re-inspection fee.<br>Roofing contractors will be invoiced for all travel expenses related to re-inspections.  |

| <b>Additional Requirements and Information Continued</b> |  |
|--|--|
| <p>Total System<br/>warranty requirements</p>            | <p style="text-align: center;">Standard warranty requirements</p> <ul style="list-style-type: none"> <li>- A "Total System" Notice of Aware (NOA) form must be completed, submitted, approximately two weeks prior to the start of the project.</li> <li>- A roof plan showing dimensions and equipment layout is required.</li> <li>- Any change of approved quotation other than standard warranty fee schedule must be included on the NOA form.</li> <li>- The roofing contractor is responsible for advance notification and coordinating all required project meetings, start-ups, training requests and jobsite inspections with the IB Roof Systems inspector.</li> <li>- Additional inspections may be required and are subject to additional fees (see "Total System" re-inspection charges) resulting from excess punch list items, incomplete work, alterations after final, damage by other trades, and/or late submission or inaccurate information within required NOA form.</li> <li>- Request for special warranty rider coverage must be checked in the NOA form.</li> <li>- An additional minimum fee, or charge per square foot (projects greater than 100 squares), will be added to the warranty fee for Total System warranty projects requiring a warranty rider.</li> <li>- A warranty rider may not be combined with other warranty riders or extensions.</li> </ul> |
|  | <p style="text-align: center;">Wind coverage</p> <ul style="list-style-type: none"> <li>- Design pressures for the building along with all of the building information must be submitted for review.</li> <li>- Additional attachment requirements, pull tests, and rated edge metal assemblies are required in order to meet IB Wind Rider performance specifications.</li> <li>- Wind Riders (max. 120 mph straight line winds) are available for select, wind-rated IB roof assemblies. Contact IB Roof Systems for details and limitations.</li> <li>- Overburden, solar, garden roof and stone ballasted roof systems are not eligible for wind rider issuance.</li> </ul>  |
|  | <p style="text-align: center;">Hail coverage</p> <ul style="list-style-type: none"> <li>- Hail Rider (max. up to 2" diameter hail) available for selected fully-adhered IB roof membrane covers.</li> <li>- Roof system must be polyester reinforced IB PVC membrane installed over approved high-density gypsum or HD isocyanurate cover board. Installed cover board must be installed in IB roof insulation adhesive over an approved thermal insulation or substrate.</li> </ul>   |
|  | <p style="text-align: center;">Consequential damage</p> <ul style="list-style-type: none"> <li>- Available for standard installations of fully-adhered or mechanically-attached IB roof systems. Not available for overburden, solar, garden or ballasted assemblies.</li> </ul>   |
|  | <p style="text-align: center;">5-Year Extended Warranty</p> <ul style="list-style-type: none"> <li>- Limited to standard installations of fully-adhered or mechanically-attached polyester reinforced IB roof membrane assemblies. Not available for overburden, solar, or stone ballasted roof systems. Contact IBRS Technical Services for requirements.</li> </ul>  |
| <p>Total System Warranty Issuance</p>                    | <ul style="list-style-type: none"> <li>- A signed and dated Notice of Completion (located at the top right corner of the NOA form) must be received by IB Roof Systems. Photos of all required corrective actions along with a signed and dated 'Final Inspection must be submitted to IB prior to warranty issuance.</li> <li>- Payment in full must be received by IB Roof Systems for all invoices and money owed on materials/equipment supplied, applicable warranty charges, and inspection / re-inspection fees.</li> </ul>   |

**Additional Requirements and Information Continued**

Total System Warranty Issuance

- IB Roof Systems only inspects Total System Warranted projects. Warranty inspections are conducted solely for IB Roof Systems use and benefit in the administration of our warranty program and are provided to our IB Authorized Roofing Contractors on Total System warranty installations. No other party may assume, act or rely upon IB inspection as a substitute for their Quality Assurance program or obligations. Contractors may at their discretion, provide or request IB Roof Systems forward copies of inspection reports to other parties. IB additionally reserves the right to distribute inspection reports or warranty information to the building owner or other parties as we determine appropriate or as directed by our legal counsel. Requests for Inspection Report copies are typically forwarded to the IB Authorized Contractor for handling.
- IB Roof Systems ChemGuard chemical resistant membrane and accessories must be used on restaurants or similar projects that have chemical discharge or exposure. Refer to IB Roof Systems published current Chemical Resistance Chart for additional information.
- A dedicated power supply and automatic welding equipment (such as a Leister Varimat 220v automatic welder) must be used whenever applicable on any IB Roof Systems roof system.
- IB Roof Systems published warranty fees include a minimum fee per project for Total System warranted installations.

## **Owner's Roof Maintenance Guide**

### **Protecting Your Investment in an IB Roof System**

Congratulations on your choice of installing an IB Roof Systems Membrane for your application. IB Roof Systems is the best solution for many flat or low-pitched residential and commercial roofing projects and is backed by a leader and veteran in the roofing industry.

With all of our roofing systems, low maintenance was very high on our priority list. Properly installed, IB PVC roofing requires very little in the way of maintenance other than industry-recommended seasonal inspection and general housekeeping / preventative owner care. While this is a key performance benefit of IB membranes versus other types of roofing products, it is important to recognize that modern roof assemblies are made up of many other components and products beyond the roof membrane material. Roofs are only one part of the building envelope and are affected by the performance of other materials, fixtures and equipment present on the roof. Your roof is a major investment in your property and there are simple, inexpensive routine care and maintenance items that, when performed, will allow you to enjoy all of its benefits and have that investment perform to its potential.

Roof installations covered by IB Roof Systems Limited Material and Total System warranties include coverage for the life of the warranty against leaks or loss of water-tightness resulting from defects per their terms and conditions. IB Lifetime Residential Limited, Commercial Limited, and Warranty Plus Limited Material warranties provide coverage against leaks resulting from manufacturing defects in the IB roof membrane. IB Total System warranties cover both material and installation defects in the IB materials as the IB Authorized Applicator is responsible for workmanship and installation defects for the first two years of the warranty period. Upon expiration of this contractor warranty term, the IB Roof Systems Total System warranty covers both material defects and leaks that result from installation deficiencies in the application of the IB roof membrane material for the remaining warranty period.

It will be of benefit for you as the owner to develop a routine roof observation and maintenance program, which can help you avoid problems that could result in costly repairs to your building. The IB Roof Systems membrane installed on your roof is designed to give you excellent performance for years to come. Other building components such as gutters and drains, exterior cladding, roof-mounted equipment, metal work and overburden materials do need routine inspection and maintenance to ensure best performance and protect your roofing investment.

If a leak appears, contact your IB Authorized Applicator and notify IB Roof Systems immediately at 800-426-1626. The terms of your IB Roof Systems warranty requires you to call or report a leak to IB Technical Services at the number above within 5 calendar days of discovering a leak, and to provide written notice within 14 days of the leak occurrence. Notification to the contractor does not constitute notification to IB Roof Systems.

**NOTE:** IB recommends that a building owner first investigates or has inspected any reported or observed leak by an IB Authorized Applicator or trained building maintenance personnel. Leak investigations are the owner's responsibility and could result in an inspection, repair or service call invoice from IB Roof Systems or the IB Authorized Applicator should leaks be determined as not attributed to the IB single-ply membrane or a condition covered by the IB warranty. An examination of the roof area and associated building components / equipment near the area may be helpful in avoiding unnecessary charges for non roof membrane-related moisture entry such as leaks resulting from maintenance items, rooftop equipment, drain lines, plumbing or HVAC leaks.

In some circumstances, emergency repairs may be needed to prevent accelerated building damage until a full inspection and investigation of a leak can be conducted. Should this occur, a building owner may make reasonable temporary repairs at their sole expense and notify IB Roof Systems the next business day. Emergency repairs must be reasonably controlled and completed with methods and materials compatible with the IB roof membrane so as, in the sole judgement of IB Roof Systems, not to significantly increase the scope or cost of authorized warranty repairs.

## A Maintenance Program

### Safety Measures

It is the responsibility of the building owner and contractor to protect persons on the roof. OSHA and local safety agencies should be consulted for guidelines on how this should be accomplished. Roof repair can be dangerous, and every precaution should be taken to protect these persons.

Elements of a good Owner's Maintenance Program will vary according to many factors including the size, location, occupancy, use and design of an installed roof assembly. The complexity of any given roof application and variety of other building components integrated into it must be considered in developing an effective approach to maintenance activities. Typical maintenance programs include inspection and preventative care in the following general areas:

- a schedule of periodic / seasonal roof maintenance inspections;
- roof access and repair logs;
- inspection of sealants and caulks;
- drainage;
- parapet walls, copings and metal work;
- building envelope (cladding, fenestration, interior/exterior walls, ceilings, rooftop structures)
- roof tie-ins and expansion joints;
- HVAC units and rooftop equipment;
- general appearance; and
- emergency repair plan and materials.

### Inspections

Scheduling regular inspections and assigning them to the right personnel are the first things needed to organize an Owner's Maintenance Program. Visual roof inspections and minor preventative roof maintenance are recommended twice yearly; in the fall before winter weather arrives and inclement weather prevents roof access or correction of minor problems, and again in early spring to assess any damage incurred during winter and before arrival of rainy seasons and increased storm activity. To correct minor problems and damage to the roof before they become a costly repair, additional inspections should occur after every extreme or unusual storm, fires, building damage or additions to the building, significant maintenance work or repairs involving access to or traffic on the roof.

### Roof Access and Repair Logs

A roof access log should be maintained to record and manage the activities of other trades and service personnel working on the roof. Any work being conducted such as window washing, equipment or exterior building maintenance, routine service calls, additions or other construction activities involving access to the roof should be logged consistently. Roof traffic and damage from other trades is a common source of roof leaks. These individuals or companies are liable for any damages to your roofing system.

It will also benefit commercial and multi-tenant facilities to have maintenance personnel maintain a repair log with both a roof plan and floorplan pinpointing the locations of observed roof leaks, date of occurrence, general weather conditions, record of notification and inspection dates. This information should be reviewed prior to regular seasonal inspections and will be helpful during investigations of any leak reports or problems.

### Sealants

On almost every roof, there is a need to periodically maintain and reseal joints, flashings and protrusions with caulking or sealants. Caulking and sealants are considered owner maintenance items and will not last the life of the roofing system without periodic care. These areas need to be inspected and resealed if necessary with an IB-approved sealant. Review metal work, membrane and flashing terminations, penetrations and other areas where sealants and caulks are present to ensure there are no open cracks or separations allowing water penetration to occur. Deteriorated or



questionable areas should be proactively resealed to avoid the potential for moisture entry.

## **Drainage**

Unrestricted, properly operating drainage outlets and adequate roof drainage on any roof are critical. Your IB roof membrane is designed to resist small puddles and areas of ponded water. However, the weight of retained water can adversely affect your building's health and can, in severe cases, result in loads on the roof exceeding a building's structural design capacity. Ponded areas can also act as a reservoir and significantly worsen moisture infiltration and damage from leaks should they occur; can collect contaminants and support biologic growth; and can significantly reduce roof membrane reflectivity, potentially costing energy savings. Leaks can occur when water levels reach heights above a roof assembly's terminations and flashing heights such as at curbs, walls, equipment penetrations and vents.

Routine inspection and cleaning of drains, scuppers, outlets and gutter systems are essential to maintaining adequate roof drainage and unobstructed pathways for water to be removed from the roof. Inspect drains and outlets frequently as part of regularly scheduled maintenance inspections and during seasonal changes when leaves, ice or snow loads, or other debris may be present.

## **Parapet Walls, Copings and Metal Work**

Parapet walls need to be checked for condition of exposed cladding, deterioration of masonry or concrete surfaces, and water-tightness of installed coping materials. Inspect and reseat all sealant joints and surfacing as needed to maintain a watertight condition. Parapets and other walls extending above the roofline should be inspected for signs of moisture entry, integrity and general condition. Leaks from condensation, moisture and air entry into or through walls can adversely affect your roofing assembly and building structure.

Counterflashings, reglets, storm collars, vent hoods and similar metal work should be reviewed for securement and water-tightness. Sheet metal work, copings, roof edge metal and miscellaneous metal flashing materials should be inspected for signs of wind damage, loss of securement, movement, damage to membrane flashings, corrosion and deteriorated caulking or sealants, as these are considered owner maintenance items. Particular attention should be paid to end joints, laps and corners where metal condition and movement may affect sealants, caulks or membrane terminations.

## **Building Envelope and Structure**

The overall building envelope and structure should be examined to determine if there have been any major visual changes. Inspect exterior surfaces for signs of deterioration, rust, moisture entry, damage from freeze/thaw or thermal exposure, exposure to contaminants and similar evidence of potential problems. These changes, changes in building occupancy or use, may affect the way your roof and building interact with each other. Cracks, open joints, deteriorated cladding or siding, unsealed laps, deteriorated sealant joints/materials at windows and fenestration units; all of these conditions can allow significant moisture and/or moisture-laden air into the building envelope.

The underside of the roof deck, attic spaces, plenums and building interior should be checked for evidence of moisture, deterioration and structural movement including settling or stress on structural and roof deck supports and components. Water stains on beams or interior walls may indicate ongoing moisture entry and should be investigated. Concrete surfaces need to be inspected for spalling and cracking. Structural defects and changes can affect the performance of your roofing system. If present, IB recommends examination by a competent party such as a structural engineer or architect to determine what corrective action may be needed.

## **Roof Tie-Ins and Expansion Joints**

Tie-ins on the roof between dissimilar roofing materials or assemblies must be inspected regularly and maintained in a watertight condition. These areas are outside the scope of coverage of an IB warranty and are the owner's responsibility to maintain. Inspect flashings, metal work, wood curbs or blocking, sealants and caulks used in these areas for evidence of stress, moisture entry or loose materials. Expansion joints should be inspected for physical damage, excessive joint movement and general condition of laps and seams. Counterflashing and metal work should be inspected and repaired if needed.

## **HVAC Units and Rooftop Equipment**

Great care is required for maintenance on rooftop air conditioning units and other equipment where sharp tools, oils, lubricants, caustic chemicals or heavy components are handled or used. Make sure that maintenance personnel avoid placing sharp and/or hazardous objects and incompatible chemicals on the roof. Metal service doors must be properly secured and not left open or loose. Remove old compressors, motors, and other debris or service materials immediately from the roof. Punctures may result from fasteners and screws left on the roof surface.

Where service work involves potential damage to the roof membrane, require service personnel to protect the roof with tarps, plywood and other compatible materials to prevent damage. Ensure air ducts are in good condition with joints and connections properly sealed against moisture. Condensate lines should be maintained in good working order to avoid leaks and back-up. Drainage pans should be inspected for signs of rust and deterioration at seams. Clean all HVAC unit drains, and make sure all panels are secure so as not to allow water penetration.

## **General Appearance**

Inspect the roof surface for signs of unusual deterioration, evidence of contaminants or excessive build-up of dirt and environmental deposits. Keeping the roof free from debris and periodic cleaning as necessary will not only help the general appearance of the roof but avoid future problems. Grease traps, vents and containment systems must be routinely maintained to avoid overflow and contaminant deposit on the roof. Avoid use of incompatible cleaning compounds and high-pressure washers. Contact IB Roof Systems for additional information on cleaning recommendations.

The field of the IB roof membrane and flashings should be checked for signs of physical damage or premature wear. Inspect all overburden materials such as solar racks, walkways and walking decks for flashing condition or signs of damage where bearing on the roof surface. Where snow removal operations have been utilized during winter months, inspect all areas for evidence of damage. Areas of previous roof repairs should be periodically re-inspected to ensure they are in good condition and remain watertight.

## **Emergency Repairs**

The building owner should keep general roof system information, warranty records, and key contact numbers handy for use when leaks occur or emergency repairs are needed. Contact information for the installing IB Authorized Applicator and IB Roof Systems should be kept available when warranty service is needed or questions arise regarding roof system maintenance. Safety during inspection and repair of a roof is critical and must be observed at all times, following all OSHA and applicable safety regulations. Extreme care must be exercised anytime access to the roof is needed or attempted. Particular care must be given to fall protection and avoidance of electrical hazards when setting ladders or working around the roof. Roof surfaces and materials can be slippery even when they appear dry. Particular care should be taken when the roof is wet or frozen.

For additional information and recommendations on implementing your own Owner Maintenance Program, refer to the IB Roof Systems Maintenance brochure available online at [www.ibroof.com](http://www.ibroof.com) or contact IB Roof Systems.