

# ***ASSA MODIFIED BITUMEN ROOFING SYSTEMS***

Projects: \_\_\_\_\_  
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## ***Specification Guide for Installation***

by:  
**Assa Caribbean Inc**

# ASSA MODIFIED BITUMEN SYSTEMS

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# ASSA MODIFIED BITUMEN SYSTEMS

## PART 1 - GENERAL

### 1.01 GENERAL DESCRIPTION

**A.** Furnish and install the **Assa** Modified Roofing Systems in accordance with the **Assa** published specifications and details. All materials, labor and equipment necessary for and incidental to, all roofing and related work as shown on the drawings and specifications contained herein must be approved in writing, manufactured and/or supplied by:

**Assa Caribbean Inc.**  
Carretera 169 Km 6.4  
Bo. Camarones Guaynabo Puerto Rico  
Tel.: 787 287-7249 Fax. 787-790-9408

**B.** Detailed drawings and dimensions contained in these specifications shall be assumed to be approximate. If work requirements at the job site disclose an alteration to the dimensions of these specifications, the contractor shall contact the **Assa** at 1-787 287-7249.

### 1.02 SPECIAL CONDITIONS

**A.** This specification is to be applied, without variation, to only those building roofs that have decking of sufficient structural integrity, capable of supporting a **Assa** Modified Roofing Systems according to the guidelines set forth herein.

**B.** All applications require review by **Assa Technical Personnel** before any modification of this specification is valid.

**C.** **Assa** Request for Warranty Form (**ASSA-WRF**), must be completed, signed by an Assa authorized roofing contractor, submitted to and approved by **Assa** before any consideration for warranty and/or the release of any materials can be authorized.

### 1.03 QUALITY ASSURANCE

**A.** **Assa** Modified Roofing Systems shall be installed only by a roofing contractor, authorized by Assa (herein after referred to as Assa) prior to bid and / or contract award.

**B.** Roofing contractor's key personnel shall have been trained by **Assa**.

**C.** **Assa** Modified Roofing Systems shall be installed in accordance with current specifications and details as amended and / or authorized by **Assa**.

**D.** There shall be no deviations from approved contract specifications or shop drawings without prior written approval by the owner/owner representative and **Assa**.

**E.** Unauthorized deviations may subject the roof system to warranty ineligibility.

**F.** Upon completion and certification by the contractor that a quality installation has been completed in accordance with the contract specifications, a quality assurance inspection of the roof system shall be performed by **Assa** for acceptance and approval of appropriate warranty.

## 1.04 JOB CONDITIONS

### A. Environmental Requirements

1. Work shall only begin when the contractor has decided to his satisfaction, that all specifications are workable as specified, and that the contractor can meet project and code requirements.
2. Do not begin work when inclement weather is forecast to occur prior to the anticipated time of completion of the work item.
3. The contractor shall be responsible for verifying the existing and forecasted weather conditions to determine when the conditions are acceptable for the roof work.
4. Roof application shall not proceed when there is moisture present in any form on the deck including but not limited to rain, dew, ice, frost or snow.
5. Do not apply roofing membrane to a frozen deck.
6. Roof application shall not proceed when using hot asphalt when the ambient air temperature is below 45°F (7.2°C).
7. The contractor shall be prepared at all times to protect any uncompleted roof work from the rapid changes in the weather. If work continues during sudden rains to protect the interior of the building, then these areas shall be subsequently removed and replaced.
8. The contractor shall observe the provisions of Section 1.09, regarding material storage and handling of the roofing products in cold weather.

**B.** Areas of the substrate where ponding water occurs shall be built up prior to the installation of the roof system. Areas where water ponds for more than 24 hours are unacceptable and will not be eligible for **Assa** Roofing Systems.

**C.** Do not remove anymore of the existing roof system than can be completely reinstalled with the new roofing system in the same day. Wherever possible, removal has to be simultaneous with penetrations sealer, in case of unexposed rains so that no leaks appear inside of the building.

**D.** Ensure that the roof deck is structurally sound to support the live and dead load requirements of the new roofing system and rigid enough to support construction traffic. Do not store or load the roof deck above its load capacity.

## 1.05 SUBMITTALS

A. The following information shall be submitted to **Assa** for review before warranty consideration or acceptance can be confirmed.

1. Complete copy of project architectural specifications or authorized applicator's proposal outlining design parameters.
2. Complete list of accessories or materials not manufactured or expressly authorized for use in **Assa** literature.
3. Dimensioned shop drawings illustrating non-**Assa** details. Details that do not conform with standard **Assa** details shall be returned with appropriate recommendations.

**B. At the time of contract award, the authorized roofing contractor shall submit to the owner/owner's Representative the following:**

1. Most recent published technical literature and specifications issued by **Assa**.
2. Sample warranty and letter from Assa, authorizing the roofing contractor.
3. Roofing Contractor's approved copy of submittal form ASSA-WRF.
4. Dimensioned shop drawings, including roof plan detailing perimeter enhancement, flashing methods, terminations and acceptance by **Assa**.
5. Written approval from **Assa** confirming any accessories submitted, not manufactured or expressly approved in Assa literature are acceptable and compatible with the proposed Assa Roofing System.
6. Material Safety Data Sheets (MSDS) relating to all products, chemicals and solvents.

#### **1.06 DELIVERY STORAGE & HANDLING**

**A.** Deliver all materials to the job site in manufacturer's original, unopened containers, with legible labels and in sufficient quantity to allow for continuity of work.

**B.** Select and operate material handling equipment in a safe manner, guarding against damage to existing construction or newly applied roofing and conforming to manufacturer's recommendations of handling and storage.

**C.** Materials, having been determined by the owner/owner's representative to be damaged, shall be immediately removed from the construction site and replaced at no cost to the owner.

#### **1.07 PERFORMANCE REQUIREMENTS**

##### **A. Safety**

1. Comply with all OSHA requirements for construction.
2. Daily site cleanup shall be performed to minimize debris and hazardous congestion.

##### **B. Protection**

1. Schedule installation sequence to limit access and utilization of the newly installed membrane for material storage, construction staging, mechanical and/or excessive foot traffic.
2. Provide proper protection on newly completed roofing.
3. Protect building walls, rooftop units, windows and other components during installation.

##### **C. Additional Precautions**

1. Daily production schedules of new roofing shall be limited to only that which can be made 100% watertight at the end of the day, including all flashing and night seals.
2. All surfaces to receive new roof system, including flashing, shall be free from all dirt, debris and be thoroughly dry.
3. Adverse weather conditions extreme temperature, high winds, high humidity and moisture, could have a detrimental effect on flashing adhesives, general production or the quality of the finished installation. Contact **Assa** for recommendations and acceptable tolerances.

4. Comply with local EPA requirements as published by Local, State and Federal authorities.
5. All construction debris shall be removed from the construction site and legally disposed of off site.

## 1.08 COORDINATION

**A.** Prior to installation of materials, a pre-roofing conference will be held with the authorized roofing contractor, Assa representative and owner/owner's representative to discuss the specified roofing system, its proper application and the expectations of all parties involved. The authorized roofing contractor and the owner/owner's representative shall notify all parties a minimum of fourteen days prior to the meeting.

**B. Assa** shall be available to make recommendations necessary to insure compliance with project specifications and shall be responsible for recommending any specification alternatives due to unforeseen job conditions.

## 1.09 GUARANTEE REQUIREMENTS

### A. Inspections

1. **Assa** Technical Personnel Representative shall inspect the completed waterproofing installation, and upon acceptance, **Assa** shall issue the specified warranty, subject to the terms and conditions of the sample warranty and contract documents.

### B. Available Warranties

**Assa offers**, for all **Assa** Modified Roofing Systems, the following warranties:

1. **Material Warranty.** This guarantee provides the building owner protection against the cost of repairing defects in the membrane only for periods of 5, 10, 12, 15, or 20 years. This warranty is offered at no cost to the owner direct by **Assa**.

2. **Labor and Material Warranty.** This guarantee provides the building owner protection against the cost of repairing leaks as a direct result of either defects in the material and workmanship involved in its installation for a period of 5, 10, 12, 15, or 20 year max. This warranty is offered at no cost to the owner direct by Assa. The Roofing Contractor must be an Authorized **Assa** Applicator to request this warranty type.

### C. Maintenance

1. Along with the issuance of the warranty, a set of instructions shall be included detailing preventative maintenance and noting a list of harmful substances which may damage the **Assa** APP Modified Roofing Systems.

## 2.00 PRODUCTS

### 2.01 RELATED MATERIALS

**A.** All products and components for the Modified Bitumen Roofing Systems shall be supplied by **Assa**.

**B.** Components other than those manufactured and / or supplied non by **Assa** shall be submitted for review, prior to ordering. Any products not specifically authorized in writing for the project by **Assa**, shall be considered unacceptable and their performance excluded from the warranty.

## 2.02 MEMBRANE MATERIALS

A. Acceptable substrates

B. Substrates which are scheduled to receive roof systems shall be smooth, dry, clean and free of sharp projections and depressions. See individual details.

**C. Approved Assa Roofing Systems.** Roofing membrane and products shall be as manufactured or supplied by Assa Caribbean Inc. as per description:

1. ASSA Roof Primer. Assa Roof Primer conforming to ASTM D41 criteria. Applied primer at 1 gallon per 100 sq. ft.
2. ASSA SBS or APP modified base sheet 2, 3, 4 or 5k M/2. Fiberglass or polyester internally reinforced and finished interior surfaces with a polyethylene film, talc or sand. Use as base in the Assa Modified Bitumen Roofing Systems. Installation will be cold adhesive, self adhesive or torch application.
3. ASSA SBS or APP modified cap sheet 4 or 5k M2. Polyester internally reinforced only and finished with mineral granules on top protection surface area and polyethylene film or sand in below surface. Installation will be cold adhesive, self adhesive or torch method. Use as top sheet in the ASSA Modified Bitumen Roofing Systems.
4. Use ASSA SBS membranes for Assa Adheso Technique cold applicate. Use ASSA APP membranes in ASSA Adheso technique only with sand finish below.

## 2.03 RELATED MATERIALS.

A. All complement material in ASSA Modified Roofing Systems shall be supply by **Assa Caribbean Inc.**

## 2.04 CANT STRIP

A. Cant Strip shall be designed to provide a smooth transition from horizontal to vertical surface or for transitions from lower to higher elevations. Cant Strip shall be made of rigid insulation board. The Cant Strips are flame resistant and easy to install. Cant Strips are not mandatory in concrete superface.

## 2.05 FLASHING MEMBRANE

A. Flashing membrane applications shall consist of a base ply and cap ply both torch applied in this systems.

B. Pre-cut all flashing membranes (base and cap) to the correct length, no more than 6' feet line. Leave a 1/2 inch in the parapet top base to weld it correctly. If metal flashing is included, extend the top flashing material 1" inches over the fascia.

C. Extended base flashing 4" inches onto field of roof from toe of cant or vertical wall. Extended cap flashing material 6" inches onto field of roof from toe of can't or vertical wall.

## 3.00 EXECUTION

### 3.01 GENERAL

**A.** The authorized roofing contractor shall be responsible for providing a suitable substrate surface for the proper installation of the ASSA Modified Bitumen Roofing System and specified components.

**B.** Application of **Assa** materials constitutes an agreement that the authorized roofing contractor has inspected and found the substrate suitable for the installation of the Modified Bitumen Roofing System.

**C.** The authorized roofing contractor shall be responsible for coordinating the installation to insure that the system remains watertight at the end of each working day.

### **3.02 SUBSTRATE PREPARATION**

- A.** The roofing contractor shall be responsible for verifying that the deck condition and/or existing roof construction is suitable for the specified installation of the ASSA Modified Bitumen Roofing System.
- B.** Examine surfaces for inadequate property, low areas that will not drain properly, water ponds, foreign material, unevenness or any other defect which would prevent the proper execution and quality application of the ASSA Modified Bitumen Roofing System as specified.
- C.** Prepared substrate shall be smooth, dry, free of debris and/or any other irregularities which would interfere with the proper installation of the APP Modified Bitumen Roofing System.
- D.** Clean all vents, pipes, conduits, tubes, walls, and stacks to bare metal. All protrusions must be properly secured to the roof deck with approved fasteners. Remove and discard all lead, pipe and drain flashing. Flash all penetrations according to approved details.
- E.** Do not proceed with any part of the application until all defects and preparation work have been corrected and complete. La superficie tiene que estar libre de filtraciones en el interior del edificio antes de la instalación del sistema.

### **3.03 MEMBRANE APPLICATION**

#### **A. Quality Control**

1. It will be the responsibility of the roofing contractor to initiate a QC program to govern all aspects of the installation of the Assa Modified Bitumen Roofing System.
2. The project foreman and or supervisor will be responsible for the daily execution of the QC program which will include but is not limited to the supervision, inspection and probing of all heat welding incorporated within the apply roofing membranes.
3. If inconsistencies in the quality of the welds are found, all work shall cease until corrective actions are taken to insure the continuity of all field and detail welding.

#### **B. General**

1. Work shall be coordinated to insure that sequencing of the installation promotes a 100% watertight installation at the end of each day.

#### **C. Installation the Membranes in the Roof.**

1. Determine the direction of surface according to the drawing details.
2. Cut all Assa base sheet membranes to a suitable length depending upon the conditions and application requirements.
3. Starting at the low points, proceed with the installation of the Assa base sheet full adhered to the Assa Primed concrete using Adheso technique, self adhesive or torch application.
4. Install the second Assa cap ply, full adhered to the membrane base sheet with Adheso technique, self adhesive, or torch application.



5. All over laps (in base and cap sheet) shall be 4" side and 6" end and must be rolled with a 3" rounded edge roller. A minimum bleed out of modified bitumen compound shall be visible at edge of the all seams. All laps shall be checked for perfect adhesion. Paint all seams edge and all obscure areas with Assa Aluminum Roof Coating.

6. All works shall be according with the better solution according with these specifications.

#### **D. Metal Flashing**

1. Install aluminum flashing .032 thicknesses where they are needed according to the contractor's specifications. Metal flashing .24 thicknesses also is acceptable.

#### **E. Roof Drains**

1. All roof drains will be in accordance with Assa roof drain details.

#### **F. Pitch Pocket and Others Protection**

1. Any pipeline or piece that on goes out of the waterproofing shall be covered with protection piece equal the specified by Assa in these specifications.

#### **G. Inspection**

1. The job foreman and/or supervisor shall initiate daily inspections of all completed work which shall include, but is not limited to the probing of all field welding with a dull pointed instrument to assure the quality of the application and insure that any equipment or operator deficiencies are immediately resolved.

2. Insure that all aspects of the installation (sheet layout, attachment, welding, flashing details, etc.) are in strict conformance with the most current Assa Roofing Systems Specifications and Details.

3. Excessive patching of field seams because of inexperienced or poor workmanship will not be accepted at time of FINAL INSPECTION FOR WARRANTY ACCEPTANCE.

4. Any deviation from pre-approved specifications and/or details requires written authorization from the **Assa** prior to application to avoid any warranty disqualification.

### **3.04 EXPANSION JOINTS**

**A.** Flash all expansion joints in accordance with authorized details. Fasten all expansion joint material according to Assa specifications. Insure the expansion material has sufficient material to expand to the widest point in expansion without causing undue stress on the expansion joint material.

**B.** If the expansion joint is a "pre-formed" system; the manufacturer, description and a drawing illustrating the method of installation must be included when the (ASSA-WRF) is submitted.

### **3.05 WALKWAYS**

**A.** Walkways pads shall be installed at staging areas for roof top equipment maintenance or areas subject to regular foot traffic as is specified by the architect. The following alternative is approved by Assa:

**1. Assa APP or SBS Polyesdter Mineral Cap Walkway Installation.** Proceed with the installation of the Mineral Cap 5k membrane heat the entire surface to the lower membrane lapping 6" ends between plies. Revise the upper surface of the lapping joints with a heated round-nosed trowel. Use Mineral cap roofing membrane in other color different at top roofing membrane installed in waterproofing. See individual details.

**2. Assa Walkway Mats.** Seamless paving made of synthetic resin or asphalt base and sand mix, seamless. See more details in Assa specifications. See individual details.

### **3.06 COMPLETION**

- A. Remove any and all debris, excess materials and scrap of any kind from the roof and surrounding premises prior to demobilization.
- B. Inspect all field welds, detailing and terminations to insure a 100% the watertight installation.

### **3.07 WARRANTY INSPECTION**

- A. Upon completion of the project, the authorized roofing contractor shall complete and submit the Assa Systems Project Completion Notice to Assa Technical Customer Services.
- B. Upon receipt of the notice of completion, a Assa Technical Representative will schedule an inspection with a representative of the authorized roofing contractor to thoroughly review the installation and verify compliance with Assa Corporation specifications.
- C. Any corrections or modifications necessary for compliance with the specifications and acceptance for warranty (punch list) will be noted on the Final Inspection for Warranty Form.
- D. Upon completion of all punch list items and final acceptance of the installation, a warranty will be issued in accordance with the Assa Corporation, pre-approved project specifications and Warranty Request Form.

These specifications were prepared by  
**Asa Caribbean Inc.**  
PMB 169 Ave. Esmeralda # 405 STE 2  
Guaynabo Puerto Rico, 00969-4457  
Phone (787) 287-7249 Fax (787) 789-3270  
[www.assapr.com](http://www.assapr.com)  
[assa@assapr.com](mailto:assa@assapr.com)

# Assa Caribbean Inc.

Carretera 169 Km 6.4 Bo. Camarones Guaynabo Puerto Rico.  
787 287-7249 Office, 787-789-3270 fax, 787-287-ASSA

## APP/SBS Modified Roofing Systems

\_\_\_\_\_  
Project Name

\_\_\_\_\_  
Date of Inspection

\_\_\_\_\_  
Project Direction

\_\_\_\_\_  
Square Footage

\_\_\_\_\_  
Roofing Contractor

## INSPECTION REPORT

Visual Observation

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments

\_\_\_\_\_

\_\_\_\_\_  
Inspector Name

\_\_\_\_\_  
Roofing Contractor

\_\_\_\_\_  
Inspector Signature