

Fully Adhered Guide

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SECTION 07 54 19 THERMOPLASTIC PVC MEMBRANE ROOFING IB ROOF SYSTEMS FULLY ADHERED PVC SINGLE PLY MEMBRANES

Part 1 GENERAL

1.0 SECTION INCLUDES

- A. IB Roof Systems Fully Adhered, (Smooth or Fleece Backed) Polyester Reinforced Thermoplastic PVC Roofing Membrane
- B. Cover Board
- C. Thermal Roof Insulation
- D. Flexible Membrane Flashings
- E. Metal Flashings
- F. IB Roof Systems Accessories

1.1 RELATED SECTIONS

- A. Section 03 30 00 Cast-In-Place Concrete
- B. Section 03 40 00 Precast Concrete
- C. Section 03 51 13 Cementitious Wood Fiber
- D. Section 03 51 16 Gypsum Concrete
- E. Section 03 52 00 Lightweight Insulating Concrete Roof Insulation
- F. Section 05 30 00 Metal Decking
- G. Section 06 10 00 Rough Carpentry
- H. Section 07 25 00 Weather Barriers
- I. Section 07 60 00 Flashing and Sheet Metal
- J. Section 07 70 00 Roof and Wall Specialties and Accessories
- K. Section 08 60 00 Roof Windows and Skylights
- L. Section 22 14 00 Facility Storm Drainage

1.2 REFERENCES

- A. American Society of Civil Engineers (ASCE):
 - 1. ASCE 7; Minimum Design Loads for Buildings and Other Structures. Revision as adopted by local code and Authority Having Jurisdiction.
- B. ASTM International (ASTM):
 - 1. ASTM C208: Standard Specification for Cellulosic Fiber Insulating Board
 - 2. ASTM C578: Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation
 - 3. ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
 - 4. ASTM C1278: Standard Specification for Fiber-Reinforced Gypsum Panel
 - 5. ASTM C1289: Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
 - 6. ASTM C1325: Standard Specification for Fiber-Mat Reinforced Cementitious Backer Units
 - 7. ASTM D4263: Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method
 - 8. ASTM D4434: Standard Specification for Poly (Vinyl Chloride) Sheet Roofing
 - 9. ASTM E96: Standard Test Methods for Water Vapor Transmission of Materials
 - 10. ASTM E108: Standard Test Methods for Fire Tests of Roof Coverings.
- C. Factory Mutual (FM Approvals / Roof Nav.):
 - 1. Factory Mutual Standard 4450: Approval Standard for Class 1 Insulated Steel Decks
 - 2. Factory Mutual Standard 4470: Approval Standard for Class 1 Roof Covers
 - 3. Factory Mutual Standard 4476: Approval Standard for Flexible Photovoltaic Modules
 - 4. Factory Mutual Standard 4481 Approval Standard for Anchors for Roof Mounted Equipment
 - 5. FM Global Property Loss Prevention Data Sheets 1-15, 1-28, 1-29, 1-49, and 1-52
- D. Underwriters Laboratories (UL):
 - 1. UL 790: Standard Test Method for Fire Tests of Roof Coverings



- E. International Code Council (ICC)
 - 1. International Building Code (IBC)
 - 2. International Residential Code (IRC)
- G. CAN / CGSB 37.54-95
- H. Single Ply Roofing Institute (SPRI):
 - 1. ANSI / SPRI / ED-1: Design Standard for Edge Systems Used with Low Slope Roofing Systems, 2019 Edition.
 - 2. ANSI / SPRI / FM4435 / ES-1: Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems, Revision as adopted by local code and AHJ, 2017 Edition.
 - 3. ANSI / SPRI / GD-1: Structural Design Standard for Gutter Systems Used with Low-Slope Roofs, 2010 Edition.
 - 4. ANSI / SPRI / GT-1: Test Standard for External Gutter Systems, 2022 Edition.
 - 5. ANSI / SPRI / WD-1: Wind Design Standard Practice for Roofing Assemblies.
- I. International Institute of Building Enclosure Consultants (IIBEC): Glossary of Roofing Terms.
- J. National Roofing Contractors Association (NRCA): Low Slope Roofing and Waterproofing Manual, 2019 Edition.
- K. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA): Architectural Sheet Metal Manual, 2012 Edition.

1.3 DESIGN CRITERIA

A.	Provide installed roofing system that remains watertight, resists specified uplift pressures and exposure to normal weathering conditions without failure. Roofing materials and accessories shall be tested and compatible
	for use within the assembly, installed in accordance with manufacturer requirements.
B.	
υ.	and authorities having jurisdiction.
\sim	Fire Resistance Performance: Class (A, B, C) external fire classification as tested in accordance with
С.	ASTM E108 or UL 790.
_	
υ.	Wind Uplift Performance: Roof system shall be designed and installed to withstand wind uplift pressures as
	calculated using ASCE 7, revision as adopted by the authorities having jurisdiction.
	1. Roofing system shall be tested by a qualified testing agency to resist the following design pressures:
	a. Zone 1'- Interior Field of Roof: psf
	b. Zone 1 – Exterior Field of Roof: psf
	c. Zone 2 – Perimeter Zone: psf
	d. Zone 3 – Corner Zone: psf
	2. Field, Perimeter and Corner areas shall be fastened or secured in accordance with IB specifications and
	details, project design, and local code requirements. Perimeter and Corner Zones shall receive
	supplemental fastening or securement where required, to meet calculated pressures in these areas in
	accordance with IB requirements and the local authority having jurisdiction.
	3. Factory Mutual Approval (FM Projects Only): Roof system shall be installed in accordance with Class 1 or
	noncombustible construction in compliance with requirements of Factory Mutual Global FM 4450 and FM
	4470.
	a. Fire Hazard Classification: Class (A, B or C)
	b. Wind Uplift Classification: FM Class or psf MDP
	c. Hail Resistance: Severe Hail (SH) or Moderate Hail (MH)
E.	Roof System Reflectivity and Thermal Performance: Provide installed roofing system that complies with the
	following thermal performance and reflectivity requirements:
	1. Provide roof assembly to achieve a minimum total R-value of
	2. Roof membrane shall be tested in accordance with ANSI / CRRC-1 Standard and comply with the following
	minimum reflectivity and emissivity requirements:
	a. Minimum Initial Reflectance:
	b. Minimum 3-year Aged Reflectance:
	c. Initial SRI (Solar Reflectance Index):
	d. Energy Star: Initial solar reflectance of 0.65 with 3-year aged reflectance of .50 or greater.
	e. Roof system shall comply with the requirements of California Title 24.
	o. Root dystem shan compry with the requirements of Camernia Title 27.

1.4 ENVIRONMENTAL AND GREEN CONSTRUCTION DESIGN REQUIREMENTS

A. Roof system shall comply with the following Environmental and Sustainable Design requirements:



1.	United States Green Building Council LEED Certification Program
	a. Roof system shall be installed to achieve the following required LEED credits:
2.	Green Building Initiative Green Globes Certification
	a. Roof system shall be installed to achieve the following Green Globes Rating System Certification
	points:
3.	Carbon Neutral Recovery Certification
	a. Roof membrane shall be documented to achieve Carbon Neutrality within the specified warranty period
	after installation:
	1. 80-mil White: years
	2. 60-mil White: years
	3. 50-mil White: years
	b. Roof membrane shall be documented to avoid carbon emissions within the specified warranty period
	after installation for the specified period:
	1. 80-mil White: years
	2. 60-mil White: years
	3. 50-mil White: years

1.5 SUBMITTALS

- A. Submit product data, samples, shop drawings and installer certification under provisions of Division 1 General Requirements: Section 01 30 00.
- B. Product Data: Submit product data sheets indicating membrane materials, base flashing, insulation, separator/thermal insulation, accessories and manufacturer's installation instructions and details including:
 - 1. Product Data Sheets
 - 2. Material Safety Data Sheets
 - 3. Roof assembly installation instructions and recommendations
 - 4. Required storage and handling recommendations
 - 5. Sample of Manufacturer's Warranty
 - 6. Manufacturer recommended Maintenance Program Data
 - 7. Submit certification from manufacturer of membrane roofing system certifying the installer is authorized by the manufacturer for installation of the specified roofing system and eligible to obtain the required Manufacturer's Warranty.
- C. Detail Drawings:
 - 1. Provide roof system elevation, section, plan, attachment, and construction detail drawings showing methods, components, flashing conditions, and location of work on the project.
 - 2. Submit shop drawings of tapered insulation system for approval; show direction and amount of slope, cricket locations, lengths, and details.
- D. Verification Samples: Submit a quantity of _____ samples for each product specified. Submit 4" x 6" (10.2 cm x 15.2 cm) PVC membrane samples in the specified color for approval.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum 20 years documented experience.
- B. Installer Qualifications:
 - 1. Company specializing in the installation of thermoplastic roofing and all products included in this section with minimum five years documented experience.
 - 2. The installer must be authorized by the manufacturer and eligible to provide the required Manufacturer's Warranty.
 - 3. Installer must provide an adequate number of experienced workers, trained in jobsite safety practices and skilled in the use of hot-air welding equipment and the installation of materials and flashings used in the construction of the roofing assembly.
 - 4. Installer shall always provide a project supervisor on the job while work is in progress.
- C. Application of Roofing: Work of this section shall conform to contract documents and manufacturer specifications. No deviations shall be made from this specification without the approval of the designer of record. Deviations from published manufacturer requirements require review and approval of the designer of record and written approval from the manufacturer on manufacturer's letterhead, signed by an authorized technical manager of the company. Where discrepancies exist, the Installer shall promptly notify the design professional, project engineer or owner for resolution prior to commencing work.



- D. Materials: Provide only top-quality materials from a manufacturer complying with specification requirements. All materials shall be provided by the primary roofing system manufacturer or approved for use in conjunction with installation of the roofing assembly.
- E. Manufacturers Final Inspection: Manufacturer's technical representative shall conduct a final inspection upon completion of projects requiring a Manufacturer's Total System Warranty covering workmanship and material to determine if the assembly is in compliance with manufacturer requirements for issuance of the warranty. A punch list of defective work and conditions requiring repair shall be provided to the installer for correction.

1.7 PRECONSTRUCTION CONFERENCE

A. Preconstruction Conference: A pre-roofing conference will be held in accordance with the contract documents at least one week prior to initiation of roofing work. Manufacturer representative, supervisor for roofing contractor, estimator for roofing contractor, architect, owner representative, sheet metal contractor, general contractor and other required parties should be present to discuss the execution of the work.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Materials and equipment stored on the roof must be properly staged and supported to avoid damage and / or permanent deflection of the deck. Spread loads of roofing materials on roof structures to avoid damage to existing structure. Use protective plywood as required. No material storage or construction traffic shall be allowed over the new roofing unless properly protected to prevent damage and contamination on the finished roofing.
- B. Follow manufacturer's recommendations for environmental conditions and product storage. Bonding adhesives shall be stored at temperatures above 40°F (4.4°C). Materials shall be stored and maintained within the manufacturer's published temperature ranges.
- C. Storage and disposal of hazardous materials shall comply with the requirements of local authorities having jurisdiction.

1.9 PROJECT CONDITIONS

- A. Precautions: Install roofing only when adequate application temperatures exist to maintain a satisfactory roofing system application. Apply no insulation or membrane adhesives to the substrate or roofing membranes when deck surface temperatures are less than the recommended application temperature range stated on the products labels, or printed literature. Install no roofing material when water in any form is present on roof deck or substrate surface, or when materials are damp or wet. Proceed with roofing work only when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.
- B. Temporary Roofing: Install watertight seals to protect work when adverse job conditions or weather conditions prevent permanent roofing and associated work from being installed in accordance with project requirements. Consult the designer of record and the primary roofing manufacturer regarding installation and removal of temporary roofing.
- C. Install new roofing to be complete and watertight by the close of each day's work.
- D. Avoid exposure of combustible materials to ignition source and follow all safety and handling cautions, warnings, and recommendations for safe handling of materials. Material Safety Data Sheets shall be maintained at the jobsite, during transport and storage at all times.
- E. Moisture: Do not proceed with installation where potential exists for condensation or uncontrolled moisture migration into the roof system from construction-related moisture or installation over moisture bearing substrates or interiors without adequate ventilation and moisture control.
- F. All work shall be performed in accordance with applicable federal, state, and local requirements, codes, and safe work practices. Use of roof assembly adhesives, sealants, caulks, and related accessory materials shall conform to the requirements and VOC limits of the Authority Having Jurisdiction.

1.10 WARRANTY

- A. Contractor Warranty: Contractor shall warrant roofing assembly components, accessories, and associated work of this section against leaks or defective workmanship from date of substantial completion.
 - 1. Term of Warranty _____ years [two, five]
- B. Manufacturer's Limited Material Warranty: Submit executed copy of roofing manufacturer's (Commercial or Residential Limited Material, Warranty Plus Limited, Lifetime Residential Limited Material) warranty on materials from date of substantial completion.



Term or warranty	_years [ten, fifteen, twenty, twenty-five]
anufacturer's Total System	Warranty: Submit executed copy of roofing manufacturer's Total System Warranty
gainst leaks due to defectiv	ve materials or workmanship according to its standard published coverage, terms
nd conditions from date of	substantial completion.
Term of Warranty	years [ten, fifteen, twenty, twenty-five, thirty]
ľ	gainst leaks due to défectiv nd conditions from date of s

Part 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: IB Roof Systems, 506 E. Dallas Road, Suite 300, Grapevine, Texas 75061

Toll-free: 800-426-1626 Fax: 541-610-1726

Email: technical@ibroof.com
Website: www.ibroof.com
B. Substitutions: Not permitted.

C. Substitution Requests: Submit in accordance with Section 01 60 00.

2.2 SCOPE / APPLICATION

A.	Roof System: Provide a waterproof roof system manufactured and supplied or approved by the primary roofing
	materials manufacturer as specified in this section.

- Fully Adhered Membrane: IB Roof Systems Specification _____ is the basis of design for the roofing assembly.
- B. Base Flashing: Provide waterproof base flashing assemblies and flashings at all penetrations, vertical walls, curbs, and terminations.
- C. Thermal Roof Insulation: Provide roof insulation components as specified herein, secured to the substrate in accordance with IB Specifications and the performance requirements of this section.

2.3 POLYVINYL CHLORIDE (PVC) MEMBRANE

- A. Roof Covering: Provide IB PVC Single Ply roofing membrane constructed from a calendered film, non-extrusion lamination process with a non-wicking polyester scrim reinforcement and compounded PVC resin based with plasticizers, stabilizers, fillers, pigments with an acrylic finish conforming to ASTM D4434, Type III. Flashings and accessories shall be factory-manufactured or approved by IB Roof Systems coordinated with the specified membrane and finish color.
 - 1. Membrane Type:
 - a. Smooth Back
 - b. Fleece Back (white only)
 - Color: _____
 - a. White
 - b. Bronze
 - c. Cool Sand
 - d. Cool Stone
 - e. Gray
 - f. Tan
 - g. Custom:
 - 3. Membrane Thickness, overall (ASTM D751): 50-mil nominal
 - a. Thickness over scrim, (ASTM D751): 24 mils
 - b. Breaking strength (ASTM D751): 332 MD / 256 CD lbf
 - c. Tearing strength (ASTM D751): 54 MD / 68 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Field sheet width: 72 inches (1.83m)
 - f. Length: 90 feet (27.43m)
 - 4. Membrane Thickness, overall (ASTM D751); 60-mil nominal
 - a. Thickness over scrim, (ASTM D751): 28 mils
 - b. Breaking strength (ASTM D751): 371 MD / 308 CD lbf
 - c. Tearing strength (ASTM D751): 58 MD / 72 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD



- e. Field sheet width: 72 inches (1.83m)
- f. Length: 90 feet (27.43m)
- 5. Membrane Thickness, overall (ASTM D751): 80-mil nominal
 - a. Thickness over scrim, (ASTM D751): 38 mils
 - b. Breaking strength (ASTM D751): 408 MD / 388 CD lbf
 - c. Tearing strength (ASTM D751): 62 MD / 78 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Field sheet width: 72 inches (1.83m)
 - f. Length: 60 feet (18.3m)
- B. Roof Covering: Provide B PVC Single Ply ChemGuard® roofing membrane constructed from a calendared film, non-extrusion lamination process with a non-wicking polyester scrim reinforcement and compounded PVC resin based with Elvaloy®, stabilizers, fillers, pigments with an acrylic finish conforming to ASTM D4434, Type III. Flashings and accessories shall be factory-manufactured or approved by IB Roof Systems coordinated with the specified membrane and finish color.
 - 1. Membrane Type:
 - a. Smooth Back
 - Color: _____
 - a. White
 - 3. Membrane Thickness, overall (ASTM D751): 50-mil nominal
 - a. Thickness over scrim, (ASTM D751): 24 mils
 - b. Breaking strength (ASTM D751): 332 MD / 256 CD lbf
 - c. Tearing strength (ASTM D751): 54 MD / 68 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Field sheet width: 72 inches (1.83m)
 - f. Length: 90 feet (27.43m)
 - 4. Membrane Thickness, overall (ASTM D751): 80-mil nominal
 - a. Thickness over scrim, (ASTM D751): 38 mils
 - b. Breaking strength (ASTM D751): 408 MD / 388 CD lbf
 - c. Tearing strength (ASTM D751): 62 MD / 78 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Field sheet width: 72 inches (1.83m)
 - f. Length: 60 feet (18.3m)
- C. PVC Flashing Membrane: Provide IB PVC Single Ply constructed from a calendared film, non-extrusion lamination process with a non-wicking polyester scrim reinforcement and compounded PVC resin based with plasticizers, stabilizers, fillers, pigments with an acrylic finish conforming to ASTM D4434, Type III. Flashings and accessories shall be factory-manufactured or approved by IB Roof Systems coordinated with the specified membrane and finish color.
 - 1. Membrane Type:
 - a. Smooth Back
 - 2. Color:
 - a. White
 - b. Bronze
 - c. Brown
 - d. Cool Sand
 - e. Cool Stone

Custom:

- f. Gray
- g. Green
- h. Red
- i. Tan

i.

- 3. Membrane Thickness, overall (ASTM D751): 50-mil nominal
 - a. Thickness over scrim, (ASTM D751): 24 mils
 - b. Breaking strength (ASTM D751): 332 MD / 256 CD lbf
 - c. Tearing strength (ASTM D751): 54 MD / 68 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Width: 72 inches (1.83m) or 36 inches (0.91m)
 - f. Length: 90 feet (27.43m)
- 4. Membrane Thickness, overall (ASTM D751): 60-mil nominal



- a. Thickness over scrim, (ASTM D751): 28 mils
- b. Breaking strength (ASTM D751): 371 MD / 308 CD lbf
- c. Tearing strength (ASTM D751): 58 MD / 72 CD lbf
- d. Elongation at break (ASTM D751): 34% MD / 29% CD
- e. Width: 72 inches (1.83m) or 36 inches (0.91m)
- f. Length: 90 feet (27.43m)
- 5. Membrane Thickness, overall (ASTM D751): 80-mil nominal
 - a. Thickness over scrim, (ASTM D751): 38 mils
 - b. Breaking strength (ASTM D751): 408 MD / 388 CD lbf
 - c. Tearing strength (ASTM D751): 62 MD / 78 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Width: 72 inches (1.83m) or 36 inches (0.91m)
 - f. Length: 60 feet (18.3m)
- D. PVC Flashing Membrane: Provide IB PVC Single Ply ChemGuard® constructed from a calendared film, non-extrusion lamination process with a non-wicking polyester scrim reinforcement and compounded PVC resin based with Elvaloy®, stabilizers, fillers, pigments with an acrylic finish conforming to ASTM D4434, Type III. Flashings and accessories shall be factory manufactured or approved by IB Roof Systems, coordinated with the specified membrane and finish color.
 - 1. Membrane Type:
 - a. Smooth Back
 - 2. Color:
 - a. White
 - 3. Membrane Thickness, overall (ASTM D751): 50-mil nominal
 - a. Thickness over scrim, (ASTM D751): 24 mils
 - b. Breaking strength (ASTM D751): 332 MD / 256 CD lbf
 - c. Tearing strength (ASTM D751): 54 MD / 68 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Width: 72 inches (1.83m) or 36 inches (0.91m)
 - f. Length: 90 feet (27.43m)
 - 4. Membrane Thickness, overall (ASTM D751): 80-mil nominal
 - a. Thickness over scrim, (ASTM D751): 38 mils
 - b. Breaking strength (ASTM D751): 408 MD / 388 CD lbf
 - c. Tearing strength (ASTM D751): 62 MD / 78 CD lbf
 - d. Elongation at break (ASTM D751): 34% MD / 29% CD
 - e. Width: 72 inches (1.83m) or 36 inches (0.91m)
 - f. Length: 60 feet (18.3m)

2.4 INSULATION

- A. Polyisocyanurate: Rigid thermal roof insulation board with fiber reinforced facers on both sides meeting or exceeding the requirements of ASTM C1289.
 - 1. IB Energy Board II supplied by IB Roof Systems
 - a. Board Size: ____
 - I. 4' x 4' (1.22m x 1.22m)
 - II. 4' x 8' (1.22m x 2.44m)
 - b. Minimum Thickness: _____
 - c. Minimum R-Value:
 - d. Compressive Strength: 20 psi (1.4 kg/cm)
 - e. Compressive Strength: 25 psi (1.8 kg/cm)
- B. Polyisocyanurate: Rigid thermal, tapered roof insulation board with fiber reinforced facers on both sides meeting or exceeding the requirements of ASTM C1289.
 - 1. Tapered IB Energy Board II supplied by IB Roof Systems
 - a. Board Size:
 - I. 4' x 4' (1.22m x 1.22m)
 - b. Minimum Slope per Foot:
 - I. 1/8"
 - II. 1/4"
 - III. 1/2"
 - c. Minimum Starting Thickness: _____



	d. Minimum Average R-Value:
	e. Compressive Strength: 20 psi (1.4 kg/cm)
	f. Compressive Strength: 25 psi (1.8 kg/cm)
C.	Polyisocyanurate: Rigid thermal roof insulation board with fiberglass facers on both sides meeting or
	exceeding the requirements of ASTM C1289.
	IB Energy Board III supplied by IB Roof Systems
	a. Board Size:
	I. 4' x 4' (1.22m x 1.22m)
	II. 4' x 8' (1.22m x 2.44m)
	b. Minimum Thickness:
	c. Minimum R-Value:
	d. Compressive Strength: 20 psi (1.4 kg/cm)
	e. Compressive Strength: 25 psi (1.8 kg/cm)
D	Polyisocyanurate: Rigid thermal, tapered roof insulation board with fiberglass facers on both sides meeting or
٥.	exceeding the requirements of ASTM C 1289.
	Tapered IB Energy Board III supplied by IB Roof Systems
	a. Board Size:
	I. 4' x 4' (1.22m x 1.22m)
	b. Minimum Slope per Foot:
	I. 1/8"
	II. 1/4"
	III. 1/2"
	c. Minimum Starting Thickness:
	d. Minimum Average R-Value:
	e. Compressive Strength: 20 psi (1.4 kg/cm)
	f. Compressive Strength: 25 psi (1.4 kg/cm)
F	High Density Polyisocyanurate Cover Board: Rigid thermal, high density roof insulation board with coated
ь.	fiberglass facers on both sides meeting or exceeding requirements of ASTM C1289, Type II, Class 4, Grade.
	1. HD ISO Coverboard
	a. IB HD ISO supplied by IB Roof Systems
	b. Hunter Panels H-Shield HD supplied by IB Roof Systems
	2. Board Size:
	I. 4' x 4' (1.22m x 1.22m)
	II. 4' x 8' (1.22m x 2.44m)
	3. Minimum Thickness: 1/2" (13 mm)
	4. Minimum Average R-Value: 2.5
	a. Compressive Strength: 80 – 109 psi (5.6 – 7.7 kg/cm)
F	Gypsum Fiber Roof Board: Moisture resistant, fiber reinforced gypsum roof board with integral water-resistant
٠.	core conforming to the requirements of ASTM C1278.
	Securock® Gypsum-Fiber Roof Board supplied by IB Roof Systems
	a. Board Size:
	a. 4' x 4' (1.22m x 1.22m)
	b. 4' x 8' (1.22m x 2.44m)
	b. Board Thickness:
	a. 1/4" (6.3 mm)
	b. 3/8" (9.5 mm)
	c. 1/2" (13 mm)
	d. 5/8" (16 mm)
	c. Minimum R-Value:
G	Gypsum Roof Board with Glass Mat Facer: Standard, pre-primed or coated, moisture-resistant gypsum board
U .	with silicone treated core and embedded fiberglass facer on both sides conforming to the requirements of
	ASTM C1177.
	7.0 m 0 m 1 m

- G.
 - 1. Glass Mat Gypsum Roof Board

 - a. DensDeck® Roof Board supplied by IB Roof Systemsb. DensDeck® Prime Roof Board supplied by IB Roof Systems
 - c. DensDeck® StormX™ Prime® Roof Board supplied by IB Roof Systems
 - d. Securock® Ultralight Glass-Mat Roof Board supplied by IB Roof Systems
 - e. Securock® Ultralight Coated Glass-Mat Roof Board supplied by IB Roof Systems



		f. DEXCell® Glass Mat Roof Board supplied by IB Roof Systems
		g. DEXCell® FA Glass Mat Roof Board supplied by IB Roof Systems
	2.	Board Size:
		a. 4' x 4' (1.22m x 1.22m)
	_	b. 4' x 8' (1.22m x 2.44m)
	3.	Board Thickness:
		a. 1/4" (6.3 mm)
		b. 1/2" (13 mm)
	4	c. 5/8" (16 mm)
ы		Minimum R-Value:
п.		ment Board: Moisture-resistant, cement roof boards in various thicknesses with integral water-resistant res available in un-faced, fiberglass faced or primed fiberglass facer formats conforming to the
		puirements of ASTM C1325.
		Cement Board
	٠.	a. DEXCell® Cement Roof Board supplied by IB Roof Systems
		c. USG Securock® Brand Cement Roof Board supplied by IB Roof Systems
	2.	Board Size:
		a. 4' x 4' (1.22m x 1.22m)
		b. 4' x 8' (1.22m x 2.44m)
	3.	Board Thickness:
		a. 1/2" (13 mm)
		b. 5/8" (16 mm)
	4.	Minimum R-Value:
I.	Hig	ph Density Fiber Board: Rigid high density non-asphaltic wood fiber board with compatible primer on both
		es conforming to the requirements of ASTM C208, Type II, Grade 1 and 2.
	1.	High Density Wood Fiberboard
	_	a. Blue Ridge Structodek® HD with Primed Red Coating supplied by IB Roof Systems
	2.	Board Size:
		a. 4' x 4' (1.22m x 1.22m)
		b. 4' x 8' (1.22m x 2.44m)
	2	Board Thickness: 1/2" (13 mm)
		Minimum R-Value: 1.3
J.		panded Polystyrene (EPS): Rigid, closed cell foam insulation conforming to the requirements of ASTM 78. Requires IB approved gypsum or high-density Isocyanurate coverboard, high density fiberboard, or
		ditional top layer of polyisocyanurate or other approved non-EPS or XPS insulation.
		EPS Roof Board
	٠.	Cellofoam EPS insulation supplied by IB Roof Systems
		b. Insulfoam EPS insulation supplied by IB Roof Systems
		c. Thermafoam EPS insulation supplied by IB Roof Systems
		d. ThermalStar EPS insulation supplied by IB Roof Systems
	2.	Board Size:
		a. 4' x 8' (1.22m x 2.44m)
	3.	
	4.	Minimum R-Value:
	5.	
		a. Type VIII, nominal density of 1.25 pcf; Compressive Strength: 13 psi (0.9 kg/cm)
		b. Type II, nominal density of 1.5 pcf; Compressive Strength: 15 psi (1.0 kg/cm)
.,	_	c. Type IX, nominal density of 2.0 pcf; Compressive Strength: 25 psi (1.8 kg/cm)
K.		panded Polystyrene (EPS) Flute Fill: Rigid, closed cell foam insulation conforming to the requirements of
		TM C 578 Type I nominal density of 1.0 pcf or greater. Available with square cut, tapered cut, or panel
		offile design. Intended to be loose laid or simultaneously fastened with an approved cover board.
	١.	EPS Flute Fill
		Cellofoam EPS insulation supplied by IB Roof Systems Insulfoam EPS insulation supplied by IB Roof Systems
		c. Thermafoam EPS insulation supplied by IB Roof Systems
		d. ThermalStar EPS insulation supplied by IB Roof Systems
	2.	
	3.	

I.



4.	Mir	nimum R-Value:	
5.	Board Type:		
	a.	Type I: Density 1.0 pcf; Compressive Strength: 10 psi (0.7 kg/cm) min.	
	b.	Type II: Density 1.5 pcf; Compressive Strength: 15 psi (1.0 kg/cm) min.	
	C.	Type VIII: Density 1.25 pcf; Compressive Strength: 13 psi (0.9 kg/cm) min.	
	d.	Type IX: Density 1.80 pcf; Compressive Strength: 25 psi (1.8 kg/cm) min.	

- L. Extruded Polystyrene (XPS) roof insulation; Rigid, closed cell, flat, or tapered extruded polystyrene foam insulation with integral formed skin or planed exterior faces, conforming to the requirements of ASTM C578, Type IV; nominal minimum compressive strength of 25 psi (1.8 kg/cm).
 - 1. XPS Roof Board
 - a. DuPont™ Styrofoam™ Brand DECKMATE™ Plus FA supplied by IB Roof Systems
 - b. DuPont™ Styrofoam™ Brand DECKMATE™ Plus supplied by IB Roof Systems
 - c. DuPont™ Styrofoam™ Brand DECKMATE™ supplied by IB Roof Systems

2.	Board Size:
	a. 4' x 8' (1.22m x 2.44m)
3.	Board Thickness:
4.	Minimum R-Value:
5.	Board Type:

a. Type IV, nominal density of 1.55 pcf; Compressive Strength: 25 psi (1.8 kg/cm).

Note: Requires IB approved gypsum or high-density Isocyanurate coverboard, high density fiberboard, or additional top layer of polyisocyanurate or other approved non-EPS or XPS insulation.

2.5 INSULATION ADHESIVE

- A. Two Component Insulation Adhesive: Two-component, low-rising expanding polyurethane adhesive designed for bonding layers of rigid roof insulation to various substrates using a compatible factory supplied, delivery applicator.
 - 1. IB Rapid Set Insulation Adhesive by IB Roof Systems.
 - 2. ICP Polyset® BoardMax Adhesive supplied by IB Roof Systems
 - 3. ICP Polyset® CR-20 HFO Adhesive supplied by IB Roof Systems
 - 4. Millennium One-Step Foamable Adhesive supplied by IB Roof Systems
 - 5. Millennium PG-1 Pump Grade Adhesive supplied by IB Roof Systems
 - 6. OMG OlyBond500® Bag-in-Box Adhesive supplied by IB Roof Systems
 - 7. OMG OlyBond500® Cannisters Adhesive supplied by IB Roof Systems
 - 8. OMG OlyBond500® Spot Shot Adhesive supplied by IB Roof Systems
- B. Insulation Adhesive Primer: All-purpose water-based primer designed for use with IB Rapid Set Insulation Adhesive over existing prepared asphalt Built-Up, Modified Bitumen and Metal roofs. Red tint for identification of primed surfaces.
 - 1. Millennium Universal Primer supplied by IB Roof Systems.

2.6 MEMBRANE FLASHINGS AND ACCESSORIES

- A. Cover Strip: Reinforced 60-mil thermoplastic PVC flashing and stripping membrane made from the same material as IB PVC Single Ply Roofing Membrane with non-wicking polyester fiber reinforcement conforming to ASTM D4434, Type III.
- B. ChemGuard® Cover Strip: Reinforced 50-mil thermoplastic PVC flashing and stripping membrane made from the same material as IB PVC Single Ply ChemGuard® Roofing Membrane with non-wicking polyester fiber reinforcement conforming to ASTM D4434, Type III.
- C. Flashing Detail Membrane: Non-reinforced 60-mil thermoplastic PVC flashing and detailing membrane.
 - 1. IB NR Detail Flashing Membrane
- D. T-Joint Patches: Reinforced PVC T-Joint flashing cut into 5" (12.7 cm) diameter circular targets for reinforcing lap intersections in membrane and flashings.
 - 1. IB Round T-Joint Patch
 - 2. IB Round T-Joint Patch ChemGuard®
- E. Inside Corners: Factory-manufactured 60-mil non-reinforced inside corner for non-canted 90° flashings.
 - 1. IB Inside Corner
- F. Outside Corners: Factory-manufactured 60-mil non-reinforced outside corner for non-canted 90° flashings.
 - 1. IB Outside Corner



- G. Universal Outside Corners: Factory-manufactured, 60-mil fluted non-reinforced outside corner for canted and non-canted 90° flashings.
 - 1. IB Universal Outside Corner
- H. Pipe Flashings: Dielectrically welded, factory manufactured PVC flashing with reinforced membrane base and 60-mil PVC upper flashing used for pipe penetrations.
 - 1. IB PVC Pipe Flashing
 - 2. IB PVC ChemGuard® Pipe Flashing
 - a. Size:
 - 3. IB PVC No-Cone Pipe Flashing
 - 4. IB PVC ChemGuard® No-Cone Pipe Flashing
 - a. Size:
 - 5. IB PVC Steep Slope Flashing
 - 6. IB PVC ChemGuard® Steep Slope Flashing
 - a. Oval
 I. Size:
 a. Round
 I. Size:
- Vent Flashings: One and two-way PVC molded roof vents manufactured from heavy duty, UV-stabilized PVC with factory welded reinforced membrane target patch bases.
 - 1. 5" (12.7 cm) Two Way Recover Vent
 - a. IB PVC Single Ply Recover Membrane Vent
 - b. IB PVC Single Ply ChemGuard® Recover Membrane Vent
 - 2. 10" (25.4 cm) Roof Vent
 - a. IB PVC Single Ply 10" (25.4 cm) Roof Vent
 - b. IB PVC Single Ply ChemGuard® 10" (25.4 cm) Roof Vent
- J. Rooftop Dryer / Exhaust Vent Flashing: Two-piece, G90 galvanized metal exhaust vent with flanged base, Kynar 500® finished cap and internal backdraft dampers designed for use with IB No-Cone Pipe Flashing.
 - 1. IB Dryer Vent / Exhaust Vent
 - a. Size: _____
 - I. 4" (10.2 cm)
 - II. 6" (15.2 cm)
 - III. 8" (20.3 cm)
- K. Penetration E-Curb Flashing Kits: Modular, interlocking, expandable formed curbs with M-1 Structural Adhesive/Sealant and 1-Part moisture cure pourable sealer.
 - 1. E-Curb Kits
 - a. Size:
 - I. 4" (10.2 cm) Round
 - II. 6" (15.2 cm) Round
 - III. Universal
- L. Penetration Pocket Flashings: Factory-manufactured split PVC clad metal flashing with reinforced membrane base used for pitch pan penetrations.
 - 1. IB PVC Split Pitch Pan Flashing
 - 2. IB PVC ChemGuard® Split Pitch Pan Flashing
 - a. Size:
- M. PVC Clad Metal Scuppers: Factory-fabricated, custom sized through wall scupper manufactured from 24-gauge G90 galvanized, PVC clad metal with IB 0.060 non-reinforced membrane flashing.
 - 1. IB Custom Clad Metal Through-Wall Scupper
 - 2. IB Custom Clad Metal Through-Wall Overflow Scupper
- N. Retrofit Drains: Factory-fabricated, clamping ring style roof drain made of spun-bonded aluminum with IB 60-mil reinforced membrane flashing.
 - 1. IB Retrofit Drain
 - 2. IB Retrofit Overflow Drain
 - a. Size
- O. Walkway Pad: Calendared and embossed 80-mil slip resistant, heat weldable PVC walk tread for use with IB Roof Systems in 3' x 60' (0.91m x 18.3m) rolls.
 - 1. IB WalkTread™
 - a. Color: ____
 - I. Gray



- II. Safety Yellow
- P. GrossGrip: Slip resistant walkway system for roof and worker protection in high maintenance rooftop areas, where access for installation and maintenance of solar power systems, HVAC, telecommunications, and auxiliary equipment is necessary. Open grid "duckboard" design with cross directional top ribs in 3' x 33' (0.91m x 10.1m) rolls.
 - 1. IB CrossGrip™
 - a. Color: ____
 - I. Gray
 - II. Black
 - III. White
 - IV. Yellow

2.7 CLEANERS, PRIMERS, ADHESIVES AND SEALANTS

- A. Water-Based PVC Bonding Adhesive: Water-based membrane adhesive designed for one-sided, fully adhered application of IB Roof Systems Single Ply membranes to approved horizontal substrates.
 - 1. IB Water Borne Adhesive
 - 2. IB Water Borne 636 Adhesive
- B. Solvent-Based PVC Bonding Adhesive: Solvent-based membrane adhesive designed for two-sided, fully adhered contact adhesion of IB Roof Systems Single Ply membranes to approved vertical and horizontal substrates.
 - 1. IB Vertibond Adhesive
 - 2. IB Vertibond 432 Bonding Adhesive
 - 3. Approved PVC spray contact adhesive supplied by IB Roof Systems
- C. Two Component Membrane Adhesive: Two-component, low-rising expanding polyurethane adhesive designed to adhere IB PVC Fleece Back membranes to various approved horizontal substrates using a compatible factory supplied, delivery applicator.
 - 1. IB Rapid Set Insulation Adhesive by IB Roof Systems.
 - 2. ICP Polyset® CR-20 HFO Adhesive supplied by IB Roof Systems
 - 3. OMG OlyBond500® Cannisters Adhesive supplied by IB Roof Systems
- D. Night Sealant: two-component spray polyurethane foam (SPF) is specifically designed to provide a temporary seal of the new roofing membrane to the existing roof system using a compatible factory supplied, delivery applicator.
 - 1. ICP Polyset® Roof Seal supplied by IB Roof Systems
- E. Water Cut-Off Mastic: Butyl-based one-component mastic used as a compression sealant between IB membrane and flashings to applicable substrates.
 - 1. IB Water Stop
- F. Polyurethane Caulk Sealant: One part polyurethane sealant suitable for sealing upper lip of exposed termination bars and around upper edge of penetration clamping rings, meets or exceeds ASTM C920.
 - 1. Solar Seal #900 Terpolymer Rubber Adhesive / Sealant by NPC supplied by IB Roof Systems.
- G. High Performance Sealant: High performance, plasticizer free, single component, 100% solids, moisture-curing sealant for sealing terminations, metal flashings and filling pitch pans.
 - 1. IB Sealer by IB Roof Systems
- H. One Part Pourable Penetration Sealant: One-part pourable sealant suitable for filling pitch pans at irregularly shaped penetrations.
 - 1. Chemlink 1-Part Pourable Sealer supplied by IB Roof Systems
 - 2. IB Sealer by IB Roof Systems
- Self-Adhered Vapor Retarder Primer: Solvent-based primer with enhanced resins and polymers for use over prepared substrates to improve self-adhered membrane adhesion to a variety of substrates.
 - 1. IBarrier Primer by IB Roof Systems
 - 2. IBarrier Primer LV by IB Roof Systems

2.8 SEPARATION SHEETS, FIRE SHEETS AND VAPOR RETARDERS

- A. Polyester Separation / Protection Sheet: Non-woven polyester UV-stabilized mat, used as a separation sheet beneath membranes, or as a protection layer over membranes in ballast-applied and overburden assemblies.
 - 1. IB Poly Separator Sheet (7.5' x 360'); (2.3m x 109.7m)
 - 2. IB HD Poly Separator Sheet (7.5' x 150'); (2.3m x 45.7m)



- B. Separation Sheet: High-strength, polypropylene scrim reinforced fabric with polypropylene coating both sides used as separation sheet beneath membranes to resist contaminant, residue transfer and moisture from existing substrates.
 - 1. IB Separator Sheet (5.83' x 515'); (1.8m x 156.9m)
- C. Fire Sheet: Fire resistant glass fiber mat used as a separation sheet over polystyrene foam insulation or beneath insulation over wood substrates.
 - 1. IB Fire Sheet 10 (4' x 250'); (1.2m x 76.2m)
- D. Vapor Retarder: Self-adhered SBS-modified bitumen vapor retarder for steel, concrete, plywood and approved insulated substrates with tri-laminated woven polyethylene top surface and integral release film on bottom.
 - 1. IBarrier SA Membrane (3' 7" x 133'); (1.09m x 40.5m)

2.9 FASTENERS

- A. Standard Fasteners: Standard gauge alloy steel fastener with corrosion resistant e-coating and .228-inch diameter thread: Factory Mutual Standard 4470 approved #3 Phillips truss head for use on approved decks.
 - 1. IB SD #12 Insulation Fastener
- B. HD Fasteners: Heavy duty gauge alloy steel fastener with corrosion resistant e-coating and .242-inch diameter thread: Factory Mutual Standard 4470 approved #3 Phillips truss head for use on approved decks.
 1. IB HD #14 Roofing Fastener
- C. XHD Fasteners: Heavy duty gauge alloy steel fastener with corrosion resistant e-coating and .260-inch diameter thread: Factory Mutual Standard 4470 approved #3 Phillips truss head for use on approved decks.
 - 1. IB XHD #15 Roofing Fastener
- D. Purlin Fasteners: Standard gauge alloy steel fastener with corrosion resistant e-coating and .209-inch diameter thread: Factory Mutual Standard 4470 approved #3 square drive head for drilling through steel purlin thicknesses of 18 ga (.045" nominal) through 1/4" (.250").
 - 1. IB #12 Purlin Fastener
- E. Stainless Fasteners: 410 stainless steel fastener with corrosion resistant e-coating and .235-inch diameter thread: Factory Mutual Standard 4470 approved #3 Phillips truss head for use on approved decks.
 - 1. IB #14 Stainless Roofing Fastener
- F. Concrete Anchor: Hammer-in, non-threaded fastener designed to secure insulation and membrane to structural concrete. Alloy steel fastener with corrosion resistant e-coating and .239-inch shank diameter: Factory Mutual Standard 4470 approved 1/2" (13 mm) mushroom drive head.
 - 1. Dekspike Concrete Anchor supplied by IB Roof Systems
- G. Concrete Fastener: Hammer-in, non-threaded fastener designed to secure insulation and membrane to structural concrete. Alloy steel fastener with a corrosion resistant e-coating and split bulb shank of .270 .277-inch diameter: Factory Mutual Standard 4470 approved flat top pan head.
 - 1. CD-10 Concrete Fastener supplied by IB Roof Systems
- H. Gypsum Fastener: Glass-filled nylon auger fastener with a 1-inch (25 mm) head designed to secure insulation and membrane to lightweight insulating concrete, poured gypsum, gypsum plank, and cementitious wood fiber decks. Features a wide buttress thread design: Factory Mutual Standard 4470 approved 1/4" (6.3 mm) square drive head.
 - 1. Polymer GypTec® Fastener supplied by IB Roof Systems
 - 2. Deklite Roofing Fastener supplied by IB Roof Systems
- I. Barbed Seam Plate: Galvalume, barbed fastening plate used with IB HD #14 Roofing Fastener, IB XHD #15 Roofing Fastener, IB #12 Purlin Fastener, CD-10 Concrete Anchor, and DekSpike Roofing Fasteners for securement and termination of IB membranes at penetrations and perimeter walls or edges.
 - 1. IB 2" (5.1 cm) Barbed Seam Plate
 - 2. IB 2-3/8" (6 cm) Barbed Seam Plate
- J. Insulation Plate: Galvalume-coated steel insulation plates used with IB SD #12 Insulation Fastener, HD #14 Roofing Fastener, XHD #15 Roofing Fastener, CD-10 Concrete Anchor, and DekSpike Roofing Fasteners to attach approved separator sheets, rigid insulation, and cover boards to approved substrates below IB membranes.
 - 1. IB 3" (7.6 cm) Galvalume Insulation Plate
- K. Deklite 2" (5.1 cm) Barbed Seam Plate: Galvalume, barbed fastening plate used with Deklite Roofing Fasteners for securement and termination of IB membranes at penetrations and perimeter walls or edges.
- L. Deklite 3" (7.6 cm) Insulation Pate: Galvalume-coated steel insulation plates used with Deklite Roofing Fasteners to attach approved separator sheets, rigid insulation, and cover boards to approved substrates below IB membranes.



- M. Gyptec 2" (5.1 cm) Barbed Seam Plate: Galvalume, barbed fastening plate used with Polymer Gyptec Fasteners for securement and termination of IB membranes at penetrations and perimeter walls or edges.
- N. Gyptec 3" 7.6 cm) Insulation Plate: Galvalume-coated steel insulation plates used with Polymer Gyptec Fasteners to attach approved separator sheets, rigid insulation, and cover boards to approved substrates below IB membranes.
- O. Multi-Purpose Termination Fastener: EPDM grommeted anchor designed to secure termination bar, counter flashing, and various metal flashings to wood, concrete, masonry, and steel. Zinc aluminum composition with corrosion resistant e-coating on thread meets FM Approval Standard 4470.
 - 1. ZAC Anchors supplied by IB Roof Systems
- P. Zinc Term Bar Anchors: Mushroom head, expanding zinc plated steel nailin anchor designed to secure termination bar, counter flashing and various metal flashings to concrete, brick, and filled masonry walls. Zamac alloy composition with corrosion resistant e-coating on thread meets FM Approval Standard 4470.
 - 1. Zinc Nailin Anchor supplied by IB Roof Systems
- Q. Batten Bar: 1" (25 mm) Galvalume Steel or Polymer Batten Bar with pre-punched holes used inseam or through membrane with cover strip on IB membranes.
 - 1. IB Heavy Duty Steel Batten Bar
 - 2. IB Polymer Batten Bar

2.10 EDGINGS AND TERMINATIONS

1.

A. Anchor Tite Drip Edge: Two-part edge metal assembly with a rigid extruded aluminum anchor bar with prepunched holes, 12" (30.5 cm) o.c. and decorative 24 ga. steel or .040 aluminum snap on fascia cover in 12' (3.66m) lengths. A wide range of standard colors and finishes are available. ES-1 tested and approved. FM Approved. Miami-Dade Approved (No. 18-0424.06 12/11/23) for use in the High Velocity Hurricane Zone. Available Lifetime, 215 mph wind warranty.

mable Enerine, 210 mph wind warranty.			
And	hor Tite Drip Edge (12' lengths); (3.66m)		
a.	Cover Type:		
	I. 24-gauge Steel		
	II040 Aluminum		
b.	Face Size:"		
	I. 3" (7.6 cm)		
	II. 4-1/2" (11.4 cm)		
	III. 6" (15.2 cm)		
	IV. 7-1/2" (19 cm)		
	V. Custom: "		
C.	Color:		

- B. PVC Clad Drip Edge: 24-gauge G90 corrosion resistant galvanized steel laminated to 0.045 PVC non-reinforced cladding, formed into a standard metal drip edge profile with an open-hem kick-out at the bottom to provide a corrosion resistant, heat weld-able perimeter roof edge termination supplied by IB Roof Systems. ES-1 tested and approved with use of CS Steel G90 22-gauge cleat on standard sizes.
 - 1. IB PVC Clad Drip Edge (3" deck flange, 10' lengths); (7.6 cm x 3.05m)

a.	Fac	ce Size:	"
	I.	2.5" (6.3 cm)	
	II.	4" (10.2 cm)	
	III.	Custom:	
b.	Col	or:	
	I.	White	
	II.	Bronze	
	III.	Gray	
	IV.	Tan	

- C. PVC Clad Gravel Stop Metal Edge: 24-gauge G90 corrosion resistant galvanized steel laminated to 0.045 PVC non-reinforced cladding, formed into a gravel stop edge profile with a ¾" (18 mm) rise and with an openhem kick-out at the bottom to provide a corrosion resistant, heat weld-able perimeter roof edge termination supplied by IB Roof Systems. ES-1 tested and approved with use of CS Steel G90 22-gauge cleat on standard sizes.
 - 1. IB PVC Clad Gravel Stop Metal Edge (3" deck flange, 10' lengths); (7.6 cm x 3.05m)
 - a. Face Size: _____'
 I. 2.5" (6.3 cm)
 II. 4" (10.2 cm)



	III. Custom:"
	b. Color:
	I. White
	II. Bronze
	III. Gray
	IV. Tan
_	
υ.	PVC Clad Drip Edge Stainless Steel Metal: 24-gauge SAE 304 stainless steel laminated to 0.045 PVC non-
	reinforced cladding, formed into a standard metal drip edge profile with an open-hem kick-out at the bottom to
	provide a corrosion resistant, heat weld-able perimeter roof edge termination supplied by IB Roof Systems.
	ES-1 tested and approved with use of 22-gauge stainless steel cleat on standard sizes.
	1. IB PVC Clad Drip Edge Stainless Steel (3" deck flange, 10' lengths); (7.6 cm x 3.05m)
	a. Face Size:"
	I. 2.5° (6. $\overline{3}$ cm)
	II. 4" (10.2 cm)
	III. Custom:"
	b. Color:
	I. White
F	PVC Clad Gravel Stop Stainless Steel Metal Edge: 24-gauge SAE 304 stainless steel laminated to 0.045
ь.	PVC non-reinforced cladding, formed into a gravel stop edge profile with a 3/4" (18 mm) rise and with an open
	hem kick-out at the bottom to provide a corrosion resistant, heat weld-able perimeter roof edge termination
	supplied by IB Roof Systems. ES-1 tested and approved with use of 22-gauge stainless steel cleat on
	standard sizes.
	1. IB PVC Clad Gravel Stop Stainless Steel Metal Edge (3" deck flange, 10' lengths); (7.6 cm x 3.05m)
	a. Face Size:"
	I. 2.5" (6.3 cm)
	II. 4" (10.2 cm)
	III. Custom:"
	b. Color:
	I. White
F.	PVC Coated Metal: 24-gauge G90 corrosion resistant galvanized steel sheets laminated to 0.045 PVC non-
	reinforced cladding used in the fabrication of PVC flashings.
	1. IB PVC Clad Metal (4' x 10' sheets); (1.22m x 3.05m).
	a. Color:
	I. White
	II. Bronze
	III. Gray
	IV. Tan
G.	PVC Coated Stainless Steel Metal: 24-gauge SAE 304 stainless steel sheets laminated to 0.045 PVC non-
•	reinforced cladding used in the fabrication of PVC flashings.
	1. IB PVC Clad Metal (4' x 10' sheets); (1.22m x 3.05m).
	a. Color:
	I. White
ш	Aluminum Termination Bar: Extruded aluminum bar with angled lip caulk receiver and lower leg bulb stiffener
11.	
	Pre-punched holes at 6" (15.2 cm) o.c.
	1. IB Aluminum Termination Bar (1" x 10' lengths); (25 mm x 3.05m)
I.	PVC Termination Bar: 24-gauge G90 corrosion resistant galvanized steel laminated to 0.045 PVC non-
	reinforced cladding formed into termination bar with angled lip caulk receiver and lower him stiffener.
	1. IB PVC Clad Termination Bar (2" x 10' lengths); (5.1 cm x 3.05m)
	a. Color:
	I. White
	II. Bronze
	III. Gray
	IV. Tan
J.	IB Snap Fascia: Two-piece assembly with a raised rigid .063 aluminum retainer/clip base plate and a raised
	decorative coated galvanized steel or aluminum, snap on face cover designed for terminating IB PVC
	membrane systems at the perimeter edges, or for vertically terminating IB PVC base flashing. Cover is 10'
	(3.05m) lengths with pre-punched holes for fastening 12" (30.5 cm) on center.
	1. IB Snap Fascia (10' lengths); (3.05m)

Ι.



	a.	Cover Type:			
		I. 24-gauge Steel			
		II. 22-gauge Steel			
		III032 Aluminum			
		IV040 Aluminum			
		V050 Aluminum			
	b.	Face Size:"			
	۵.	I. 2-1/4" (standard); (5.7 cm)			
		II. Custom:"			
	C.				
	٠.	I. White			
		II. Bronze			
		III. Tan			
		IV. Gray			
		V. Custom:			
(Metal-I	Era One Coping: Two-piece metal coping assembly, in a flat or tapered design, with a 22-gauge			
١.		ized steel cleat, and a decorative steel or aluminum coping cover in 12' (3.66m) lengths with pre-			
		ed holes. A wide range of standard colors and finishes are available. ES-1 tested and approved.			
		ble with 10-year, 90 mph wind warranty.			
		ie Coping (12' lengths); (3.66m)			
		, , , , ,			
	a.	Cover Type:			
		I. 24-gauge Steel			
		II. 22-gauge Steel III040 Aluminum			
		IV050 Aluminum			
	L	V063 Aluminum			
	D.	Slope Style:			
		I. Flat			
		II. Tapered (Raised Cleat)			
	C.	Coping Width:" Inside Face Size:"			
	a.	Inside Face Size:			
	e.	Outside Face Size.			
	f.	Color:			
		-Tite Coping: Full Snap-On metal coping, in a flat or tapered design, with 20-gauge, galvanized steel			
	anchor clips and factory-applied stainless-steel springs, and a decorative steel or aluminum coping cover in				
	12' (3.66m) lengths. A wide range of standard colors and finishes are available. ES-1 tested and approved.				
	FM Approved. Miami-Dade Approved (No. 18-0424.06 12/11/23) for use in the High Velocity Hurricane Zone				
		ole with 20-year, 120 mph Perma-Tite wind warranty.			
		rma-Tite Coping (12' lengths); (3.66m)			
	a.	Cover Type:			
		I. 24-gauge Steel			
		II. 22-gauge Steel			
		III040 Aluminum			
		IV050 Aluminum			
		V063 Aluminum			
	b.	Slope Style:			
		I. Flat			
		II. Tapered (Raised Cleat)			
	C.	Coping Width:			
	d.	Coping Width:" Inside Face Size:" Outside Face Size:"			
	e.	Outside Face Size:"			
_	f.	Color:			
Λ.		-Tite Gold Coping: Full Snap-On metal coping, in a tapered design, with 16-gauge, galvanized steel			
	anchor	cline and factory-applied etainless-steel enrings, and a decorative steel or aluminum coning cover in			

- M. Perma-Tite Gold Coping: Full Snap-On metal coping, in a tapered design, with 16-gauge, galvanized steel anchor clips and factory-applied stainless-steel springs, and a decorative steel or aluminum coping cover in 12' (3.66m) lengths. A wide range of standard colors and finishes are available. ES-1 tested and approved. FM Approved. Miami-Dade Approved (No. 18-0424.06 12/11/23) for use in the High Velocity Hurricane Zone. Available with Lifetime, 215 mph Perma-Tite wind warranty.
 - 1. Perma-Tite Coping (12' lengths); (3.66m)



a.	Cover Type:
	I. 24-gauge Steel
	II. 22-gauge Steel
	III040 Aluminum
	IV050 Aluminum
	V063 Aluminum
b.	Slope Style:
	I. Tapered Version only
C.	Coping Width:"
d.	Inside Face Size:"
e.	Outside Face Size:'
Col	or.

Part 3 EXECUTION

3.0 EXAMINATION

- A. Prior to roof installation, inspect substrates to ensure all penetrations, drainage outlets and flashings are in place and ready to receive roofing.
- B. Roof deck and flashing substrates must be clean, dry, and properly secured. Existing substrates, flashings or materials scheduled for re-use must be carefully inspected and properly prepared to ensure they are suitable for incorporation into the new roof system, free of defects, contaminants, or moisture.
- C. Examine substrates for deterioration, defects and entrapped or excess moisture. Wet or deteriorated decking shall be replaced or repaired prior to start of work. Fastener and / or adhesive pull tests should be conducted to confirm adequate condition and acceptable performance of decking.
- D. Review work plan to avoid excess loading of roof areas during material transport, temporary storage, or during installation. Protect building components and fixtures from damage during work.

3.1 PREPARATION

- A. All surfaces shall be cleaned and primed where required prior to installation.
- B. Avoid construction traffic or work by other trades over completed roof sections. Where unavoidable, install adequate and secured temporary protection with tarps, plywood and / or layers of protective sheathing or insulation to avoid contamination and physical damage.
- C. Proper deck and substrate preparation is the responsibility of the contractor or building owner. Review manufacturer recommended preparation requirements and methods for specific project conditions and materials.
- D. Equipment, penetration, and supports scheduled for demolition or renovation should be completed prior to the start of work.
- E. Confirm flashing details, terminations and penetrations have adequate height or clearance to receive roofing materials and comply with manufacturer requirements.
- F. Review decking and substrates for the presence of above or below deck conduit, equipment, fixtures, or structural elements that may interfere with roof installation.
- G. Recover and re-roofing installations require careful preparation and examination of existing decking, substrates, terminations, flashings, rooftop equipment and supports. Qualified review by a design professional is recommended where air or vapor retarders are present or required, where high interior humidity or cold storage conditions are present, or where potential exists for condensation to occur below or within the roof assembly.
 - 1. Inspect and clean all substrate surfaces to remove contaminants, bituminous materials, mastics, sealants, coatings, previous roofing, and incompatible materials. Make ready to receive new roofing materials.
 - Prepared roof deck surfaces retaining excess contaminant or incompatible materials require review and approval of IB Technical Services and shall receive a separation layer of approved IB thermal insulation or cover board.
 - 3. Remove and replace areas of deteriorated decking. Steel decking exhibiting rust shall be inspected for condition and suitability to receive new materials. Repair areas of minor rusting with a rust inhibitor coating.
 - 4. Existing vertical surfaces at walls and curbs retaining excess contaminant or incompatible materials require separation from new materials with a layer of plywood / OSB sheathing or approved cover board. IB separation sheet may be used for separation of existing substrates at mechanically attached base and wall flashings.



- 5. Replace all deteriorated or damaged decking, supports, drains, sheet metal and wood blocking or nailers. Inspect drainage outlets for proper operation; replace broken or stripped drain bolts.
- 6. Existing flashings, membranes, integrated sheet metal, drain leads, and related accessories must be removed at perimeter edges, terminations, and penetrations. Confirm flashing substrates and conditions conform with IB Flashing Details and requirements.
- H. Re-roofing Installation: Remove all existing roof system components including ballast, surfacing/overburden materials, membranes, insulations, fasteners / anchors, flashings, sheet metal, copings, counter flashings, and penetration flashings.
 - Visual observation and fastener pull tests should be performed to confirm the performance of the deck to meet IB Roof Systems and project requirements and may be required for issuance of IB Total System Warranties.
 - 2. Direct adhesion of thermal insulation to existing substrates with bituminous or other material residue requires field uplift testing to confirm adequate adhesive and insulation securement.
- Recover Installation: Do not install roofing over existing roof assemblies or substrates containing moisture.
 Moisture surveys are recommended prior to installation of recover materials to avoid infiltration of moisture into or beneath the new roof assembly.
 - 1. Review existing roof system type and materials for compatibility and manufacturer's required separation or preparation prior to installation of new materials.
 - 2. Existing adhered and mechanically attached single ply membranes left in place must be cut on 20' (6.1m) centers in both directions. Fully adhered IB Recover Roof Systems require a minimum layer of approved IB roof insulation or recover board mechanically attached or adhered to the prepared existing roof as applicable.
 - 3. Visual observation, uplift testing and fastener pull tests should be performed to confirm adequacy of attachment of existing roof assembly and performance of the deck to meet project requirements and may be required for issuance of IB Total System Warranties.
 - 4. Direct adhesion of IB roof insulations or approved IB PVC Fleece back membranes to prepared existing roof systems and substrates requires field uplift testing to confirm adequate adhesive and insulation securement. In-seam, cover bar or plate-bonded mechanically attached and loose-laid ballasted roof membranes are not acceptable for direct adhesion of IB recover roof systems.
 - 5. Install IB One-Way Roof Vents at the rate of 1 per 1000 square feet over existing insulated roof systems or over new or existing lightweight insulating concrete roof assemblies.

3.2 SUBSTRATE PREPARATION

- A. Structural Concrete Deck:
 - 1. Deck shall be finished to a smooth uniform surface free of sharp edges, ridges, and irregular surfaces with minimum thickness of 4 inches (10.2 cm).
 - Sumps, provided for roof drains, shall be cast into the deck.
 - 3. Cracks greater than 1/8" (3.1 mm) in width must be repaired in accordance with the deck manufacturer's recommendations.
 - 4. The roof deck shall be dry, free of frost or surface moisture and permitted to cure 28 days before the start of roof system application. The underside shall be open and designed to allow adequate ventilation for drying with form materials removed. If there is any doubt about the dryness of the deck, evaluate surface moisture and deck dryness using ASTM D4263 test method.
 - 5. Composite form concrete decks, decks with painted, insulated, or other condition restricting underside drying require review by IB Technical Services.
 - 6. Primers, when used, must be allowed to dry prior to the application of insulation adhesive and balance of the roofing system.
 - 7. Field uplift resistance testing of insulation adhesives is recommended to confirm acceptable roof system attachment and adhesive performance.

B. Steel Deck:

- 1. Minimum 22 gauge cold-formed steel decking with G-90 galvanized or minimum finish coat of primer paint on both sides. Galvanized steel decking where appropriate to project design criteria is recommended.
- Inspect and repair areas of surface corrosion in accordance with deck manufacturer's recommendations.
 Replace damaged or deflected panels and deteriorated areas, securing loose or inadequately attached decking.

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3. Install adequate support and framing at new and existing openings in deck.



4. Comply with applicable building code, deck manufacturer and/or project required Factory Mutual gauge and span requirements in the current FM Approval Guide and Loss Prevention Data Sheets 1-28 and 1-29.

C. Wood Plank:

- 1. Wood boards shall be kiln-dried with tongue and groove or shiplap long dimension edges, minimum 1" (25 mm) nominal thickness with nominal 4" to 6" (10.2 cm to 15.2 cm) minimum width.
- Lumber shall be dry, safely stored against the weather and covered with the roofing assembly in a timely manner after installation.
- 3. Boards shall be securely fastened with ends bearing on rafters or joists.
- 4. Cover knotholes, and cracks greater than 1/4" (6.3 mm) with sheet metal securely fastened into position.
- 5. Composite deck panels containing EPS/XPS polystyrene insulation are not suitable for use with solvent-based roof system adhesives.

D. Plywood Deck:

- 1. Plywood sheathing shall be not less than 15/32" (12 mm) thick, minimum 4-ply construction conforming with C-D, Exposure 1 grade.
- 2. Install deck over joists spaced 24" (61 cm) o.c. or less. Install deck with all sides bearing on and secured to joist and cross blocking.
- 3. Composite deck panels containing EPS/XPS polystyrene insulation are not suitable for use with solvent-based roof system adhesives.

E. Oriented Strand Board:

- 1. OSB Sheathing shall be not less than 7/16" (11 mm) thick, conforming with PS 2-10, Exposure 1, Structural 1 grade material.
- 2. Install deck over joists spaced 24" (61 cm) o.c. or less. Install deck with all sides bearing on and secured to joist and cross blocking.
- Composite deck panels containing EPS/XPS polystyrene insulation are not suitable for use with solventbased roof system adhesives.

F. Lightweight Insulating Concrete Decks (LWIC):

- Lightweight Insulating Cellular Concrete decks shall be minimum 2" (5.1 cm) thick over approved steel or concrete form deck with minimum compressive strength of 125 psi and density of 22 pcf (208 g/m³) or greater.
- 2. Lightweight fill shall be tested and confirmed dry, certified by the deck manufacturer and installer, and ready to receive roofing material.
- 3. Fastener withdrawal testing (pull tests) into steel or concrete are required prior to project acceptance by IB Roof Systems. Average pull values for attached insulation should exceed 300 lbs. Retrofit applications and roof applications over existing LWIC decks require the written prior approval of IB Technical Services.
- 4. Frozen decks are not acceptable and must be replaced. Remove and replace any wet areas of existing or new decks that exhibit entrapped or excess moisture and allow to dry prior to the start of roofing.

G. Cementitious Wood Fiber:

- 1. Minimum panel thickness of 2" (5.1 cm) secured to supports in accordance with deck manufacturers requirements to resist uplift and lateral movement.
- Grout and level deflections and irregularities between panels to provide a level, smooth deck. Offsets, deflection, or deteriorated panels shall be repaired or replaced prior to start of work.
- 3. Fastener withdrawal testing (pull tests) is required prior to project acceptance by IB Roof Systems. Average pull values for attached insulation should exceed 300 lbs. Retrofit applications and roof applications over existing CWF decks require the written prior approval of IB Technical Services.
- 4. Protect panels from weather during storage and application.

H. Gypsum:

- 1. Minimum panel thickness of 2" (5.1 cm) secured to supports in accordance with deck manufacturers requirements to resist uplift and lateral movement.
- 2. Grout and level deflections and irregularities between panels to provide a level, smooth deck. Offsets, deflection, or deteriorated panels shall be repaired or replaced prior to start of work.
- 3. Fastener withdrawal testing (pull tests) is required prior to project acceptance by IB Roof Systems. Average pull values for attached insulation should exceed 300 lbs. Retrofit applications and roof applications over existing gypsum decks require the written prior approval of IB Technical Services.
- 4. Protect panels from weather during storage and application.

3.3 WOOD NAILERS



- A. Wood Nailers: Install #2 or better solid wood nailers where required by project and manufacturer details. Minimum 1/2" (13 mm) plywood may be used in conjunction with solid wood nailers to fully shim or match insulation height.
 - 1. Nailers should be nominal 4" to 6" (10.2 cm to 15.2 cm) in width extending approximately 1/2" (13 mm) beyond perimeter metal edge flanges; mechanically secured to resist the required loads at perimeter edges and corners. Secure nailers with anchors / fasteners approved for the substrate using a minimum of two fasteners per nailer. Where anchors / fasteners are set into cement-filled masonry or concrete block, fastened into structural concrete, or secured to structural steel or wood framing members through an approved roof deck; perimeter nailer securement should be limited to 48" (1.22m) o.c. or less and 24" (1.22m) o.c. or less at corner regions. Fastening of nailers into steel or wood decking at perimeter edges without securement into underlying continuous blocking or structural framing may not result in adequate resistance. Where present and confirmed adequate to resist design loads, perimeter nailer securement should be located 12" (30.5 cm) o.c. staggered or less and 6" (15.2 cm) or less at corner regions.
 - 2. Where two or more nailers are required, attach second nailer to the first sufficient to resist design loads with corrosion resistant fasteners installed a minimum of 12" (30.5 cm) o.c. staggered and 6" (15.2 cm) o.c. staggered within corner areas.

3.4 VAPOR RETARDER

- A. Where required by project details and conditions, install an IB approved vapor retarder assembly over the prepared substrate, thermal barrier, or minimal thickness of approved insulation board. Installation shall conform to the vapor retarder manufacturer, IB Roof Systems and applicable assembly approval and regulatory requirements. Surfaces to receive a vapor retarder shall be smooth, clean, and dry; primed where required with a primer approved by the vapor retarder manufacturer and IB Roof Systems. Allow primer to dry prior to membrane application.
- B. Seal all side and end laps, terminations, and penetrations to form a weather-tight, permanent seal. Coordinate vapor retarder installation, detailing and integration into other building envelope components and / or existing vapor / air barrier assemblies. Prior to roof system installation, IB recommends the building owner, design professional and installer confirm project design, roof assembly and associated detail requirements including wind resistance, adequate thermal resistance and insulation, and the provision of adequate ventilation where project conditions require use of a vapor retarder.

3.5 SEPARATION AND FIRE SHEETS

- A. Where required by project details, install one or more layers of IB Fire Sheet 10, IB Separator Sheet, IB Poly or HD Poly Separator Sheets over the prepared substrate. Install separation and fire sheets in conformance with project design, regulatory and IB specification requirements.
- B. Lap sheets a minimum of 2" (5.1 cm) on sides and ends. Where two layers are required, install the second layer with all side and end laps offset a minimum of 12" (30.5 cm) from the first course. Fasten installed separation sheets with approved IB fasteners and 3" (7.6 cm) Galvalume Insulation plates as required to hold in position.
- C. Fully adhered roof membrane and flashing applications require IB separation and fire sheets to be set below a minimum layer of approved IB thermal insulation or cover board.

3.6 THERMAL BARRIERS

- A. Install one layer of approved thermal barrier board over the prepared deck where required by local code, UL fire rated assembly or applicable roof system approval listing. For combustible decks, install one layer of UL classified minimum 1/2" (13 mm) gypsum board, 1/4" (6.3 mm) DensDeck Roof Board, 1/4" (6.3 mm) DEXCell Glass Mat Roof Board, 1/4" (6.3 mm) Securock Glass-Mat Roof Board, or 1/4" (6.3 mm) Securock Gypsum-Fiber Roof Board over the substrate.
- B. Thermal barrier board joints shall be staggered in one direction and offset a minimum of 6" (15.2 cm) from all joints in underlying plywood decks. Secure thermal barrier boards with approved fasteners in accordance with the requirements of the approved IB Roof System assembly.

3.7 INSULATION PLACEMENT

A. Set insulation over the substrate with board edges fitted uniformly and closely together. Install insulation boards over steel decks with long dimension edges parallel to and bearing on ribs. Avoid joints or gaps greater than 1/4" (6.3 mm) and fill gaps greater than 1/4" (6.3 mm) with matching insulation material. Offset board joints a



minimum of 12" (30.5 cm) in one direction from preceding course. For multiple layer installations, all joints must be staggered and offset both horizontally and vertically from preceding courses and layers.

- B. Do not install wet, damaged, or warped insulation boards.
- C. Where insulation board thickness is greater than 3" (7.6 cm) insulation should be installed in two layers.
- D. Fit and miter cut board edges at crickets, valleys, hips, ridges, and other changes in plane to provide a smooth transition and surface without voids. Install boards flush to the substrate, edges fully supported or bearing on deck ribs to avoid puncture or breakage.
- E. Install sumps with minimum 1/2" (13 mm) per foot factory tapered insulation panels at drains to provide a minimum 36" x 36" (0.91m x 0.91m) or larger sump area.
- F. Fasten or adhere roof insulation with IB Roof Systems approved insulation fasteners and stress plates, or IB insulation adhesive in accordance with IB specifications and project requirements.
- G. Do not install any more insulation than will be completely waterproofed each day.
- H. Enhance the perimeter and corner areas with additional fasteners or rows of adhesive in accordance with manufacturer requirements and the International Building Code (ASCE 7) or ANSI/SPRI WD-1.

3.8 INSULATION ATTACHMENT

- A. Adhered Insulation Attachment to Approved Mechanically Attached Insulations, Approved Substrates (Wood, Structural Concrete, LWIC, CWF, or Gypsum), or Approved Existing Roofs: Install IB insulation in approved IB insulation adhesive to the roof deck, approved existing asphaltic smooth or granule surfaced roof; or over mechanically attached base layers of insulation in accordance with IB specifications. The insulation attachment shall meet or exceed IB Roof Systems' requirements. Comply with design uplift pressures calculated under ASCE 7 and as required by local building codes or the Authority Having Jurisdiction.
 - 1. Insulation layers installed in approved IB insulation adhesive shall be limited to maximum 4' x 4' (1.22m x 1.22m) board sizes. Install adhesive in 3/4" to 1" (18mm to 25 mm) ribbons set a minimum of 12" (30.5 cm) o.c. or as required to meet project wind uplift resistance. Stagger the joints of additional layers in relation to the insulation joints in the layer(s) below by a minimum of 12" (30.5 cm).
 - 2. Secure all insulation layers at Perimeter and Corner areas with additional rows of adhesive (reduce spacing between ribbons) as required to meet higher uplift pressures, specific wind uplift assembly design, the Authority Having Jurisdiction, and IB specification and construction detail guidelines.
 - 3. For reroofing and recover applications, confirm adhesive uplift resistance and insulation securement with field pull tests. Prime existing asphaltic surfaces with required insulation adhesive primer when required and allow to dry.
 - 4. Install insulation layers applied with adhesive applied at coverage rate necessary to achieve the specified attachment and uplift rating. Press each board firmly into place after adhesive has risen and activated, beginning to string when touched, but prior to skinning over or losing tack. Allow adequate open time prior to board installation for full activation and adhesive rise, typically one to two minutes after bead application, adjusted for weather conditions at time of installation. Roll boards with a weighted roller and apply temporary weight to ensure boards are in full, uniform contact with the applied adhesive until set.
- B. Mechanically Attached Insulation: Mechanically attach insulation to the deck with IB approved fasteners and insulation plates to meet or exceed IB Roof Systems requirements. Refer to Table A.2 of General Requirements for Minimum Insulation Fastening Requirements for Adhered IB Roof Membranes.
- C. Install roof assembly to comply with design uplift pressures calculated under ASCE 7 and as required by local building codes or the authority having jurisdiction.
 - 1. Install insulation with cross or short dimension joints staggered. Multi-layer insulation assemblies may be simultaneously mechanically attached to the deck using the approved fastening rate and spacing requirements for the top insulation layer with all joints staggered and offset between layers.
 - 2. Increase insulation securement with supplemental fasteners or rows of fasteners within Perimeter and Corner Zones as required to meet higher uplift pressures, specific wind uplift assembly design, the Authority Having Jurisdiction, and IB specification and construction detail guidelines.

3.9 FULLY ADHERED MEMBRANE APPLICATION

- A. Position PVC Single Ply Smooth or Fleece backed membrane over the installed roof insulation beginning from the low side of the roof. Install membrane either perpendicular or parallel to slope so that water runs over or with, but not against, membrane laps.
- B. Extend membrane over and below lower outside edge of perimeter edge nailers a minimum of 1" (25 mm) and fasten 12" (30.5 cm) o.c. At parapet walls, curbs, and other vertical terminations, fasten membrane to roof deck



- or turn up and terminate into approved substrate 12" (30.5 cm) o.c. through IB Aluminum Lip Termination Bar or IB barbed plates.
- C. Membrane Application: Ensure insulation substrates are clean, dry, and properly secured in accordance with project requirements and IB specifications. Remove all debris, dirt, trash, or contaminants from insulation surfaces prior to installation. Measure and mark courses as needed to maintain alignment and keep roll courses square to the overall roof deck and structure. Avoid contamination of membrane surfaces within the seam areas (side, end, and flashing laps) during application of bonding adhesives. Ensure all seam areas are clean and free of debris or other contamination prior to welding. Use only IB Roof Systems recommended cleaning procedures and products where necessary to clean membrane prior to seaming or after completed installation.

1. Full Sheet Method:

- a. Align membrane to provide a minimum 3" (7.6 cm) side lap. Fold membrane sheet back lengthwise so the underside of the membrane is exposed and apply IB membrane bonding adhesive at the specified coverage rate to required surfaces.
- b. Reinstall membrane into the applied adhesive when ready avoiding wrinkles or air pockets.
- c. Continue with remaining courses lapping 3" (7.6 cm) on sides.

2. Half Sheet Method:

- a. Install two adjacent courses of membrane dry and align to provide a minimum 3" (7.6 cm) side lap. Fold both courses of membrane back lengthwise so half the underside of the membrane is exposed and apply IB membrane bonding adhesive at the specified coverage rate to required surfaces.
- b. Reinstall membrane into the applied adhesive when ready beginning with the underlapping course and followed by the overlapping course taking care to avoid wrinkles or air pockets.
- c. Fold back the un-bonded half of the sheet lengthwise along with the adjoining membrane course and repeat the bonding procedure.

D. Membrane Adhesive Application:

- 1. IB PVC Single Ply Membranes: Apply IB bonding adhesive in accordance with project specifications and requirements at the following application rates:
 - a. IB Water Borne Adhesive: Apply adhesive to installed insulation or horizontal field of roof substrate only at the approximate rate of one (1) gallon per 160 square feet. Install adhesive in a uniform, thin coating and set membrane into the adhesive while wet.
 - b. IB Water Borne 636 Adhesive: Apply adhesive to installed insulation or horizontal field of roof substrate only at the approximate rate of one (1) gallon per 140 -180 square feet. Install adhesive in a uniform, thin coating and set membrane into the adhesive while wet.
 - c. IB Vertibond Adhesive: Apply as contact adhesive to both the underside of the membrane and to installed insulation, horizontal and vertical substrates at the approximate rate of one gallon per 60 square feet of net applied coverage area. Allow the adhesive open time to a dry substrate / tacky on back of membrane condition. Dry condition is tacky without stringing to a dry finger touch.
 - d. IB Vertibond 432 Bonding Adhesive: Apply as contact adhesive to both the underside of the membrane and to installed insulation, horizontal and vertical substrates at the approximate rate of one gallon per 60 square feet of net applied coverage area. Allow the adhesive open time to a dry substrate / tacky on back of membrane condition. Dry condition is tacky without stringing to a dry finger touch.

2. Approved PVC Spray Contact Adhesive:

- a. The substrate must be clean, dry, firm, free of loose particles, and free of dust, grease, and mold release agents. Protect surfaces not to be adhered.
- b. Approved PVC Spray Contact Adhesive: Follow manufacturer's guidelines and application instructions for use. The following are basic instructions when using IB approved PVC spray contact adhesive. Apply as adhesive to both the underside of the membrane and to approved substrates and insulation with an adhesive pattern at 90° angles (opposite direction) to each other. (Example: Spray one substrate vertically and spray the other substrate horizontally). Apply a consistent and thorough coat of adhesive at approximately 1,000 sq. ft. net applied coverage (both surfaces) per kit. Extra coverage is recommended at substrate edge. Allow the adhesive open time to a dry substrate / tacky on back of membrane condition. Dry condition is tacky without stringing to a dry finger touch.
- c. Press or roll membranes to surface of intended substrate immediately after installation to ensure full contact eliminating air pockets and wrinkles.
- d. A thin prime coat of additional adhesive may be required over rough or porous surfaces such as masonry or block walls. Allow adhesive prime coats to dry fully prior to application of membrane materials and bonding adhesives.
- e. Follow all cold weather and applicable handling procedures and do not apply when ambient or substrate temperatures are below 40°F (4.4°C). Do not use during inclement weather, on wet surfaces or on any



- roof deck showing signs of deterioration or loss of structural integrity. Do not use after the expiration date. Note: IB approved PVC spray contact adhesive should not be used and is not compatible for use with Expanded (EPS) and Extruded (XPS) Polystyrene board substrates.
- f. Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Recommend dispensing product in a well-ventilated area with certified respiratory protection; however, well-ventilated exterior applications may not need respiratory protection.
- g. It is the responsibility of the employer to complete a PPE evaluation and/or exposure assessment to determine if respiratory protection is required. Read all instructions, Product installation guidelines, and Safety Data Sheets (SDS) prior to use of any product. For additional information go to the website of the approved PVC spray contact adhesive manufacturer.
- 3. IB PVC Single Ply Fleece Back Membranes: Apply IB bonding adhesive in accordance with project specifications and requirements at the following application rates:
 - a. IB Water Borne Adhesive: Apply adhesive to installed insulation or horizontal field of roof substrate only at the approximate rate of one (1) gallon per 160 square feet. Install adhesive in a uniform, thin coating and set membrane into the adhesive while wet.
 - I. Broom membrane surfaces immediately after installation with a soft bristle push broom to ensure full contact eliminating air pockets and wrinkles. Follow a weighted roller and roll the membrane in both directions to achieve maximum contact. Follow all cold weather and applicable handling procedures and do not apply when temperatures are less than 40°F (4.4°C). Do not apply IB Water Borne Adhesives when temperatures may fall below 40°F (4.4°C) before the adhesive can completely dry.
 - II. Avoid application or contamination of seam areas and laps with bonding adhesive. Clean and remove all contaminants immediately and before final welding and completion of the seam.
 - III. A thin prime coat of additional adhesive may be required over rough or porous surfaces such as masonry or block walls. Allow adhesive prime coats to dry fully prior to application of membrane materials and bonding adhesives.
 - b. IB Water Borne 636 Adhesive: Apply adhesive to installed insulation or horizontal field of roof substrate only at the approximate rate of one (1) gallon per 100-120 square feet. Install adhesive in a uniform, thin coating and set membrane into the adhesive while wet.
 - I. Broom membrane surfaces immediately after installation with a soft bristle push broom to ensure full contact eliminating air pockets and wrinkles. Follow a weighted roller and roll the membrane in both directions to achieve maximum contact. Follow all cold weather and applicable handling procedures and do not apply when temperatures are less than 40°F (4.4°C). Do not apply IB Water Borne Adhesives when temperatures may fall below 40°F (4.4°C) before the adhesive can completely dry.
 - II. Avoid application or contamination of seam areas and laps with bonding adhesive. Clean and remove all contaminants immediately and before final welding and completion of the seam.
 - III. A thin prime coat of additional adhesive may be required over rough or porous surfaces such as masonry or block walls. Allow adhesive prime coats to dry fully prior to application of membrane materials and bonding adhesives.
 - c. Low Rise Foam Adhesive: Apply two-component low rise foam membrane adhesive in accordance with project specifications and requirements at the following application rates:
 - I. Full Sheet Method: Align membrane to provide a minimum 3" (7.6 cm) side lap. Fold membrane sheet back lengthwise so the underside of the membrane is exposed and apply CR-20 adhesive at the specified coverage rate to required surfaces, approximately 3.75 lbs. / square. The spatter pattern should yield a heavily textured, even coating of ½" to ½" (6.3 mm to 13 mm) nominal thickness height on the peaks of the spattered adhesive. Reinstall membrane into the applied adhesive when ready avoiding wrinkles or air pockets. Continue with remaining courses lapping 3" (7.6 cm) on sides.
 - II. Half Sheet Method: Install two adjacent courses of membrane dry and align to provide a minimum 3" (7.6 cm) side lap. Fold both courses of membrane back lengthwise so half the underside of the membrane is exposed and apply CR-20 adhesive at the specified coverage rate to required surfaces, approximately 3.75 lbs. / square. The spatter pattern should yield a heavily textured, even coating of ¼" to ½" (6.3 mm to 13 mm) nominal thickness height on the peaks of the spattered adhesive. Reinstall membrane into the applied adhesive when ready beginning with the underlapping course and followed by the overlapping course taking care to avoid wrinkles or air pockets. Fold back the un-bonded half of the sheet lengthwise along with the adjoining membrane course and repeat the bonding procedure.



- III. Avoid application or contamination of seam areas and laps with bonding adhesive. Clean and remove all contaminants immediately and before final welding and completion of the seam.
- E. Position IB PVC Single Ply smooth membrane rolls to provide a minimum 3" (7.6 cm) overlap at end laps. Stagger and offset end laps or membrane courses a minimum of 12" (30.5 cm) apart.
- F. Install IB PVC Single Ply Fleece back membranes with rolls closely butted together on ends for cover strip application. Install a 6" (15.2 cm) side strip of IB Cover Strip centered over the butt joint in accordance with IB Flashing Details. Continuously weld the cover strip into position after completion and welding of membrane side laps.
- G. IB membrane side laps and seams shall be hot-air welded using either an automatic hot-air welding machine or hot air hand welder in accordance with IB Roof Systems specifications, flashing details, and welding procedures. Follow all IB weld speed and temperature recommendations for IB membranes and pre-flashed accessories.
- H. Refer to FA-AT-21 for perimeter edge peel stop installation requirements. Where required, install peel stop in accordance with IB Construction Details, within 24" (61 cm) of the perimeter edge where conditions meet criteria outlined in FA-AT-21 greater than 2" per foot.

3.10 SEAM WELDING

- A. The minimum recommended weld width for seams completed with an automatic hot-air welder is 1-1/2" (3.8 cm). Seams, laps, and flashings completed with a hot-air hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Hand welded seams and laps shall be rolled with a silicone roller during welding to ensure a continuous welded seam.
- B. Regular test welds shall be conducted during all hot-air welding operations to verify attainment of watertight, properly welded membrane laps and seams, and to adjust welding parameters and settings as required. IB recommends test weld samples be retained for review, dated, and labeled, as part of a thorough Quality Control program by the installer.
- C. Only install as much roofing in one day as can be seamed and completed to a watertight condition. Seam areas must be kept clean and free of contaminants, adhesives, dirt, or moisture. Clean spills and accidental seam contamination immediately before drying or setting occurs. Avoid use of solvents to clean IB PVC Single Ply membranes or wipe down laps. Follow IB recommended cleaning procedures for welding to existing weathered membrane or cleaning areas of contamination. Denatured alcohol may be used to wipe and remove moisture from within membrane laps prior to welding.
- D. Install IB Round T-Joint Patches at all T-joint locations in field laps and flashing seams on 80-mil membrane installations. Hot-air weld T-joint patches over the prepared seam intersections and laps in accordance with IB flashing details.
- E. All seams and laps shall be visually inspected and physically probed after they have been set and cooled. Probe all seam areas to locate cold welds or presence of voids.
- F. Repair all seam defects and deficiencies the same day they are discovered.

3.11 FLASHING

- A. General: Refer to the General Requirements and IB Construction Details of this Manual, which outlines and or depicts flashing requirements for typical construction conditions. Install flashing materials as shown in the roofing details. Contact IB Technical Services for conditions not addressed in the IB Construction Details or for approval of alternative flashing options.
 - 1. IB Roof Systems requires installation of all roof construction details in accordance with published IB Construction Details utilizing IB manufactured and approved accessories, membranes and required components.
 - IB Base and Wall Flashing Details are approved for use over a variety of substrates conforming with IB
 requirements including structural poured and precast concrete, masonry block, dimensional lumber,
 plywood, and oriented strand board sheathing, approved pre-manufactured metal curbs and IB supplied,
 approved gypsum cover boards.
 - 3. Wood and steel-framed walls shall be surfaced with approved plywood, OSB or IB approved gypsum cover board products designed for direct application of roofing materials. Framed walls with approved gypsum sheathing require provision of a suitable wood nailing strip or wood blocking for the termination and attachment of flashing membranes.
 - 4. Base flashings shall be constructed with IB reinforced membrane the same mil thickness as used in the field of roof and shall be installed as a separate component from installation of the field membrane. Field



membrane courses may not be extended up vertical surfaces at base flashings and walls, except where alternate membrane terminations are incorporated at the base of the curb/wall.

- 5. Minimum flashing height is 8" (20.3 cm).
- 6. Base flashings and wall coverings shall be Fully Adhered in place and should conform to the height recommendations and limitations below. Insufficient height or termination of base flashings and penetrations below a roof's potential water accumulation depth, or where exposed to wind-driven rain or snow loads should be avoided. Sealants and caulks may be inadequate in preventing water entry under these conditions and will require periodic regular owner maintenance.
- 7. Proper securement of IB Roof Systems field and flashing membranes is required to ensure adequate resistance to wind and other loads to which the roof system will be subjected. For standard IB Roof System installations, follow the following securement requirements for mechanical fastening of IB field of roof and flashing membranes at roof system terminations, penetrations, vertical intersections, walls, and perimeter edges.
- 8. The maximum distance from the wall that horizontal mechanical attachment is installed is 6" (15.2 cm). For horizontal mechanical attachment beyond 6" (15.2 cm), move the attachment to the vertical substrate.
- 9. Use only IB supplied and approved fasteners, plates, anchors, and accessory products for the securement of IB membranes and flashing products.
- 10. Fully Adhered flashings shall be attached in accordance with IB Construction Details, published IB Specifications, and the following Flashing Securement Table.
- 11. Split / rough face concrete masonry block units are not suitable for direct flashing application. Smooth-faced units should be installed at areas to receive base and wall flashings with provision for through wall or reglet style counterflashing. Surface mount flashing terminations are not permitted at concrete masonry block wall substrate.
- 12. Walls clad with smooth, corrugated or standing seam metal panels, lap siding, hardboard, EIFS, stucco / cement finish or similar exterior claddings require the installed IB base flashing to extend up vertical surfaces behind the cladding with a minimum 2" overlap. Bottom edge of cladding or finish materials shall include provision of a sheet metal closure and counterflashing.
- 13. For occupied structures and projects where odor or fume control concerns exist, care should be taken during project planning to assess potential entry points into the structure. Consideration should be given to the use of compatible air / vapor barrier seals at openings of the roof deck, terminations, walls, and penetrations; and selection of construction details and low fume, reduced VOC, content adhesives and accessory products which are approved for the specific application.
- 14. Flashing of curbs, parapets, expansion joints, and other penetrations of the roof must be performed using approved IB PVC reinforced membrane and IB factory-manufactured accessories. Non-reinforced membrane may be used for flashing pipe penetrations, penetration pockets, and scuppers, as well as inside and outside corners, in accordance with IB details when the use of IB factory-manufactured accessories cannot be used or with prior approval from Technical.
- 15. Follow IB Flashing Details and procedures for all curb, wall, terminations, and penetration flashings including metal edging/coping and drainage outlets using IB manufactured and supplied accessories.
- 16. Tie-ins to sloped roof areas, transitions of roof plane or installation at valleys with slopes 2" in 12" or greater require termination and securement of the field membrane in accordance with IB Construction Details. Refer to IB Construction Details for additional requirements.
- 17. Install sheet metal in compliance with IB Flashing Details and SMACNA guidelines for type, grade and forming of seams.
- 18. Use only IB PVC clad coated metal stock formed metal edging and flashing components for construction of flashing details where welded membrane or welded flashing terminations to coated metal flanges are required.
- 19. All clad coated metal flashing corners and joints must be reinforced with an additional layer of IB NR 5" x 8" (12.7 cm x 20.3 cm) Metal Joint Patch or larger piece of NR Detail Flashing if required by joint size.
- 20. Surfaces with existing asphalt, coal tar, mastics, sprayed polyurethane foam or similar incompatible materials shall be removed, thoroughly cleaned, or separated from contact with new IB PVC flashings by a slip sheet, approved insulation or cover boards, or approved plywood, etc.
- 21. IB PVC ChemGuard is available with a variety of accessories specific to these membranes. Note: IB PVC ChemGuard® flashings and accessories are required for use with IB PVC ChemGuard® membranes.
- 22. DensGlass® boards are NOT to be used as a substrate for fully adhered attachment on parapet walls, according to the manufacturer.
- 23. Conduits and wiring shall be properly secured and supported above the IB roof system on approved piping / conduit support details.



24. Wood blocking and wood nailers shall be provided where required by project details and in accordance with IB Construction Details.

3.12 FLASHING INSTALLATION

A. General Application Guidelines

- 1. Substrate surfaces shall be smooth, clean, dry, and properly secured in place, ready to receive flashing materials prior to the start of work.
- 2. Hand welding of flashing membrane and accessory laps and seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams and laps shall be probed after completion and adequate set time for watertight seam integrity and proper bond. Regular test welds prior to and during progress of work is an important part of project quality control and consistency in proper membrane seaming.
- 3. When using bonding adhesives, be sure to use the adhesive specific to membrane and follow ambient weather conditions restrictions for use. Avoid contamination of lap and seam areas prior to welding with membrane or insulation adhesives, caulks, or primers.
- 4. All membrane flashing corners shall be reinforced with an additional layer of IB Inside / Outside corners or reinforcing membrane.
- 5. Remove and discard flashing materials or membrane used for temporary seals prior to completion of final flashing application.
- 6. Where tie-ins are required for new or existing air or vapor barriers and retarders, consult IB Technical Services and the specific material manufacturer for recommendations and requirements on required detailing.

B. Curbs:

- 1. Flashings are installed using compatible adhesive for vertical applications.
- Secure membrane flashing at the top edge with a termination bar, flat stock, or counter flashing. Apply a
 bead of IB Water Stop sealant between the curb surface and membrane flashing, and underneath all
 termination bars and surface mounted counter flashings. Exposed termination bars must be mechanically
 fastened 6" (15.2 cm) o.c. Termination bars that are counter flashed must be fastened 12" (30.5 mm) o.c.
- 3. If wood is present at the top of the curb, secure membrane to the inside of the curb using ring shanks nails 12" (30.5 cm) o.c. after wrapping the membrane to the inside of the curb. This can be used in lieu of the termination bar if nailed on the top or preferably the back side of the wood.
- 4. Roof field membrane must be fastened along the base of curbs, ducts, equipment supports, and field terminations a minimum of 12" (30.5 cm) o.c. with approved fasteners and barbed seam plates or alternatively membrane can be extended up the curb and secured into the base of the curb.

C. Parapets:

- 1. Flashings are installed using compatible adhesive for vertical applications. Maximum standard parapet wall height conditions are:
 - a. Adhered Parapet Walls:
 - Wall heights 60" (1.52m) or less, refer to Standard Adhered Wall Detail.
 - Wall heights exceeding 60" (1.52m), the adhered membrane shall be additionally fastened in the vertical lap at in-seam spacing at 12" (30.5 cm) o.c. (Refer to IB Construction Detail WD-02 Adhered Tall Wall).
- 2. Secure membrane flashing at the top edge with a termination bar, counter flashing, or metal cap flashing. Apply a bead of IB Water Stop sealant between the wall surface and membrane flashing, and underneath all termination bars and surface mounted counter flashings. Exposed termination bars must be mechanically fastened 6" (15.2 cm) o.c. Termination bars that are counter flashed must be fastened 12" (30.5 cm) o.c.
- 3. Roof membrane must be mechanically attached along the base of walls and field terminations a minimum of 12" (30.5 cm) o.c. with approved fasteners and barbed seam plates or alternatively membrane can be extended up the curb and secured into the base of the wall.
- 4. Metal counter flashings with fully adhered membrane wall flashings are required on warranty terms longer than 20 years. (They are not required for warranty term lengths of 20 years or less.) All termination bars, either exposed or covered, must be sealed with Solar Seal 900 Caulk or IB Sealer.
- 5. Metal cap flashings must have continuous cleats or be face-fastened 12" (30.5 cm) o.c. on both the inside and outside of the walls.

- D. Adhered Base and Wall Membrane Flashings:
 - 1. The thickness of the flashing membrane must be the same as the thickness of the roofing membrane.



- 2. For fully adhered application, install membrane with 3" end and side laps using only IB adhesives approved for vertical substrate installations. Follow all IB requirements and recommendations for acceptable environmental conditions and temperatures and required application rates. Application during colder weather requires special attention to material storage and handling, and typically requires longer open times for adhesive set-up and curing.
- Adhesive application rates will vary according to the porosity and condition of the substrate surface. A light
 prime coat of adhesive or manufacturer's approved primer may be required particularly at concrete and
 masonry block surfaces prior to application of primary flashing membrane adhesive. Where required, allow
 prime coat to dry thoroughly.
- 4. When using IB Vertibond Adhesive, IB Vertibond 432 Bonding Adhesive or IB Approved PVC spray contact adhesive, the following substrates are generally suitable: new primed gypsum roof board; Type X gypsum board, cement roof board, properly prepared structural concrete (absent of curing and sealing compound); new or properly prepared OSB (untreated), new or properly prepared CDX plywood (untreated), wood board curbs (untreated), and dry, sound masonry (absent of curing or sealing compounds).
- 5. Apply IB Vertibond Adhesive or IB Vertibond 432 Bonding Adhesive in accordance with IB specifications and requirements at the following application rates:
 - a. The substrate must be clean, dry, firm, free of loose particles, and free of dust, grease, and mold release agents. Protect surfaces not to be adhered.
 - b. IB Vertibond Adhesive or IB Vertibond 432 Bonding Adhesive: Apply as contact adhesive to both the underside of the membrane and to approved vertical substrates at the approximate rate of one gallon per 60 square feet of net applied coverage area. Allow the adhesive sufficient open time to achieve a dry substrate / tacky on back of membrane condition. Dry condition is tacky without stringing to a dry finger touch.
 - c. Press or roll flashing membranes to vertical surfaces immediately after installation to ensure full contact eliminating air pockets and wrinkles.
 - d. Follow all cold weather and applicable handling procedures and do not apply when ambient or substrate temperatures are below 40°F (4.4°C). Do not use it during inclement weather, on wet surfaces or on any roof deck showing signs of deterioration or loss of structural integrity. Do not use after the expiration date. Please note: IB Vertibond Adhesive and IB Vertibond 432 Bonding Adhesive should not be used and is not compatible for use with Expanded (EPS) and Extruded (XPS) Polystyrene board substrates.
 - e. Avoid application or contamination of seam areas and laps with bonding adhesive. Clean and remove all contaminants immediately and before final welding and completion of the seam.
- 6. Apply IB approved PVC spray contact adhesive in accordance with IB specifications and requirements at the following application rates:
 - a. The substrate must be clean, dry, firm, free of loose particles, and free of dust, grease, and mold release agents. Protect surfaces not to be adhered.
 - b. IB Approved PVC spray contact adhesive: Follow manufacturer's guidelines and application instructions for use. The following are basic instructions when using the IB Approved PVC spray contact adhesive. Apply as adhesive to both the underside of the membrane and to approved vertical substrates with an adhesive pattern at 90° angles (opposite direction) to each other. (Example: Spray one substrate vertically and spray the other substrate horizontally). Apply a consistent and thorough coat of adhesive at approximately 1,000 sq. ft. net applied coverage (both surfaces) per kit. Extra coverage is recommended at substrate edge. Allow the adhesive open time to a dry substrate / tacky on back of membrane condition. Dry condition is tacky without stringing to a dry finger touch.
 - c. Press or roll flashing membranes to vertical surfaces immediately after installation to ensure full contact eliminating air pockets and wrinkles.
 - d. A thin prime coat of additional adhesive may be required over rough or porous surfaces such as masonry or block walls. Allow adhesive prime coats to dry fully prior to application of membrane materials and bonding adhesives.
 - e. Follow all cold weather and applicable handling procedures and do not apply when ambient or substrate temperatures are below 40°F (4.4°C). Do not use it during inclement weather, on wet surfaces or on any roof deck showing signs of deterioration or loss of structural integrity. Do not use after the expiration date. Note: IB approved PVC spray contact adhesive should not be used and is not compatible for use with Expanded (EPS) and Extruded (XPS) Polystyrene board substrates.
 - f. Follow IB Flashing Details and procedures for all wall and curb flashings substituting IB approved spray contact adhesive in lieu of IB Vertibond Contact Adhesive in applicable conditions.



- g. Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Recommend dispensing product in a well-ventilated area with certified respiratory protection; however, well-ventilated exterior applications may not need respiratory protection.
- h. It is the responsibility of the employer to complete a PPE evaluation and/or exposure assessment to determine if respiratory protection is required. Read all instructions, Product installation guidelines, and Safety Data Sheets (SDS) prior to use of any product. For additional information go to the website of the approved PVC spray contact adhesive manufacturer.

E. Perimeter Edge Flashings:

- Perimeter edge details should be installed in accordance with ANSI / SPRI ES-1 and applicable local code requirements. Continuous metal cleats one gauge heavier than the edge metal or as required for premanufactured IB edge systems shall be installed along perimeter edges. As an alternative, IB PVC clad edge metal may be externally fastened in accordance with IB Construction Details with approved fasteners.
- PVC Clad Metal is applicable for both drip edge and gravel stop conditions as well as the exterior edges of
 parapet walls. PVC Clad Metal constructed of galvanized metal may be used for warranties up to 20 years.
 For extended length warranties (25 years, 30 years or greater; use IB PVC Clad Drip Edge or IB PVC Clad
 Gravel Stop of Stainless-Steel construction or IB pre-manufactured Metal-Era fascia and coping systems
 only.
- 3. Roof edge flashings constructed with IB coated metal are secured through the metal flanges nailed 4" (10.2 cm) o.c. staggered or using IB HD #14 Fasteners at 12" (30.5 cm) o.c. into wood nailers. Then heat-weld an 6" (15.2 cm) IB Cover Strip to metal flanges and field membrane.
- 4. Form exposed edge metal flanges with a 1/2" (13 mm) hem formed where applicable for use with a continuous metal cleat. Clad metal termination bars and miscellaneous metal flashings should be formed with fully closed 1/2 (13 mm) hems with or without caulk lip kick-out as required.
- 5. Flashings formed from PVC clad metal for perimeter drip edge, gravel guard edge, 90° or other transitions, clad metal termination bars and similar linear lengths of metal flashing require sealing of butt-joints in accordance with published IB Butt-Joint Details. Install metal flashings with a 1/4" (6.3 mm) gap between ends to allow for expansion. Seal joint with application of a 2" (5.1 cm) strip of foil bond-breaker tape and cover with a minimum 5" (12.7 cm) wide strip of non-reinforced IB PVC membrane centered over the joint and extending down the outside face prior to application of final reinforced flashing strip-in membrane.
- 6. Perimeter Edge Metal Wall Closures, 90° flashings with inside/outside corners and similar constructions shall be formed to provide a continuous clad metal flange with all overlapping joints sealed, riveted, and covered with a strip of non-reinforced membrane prior to application of reinforced flashing membrane.
- 7. Lapped PVC clad perimeter edge metal and similar metal flashing butt-joints are susceptible to fatigue and splitting of flashing and / or field membranes at these locations due to movement and expansion of metal flashings. IB Roof Systems does not recommend use of lapped butt-joint details nor warrants against leaks or damage caused by metal movement.

F. Manufactured Edge Systems (Anchor-Tite):

- 1. Note: For extended length warranties (25 years, 30 years, or greater; use IB PVC Clad Drip Edge or IB PVC Clad Gravel Stop of Stainless-Steel construction or IB pre-manufactured Metal-Era fascia and coping systems only.
- 2. IB PVC field membrane or wall flashing membrane shall be turned over the roof edge or parapet wall and down outside face of wall extending past bottom of wood nailer a minimum of ½" (13 mm).
- The outside edge of wood nailer(s) must be aligned flush with or extend slightly past outermost edge of wall.
- 4. Follow any applicable pre-installation and post installation requirements of the manufacturer's edge system design requirements.
- 5. Install edge system or coping system per manufacturer's installation and securement instructions. Comply with design uplift pressures calculated under ASCE 7 and as required by local building codes or authority having jurisdiction.
- 6. Important: Remove protective film immediately upon installation.

G. Pipe Flashings:

1. Install pipe penetration flashings around pipes and circular penetrations using IB PVC Pipe Flashings, Split Pipe Flashings, No-Cone Pipe Flashings, or IB Custom Pipe Flashings. Terminate and secure field membrane near the base of the penetration 6" (15.2 cm) o.c. with a minimum of 3 fasteners and plates for pipes less than 12" (30.5 cm) diameter, and 12" (30.5 cm) o.c. with a minimum of 4 fasteners and plates for penetrations larger than 12" (30.5 cm) in diameter. Mark and trim cone flashings to an opening size smaller than the pipe outside diameter to provide a 1/2" (13 mm) or wider flared top edge when set and drawn down over the pipe. Slide the flashing over penetration and center. The flared upper edge of cone



flashing must fit tightly against the pipe without gaps or voids. Heat weld perimeter edge of the target sheet to field membrane. Apply stainless steel banding clamp and seal with a continuous bead of approved IB sealant around the top of the completed penetration. Probe and repair all non-welded areas.

2. Where required for irregular size or pipe flashings with greater than an 8" (20.3 cm) diameter, contact IB Roof Systems for assistance with custom pipe flashing requirements. Where custom flashings are not available from IB, field fabricated no-cone pipe flashing details may be constructed from reinforced IB membrane target sheets with non-reinforced upper membrane in accordance with IB Construction Details.

H. Pitch Pans or Penetration Pocket Pans:

- 1. Where used, install IB PVC Clad Pitch Pans and fill pans with IB approved Sealant / Filler for pitch pans. IB Pitch Pans must be secured in place over the installed IB membrane with IB Fasteners approved for the substrate type. Split pan seams must be sealed with a continuous bead of M-1 Sealant and closed with a pop-rivets spaced approximately 1" (25 mm) o.c. (not supplied).
- 2. Fill sealant pans with IB One-Part Pourable Sealant or IB Sealer. Pans may be partially filled with non-shrink quick-set grout, allowing a 2" (5.1 cm) minimum thickness of IB One-Part Pourable Sealant or IB Sealer and filled to the very top or overfill the pocket.
- 3. Pitch pan sealant will require periodic inspection and regular owner maintenance.
- 4. Solid soldered stainless steel sheet metal cap flashings above the pans are recommended to reduce owner required sealant maintenance.

I. Irregular Shaped Penetrations:

- 1. Where irregularly shaped supports are not suitable for pipe or curb flashing application, install IB PVC Clad Pitch Pans and fill pans with IB approved Sealant / Filler for pitch pans. IB Pitch Pans must be secured in place over the installed IB membrane with IB Fasteners approved for the substrate type. Split pan seams must be sealed with a continuous bead of M-1 Sealant and closed with a pop-rivets spaced approximately 1" (25 mm) o.c. (not supplied).
- 2. Fill sealant pans with IB One-Part Pourable Sealant or IB Sealer. Pans may be partially filled with non-shrink quick-set grout, allowing a 2" (5.1 cm) minimum thickness of IB One-Part Pourable Sealant or IB Sealer and filled to the very top or overfill the pocket.
- 3. Pitch pan sealant will require periodic inspection and regular owner maintenance.
- 4. Solid soldered stainless steel sheet metal cap flashings above the pans are recommended to reduce owner required sealant maintenance.
- J. Hot Exhaust Stacks & Hot Pipe Vents:
 - 1. Hot pipe and similar hot exhaust vents with operating / surface temperatures above 120°F (48.9°C); require the use of an approved IB Hot-Pipe Flashing Detail. Install an insulated metal jacket or curb flashing with separate sheet metal rain collar prior to application of IB PVC pipe flashing. As an alternative, an insulated metal curb may be installed with sheet metal cap flashing.

K. Drver / Exhaust Vents:

- 1. For dryer, kitchen, and bath exhaust vents use IB Dryer Exhaust Vents. Connect vent pipe to exhaust below deck. Tighten hose clamp at pipe connection, apply duct tape where both pipes connect, if necessary, to prevent any exhaust leakage. Secure the metal flange of the vent to the roof deck with a minimum of 4 fasteners using appropriate IB Fasteners for deck type. Install provided IB No Cone Flashing over the exhaust pipe and hot-air weld the perimeter of the target flashing to the field membrane with a minimum 1-1/2" (3.8 cm) weld to provide a watertight seal. Install the vent hood over the pipe and tighten clamp to secure into place.
- 2. Note: Not intended for use over plumbing vents, furnaces, chimneys, water heater or other gasfired equipment, or roof ventilation purposes.

L. Drains:

- 1. Roof drains shall be cast iron or minimum 11 gauge or heavier spun aluminum type for new installations manufactured with integral clamping rings and strainers.
- 2. Sump areas approximately 36" x 36" (0.91m x 0.91m) for primary drains and 36" x 48" (0.91m x 1.22m) for primary / overflow drain sets, should be formed into the deck, or constructed with tapered insulation to facilitate drainage and water removal from the roof. Sump area shall be tapered a minimum of 1/2" (13 mm) per foot and shall not exceed 3" (7.6 cm) per horizontal foot slope.
- 3. Drain flashings shall be installed in accordance with IB Construction Details with a seamless drain target sheet. Field membrane shall be terminated around the drain and fastened 12" (30.5 cm) o.c. with IB fasteners and barbed seam plates.
- 4. Insulation and substrate surfaces should be tapered and sumped to drains and outlets. Flash drains with a reinforced, smooth back target sheet in accordance with IB Flashing Details. Do not extend the field or flashing seams through roof drain flashings or beneath clamping rings. Secure target sheet around drain



sump fastened a minimum of 6" (15.2 cm) o.c. with approved fasteners. Make small cuts or holes around drain bolts and seal the underside of target flashing to prepared drain flange in a continuous bed of IB Water Stop sealant. Install clamping ring to provide a watertight compression seal. Cut an opening in the membrane directly above and slightly wider than the drain opening with a minimum of 1/2" (13 mm) past the inside edge of drain bolts.

M. Retrofit Drains:

- IB Aluminum Retrofit Drain with a factory applied IB reinforced membrane target flashings are available
 for use in most new construction and retrofit drain applications. There are two types of models. The 2"
 (5.1 cm) Retro-fit drains are supplied with an expandable foam tape that seals to the existing drainpipe
 forming a compression seal. Larger diameter Retro-fit drains incorporate a Pro-Seal expansion gasket
 that requires the use of a Pro-Seal screwdriver to tighten gasket to create a water-tight connection to the
 existing drainpipe.
- 2. Select appropriate drain to connect to or fit inside of the existing drainpipe.
- 3. Retro-fit drain with expandable tape:
 - a. For Retro-fit drain models with expandable tape the installer removes the exterior restraining tape and immediately sets the retro drain in place. The released tape gradually expands to fill the space between the Retro-fit drain and the existing drain sleeve making the connection watertight. Directconnect design utilizes flexible expansion-type connectors to prevent failure from movement of roof deck or drain.
 - b. The Retro-fit drains may be set in a shallow bowl or directly on roof membrane with deck opening of at least 1" (25 mm) greater than the leader size into which the drain will be inserted. The flange is adaptable to all membranes.
 - c. Secure the drain flange to the roof deck using a minimum of four IB Fasteners that are evenly spaced around the flange. The flashing membrane must cover and extend past the fastener head.
 - d. Flash drain flange in accordance with membrane manufacturer's instructions. Hand welding of flashing membrane seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams shall be probed after completion and adequate set time for watertight seam integrity and proper bond.
 - e. Install Aluminum Strainer in accordance with manufacturer's instructions.
- 4. Retro-fit drain with Pro-Seal Gasket:
 - a. Insert Pro-Seal into the end of drain stem and tighten screws enough to hold the seal in place during installation. Insert assembled Retro-fit Drain into existing drainpipe until flange is flush on roof membrane.
 - b. Alternately tighten seal compression ring screws with Pro-Seal Screwdriver until hand tight. Retro-fit Drain body is correctly installed when pressure placed on drain body results in no vertical movement. **Do not overtighten the screws.**
 - c. Secure the drain flange to the roof deck using a minimum of four IB Fasteners that are evenly spaced around the flange. The flashing membrane must cover and extend past the fastener head.
 - d. Flash drain flange in accordance with membrane manufacturer's instructions. Hand welding of flashing membrane seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams shall be probed after completion and adequate set time for watertight seam integrity and proper bond.
 - e. Install Aluminum Strainer in accordance with manufacturer's instructions.

N. Scuppers:

- There are three typical styles of IB PVC Clad Scuppers: Standard Through Wall Scupper, Standard Overflow Through Wall Scupper and Through Wall Box Scupper with Drop Drain & Overflow Cut-Out. Each style is made to order as a custom scupper.
- Metal through-wall scuppers shall be installed over the completed base and wall flashing assembly. A
 wood nailer is required at the juncture of the deck and wall for securement of the scupper flange to the
 deck. Scupper flanges shall be secured using a minimum of two IB Fasteners per flange that are
 appropriate for the specific substrate.
- 3. Hand welding of scupper target flashing membrane seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams shall be probed after completion and adequate set time for watertight seam integrity and proper bond.
- 4. Apply a bead of Solar Seal 900 or IB Sealer to the scupper box at the outside wall face.
- Mechanically attached base and wall flashings require separate securement 6" (15.2 cm) o.c. through IB
 Aluminum Termination Bar around perimeter edge of scupper opening prior to placement and
 securement of the clad metal scupper.



O. Blocking and Equipment Supports:

- Use of appropriate grade and type round structural pipe supports in lieu of irregularly shaped penetrations such as c-channel, angle iron, I-beam, or Unistrut type channels, angles or beams are recommended to facilitate use of standard pipe flashings. Penetration supports subject to regular movement or vibration such as at equipment stands, screen walls, or other elevated rooftop equipment should be flashed with IB U-Anchor Flashing Systems.
- 2. IB U-Anchors are customized to fit roof top conditions and provide anchorage and equipment support solutions that are compatible with the IB PVC roof membrane.
- 3. Wood support blocking, typically 4" x 4" (10.2 cm x 10.2 cm), is usually installed under light-duty or temporary roof mounted equipment, such as electrical conduit, gas lines, and condensation and drain lines.
- 4. Place wood blocking on oversized IB PVC Membrane Isolation Pad, fold two sides vertically, and fasten with roofing nails into the blocking.

P. Expansion Joints:

- Roof expansion joint details may be field fabricated to meet expansion joint needs. There are three typical
 expansion joint construction styles: a curb-to-curb style set 8" (20.3 cm) or more above the roof or
 installed with an approved low profile, or canted profile style directly to the roof surface into the structure
 support or wood nailers.
- 2. Field construction of expansion joints consists of a membrane retainer sheet, expansion joint filler, foam backer rod, and an IB membrane cover strip.
- 3. Expansion joints should be set in a continuous line extending fully through the edge of the roof with approved wood nailers secured along both sides of the joint.
- 4. Temporary construction ties at expansion joints must be removed. Do not install roof insulation or membrane materials directly across joint openings.
- 5. Provide watertight detailing and functional integration of the expansion joint with other roof flashings and termination details at expansion joint terminations, intersections, and closures.
- Protection of the finished roof assembly is recommended with expansion joint cross-over access installed at walkways and where service work is expected to reduce the potential for foot traffic and equipment damage.
- 7. Avoid expansion joint construction and placement that restricts or prevents the free flow of water to outlets. Do not block or intersect drainage outlets and valley lines or attempt to route roof drainage over an installed expansion joint.
- 8. Roof membrane must be mechanically attached along the base of the expansion joint with screws and plates a minimum of 12" (30.5 cm) o.c.
- 9. The retainer sheet must extend from one side of the expansion joint to the other and cover the secured field membrane on each side of the joint, extending past the fastener plate sufficiently to provide specified welded seam width of a minimum of 1-1/2" (3.8 cm).
- 10. The retainer sheet shall be secured along to the wood nailer or the top of the raised wood curb a minimum of 6" (15.2 cm) o.c.
- 11. The cavity of the expansion joint is filled with expansion joint filler (specified by others). The expansion joint bellows must be a minimum of one and one-half times larger than the width of the expansion joint opening to allow for sufficient expansion / contraction.
- 12. An additional layer of IB membrane is loose laid over the expansion bellows and then welded to the membrane retainer sheet.
- 13. Hand welding of flashing membrane seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams shall be probed after completion and adequate set time for watertight seam integrity and proper bond.

Q. U-Anchor Solar Array Support System:

- 1. Depending on engineering requirements determined by others, the U-Anchor may be required to be secured to structural supports. Install the U-Anchor as per instructions provided by Anchor Products. Follow any applicable pre-installation and post installation requirements according to the engineered design.
- 2. Hand welding of the U-Anchor PVC flashing membrane seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams shall be probed after completion and adequate set time for watertight seam integrity and proper bond.
- 3. Attach the solar system mounting bracket and assembly to the U-Anchor posts as per instructions provided by Anchor Products.

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R. U-Anchor Pipe Support System:



- 1. Depending on engineering requirements determined by others, the U-Anchor may be required to be secured to structural supports. Install the U-Anchor as per instructions provided by Anchor Products. Follow any applicable pre-installation and post installation requirements according to the engineered design.
- 2. Hand welding of the U-Anchor PVC flashing membrane seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams shall be probed after completion and adequate set time for watertight seam integrity and proper bond.
- 3. Secure the pipe support mounting bracket and assembly to the U-Anchor posts as per instructions provided by Anchor Products.

S. Pipe Supports:

1. Conduits and piping shall be properly secured and supported above the completed roof on approved support details. Surface-mounted supports bearing on the membrane surface shall be installed over a course of IB WalkTread™ or IB approved protection pad.

T. Satellite Dish Supports:

- 1. Install satellite dish support bases over a protective layer of minimum 60-mil IB PVC membrane or IB WalkTread™ which is to be continuously perimeter welded to the field membrane in accordance with IB Flashing Details.
- U. U-Anchor Satellite Support Securement System:
 - Depending on engineering requirements determined by others, the U-Anchor may be required to be secured to structural supports. Install the U-Anchor as per instructions provided by Anchor Products. Follow any applicable pre-installation and post installation requirements according to the engineered design.
 - 2. Hand welding of U-Anchor PVC flashing membrane seams by means of a hand welder shall maintain a minimum 1-1/2" (3.8 cm) weld width. Flashing seams shall be probed after completion and adequate set time for watertight seam integrity and proper bond.
 - 3. Secure the satellite dish mounting bracket and assembly to the U-Anchor as per instructions provided by Anchor Products.
 - 4. Secure the base of the dish as per instructions provided by Anchor Products.

V. Lightning Protection Clips:

- 3. Lightning protection base / clips shall be limited to designated locations over a minimum 3" (7.6 cm) wide IB PVC flashing membrane strips which are continuously perimeter heat-welded to the roof membrane.
- 4. The lightning protection base / clips shall be adhered to the membrane strip using a generous bead of M-1 Sealant, IB Sealer, or another compatible sealant.

3.13 WALKWAYS

- A. Clean the membrane prior to walkway pad installation at locations designated to receive walkways. Provide manufacturers walkway pads at roof access points, hatches, areas of foot traffic, and around rooftop equipment requiring periodic maintenance.
- B. IB WalkTread™ where required shall be continuously perimeter welded to the membrane in accordance with IB Flashing Details. Do not install walk treads directly over completed seams. Hold back walk tread edges a minimum of 3" (7.6 cm) on either side of a completed membrane or flashing seams.
- C. Walkway pad installation must be monitored to avoid overheating the underlying membrane or walk tread while welding in place. Probe welds to ensure adequate bond to membrane surfaces.

3.14 DAILY SEALS

- A. Install night seals as temporary closure to prevent moisture infiltration at membrane terminations and flashings that cannot be finished by the close of each day. Remove temporary seals prior to the next day's work to avoid contamination or damage to the completed membrane.
- B. Remove and replace areas that are damaged, wet, or contaminated prior to continuation of work. Clean and prepare seams in accordance with IB recommendations.
- C. Clean temporary sealant materials from deck and flashing substrates and prepare surfaces to receive permanent roofing and flashing materials.

3.15 CLEAN UP AND PROTECTION

A. During installation, keep all work surfaces clean and free of dirt and debris. Remove excess materials, trash, cartons, loose fasteners, tools, and debris from the roof daily. Dispose of waste material, packaging, and debris in accordance with project requirements and applicable regulatory requirements.



- B. Avoid contamination of finished membrane surfaces. Install protective materials and tarps as necessary to protect completed roof areas from damage. Remove adhesive spills, residue, and other contaminants immediately before drying or setting up.
- C. IB recommends contractor pre-inspection of the completed installation in advance of a requested IB final inspection. Pre-inspection should include review of all project details, drainage outlets, inspection of laps and seams, sheet metal work, sealants, and caulks.
- D. Avoid construction traffic or material staging over completed membrane areas. Install protective tarping and plywood secured against wind and the elements to prevent membrane contamination and physical damage from other trades or work.

END OF SECTION



IB PVC FULLY ADHERED SINGLE PLY FASTSPECS

	IB PVC FULLY ADHERED SINGLE PLY FASTSPECS	
	semblies: Wood Decks – New or Tear-Off	
FA-CB ^{MA} -W	FA Membrane / Cover Board ^(MA) / Wood Deck	196
FA-CB ^{RB} -W	FA Membrane / Cover Board ^(RB) / Wood Deck	197
FA-CB ^{MA} -IN ^{MA} -W	FA Membrane / Cover Board ^(MA) / Insulation ^(MA) / Wood Deck	198
FA-CB ^{RB} -IN ^{MA} -W	FA Membrane / Cover Board ^(RB) / Insulation ^(MA) / Wood Deck	199
FA-CB ^{RB} -IN ^{RB} -W	FA Membrane / Cover Board(RB) / Insulation(RB) / Wood Deck	200
FA-CB ^{RB} -IN ^{MA} -VB-W	FA Membrane / Cover Board(RB) / Insulation(MA) / Vapor Barrier / Wood Deck	201
FA-IN ^{MA} -W	FA Membrane / Insulation ^(MA) / Wood Deck	202
FA-IN ^{RB} -W	FA Membrane / Insulation ^(RB) / Wood Deck	203
	atter Adhesive Roof Assemblies: Wood Decks – New or Tear-Off	T
FA ^{SP} -CB ^{RB} -W	FA ^(SP) Membrane / Cover Board ^(RB) / Wood Deck	204
FA ^{SP} -CB ^{RB} -IN ^{RB} -W	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Wood Deck	205
FA ^{SP} -CB ^{RB} -IN ^{MA} -VB-W	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(MA) / Vapor Barrier / Wood Deck	206
	semblies: Wood Decks – Recover	
FA-CB ^{MA} -EX-W	FA Membrane / Cover Board ^(MA) / Existing Roof / Wood Deck	207
FA-CB ^{RB} -EX-W	FA Membrane / Cover Board ^(RB) / Existing Roof / Wood Deck	208
FA-CB ^{RB} -IN ^{MA} -EX-W	FA Membrane / Cover Board ^(RB) / Insulation ^(MA) / Existing Roof / Wood Deck	209
FA-CB ^{RB} -IN ^{RB} -EX-W	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Wood Deck	210
Fully Adhered with Spa	atter Adhesive Roof Assemblies: Wood Decks – Recover	
FA ^{SP} -CB ^{RB} -EX-W	FA ^(SP) Membrane / Cover Board ^(RB) / Existing Roof / Wood Deck	211
FA ^{SP} -CB ^{RB} -IN ^{RB} -EX-W	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Wood Deck	212
FA ^{SP} -EX ^{MB} -W	FA ^(SP) Membrane / Existing Roof ^(MB) / Wood Deck	213
FA ^{SP} -EX ^{SA} -W	FA ^(SP) Membrane / Existing Roof ^(SA) / Wood Deck	214
Fully Adhered Roof As	semblies: Steel Decks – New or Tear-Off	
FA-CB ^{MA} -S	FA Membrane / Cover Board ^(MA) / Steel Deck	215
FA-CB ^{MA} -IN ^{MA} -S	FA Membrane / Cover Board ^(MA) / Insulation ^(MA) / Steel Deck	216
FA-CBRB-INMA-S	FA Membrane / Cover Board ^(RB) / Insulation ^(MA) / Steel Deck	217
FA-IN ^{MA} -S	FA Membrane / Insulation ^(MA) / Steel Deck	218
FA-CB ^{RB} -IN ^{RB} -VB-TB ^{MA} -S	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Vapor Barrier / Thermal Barrier ^(MA) / Steel Deck	219
FA-IN ^{RB} -IN ^{MA} -VB-S	FA Membrane / Insulation ^(RB) / Insulation ^(MA) / Vapor Barrier / Steel Deck	220
FA-IN ^{RB} -VB-TB ^{MA} -S	FA Membrane / Insulation ^(RB) / Vapor Barrier / Thermal Barrier ^(MA) / Steel Deck	221
Fully Adhered with Spa	atter Adhesive Roof Assemblies: Steel Decks – New or Tear-Off	
FA ^{SP} -CB ^{MA} -IN ^{MA} -S	FA ^(SP) Membrane / Cover Board ^(MA) / Insulation ^(MA) / Steel Deck	222
FA ^{SP} -CB ^{RB} -IN ^{MA} -S	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(MA) / Steel Deck	223
FA ^{SP} -IN ^{MA} -S	FA ^(SP) Membrane / Insulation ^(MA) / Steel Deck	224
FA ^{SP} -CB ^{RB} -IN ^{RB} -VB-TB ^{MA} -S	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Vapor Barrier / Thermal Barrier ^(MA) / Steel Deck	225
FA ^{SP} -IN ^{RB} -IN ^{MA} -VB-S	FA ^(SP) Membrane / Insulation ^(RB) / Insulation ^(MA) / Vapor Barrier / Steel Deck	226
Fully Adhered Roof As	semblies: Steel Decks – Recover	
FA-CB ^{MA} -EX-S	FA Membrane / Cover Board ^(MA) / Existing Roof / Steel Deck	227
FA-CB ^{RB} -EX-S	FA Membrane / Cover Board ^(RB) / Existing Roof / Steel Deck	228
FA-CB ^{MA} -IN ^{MA} -EX-S	FA Membrane / Cover Board ^(MA) / Insulation ^(MA) / Existing Roof / Steel Deck	229
FA-CB ^{RB} -IN ^{RB} -EX-S	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Steel Deck	230
FA-INMA-EX-S	FA Membrane / Insulation ^(MA) / Existing Roof / Steel Deck	231
FA-IN ^{RB} -EX-S	FA Membrane / Insulation ^(RB) / Existing Roof / Steel Deck	232
Fully Adhered Roof wit	th Spatter Adhesive Assemblies: Steel Decks – Recover	
FA ^{SP} -CB ^{RB} -EX-S	FA ^(SP) Membrane / Cover Board ^(RB) / Existing Roof / Steel Deck	233
FA ^{SP} -CB ^{RB} -IN ^{RB} -EX-S	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Steel Deck	234
FA ^{SP} -EX ^{MB} -S	FA ^(SP) Membrane / Existing Roof ^(MB) / Steel Deck	235
FA ^{SP} -EX ^{SA} -S	FA ^(SP) Membrane / Existing Roof ^(SA) / Steel Deck	236
	semblies: Concrete Decks – New or Tear-Off	-
FA-CB ^{RB} -IN ^{RB} -C	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Concrete Deck	237
FA-IN ^{RB} -C	FA Membrane / Insulation (RB) / Concrete Deck	238
FA-CB ^{RB} -IN ^{RB} -VB-C	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Vapor Barrier / Concrete Deck	239
17. OD -114 -VD-O	Try membrane / cover board - // mediation - // vapor barrier / conferee book	200



IB PVC FULLY ADHERED SINGLE PLY FASTSPECS - Continued

	Datter Adhesive Roof Assemblies: Concrete Decks – New or Tear-Off	T 040
FA ^{SP} -CB ^{RB} -IN ^{RB} -C	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Concrete Deck	240
FASP-INRB-C	FA ^(SP) Membrane / Insulation ^(RB) / Concrete Deck	241
FA ^{SP} -CB ^{RB} -IN ^{RB} -VB-C	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Vapor Barrier / Concrete Deck	242
	ssemblies: Concrete Decks – Recover	
FA-CB ^{RB} -EX-C	FA Membrane / Cover Board ^(RB) / Existing Roof / Concrete Deck	243
FA-CB ^{RB} -IN ^{RB} -EX-C	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Concrete Deck	244
FA-IN ^{RB} -EX-C	FA Membrane / Insulation ^(RB) / Existing Roof / Concrete Deck	245
Fully Adhered with St	patter Adhesive Roof Assemblies: Concrete Decks – Recover	
FA ^{SP} -CB ^{RB} -EX-C	FA ^(SP) Membrane / Cover Board ^(RB) / Existing Roof / Concrete Deck	246
FA ^{SP} -CB ^{RB} -IN ^{RB} -EX-C	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Concrete Deck	247
FA ^{SP} -IN ^{RB} -EX-C	FA ^(SP) Membrane / Insulation ^(RB) / Existing Roof / Concrete Deck	248
FA ^{SP} -EX ^{MB} -C	FA ^(SP) Membrane / Existing Roof ^(MB) / Concrete Deck	249
FA ^{SP} -EX ^{SA} -C	FA ^(SP) Membrane / Existing Roof ^(SA) / Concrete Deck	250
Fully Adhered Roof A	ssemblies: Cementitious Wood Fiber Decks – Tear-Off	
FA-CB ^{RB} -CWF	FA Membrane / Cover Board ^(RB) / Cementitious Wood Fiber Deck	251
FA-IN ^{RB} -CWF	FA Membrane / Insulation ^(RB) / Cementitious Wood Fiber Deck	252
	•	
FASP-CBRB-CWF	Datter Adhesive Roof Assemblies: Cementitious Wood Fiber Decks – Tear-Off	7 252
FA ^{SP} -IN ^{RB} -CWF	FA ^(SP) Membrane / Cover Board ^(RB) / Cementitious Wood Fiber Deck FA ^(SP) Membrane / Insulation ^(RB) / Cementitious Wood Fiber Deck	253
	•	254
<u> </u>	ssemblies: Cementitious Wood Fiber Decks – Recover	
FA-CB ^{RB} -EX-CWF	FA Membrane / Cover Board ^(RB) / Existing Roof / Cementitious Wood Fiber Deck	255
FA-CB ^{RB} -IN ^{RB} -EX-CWF	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Cementitious Wood Fiber Deck	256
Fully Adhered with St	patter Adhesive Roof Assemblies: Cementitious Wood Fiber Decks – Recover	
FA ^{SP} -CB ^{RB} -EX-CWF	FA ^(SP) Membrane / Cover Board ^(RB) / Existing Roof / Cementitious Wood Fiber Deck	257
FA ^{SP} -CB ^{RB} -IN ^{RB} -EX-CWF	FA ^(SP) Membrane / Cover Board(RB) / Insulation(RB) / Existing Roof / Cementitious Wood Fiber Deck	258
	ssemblies: Gypsum Decks – Tear-Off	
FA-CB ^{RB} -GYP	FA Membrane / Cover Board ^(RB) / Gypsum Deck	250
FA-CB ^{RB} -IN ^{RB} -GYP	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Gypsum Deck	259 260
	·	200
	patter Adhesive Roof Assemblies: Gypsum Decks – Tear-Off	
FA ^{SP} -CB ^{RB} -GYP	FA ^(SP) Membrane / Cover Board ^(RB) / Gypsum Deck	261
FA ^{SP} -CB ^{RB} -IN ^{RB} -GYP	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Gypsum Deck	262
Fully Adhered Roof A	ssemblies: Gypsum Decks – Recover	
FA-CB ^{RB} -EX-GYP	FA Membrane / Cover Board ^(RB) / Existing Roof / Gypsum Deck	263
FA-CB ^{RB} -IN ^{RB} -EX-GYP	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Gypsum Deck	264
Fully Adhered with Sr	patter Adhesive Roof Assemblies: Gypsum Decks – Recover	
FA ^{SP} -CB ^{RB} -EX-GYP	FA ^(SP) Membrane / Cover Board ^(RB) / Existing Roof / Gypsum Deck	265
FA ^{SP} -CB ^{RB} -IN ^{RB} -EX-GYP	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Gypsum Deck	266
	•	
FASP-LWIC-C	patter Adhesive Roof Assemblies: Lightweight Concrete (LWIC) Decks – New FA ^(SP) Membrane / Lightweight Insulating Concrete / Concrete Deck	267
FA ^{SP} -LWIC-S	FA ^(SP) Membrane / Lightweight Insulating Concrete / Steel Deck	267 268
TA -EWIC-3	T A Methoralie / Eightweight insulating Condete / Steel Deck	200
	ssemblies: Lightweight Concrete (LWIC) Decks – Tear-Off	
FA-CB ^{MA} -IN ^{MA} -LWIC	FA Membrane / Cover Board ^(MA) / Insulation ^(MA) / Lightweight Insulating Concrete	269
FA-CB ^{RB} -IN ^{RB} -LWIC	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Lightweight Insulating Concrete	270
FA-IN ^{MA} -LWIC	FA Membrane / Insulation ^(MA) / Lightweight Insulating Concrete	271
FA-IN ^{RB} -LWIC	FA Membrane / Insulation ^(RB) / Lightweight Insulating Concrete	272
Fully Adhered with Sp	patter Adhesive Roof Assemblies: Lightweight Concrete (LWIC) Decks – Tear-Off	
FA ^{SP} -CB ^{RB} -LWIC	FA ^(SP) Membrane / Cover Board ^(RB) / Lightweight Insulating Concrete	273
FA ^{SP} -CB ^{RB} -IN ^{RB} -LWIC	FA ^(SP) Membrane / Cover Board ^(RB) / Insulation ^(RB) / Lightweight Insulating Concrete	274
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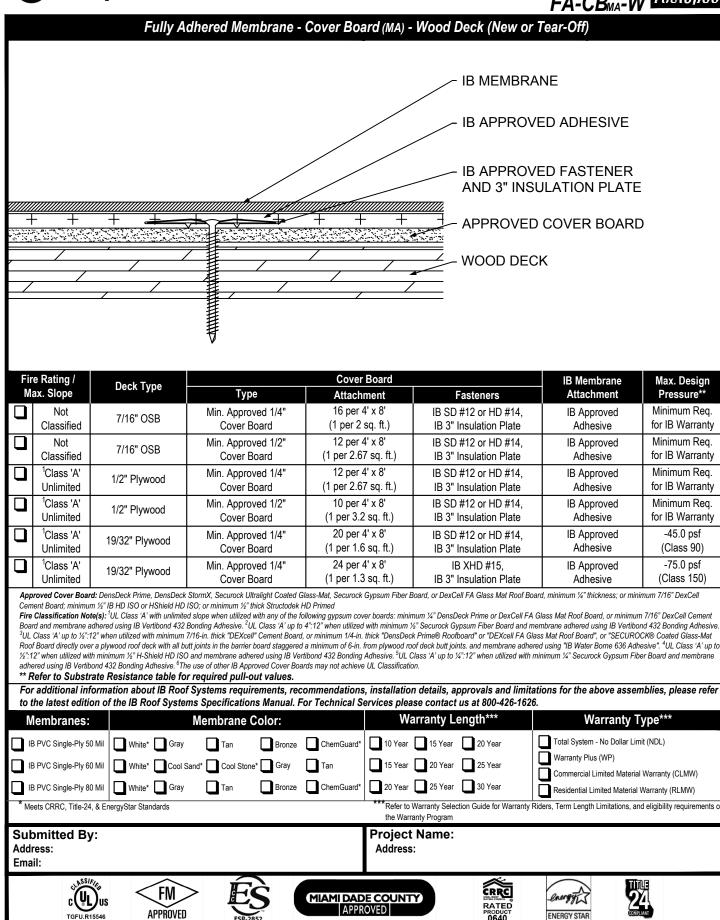
IB PVC FULLY ADHERED SINGLE PLY FASTSPECS - Continued

Fully Adhered Roo	f Assemblies.	Lightweight	Concrete	(I WIC) Deck	s – Recover
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FA-CB ^{RB} -EX-LWIC	FA Membrane / Cover Board ^(RB) / Existing Roof / Lightweight Insulating Concrete	275
FA-CB ^{RB} -IN ^{RB} -EX-LWIC	FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Lightweight Insulating Concrete	276
FA-IN ^{MA} -EX-LWIC	FA Membrane / Insulation ^(MA) / Existing Roof / Lightweight Insulating Concrete	277
FA-IN ^{RB} -EX-LWIC	FA Membrane / Insulation ^(RB) / Existing Roof / Lightweight Insulating Concrete	278
	atter Adhesive Roof Assemblies: Lightweight Concrete (LWIC) Decks – Recover	
FA ^{SP} -CB ^{RB} -EX-LWIC	FA Membrane ^(SP) / Cover Board ^(RB) / Existing Roof / Lightweight Insulating Concrete	279
FA ^{SP} -CB ^{RB} -IN ^{RB} -EX-LWIC	FA Membrane ^(SP) / Cover Board ^(RB) / Insulation ^(RB) / Existing Roof / Lightweight Insulating Concrete	280
FA ^{SP} -EX ^{MB} -LWIC	FA Membrane ^(SP) / Existing Roof ^(MB) / Lightweight Insulating Concrete	281
FA ^{SP} -EX ^{SA} -LWIC	FA Membrane ^(SP) / Existing Roof ^(SA) / Lightweight Insulating Concrete	282
Flexible Metal Profile o	ver Fully Adhered Roof Assemblies: Wood Decks – New or Tear-Off	
MP-FA-CB ^{RB} -IN ^{MA} -W	Metal Profile over FA Membrane / Cover Board ^(RB) / Insulation ^(MA) / Wood Deck	283
MP-FA-CB ^{RB} -IN ^{RB} -W	Metal Profile over FA Membrane / Cover Board (RB) / Insulation (RB) / Wood Deck	284
Flexible Metal Profile o	ver Fully Adhered Roof Assemblies: Steel Decks – New or Tear-Off	
MP-FA-CB ^{RB} -IN ^{MA} -S	Metal Profile over FA Membrane / Cover Board ^(RB) / Insulation ^(MA) / Steel Deck	285
	ver Fully Adhered Roof Assemblies: Concrete Decks – New or Tear-Off	
MP-FA-CB ^{RB} -IN ^{RB} -C	Metal Profile over FA Membrane / Cover Board ^(RB) / Insulation ^(RB) / Concrete Deck	286
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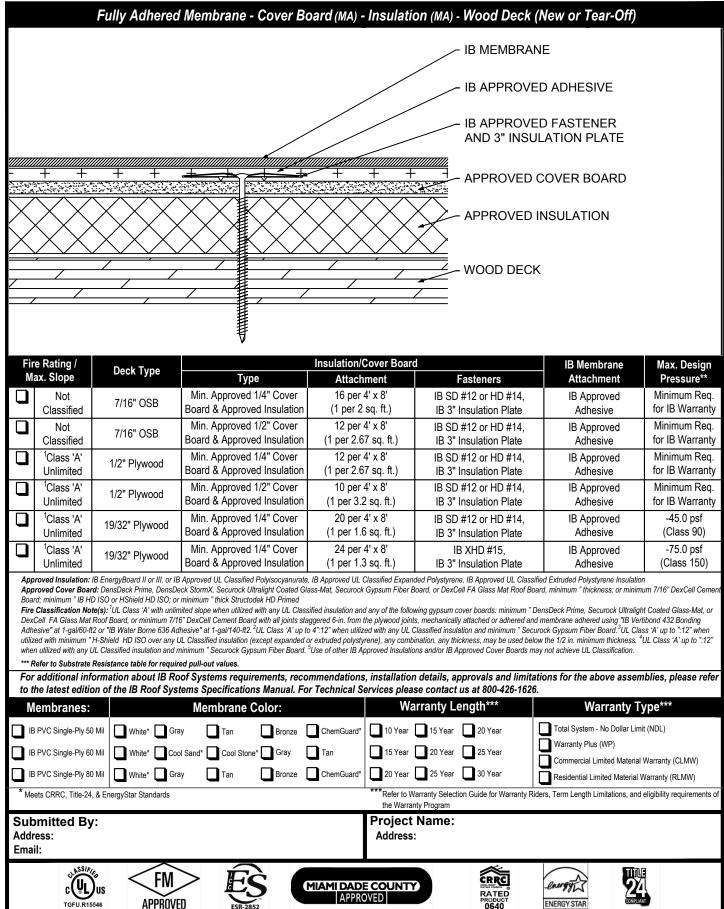




		Fully A	dhered Membrane - Co	over Board (RB) -	Wood Deck (New or 1	Tear-Off)	
						-	
						EMBRANE	
					/ IB AF	PPROVED ADHE	SIVE
					APPI	ROVED COVER I	BOARD
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						ROVED INSULAT ESIVE	ΓΙΟΝ
F					Woo	DD DECK	
	re Rating /	- Deck Type		Cover Board		IB Membrane	Max. Design
N	lax. Slope	Deck Type	Туре	Attachment	Fasteners	Attachment	Pressure**
		Deck Type	Type Min. Approved 1/4" Cover Board		Fasteners Four Continuous Ribbons, 12" o.c.		
N	lax. Slope Not		Min. Approved 1/4"	Attachment BM, CR20, OB500,	Four Continuous Ribbons,	Attachment IB Approved	Pressure** Minimum Req.
	Not Classified Class 'A' Unlimited Droved Insulation Ac	7/16" OSB 1/2" Plywood	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board fax, CR-20 = Polyset CR-20, OB500 = OlyB	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c.	Attachment IB Approved Adhesive IB Approved Adhesive	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty
App RSS. App Cer	Not Classified Class 'A' Unlimited Droved Insulation Act A = IB Rapid Set Insulation Foroved Cover Board ment Board; minimum	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck S m ½" IB HD ISO or HShield HD Is	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO; or minimum ½" thick Structodek HD Pr	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Botherimed	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Adoord, or DexCell FA Glass Mat Roof Board	Attachment IB Approved Adhesive IB Approved Adhesive thesive; PG-1 = Millennium PG-1 in the control of the c	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell
App RSS App Cer Fire Boo	Not Classified Classified Class 'A' Unlimited Croved Insulation Act A = IB Rapid Set Insuroved Cover Board Enent Board; minimum Classification Note and and membrane act	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck to m ½" IB HD ISO or HShield HD. te(s): *UL Class 'A' with unlimited dhered using IB Vertibond 432 E	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass-ISO; or minimum ½" thick Structodek HD Pr d slope when utilized with any of the followil Bonding Adhesive. ² UL Class 'A' up to 4":12	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OSPANED, Formed ing gypsum cover boards: minim 2" when utilized with minimum 1/2"	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Advanced, or DexCell FA Glass Mat Roof Board, or DexCell FA Glass Mat Roof Board and Willen Will DensDeck Prime or DexCell FA G	Attachment IB Approved Adhesive IB Approved Adhesive thesive; PG-1 = Millennium PG-1 in the part of	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell 17/16" DexCell Cement and 432 Bonding Adhesive.
Appl RS. Appl Cer Firm Book	Not Classified Classified Class 'A' Unlimited Class 'A' Unlimited Class 'A' Unlimited Coroved Insulation Act Coroved Cover Board Coroved Cover Board Coroved Cover Board Coroved Town Mote Class 'A' up to '&".12 Ctly over a plywood re	7/16" OSB 1/2" Plywood Idhesive: BM = Polyset BoardM. sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck 3: n ½" IB HD ISO or HShield HD II te(s): *UL Class 'A' with unlimitee dhered using IB Vertibond 432 E 2" when utilized with minimum 7 roof deck with all butt joints in the	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO; or minimum ½" thick Structodek HD Pr d slope when utilized with any of the followib Bonding Adhesive. ² UL Class 'A' up to 4":12 7/16-in. thick DexCell Cement Board, or min the barrier board staggered a minimum of 6-i	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Bo rrimed ing gypsum cover boards: minim inimum 1/4-in. thick DensDeck Pr ini. from plywood roof deck butt ji	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Ad oard, or DexCell FA Glass Mat Roof Boan num ¼" DensDeck Prime or DexCell FA G ''' Securock Gypsum Fiber Board and mer trime Roofboard" or DexCell FA Glass Mat ioints. and membrane adhered using "IB V	Attachment IB Approved Adhesive IB Approved Adhesive thesive; PG-1 = Millennium PG-1 in the sive; PG-1 and the sive; PG-1 an	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell 17/16" DexCell Cement 1432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to ½":12"
App RSS. App Cer Firm Book 3'ULI dire whe	Not Classified Classified Class 'A' Unlimited Croved Insulation Act A = IB Rapid Set Insurance Cover Board Classification Note and and membrane act Classification Note and membrane act Classification with miniming IB Vertibond 432 B	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck 3: m ½" IB HD ISO or HShield HD I. te(s): UL Class 'A' with unlimited dhered using IB Vertibond 432 E '2" when utilized with minimum roof deck with all butt joints in the num ½" H-Shield HD ISO and me	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO; or minimum ½" thick Structodek HD Pr d slope when utilized with any of the followin Bonding Adhesive. ² UL Class 'A' up to 4":12 7/16-in. thick DexCell Cement Board, or min he barrier board staggered a minimum of 6-i hembrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Both rimed ring gypsum cover boards: minim 2" when utilized with minimum 1/4-in. thick DensDeck Prinimum 1/4-i	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Ad oard, or DexCell FA Glass Mat Roof Boan num ¼" DensDeck Prime or DexCell FA G ''' Securock Gypsum Fiber Board and mer trime Roofboard" or DexCell FA Glass Mat ioints. and membrane adhered using "IB V	Attachment IB Approved Adhesive IB Approved Adhesive thesive; PG-1 = Millennium PG-1 in the sive; PG-1 and the sive; PG-1 an	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell 17/16" DexCell Cement 1432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to ½":12"
Apple RS. Apple Cere Fire Boa 3 ULI direct whee usin ** F	Not Classified Classified Class 'A' Unlimited Droved Insulation Act A = IB Rapid Set Insula	7/16" OSB 1/2" Plywood Idhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck b. In %" IB HD ISO or HShield HD I. Ite(s): ¹ UL Class 'A' with unlimited dhered using IB Vertibond 432 E 12" when utilized with minimum 7 roof deck with all but joints in the mam ½" H-Shield HD ISO and me Bonding Adhesive. ⁶ The use of or Resistance table for required p. Formation about IB Roof	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO; or minimum ½" thick Structodek HD Pr d slope when utilized with any of the followin Bonding Adhesive. *UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 64 embrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomi	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Borimed ining yppsum cover boards: minim 2" when utilized with minimum 1/4-in. thick DensDeck Pr in. from plywood roof deck butt je Bonding Adhesive. 5"UL Class 'A' achieve UL Classification.	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Ad oard, or DexCell FA Glass Mat Roof Boan num ¼" DensDeck Prime or DexCell FA G "Securock Gypsum Fiber Board and mer rime Roofboard" or DexCell FA Glass Mat loints. and membrane adhered using "IB V up to ¼":12" when utilized with minimum n details, approvals and limitate	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Ithesive; PG-1 = Millennium PG-1 is Ithesive; PG-1 = Millenn	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell an 7/16" DexCell Cement and 432 Bonding Adhesive. d Glass-Mat Roof Board Class: A' up to ½":12" d and membrane adhered
App RSS App Cer Firm Boo 3'UL dire whe usin ** F	Not Classified Classified Class 'A' Unlimited Droved Insulation Act A = IB Rapid Set Insula	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck 3. In ½" IB HD ISO or HShield HD II. Ite(s): *UL Class A' with unlimited. Adhered using IB Vertibond 432 E 2" when utilized with minimum 7. "orof deck with all butt joints in the num ½" H-Shield HD ISO and me Bonding Adhesive. *The use of o Resistance table for required p. Formation about IB Roof on of the IB Roof Syster	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO; or minimum ½" thick Structodek HD Pr d slope when utilized with any of the followin Bonding Adhesive. *UL Class X" up to 4"*12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 64 embrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values.	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Boorined ing gypsum cover boards: minim 2" when utilized with minimum ½ inimum 1/4-in. thick DensDeck Pr in. from plywood roof deck butt ji Bonding Adhesive. SUL Class 'A' achieve UL Classification. Immendations, installation Technical Services please	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Ad oard, or DexCell FA Glass Mat Roof Boan num ¼" DensDeck Prime or DexCell FA G "Securock Gypsum Fiber Board and mer rime Roofboard" or DexCell FA Glass Mat loints. and membrane adhered using "IB V up to ¼":12" when utilized with minimum n details, approvals and limitate	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Ithesive; PG-1 = Millennium PG-1 is Ithesive; PG-1 = Millenn	Minimum Req. for IB Warranty Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell 17/16" DexCell Cement 1d 432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to ½":12" d and membrane adhered
App, RS. App, RS. App, RS. 3UL direction when using the state of the s	Not Classified Classified Class 'A' Unlimited Cover losulation Act A = IB Rapid Set Inst Conved Insulation Act A = IB Rapid Set Inst Conved Cover Board Control Cont	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. sulation Adhesive, maximum bea d: DensDeck Prime, DensDeck & d: DensDeck Prime, DensDeck & e(s): ¹ UL Class 'A' with unlimited dhered using IB Vertibond 432 E 2" when utilized with minimum in the nor deck with all butt joints in the num '%" IB-Shield HD ISO and me Bonding Adhesive. ⁶ The use of o Resistance table for required p formation about IB Roof on of the IB Roof Syster	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO, or minimum ½" thick Structodek HD Pr dd slope when utilized with any of the followin Bonding Adhesive. *UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 6-i nembrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomm ms Specifications Manual. For 1 Membrane Color:	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Boorined ing gypsum cover boards: minim 2" when utilized with minimum ½ inimum 1/4-in. thick DensDeck Pr in. from plywood roof deck butt ji Bonding Adhesive. SUL Class 'A' achieve UL Classification. Immendations, installation Technical Services please	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Ad oard, or DexCell FA Glass Mat Roof Boan num ¼" DensDeck Prime or DexCell FA G "Securock Gypsum Fiber Board and mer rime Roofboard" or DexCell FA Glass Mat loints. and membrane adhered using "IB V up to ¼":12" when utilized with minimum on details, approvals and limitation details, approvals approvals and limitation details, approvals and limitation details, approvals and limitation details, approvals approvals and limitation details, approvals approval	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Thesive; PG-1 = Millennium PG-1 is a minimum %" thickness; or minimum mbrane adhered using iB Vertibon to Roof Board", or Securock Coate Water Borne 636 Adhesive". ** ** ** ** ** ** ** ** ** ** ** ** **	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell an 7/16" DexCell Cement and 432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to '%".12" d and membrane adhered mblies, please refer
Approximate Approx	Not Classified 1 Class 'A' Unlimited Deroved Insulation Act A = IB Rapid Set Insulation Note and and membrane act Classification Note and all Evertibond 432 B (Per to Substrate Refer	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck de(s): *UL Class 'A' with unlimited dhered using IB Vertibond 432 & drawn utilized with minimum 7. rorof deck with all butt joints in the num ½" H-Shield HD ISO and me Bonding Adhesive. *The use of o Resistance table for required p. formation about IB Roof on of the IB Roof System O Mil	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO: or minimum ½" thick Structodek HD Pr dd slope when utilized with any of the followin Bonding Adhesive. ² UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 6-i membrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomm ms Specifications Manual. For 1 Membrane Color:	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Both ring gypsum cover boards: minim 2" when utilized with minimum ½- inimum 1¼-in. thick DensDeck Prinimum 1¼-in. thick DensDeck Pri	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Adord, or DexCell FA Glass Mat Roof Board and Mary Market Board and mer rime Roofboard" or DexCell FA Glass Mat Roof Board and mer rime Roofboard" or DexCell FA Glass Mat Roof Board and mer rime Roofboard" or DexCell FA Glass Mat Roof Board and Market Board	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive thesive; PG-1 = Millennium PG-1 if and the sive; PG-1 if the sive; or minimum properties of the sive; or minimum properties of the sive; or Securock Oated Water Borne 636 Adhesive; full of the sive; or Securock Gypsum Fiber Board Water Borne 636 Adhesive; full of the sive; fu	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; or mum 7/16" DexCell a 7/16" DexCell Cement ad 432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to ½":12" d and membrane adhered mblies, please refer ype****
Apple RS. Apple Cere Finn Book 3 ULI direct where using the substitution of the substi	Not Classified 1 Class 'A' Unlimited Toved Insulation Act A = IB Rapid Set Insu roved Cover Board ment Board; minimum to Classification Note act and membrane ac Class 'A' up to '%:"12 ctly over a plywood re mutilized with minimum to Insulation Act to Substrate Re to radditional infect the latest edition Membranes: IB PVC Single-Ply 50	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck 3. te(s): *UL Class A' with unlimited dhered using IB Vertibond 432 E 2" when utilized with minimum 7. roof deck with all butt joints in the num %" H-Shield HD ISO and me Bonding Adhesive. The use of o Resistance table for required p. Formation about IB Roof on of the IB Roof System O Mil White* Gray O Mil Gray White* Cool S	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO: or minimum ½" thick Structodek HD Pr dd slope when utilized with any of the followin Bonding Adhesive. ² UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 6-i embrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomm ms Specifications Manual. For 1 Membrane Color: Tan Bronze Sand* Cool Stone* Gray Gray	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Boring Gypsum cover boards: minimum 2" when utilized with minimum 2" when utilized with minimum 1/4-in. thick DensDeck Prinimum 1/4-in. thick Dens	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Ad oard, or DexCell FA Glass Mat Roof Boan num ½" DensDeck Prime or DexCell FA G §" Securock Gypsum Fiber Board and mer rime Roofboard" or DexCell FA Glass Mat ioints. and membrane adhered using "IB V up to ½":12" when utilized with minimum on details, approvals and limitat se contact us at 800-426-1626. arranty Length**** 15 Year 20 Year 20 Year	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Thesive; PG-1 = Millennium PG-1 is a minimum %" thickness; or minimum mbrane adhered using iB Vertibon to Roof Board", or Securock Coate Water Borne 636 Adhesive". ** ** ** ** ** ** ** ** ** ** ** ** **	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; of mum 7/16" DexCell an 7/16" DexCell Cement and 432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to ½":12" d and membrane adhered mblies, please refer ype*** int (NDL) Warranty (CLMW)
Apple	Not Classified 1 Class 'A' Unlimited Proved Insulation A A = IB Rapid Set Insu roved Cover Board ment Board; minimum Classification Note and and membrane ac Class 'A' up to ½":12 ctly over a plywood re mutilized with minimum g IB Vertibond 432 B telfer to Substrate Re or additional infet the latest edition Membranes: B PVC Single-Ply 50 B PVC Single-Ply 60 B PVC Single-Ply 80	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea d: DensDeck Prime, DensDeck 3. te(s): *UL Class A' with unlimited dhered using IB Vertibond 432 E 2" when utilized with minimum 7. roof deck with all butt joints in the num %" H-Shield HD ISO and me Bonding Adhesive. The use of o Resistance table for required p. Formation about IB Roof on of the IB Roof System O Mil White* Gray O Mil Gray White* Cool S	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO: or minimum ½" thick Structodek HD Pr dd slope when utilized with any of the followin Bonding Adhesive. ² UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 6-i embrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomm ms Specifications Manual. For 1 Membrane Color: Tan Bronze Sand* Cool Stone* Gray Gray	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Borimed ring gypsum cover boards: minim 2° when utilized with minimum 1/4-in, thick Denbeck Prinimum 1/4	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Adorder, or DexCell FA Glass Mat Roof Board, or DexCell FA Glass Mat Roof Board and mer frime Roofboard" or DexCell FA Glass Mat Potopoard	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Ithesive; PG-1 = Millennium PG-1 II Indian	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; o mum 7/16" DexCell a 7/16" DexCell Cement and 432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to ½":12" d and membrane adhered mblies, please refer ype*** hit (NDL) Warranty (CLMW) Warranty (RLMW)
Apple	Not Classified 1 Class 'A' Unlimited 1 Class 'A' Un to 'X':12 Citly over a plywood non utilized with minimited with minimited by the company of the latest edition 1 Class 'A' Unlimited 1 Class 'A' Unlimited 1 Classification Note 2 Classification	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea dt: DensDeck Prime, DensDeck of Sensor Prime, DensDeck te(s): 1 UL Class 'A' with unlimited dhered using IB Vertibond 432 E 2" when utilized with minimum 7: rorof deck with all butt joints in the num ½" H-Shield HD ISO and me Bonding Adhesive. 6 The use of o Resistance table for required p. formation about IB Roof on of the IB Roof System 10 Mil	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO: or minimum ½" thick Structodek HD Pr dd slope when utilized with any of the followin Bonding Adhesive. ² UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 6-i embrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomm ms Specifications Manual. For 1 Membrane Color: Tan Bronze Sand* Cool Stone* Gray Gray	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Borimed 2" when utilized with minimum ½" inimum 1¼-in. thick DensDeck Prinimum 1¼-in. thick DensDeck Prinimum 1¼-in. thick DensDeck Prinimum 1½-in. thick DensDeck Pr	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Adord, or DexCell FA Glass Mat Roof Board, or DexCell FA Glass Mat Roof Board and mer frime Roofboard" or DexCell FA Glass Matioints. and membrane adhered using "IB V up to ½":12" when utilized with minimum and details, approvals and limitatise contact us at 800-426-1626. Serranty Length*** 15 Year 20 Year 25 Year 30 Year 25 Year 30 Year Varranty Selection Guide for Warranty Ridenty Program Name:	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Ithesive; PG-1 = Millennium PG-1 II Indian	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; of mum 7/16" DexCell and 432 Bonding Adhesive. d Glass-Mat Roof Board Class 'A' up to ½":12" d and membrane adhered mblies, please refer ype*** init (NDL) Warranty (CLMW) Warranty (RLMW)
Apple	Not Classified 1 Class 'A' Unlimited 1 Class 'A' Un to 'X':12 Citly over a plywood renutilized with minimited 1 Class 'A' up to 'X':12 Citly over a plywood renutilized with minimited 1 Classification Note 2 Classification No	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea dt: DensDeck Prime, DensDeck of Sensor Prime, DensDeck te(s): 1 UL Class 'A' with unlimited dhered using IB Vertibond 432 E 2" when utilized with minimum 7: rorof deck with all butt joints in the num ½" H-Shield HD ISO and me Bonding Adhesive. 6 The use of o Resistance table for required p. formation about IB Roof on of the IB Roof System 10 Mil	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO: or minimum ½" thick Structodek HD Pr dd slope when utilized with any of the followin Bonding Adhesive. ² UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 6-i embrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomm ms Specifications Manual. For 1 Membrane Color: Tan Bronze Sand* Cool Stone* Gray Gray	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Bording gypsum cover boards: minimm 22° when utilized with minimum ½-in. thick DensDeck Prinimum 1/4-in. t	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Adord, or DexCell FA Glass Mat Roof Board, or DexCell FA Glass Mat Roof Board and mer frime Roofboard" or DexCell FA Glass Matioints. and membrane adhered using "IB V up to ½":12" when utilized with minimum and details, approvals and limitatise contact us at 800-426-1626. Serranty Length*** 15 Year 20 Year 25 Year 30 Year 25 Year 30 Year Varranty Selection Guide for Warranty Ridenty Program Name:	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Ithesive; PG-1 = Millennium PG-1 II Indian	Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; of mum 7/16" DexCell 10 17/16" DexCell Cement and 432 Bonding Adhesive. of Glass-Mat Roof Board Class: 'A' up to ½":12" of and membrane adhered In this please refer In this please reference refered refe
Apple	Not Classified 1 Class 'A' Unlimited 1 Class 'A' Un to 'X':12 Citly over a plywood renutilized with minimited 1 Class 'A' up to 'X':12 Citly over a plywood renutilized with minimited 1 Classification Note 2 Classification No	7/16" OSB 1/2" Plywood Adhesive: BM = Polyset BoardM. Sulation Adhesive; maximum bea dt. DensDeck Prime, DensDeck S. M. Will Holl In the St. St. Will Labor 1. Class 'A' with unlimited dhered using IB Vertibond 432 E 2" when utilized with minimum 7 roof deck with all butt joints in the num 1/4" H-Shield HD ISO and me Bonding Adhesive. The use of o Resistance table for required promotion of the IB Roof System O Mil White* Gray O Mil White* Gray White* Gray White* Gray White* Gray Mil Gray White* Gray	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Max, CR-20 = Polyset CR-20, OB500 = OlyB ad spacing 12" o.c. StormX, Securock Ultralight Coated Glass- ISO: or minimum ½" thick Structodek HD Pr dd slope when utilized with any of the followin Bonding Adhesive. ² UL Class 'A' up to 4".12 7/16-in. thick DexCell Cement Board, or min be barrier board staggered a minimum of 6-i embrane adhered using IB Vertibond 432 B other IB Approved Cover Boards may not ac bull-out values. f Systems requirements, recomm ms Specifications Manual. For 1 Membrane Color: Tan Bronze Sand* Cool Stone* Gray Gray	Attachment BM, CR20, OB500, OSFA, PG1 or RSIA BM, CR20, OB500, OSFA, PG1 or RSIA Bond 500 Adhesive Fastener, OS -Mat, Securock Gypsum Fiber Borimed 2" when utilized with minimum ½" inimum 1¼-in. thick DensDeck Prinimum 1¼-in. thick DensDeck Prinimum 1¼-in. thick DensDeck Prinimum 1½-in. thick DensDeck Pr	Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. Four Continuous Ribbons, 12" o.c. SFA = Millennium One-Step Foamable Adord, or DexCell FA Glass Mat Roof Board, or DexCell FA Glass Mat Roof Board and mer frime Roofboard" or DexCell FA Glass Matioints. and membrane adhered using "IB V up to ½":12" when utilized with minimum and details, approvals and limitatise contact us at 800-426-1626. Serranty Length*** 15 Year 20 Year 25 Year 30 Year 25 Year 30 Year Varranty Selection Guide for Warranty Ridenty Program Name:	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Ithesive; PG-1 = Millennium PG-1 II Indian	Minimum Req. for IB Warranty Minimum Req. for IB Warranty Pump Grade Adhesive; of mum 7/16" DexCell 10 17/16" DexCell Cement and 432 Bonding Adhesive. of Glass-Mat Roof Board Class: 'A' up to ½":12" of and membrane adhered In this please refer In this please reference refered refe

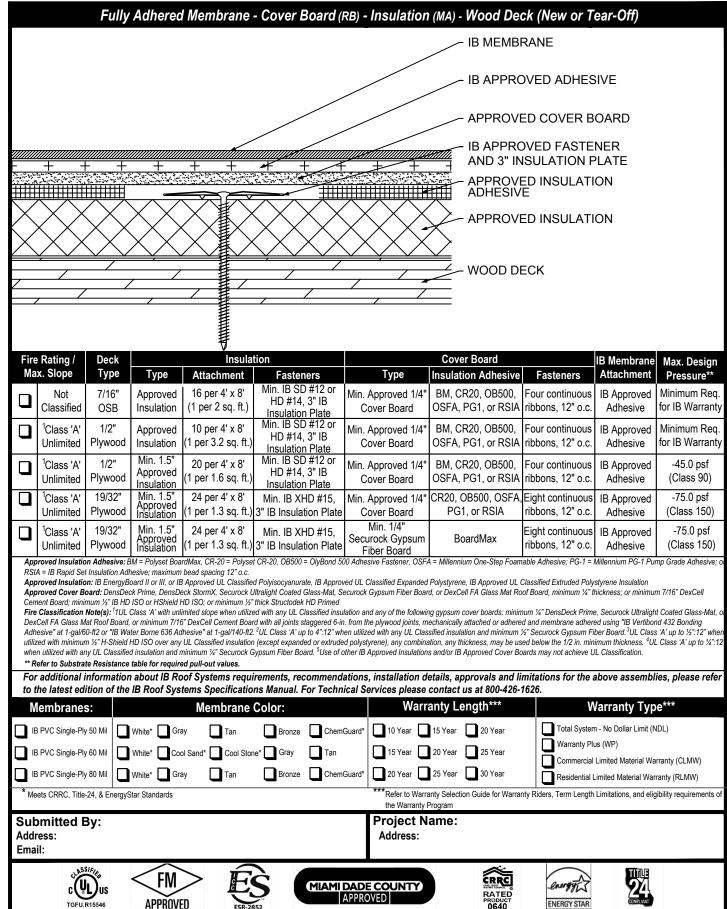




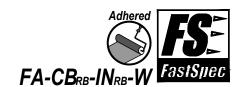








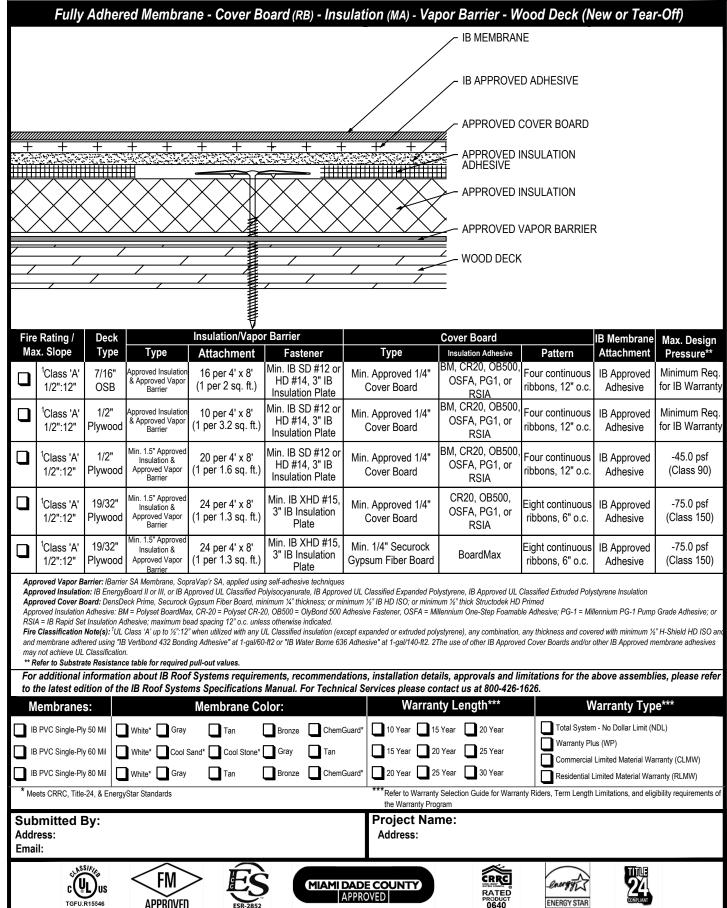




		Fully	Adhered	Membrane -	- Cover Board (RB) - Insulation	(RB) - Wood Dec	ck (New or T	ear-Off)	
							- IB i	MEMBRANE		
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	Rating /	Deck	Typo	Insulation Adhesive		Type	Cover Board		IB Membrane	
	Rating / x. Slope Not Classified	Deck Type 7/16" OSB	Type Approved Insulation	Insulation Adhesive BM, CR20, OB500, OSFA,	Four continuous ribbons, 12" o.c.	Type Min. Approved 1/4" Cover Board	Cover Board Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA	Fasteners Four continuous	IB Membrane Attachment IB Approved Adhesive	Pressure** Minimum Req.
Ma	Not Classified Class 'A' Unlimited	Type 7/16" OSB 1/2" Plywood	Approved Insulation Approved Insulation	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c.	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c.	IB Approved Adhesive IB Approved Adhesive	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty
App RSIA App App Cerr Fire Dex Adh utiliz whea	Not Classified Classified Class 'A' Unlimited Classification A = IB Rapid Selectoroved Insulation Cover Insulation Call FA Glass Messive" at 1-gal/6 teed with minimum nutilized with ar	Type 7/16" OSB 1/2" Plywood on Adhesive: E t Insulation Adh on: IB EnergyB oard: DensDec mm // E T UL C tat Roof Board, 0-0-ft2 or "IB Wa m/" IH-Shield I ny UL Classified on UL Classified	Approved Insulation Approved Insulation Approved Insulation M = Polyset Boa nesive; maximum oard II or III, or IE ck Prime, Densbe iSO or HShield I lass 'A' with unlin or minimum 7/11 ter Borne 636 Ao HD ISO over any d insulation and r	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA rdMax, CR-20 = Polyset bead spacing 12" o.c. Approved UL Classified sck StormX, Securock U HD ISO; or minimum ½" inited slope when utilized "DexCell Cement Boar thesive" at 1-gal/140-ft2. UL Classified insulation inimum ½" Securock G	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. CR-20, OB500 = Olybond 5	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board 00 Adhesive Fastener, OSFA ved UL Classified Expanded Securock Gypsum Fiber Boar ation and any of the following n. from the plywood joints, m en utilized with any UL Clas and polystyrene), any combine	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500,	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. able Adhesive; PG-1 = Classified Extruded Polyof Board, minimum ½" to um ¼" DensDeck Prime, d and membrane adher v½" Securock Gypsum Fixed below the 1/2 in. min	Attachment IB Approved Adhesive IB Approved Adhesive Millennium PG-1 Pur styrene Insulation hickness; or minimum Securock Ultralight ed using "IB Vertibor board. ³ UL Class imum thickness. ⁴ Ul	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty mp Grade Adhesive; o m 7/16" DexCell Coated Glass-Mat, or nd 432 Bonding s 'A' up to ½":12" when
App RSIA App App Cem Eire Dex Adh utilize whee	Not Classified Classified Class 'A' Unlimited Classified Classified Classified Classification Cell FA Glass Mesive' at 1-galó curoud insulation Cell FA Glass Mesive' at 1-galó un utilized with minimur refer to Substrat additional i	Type 7/16" OSB 1/2" Plywood on Adhesive: E t Insulation Adh on: IB EnergyBi oard: DensDec mum ½" IB HD Note(s): "UL C lat Roof Board, 0-ft2 or "IB Wa n ½" H-Shield I n ½" H-Shield I n ½" H-Shield I n ½" H-Shield I n y UL Classified te Resistance	Approved Insulation Approved Insulation Approved Insulation M = Polyset Boa nesive; maximum oard II or III, or IE xk Prime, DensDu ISO or HShield It lass 'A' with unlin or minimum 7/11 ter Borne 636 Ad the ISO over any d insulation and realed for require about IB Roc	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA 20, OB500, OSFA, PG1, or RSIA 20, OB500, OSFA, PG1, or RSIA 20, OB500, OSFA, PG1, or RSIA 21, OB500, OSFA, 22, OB500, OSFA, 23, OB500, OSFA, 24, OB500, OSFA, 25, OB500, OSFA, 26, OSFA, 26, OSFA, 27, OSFA, 28, OSFA, 29, OSFA, 29, OSFA, 20, OSFA,	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. CR-20, OB500 = OlyBond 5: Polyisocyanurate, IB Approlitralight Coated Glass-Mat, S thick Structodek HD Primed I with any UL Classified insulad with all joints staggered 6-in 2 UL Class 'A' up to 4":12" with (except expanded or extruded yppsum Fiber Board. Suse of correments, recommend	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board 00 Adhesive Fastener, OSF/ ved UL Classified Expanded lecurock Gypsum Fiber Boar ation and any of the following in. from the plywood joints, in hem utilized with any UL Class det polystyrene), any combina other IB Approved Insulation.	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA A = Millennium One-Step Foam Polystyrene, IB Approved UL of, or DexCell FA Glass Mat Ro or gypsum cover boards: minimum echanically attached or adhere sified insulation and minimum atton, any thickness, may be us and/or IB Approved Cover Bo etails, approvals and Ii	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. able Adhesive; PG-1 = Classified Extruded Poly of Board, minimum %" to um %" DensDeck Prime, d and membrane adhere %" Securock Gypsum Fired below the 1/2 in. min bards may not achieve to unitations for the administrations for the administration for	Attachment IB Approved Adhesive IB Approved Adhesive Millennium PG-1 Pur styrene Insulation hickness; or minimum Securock Ultralight ed using "IB Vertibor ber Board.3 UL Class imum thickness. 4 UL L Classification.	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty mp Grade Adhesive; o m 7/16" DexCell Coated Glass-Mat, or ad 432 Bonding s: 'A' up to 'A':12" when. Class 'A' up to 'A':12"
App RSIA App App Cerr Fire Dex Adh utiliz whee	Not Classified Classified Class 'A' Unlimited Classified Classified Classified Classification Cell FA Glass Mesive' at 1-galó curoud insulation Cell FA Glass Mesive' at 1-galó un utilized with minimur refer to Substrat additional i	Type 7/16" OSB 1/2" Plywood on Adhesive: E t Insulation Adh on: IB EnergyBo oard: DensDet Mote(s): ¹UL C tat Roof Board, 0°-ft2 or "IB Wa m ½" IH-Shield I ory UL Classified te Resistance information ition of the	Approved Insulation Approved Insulation Approved Insulation M = Polyset Boa nesive; maximum oard II or III, or IE xk Prime, DensDu ISO or HShield It lass 'A' with unlin or minimum 7/11 ter Borne 636 Ad the ISO over any d insulation and realed for require about IB Roc	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA 20, OB500, OSFA, PG1, or RSIA 20, OB500, OSFA, PG1, or RSIA 20, OB500, OSFA, PG1, or RSIA 21, OB500, OSFA, 22, OB500, OSFA, 23, OB500, OSFA, 24, OB500, OSFA, 25, OB500, OSFA, 26, OSFA, 26, OSFA, 27, OSFA, 28, OSFA, 29, OSFA, 29, OSFA, 20, OSFA,	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. CR-20, OB500 = OlyBond 5. It Polyisocyanurate, IB Approviltralight Coated Glass-Mat, Stitick Structodek HD Primed with any UL Classified insulad with all joints staggered 6-in 2 "UL Class 'A' up to 4":12" where with any UL Class' A' up to 4":	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board 00 Adhesive Fastener, OSFA ved UL Classified Expanded eccurock Gypsum Fiber Boar ation and any of the following in. from the plywood joints, m fren utilized with any UL Class and polystyrene), any combine other IB Approved Insulation. Illations, installation de ical Services please	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA A = Millennium One-Step Foam Polystyrene, IB Approved UL of, or DexCell FA Glass Mat Ro or gypsum cover boards: minimus echanically attached or adhere sified insulation and minimum attion, any thickness, may be us a and/or IB Approved Cover Bo	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. able Adhesive; PG-1 = Classified Extruded Polyof Board, minimum %" to um %" DensDeck Prime, d and membrane adher %" Securock Gypsum Fied below the 1/2 in. min pards may not achieve Umitations for the a 1626.	Attachment IB Approved Adhesive IB Approved Adhesive Millennium PG-1 Pur styrene Insulation hickness; or minimum Securock Ultralight ed using "IB Vertibor ber Board.3 UL Class imum thickness. 4 UL L Classification.	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty mp Grade Adhesive; o m 7/16" DexCell Coated Glass-Mat, or d 432 Bonding s'A' up to ½":12" when. c Class 'A' up to ½":12" ies, please refer
App RSIA App App Cerr Fire Dex Adhlutiliz whee *** R	Not Classified Classified Class 'A' Unlimited Classified Reproved Insulation Coved Insulation Coved Insulation Coved Insulation Coved Insulation Call FA Glass Melected with minimum In utilized with ar efer to Substra additional in the latest ed	Type 7/16" OSB 1/2" Plywood on Adhesive: E t Insulation Adh on: IB EnergyB oard: DensDec mm ½" IB HD Note(s): *UL C lat Roof Board, 0-ft2 or *IB Wa ny UL Classified te Resistance information ition of the s: / 50 Mil	Approved Insulation Approved Insulation Approved Insulation M = Polyset Boanesive; maximum oard II or III, or IE Ask Prime, Dens De ISO or HShield I lass 'A' with unlin or 1636 Ac HD ISO over any d insulation and rable for require to about IB Roof Sys White* Gra White* Gra White* Gra	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA CR-20 = Polyset bead spacing 12" o.c. B Approved UL Classified sch StormX, Securock U HD ISO; or minimum ½" inited slope when utilize bead spacing 12" o.c. B Approved UL Classified sch StormX, Securock U HD ISO; or minimum ½" inited slope when utilize bead pull-out values. Both Systems required by Systems required by Tan DI Sand* Cool Ston Cool Ston	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. CR-20, OB500 = OlyBond 5 of Polyisocyanurate, IB Approvious Approving Italight Coated Glass-Mat, S thick Structodek HD Primed I with any UL Classified insulad with all joints staggered 6-in 2'UL Class 'A' up to 4":12" with (except expanded or extrude ypsum Fiber Board. Suse of the comments, recommending Manual. For Technology. Bronze Chem	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board 00 Adhesive Fastener, OSFA ved UL Classified Expanded lecurock Gypsum Fiber Board ation and any of the following. In from the plywood joints, m nen utilized with any UL Clas ed polystyrene), any combina other IB Approved Insulation lations, installation de nical Services please Warr 15 Year 15 Year Guard* 20 Year	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA A = Millennium One-Step Foam Polystyrene, IB Approved UL d, or DexCell FA Glass Mat Ro g gypsum cover boards: minimum echanically attached or adhere sified insulation and minimum. sified insulation and minimum atton, any thickness, may be us and/or IB Approvals and Ii contact us at 800-426-anty Length*** 15 Year 20 Year 20 Year	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. able Adhesive; PG-1 = 1 Classified Extruded Poly of Board, minimum ½" to um ½" DensDeck Prime, do and membrane adhern bards may not achieve Usinitations for the allocations for the allocat	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Millennium PG-1 Pur Styrene Insulation hickness; or minimum Securock Ultralight ed using "IB Vertibor bier Board. ³ UL Class imum thickness. ⁴ UI IL Classification. Above assembl. Varranty Typ m - No Dollar Limit (N us (WP) Limited Material War Limited Material War	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Minimum Req. for IB Warranty mp Grade Adhesive; of m7/16" DexCell Coated Glass-Mat, or nd 432 Bonding s' A' up to '%":12" where c Class 'A' up to '%":12 ies, please refer e*** IDL) rranty (CLMW) rranty (RLMW)
App RSIA App App Cerr Fire Dex: Adhlutiliz whee *** RF FOR to t	Not Classified 1 Class 'A' Unlimited 1 Class 'A' Unlimited 1 Class 'A' Unlimited 1 Classification Cover Bineric Board; minito Call FA Glass Minimum In utilized with an inder to Substrated with minimum 1 Classification Call FA Glass Minimum In utilized with an inder to Substrated with minimum 1 Classification 1 Classification Call FA Glass Minimum 1 Classification 1 Classifi	Type 7/16" OSB 1/2" Plywood on Adhesive: E t Insulation Adh on: IB EnergyB. doard: DensDec mum ½" IB HD Note(s): ¹UL C tat Roof Board, 0°-0ft2 or "IB Wa on ½" H-Shield I ony UL Classified te Resistance information ition of the s: / 50 Mil // 80 Mil // 80 Mil // 80 Mil // 80 Mil // 2-24, & EnergyS	Approved Insulation Approved Insulation Approved Insulation M = Polyset Boanesive; maximum oard II or III, or IE Ask Prime, Dens De ISO or HShield I lass 'A' with unlin or 1636 Ac HD ISO over any d insulation and rable for require to about IB Roof Sys White* Gra White* Gra White* Gra	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA CR-20 = Polyset bead spacing 12" o.c. B Approved UL Classified sch StormX, Securock U HD ISO; or minimum ½" inited slope when utilize bead spacing 12" o.c. B Approved UL Classified sch StormX, Securock U HD ISO; or minimum ½" inited slope when utilize bead pull-out values. Both Systems required by Systems required by Tan DI Sand* Cool Ston Cool Ston	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. CR-20, OB500 = OlyBond 50 of Polyisocyanurate, IB Approviltralight Coated Glass-Mat, S thick Structodek HD Primed with any UL Classified insulad with all joints staggered 6-in 2"UL Class 'A" up de "2"UL Class 'A" up de "2"UL Class 'A" up de "2"UL Class 'A" up de "1" up de "2" up de "1" up de "1	Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board Min. Approved 1/4" Cover Board 00 Adhesive Fastener, OSFA ved UL Classified Expanded lecurock Gypsum Fiber Board ation and any of the following. In from the plywood joints, m nen utilized with any UL Clas ed polystyrene), any combina other IB Approved Insulation lations, installation de nical Services please Warr 15 Year 15 Year Guard* 20 Year	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA A = Millennium One-Step Foam Polystyrene, IB Approved UL of, or DexCell FA Glass Mat Ro g gypsum cover boards: minimum echanically attached or adhere stifled insulation and minimum stifled, any thickness, may be us and/or IB Approved Cover Bo etails, approvals and Ii contact us at 800-426- anty Length*** 15 Year 20 Year 20 Year 25 Year 25 Year 30 Year anty Selection Guide for Warran Program	Fasteners Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. able Adhesive; PG-1 = 1 Classified Extruded Poly of Board, minimum ½" to um ½" DensDeck Prime, do and membrane adhern bards may not achieve Usinitations for the allocations for the allocat	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Millennium PG-1 Pur Styrene Insulation hickness; or minimum Securock Ultralight ed using "IB Vertibor bier Board. ³ UL Class imum thickness. ⁴ UI IL Classification. Above assembl. Varranty Typ m - No Dollar Limit (N us (WP) Limited Material War Limited Material War	Pressure** Minimum Req. for IB Warranty Minimum Req. for IB Warranty Minimum Req. for IB Warranty mp Grade Adhesive; of m7/16" DexCell Coated Glass-Mat, or nd 432 Bonding s' A' up to '%":12" where c Class 'A' up to '%":12 ies, please refer e*** IDL) rranty (CLMW) rranty (RLMW)

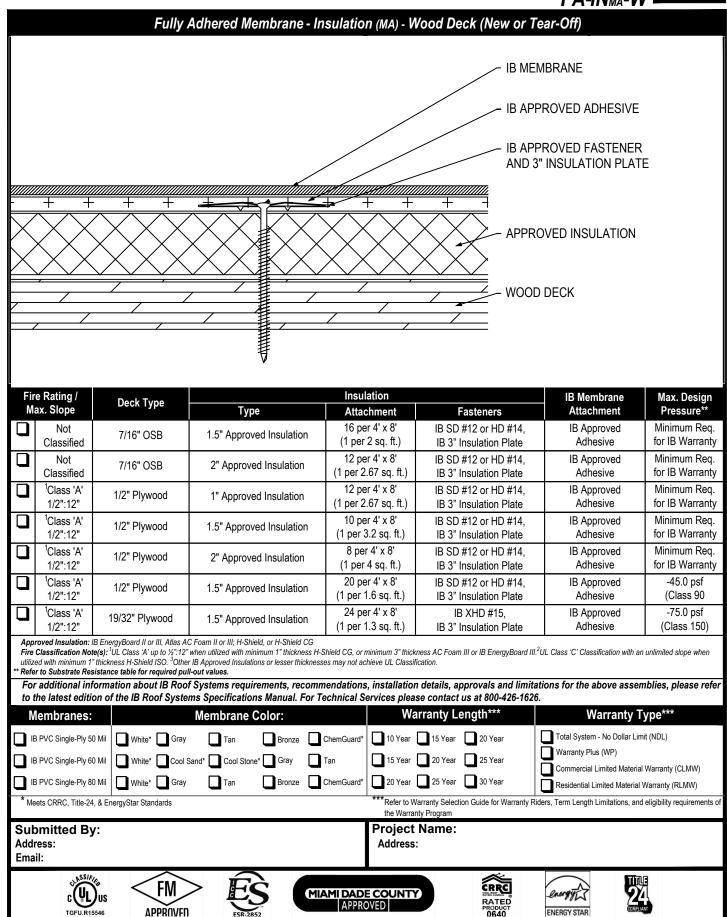
















		Fully	Adhered Membrane -	Insulation (RB) - V	Vood Deck (New or T	ear-Off)	
						3 MEMBRANE	
					/ J- IE	3 APPROVED ADHES	SIVE
					/ ////////////////////////////////////	PPROVED INSULAT	ION
	+	+ + -	+ + + +	+ + +	+7 +		
\mathbb{K}_{\times}	$\times \times$	$\times \times \times$	$\times \times \times \times$	$\times\!\!\times\!\!\times\!\!\times$	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	DDDOVED INGLIL AT	IONI
K	$\times\!$	$\times \times \times$	$\times \times \times$	$\times \times \times \times$	XXX Â	PPROVED INSULAT DHESIVE	ION
				####			
					W	OOD DECK	
\models							
	e Rating / ax. Slope	Deck Type	Туре	Insulation Insulation Adhesive	Pattern	IB Membrane Attachment	Max. Design Pressure**
	Not Classified	7/16" OSB	1" Approved Insulation	BM, CR20, OB500, OSFA, PG1 or RSIA	Four Continuous Ribbons, 12" o.c.	IB Approved Adhesive	Minimum Req. for IB Warranty
	¹ Class 'A' 1/2":12"	1/2" Plywood	1" Approved Insulation	BM, CR20, OB500, OSFA, PG1 or RSIA	Four Continuous Ribbons, 12" o.c.	IB Approved Adhesive	Minimum Req. for IB Warranty
App	roved Insulation A	dhesive: BM = Polyset BoardM	C Foam II or III; H-Shield, or H-Shield CG Max, CR-20 = Polyset CR-20, OB500 = O		SFA = Millennium One-Step Foamable A	Adhesive; PG-1 = Millennium PG-	1 Pump Grade Adhesive; or
Fire	Classification Note		ead spacing 12" o.c. " when utilized with minimum 1" thickness er IB Approved Insulations or lesser thickr			2UL Class 'C' Classification with	an unlimited slope when
** Re	efer to Substrate Re	esistance table for required p				ations for the above asse	mhlies, please refer
to t	the latest edition	on of the IB Roof Syste	ms Specifications Manual. For	r Technical Services plea	se contact us at 800-426-1626	5.	
	lembranes:		Membrane Color:		arranty Length***	Warranty	
_	3 PVC Single-Ply 50			ChemGuard* 10 Year	= =	Total System - No Dollar Lin Warranty Plus (WP)	mit (NDL)
_	B PVC Single-Ply 60		Sand* Cool Stone* Gray	Tan 15 Year		Commercial Limited Materia	al Warranty (CLMW)
	B PVC Single-Ply 80	O Mil White* Gray White* Gray A EnergyStar Standards	Tan Bronze	ChemGuard* 20 Year	25 Year 30 Year Varranty Selection Guide for Warranty Ri	Residential Limited Material	
				the Warrar	inty Program	ueis, reini Lengur Liiniauona, an	d eligibility requirements of
	omitted By ress:	r:		Project Address			
Ema							
	CLASSIF/	Ŷ ⟨FM ⟩	> E S (N3

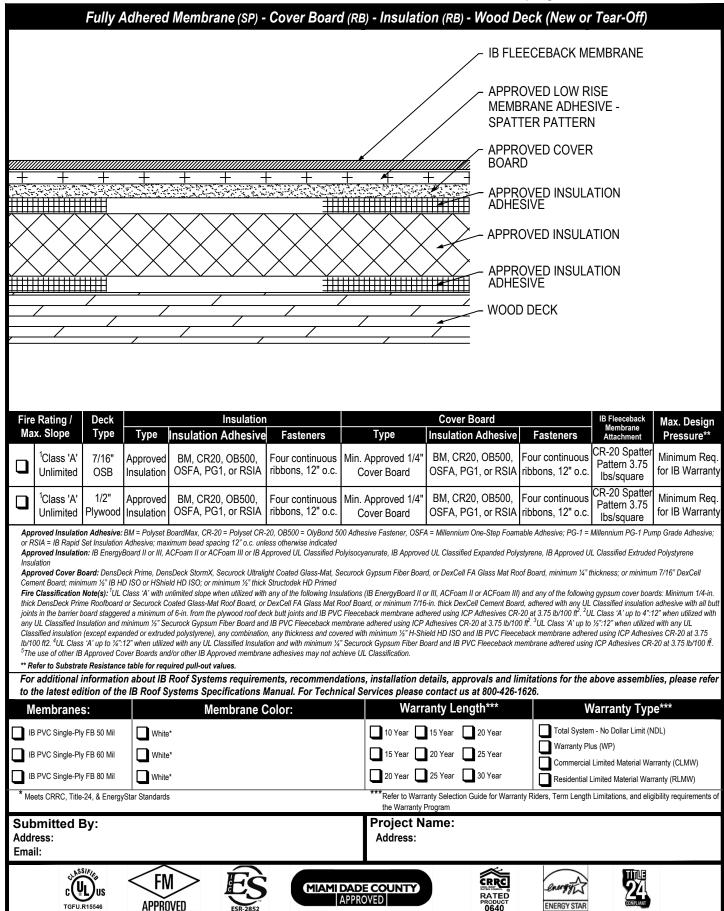




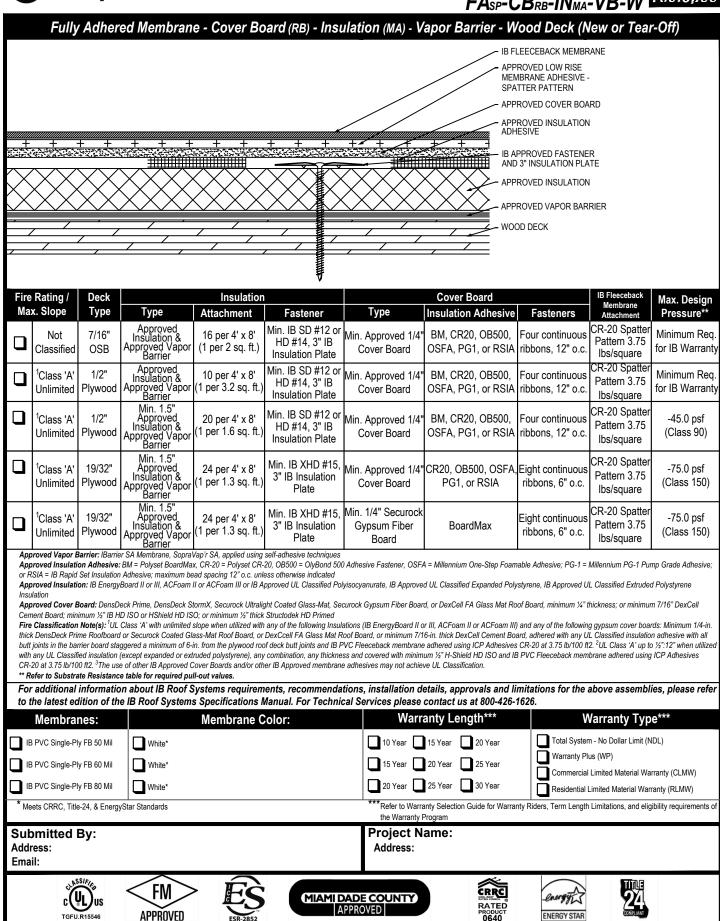
		Fully Adh	ered Membrane (S	SP) - Cover Board (RB) - Wood Deck (Ne	w or Tear-Off)	
						IB FLEECEBACK MI	EMBRANE
						APPROVED LOW R MEMBRANE ADHES SPATTER PATTER!	SIVE -
						APPROVED COVER	R BOARD
+ - - - - -	+	+ +	+ +			APPROVED INSULA ADHESIVE WOOD DECK	ATION
Eir	e Rating /			Cover Board		IB Fleeceback Membrane	Max. Design
	ax. Slope	Deck Type	Туре	Insulation Adhesive	Pattern	Attachment	Pressure**
	Not Classified	7/16" OSB	Min. Approved 1/4" Cover Board	BM, CR20, OB500, OSFA, PG1 or RSIA	Four Continuous Ribbons, 12" o.c.	CR-20 Spatter Pattern 3.75 lbs/square	Minimum Req. for IB Warranty
	Class 'A' Unlimited	1/2" Plywood	Min. Approved 1/2" Cover Board	BM, CR20, OB500, OSFA, PG1 or RSIA	Four Continuous Ribbons, 12" o.c.	CR-20 Spatter Pattern 3.75 lbs/square	Minimum Req. for IB Warranty
or RS Appl Ceme Fire DexC deck mem lb/10 Boan	SIA = IB Rapid Set roved Cover Boar ent Board; minimu Classification Not Sell FA Glass Mat IF butt joints and IB IF brane adhered usid 0 ft2. 4UL Class 'A ds and/or other IB fer to Substrate R	Insulation Adhesive; maximum dt DensDeck Prime, DensDeck Prime, DensDeck Prime, DensDeck Prime, Bensbeck Prime, Class 'A' with unlimite Roof Board, or minimum 7/16-in. PVC Fleeceback membrane adh gr ICP Adhesives CR-20 at 3.75 or 19 to 3/*:12° when utilized with Approved membrane adhesives lesistance table for required p	bead spacing 12" o.c. StormX, Securock Ultralight Coate SO; or minimum ½" thick Structod d slope when utilized with any of the thick DexCell Cement Board, adh ered using ICP Adhesives CR-20, ib/100 ft2. 3UL Class 'A' up to ½" minimum ¼" Securock Gypsum Fi may not achieve UL Classification ull-out values.	d Glass-Mat, Securock Gypsum Filek HD Primed he following gypsum cover boards: ered with any UL Classified insulati at 3.75 lb/100 ft2. 2UL Class 'A' up:12" when utilized with minimum ½ iber Board and IB PVC Fleeceback	ber Board, or DexCell FA Glass Mat Roc Minimum 1/4-in. thick DensDeck Prime on adhesive with all butt joints in the bar to 4":12" when utilized with minimum ½" "H-Shield HD ISO and IB PVC Fleeceba membrane adhered using ICP Adhesive	ible Adhesive; PG-1 = Millennium PG-1 in f Board, minimum ¼" thickness; or minim Roofboard or Securock Coated Glass-Meirer board staggered a minimum of 6-in. Securock Gypsum Fiber Board and IB Pock membrane adhered using ICP Adhesis CR-20 at 3.75 lb/100 ft2. 5The use of control of the securock of the	at Roof Board, or from the plywood roof VC Fleeceback ives CR-20g at 3.75 other IB Approved Cover
			• • •	l. For Technical Services _l	olease contact us at 800-426-1		·•
	Membrai	nes:	Membrane Colo	or:	Warranty Length***	Warrar	nty Type***
	PVC Single-Ply Fl PVC Single-Ply Fl PVC Single-Ply Fl	B 60 Mil White	*	15 Y	/ear	Total System - No Dollar Limi Warranty Plus (WP) Commercial Limited Material Residential Limited Material W	Warranty (CLMW)
* Me	ets CRRC, Title-24	l, & EnergyStar Standards			r to Warranty Selection Guide for Warrar Varranty Program	nty Riders, Term Length Limitations, and	eligibility requirements of
Sub Addr Ema		<i>y</i> :			ect Name:		
	C L TGFU.R1:)us FIVI	> ES	MIAMI DADE COUI	RATED PRODUCT 0640	ENERGY STAR	





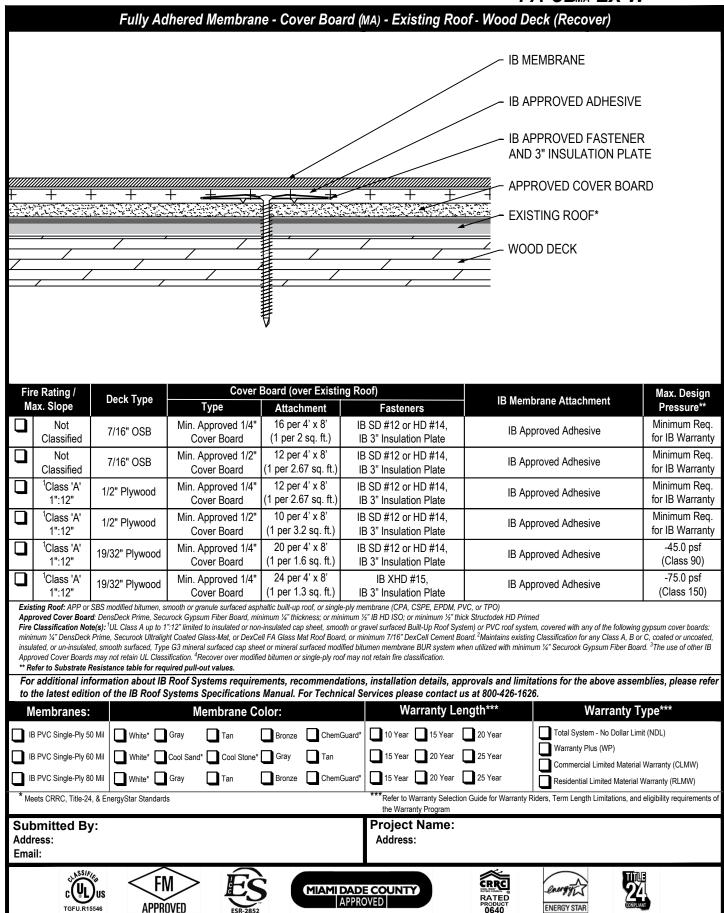
















		Fully Adhe	red Membrane - Cove	er Board (RB) - Exis	ting Roof - Wood De	ck (Recover)	
					IB M	EMBRANE	
					IB A	PPROVED ADHE	ESIVE
					APP	ROVED COVER	BOARD
////// 	 	+ +	<u> </u>	<u>/////////////////////////////////////</u>		ROVED INSULA ESIVE	TION
					EXIS	STING ROOF*	
	/				WOO	DD DECK	
	/						
			Cover Po	pard (over Existing Asph	voltic Doof)		
	re Rating / ax. Slope	Deck Type	Type	Insulation Adhesive	Pattern	IB Membrane Attachment	Max. Design Pressure**
	Not Classified	7/16" OSB	Min. Approved 1/4" Cover Board	BM, CR20, OB500, OSFA, PG1 or RSIA	Four Continuous Ribbons, 12" o.c.	IB Approved Adhesive	Minimum Req. for IB Warranty
	¹ Class 'A' 1":12"	1/2" Plywood	Min. Approved 1/4" Cover Board	BM, CR20, OB500, OSFA, PG1 or RSIA	Four Continuous Ribbons, 12" o.c.	IB Approved Adhesive	Minimum Req. for IB Warranty
App. App. RSIA Fire minin insul Appr	roved Cover Board: roved Insulation Ao A = IB Rapid Set Insu Classification Note mum ¼" DensDeck F lated, or un-insulated roved Cover Boards I	: DensDeck Prime, Securock (thesive: BM = Polyset BoardM ilation Adhesive; maximum ber (sp: ¹UL Class A up to 1":12" lii 'rrime, Securock Ultralight Coai I, smooth surfaced, Type G3 m	mited to insulated or non-insulated cap si ted Glass-Mat, or DexCell FA Glass Mat nineral surfaced cap sheet or mineral sur in. ⁴ Recover over modified bitumen or sin	ess; or minimum ½" IB HD ISO; or IlyBond 500 Adhesive Fastener, OS theet, smooth or gravel surfaced Bu Roof Board, or minimum 7/16" Dex faced modified bitumen membrane	minimum ½" thick Structodek HD Prime SFA = Millennium One-Step Foamable A uilt-Up Roof System) or PVC roof systen KCell Cement Board. ² Maintains existing BUR system when utilized with minimu	dhesive; PG-1 = Millennium PG-1 n, covered with any of the following Classification for any Class A, B of	gypsum cover boards: r C, coated or uncoated,
			f Systems requirements, reco ms Specifications Manual. Fo				mblies, please refer
N	lembranes:		Membrane Color:	Wa	rranty Length***	Warranty 1	ype***
1	3 PVC Single-Ply 50		Tan Bronze		15 Year 20 Year	Total System - No Dollar Lin Warranty Plus (WP)	nit (NDL)
	B PVC Single-Ply 60 B PVC Single-Ply 80		Sand* Cool Stone* Gray Tan Bronze	Tan 15 Year 1 ChemGuard* 15 Year	20 Year	Commercial Limited Materia	
		& EnergyStar Standards	Tall	***Refer to W	arranty Selection Guide for Warranty Ri	Residential Limited Material ders, Term Length Limitations, and	
Addı	omitted By	:		the Warran	Name:		a eligibility requirements of
Ema	ress: ill:			Address			a eligibility requirements or





Fully Adhered Memb	orane - Cover Board (RB) - Ins	sulation (MA) - Existing Roof - \	Wood Deck (Recover)
			- IB MEMBRANE
			- IB APPROVED ADHESIVE
			- APPROVED COVER BOARD
			- IB APPROVED FASTENER AND 3" INSULATION PLATE - APPROVED INSULATION ADHESIVE
			- APPROVED INSULATION
			- EXISTING ROOF*
			- WOOD DECK
Fire Rating / Deck In Max. Slope Type Type	sulation (over Existing Roof) Attachment Fastener	Cover Board Type Insulation Adhesive	IB Membrane Max. Design Fasteners Attachment Pressure**
Not Rated 7/16" Approved Insulation	16 per 4' x 8' Min. IB SD #12 or HD #14, 3" IB Insulation Plate	Min. Approved 1/4" BM, CR20, OB500, Cover Board OSFA, PG1, or RSIA	Four continuous IB Approved Minimum Req.
Not Rated Plywood Insulation	10 per 4' x 8' Min. IB SD #12 or HD	Min. Approved 1/4" BM, CR20, OB500, Cover Board OSFA, PG1, or RSIA	Four continuous IB Approved Minimum Req. A ribbons, 12" o.c. Adhesive for IB Warranty
Not Rated 1/2" Min. 1.5" Approved Insulation	20 per 4' x 8' Min. IB SD #12 or HD	Willi. Approved 1/4 Bivi, Crt20, OB300,	Four continuous IB Approved (Class 90)
¹ Not Rated 19/32" Approved Insulation	24 per 4' x 8' Min. IB XHD #15, (1 per 1.3 sq. ft.) 3" IB Insulation Plate	Min. Approved 1/4" BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous IB Approved ribbons, 12" o.c. Adhesive (Class 150)
Not Rated 19/32" Approved Insulation	(1 per 1.3 sq. it.) 3 IB insulation Plate	ļ.	Four continuous IB Approved ribbons, 12" o.c. Adhesive (Class 150)
Approved Insulation: IB EnergyBoard II or III, or Approved Cover Board: DensDeck Prime, Secu Approved Insulation Adhesive: BM = Polyset Bo or RSIA = IB Rapid Set Insulation Adhesive; maxii Fire Classification Note(s): ¹ This assembly is not U ** Refer to Substrate Resistance table for requ	rrock Gypsum Fiber Board, minimum 'X" thickness; or m oardMax, CR-20 = Polyset CR-20, OB500 = OlyBond 5 imum bead spacing 12" o.c. unless otherwise indicated. UL Classified uired pull-out values.	wed UL Classified Expanded Polystyrene, IB Approved U. ninimum ½" IB HD ISO; or minimum ½" thick Structodek F 600 Adhesive Fastener, OSFA = Millennium One-Step Foe	ID Primed mable Adhesive; PG-1 = Millennium PG-1 Pump Grade Adhesive;
		lations, installation details, approvals and nical Services please contact us at 800-426	limitations for the above assemblies, please refer 3-1626.
Membranes:	Membrane Color:	Warranty Length***	Warranty Type***
IB PVC Single-Ply 50 Mil IB PVC Single-Ply 60 Mil IB PVC Single-Ply 80 Mil White* White*	Cool Sand* Cool Stone* Gray Tan	15 Year 20 Year 25 Year	Total System - No Dollar Limit (NDL) Warranty Plus (WP) Commercial Limited Material Warranty (CLMW) Residential Limited Material Warranty (RLMW)
* Meets CRRC, Title-24, & EnergyStar Standards		****Refer to Warranty Selection Guide for War the Warranty Program	ranty Riders, Term Length Limitations, and eligibility requirements of
Submitted By: Address: Email:		Project Name: Address:	
CUL) US TGFU.R15546 APPROV		DADE COUNTY APPROVED RATED PRODUCT 0640	ENERGY STAR

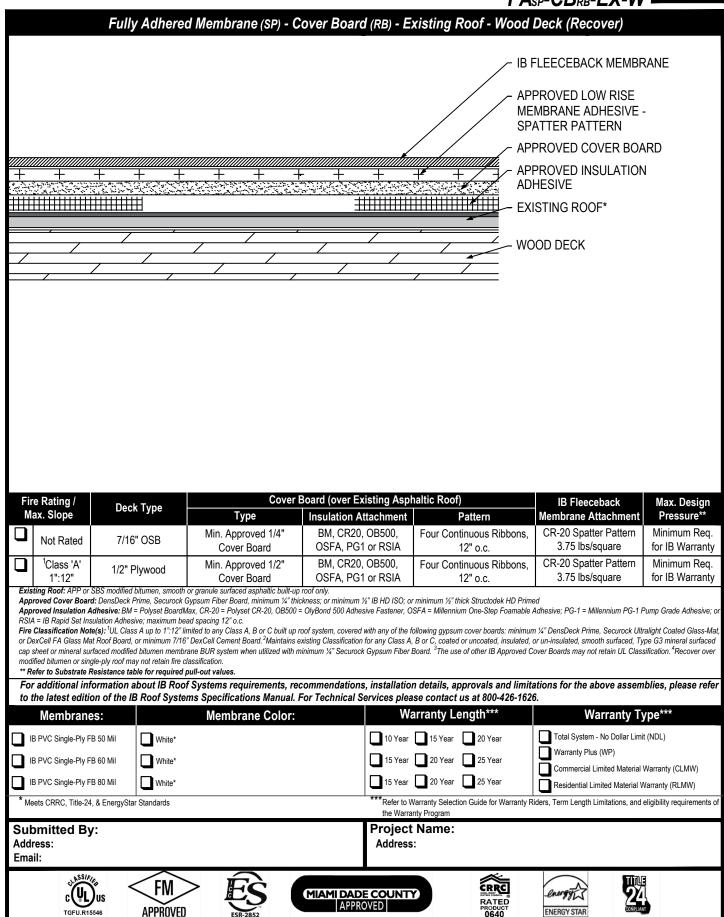




	Fully	Adhere	d Membi	ane - Cover	Board (RB) - In	sulation (RB) - E	xisting Roof - W	ood Deck (R	Re <i>cove</i> r)	
								IB MEMBRA	NE	
								IB APPROV	ED ADHES	SIVE
						tinnununtui	mununti.	APPROVED	COVER E	BOARD
	+	+	+	+ -	+	+ +		APPROVED ADHESIVE	INSULAT	ION
	$\times\!$	$\langle \times \rangle$		\times	$\times\!\!\!\times\!\!\!\!\times$	$\times\!$		APPROVED	INSULAT	ION
		\searrow					++1111111111111111111111111111111111111	APPROVED ADHESIVE EXISTING R		ION
	7			<u></u>				WOOD DEC	K	
	D - 1' 1'		- legulatio		Angletic Poof)		- Parel			
	Rating / x. Slope	Deck Type	Type	on (over Existing Insulation Adhesive	Pattern	Туре	Cover Board Insulation Adhesive		IB Membrane Attachment	Max. Design Pressure**
	¹ Not Rated	7/16" OSB	Approved Insulation	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	Min. Approved 1/4" Cover Board	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	IB Approved Adhesive	Minimum Req. for IB Warranty
	¹ Not Rated	1/2" Plywood	Approved Insulation	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	Min. Approved 1/4" Cover Board	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	IB Approved Adhesive	Minimum Req. for IB Warranty
App App App or R Fire	proved Insulation proved Cover Bo proved Insulation PSIA = IB Rapid S Classification	n: IB EnergyBo pard: DensDeo n Adhesive: B Set Insulation A Note(s): ¹ This a	pard II or III, or IE k Prime, Securo M = Polyset Boa Idhesive; maximi assembly is not U	B Approved UL Classified ck Gypsum Fiber Board, rdMax, CR-20 = Polyset um bead spacing 12" o.c	minimum 1/4" thickness; or CR-20, OB500 = OlyBond	minimum ½" IB HD ISO; or mi	l Polystyrene, IB Approved UL inimum ½" thick Structodek HD A = Millennium One-Step Foan	Primed	•	mp Grade Adhesive;
For	additional i	nformation	about IB Ro	oof Systems requi			etails, approvals and li contact us at 800-426-		above assembl	lies, please refer
	lembranes			Membrane (anty Length***		/arranty Typ	e***
☐ IE	3 PVC Single-Ply	50 Mil	White* Gra	ay Tan	Bronze Che	mGuard* 10 Year	15 Year 20 Year		n - No Dollar Limit (N	NDL)
1	3 PVC Single-Ply		White* Cod	ol Sand* Cool Ston	e* Gray Tan	15 Year	20 Year 25 Year	Warranty Pl	us (WP) Limited Material Wa	arranty (CLMW)
	3 PVC Single-Ply		White* Gra	ay Tan	Bronze Che	mGuard* 15 Year			imited Material War	
* Me	ets CRRC, Title-	24, & EnergyS	tar Standards			the Warranty F		nty Riders, Term Length	Limitations, and eliq	gibility requirements of
	omitted E ress: il:	By:				Project N Address:	ame:			
	C U	US R15546	FM APPROVE	> E	MIAM	I DADE COUNTY APPROVED	RATED PRODUCT 0640	Energy STAR	TITUE 21 COMPLIANT	0









	Ful	ly Adhe	red Mem	brane (SP) - C	Cover Board (R	B) - Insulation	(RB) - Existing R	oof - Wood L	Deck (Recov	rer)
							- IB FLI	EECEBACK M	1EMBRANE	
							/ MEMI	ROVED LOW F BRANE ADHE TER PATTER	SIVE -	
							/ ////////////////////////////////////	ROVED COVE	R BOARD	
		+	+	+ +	+ +	+ / +	۸ ١١٦	ROVED INSUL ESIVE	ATION	
\times	\mathcal{X}	$\times\!\!\!/\!\!\!\!>$	$\langle \times \rangle$	$\times \times \rangle$	$\times \times \times$	$\langle \times \rangle$	APPR	ROVED INSUL	ATION	
\times	\times	$\times\!$	\times				ADHE	ROVED INSUL ESIVE	ATION	
							EXIS	TING ROOF*		
						, ,		D DECK		
							7	D DLOK		
	e Rating / ix. Slope	Deck Type	Insulatio Type	n (over Existing	Asphaltic Roof) Fasteners	Туре	Cover Board Insulation Adhesive	Fasteners	IB Fleeceback Membrane Attachment	Max. Design Pressure**
ū	Not Rated	7/16" OSB	Approved Insulation	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	Min. Approved 1/4" Cover Board	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous	CR-20 Spatter Pattern 3.75 lbs/square	Minimum Req. for IB Warranty
u	¹ Maintains Existing 1":12"	1/2" Plywood	Approved Insulation	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	Min. Approved 1/4" Cover Board	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	CR-20 Spatter Pattern 3.75 lbs/square	Minimum Req. for IB Warranty
Арр Арр Арр	proved Cover B proved Insulation proved Insulation	oard: DensDec on: IB EnergyBo on Adhesive: B	k Prime, Securo pard II or III, or IE M = Polyset Boa	ck Gypsum Fiber Board Approved UL Classifie	d Polyisocyanurate, IB Appi t CR-20, OB500 = OlyBond	roved UL Classified Expande	ninimum ½" thick Structodek F ed Polystyrene, IB Approved U FA = Millennium One-Step Fo	L Classified Extruded Po		mp Grade Adhesive;
III o Boa bitu	r ACFoam-III HE ard with all joints men may not ret	O Cover Board a staggered 6-in. ain fire classific	and any of the fol from the plywoo ation.	lowing gypsum cover bo	oards: minimum ¼" DensDe	eck Prime, Securock Ultraligh	any of the following roof insula It Coated Glass-Mat, or DexCe Ins and/or IB Approved Cover I	ell FA Glass Mat Roof Bo	oard, or minimum 7/16"	DexCell Cement
Foi	r additional	information	about IB Ro	of Systems requi			details, approvals and e contact us at 800-42		e above assembl	ies, please refer
	Membra				ne Color:		ranty Length***		Warranty Typ	e***
	B PVC Single-PI	y FB 50 Mil	White*			10 Year	15 Year 20 Year	= '	em - No Dollar Limit (N Plus (WP)	IDL)
1	B PVC Single-PI		White*			15 Year	20 Year 25 Year	-	al Limited Material Wa	rranty (CLMW)
	B PVC Single-Pl		White*			15 Year	20 Year 25 Year		al Limited Material War	ranty (RLMW)
Me Me	ets CRRC Title	-24 & FnerayS	tar Standards			***Refer to War	rranty Selection Guide for War	ranty Riders. Term Lend	th Limitations, and elic	ibility requirements of
	eets CRRC, Title		tar Standards			the Warranty		ranty Riders, Term Leng	th Limitations, and elig	ibility requirements of
Suk	omitted I		tar Standards				y Program	ranty Riders, Term Leng	th Limitations, and elig	ibility requirements of





		Fully 2	Adhered Membrane (SP) - Exis	ting Roo	f (MB) - Wood Deck	(Recover)	
				_		-	
					∕- IB	FLEECEBACK MEN	/BRANE
					- ΔP	PROVED LOW RIS	F
					/ ME	EMBRANE ADHESIN	
					/ SP	ATTER PATTERN	
				F ananan		ISTING ROOF* DIFIED BITUMEN	
+	+ -	+ + +	+ + + +	+ ++	— <u>+</u>	DOILIED BLI OMEN	
		,	,		*		
					— WO	OOD DECK	
_							
			/				
	re Rating / ax. Slope¹	Deck Type	IB Fleeceback Membra Existing Roof	ane (over E)	tisting Modified Bitumen Attachi		Max. Design Pressure**
	¹Not	7/16" OSB	Existing Modified Bitumen Roo	vt.	CR-20 Spatt	er Pattern	Minimum Req.
	Rated	7/10 USB	Existing Modified Bitumen Not	л 	3.75 lbs/s		for IB Warranty
	¹ Not Rated	1/2" Plywood	Existing Modified Bitumen Roc	of	CR-20 Spatt 3.75 lbs/s		Minimum Req. for IB Warranty
	¹Not	40/20" Dhaward	Friedra ADD Consulated Madified Ditu	Daaf	CR-20 Spatt	•	-75.0 psf
	Rated	19/32" Plywood	Existing APP Granulated Modified Bitu	men Root	3.75 lbs/s	square	(class 150)
	¹Not	19/32" Plywood	Existing APP Granulated Modified Bitu	men Roof	CR-20 Spatt 3.75 lbs/s		-112.5 psf (class 225)
Exis	Rated sting Roof: APP or	SBS modified bitumen, smooth	or granule surfaced roof only.		3.73 105/3	square	(Class 223)
		e(s): ¹ This assembly is not UL (Resistance table for required					
			f Systems requirements, recommendation ms Specifications Manual. For Technical S				ssemblies, please refer
	ne ratest edition. Nembranes:		Membrane Color:		arranty Length***		nty Type***
	B PVC Single-Ply FE					Total System - No Do	
	• •					Warranty Plus (WP)	
1=	B PVC Single-Ply FE			15 Year	20 Year 25 Year	Commercial Limited N	Material Warranty (CLMW)
	B PVC Single-Ply FE			15 Year			aterial Warranty (RLMW)
* Me	eets CRRC, Title-24	, & EnergyStar Standards			Varranty Selection Guide for Warrant nty Program	y Riders, Term Length Limitation	is, and eligibility requirements of
	omitted By	<u></u>		Project	Name:		
Add Ema	ress:			Address	:		
EIII		<i>y</i> .		<u> </u>	- &		E-T-N-C
1		Š" ⟨FM⟩	> EÇ (MIAMI DAD	E COUNT	CRRC	energy	5 77
1	TGFU.R15	5546 APPROVED	MIAMI DAD	OVED	RATED PRODUCT 0640	ENERGY STAR	COMPLIANT

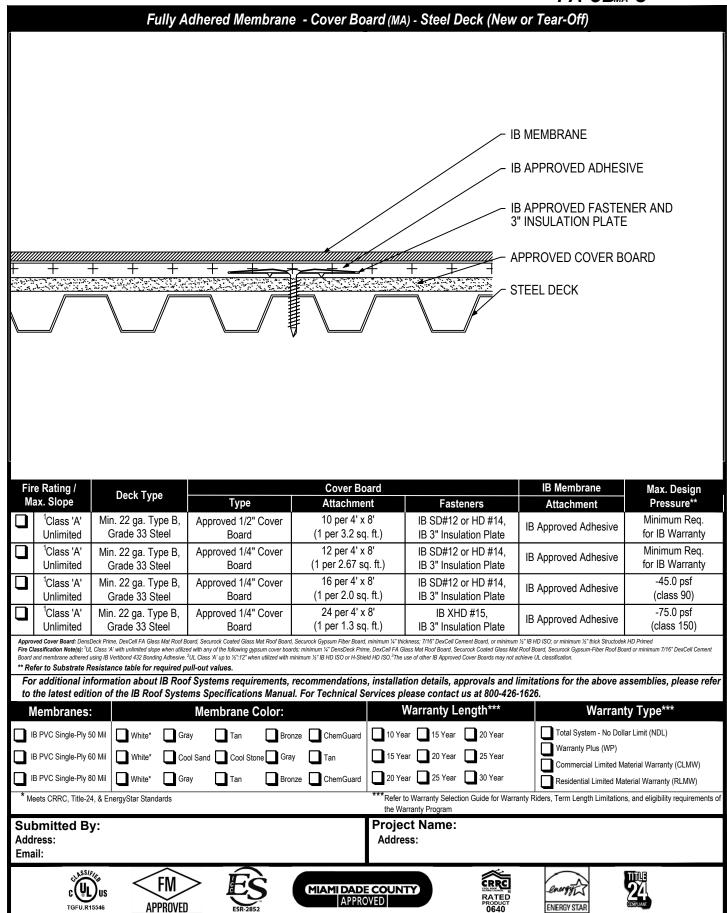




		Fully A	Adhered Membrane (SP) - Existing Roof (SA) - Wood Deck (Recover)	
			✓ IB FLEECEBACK MEME	DDANIE
			IB FLEEGLBACK WILIVIL	DRAINE
			APPROVED LOW RISE	
			MEMBRANE ADHESIVE SPATTER PATTERN	-
			EXISTING ROOF* SMOOTH ASPHALTIC	
+	+ +	+ +	+ + + + + + + + + + + + + + + + + + +	
	,	/	WOOD DEGIC	
\equiv			WOOD DECK	
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	re Rating / ax. Slope	Deck Type	IB Fleeceback Membrane (over Existing Smooth Bitumen Roof) Attachment	Max. Design Pressure**
	Not	7/16" OSB	CR-20 Spatter Pattern	Minimum Req.
	Rated ¹ Maintains	//10 USD	3.75 lbs/square	for IB Warranty
	¹Maintains Existing 1":12"	1/2" Plywood	CR-20 Spatter Pattern 3.75 lbs/square	Minimum Req. for IB Warranty
	1":12" ¹Maintains		CR-20 Spatter Pattern	-112.5 psf
	Existing 1":12"	19/32" Plywood	3.75 lbs/square	(class 225)
Exis Fire	sting Roof: Smooth	n or granule surfaced asphaltic but te(s): 1Maintains existing up to 1	iill-up roof only. :12" slope over any Class A, B or C built up roof system. ² Recover over modified bitumen may not retain fire classification.	
** Re	efer to Substrate R	Resistance table for required p		semblies, please refer
to t	the latest edition	on of the IB Roof Syster	ns Specifications Manual. For Technical Services please contact us at 800-426-1626.	
	Membranes:	_		y Type***
1=	B PVC Single-Ply FE		10 Year 15 Year 20 Year Total System - No Dolla	r Limit (NDL)
1	B PVC Single-Ply FE B PVC Single-Ply FE			terial Warranty (CLMW)
		B 80 Mil White* 4, & EnergyStar Standards	15 Year 20 Year 25 Year Residential Limited Mate ***Refer to Warranty Selection Guide for Warranty Riders, Term Length Limitations	
			the Warranty Program Project Name:	,
Addı	bmitted By ress:	γ:	Address:	
Ema				
	ر (ال	Sus (FM)	MIAMI DADE COUNTY	1 100 2 11
		5546 APPROVED	APPROVED RATED PRODUCT ENERGY STAR	COMPLIANT

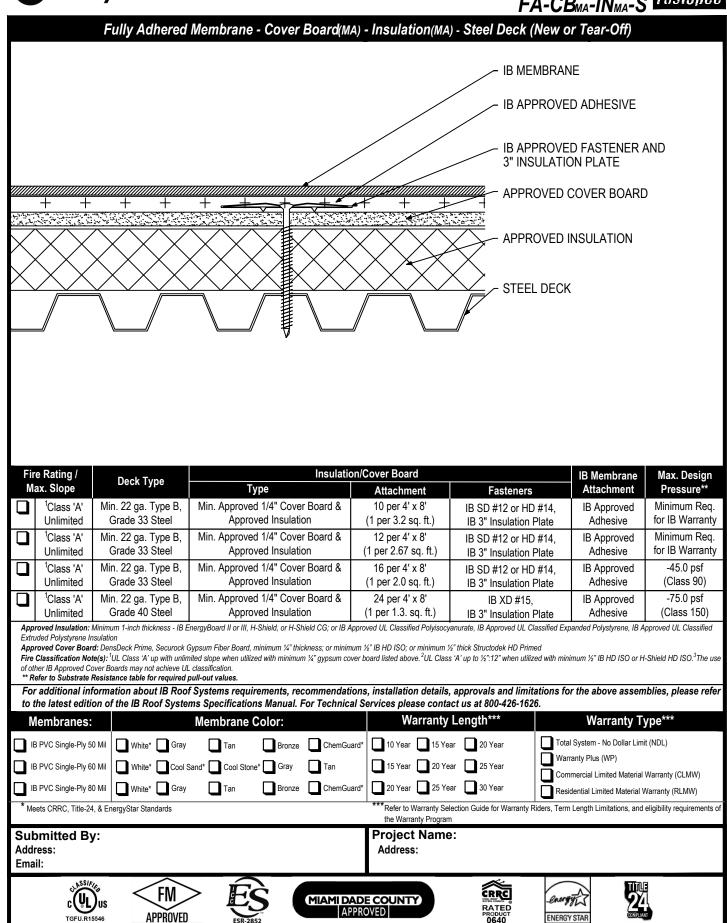






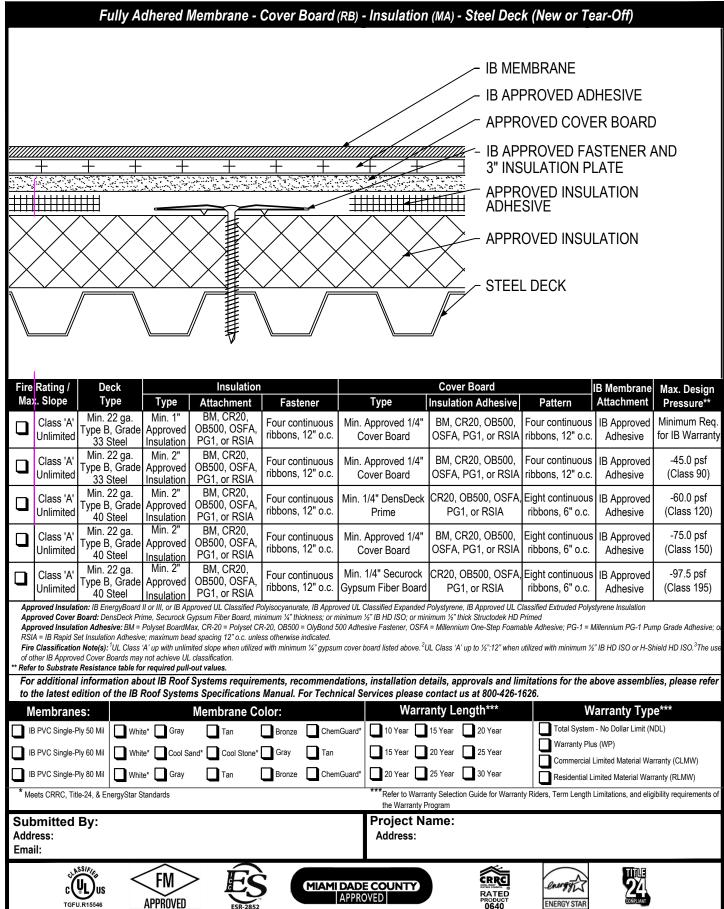






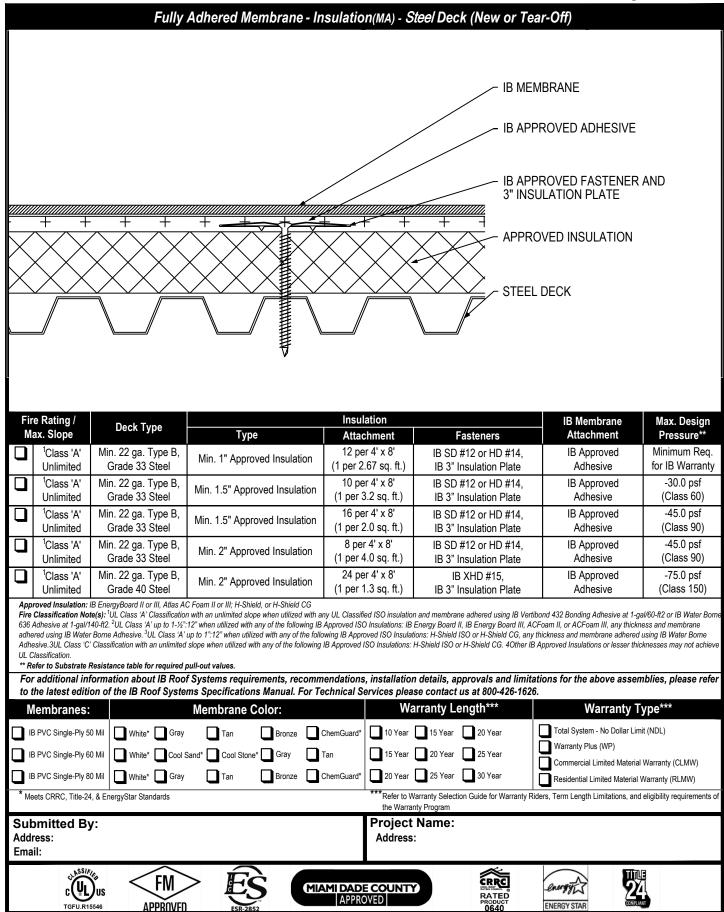








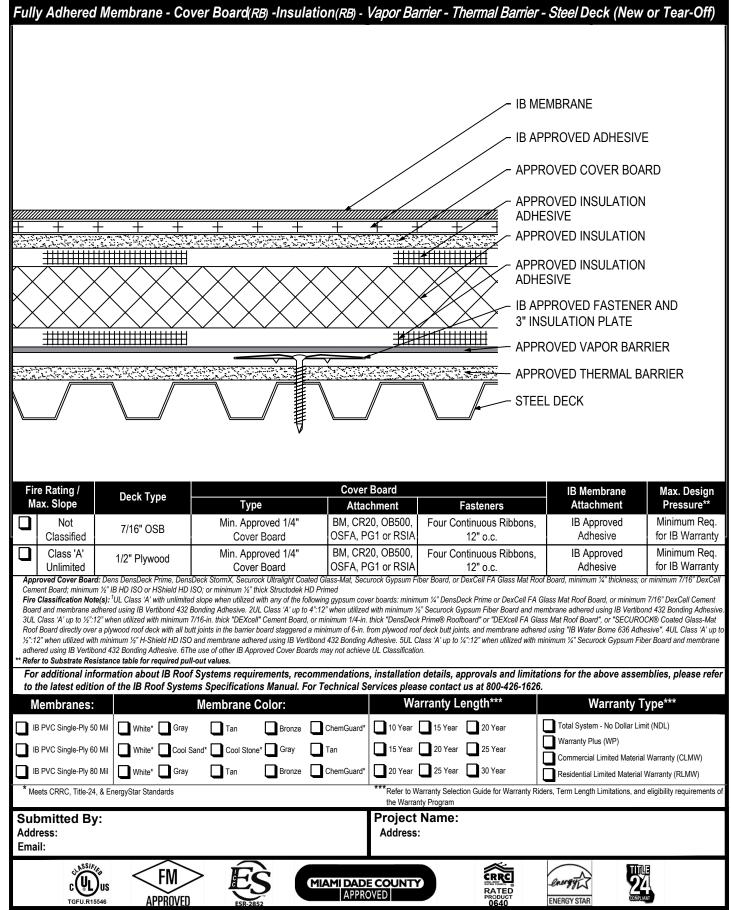






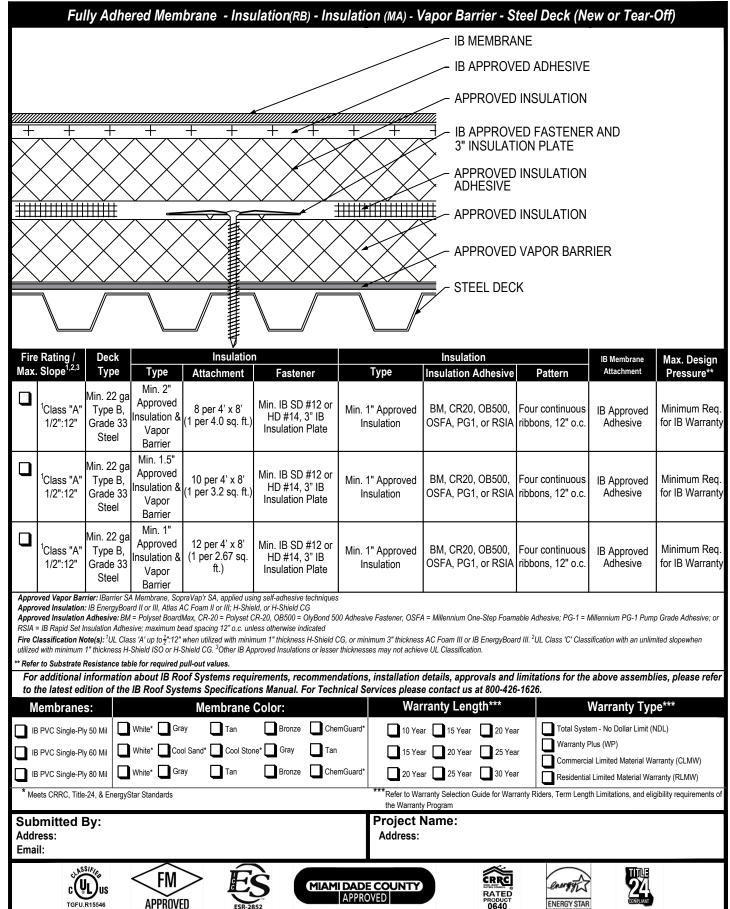






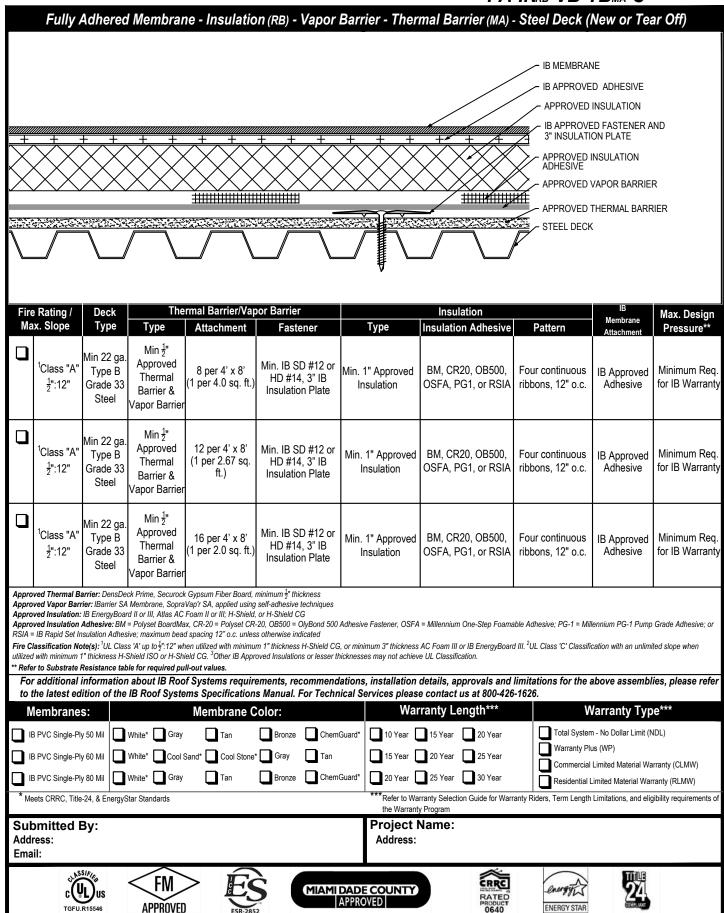




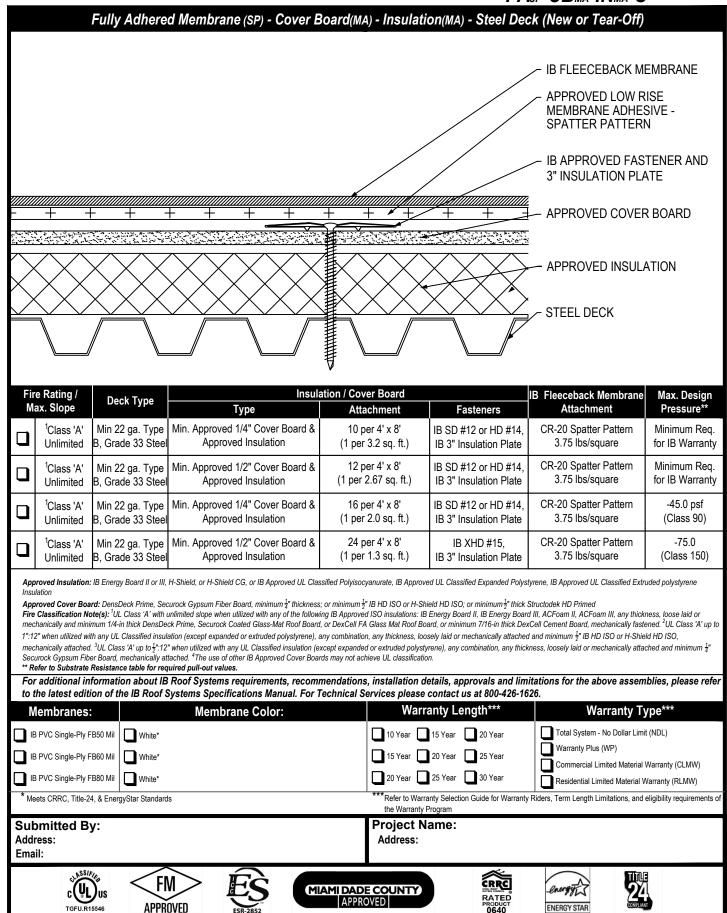




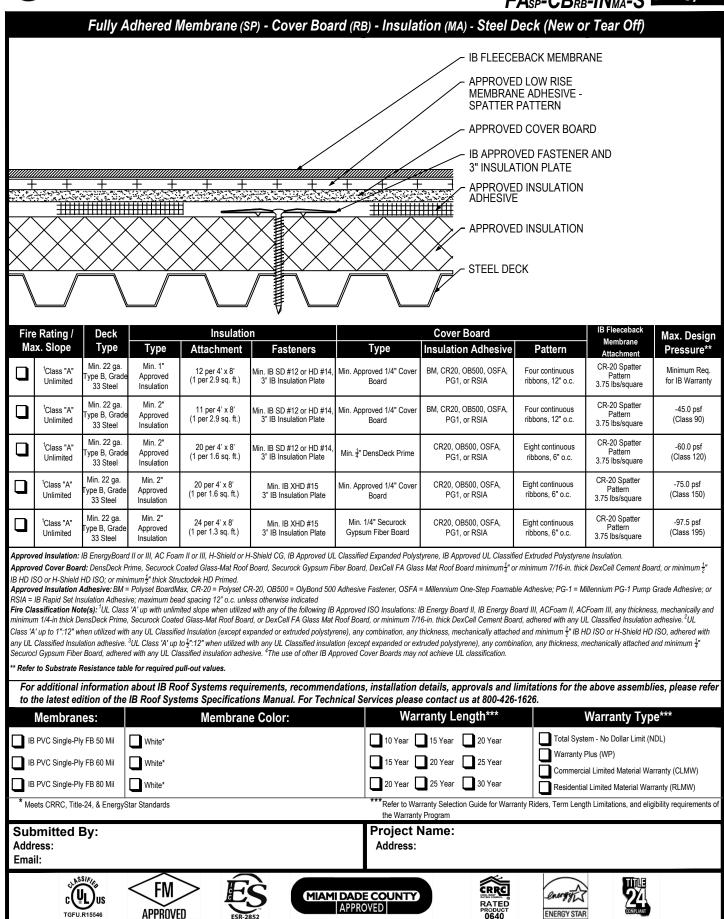






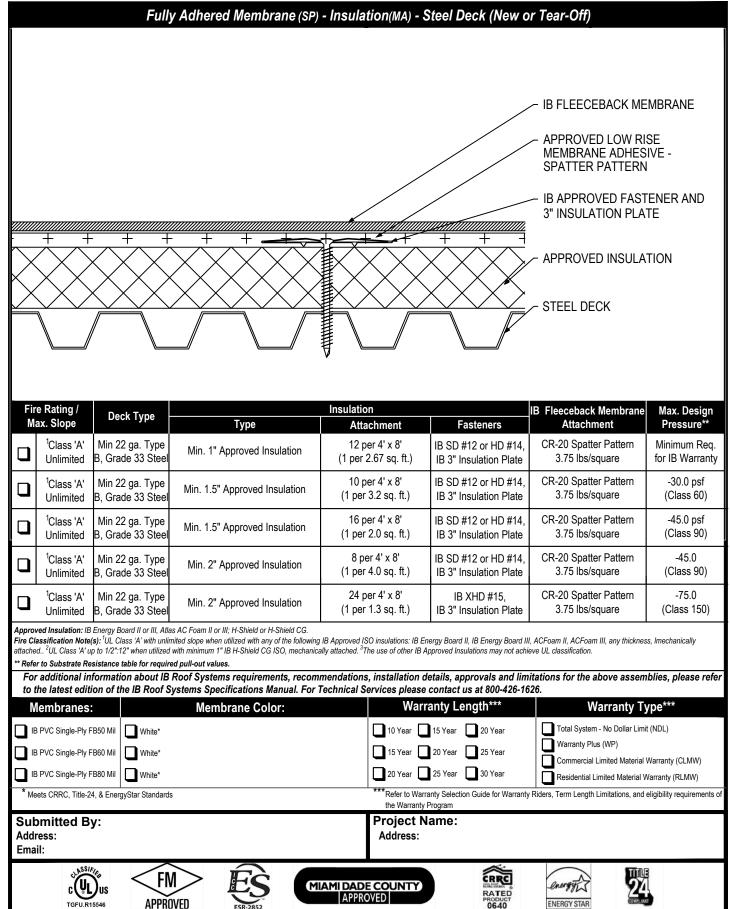




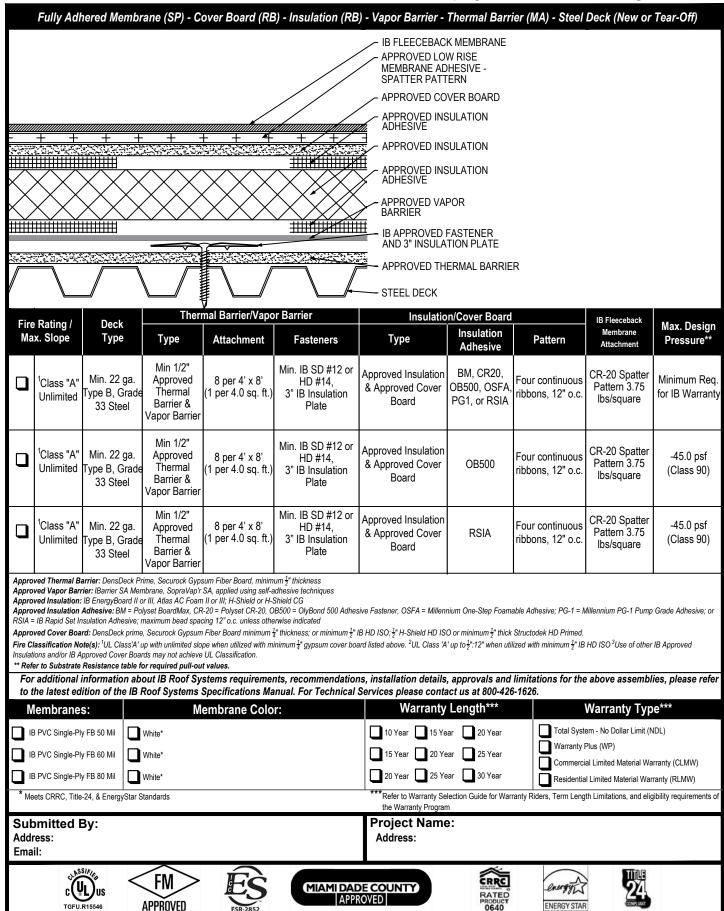




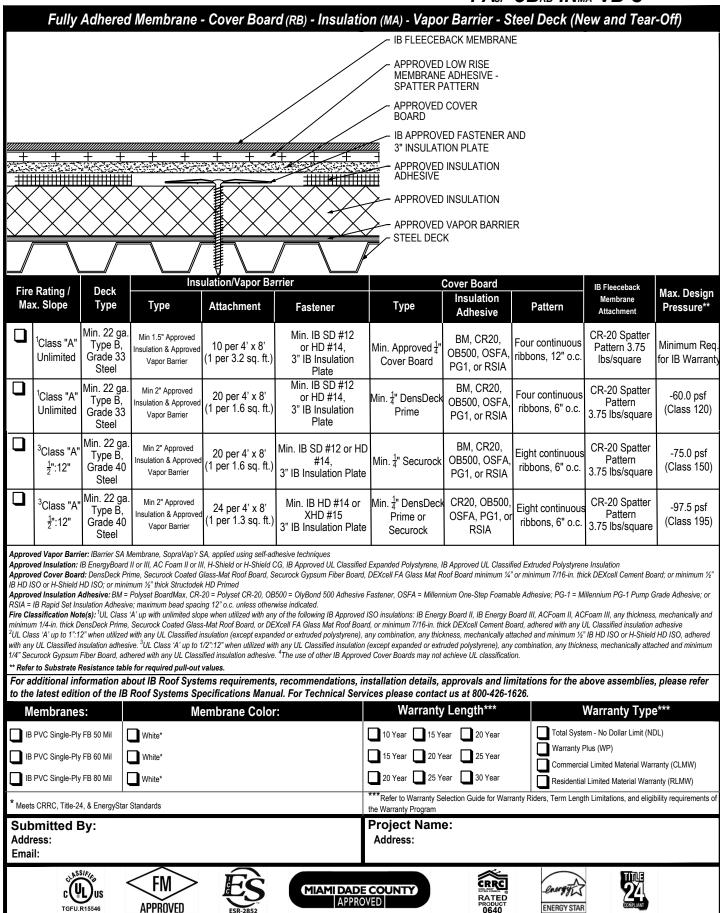






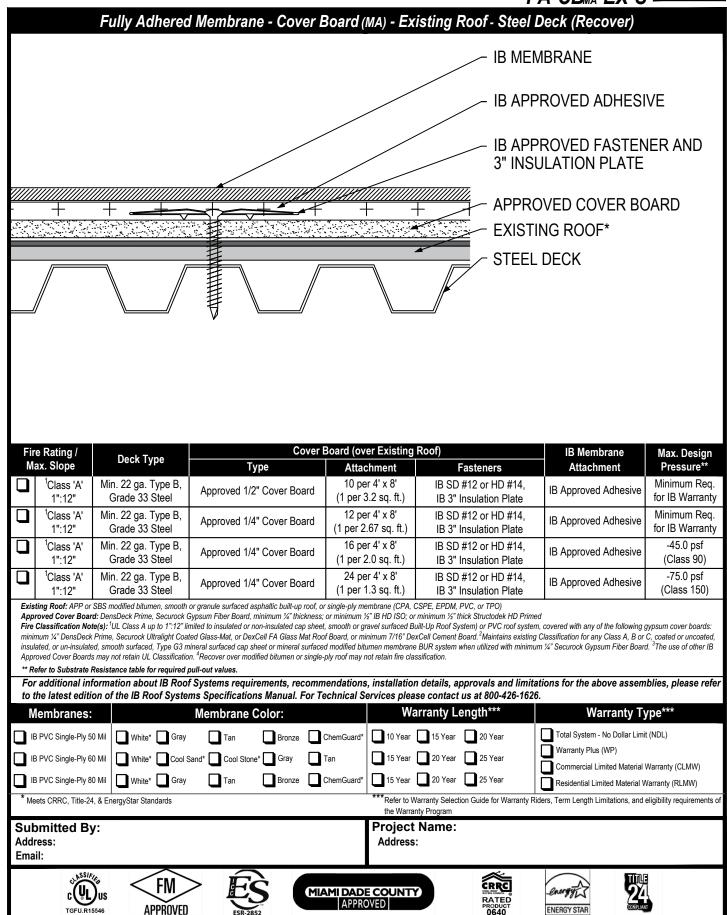






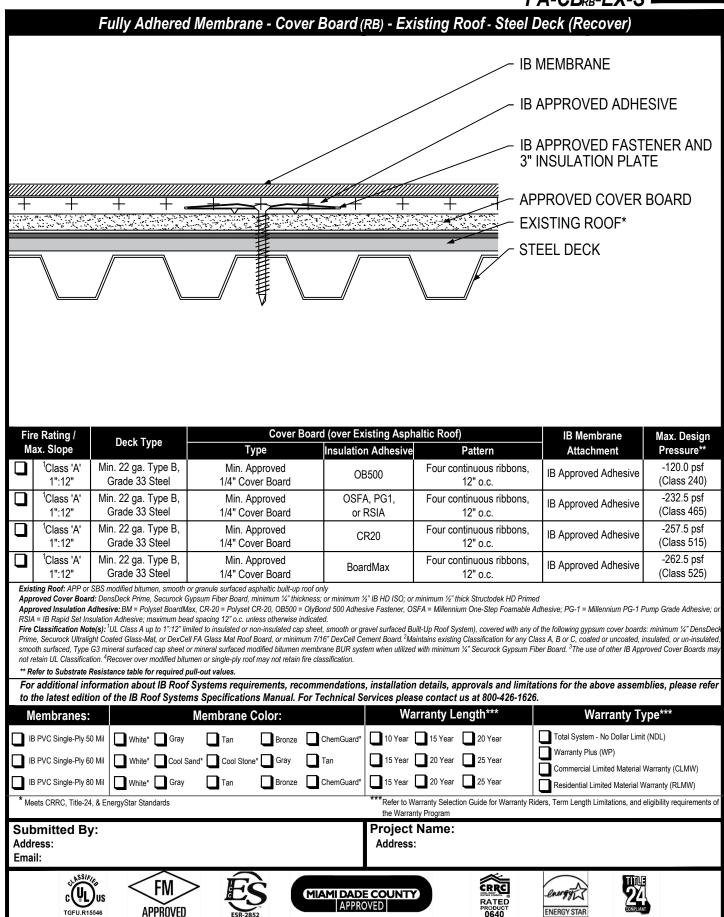




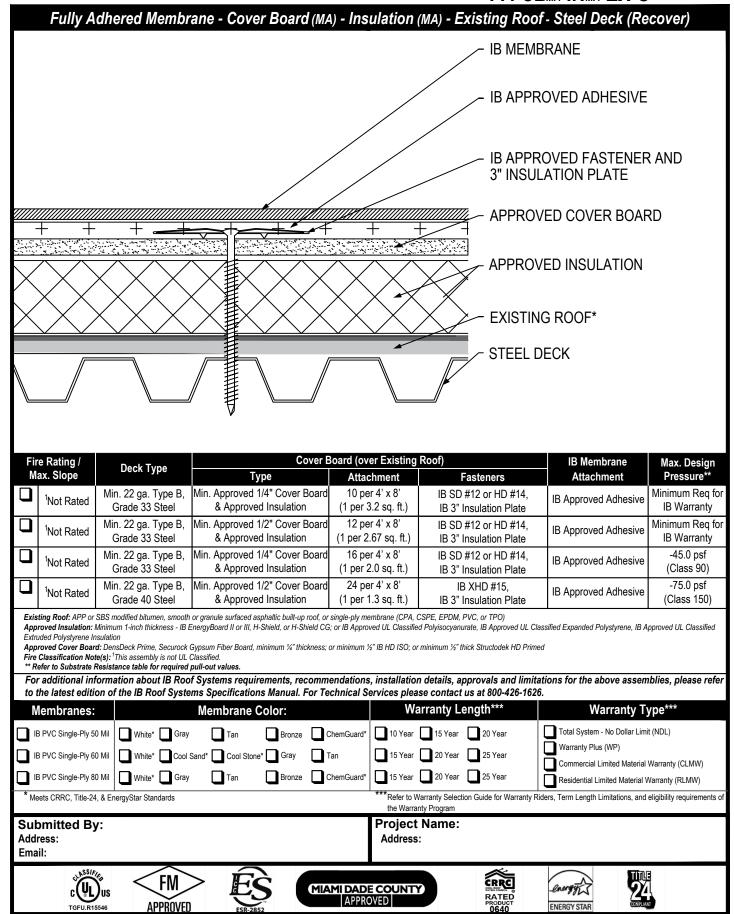




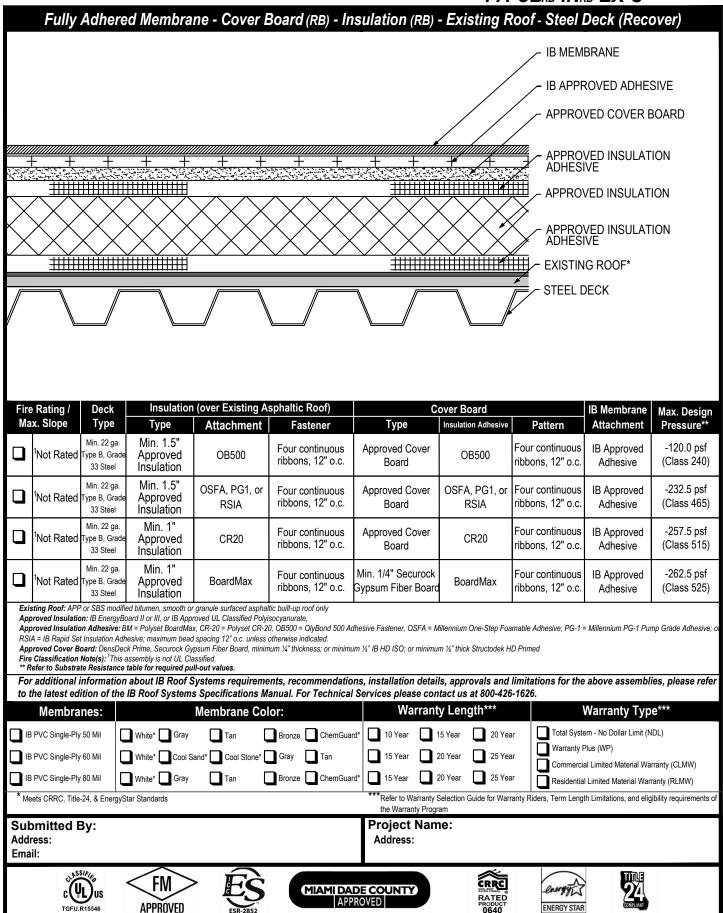






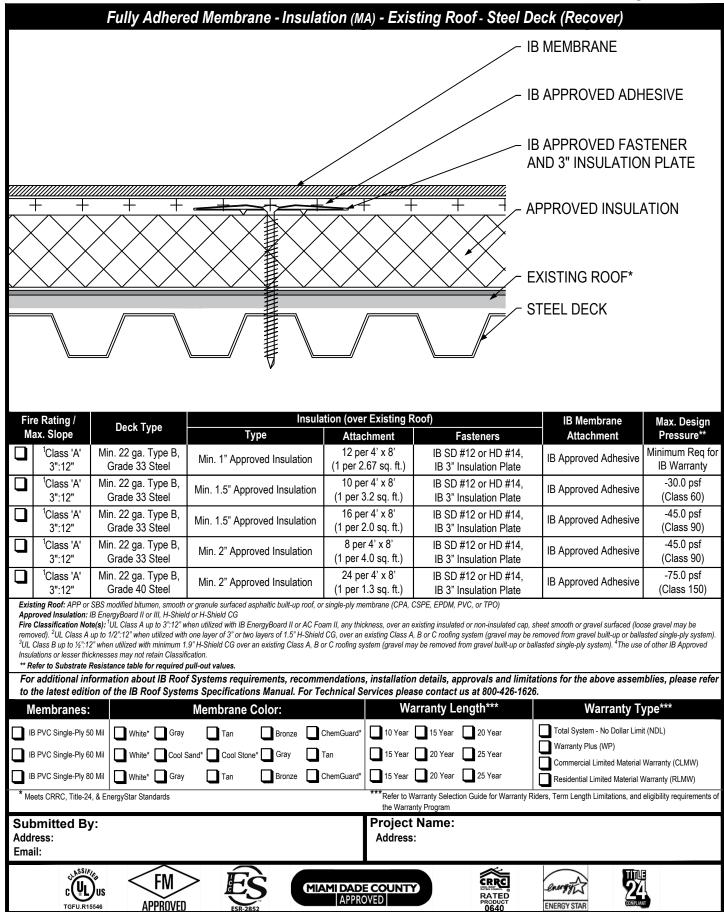






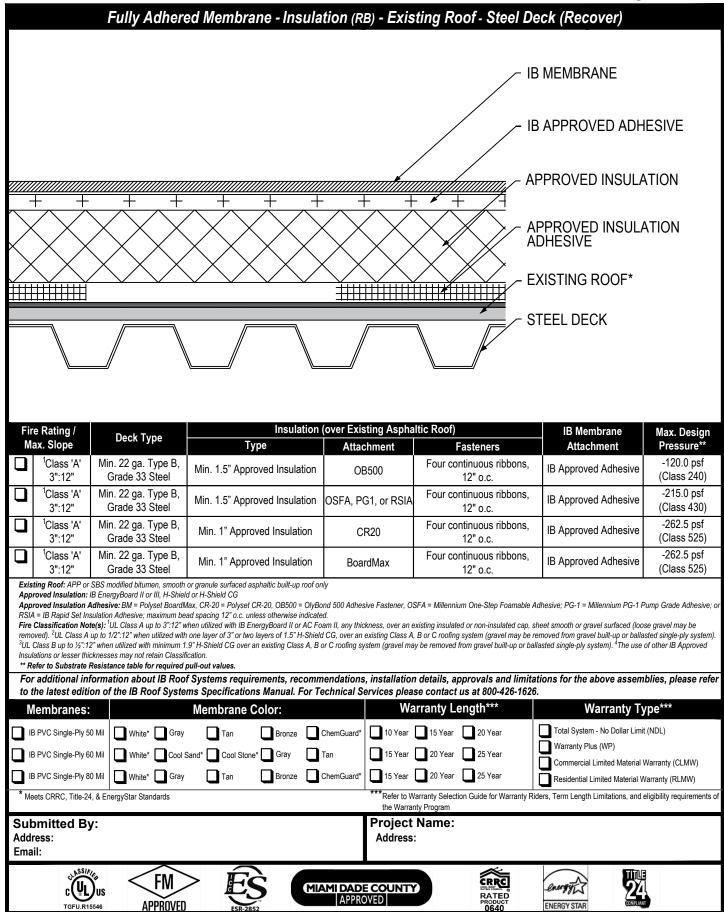






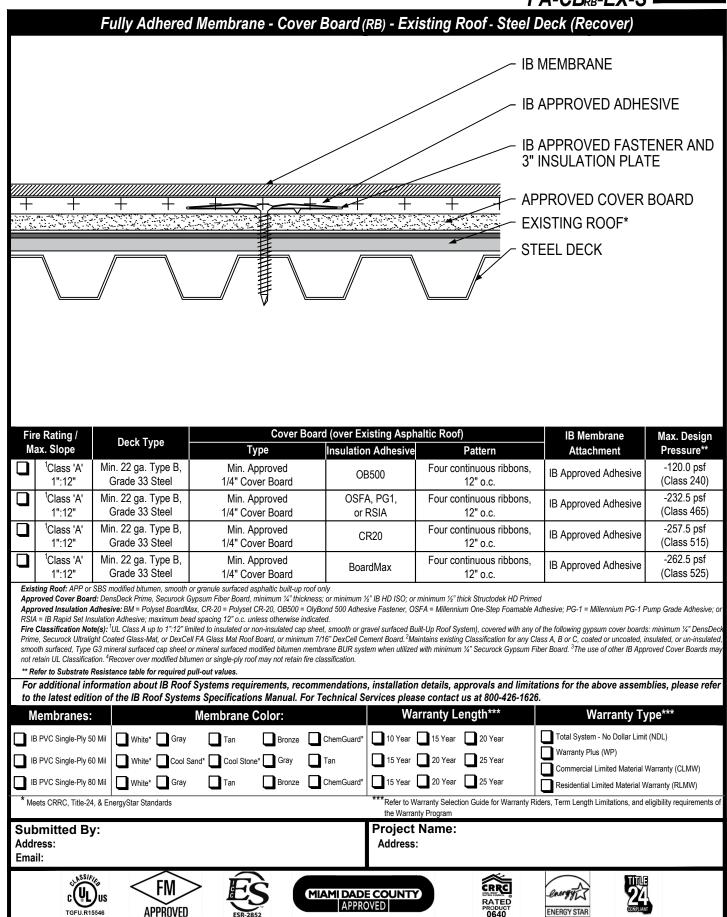




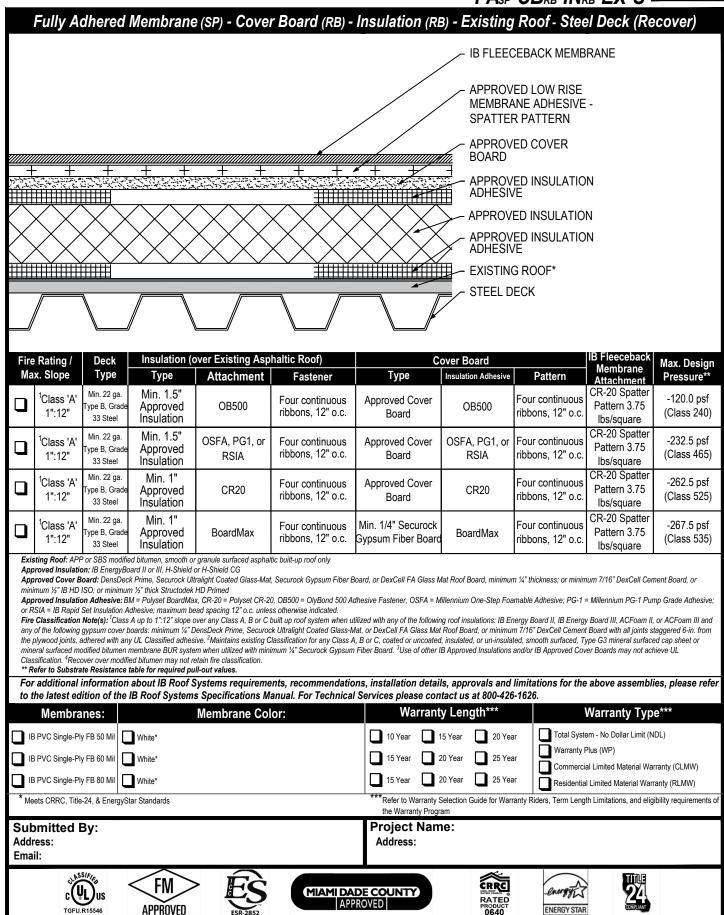






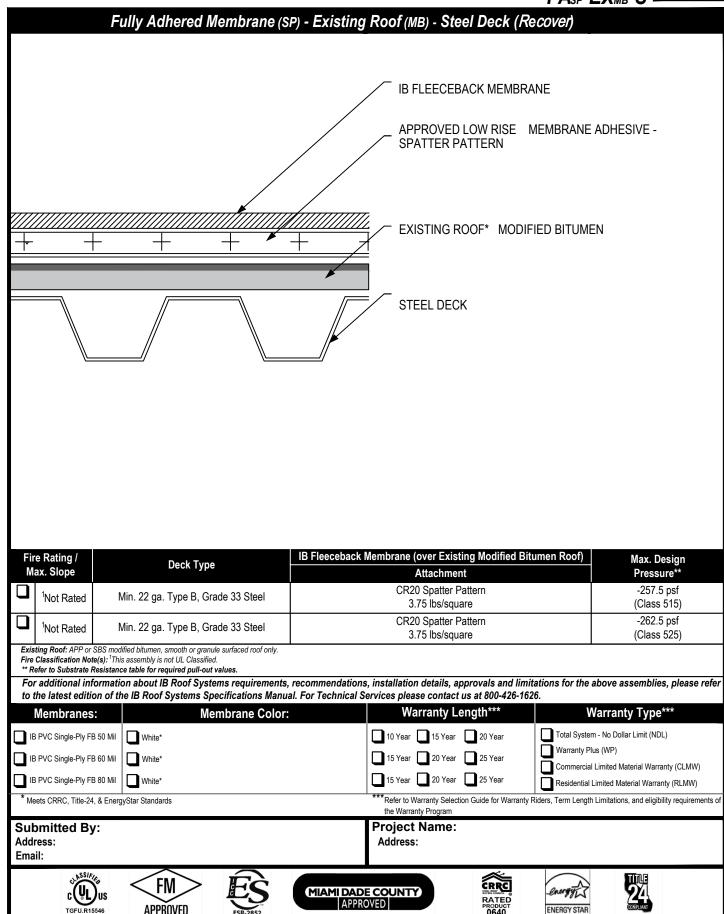






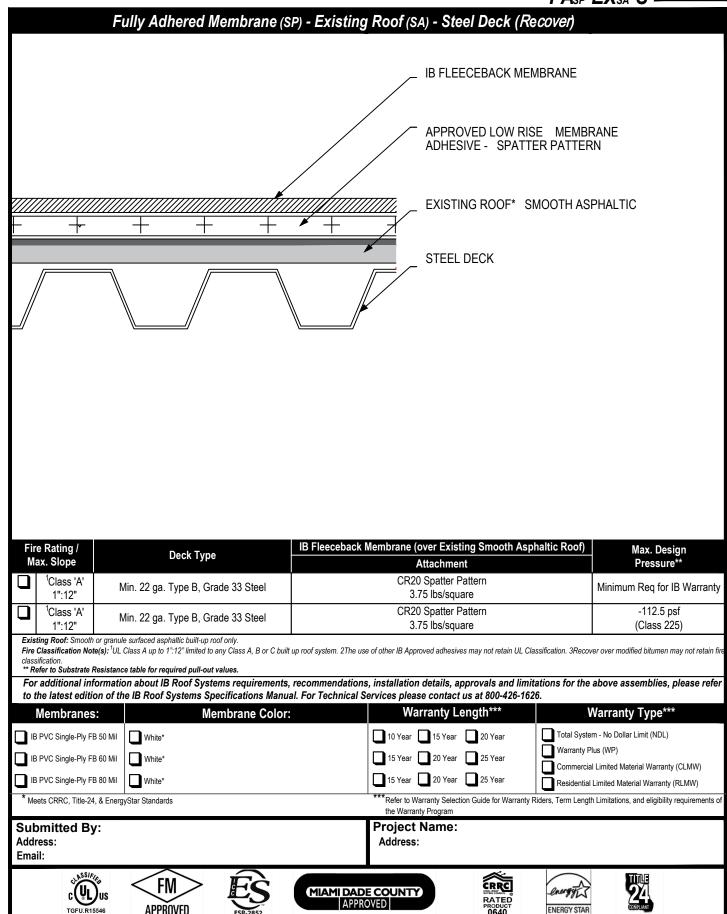




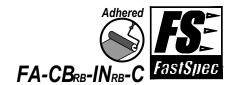


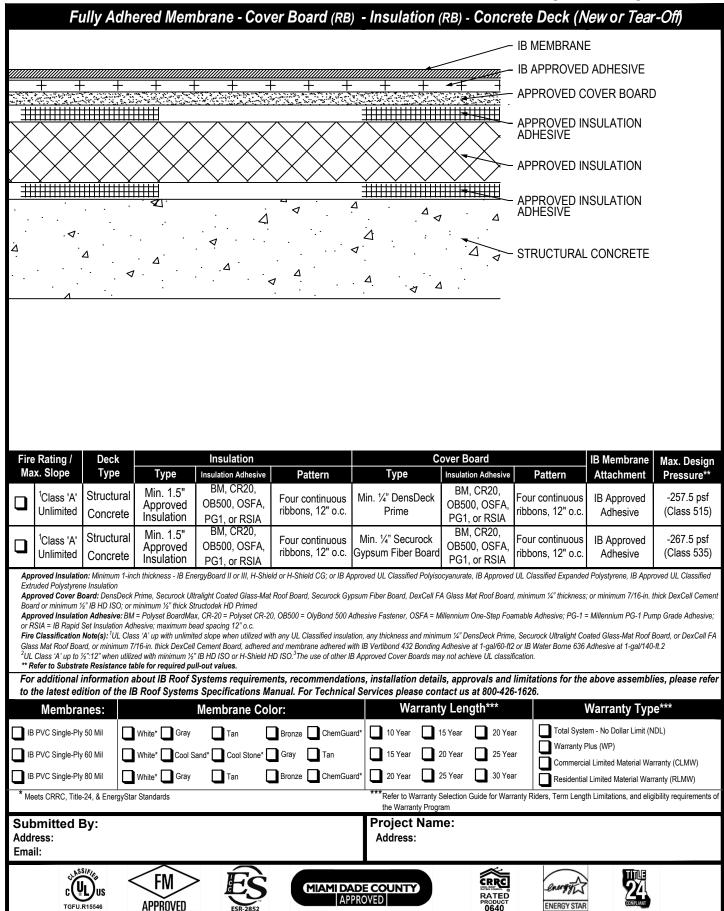












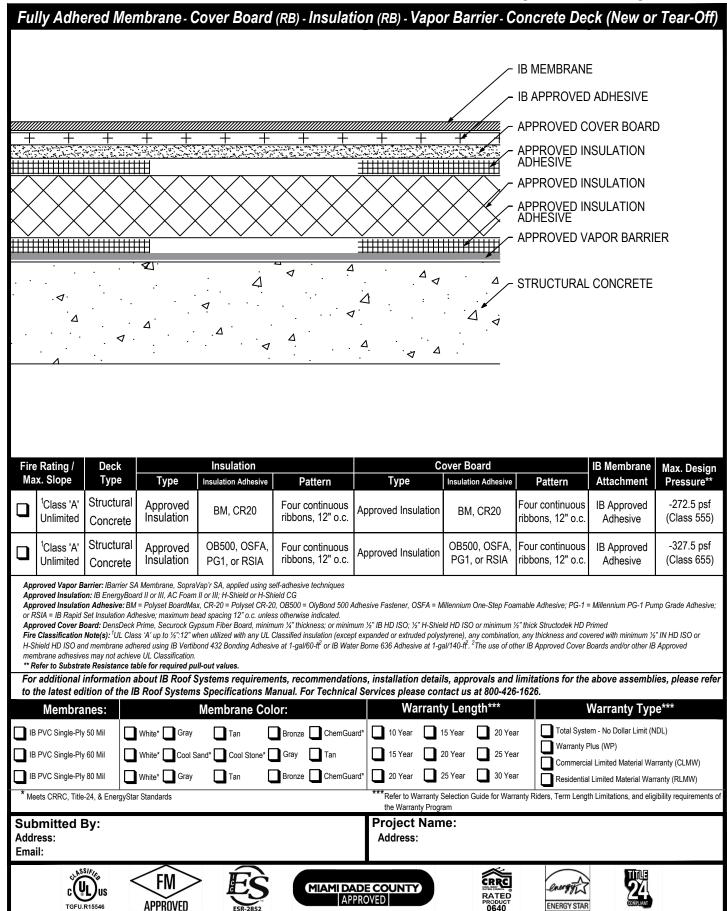




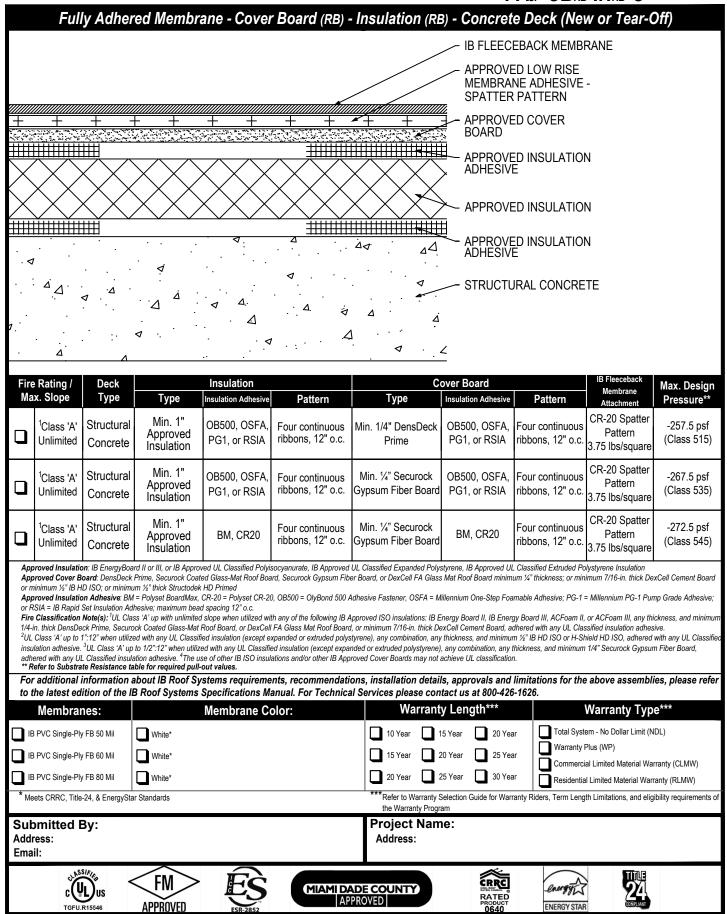
		Fully Adi	hered Membrane -	- Insulation	(RB) - C	oncrete	e Deck (Ne	w or T	ear-Off)	
								B MEMBI	_	
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	<u>#######</u>	Δ 4	Δ		<u> </u>			TRUCTU	JRAL CONCRE	TE
	re Rating /	Deck Type			sulation				IB Membrane	Max. Design
U NIE	¹ Class 'A' Unlimited	Structural Concrete	Type 1" Approved Insulation	Insulation A n BM, C			Pattern atinuous ribbons	s, 12" o.c.	Attachment IB Approved Adhesive	-272.5 psf (Class 555)
	¹ Class 'A' Unlimited	Structural Concrete	1" Approved Insulation	n OB500, OSF		Four con	ntinuous ribbons	s, 12" o.c.	IB Approved Adhesive	-327.5 psf (Class 655)
Appr RSIA Fire (Adhe Appro	proved Insulation: I proved Insulation A A = IB Rapid Set Ins Classification Not esive at 1-gal/140-fi proved Insulations ar Refer to Substrate I	Adhesive: BM = Polyset Board nsulation Adhesive; maximum b ote(s): "UL Class 'A' up with unl -ft2 ² UL Class 'A' up to 1-½":12' and or adhesives may not achie Resistance table for required	Inlimited slope when utilized with any to the solid of th	H-Shield CG; or IB Approv 500 = OlyBond 500 Adhes r UL Classified insulation, a rd II, IB Energy Board III, A	oved UL Classified sive Fastener, O. any thickness ar ACFoam II, ACF	OSFA = Millenni and membrane a Foam III, any thi	ium One-Step Foama adhered with IB Vertil ickness and membrai	bond 432 Bond ne adhered wit	PG-1 = Millennium PG-1 I ding Adhesive at 1-gal/60- th IB WaterBorne Adhesiv	Pump Grade Adhesive; or ft2 or IB Water Borne 636 e. ³ The use of other IB
			oof Systems requirements, stems Specifications Manua						or the above assem	ıblies, please refer
	Membranes:		Membrane Color:			arranty L			Warranty T	ype***
_	B PVC Single-Ply 50			_	_	_	20 Year		al System - No Dollar Limi	it (NDL)
1=	B PVC Single-Ply 60 B PVC Single-Ply 80		ool Sand*	· -	15 Year 20 Year	20 Year 25 Year	_	Cor	mmercial Limited Material sidential Limited Material V	
		24, & EnergyStar Standards			***Refer to W				m Length Limitations, and	
	bmitted By ress: ail:	у:				t Name:				
	C UL	FM APPROVE	> Es	MIAMI DADE			RATED PRODUCT	energ	TITLE 22	









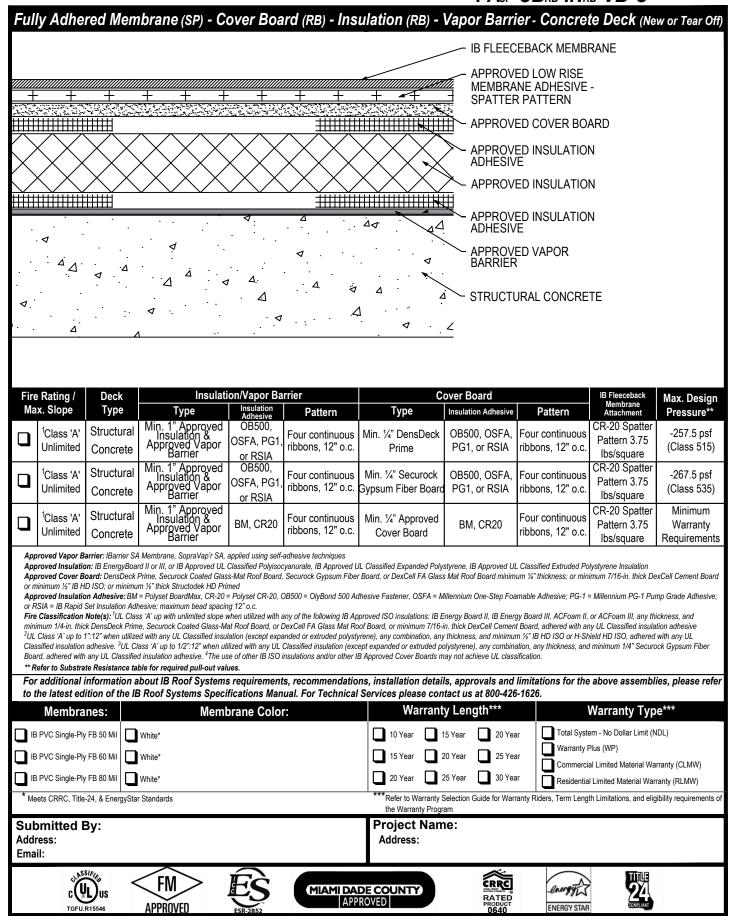






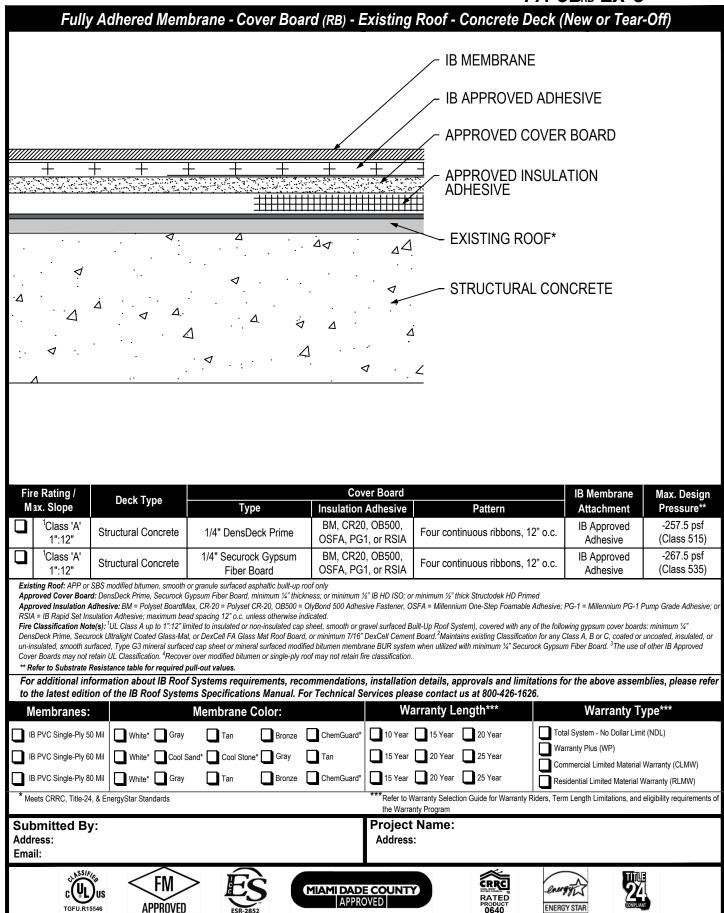
		Fully Adhere	ed Membrane (SP) - In	sulation (RB) - (Concrete Deck (Ne	w or Tear Off)	
					IB FLEECEB	ACK MEMBRANE	
<i> </i>	//////////////////////////////////////	<u>/////////////////////////////////////</u>	<u> </u>	<u> </u>	APPROVED MEMBRANE SPATTER PA	ADHESIVE -	
					APPROVED	INSULATION	
	<u> </u>	XXX			APPROVED ADHESIVE	INSULATION	
		1	4 . · · .	ΔΔ		N CONODETE	
· .			1. Δ	A .	STRUCTURA	AL CONCRETE	
	:·	· · · · · · · · · · · · · · · · · · ·		✓	. <u>.</u> ∠		
	- Patient			Insulation			
	re Rating / lax. Slope	Deck Type	Туре	Attachment	Fasteners	IB Fleeceback Membrane Attachment	Max. Design Pressure**
	¹ Class 'A' Unlimited	Structural Concrete	1" Approved Insulation	BM, CR20	Four continuous ribbons, 12" o.c.	CR-20 Spatter Pattern 3.75 lbs/square	-272.5 psf (Class 555)
	¹ Class 'A' Unlimited	Structural Concrete	1" Approved Insulation	OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c.	CR-20 Spatter Pattern 3.75 lbs/square	-327.5 psf (Class 655)
App RSI Fire any ⁴ Oth	proved Insulation: I proved Insulation A IA = IB Rapid Set Ins e Classification Not UL Classified insula her IB Approved Insu	Adhesive: BM = Polyset BoardMa sulation Adhesive; maximum beac te(s): 1UL Class 'A' up with unlimit	ited slope when utilized with any of the follow to ½":12" when utilized with minimum 1" thick ay not achieve UL Classification.	or IB Approved UL Classified Pond 500 Adhesive Fastener, OSi wing IB Approved ISO insulation	Polyisocyanurate FA = Millennium One-Step Foamable , ns: IB Energy Board II, IB Energy Boar	rd III, ACFoam II, or ACFoam III, any t	thickness adhered with
			Systems requirements, recomments of Systems requirements, recommendations Manual. For Te				
= [0				acnnicai Services Dieas	e contact us at 000-420-102.	ຳ.	blies, please refer
	Membranes		Membrane Color:		rranty Length***	Warranty Ty	
		s:		Wai		Warranty Ty Total System - No Dollar Limit	pe***
	Membranes	SH SO Mil White*		Wai	rranty Length***	Warranty Ty Total System - No Dollar Limit Warranty Plus (WP)	'pe*** (NDL)
	Membranes	B 50 Mil White* White*		War [rranty Length*** 15 Year 20 Year 20 Year 25 Year	Warranty Ty Total System - No Dollar Limit	(NDL) Varranty (CLMW)
	Membranes B PVC Single-Ply FI B PVC Single-Ply FI B PVC Single-Ply FI	B 50 Mil White* White*		Wat 10 Year 15 Year 20 Year ***Refer to Wa	rranty Length*** 15 Year 20 Year 20 Year 25 Year 25 Year 30 Year arranty Selection Guide for Warranty R	Warranty Ty Total System - No Dollar Limit Warranty Plus (WP) Commercial Limited Material W Residential Limited Material W	(NDL) Varranty (CLMW) Varranty (RLMW)
	Membranes B PVC Single-Ply FI B PVC Single-Ply FI B PVC Single-Ply FI	B 50 Mil White* B 60 Mil White* B 80 Mil White* White* White*		Wat ☐ 10 Year ☐ ☐ 15 Year ☐ ☐ 20 Year ☐	rranty Length*** 15 Year 20 Year 20 Year 25 Year 25 Year 30 Year arranty Selection Guide for Warranty R ty Program	Warranty Ty Total System - No Dollar Limit Warranty Plus (WP) Commercial Limited Material W Residential Limited Material W	(NDL) Varranty (CLMW) Varranty (RLMW)
U III	Membranes B PVC Single-Ply FI B PVC Single-Ply FI B PVC Single-Ply FI leets CRRC, Title-24 bmitted By tress:	B 50 Mil White* B 60 Mil White* B 80 Mil White* White* White*		10 Year [15 Year [20 Year [***Refer to Wathe Warrant	rranty Length*** 15 Year 20 Year 20 Year 25 Year 25 Year 30 Year arranty Selection Guide for Warranty R by Program Name:	Warranty Ty Total System - No Dollar Limit Warranty Plus (WP) Commercial Limited Material W Residential Limited Material W	'pe*** (NDL) Varranty (CLMW) 'arranty (RLMW)



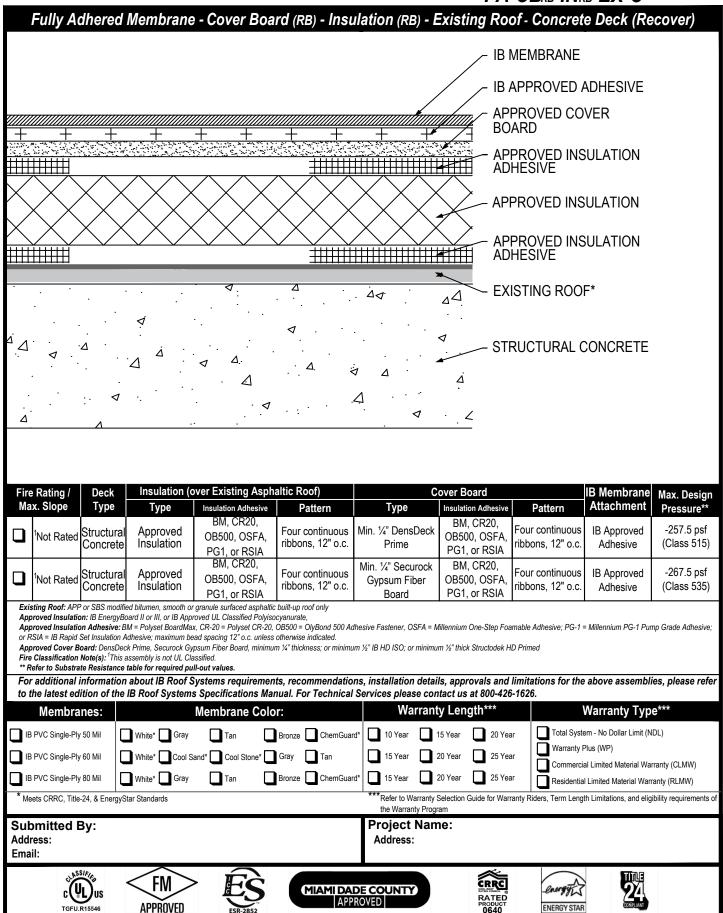






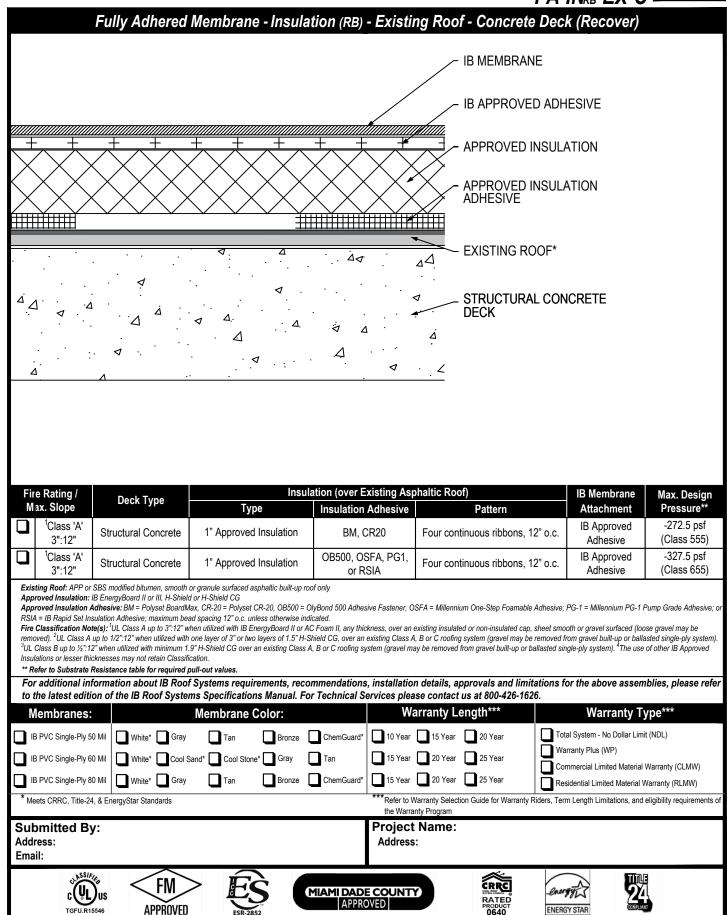






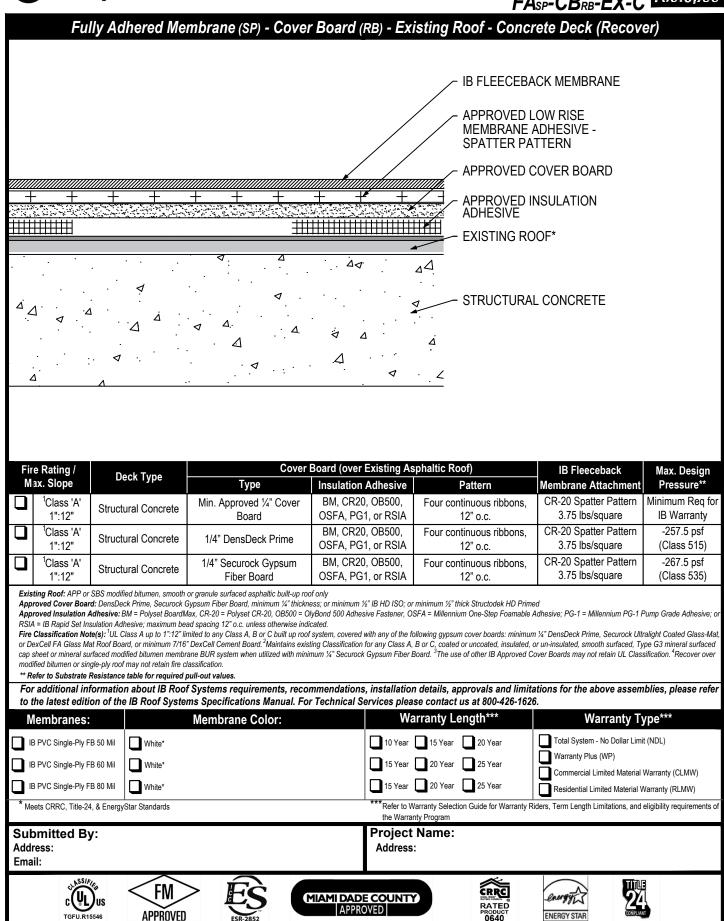




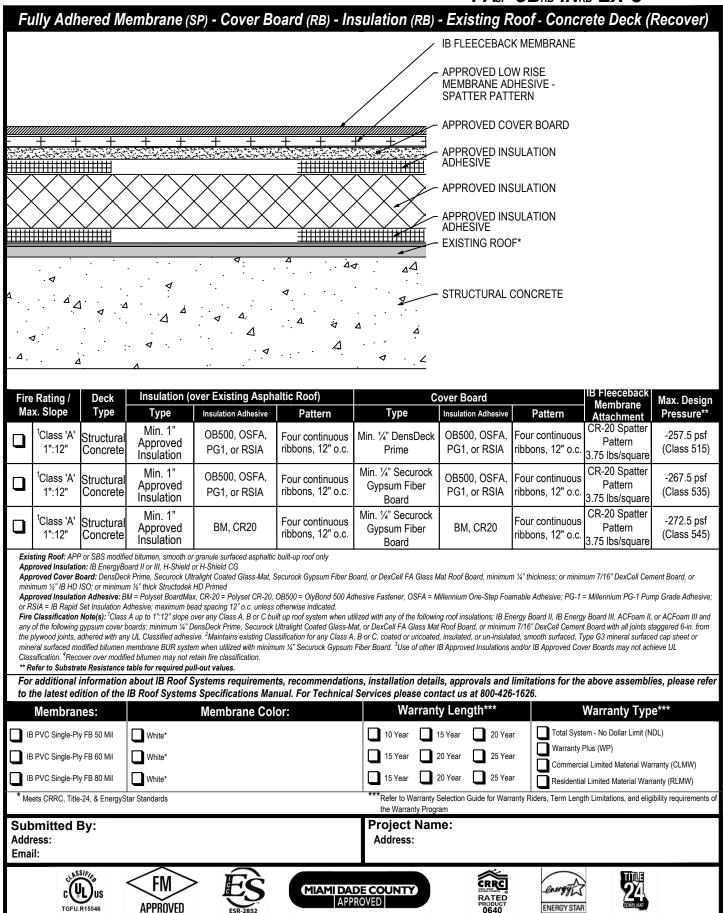






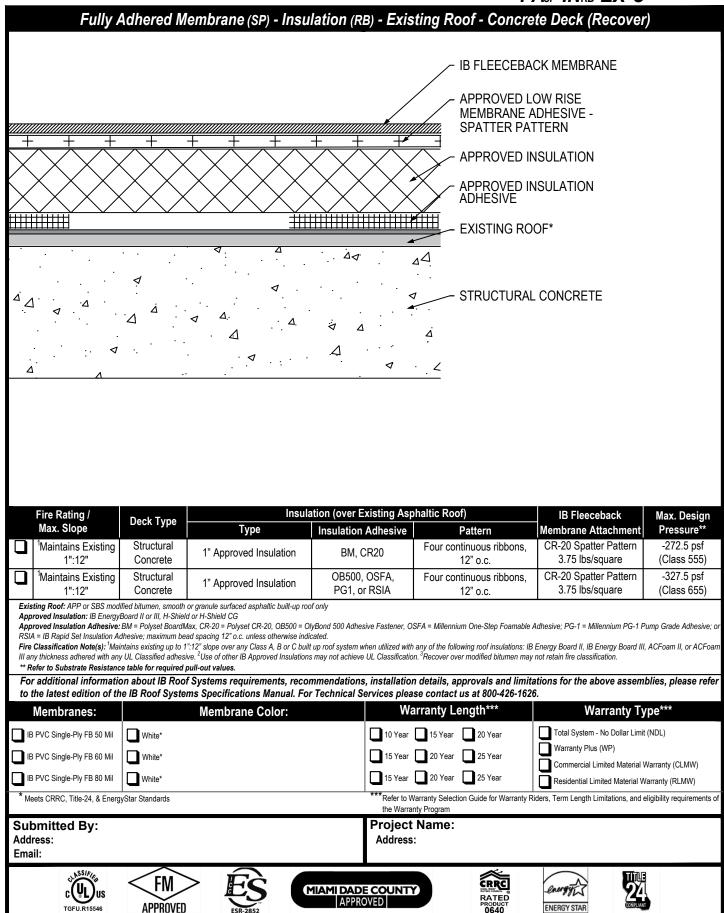






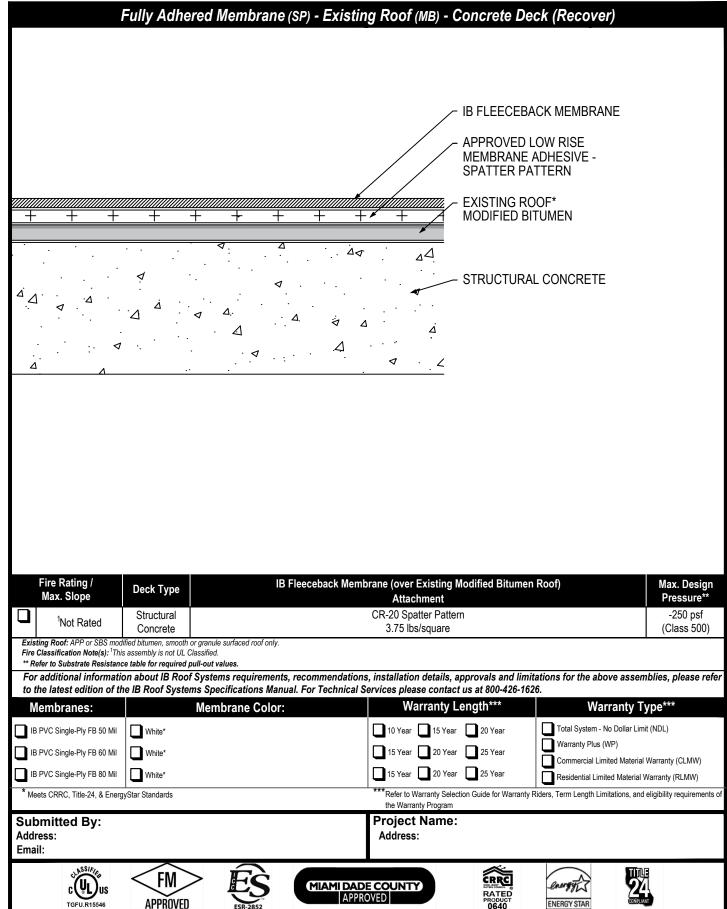






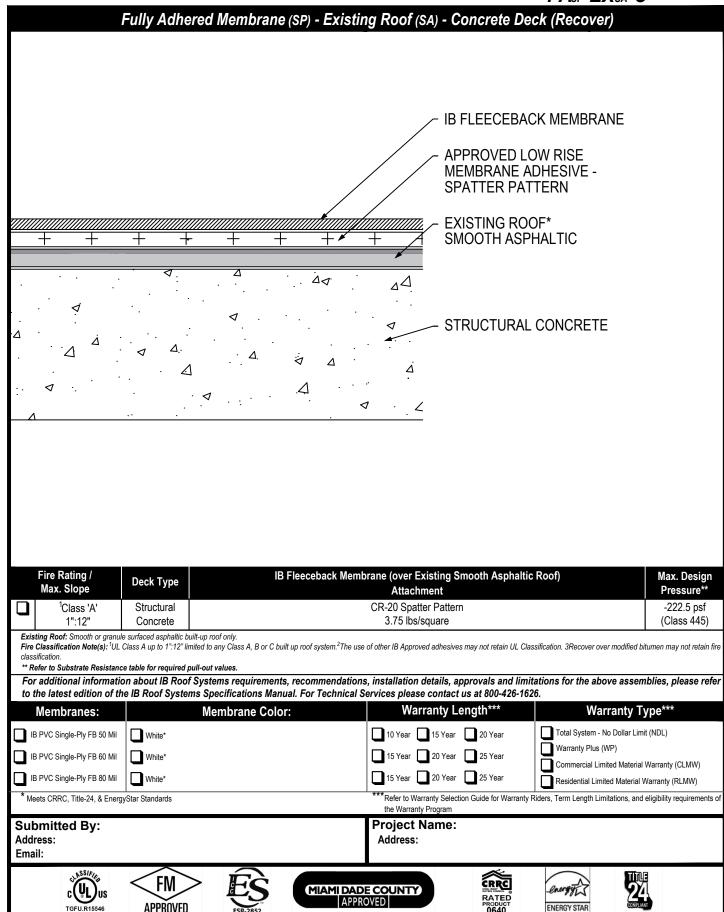
















		Fully Adhere	d Membrane - Cover E	Board (RB) - Cei	mentitious Wood I	Fiber (Tear-Off)	
					/ IB M	1EMBRANE	
					– IB A	PPROVED ADH	ESIVE
				anananan j	/ / APP	PROVED COVER	BOARD
	+	+ +	<u> </u>		APP ADH	PROVED INSULA HESIVE	TION
					CEN	MENTITIOUS WO ER	OD FIBER
	e Rating / ax. Slope	Deck Type	Туре	Cover Board Insulation Adhesive	Pattern	IB Membrane Attachment	Max. Design Pressure**
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" Approved Cover Board	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 1	ID Approved	Minimum Req for IB Warranty
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	OB500	Four continuous ribbons, 1	2" o.c. IB Approved Adhesive	-45.0 psf (Class 90)
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	CR20	Four continuous ribbons, 1	2" o.c. IB Approved Adhesive	-52.5 psf (Class 105)
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" DensDeck Prime	ВМ	Four continuous ribbons, 1	Adnesive	-75.0 psf (Class 150)
ISO; Appro RSIA Fire 0 adher	or minimum ½" thic oved Insulation Adh = IB Rapid Set Ins Classification Note(red using IB Vertibo utilized with minim	k Structodek HD Primed nesive: BM = Polyset BoardMa ulation Adhesive; maximum be s): 1UL Class 'A' with unlimited and 432 Bonding Adhesive. 2U	I slope when utilized with any of the following ! IL Class 'A' up to 3":12" when utilized with ½" HD ISO. 4The use of other IB Approved Cove	J 500 Adhesive Fastener, OSFA gypsum cover boards: minimum Securock Gypsum-Fiber Roof B	 = Millennium One-Step Foamable Adl 1 ¼" Securock Coated Glass Mat Roof oard and membrane adhered using IB	hesive; PG-1 = Millennium PG-1 F Board, or DexCell FA Glass Mat I	rump Grade Adhesive; or Roof Board and membrane
			of Systems requirements, recomm Tems Specifications Manual. For Te	,			mblies, please refer
M	embranes:		Membrane Color:	War	ranty Length***	Warranty 7	Гуре***
□В	PVC Single-Ply 50	Mil White* Gray	Tan Bronze	ChemGuard* 10 Year	15 Year 20 Year	Total System - No Dollar Lin Warranty Plus (WP)	mit (NDL)
_	PVC Single-Ply 60		Sand* Cool Stone* Gray	Tan 15 Year	20 Year 25 Year	Commercial Limited Materia	al Warranty (CLMW)
	ets CRRC, Title-24	Mil White* Gray White* Gray & EnergyStar Standards	Tan Bronze (25 Year 30 Year	Residential Limited Material	, , ,
Sub Addr Emai		r:		Project I Address:	y Program		
	C C SSIFA)us FIVI	> ES MIA	AMI DADE COUNTY APPROVED	CRRC RATED PRODUCT 0640	ENERGY STAR	LANT.





		Fully Adhere	ed Membrane - Insula	ntion (RB) - Cen	nentitious Wood Fibe	r (Tear-Off)	
					IB MEMB	RANE	
				/	IB APPR	OVED ADHESIVE	<u> </u>
//////////////////////////////////////	+ +	+ +	<u>/////////////////////////////////////</u>	# + /////	APPROV	ED INSULATION	
	$\langle \rangle \langle \rangle$				APPROV ADHESIV	ED INSULATION	
					CEMEN	FITIOUS WOOD I	FIBER
\bigotimes							
	e Rating / ax. Slope	Deck Type	Туре	Insulation Adhesive	Pattern	IB Membrane Attachment	Max. Design Pressure**
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1" Approved Insulation	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.	ID Approved	Minimum Req for IB Warranty
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	Min. 1.5" EnergyBoard II or AC Foam II Insulation	OB500	Four continuous ribbons, 12" o.	c. IB Approved Adhesive	-45.0 psf (Class 90)
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	Min. 1.5" EnergyBoard II or AC Foam II Insulation	CR20	Four continuous ribbons, 12" o.	c. IB Approved Adhesive	-52.5 psf (Class 105)
Appr RSIA Fire Adhe	roved Insulation Adhe A = IB Rapid Set Insulati Classification Note(s):	sive: BM = Polyset BoardM on Adhesive; maximum bea ¹ UL Class 'A' up with unlim ₋ Class 'A' up to 1-½":12" w	nd spacing 12" o.c. nited slope when utilized with any UL Classific then utilized with IB Energy Board II, IB Energ	nd 500 Adhesive Fastener, O ed insulation, any thickness an	d Polyisocyanurate SFA = Millennium One-Step Foamable Adhes and membrane adhered with IB Vertibond 432 nam III, any thickness and membrane adhered	Bonding Adhesive at 1-gal/60	
	oved Insulations and or	adnesives may not achieve stance table for required p					e ³ The use of other IB
** Re	oved Insulations and or efer to Substrate Resist additional inform	stance table for required paration about IB Roof	oull-out values.		n details, approvals and limitation se contact us at 800-426-1626.	s for the above assen	
** Re For to t	oved Insulations and or efer to Substrate Resist additional inform	stance table for required paration about IB Roof	oull-out values. f Systems requirements, recomm	echnical Services plea		s for the above assen Warranty T	nblies, please refer
For to to	oved Insulations and or efer to Substrate Resis additional inform the latest edition o	stance table for required paration about IB Roof	oull-out values. F Systems requirements, recomm ms Specifications Manual. For Te Membrane Color:	echnical Services plea	se contact us at 800-426-1626.	Warranty T	nblies, please refer ype***
For to to	roved Insulations and or efer to Substrate Resist additional informathe latest edition of lembranes: B PVC Single-Ply 50 Mil B PVC Single-Ply 60 Mil	stance table for required partion about IB Roof of the IB Roof System White* Gray White* Cool S	pull-out values. F Systems requirements, recomm ms Specifications Manual. For Te Membrane Color: Tan Bronze Gray Grand* Cool Stone* Gray	chenGuard* 10 Year Tan 15 Year	se contact us at 800-426-1626. arranty Length*** 15 Year 20 Year 20 Year 25 Year	Warranty T	nblies, please refer ype*** iit (NDL)
** Rec For to to	oved Insulations and or efer to Substrate Resis and additional information of the latest edition of lembranes: B PVC Single-Ply 50 Mil	nation about IB Roof of the IB Roof Syster White* Gray White* Gray White* Gray	pull-out values. F Systems requirements, recomm ms Specifications Manual. For Te Membrane Color: Tan Bronze Gray Grand* Cool Stone* Gray	ChemGuard* 15 Year ChemGuard* 20 Year **** Refer to W	se contact us at 800-426-1626. arranty Length*** 15 Year 20 Year 25 Year 30 Year //arranty Selection Guide for Warranty Riders,	Warranty T Total System - No Dollar Lim Warranty Plus (WP) Commercial Limited Material Residential Limited Material	ype*** it (NDL) Warranty (CLMW) Warranty (RLMW)
** Red For to ta	reved Insulations and or efer to Substrate Resistrate additional informathe latest edition of lembranes: B PVC Single-Ply 50 Mil B PVC Single-Ply 60 Mil B PVC Single-Ply 80	nation about IB Roof of the IB Roof Syster White* Gray White* Gray White* Gray	pull-out values. F Systems requirements, recomm ms Specifications Manual. For Te Membrane Color: Tan Bronze Gray Grand* Cool Stone* Gray	ChemGuard* 15 Year ChemGuard* 20 Year **** Refer to W	se contact us at 800-426-1626. arranty Length*** 15 Year 20 Year 20 Year 25 Year 25 Year 30 Year Jarranty Selection Guide for Warranty Riders, nty Program Name:	Warranty T Total System - No Dollar Lim Warranty Plus (WP) Commercial Limited Material Residential Limited Material	ype*** it (NDL) Warranty (CLMW) Warranty (RLMW)





					Г	4 sp-U B rb-UVVF	
	F	ully Adhered	Membrane (SP) - Cove	r Board (RB) -	Cementitious Woo	od Fiber (Tear-Off,	
		# + +		Pr Board (RB) -	APPROBOARD APPROBATION APPROB	OC Fiber (Tear-Off) ECEBACK MEMBRAN EVED LOW RISE RANE ADHESIVE - ER PATTERN EVED COVER	E
	e Rating /	Deck Type	Туре	Cover Board Adhesive	Pattern	IB Fleeceback Membrane Attachment	Max. Design Pressure**
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" Approved Insulation	BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 1 o.c.		Minimum Req for IB Warranty
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	OB500	Four continuous ribbons, 1	2" CR-20 Spatter Pattern 3.75 lbs/square	-45.0 psf (Class 90)
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	CR20	Four continuous ribbons, 1 o.c.	2" CR-20 Spatter Pattern 3.75 lbs/square	(Class 105)
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1/4" DensDeck Prime	BoardMax	Four continuous ribbons, 1 o.c.	2" CR-20 Spatter Pattern 3.75 lbs/square	-75.0 psf (Class 150)
minim Appr RSIA Fire C DexC up to ** Re	num ½" IB HD ISO; oved Insulation A: = IB Rapid Set Ins. Classification Note tell Cement Board, 1/2".12" when utiliz fer to Substrate R additional infe	or minimum ½" thick Structode dhesive: BM = Polyset Boardh ulation Adhesive; maximum be (95): ¹ UL Class 'A' up with unlinadhered with any UL Classified with minimum 1/4" Securoclesistance table for required pormation about IB Roo	Max, CR-20 = Polyset CR-20, OB500 = OlyBo ad spacing 12" o.c. nited slope when utilized with minimum 1/4-in d insulation adhesive. ² UL Class 'A' up to 1":1 k Gypsum Fiber Board, adhered with any UL	and 500 Adhesive Fastener, O. thick DensDeck Prime, Secu 2" when utilized with minimum Classified insulation adhesive	SFA = Millennium One-Step Foamable rrock Coated Glass-Mat Roof Board, or 1 ½" IB HD ISO or H-Shield HD ISO, at 4 The use of other IB Approved Cover In details, approvals and limi	e Adhesive; PG-1 = Millennium PG-1 r DexCell FA Glass Mat Roof Board, thered with any UL Classified insulati r Boards may not achieve UL classific tations for the above assen	Pump Grade Adhesive; or or minimum 7/16-in. thick on adhesive. ³ UL Class 'A ation.
	Membranes		Membrane Color:		arranty Length***	Warranty T	ype***
□ B	PVC Single-Ply FB PVC Single-Ply FB PVC Single-Ply FB ets CRRC, Title-24,	60 Mil White*		the Warra	15 Year 20 Year 20 Year 25 Year 25 Year 30 Year Varranty Selection Guide for Warranty nty Program	Total System - No Dollar Lim Warranty Plus (WP) Commercial Limited Material Residential Limited Material V Riders, Term Length Limitations, and	Warranty (CLMW) Varranty (RLMW)
Sub Addr Emai		r:		Project Address			
	C C C TGFU.R15)us FM	> ES MA	AMI DADE COUNTY	CRRC RATED PRODUCT 0640	ENERGY STAR	M T

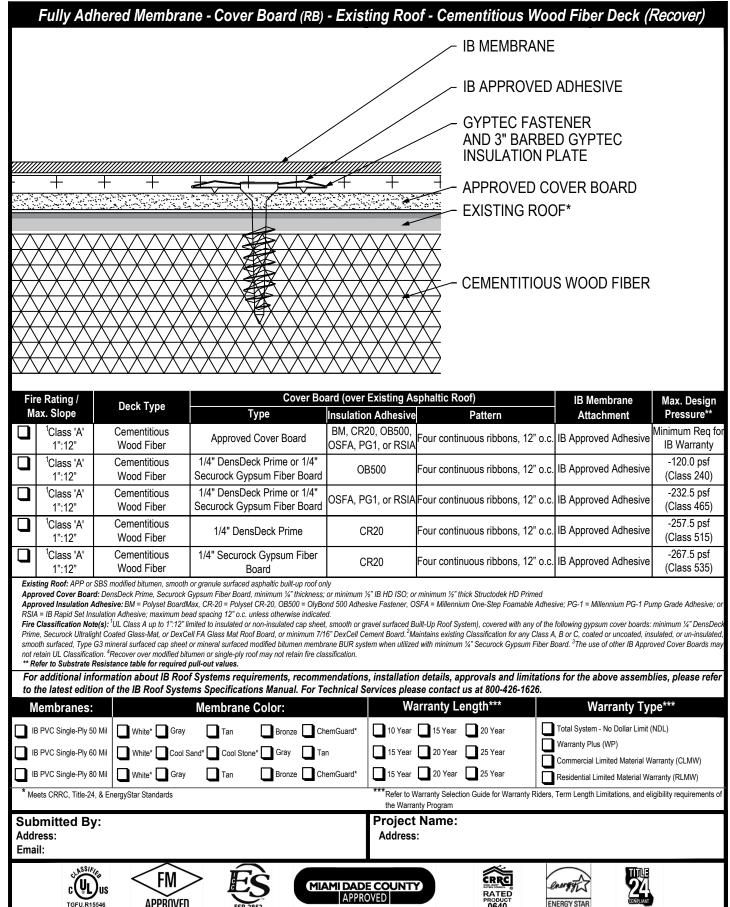




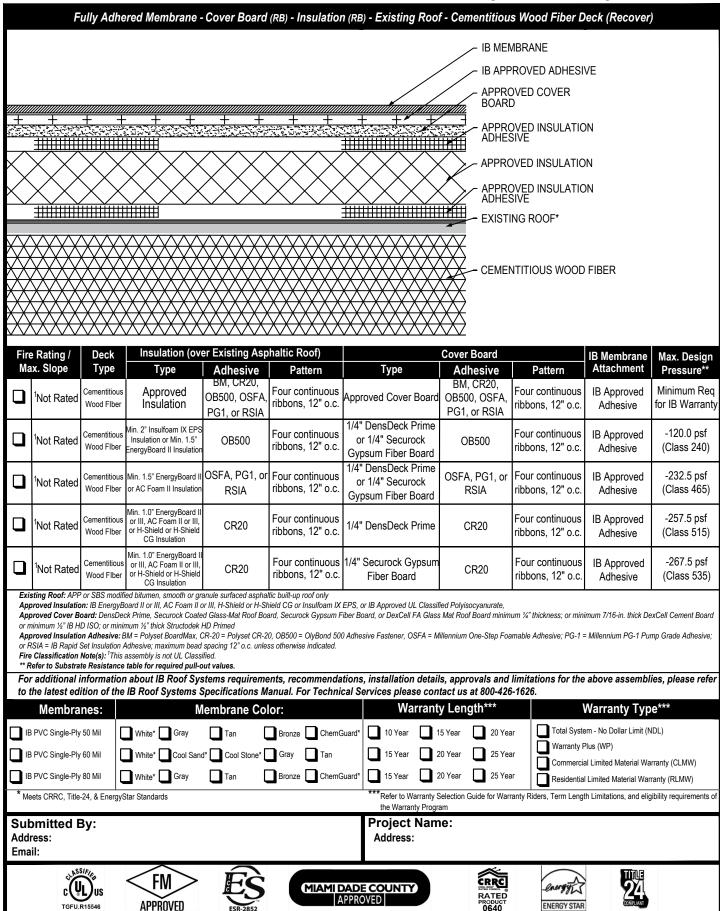
		Fully Adhere	d Membrane (SP) - Inst	ılation (RB) - C	ementitious Wood I	iber (Tear-Off)	
				_		-	
					/ IB FLEECE	BACK MEMBRANE	
					APPROVED		
					MEMBRANI SPATTER F	E ADHESIVE - PATTERN	
$\stackrel{\pm}{\nabla}$	+	+ +	+ + + +		A DDDOV/FF	NINCLII ATIONI	
	$\times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$	APPROVEL	INSULATION	
					APPROVED ADHESIVE	INSULATION	
$\stackrel{\square}{\searrow}$			XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		XX		
X	$\langle \rangle \rangle \langle \rangle \langle$				CEMENTITI	OUS WOOD FIBER	,
\Rightarrow	$\langle \rangle \rangle \langle \rangle$				CEMENTITI	OUS WOOD FIBER	•
X	$\langle \rangle \rangle \langle \rangle$	$\langle \chi \chi$					
\bigvee							
Fir	e Rating /	Dook Type		Insulation		IB Fleeceback	Max. Design
M	ax. Slope	Deck Type	Туре	Adhesive	Pattern	Membrane Attachment	Pressure**
Ľ	¹ Class 'A' Unlimited	Cementitious Wood Fiber	1" Approved Insulation	BM, CR20, OB500, OSFA, PG1, or RSIA		CR-20 Spatter Pattern 3.75 lbs/square	IB Warranty
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	Min. 1.5" EnergyBoard II or AC Foam II Insulation	OB500	Four continuous ribbons, 12" o.c.	CR-20 Spatter Pattern 3.75 lbs/square	-45.0 psf (Class 90)
	¹ Class 'A' Unlimited	Cementitious Wood Fiber	Min. 1.5" EnergyBoard II or AC Foam II Insulation	CR20	Four continuous ribbons, 12" o.c.	CR-20 Spatter Pattern 3.75 lbs/square	-52.5 psf (Class 105)
App	roved Insulation Adl		am II or ACFoam III, H-Shield or H-Shield CG, IMax, CR-20 = Polyset CR-20, OB500 = OlyBo lead spacing 12" o.c.			lhesive; PG-1 = Millennium PG-1	Pump Grade Adhesive; or
Fire any	Classification Note(s UL Classified insulation	' s): ¹ UL Class 'A' up with unl on adhesive. ² UL Class 'A' u	limited slope when utilized with any of the follow ip to ½".12" when utilized with minimum 1" thick may not achieve UL Classification.				
** R	efer to Substrate Re	sistance table for required		endations, installation	n details, approvals and limitat	ions for the above assen	nblies, please refer
		n of the IB Roof Syst	ems Specifications Manual. For Te		se contact us at 800-426-1626. arranty Length***	Warranty T	VD0***
	lembranes: PVC Single-Ply FB 5	EO MEL DAMES &	Membrane Color:			Total System - No Dollar Lim	
I <u> </u>	PVC Single-Ply FB 5			15 Year	15 Year 20 Year 25 Year	Warranty Plus (WP)	it (NDL)
1	PVC Single-Ply FB 8			20 Year		Commercial Limited Material	
		VVIIILE VVIIILE				Residential Limited Material	
	ets CRRC, Title-24, 8	& EnergyStar Standards			Varranty Selection Guide for Warranty Rid	_	Warranty (RLMW)
	mitted By:			the Warran	nty Program Name:	_	Warranty (RLMW)
	omitted By: ress:			the Warra	nty Program Name:	_	Warranty (RLMW)
Addı	omitted By: ress:			the Warran	Name:	_	Warranty (RLMW)









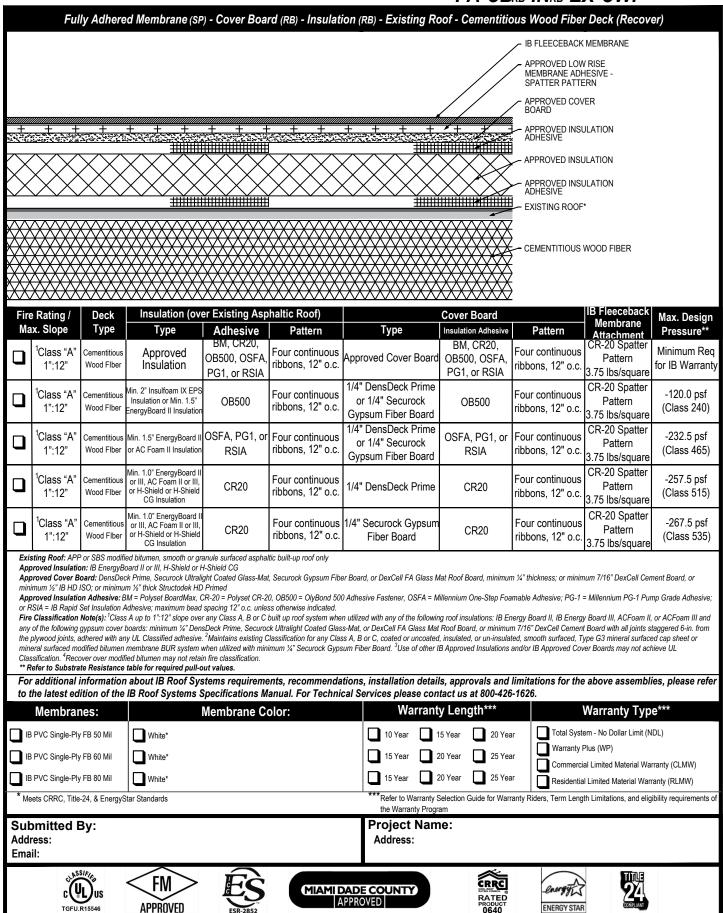






Ful	ly Adhere	ed Membrane (SP) - Cover Board (RB)	- Existing Roc	of - Cem	entitious Wo	od Fiber Deck (F	Recover)
					∕ IB FL	EECEBACK N	1EMBRANE	
					MEM	ROVED LOW I BRANE ADHE ITER PATTER	SIVE -	
					/ APPF	ROVED COVE	R BOARD	
+	+	<u> + </u>	+ + +	#/////////////////////////////////////	- Appi Adhi	ROVED INSUL ESIVE	ATION	
_					- EXIS	TING ROOF*		
					— CEMI	ENTITIOUS W	OOD FIBER	
	Rating /	Deck Type		ard (over Existing A	sphaltic Ro		IB Fleeceback Membrane	Max. Design
	¹ Class 'A' 1":12"	Cementitious Wood Fiber	Type Approved Cover Board	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA	Four contin	Pattern uous ribbons, 12" o.	Attachment CR-20 Spatter Pattern 3.75 lbs/square	Pressure** Minimum Req for IB Warranty
	¹ Class 'A' 1":12"	Cementitious Wood Fiber	1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	OB500		uous ribbons, 12" o.	CR-20 Snatter Pattern	-120.0 psf (Class 240)
	¹ Class 'A' 1":12"	Cementitious Wood Fiber	1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	OSFA, PG1, or RSIA	Four contin	uous ribbons, 12" o.	CR-20 Spatter Pattern 3.75 lbs/square	-232.5 psf (Class 465)
	¹ Class 'A' 1":12"	Cementitious Wood Fiber	1/4" DensDeck Prime	CR20	Four contin	uous ribbons, 12" o.	CR-20 Spatter Pattern 3.75 lbs/square	-262.5 psf (Class 525)
	¹ Class 'A' 1":12"	Cementitious Wood Fiber	1/4" Securock Gypsum Fiber Board	CR20	Four contin	uous ribbons, 12" o.	CR-20 Spatter Pattern 3.75 lbs/square	-267.5 psf (Class 535)
Appro Appro RSIA Fire C or De. cap si modifi ** Re	oved Cover Board oved Insulation A = IB Rapid Set Ins Classification Note xCell FA Glass Ma heet or mineral sur ied bitumen or sing fer to Substrate R	t: DensDeck Prime, Securock (dhesive: BM = Polyset Boardh ulation Adhesive; maximum be- e(s): ¹UL Class A up to ¹-1²2¹ li t Roof Board, or minimum 7/16 faced modified bitumen membr lep-ply roof may not retain fire c lesistance table for required j		or minimum ½" IB HD ISO; on d 500 Adhesive Fastener, C d. tem, covered with any of the i Classification for any Class A ½" Securock Gypsum Fiber	OSFA = Millenniu following gypsun , B or C, coated Board. ³ The use	m One-Step Foamable Adh n cover boards: minimum ¼ or uncoated, insulated, or u e of other IB Approved Cove	DensDeck Prime, Securock Ultra n-insulated, smooth surfaced, Typ Boards may not retain UL Classit	light Coated Glass-Mat, e G3 mineral surfaced ication. ⁴ Recover over
to th	he latest editio	on of the IB Roof Syste	ms Specifications Manual. For Te	echnical Services plea	se contact	us at 800-426-1626.		-
	Membranes	:	Membrane Color:	W	arranty Le	ength***	Warranty Ty	
1	PVC Single-Ply FB				15 Year	20 Year	Total System - No Dollar Limit (Warranty Plus (WP)	NDL)
1	PVC Single-Ply FB				20 Year	25 Year	Commercial Limited Material W	arranty (CLMW)
	PVC Single-Ply FB ets CRRC, Title-24	80 Mil White* , & EnergyStar Standards			20 Year Varranty Selection		Residential Limited Material Was, Term Length Limitations, and el	
	mitted By	•		the Warra	Name:	•	- '	· ·
Addr Emai	ess:	•		Address				
	C C SSIF)US FIVI	> ES (MIA	AMI DADE COUNT APPROVED		RATED PRODUCT 0640	ENERGY STAR TITLE	



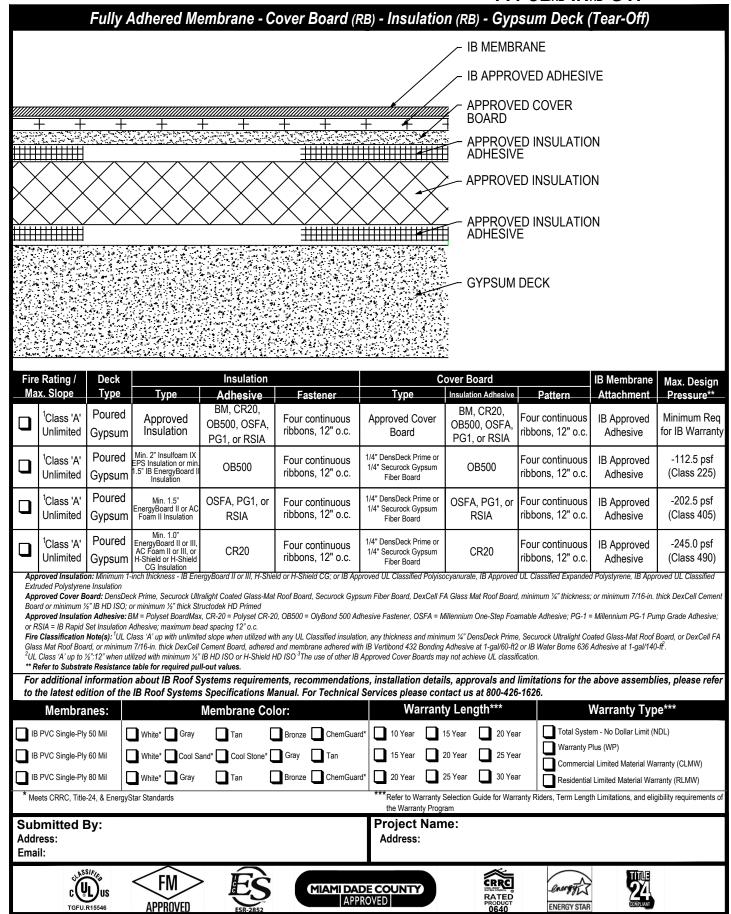






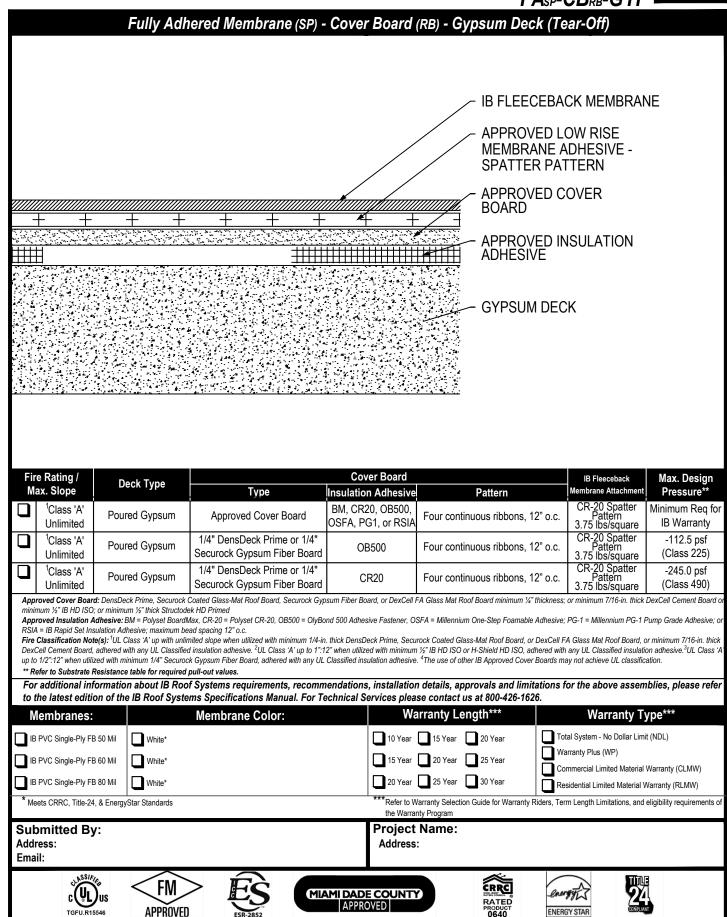
		Fully A	dhered Membrane - C	over Board (RE	в) - Gypsum Dec	ck (Tear-	-Off)	
					/ IB	MEMBR	ANE	
					/ IB	APPRO	VED ADHES	SIVE
					// AF	PPROVE	D COVER BO	DARD
+	######################################	<u> </u>	# + + ±		AF	PPROVE DHESIVE	D INSULATIO	ON
					G\	YPSUM [DECK	
El El								
	re Rating / ax. Slope	Deck Type	Туре	Cover Board	Fasteners		IB Membrane Attachment	Max. Design Pressure**
	¹ Class 'A' Unlimited	Deck Type Poured Gypsum	Approved Cover Board		Fasteners Four continuous ribbons	s, 12" o.c.	Attachment IB Approved Adhesive	Pressure** Minimum Req for IB Warranty
	ax. Slope ¹ Class 'A' Unlimited ¹ Class 'A' Unlimited		Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	Insulation Adhesive BM, CR20, OB500,			Attachment IB Approved Adhesive IB Approved Adhesive	Pressure** Minimum Req for IB Warranty -112.5 psf (Class 225)
	ax. Slope ¹ Class 'A' Unlimited ¹ Class 'A' Unlimited ¹ Class 'A' Unlimited	Poured Gypsum Poured Gypsum Poured Gypsum	Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA OB500 CR20	Four continuous ribbons Four continuous ribbons Four continuous ribbons	s, 12" o.c. s, 12" o.c.	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive	Pressure** Minimum Req for IB Warranty -112.5 psf (Class 225) -245 psf (Class 490)
App. ISO; App. RSI/Fire adhea where ** Re	ax. Slope 1 Class 'A' Unlimited 1 Class 'B' Unlimited 1 Class 'B' Unlimited 1 Class 'B' Unlimited 1 Class 'B' Unlimited 1 Unlimited	Poured Gypsum Poured Gypsum Poured Gypsum rd: DensDeck Prime, DexCell FA ck Structodek HD Primed Adhesive: BM = Polyset BoardM sulation Adhesive; maximum bea te(s): "UL Class 'A' with unlimitet te(s): "UL Class 'A' with unlimitet humm '%" IB HD ISO or H-Shield H Resistance table for required p	Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board A Glass Mat Roof Board, Securock Coated Gla Max, CR-20 = Polyset CR-20, OB500 = OlyBoa and spacing 12" o.c. d slope when utilized with any of the following L Class 'A' up to 3":12" when utilized with 'A" S HD ISO. "The use of other IB Approved Cover pull-out values.	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA OB500 CR20 lass Mat Roof Board, Securock and 500 Adhesive Fastener, OS g gypsum cover boards: minim Securock Gypsum-Fiber Roof Boards may not achieve UL of	Four continuous ribbons Four continuous ribbons Four continuous ribbons k Gypsum Fiber Board, minimum 3 SFA = Millennium One-Step Foam num 3/4" Securock Coated Glass Millendium One-Step Foam num 3/4" Securock Coated Glass Millendium One-Step Foam classification.	s, 12" o.c. s, 12" o.c. 4" thickness; 7/1 hable Adhesive; F lat Roof Board, or	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IB Coment Boar Adhesive If DexCell Cement Boar To DexCell FA Glass Mat It 432 Bonding Adhesive.	Pressure** Minimum Req for IB Warranty -112.5 psf (Class 225) -245 psf (Class 490) rd, or minimum ½" IB HD Pump Grade Adhesive; or Roof Board and membrand JL Class 'A' up to ½":12"
Appp ISO; Appp RSI/Fire adhe when ** RI for to the state of the state	ax. Slope 1 Class 'A' Unlimited 1 Class 'B' 1 Class 'B' 1 Unlimited 1 Class 'A' Unlimited 1 Cl	Poured Gypsum Poured Gypsum Poured Gypsum Poured Gypsum d: DensDeck Prime, DexCell FA ck Structodek HD Primed Adhesive: BM = Polyset BoardM sulation Adhesive: maximum bee ted(s): ¹ UL Class 'A' with unlimited tond 432 Bonding Adhesive. ² UL num '%" IB HD ISO or H-Shield H Resistance table for required p formation about IB Roof on of the IB Roof Syster	Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board A Glass Mat Roof Board, Securock Coated Gla Max, CR-20 = Polyset CR-20, OB500 = OlyBor add spacing 12" o.c. ad slope when utilized with any of the following Class 'A' up to 3":12" when utilized with ½" S HD ISO. 4 The use of other IB Approved Cover pull-out values. If Systems requirements, recomm Tems Specifications Manual. For Te	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA OB500 CR20 lass Mat Roof Board, Securock and 500 Adhesive Fastener, OS g gypsum cover boards: minim Securock Gypsum-Fiber Roof to be Boards may not achieve UL or endations, installation eachnical Services please	Four continuous ribbons Four continuous ribbons Four continuous ribbons k Gypsum Fiber Board, minimum 3 SFA = Millennium One-Step Foam num ¼" Securock Coated Glass Me Board and membrane adhered usi classification. n details, approvals and li se contact us at 800-426-	s, 12" o.c. s, 12" o.c. y" thickness; 7/1 hable Adhesive; F lat Roof Board, or ing IB Vertibond	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive I6" DexCell Cement Boar PG-1 = Millennium PG-1 ar DexCell FA Glass Mat 1 432 Bonding Adhesive30 or the above assen	Pressure** Minimum Req for IB Warranty -112.5 psf (Class 225) -245 psf (Class 490) rd, or minimum ½" IB HD Pump Grade Adhesive; or Roof Board and membrand JL Class 'A' up to ½":12"
App. ISO; App. RSI/Fire adhe when to t	ax. Slope 1 Class 'A' Unlimited 1 Class 'A'	Poured Gypsum Poured Gypsum Poured Gypsum rd: DensDeck Prime, DexCell FA ck Structodek HD Primed Adhesive: BM = Polyset BoardM sulation Adhesive; maximum bea te(s): "UL Class 'A' with unlimite te(s): "UL Class 'A' with unlimite hound 432 Bonding Adhesive." ² UL num '%" IB HD ISO or H-Shield H Resistance table for required p formation about IB Roof ion of the IB Roof System	Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board A Glass Mat Roof Board, Securock Coated Gla Max, CR-20 = Polyset CR-20, OB500 = OlyBor and spacing 12" o.c. ad slope when utilized with any of the following Class 'A' up to 3"-12" when utilized with '4" S HD ISO. "The use of other IB Approved Cover pull-out values. If Systems requirements, recomments Specifications Manual. For Te	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA OB500 CR20 lass Mat Roof Board, Securock and 500 Adhesive Fastener, OS g gypsum cover boards: minim Securock Gypsum-Fiber Roof E ar Boards may not achieve UL of tendations, installation echnical Services pleas Wa	Four continuous ribbons Four continuous ribbons Four continuous ribbons k Gypsum Fiber Board, minimum ? SFA = Millennium One-Step Foam num ¼" Securock Coated Glass Me Board and membrane adhered usi classification. In details, approvals and li use contact us at 800-426- arranty Length****	s, 12" o.c. s, 12" o.c. y" thickness; 7/1 hable Adhesive; Flat Roof Board, or ing IB Vertibond imitations for 1626.	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IB Coment Boar Adhesive If DexCell Cement Boar To DexCell FA Glass Mat It 432 Bonding Adhesive.	Pressure** Minimum Req for IB Warranty -112.5 psf (Class 225) -245 psf (Class 490) rd, or minimum ½" IB HD Pump Grade Adhesive; or Roof Board and membrane JL Class 'A' up to ½":12" Inblies, please refer
Appp. ISO; Appp. RSI// Fire adhe when to t	ax. Slope 1 Class 'A' Unlimited 1 Class 'B' 1 Class 'B' 1 Unlimited 1 Class 'A' Unlimited 1 Cl	Poured Gypsum Adhesive: BM = Polyset BoardM Sulation Adhesive: maximum bae ted(s): ¹ UL Class 'A' with unlimited pond 432 Bonding Adhesive. ² UL pum '%" IB HD ISO or H-Shield H Resistance table for required p formation about IB Roof on of the IB Roof System White* Gray White* Cool S	Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 1/4" Securock Gypsum Fiber Board 1/4" Securock Gypsum Fiber Board A Glass Mat Roof Board, Securock Coated Glaws, CR-20 = Polyset CR-20, OB500 = OlyBored spacing 12" o.c. d slope when utilized with any of the following Lolass 'A' up to 3":12" when utilized with 'x" SHD ISO. "The use of other IB Approved Cover pull-out values. If Systems requirements, recomments Specifications Manual. For Temporary Colors (Color) Tan Bronze Colors (Color) Color (Col	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA OB500 CR20 lass Mat Roof Board, Securock and 500 Adhesive Fastener, OS g gypsum cover boards: minim Securock Gypsum-Fiber Roof to ar Boards may not achieve UL of the Insulations, installations achnical Services pleas Wa ChemGuard* 10 Year	Four continuous ribbons Four continuous ribbons Four continuous ribbons k Gypsum Fiber Board, minimum 3 SFA = Millennium One-Step Foam num 3/4" Securock Coated Glass Millennium One-Step Foam num	s, 12" o.c. s, 12" o.c. s, 12" o.c. "thickness; 7/1 hable Adhesive; F at Roof Board, or ing IB Vertibond imitations for 1626.	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive I6" DexCell Cement Boar PG-1 = Millennium PG-1 and PG-1 = Millennium PG-1 = Millen	Minimum Req for IB Warranty -112.5 psf (Class 225) -245 psf (Class 490) rd, or minimum ½" IB HD Pump Grade Adhesive; or Roof Board and membran JL Class 'A' up to ½":12" mblies, please refer ype****
Appp. ISO; Appp. RSI/I/Fire adhewhere ** R Fool to t	ax. Slope Class 'A' Unlimited Corminimum '%" thic Croved Cover Board A = IB Rapid Set Ins Classification Note Classification Note Classification Note Classification Infinime Effect to Substrate R A additional infithe latest edition Clembranes: B PVC Single-Ply 60 B PVC Single-Ply 60 B PVC Single-Ply 80	Poured Gypsum Adhesive: BM = Polyset BoardM Sulation Adhesive: maximum bae ted(s): ¹ UL Class 'A' with unlimited pond 432 Bonding Adhesive. ² UL pum '%" IB HD ISO or H-Shield H Resistance table for required p formation about IB Roof on of the IB Roof System White* Gray White* Cool S	Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 4 Glass Mat Roof Board, Securock Coated Gla Max, CR-20 = Polyset CR-20, OB500 = OlyBor add spacing 12" o.c. ad slope when utilized with any of the following L Class 'A' up to 3":12" when utilized with ½" S HD ISO. 'The use of other IB Approved Cover pull-out values. If Systems requirements, recomm ams Specifications Manual. For Te Membrane Color: Tan Bronze C Sand* Cool Stone* Gray T	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA OB500 CR20 lass Mat Roof Board, Securock and 500 Adhesive Fastener, OS g gypsum cover boards: minim Securock Gypsum-Fiber Roof Boards may not achieve UL of the Boards may not achieve UL of the Charles of Boards and the	Four continuous ribbons Four continuous ribbons Four continuous ribbons k Gypsum Fiber Board, minimum 3 SFA = Millennium One-Step Foam num 3/4" Securock Coated Glass Millennium One-Step Foam num	s, 12" o.c. s, 12" o.c. y" thickness; 7/1 hable Adhesive; F lat Roof Board, or ing IB Vertibond imitations for 1626.	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IF A Common Service IF DexCell Cement Boar PG-1 = Millennium PG-1 at 1432 Bonding Adhesive Or the above assen Warranty T al System - No Dollar Limiter Tranty Plus (WP) Inmercial Limited Material addential addential Limited Material addenti	Pressure** Minimum Req for IB Warranty -112.5 psf (Class 225) -245 psf (Class 490) rd, or minimum ½" IB HD Pump Grade Adhesive; or Roof Board and membran JL Class 'A' up to ½":12" mblies, please refer ype*** init (NDL) Warranty (CLMW)
Appp. ISO; Appp. RSIJI, Fire adhewhere ** R R III to t	ax. Slope 1 Class 'A' Unlimited 1 Class 'A'	Poured Gypsum Poured Follyset BoardM Sulation Adhesive; maximum bee pour 432 Bonding Adhesive. Put Put 18 HD ISO or H-Shield H Resistance table for required promation about IB Root Formation about IB Root O Mil White* Gray White* Gray White* Gray Mil White* Gray White* Gray	Approved Cover Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 1/4" DensDeck Prime or 1/4" Securock Gypsum Fiber Board 4 Glass Mat Roof Board, Securock Coated Gla Max, CR-20 = Polyset CR-20, OB500 = OlyBor add spacing 12" o.c. ad slope when utilized with any of the following L Class 'A' up to 3":12" when utilized with ½" S HD ISO. 'The use of other IB Approved Cover pull-out values. If Systems requirements, recomm ams Specifications Manual. For Te Membrane Color: Tan Bronze C Sand* Cool Stone* Gray T	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA OB500 CR20 lass Mat Roof Board, Securock and 500 Adhesive Fastener, OS g gypsum cover boards: minim Securock Gypsum-Fiber Roof Boards may not achieve UL of the Boards may not achieve UL of the Charles of Boards and the	Four continuous ribbons Four continuous ribbons Four continuous ribbons k Gypsum Fiber Board, minimum 3 SFA = Millennium One-Step Foam num ¼" Securock Coated Glass Me Board and membrane adhered usi classification. In details, approvals and li se contact us at 800-426- arranty Length*** 15 Year 20 Year 20 Year 215 Year 30 Year Varranty Selection Guide for Warranty Program Name:	s, 12" o.c. s, 12" o.c. y" thickness; 7/1 hable Adhesive; F lat Roof Board, or ing IB Vertibond imitations for 1626.	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive IF A Common Service IF DexCell Cement Boar PG-1 = Millennium PG-1 at 1432 Bonding Adhesive Or the above assen Warranty T al System - No Dollar Limiter Tranty Plus (WP) Inmercial Limited Material addential addential Limited Material addenti	Pressure** Minimum Req for IB Warranty -112.5 psf (Class 225) -245 psf (Class 490) rd, or minimum ½" IB HD Pump Grade Adhesive; or Roof Board and membrane JL Class 'A' up to ½":12" mblies, please refer ype*** iit (NDL) Warranty (CLMW) Warranty (RLMW)



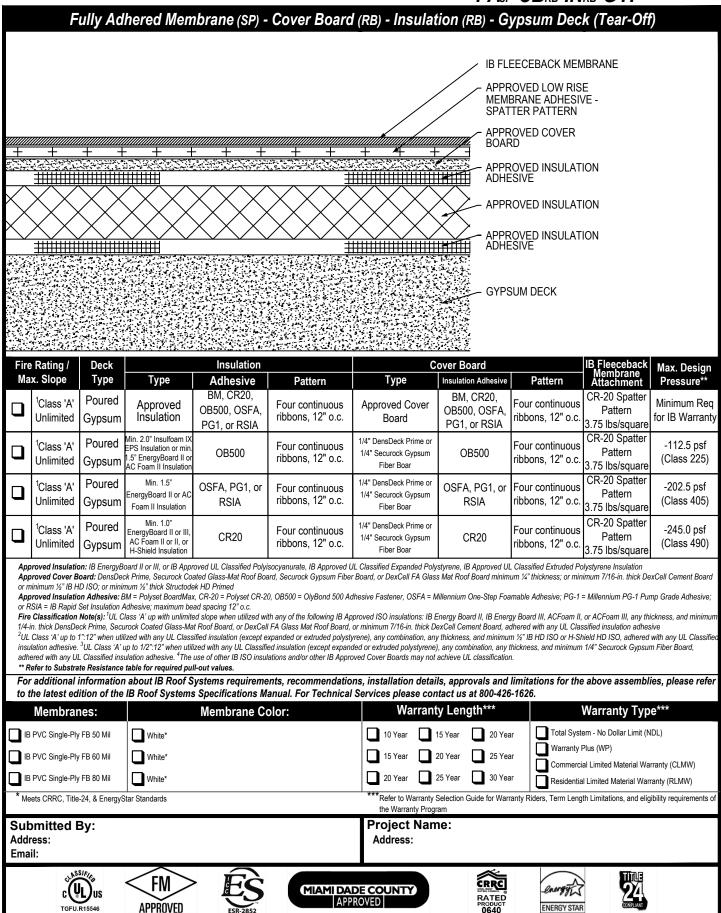




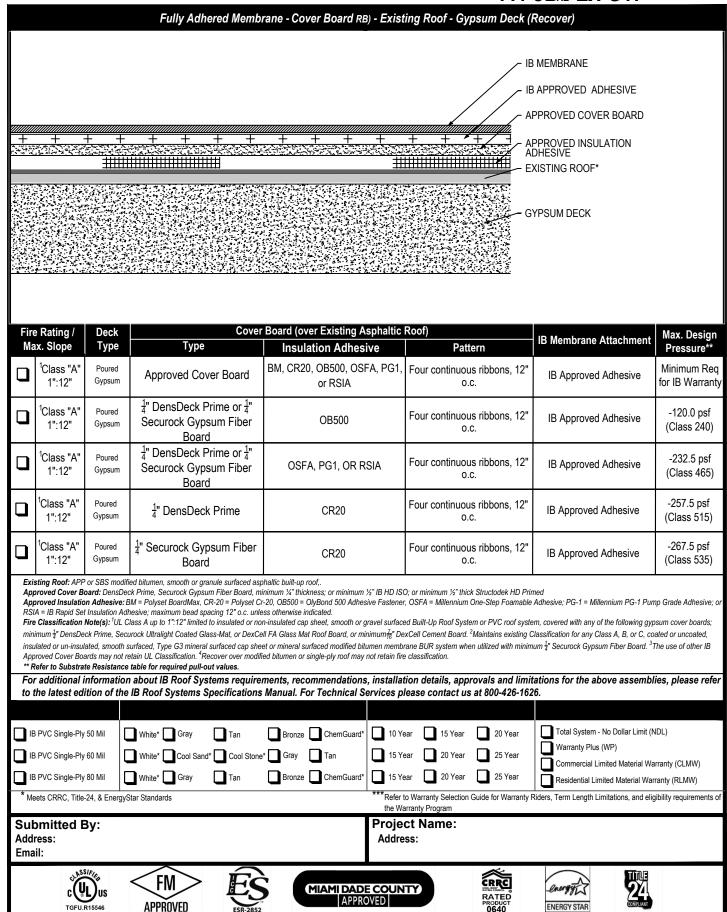




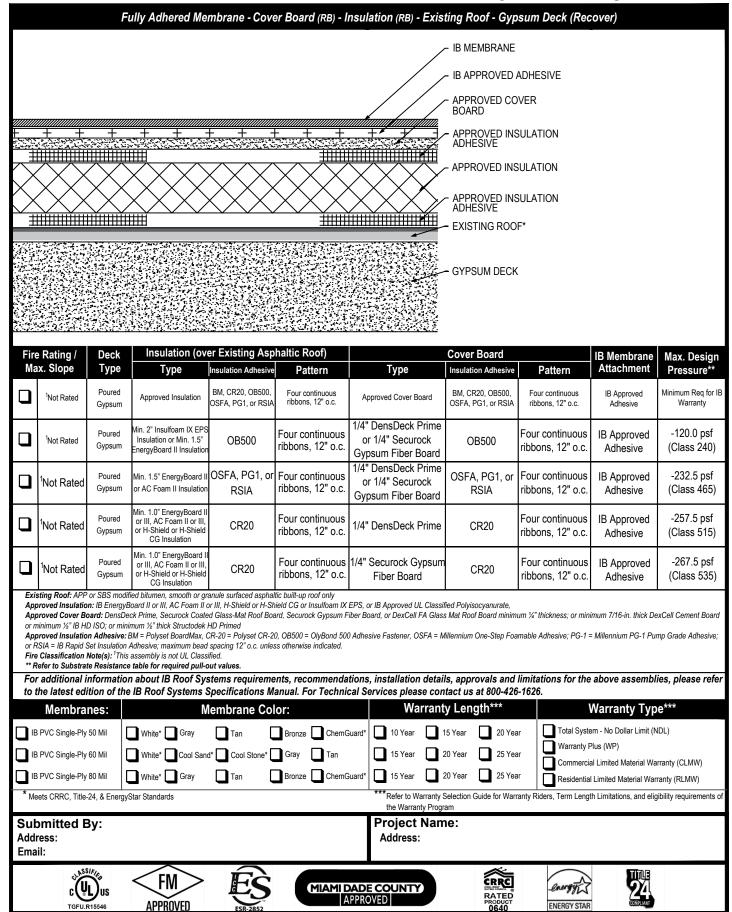






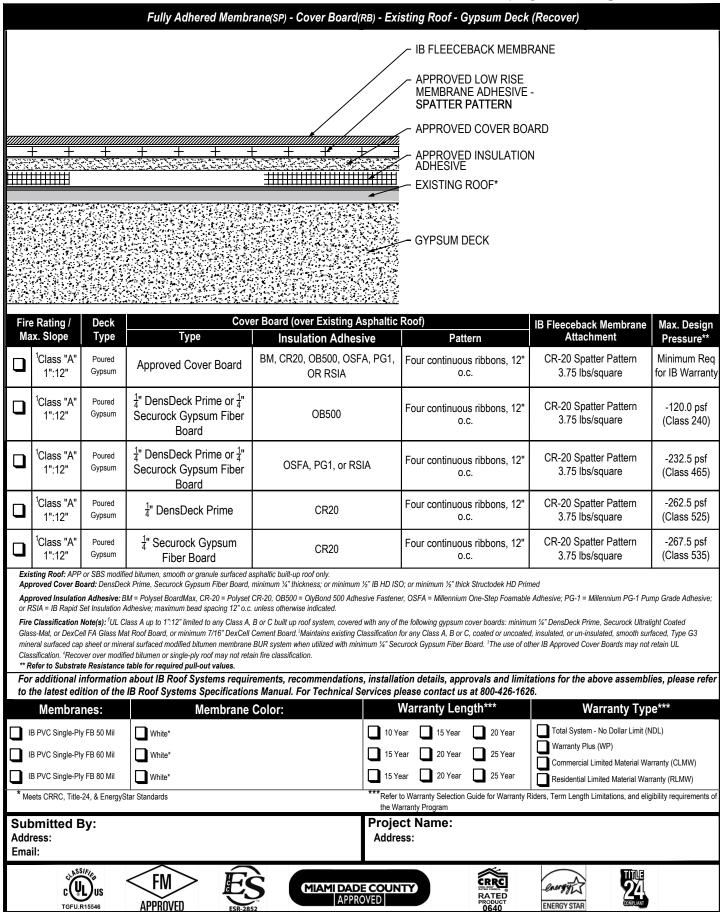




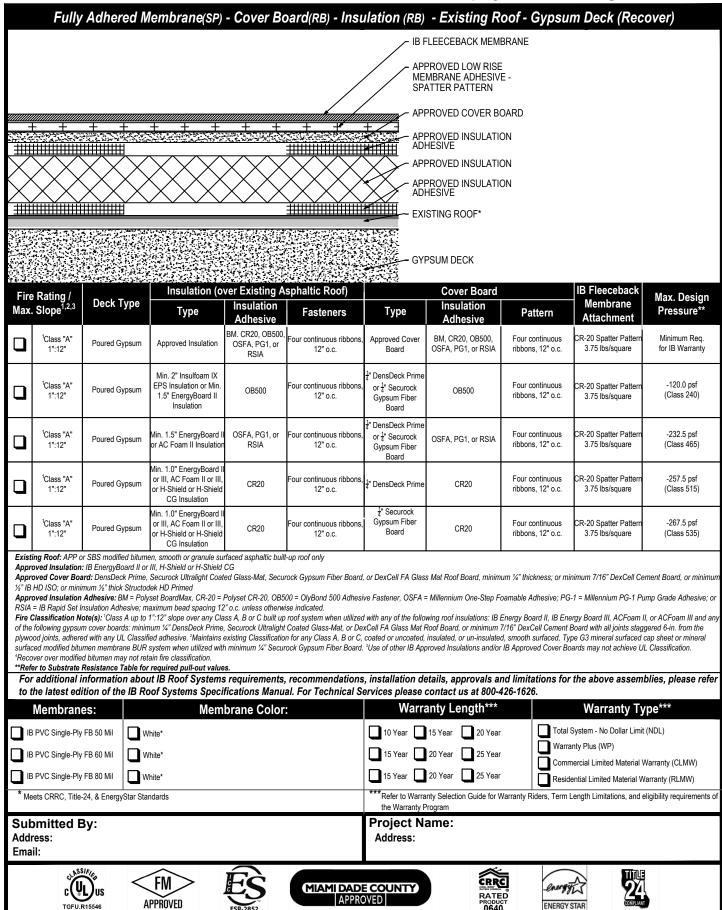






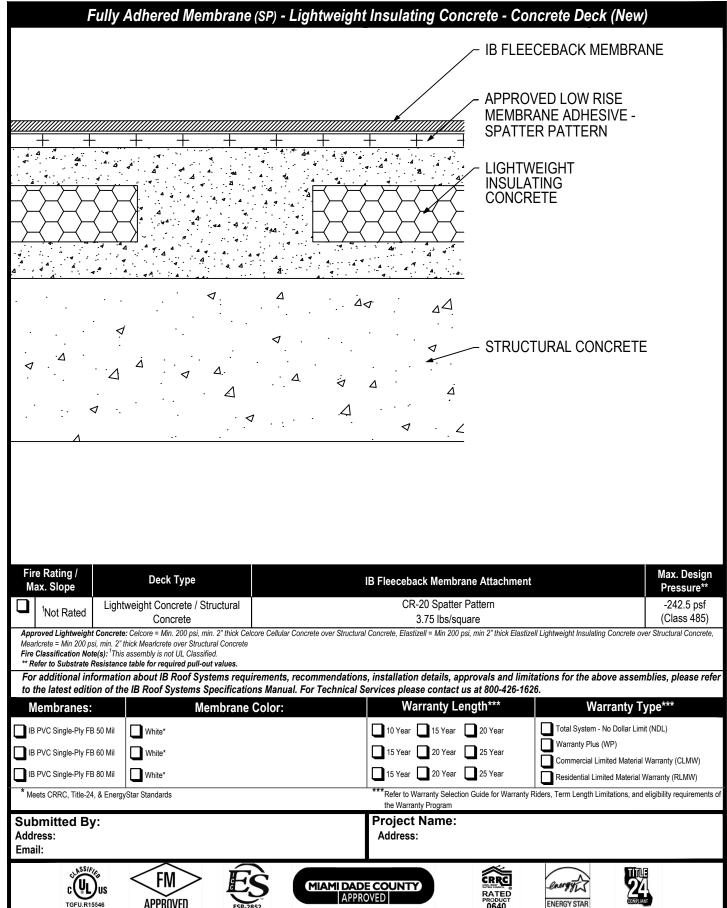






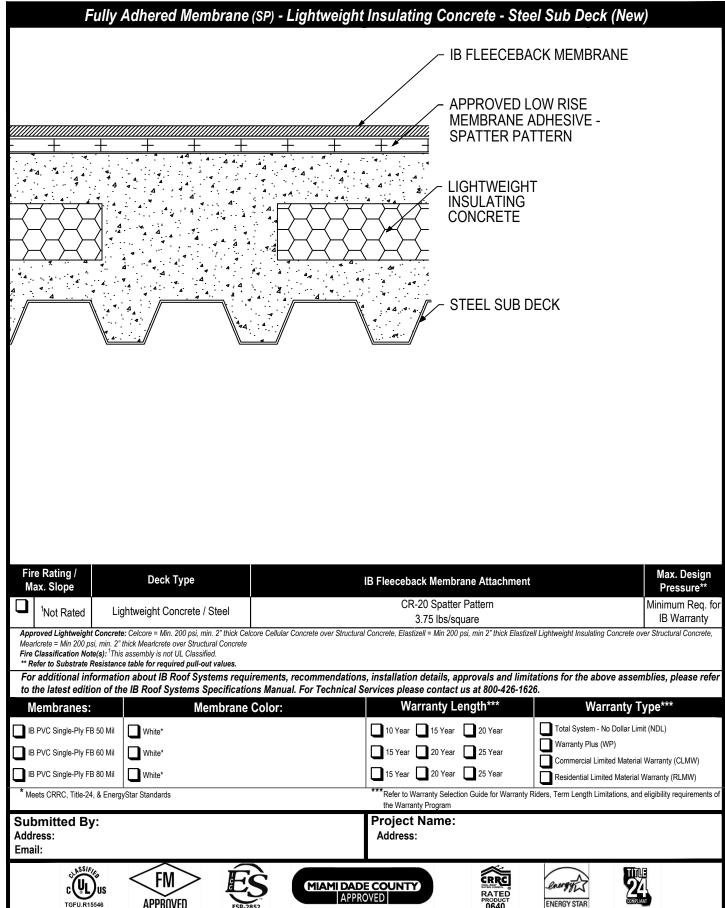






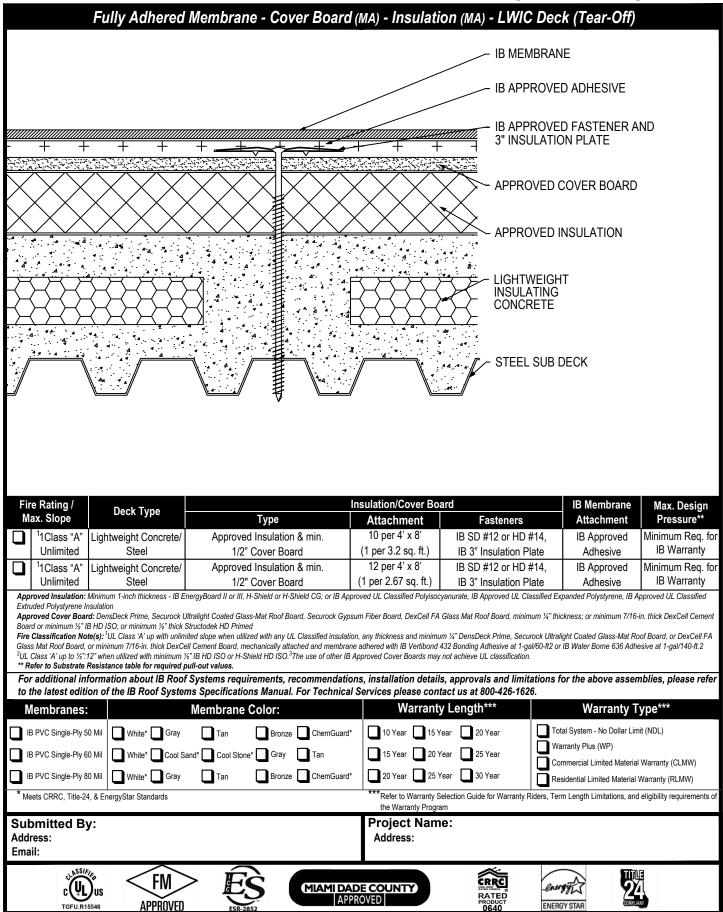






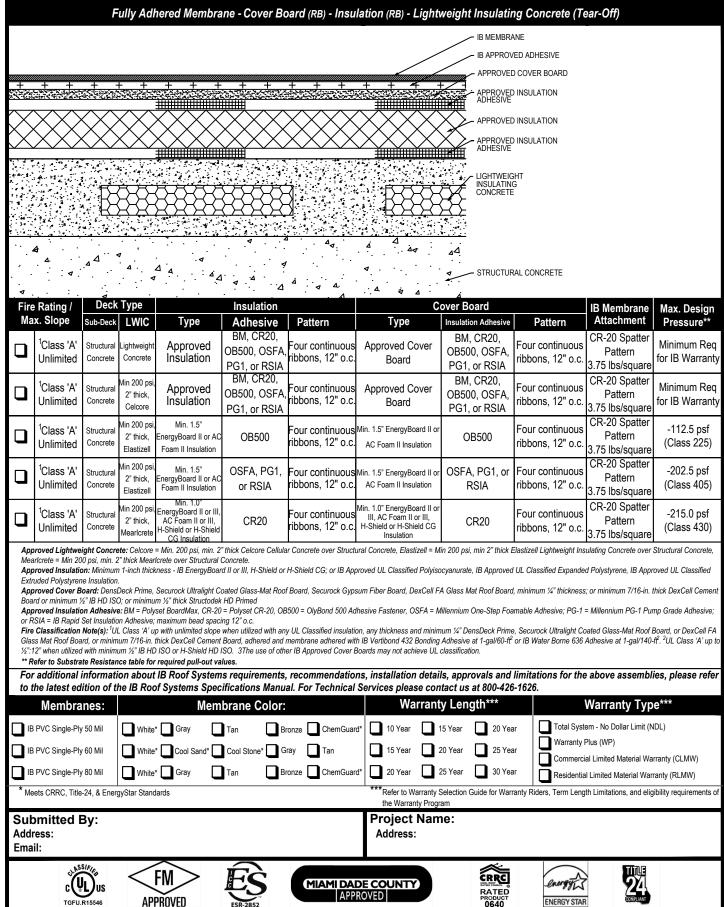








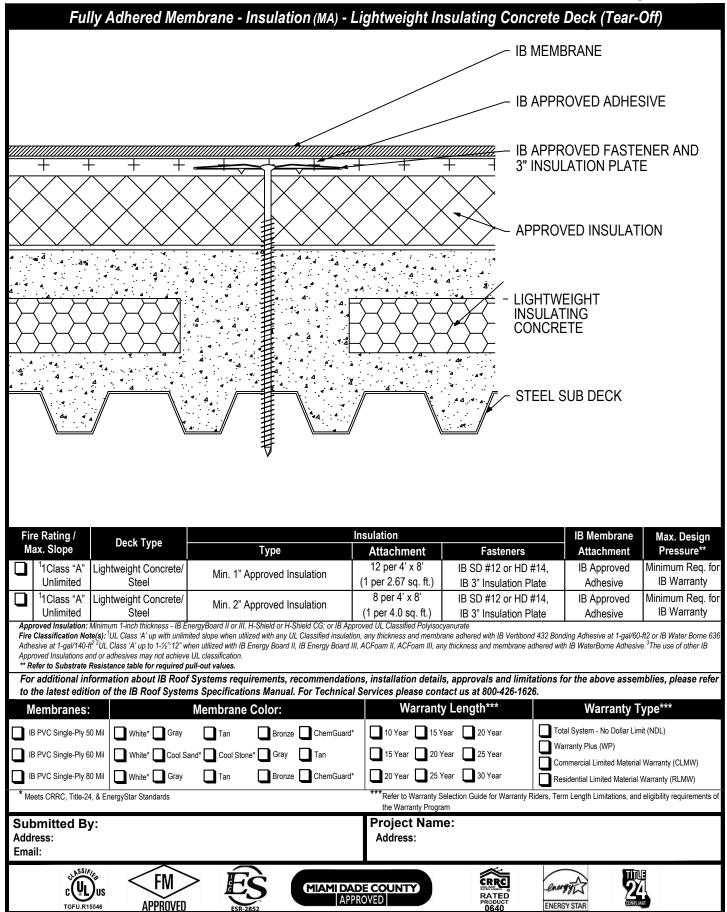




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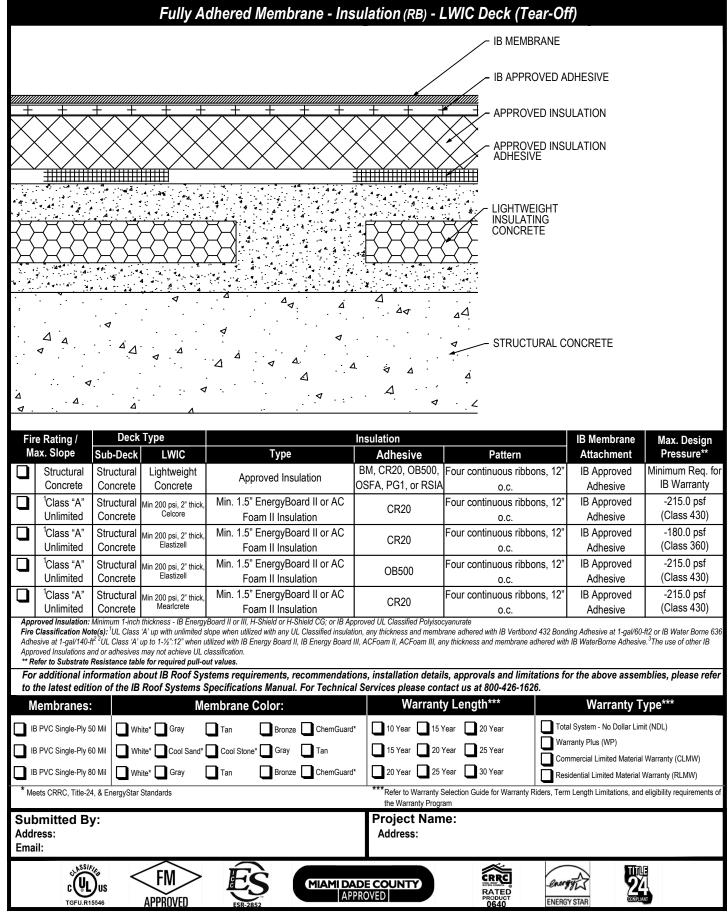




Revision: 03.2023

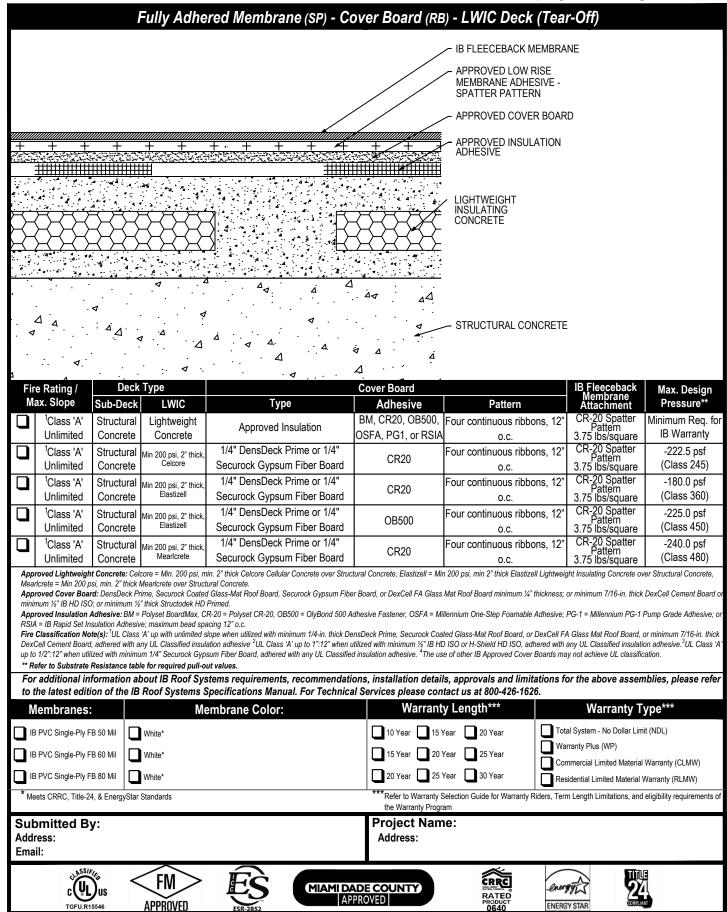




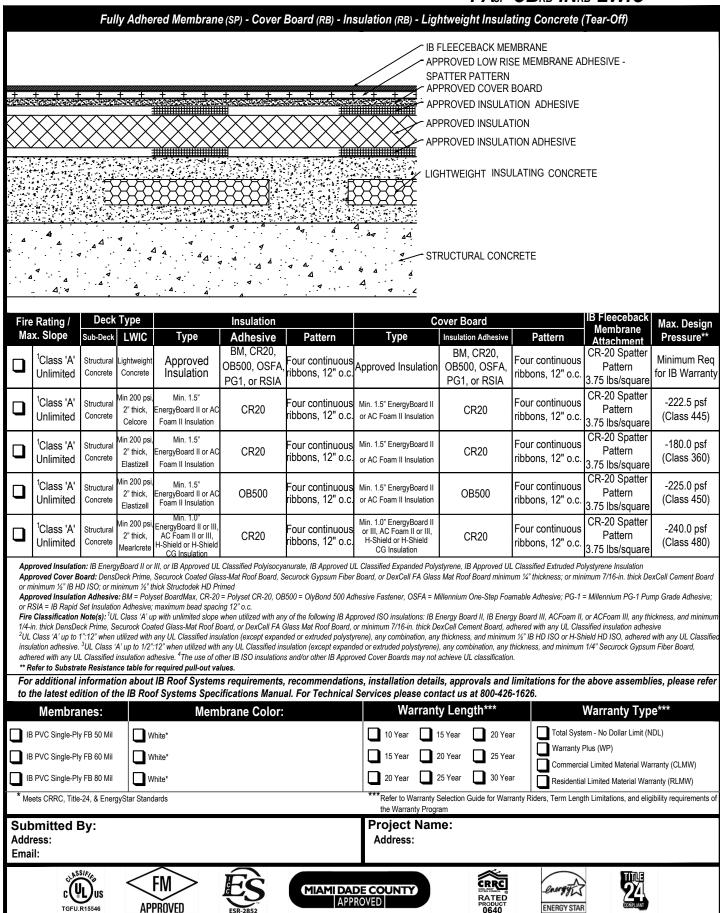






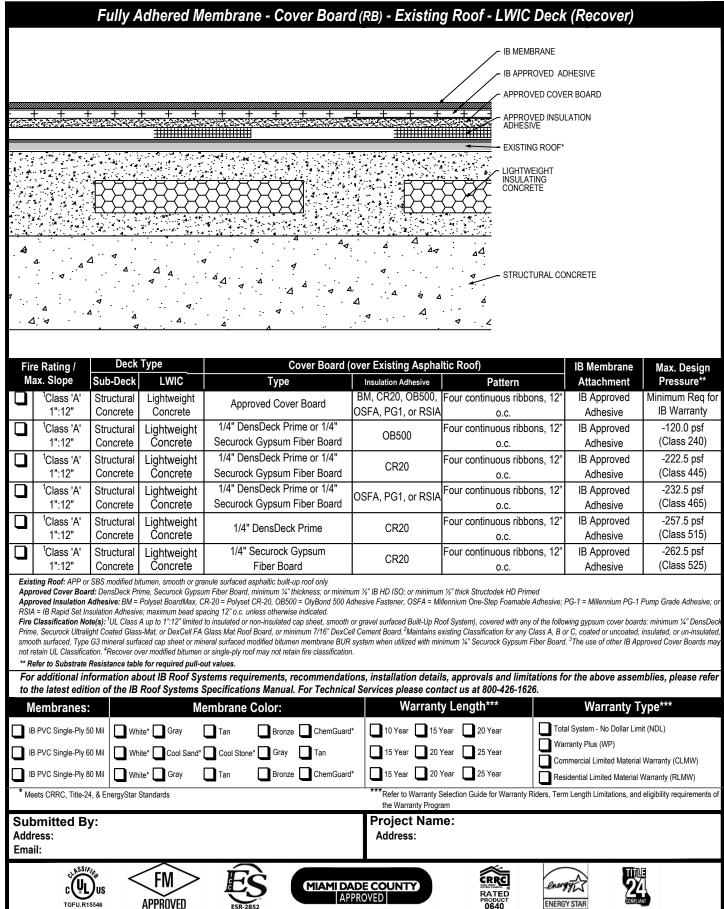




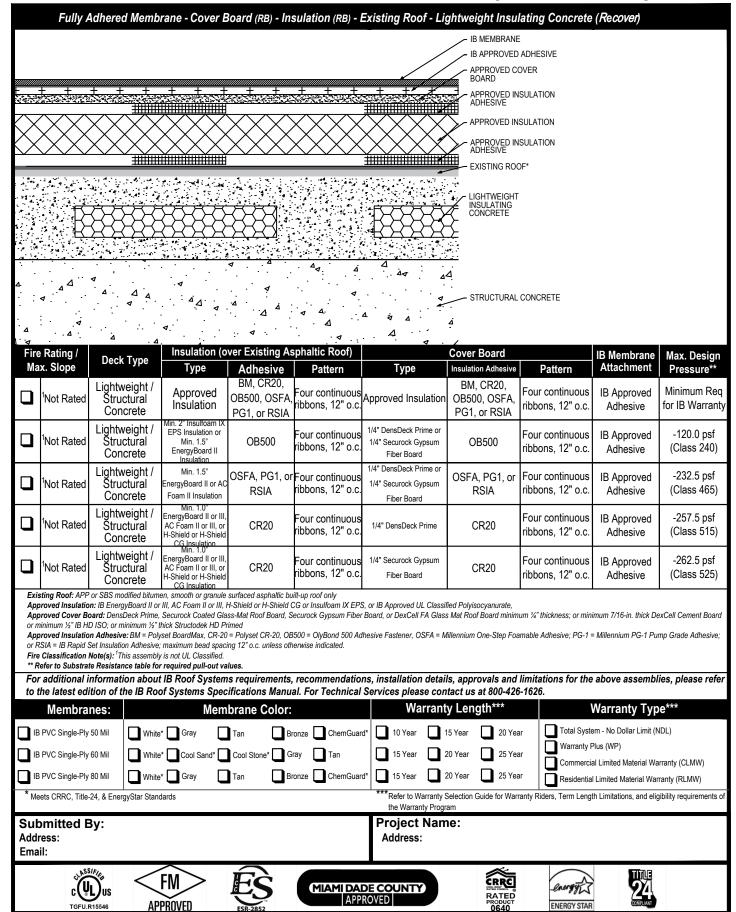










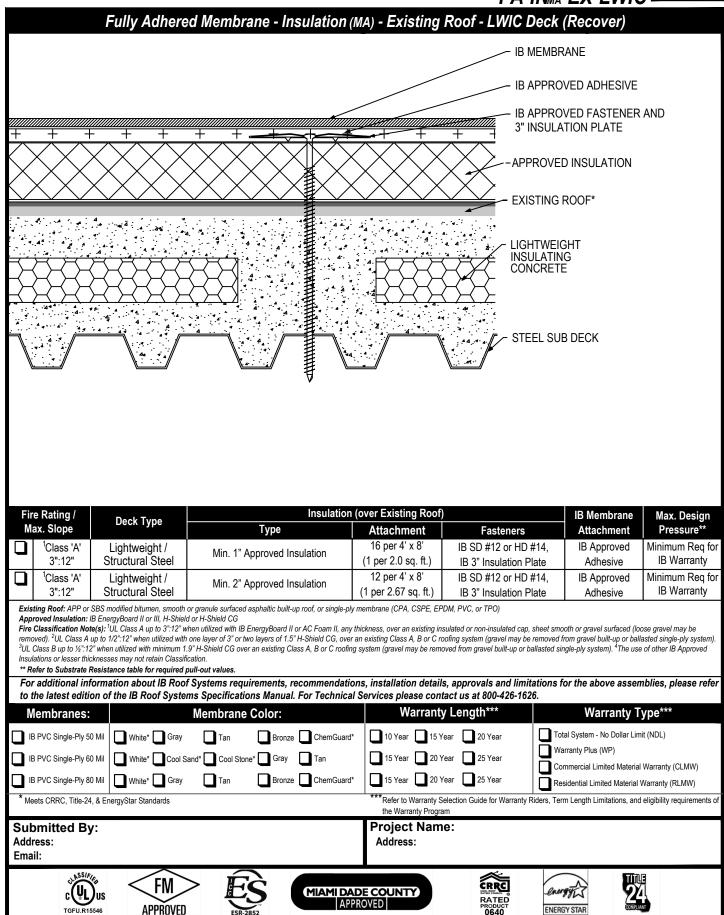


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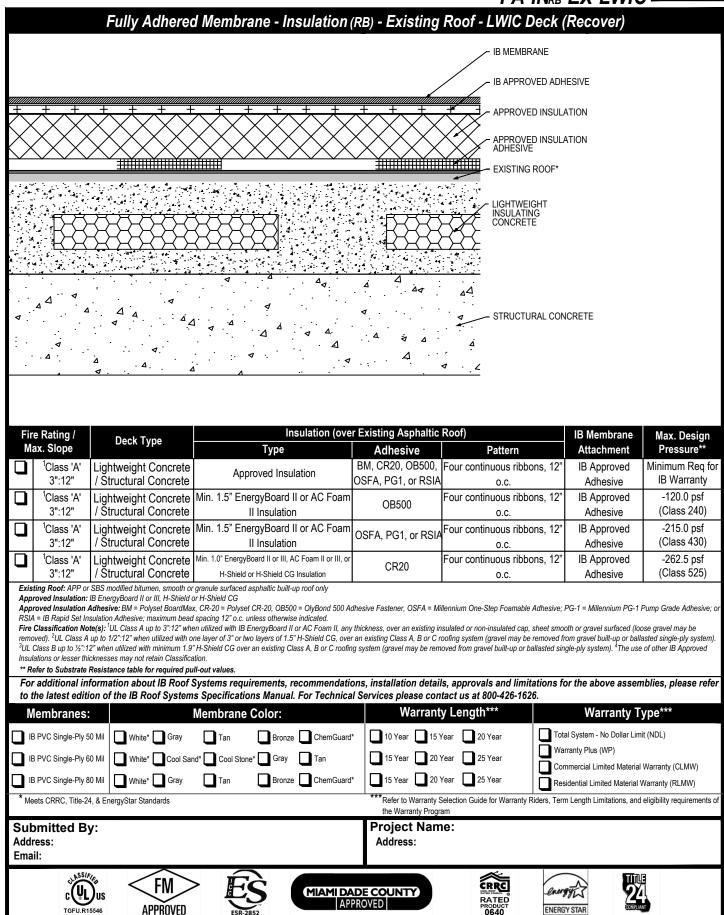




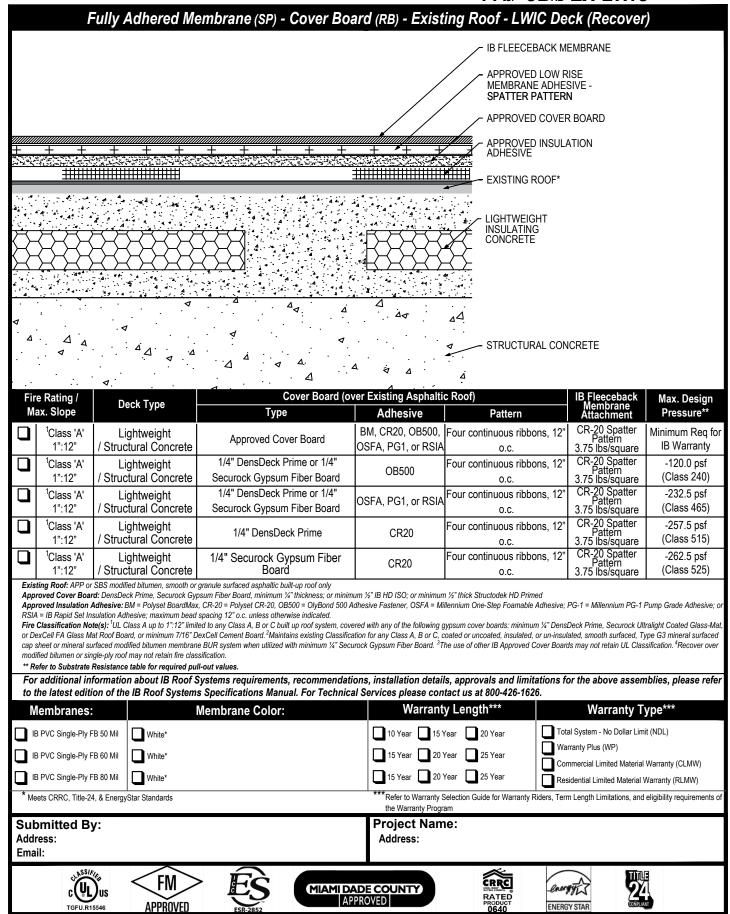




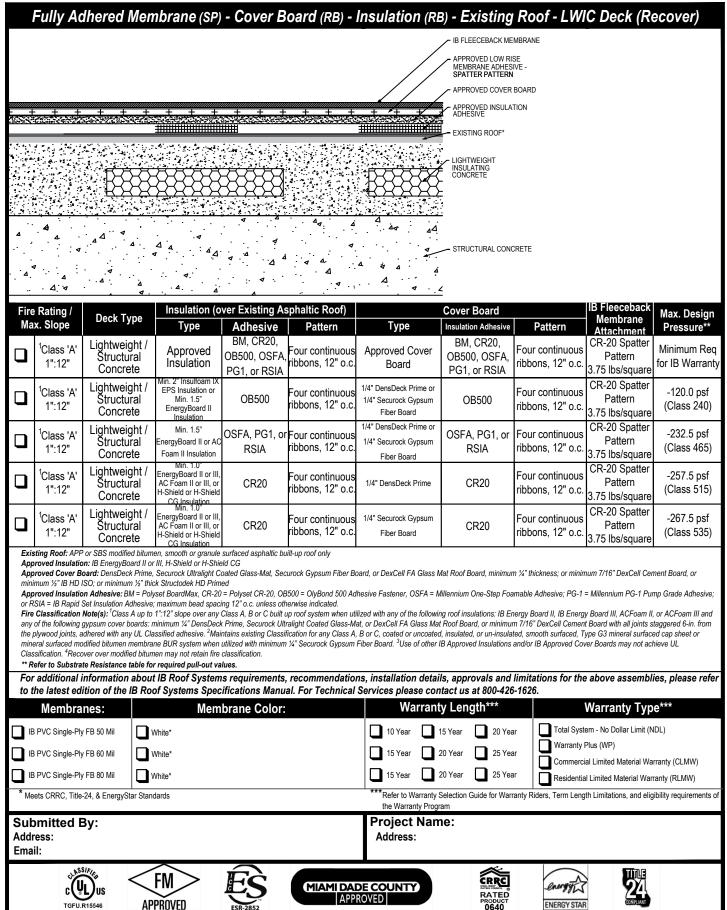












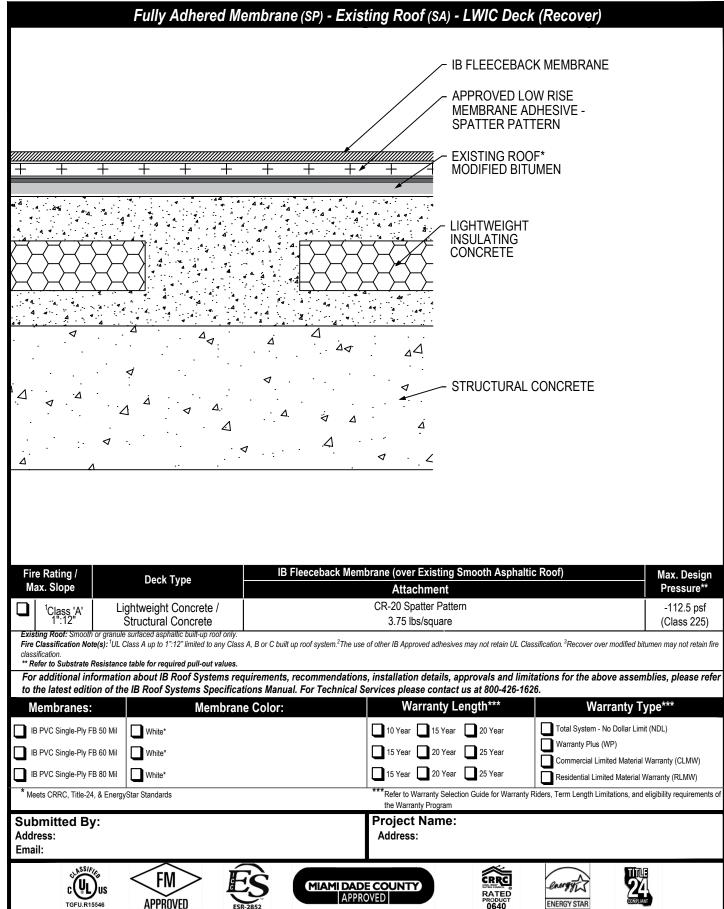




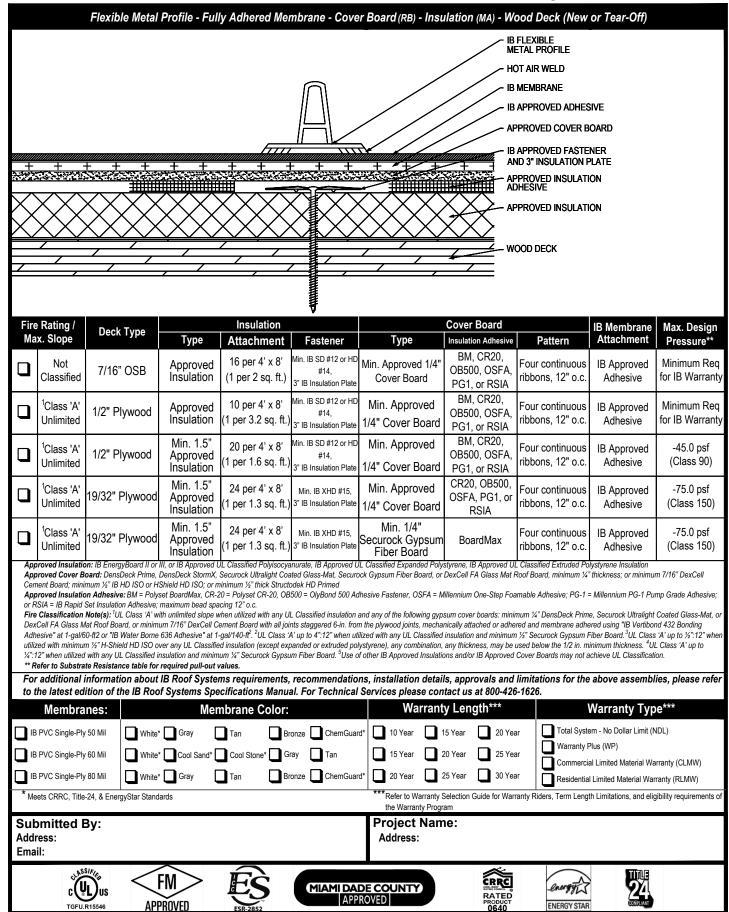
Fully Adhered Membran	e (SP) - Insulation (RB) - Existing Roof -	LWIC Deck (Recover)
		- IB FLEECEBACK MEMBRANE
		- APPROVED LOW RISE MEMBRANE ADHESIVE - SPATTER PATTERN
######################################	<u> </u>	- EXISTING ROOF* MODIFIED BITUMEN
		- LIGHTWEIGHT INSULATING CONCRETE
		OTDUOTUDU OQUODETE
		- STRUCTURAL CONCRETE
Fire Rating / Deck Type Max. Slope	IB Fleeceback Membrane (over Modified Bitur Attachment	men Roof) Max. Design Pressure**
Lightweight Concrete /	CR-20 Spatter Pattern	-112.5 psf
Structural Concrete	3.75 lbs/square	(Class 225)
Existing Roof: APP or SBS modified bitumen, smooth or granule surfaced Fire Classification Note(s): ¹ This assembly is not UL Classified.	root only.	
** Refer to Substrate Resistance table for required pull-out values. For additional information about IB Roof Systems requ	irements, recommendations, installation details, approvals	and limitations for the above assemblies, please refe
to the latest edition of the IB Roof Systems Specification	ns Manual. For Technical Services please contact us at 800	-426-1626.
Membranes: Membrane		
IB PVC Single-Ply FB 50 Mil White*	10 Year 15 Year 20 Year	ar Total System - No Dollar Limit (NDL) Warranty Plus (WP)
IB PVC Single-Ply FB 60 Mil White*	15 Year 20 Year 25 Year	ar Commercial Limited Material Warranty (CLMW)
IB PVC Single-Ply FB 80 Mil White*	15 Year 20 Year 25 Yea	Tresidential Elimited Waterial Wallanty (ITEWWY)
* Meets CRRC, Title-24, & EnergyStar Standards	""Refer to Warranty Selection Guide for the Warranty Program	Warranty Riders, Term Length Limitations, and eligibility requirements o
Submitted By: Address: Email:	Project Name: Address:	
CULUS APPROVED	MIAMI DADE COUNTY APPROVED RAT PROD 066	CALLED C



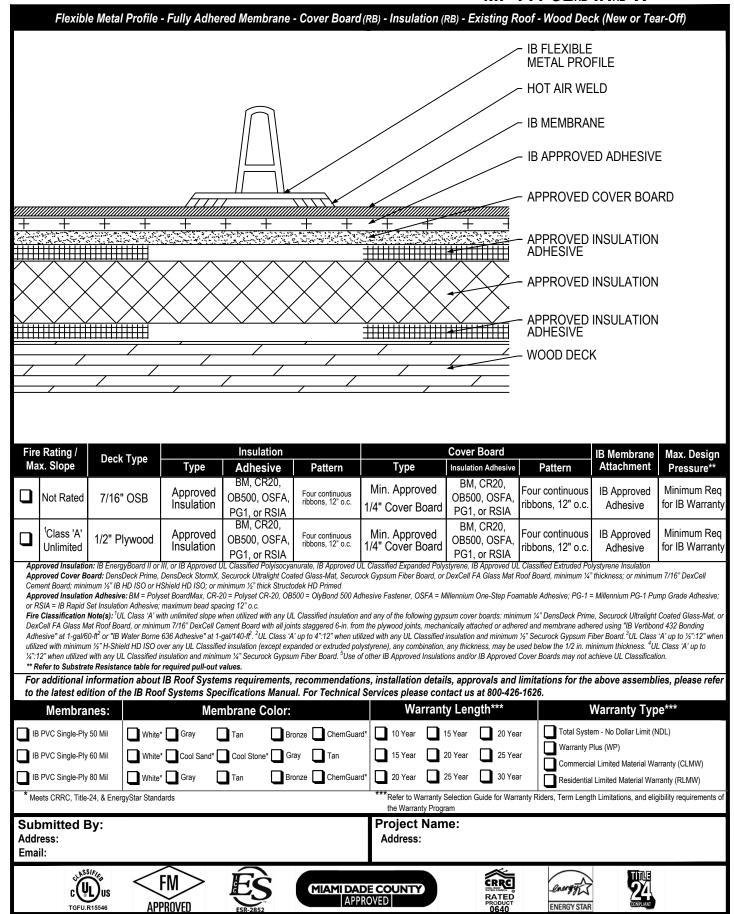




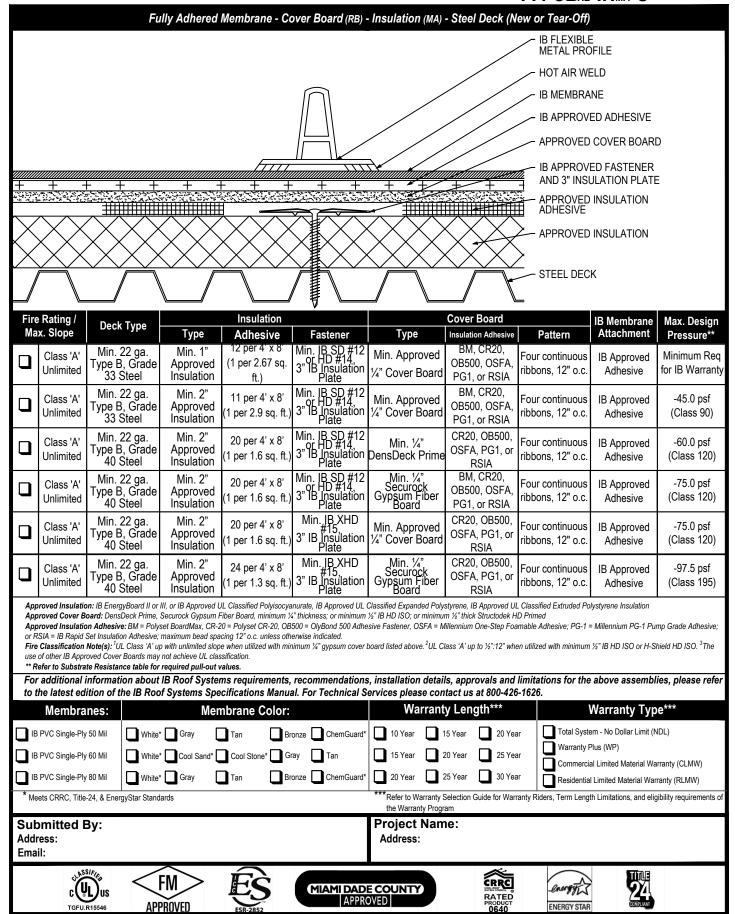














	F	lexible Metal P	rofile - Fully	Adhered Mem	brane - Cover B	oard (RB) - Insula	ation (RB) - Con	crete Deck (Nev	w or Tear-Off)	
							IB FLEXIBI METAL PR		_	
							HOT AIR V	VELD		
							IB MEMBR	ANE		
							IB APPRO	VED ADHESIVE		
//////////////////////////////////////							APPROVE	D COVER BOARI	D	
							APPROVE ADHESIVE	D INSULATION		
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Fir	o Pating /			Inculation			Cover Reard		ID Manufacture	
	e Rating / ax. Slope	Deck Type	Туре	Insulation Adhesive	Fastener	Туре	Cover Board Insulation Adhesive	Pattern	IB Membrane Attachment	Max. Design Pressure**
		Deck Type Structural Concrete	Type Approved Insulation	Adhesive BM, CR20, OB500, OSFA,	Four continuous		Insulation Adhesive BM, CR20,	Pattern Four continuous ribbons, 12" o.c.		
Ma	ax. Slope ¹ Class 'A'	Structural	Approved	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA,	Four continuous	Min. 1/4" DensDeck Prime	BM, CR20, OB500, OSFA,	Four continuous	Attachment IB Approved	Pressure** -257.5 psf
	Class 'A' Unlimited Class 'A' Unlimited Class 'A' Unlimited proved Insulation proved Cover Bo	Structural Concrete Structural Concrete on: IB EnergyBoard II or oard: DensDeck Prime,	Approved Insulation Approved Insulation III, or IB Approved U Securock Gypsum F	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. murate, IB Approved UL. "thickness; or minimum	Min. 1/4" DensDeck Prime Min. 1/4" Securock Gypsum Fiber Board Classified Expanded Poly. %" IB HD ISO; or minimu	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA styrene, IB Approved Ut m %" thick Structodek H	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Classified Extruded Pod Primed	Attachment IB Approved Adhesive IB Approved Adhesive	-257.5 psf (Class 515) -267.5 psf (Class 535)
Ap Ap or I Fir	Class 'A' Unlimited Class 'A' Unlimited Class 'A' Unlimited proved Insulatio proved Insulatio proved Insulatio proved Insulatio proved Insulatio proved Cover Be proved Insulatio proved Cover Be proved Insulatio proved Cover Be classification I	Structural Concrete Structural Concrete on: IB EnergyBoard II or oard: DensDeck Prime, on Adhesive: BM = Polys Set Insulation Adhesive; Note(s): 1 UL Class 'A' UL	Approved Insulation Approved Insulation III, or IB Approved U Securock Gypsum F set BoardMax, CR-2 maximum bead space owith unlimited slope	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA JL Classified Polyisocya- iber Board, minimum ½ 00 = Polyset CR-20, OB cing 12" o.c. unless oth e when utilized with mir	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. nurate, IB Approved UL a" thickness; or minimum 500 = OlyBond 500 Adhe erwise indicated.	Min. 1/4" DensDeck Prime Min. 1/4" Securock Gypsum Fiber Board Classified Expanded Poly:	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA styrene, IB Approved Utm %" thick Structodek H illennium One-Step Foa	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Classified Extruded Po D Primed mable Adhesive; PG-1=	Attachment IB Approved Adhesive IB Approved Adhesive lystyrene Insulation = Millennium PG-1 Pur	Pressure** -257.5 psf (Class 515) -267.5 psf (Class 535) mp Grade Adhesive;
App App Or I Fire use	1 Class 'A' Unlimited 1 Class 'A' Element In Class 'A' Unlimited 1	Structural Concrete Structural Concrete on: IB EnergyBoard II or oard: DensDeck Prime, on Adhesive: BM = Poly: Set Insulation Adhesive; Note(s): ¹ UL Class 'A' up oved Cover Boards may te Resistance table for	Approved Insulation Approved Insulation III, or IB Approved U Securock Gypsum F set BoardMax, CR-2 maximum bead space on the above UL class required pull-out v	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA L Classified Polyisocya ibler Board, minimum ½ 0 = Polyset CR-20, OB cing 12" o.c. unless oth e when utilized with min stification. ralues.	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. murate, IB Approved UL 4" thickness; or minimum 500 = OlyBond 500 Adhe erwise indicated. nimum 1/4" gypsum cover signification.	Min. 1/4" DensDeck Prime Min. 1/4" Securock Gypsum Fiber Board Classified Expanded Poly: %" IB HD ISO; or minimusive Fastener, OSFA = M board listed above. ² UL Cl	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSPA, PG1, or RSIA ### With CR20, #### With CR20, ####################################	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Classified Extruded Pod Polymed Imable Adhesive; PG-1 and utilized with minimum	Attachment IB Approved Adhesive IB Approved Adhesive Adhesive Adhesive Millennium PG-1 Pur 1/2" IB HD ISO or H-SI	Pressure** -257.5 psf (Class 515) -267.5 psf (Class 535) rp Grade Adhesive; hield HD ISO. 3The
App App or I use	1 Class 'A' Unlimited 1 Class 'A' Element In Class 'A' Unlimited 1	Structural Concrete Structural Concrete on: IB EnergyBoard II or oard: DensDeck Prime, on Adhesive: BM = Polys Set Insulation Adhesive; Note(s): ¹ UL Class 'A' up oved Cover Boards may te Resistance table for information about	Approved Insulation Approved Insulation III, or IB Approved U Securock Gypsum F set BoardMax, CR-2 maximum bead space into achieve UL class required pull-out v IB Roof System	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA L Classified Polyisocya ibler Board, minimum ½ 0 = Polyset CR-20, OB cing 12" o.c. unless oth e when utilized with mir stification. ralues.	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. murate, IB Approved UL 4" thickness; or minimum 500 = OlyBond 500 Adhe erwise indicated. minum 1/4" gypsum cover are commendations	Min. 1/4" DensDeck Prime Min. 1/4" Securock Gypsum Fiber Board Classified Expanded Poly: ½" IB HD ISO: or minimusive Fastener, OSFA = M	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA styrene, IB Approved Ut m ½" thick Structodek H iillennium One-Step Foa	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Classified Extruded Pod Polymed imable Adhesive; PG-1 are utilized with minimum	Attachment IB Approved Adhesive IB Approved Adhesive Adhesive Adhesive Millennium PG-1 Pur 1/2" IB HD ISO or H-SI	Pressure** -257.5 psf (Class 515) -267.5 psf (Class 535) rp Grade Adhesive; hield HD ISO. 3The
App App or I use	1 Class 'A' Unlimited 1 Class 'A' Element In Class 'A' Unlimited 1	Structural Concrete Structural Concrete Structural Concrete on: IB EnergyBoard II or oard: DensDeck Prime, on Adhesive: BM = Poly: Set Insulation Adhesive; Note(s): ¹ UL Class 'A' up oved Cover Boards may te Resistance table for information about ition of the IB Roo	Approved Insulation Approved Insulation III, or IB Approved U Securock Gypsum Feet BoardMax, CR-2 owith unlimited slope on the Appear of the	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA L Classified Polyisocya ibler Board, minimum ½ 0 = Polyset CR-20, OB cing 12" o.c. unless oth e when utilized with mir stification. ralues.	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. nurate, IB Approved UL. "thickness; or minimum 500 = OlyBond 500 Adhe erwise indicated. nimum ¼" gypsum cover. recommendations al. For Technical S	Min. 1/4" DensDeck Prime Min. 1/4" Securock Gypsum Fiber Board Classified Expanded Poly. ½" IB HD ISO; or minimusive Fastener, OSFA = M board listed above. ² UL Cl	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA styrene, IB Approved Ut m ½" thick Structodek H iillennium One-Step Foa	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Classified Extruded Po D Primed mable Adhesive; PG-1 = en utilized with minimum limitations for the i-1626.	Attachment IB Approved Adhesive IB Approved Adhesive Adhesive Adhesive Millennium PG-1 Pur M" IB HD ISO or H-SI	-257.5 psf (Class 515) -267.5 psf (Class 535) -267.5 psf (Class 535) mp Grade Adhesive; hield HD ISO. ³ The
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App or or uses "!" For to	ax. Slope 1 Class 'A' Unlimited 1 Class 'A'	Structural Concrete Structural Concrete Structural Concrete on: IB EnergyBoard II or oard: DensDeck Prime, on Adhesive: BM = Poly: Set Insulation Adhesive; Note(s): ¹ UL Class 'A' up over Boards may te Resistance table for information about ition of the IB Roo nes: 50 Mil	Approved Insulation Approved Insulation Approved Insulation III, or IB Approved U Securock Gypsum Fester BoardMax, CR-2 maximum bead space on with unlimited slope onto achieve UL class required pull-out v IB Roof Systems Specific Systems Specific Gray Gray Gray Gray Gray Gray	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA JL Classified Polyisocyae Fiber Board, minimum ½ 00 = Polyset CR-20, OB oing 12" o.c. unless oth the when utilized with min sification. Talues. Tan Br Cool Stone* Gi	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Inurate, IB Approved UL ("thickness; or minimum 500 = OlyBond 500 Adhe erwise indicated. nimum 1/4" gypsum coversel. For Technical Sonze ChemGuard*	Min. 1/4" DensDeck Prime Min. 1/4" Securock Gypsum Fiber Board Classified Expanded Poly. ½" IB HD ISO; or minimusive Fastener, OSFA = M board listed above. ² UL Cl s, installation detail ervices please com Warrant 10 Year 15 Year 20 Year 2	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA styrene, IB Approved Ut m ½" thick Structodek H fillennium One-Step Foa ass 'A' up to ½":12" whe as, approvals and tact us at 800-426 y Length*** 5 Year 20 Yea 20 Year 30 Yea	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Classified Extruded Po D Primed mable Adhesive; PG-1 = en utilized with minimum limitations for the interest of the inte	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Illustration Illustra	Pressure** -257.5 psf (Class 515) -267.5 psf (Class 535) mp Grade Adhesive; hield HD ISO. ³ The ies, please refer e*** IDL) rranty (CLMW) rranty (RLMW)
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App App or to to	ax. Slope 1 Class 'A' Unlimited 1 Class 'A'	Structural Concrete Structural Concrete Structural Concrete Description of the IB Room Structural Concrete Structural Concrete Structural Concrete Structural Concrete Structural Structural Structural Structural Structural Concreta Structural Structural Structural Structural Concreta Structural Concr	Approved Insulation Approved Insulation Approved Insulation III, or IB Approved U Securock Gypsum Fester BoardMax, CF-2 maximum bead space on with unlimited slope onto achieve UL class required pull-out v IB Roof Systems Specific Systems Specific Gray Gray Gray Gray Gray Gray	Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA JL Classified Polyisocyae Fiber Board, minimum ½ 00 = Polyset CR-20, OB oing 12" o.c. unless oth the when utilized with min sification. Talues. Tan Br Cool Stone* Gi	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Inurate, IB Approved UL ("thickness; or minimum 500 = OlyBond 500 Adhe erwise indicated. inimum ¼" gypsum cover. In recommendations al. For Technical Suppose ChemGuard*	Min. 1/4" DensDeck Prime Min. 1/4" Securock Gypsum Fiber Board Classified Expanded Poly ½" IB HD ISO; or minimusive Fastener, OSFA = M board listed above. ² UL Cl s, installation detail ervices please con Warrant 10 Year 1 15 Year 2 20 Year 2 **** Refer to Warranty S the Warranty Progret Nam Address:	Insulation Adhesive BM, CR20, OB500, OSFA, PG1, or RSIA BM, CR20, OB500, OSFA, PG1, or RSIA styrene, IB Approved Ut m ½" thick Structodek H illennium One-Step Foa ass 'A' up to ½":12" whe ls, approvals and tact us at 800-426 y Length*** 5 Year 20 Yea 25 Year 30 Yea Gelection Guide for Warram	Four continuous ribbons, 12" o.c. Four continuous ribbons, 12" o.c. Classified Extruded Po D Primed mable Adhesive; PG-1 = en utilized with minimum limitations for the interest of the inte	Attachment IB Approved Adhesive IB Approved Adhesive IB Approved Adhesive Illustration Illustra	Pressure** -257.5 psf (Class 515) -267.5 psf (Class 535) mp Grade Adhesive; hield HD ISO. ³ The ies, please refer e*** IDL) rranty (CLMW) rranty (RLMW)

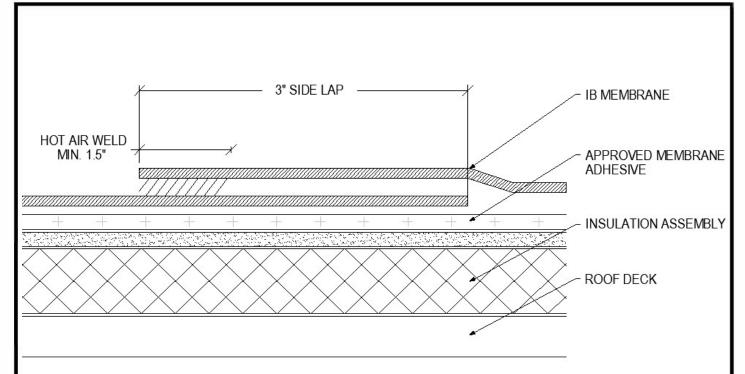


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MINIMUM FASTENER PENETRATIONS AT THE DECK (STANDARD ATTACHMENT):

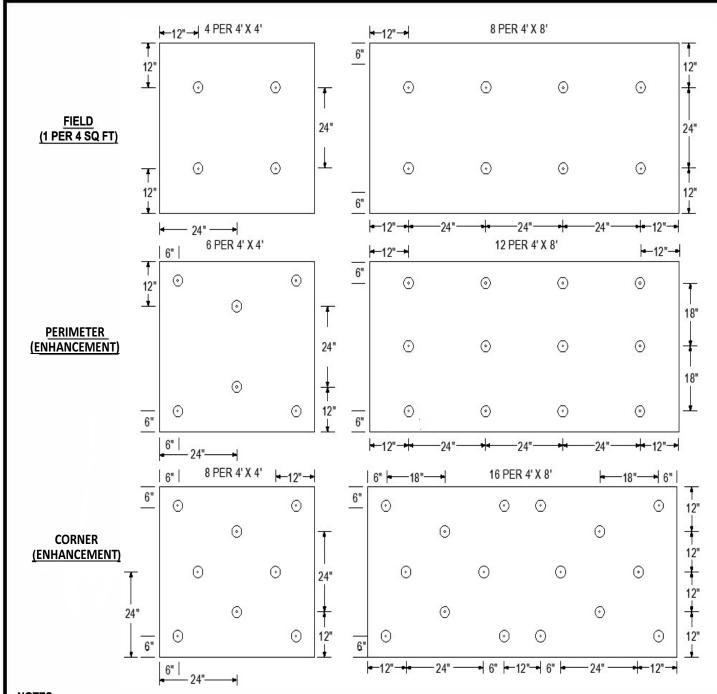
Deck Type:	Penetration Depth:	Fastener Type:
Plywood or Oriented Strand Board:	1/2" Completely through deck	IB HD #14 or IB XHD #15
1" Minimum Wood Plank:	1" into deck	IB HD #14 or IB XHD #15
Steel:	3/4" Completely through top flute	IB HD #14 or IB XHD #15
Light Weight Insulating Concrete over Steel Deck:	3/4" Completely through top flute	IB HD #14 or IB XHD #15
Light Weight Insulating Concrete:	1-1/2" into deck	Deklite
Structural Concrete:	1-1/4" into deck	CD-10 or Dekspike
Poured Gypsum:	1-1/2" into deck	Deklite
Cementitious Wood Fiber:	1-1/2" into deck	Deklite

IB Standard Pull-Test Values for Fasteners			
7/16" OSB	275 lbs		
5/8" OSB	350 lbs		
1/2" Plywood	425 lbs		
1" Minimum Wood Plank	450 lbs		
22 ga. Steel	525 lbs		
24 ga. Steel	425 lbs		
Structural Concrete	800 lbs		
LWIC over 24 ga. Steel	425 lbs		
Poured Gypsum	300 lbs		
Cementitious Wood Fiber	300 lbs		

Scale: NTS	Detail Name: Fully Adhered	l Membrane Seam	Detail Number: FA-AT-01
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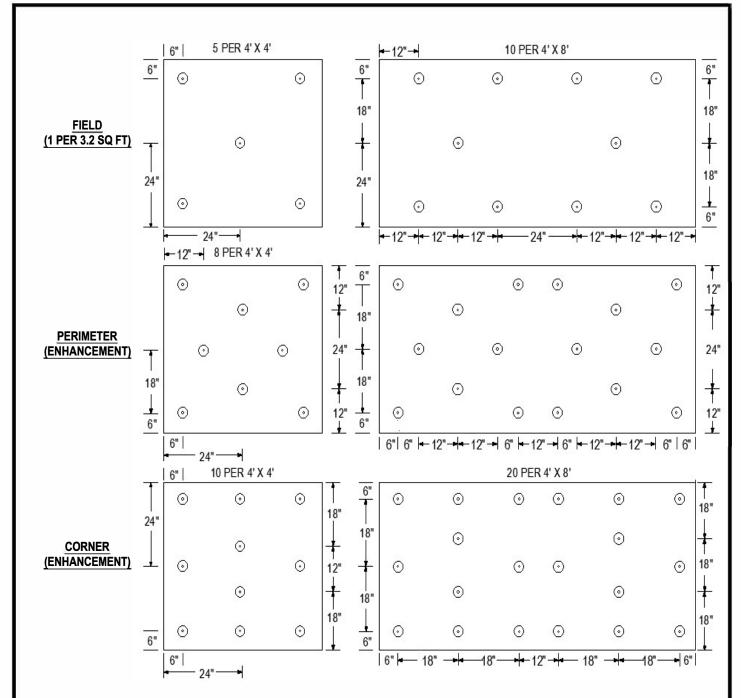


- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION
 OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A 2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

ı	Scale:	Detail Name:		Detail Number:
l	NTS	1 Per 4 Fastening Patterns for Insulation/Cover Board		FA-AT-02
ľ	Submitte	d By:	Project:	
ı	Addre	ss:	Address:	
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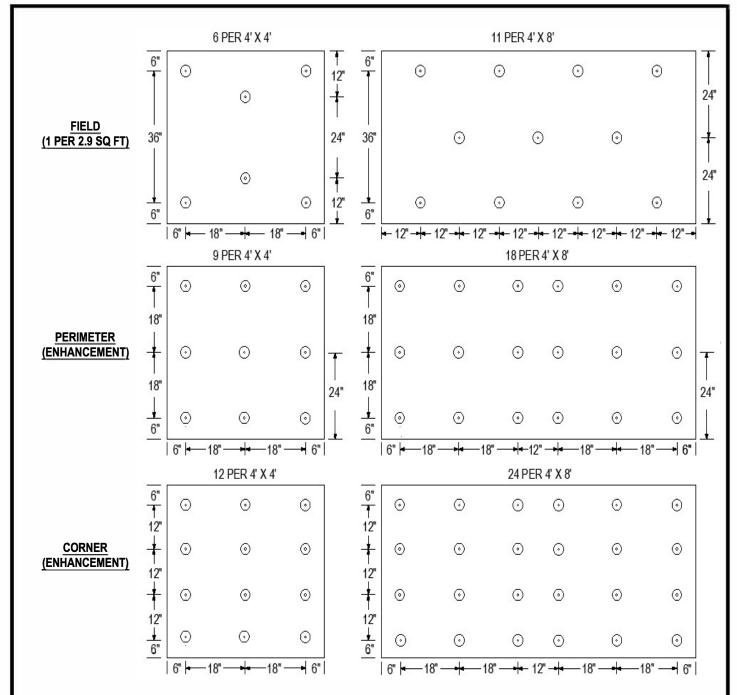


- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- REFER TO TABLE A.2 FOR MINIMUM REQUIRMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

Scale:	Detail Name:		Detail Number:
NTS	1 Per 3.2 Fastening Patterns fo	FA-AT-03	
Submitte	ed By:	Project:	
Address:		Address:	
Telepho	one:		





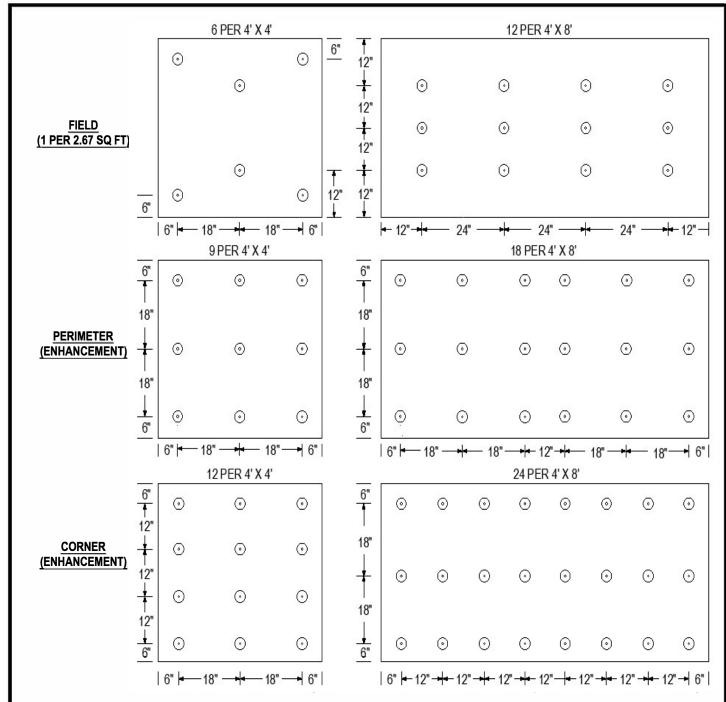


- 1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

Scale:	Detail Name:		Detail Number:
NTS	1 Per 2.9 Fastening Patterns fo	FA-AT-04	
Submitte	ed By:	Project:	
Addr	ess:	Address:	
Telepho	one:		





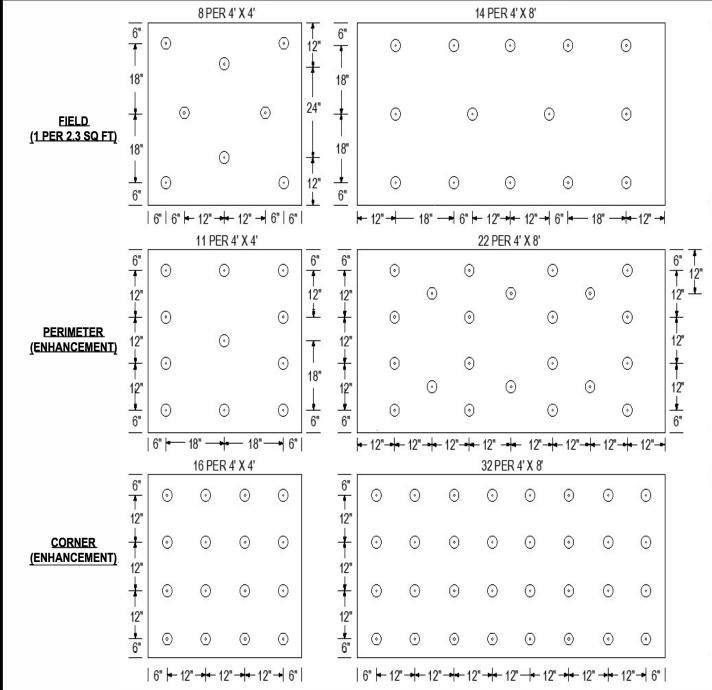


- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES,

Scale:	Detail Name:		Detail Number:
NTS	1 Per 2.67 Fastening Patterns for Insulation/Cover Board		FA-AT-05
Submitte	ed By:	Project:	
Addr	ess:	Address:	
Telepho	one:		





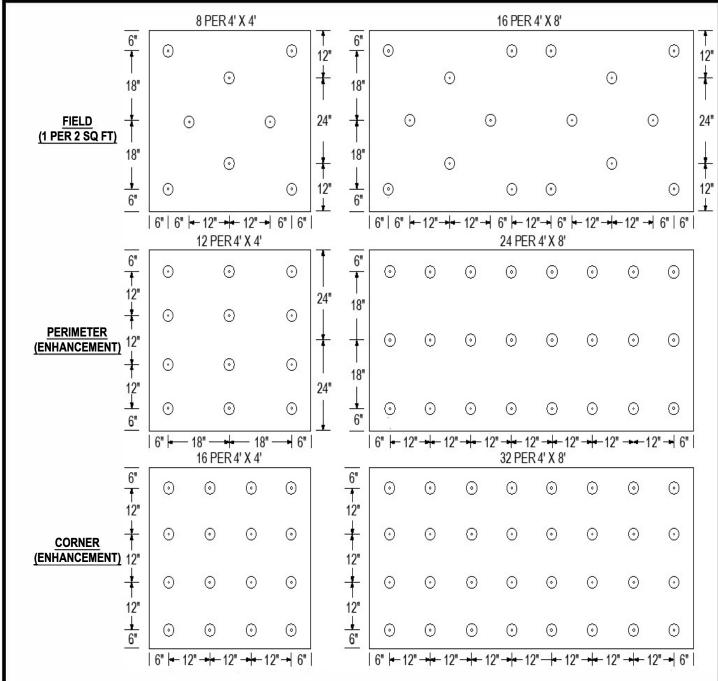


- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A.2 FFOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

Scale: NTS	1 Per 2.3 Fastening Patterns fo	FA-AT-06	
Submitte Addr	ess:	Project: Address:	
Telepho	one:		





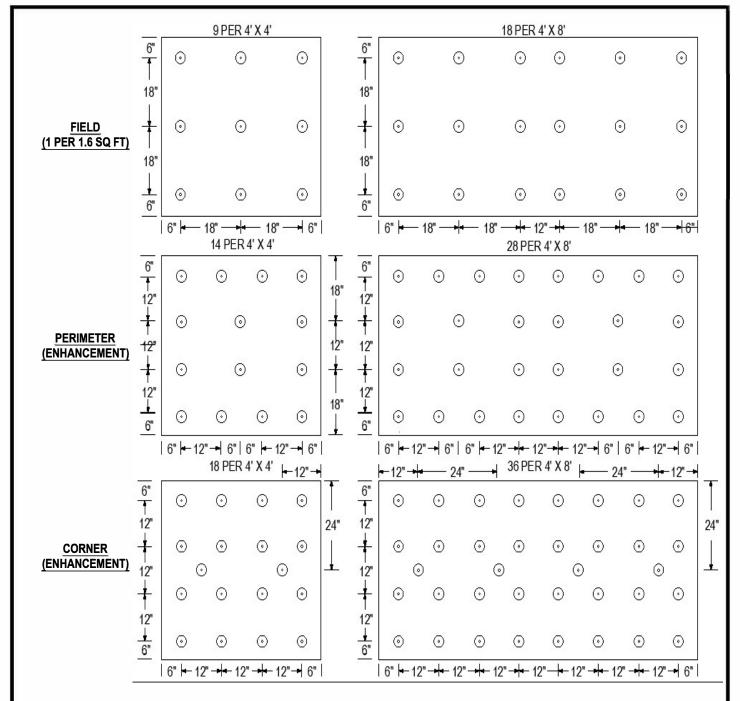


- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION
 OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- 2. AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A.2 FOR MINIMUM REQUIRMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

Scale:	Detail Name:		Detail Number:
NTS	1 Per 2 Fastening Patterns for	Insulation/Cover Board	FA-AT-07
Submitte	ed By:	Project:	
Addre	ess:	Address:	
Telepho	one:		





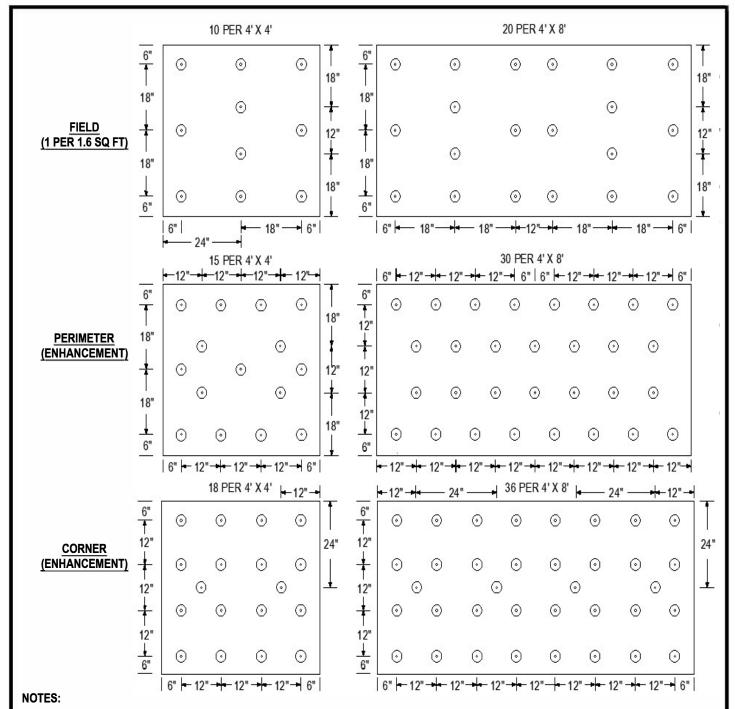


- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANE.

Scale: NTS	1 Per 1.78 Fastening Patterns		FA-AT-08
Submitte Addr Telepho	ess:	Project: Address:	







- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION
 OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

Scale: NTS	Detail Name: 1 Per 1.6 Fastening Patterns for		FA-AT-09
Submitte Addre Telepho	ess:	Project: Address:	





			12 PER	4' X 4'						2	24 PER 4'	X 8'			
	6"	0	0)	0		6"	0	0	0	0	0	0	0	0
FIELD	12"	0	0)	0		18"	0	0	0	0	0	0	0	
(1 PER 1.33 SQ FT)	+	0	0)	0		18"	0	0	0	0	⊙	⊙	0	0
	12" 6"	0	C		0		6"	Ö	0	0	0	0	0	0	0
		6" ←	– 18" – + 16 PER	← 18" 4' X 4'		ĺ		6" ←	12" - - 1	2"-₩-		2" - + -1: R 4' X 8'	2" - - 1:	2" → 1	2"→ 6"
	6" 12"	0	0	0	0		6"	0	0	0	0	0	0	0	0
PERIMETER	12"	0	0	0	0		12"	0	0	0	0	0	0	0	0
(ENHANCEMENT)	12"	0	0	0	0	1	12"	0	0	0	0	0	0	0	0
	6"	0	0	0	0		6"	0	0	0	0	0	0	0	0
		6" 🖛	12" - - 12	2" -+- 1	l2" 6"				12" - - 1		40 PE	R 4' X 8'			10) (0)
			20 PER	4' X 4'		-		6" -	12" 1	2"-+-	12"-+- 1	2"—+- 1:	2" -+- 1:	2" - +- 1	2"- 6"
	6"	0	0	0	0	12"	6" 6" 6"	0	0	0	_ ⊙	0	. 0	0	0
CORNER (ENHANCEMENT)	12"	0	⊙)	⊙ ⊙	12"	1	0	⊙ ⊙	•	⊙ ⊙	0	·) ①	((⊙ ⊙
	12"	0	0 0)	•	12" 12"	12"	0	•	•	•	0	⊙	•	· •
	12" <u>+</u> 6"	0	⊙ ⊙	0	⊙ ⊙	<u> </u>	6" 6" 6"	0	⊙ ⊙	•	⊙ ⊙	⊙ ⊙	⊙ ⊙	(⊙	⊙ ⊙
	0	6" 6"	" 6" 6"	6" 6"	6" 6"		_	 12"-	- - 2	24" —	+	24"	- 2	24" —	12"-

- FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION
 OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- 2. AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

Scale: NTS	Detail Name: 1 Per 1.33 Fastening Patterns for		FA-AT-10
Submitted By: Address:		Project: Address:	
Telepho	one:		





			14 PEF	R 4' X 4'							28 PEF	R 4' X 8'			
	6"	0	0	0	0		6"	0	0	0	0	0	0	0	0
F <u>IELD</u>	6" 12" + 12"	0	()	0		12"	0	(9	0	0	(Ð	0
(<u>1 PER 1.12 SQ FT)</u>	+	0	()	0		+	0	(Э	0	0	(Ð	0
	12" 6"	0	0	0	0		12" 6"	0	0	0	0	0	•	•	0
		6" - - 12	2"-+ 6" 16 PER		2" 6"			6" 1:	2" 6"	6" 1	100	2" - - 12 R 4' X 8'	2"-4 6"	6" - - 1:	2" 6"
	6" 12"	0	0	0	0		6" 12"	0	0	0	0	0	0	0	0
<u>Perimeter</u> (enhancement)	12"	0	0	0	0		12"	0	0	0	0	0	0	0	0
<u> </u>	+	0	0	0	0		+	0	0	0	0	0	0	0	0
	12" 6"	0	0	0	0	9	12" 6"	0	0	0	0	0	0	0	0
		6" 🗕 1	2" - - 1:	2" -+- 1	2" 6"	6		6" + 1	2"-+-1	2"-+-1			2" 12	2" - - 1:	2" 6"
			20 PER	4' X 4'				6" 1	2"-+-1	2"-+-1		R 4' X 8' 2" - - 12	2" 12	2" -+- 1	2" 6"
	6" † 12"	0	0	0	•	12"	6" 6"	0	0	0	· •	0	0	0	0
<u>CORNER</u> (ENHANCEMENT)	12" + 12"	0) 9 9 0	⊙ ⊙	12"	6" 6" 6" 12"	0	⊙ ⊙	0	⊙ ⊙	0	•) •)	0	0
	12"	0		9	⊙ ⊙	12"	6"	0	0	0	0 9	0	0	⊙ ⊙	0
	6"	0	0	0	0		6"	_ ⊙ `	0	0	0	⊙ `	0	0	
		6" 6"	6" 6"	6" 6"	6" 6"	1		- 12" →	- 2	4" —	- 2	4" -	- 2	4" —-	- -12"→

- 1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- 2. AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB ROOF MEMBRANES.

Scale:	Detail Name:		Detail Number:
NTS	1 Per 1.12 Fastening Patterns for	or Insulation/Cover Board	FA-AT-11
Submitte	ed By:	Project:	
Addr	ess:	Address:	
Telepho	one:		





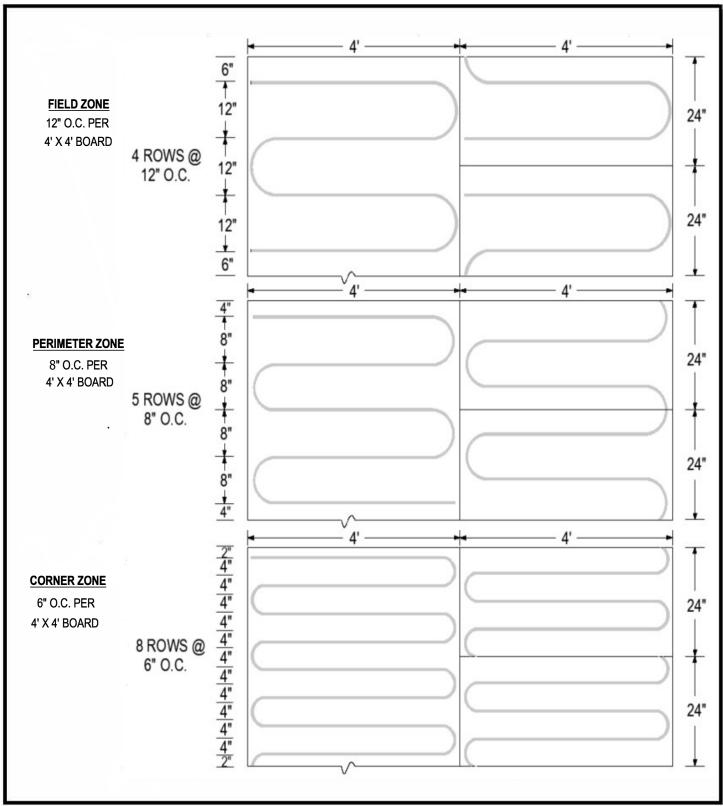
		16 PER	4' X 4'		, –	27/24			32 PE	R 4' X 8'			40
6" 12"	0	0	0	0	6	- () ()	0	0	0	0	0
+	0	0	0	0	-	- 0) () ⊙	0	0	0	0	0
FIELD 12" (1 PER 1.00 SQ FT)	0	•	0	•	12	- 0) () ⊚	0	•	0	•	0
12" 	0	0	0	0	12 6	· 0) () ⊙	0	0	0	0	0
_	6"	12" - - 1:	2" ++- 1	2"→ 6"	i -	6"	12" 	12"- - -	12"-+-		2" +- 1	2" -+- 1	2"- 6"
		20 PER	4' X 4'			6"	 12" 	← 12" - 4	40 PE - - "12 −	ER 4' X 8'	2" - 1	2" 1	2" 6"
6" †	0	· ·	0	· ·	12" 6	•	000	10/9/2	<u></u>	· <u>·</u> ·	<u> </u>	<u> </u>	<u> </u>
† 12"	500000	0		9	1 1 6		´ ⊙ `	, <u> </u>	0))		ອ ັ
PERIMETER +	0	-		0	12"	-) ⊙	_ ⊙	0	_ ⊙	0	· O
(ENHANCEMENT) 12"		0 0	0		 1	2"							
+	0	()	\odot	12" -	1) () 0	0	0	0	\odot	0
12"		⊙		9	<u>+</u> 6	-	0		0		9		୭
- ↓	0	0	0	0	6	- 0) () ①	0	0	0	0	0
	6" 6"	6" 6"	6" 6"	6" 6"		12)" -	-24"	+-	24" —	 	24"	- 12"-
		22 PER	4' X 4'			6"	12" - - 	12"- - -		R 4' X 8' 12" - - 1	2" 1	2" 1	2" 6"
<u>6"</u>	0	0	0	0	12" 6	-1 () () 0	0	0	0	0	0
12"	ASSESSME 3	⊙		9 9	6	_	· · · ·		0		o Č		ອ
CORNER (ENHANCEMENT)	0	\odot	0	\odot	12" -	- () ()	0	0	0	0	0
12"		⊙	(9	$\frac{1}{4}$ $\frac{6}{6}$	-	\odot		0	(0	(ତ
+	0	•	0	0	12" —	-10) () ①	•	•	0	o	0
		0	(9	<u></u>	-	\odot		\odot	(0	(୭
12" _ 6"	0	•	0	•	6	- 0) () ⊙	0	0	\odot	0	0
	6" 6"	6" 1:	2" 6"	6" 6"		- 12)" - 4	—24 " —	+	24" —	 	24"	 12"

- 1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER A FULLY ADHERED MEMBRANE SYSTEM.
- 2. AN APPROVED COVER BOARD IS REQUIRED FOR EPS, XPS, & POLYISOCYANURATE INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
- 3. REFER TO TABLE A 2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTNENING SCHEDULE FOR ADHERED IB ROOF MEMBRANES

	Scale: NTS	1 Per 1 Fastening Patterns fo		FA-AT-12
	Submitted By: Address:		Project: Address:	
ı	Telepho	ne:		



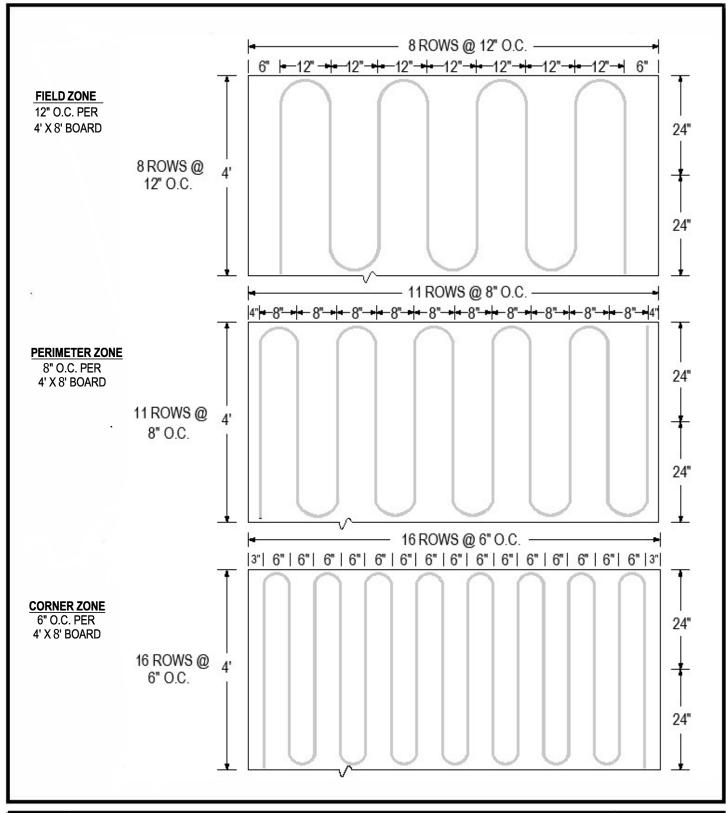




Scale: NTS	Detail Name: Ribbon Adhesive	Ribbon Adhesive Layout - 4' x 4'					
Submitte Addre Telepho	ess:	Project: Address:					





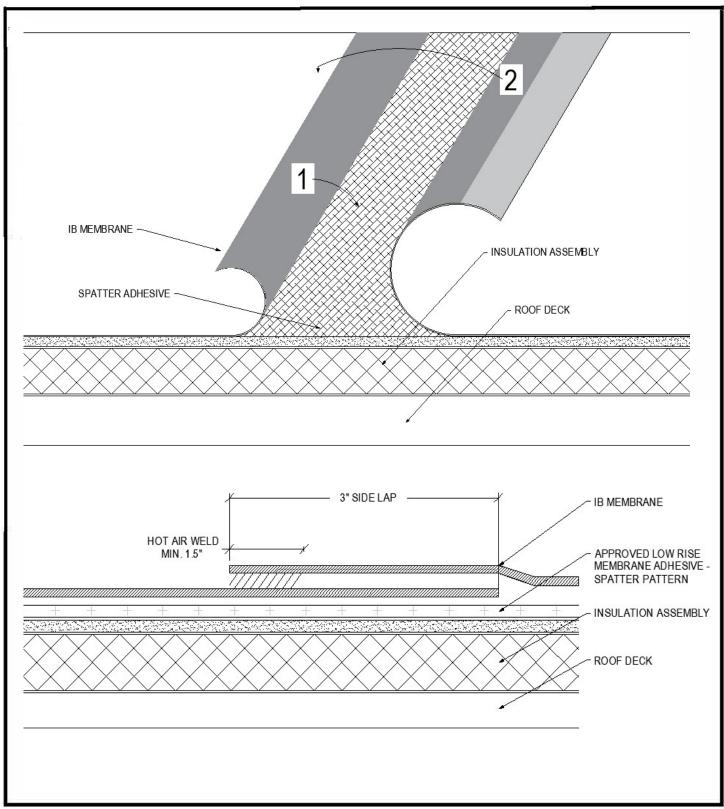


Scale: NTS	Detail Name: Ribbon Adhesive	Layout - 4'x 8'	Detail Number: FA-AT-14
Submitte Addre Telepho	ess:	Project: Address:	

www.ibroof.com



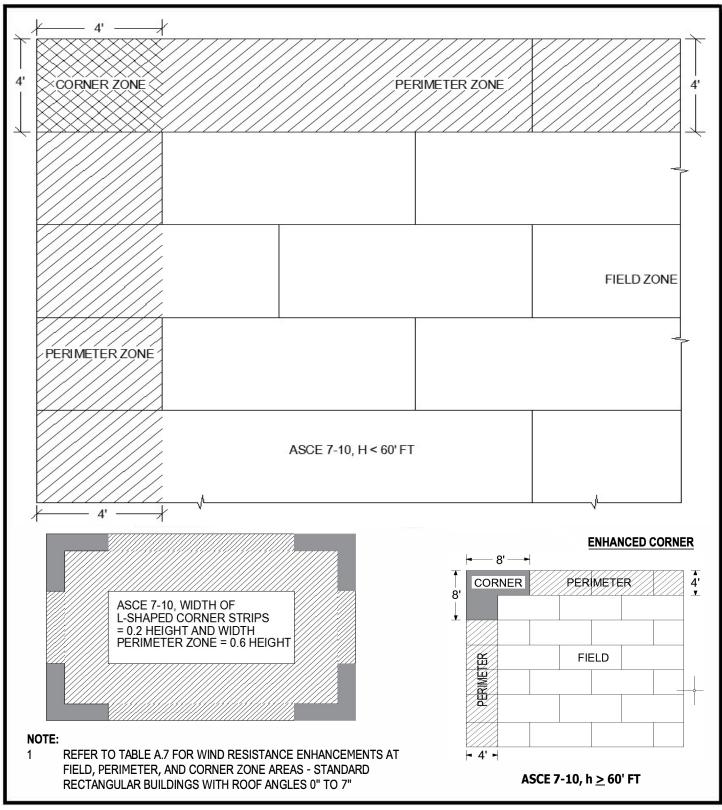




Scale: NTS	Detail Name:	Spatter Adhesive Membrane Sheet Layout					
Submitte Addr Telepho	ess:	Project: Address:					



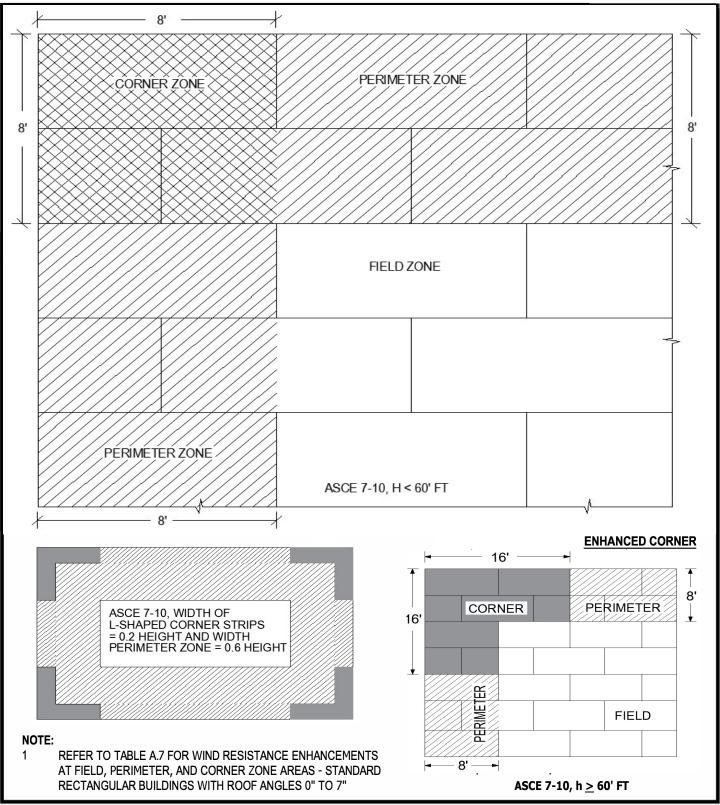




Scale:	Detail Name:		Detail Number:			
NTS	4 Foot Zone	4 Foot Zone Layout				
Submitte	d By:	Project:				
Addre		Address:				
Telepho	ne:					



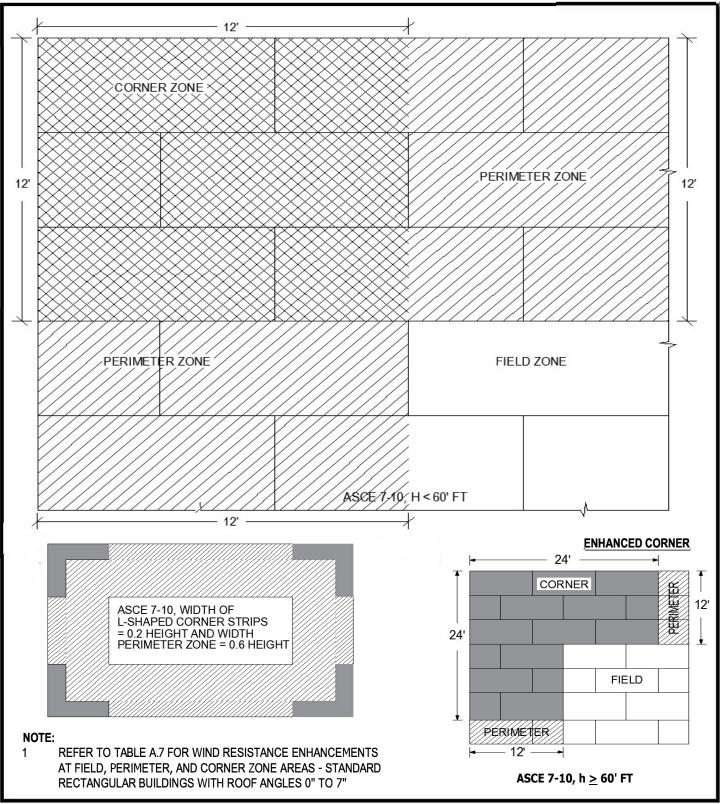




Scale:	Detail Name:		Detail Number:
NTS	8 Foot Zone Layout		FA-AT-17
Submitte	ed By:	Project:	
Address: Telephone:		Address:	



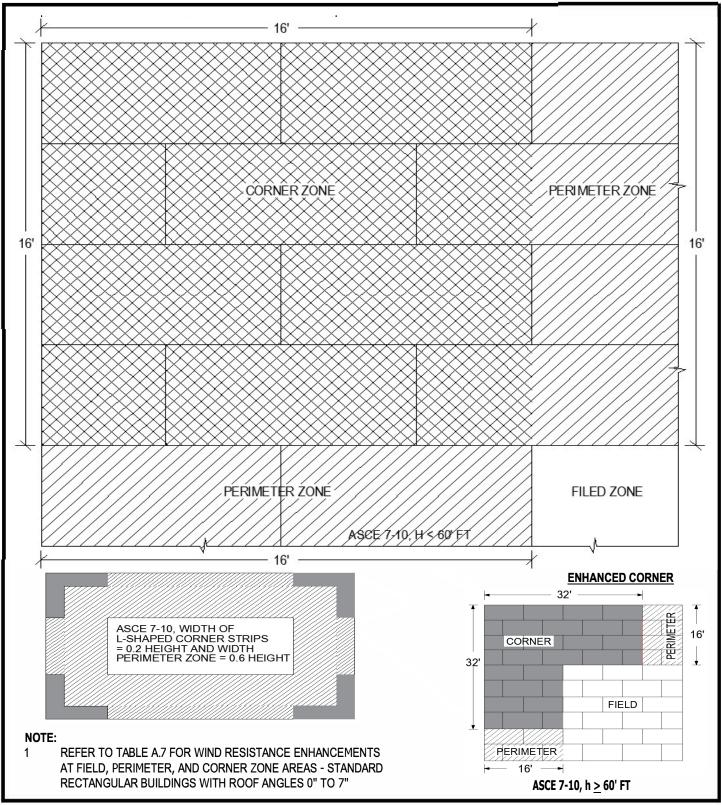




Scale:	Detail Name:		Detail Number:
NTS	12 Foot Zone Layout		FA-AT-18
Submitted By: Pro		Project:	
Address: Telephone:		Address:	



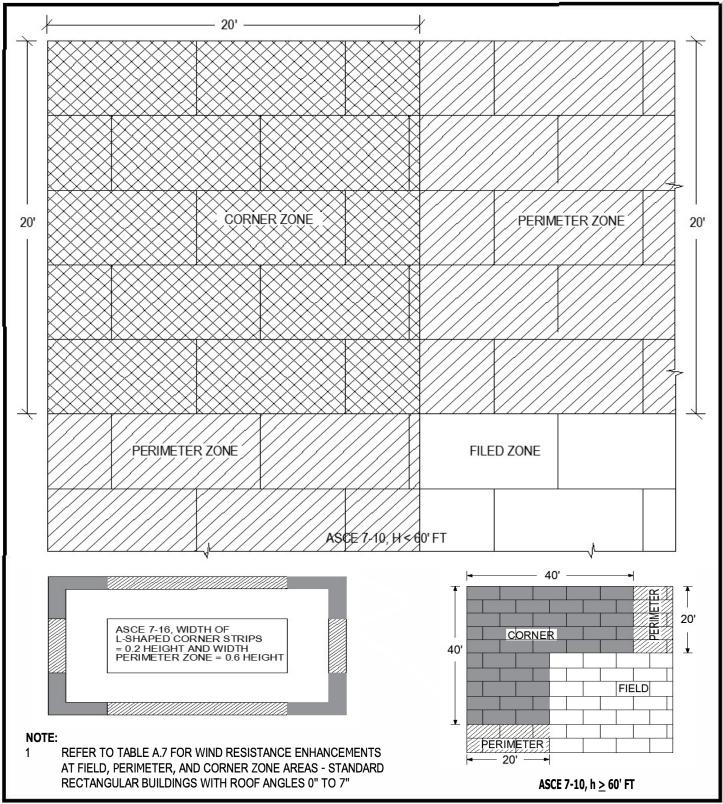




Scale: NTS	Detail Name: 16 Foot Zone	Layout	Detail Number: FA-AT-19
Submitte Addre Telepho	ss:	Project: Address:	



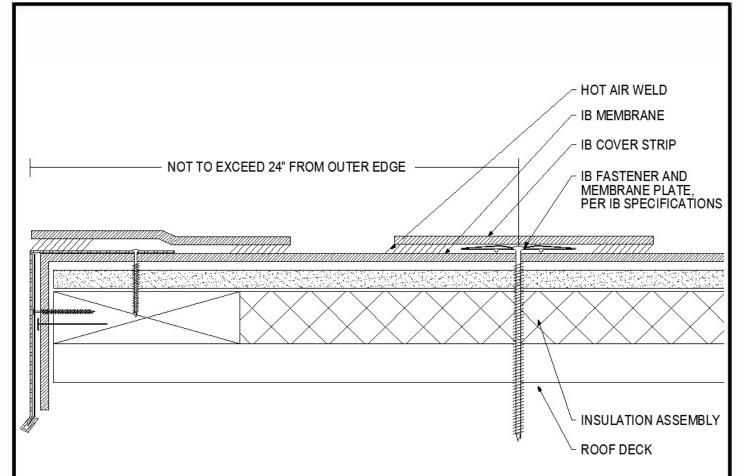




Scale: NTS	Detail Name: 20 Foot Zone Layout		PA-AT-20
Submitte Addre Telepho	ess:	Project: Address:	







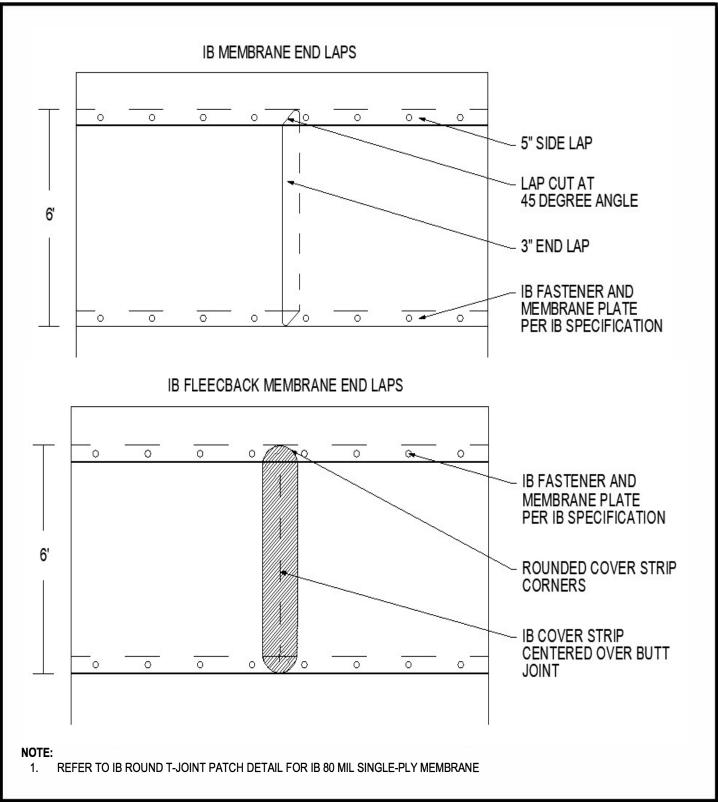
INSTALL IB APPROVED PEEL STOP DETAIL ON ALL FULLY ADHERED IB ROOF ASSEMBLIES WHERE THE FOLLOWING CONDITIONS OCCUR:

- WIND RIDER WARRANTY IN EXCESS OF STANDARD PUBLISHED IB WARRANTY TERMS AND CONDITIONS
- 2. FACTORY MUTUAL PROJECTS WHERE REQUIRED BY FM INSTALLATION GUIDELINES
- ROOF INSTALLATIONS WHERE:
- A. BASIC WIND SPEED ZONE GREATER THAN ASCE 7-10 115 MPH (ASCE 7-05 90 MPH) WHERE ONE OR MORE OF THE FOLLOWING CONDITIONS OCCUR:
 - BUILDING CLASSIFICATION IS PARTIALLY ENCLOSED
 - DESIGN VELOCITY PRESSURES IS ABOVE -52.5 PSF
 - BUILDING LOCATED WITHIN SPECIAL WIND REGIONS OR HURRICANE ZONES
- B. BASIC WIND SPEED ZONE LESS THAN OR EQUAL TO ASCE 7-10 115 MPH (ASCE 7-05 90 MPH) WHERE ONE OR MORE OF THE FOLLOWING CONDITIONS OCCUR:
 - ROOF HEIGHTS ABOVE 30' WITH PERIMETER METAL EDGE OR GUTTER DETAIL (NON-PARAPET WALL)
 - ALL ROOF HEIGHTS ABOVE 65'
 - BUILDING CLASSIFICATION IS PARTIALLY ENCLOSED
 - GUTTER OR EDGE DETAIL DOES NOT INCLUDE CONTINUOUS CLEAT

Scale: NTS	Detail Name: Peel-Sto		Detail Number: FA-AT-21
Submitte Addre Telepho	ess:	Project: Address:	



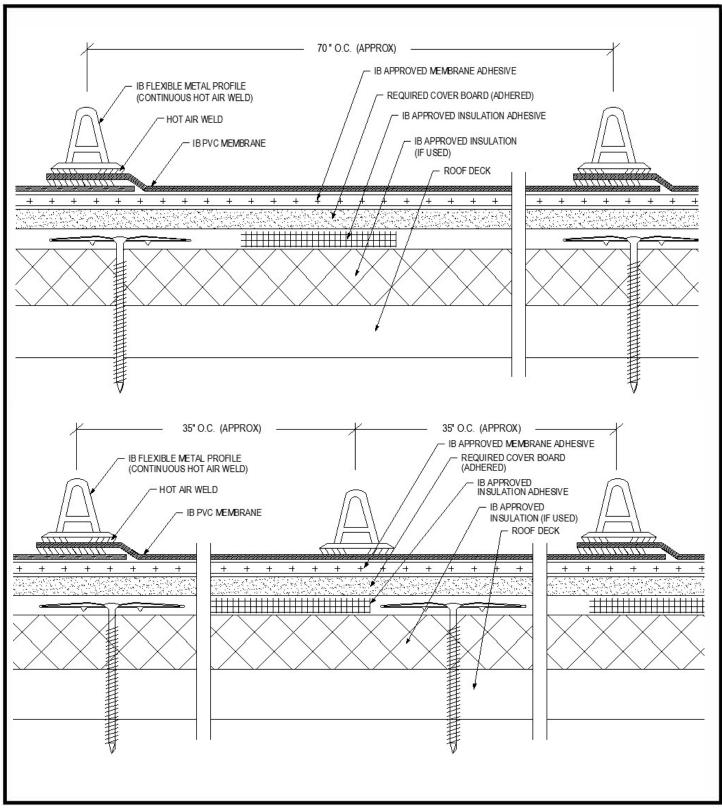




Scale:	Detail Name:	Detail Number:
NTS	Membrane End Laps for Fully Adhered Membrane	FA-AT-22
Submitte	d By: Project:	
Addre Telepho	• • • • • • • • • • • • • • • • • • • •	



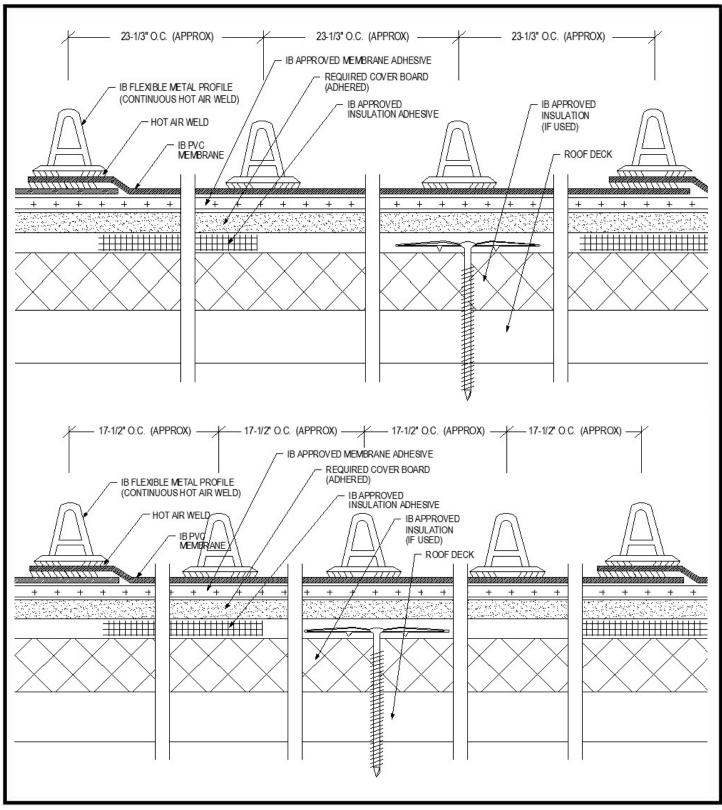




Scale: NTS	IB Flexible Metal Profile Layout - 1 & 2 per Sheet		Detail Number: FA-AT-23
Submitted By: Address: Telephone:		Project: Address:	
releptic	ile.		







Scale: NTS	IB Flexible Metal Profile Layout - 3 & 4 per Sheet		Detail Number: FA-AT-24
Submitted By: Address: Telephone:		Project: Address:	