



City of Belle Isle
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

PERMIT CARD - PLEASE POST AT JOB SITE

THIS DOCUMENT BECOMES YOUR PERMIT WHEN PROPERLY VALIDATED

Per FBC 105.3.3: An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: "NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies." The issuance of this permit does not grant permission to violate any applicable City, Orange County, State of Florida, and/or Federal codes and/or ordinances. Separate permits are required for Signs, Roofing, Electrical, Gas, Plumbing and Mechanical services. This permit becomes VOID if the work authorized is not commenced within 6 months, or is suspended or abandoned for a period of 6 months after commencement. WORK SHALL BE CONSIDERED SUSPENDED IF AN APPROVED INSPECTION HAS NOT BEEN MADE WITHIN A 6 MONTH PERIOD. PERMISSION IS GRANTED TO DO THE FOLLOWING WORK ACCORDING TO THE CONDITIONS HEREON AND THE APPROVED PLANS AND SPECIFICATIONS, SUBJECT TO COMPLIANCE WITH THE ORDINANCES OF THE CITY OF BELLE ISLE, FLORIDA

Scope of Work: REROOF: 13sq, modified bitumen Comments: None Project Information Address: 4322 Playa Court, Belle Isle, FL 32812 Parcel ID: 20-23-30-1646-00-350 Property Owner: IH4 Property Florida LP Phone Number: None ***** Company Name: Astor Construction Services, Inc. Contractor Name: Denmon, Michael License Number: CCC1329705 Address: 55637 Lee Street, Astor, FL 32102 Phone Number: 321-299-2922	Permit Number: 2014-07-028 Date of Application: 07/14/2014 Date Permit Issued: 07/14/2014 WARNING TO OWNER: "YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT." ON THE JOB INSPECTION(S) MUST BE MADE BEFORE PROCEEDING WITH SUBSEQUENT WORK. THIS CARD MUST BE DISPLAYED OUTSIDE AND BE PROTECTED FROM THE WEATHER WHILE BEING VISIBLE FROM THE STREET UNTIL THE FINAL INSPECTIONS HAVE BEEN APPROVED.
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BUILDING FEATURES

IMPACT FEES Traffic \$ School \$ ZONING FEES Zoning Fee \$30.00 UNIVERSAL ENG - BUILDING FEES Boat Dock \$ Boat House \$ Building \$ Demo \$ Door(s) \$ Driveway \$ Electrical \$ Fence \$ Gas \$ Irrigation \$ Low Voltage \$ Mechanical \$ Plumbing \$ Pool \$ Roofing \$40.00 Screen Encl \$ Shed \$ Temp Pole \$ Window(s) \$	BUILDING INSPECTOR USE ONLY IF APPLICABLE: Have Zoning Approval Conditions Been Met? YES NO Have Stormwater Approval Conditions Been Met? YES NO Silt fencing in place? YES NO Turbidity Barrier in place? YES NO BUILDING Survey specific foundation plan must be onsite before slab pour. Approved Plan on Site? _____ 1 st _____ (Footing/Foundation) 2 nd _____ (Slab) 3 rd _____ (Lintel)(Wall Reinforcing on Masonry Building) 4 th _____ (Exterior Framing)(Roof/Wall Sheathing) 5 th _____ (Framing) (To be made after Plumbing/ Mechanical/ Electrical Rough-Ins & Windows/Doors Installed) 6 th _____ (Insulation to be Made After Roof Installed) 7 th _____ (Drywall) 8 th _____ (Sidewalk/Driveway) 9 th _____ (Other) 10 th _____ (Final - After MEP and Other Applicable Finals)
SURCHARGE FEES Surcharge Fee \$2.00 Surcharge Fee \$2.00 TOTAL FEES \$74.00 Date Paid 7-14-14 CC or Check # Visa 1650 Amount Paid 74.00	ROOFING OSHA APPROVED ACCESS MUST BE MADE AVAILABLE TO INSPECTOR 1 ST ROOFING Deck Nailing/Dry-in/Flashing _____ 2 ND ROOFING Covering In-Progress _____ 3 RD ROOFING Covering Final _____ PLUMBING (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...) 1 ST _____ (Underground) 2 ND _____ (Sewer) 3 RD _____ (Rough-In/Tub Set) 4 th _____ (Final) CHECK APPROPRIATE BOX <input type="checkbox"/> GAS ___ Natural ___ LP <input type="checkbox"/> MECHANICAL <input type="checkbox"/> ELECTRICAL <input type="checkbox"/> LOW VOLTAGE 1 st _____ (Rough-In) 2 nd _____ (Final)

The person accepting this permit shall conform to the terms of the application on file and construction shall conform to the requirements of the Florida Building Code (FS 553).

Inspection requests are to be emailed to BDscheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. Next-Day Inspection requests must be made by 1pm. Please include the following in your request: Permit #, project address, type of inspection, date of the requested inspection, a contact name & a contact phone number. AM or PM may be requested but cannot be guaranteed.



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APPLICATION FOR ROOFING PERMIT

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

DATE OF APPLICATION: July 14, 2014

ROOF PERMIT NUMBER 2014-07-028

PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below.

Project Address 4322 Playa Court
Property Owner IH4 Property Florida LP
Belle Isle, FL 32809 32812
Phone _____
Property Owner's Mailing Address 21001 N Tatum Blvd Ste 1630-630
City Phoenix
State AZ Zip Code 85050 Parcel Id Number: 20-23-30-1646-00-350

REQUIRED! To obtain this information, please visit <http://www.ocgafi.org/Searches/ParcelSearch.aspx>

Class of Building: Old New Type of Building: Residential Commercial Other
Type of Work: New Roof ReRoof

- **REQUIRED!** Florida Product Approval Screen Printout from www.floridabuilding.org showing the Code Version
- **REQUIRED!** Florida Product Approval Instructions from www.floridabuilding.org (not the manufacturer instructions)
- **REQUIRED!** Copies of your General Liability & Worker's Comp Insurance Certificate & State and Local Licenses

Please indicate the nature of work by completing the information below:

Roof Square Footage: 1300 Number of Stories: 1 Job Valuation: \$ 3,500.00

Type: Asphalt Shingles Metal Modified Bitumen Other _____

I hereby certify that the above is true and correct to the best of my knowledge and make Application for Permit as outlined above, and if same is granted I agree to conform to all Florida Building Code Regulations and City Ordinances regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable Town and/or State of Florida codes and/or ordinances. By signing below, I recognize Republic Services is by legal contract the sole authorized provider of garbage, recycling, yard waste, and commercial garbage and construction debris collection and disposal services with the city limits of the City. Contractors, homeowners and commercial businesses may contact Republic Services at 407-293-8000 to setup accounts for Commercial, Construction Roll Off, or other services needed. Rates are fixed by contract and are available at City Hall or from Republic Services. The City enforces the contract through its code enforcement office. Failure to comply will result in a stop work order.

LICENSE HOLDER SIGNATURE *Michael Denmon* LICENSE # CCC 1329705

LICENSE HOLDER NAME Michael Denmon COMPANY NAME Astor Construction Services, Inc

Street Address 55637 Lee Street

City Astor State FL Zip Code 32102 Phone Number 321-299-2922

Email Address CDRSEABEE@AOL.COM

Building Official: <u>sq</u>	Date <u>7-14-14</u>
Verified Contractor's Licenses & Insurance are on file <u>sq</u>	Date <u>7-14-14</u>
Zoning Fee	\$ <u>300</u>
Permit Fee	\$ <u>400</u>
Review Fee	\$ <u>n/a</u>
3% Florida Surcharge	\$ <u>400</u>
Total Permit Fee	\$ <u>740</u>

NOTE: The Building Permit Number is required if the Roof Installation is associated with any construction or alteration where a Building Permit has been issued. Building Permit Number _____

Received
7-14-14



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Product Approval Form

DATE: July 14, 2014 PERMIT # _____
 PROJECT ADDRESS 4322 Playa Court Belle Isle, FL 32809 32812

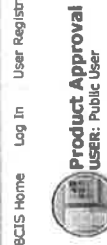
As required by Florida Statue 553.842 and Florida Administrative Code 9B-72m, please provide the information and approval numbers of the building components listed below if they will be utilized on the building or structure. FL Approved products are listed online at www.floridabuilding.org or can be obtained from the local product supplier. The following information must be turned in with permit application and available onsite for inspections:

1. This Product Approval Cover Sheet
2. Internet screen from FloridaBuilding.org showing PA#, approval and code edition stamped
3. Manufacturer's installation details from FloridaBuilding.org and requirements for each product stamped

Product Type	Manufacturer	Model/Series	FL Product Approval #	Product Type	Manufacturer	Model/Series	FL Product Approval #
EXTERIOR DOORS							
Swinging				Sliding			
Sliding				Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
				Other			
WINDOWS							
Single/Dbl Hung				Asphalt Shingles			
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
Fixed				Single Ply Roof	Certaainteed	Flintlastic	16709.1
Mullion				Other			
Skylights							
Other							
STRUCTURAL COMPONENTS							
Wood Connectors				OTHER			
Wood Anchors							
Truss Plates							
Insulation Forms							
Lintels							
Other							

It is the applicant's responsibility to verify that specific products have been installed in accordance with their limitations and with the minimum required design pressures for the structure. Specific compliance will be verified during field inspections.

Applicant Signature Michael Deamen Date 7/14/14



[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > [Application Detail](#)

FL #
 Application Type
 Code Version
 Application Status
 Comments
 Archived

FL16709
 New
 2010
 Approved

Product Manufacturer Address/Phone/Email
 CertainTeed Corporaton-Roofing
 PO Box 1100
 1400 Union Meeting Rd
 Blue Bell, PA 19422
 (215) 274-2350
 Steven.T.Lawrey@saint-gobain.com

Authorized Signature
 Steven Lawrey
 Steven.T.Lawrey@saint-gobain.com

Technical Representative Address/Phone/Email
 Mark Harner
 1400 Union Meeting Road
 P.O. Box 1100
 Blue Bell, PA 19422
 (215) 274-2443
 Mark.D.Harner@saint-gobain.com

Quality Assurance Representative Address/Phone/Email
 (Empty field)

Category Subcategory
 Roofing
 Modified Bitumen Roof System

Compliance Method
 Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer
 ✓ Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Evaluation Report
 Robert Nieminen
Florida License
 PE-59166
 UL LLC
Quality Assurance Contract Expiration Date
 07/03/2017
Validated By
 John W. Knezevich, PE
 ✓ Validation Checklist - Hardcopy Received

Certificate of Independence
 FL16709_R0_COI_Trinity_ERD_CI - Nieminen - 2013.pdf

Referenced Standard and Year (of Standard)

Standard	Year
ASTM D6162	2000
ASTM D6163	2000
ASTM D6164	2005
ASTM D6222	2002
ASTM D6509	2000
FM 4470	1992
FM 4474	2004

Equivalence of Product Standards Certified By
 (Empty field)

Sections from the Code

Product Approval Method

Method 1 Option D

Date Submitted 12/02/2013
 Date Validated 12/05/2013
 Date Pending FBC Approval 12/16/2013
 Date Approved 02/24/2014

Summary of Products

FL #	Model, Number or Name	Description
16709.1	Flintlastic Modified Bitumen Roof Systems	SBS and APP modified bitumen roof systems
<p>Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: +N/A/-97.5 Other: 1.) The design pressure in this application pertains to the maximum design pressure for one particular assembly for use in Zone 1 (field area) of the roof. Refer to ER Appendix for all systems and attachment limitations. 2.) Refer to ER Section 5 for Limits of Use.</p>		
<p>Installation Instructions FL16709_R0_IL_2013_12_FINAL_A1_ER_CERTAINTIED_MOBBIT_FL16709.pdf Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes Evaluation Reports EL16709_R0_AE_2013_12_FINAL_ER_CERTAINTIED_MOBBIT_FL16709.pdf Created by Independent Third Party: Yes</p>		

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[Next](#)

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Under Florida law, email addresses are public records. If you do not want your email address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850-487-1335. Pursuant to Section 455.275(1), Florida Statutes, effective October 1, 2012, licenses licensed under Chapter 455, F.S. must be filed with the Department with an email address if they have one. The emails provided may be used for official communication with the licensee. However email addresses are public records. If you do not want to supply a personal address, please provide the Department with an email address which can be made available to the public. To determine if you are a licensee under Chapter 455, F.S., please click [here](#).

Product Approval Accepts:



APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

Table	Deck	Application	Type	Description	Page
1	Wood	New or Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	3-4
2	Wood	New, Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	5-7
3	Wood	New, Reroof (Tear-Off) or Recover	D	Prelim. Attached Insulation, Mech. Attached Base Sheet, Bonded Roof Cover	8-9
4	Wood	New, Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	10-11
5	Wood	New, Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	12-13

The following notes apply to the systems outlined herein:

1. The roof system evaluation herein pertains to above-deck roof components. Roof decks shall be in accordance with FBC requirements to the satisfaction of the AHJ. Wind load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
2. Unless otherwise noted, insulation may be any one layer or combination of polyisocyanurate, polystyrene, wood fiberboard, perlite, DensDeck, DensDeck Prime, DensDeck DuraGuard, SECUROCK Gypsum-Fiber Roof Board or SECUROCK Glass-Mat Roof Board that meets the QA requirements of F.A.C. Rule 9N-3 and is documented as meeting FBC 1505.1 and, for foam plastic, FBC 2603.4.1 or 2603.8, when installed with the roof cover.
3. Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.
4. The maximum design pressure for the selected base assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16. This is already addressed in the tables that follow via "N/A" reference if the baseline system is "Not Applicable" to Zone 1 design pressure requirements.
5. For existing decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing and analysis shall be in accordance with TAS 105 or ANSI/SPRI FX-1.
6. For Recover Applications using System Type D, the insulation is optional; however, the existing roof system shall be suitable for a recover application.
7. Unless otherwise noted, refer to the following references for bonded base, ply or cap sheet applications.

CERTAINTEED FLINTLASTIC® MODIFIED BITUMEN COMPONENTS & APPLICATION METHODS			
Reference	Layer	Material	Application
BP-AA (Base and Ply sheets, Asphalt-Applied)	Base	Glasbase; All Weather/Empire Base; Flexiglas Base; Flintlastic Base 20	Hot asphalt at 20-40 lbs/square
	Ply	Flintglas Ply Sheet Type IV; Flintglas Premium Ply Sheet Type VI	
SBS-AA (SBS, Asphalt-Applied)	Base	Flintlastic Base 20; Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base	Hot asphalt at 20-40 lbs/square
	Ply	Flintlastic Base 20; Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base	
	Cap	Flintlastic Cap 30; Flintlastic Cap 30 CoolStar; Flintlastic FR Cap 30; Flintlastic FR Cap 30 CoolStar; Flintlastic FR Dual Cap; Flintlastic FR-P; Flintlastic FR-P CoolStar; Flintlastic Premium FR-P; Flintlastic Premium FR-P CoolStar; Flintlastic GMS; Flintlastic GMS CoolStar; Flintlastic Premium GMS; Flintlastic Premium GMS CoolStar	
SBS-TA (SBS, Torch-Applied)	Base	Flintlastic Base 20 T; Flintlastic FR Base 20 T	Torch-Applied
	Ply	Flintlastic Base 20 T; Flintlastic FR Base 20 T	
	Cap	Flintlastic FR Cap 30 T; Flintlastic FR Cap 30 T CoolStar; Flintlastic GTS; Flintlastic GTS CoolStar; Flintlastic GTS-FR; Flintlastic GTS-FR CoolStar; FlintClad	

CERTAINTEED FLINTLASTIC® MODIFIED BITUMEN COMPONENTS & APPLICATION METHODS (CONTINUED)			
Reference	Layer	Material	Application
APP-TA (APP, Torch-Applied)	Base	Flintlastic APP Base T; Flintlastic STA; Flintlastic STA Plus	Torch-Applied
	Cap	Flintlastic STA; Flintlastic STA Plus; Flintlastic GTA; Flintlastic GTA CoolStar; Flintlastic GTA-FR; Flintlastic GTA-FR CoolStar	
SBS-SA (SBS, Self-Adhering)	Base	Flintlastic SA PlyBase; Flintlastic SA Mid Ply	Self-Adhering
	Ply	Flintlastic SA PlyBase; Flintlastic SA Mid Ply	
	Cap	Flintlastic SA Cap; Flintlastic SA Cap CoolStar; Flintlastic SA Cap FR; Flintlastic SA Cap FR CoolStar	

8. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC 1609.1.5 for determination of design wind loads.

TABLE 1: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF); SYSTEM TYPE A: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER																								
NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);																								
Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)																								
System No.	Deck (See Note 1)	Anchor Sheet						Base Insulation		Top Insulation		Roof Cover			MDP (psf)									
		Type	Fasteners	Attach				Type	Attach	Type	Attach	Base	Ply	Cap										
				At Lap		Staggered Center Rows																		
				W	X	Y	Z																	
SYSTEM DESCRIPTION WITH ZONE 1 (FIELD AREA) ANCHOR SHEET ATTACHMENT:																								
W-1	Min. 19/32-inch plywood; See Note 1	Glasbase, All Weather Empire, Flexiglas Base, Poly SMS or Ultra Poly SMS	32 ga., 1-5/8-inch dia, tin caps with 11 ga. annular ring shank nails	3	8	3	8	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY-3, H-Shield or Multi-Max FA3	Hot asphalt, full coverage	Min. 0.25-inch DensDeck primed with ASTM D41 primer or DensDeck Prime	Hot asphalt, full coverage	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5									
SYSTEM W-1; ZONE 2 & 3; PERIMETER & CORNER AREA ANCHOR SHEET ATTACHMENT:																								
Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)																				
				120			130			140			150			160			170			180		
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
B	Open	0 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	10	4	10
			3-Corners	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7
			3-Corners	8	3	8	8	3	8	7	3	7	7	3	7	7	4	7	7	4	7	7	5	7
	Enclosed	0 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6	7	5	7
C	Open	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	7	5	7	6	5	6
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	6	3	6
			3-Corners	8	3	8	8	3	8	7	3	7	7	4	7	6	4	6	7	5	7	6	5	6
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7
			3-Corners	8	3	8	7	3	7	6	3	6	7	4	7	7	5	7	6	5	6	N/A		
30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	7	4	7	7	4	7		
	3-Corners	7	3	7	7	3	7	7	4	7	6	4	6	6	5	6	N/A			N/A				

TABLE 1 (CONTINUED): WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF); SYSTEM TYPE A: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);
Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)

SYSTEM W-1; ZONE 2 & 3; PERIMETER & CORNER AREA ANCHOR SHEET ATTACHMENT:																										
Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)																						
				120			130			140			150			160			170			180				
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z		
C	Enclosed	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	6	3	6		
			3-Corners	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6	7	5	7	6	5	6		
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7		
			3-Corners	8	3	8	7	3	7	6	3	6	7	4	7	7	5	7	6	5	6	N/A				
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6		
			3-Corners	7	3	7	7	3	7	7	4	7	6	4	6	6	5	6	N/A			N/A				
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6		
			3-Corners	7	3	7	6	3	6	7	4	7	7	5	7	6	5	6	N/A			N/A				
D	Open	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	6	3	6	7	4	7		
			3-Corners	7	3	7	7	3	7	7	4	7	6	4	6	7	5	7	6	5	6	N/A				
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6		
			3-Corners	7	3	7	6	3	6	7	4	7	7	5	7	6	5	6	6	5	6	N/A				
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	7	3	7	7	3	7	6	3	6	7	4	7	6	4	6		
			3-Corners	7	3	7	7	4	7	6	4	6	7	5	7	N/A			N/A			N/A				
	30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	7	3	7	7	3	7	7	4	7	6	4	6	7	5	7			
		3-Corners	7	3	7	7	4	7	6	4	6	6	5	6	N/A			N/A			N/A					
	Enclosed	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6		
			3-Corners	7	3	7	6	3	6	7	4	7	7	5	7	6	5	6	N/A			N/A				
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	7	3	7	7	3	7	7	4	7	7	4	7	N/A				
			3-Corners	7	3	7	7	4	7	6	4	6	7	5	7	N/A			N/A							
20 < h ≤ 30		2-Perimeters	8	3	8	8	3	8	7	3	7	6	3	6	7	4	7	6	4	6						
		3-Corners	6	3	6	7	4	7	7	5	7	6	5	6	N/A			N/A								
30 < h ≤ 40	2-Perimeters	8	3	8	7	3	7	7	3	7	7	4	7	7	4	7	N/A									
	3-Corners	6	3	6	7	4	7	7	5	7	6	5	6	N/A												

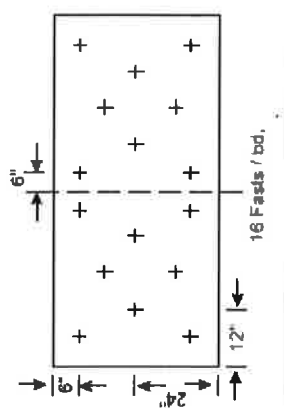
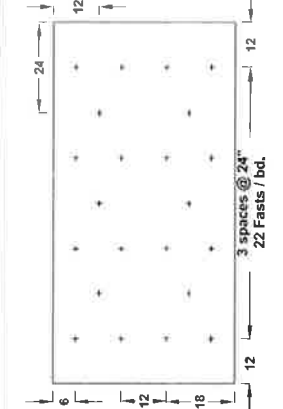
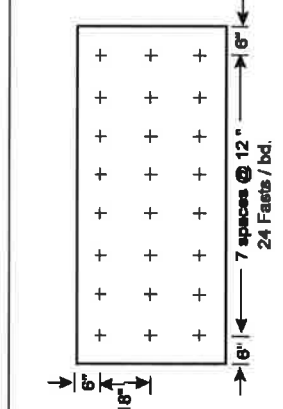
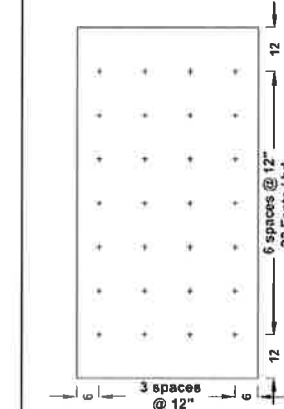
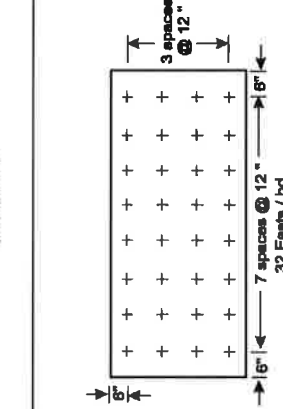
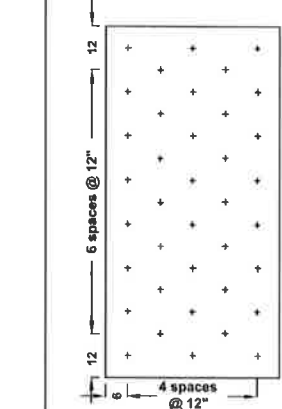
TABLE 2: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER; SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER											
System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover			MDP (psf)		
			Type	Fasteners	Attach	Base	Ply	Cap			
SYSTEM DESCRIPTION WITH ZONE 1 (FIELD AREA) INSULATION ATTACHMENT:											
W-2	Min. 19/32-inch plywood; See Note 1	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield, Multi-Max FA3 or FlintBoard ISO primed with FlintPrime SA	Flintfast 3 in. Insulation Plates with FlintFast #12 or #14	Pattern #1 1 per 2 ft ²	SBS-SA	(Optional) SBS-SA	SBS-SA	-45.0		
INSULATION ATTACHMENT PATTERN REFERENCES:											
PATTERN #1: 1 per 2 ft²		PATTERN #2: 1 per 1.45 ft²		PATTERN #3: 1 per 1.33 ft²		PATTERN #4: 1 per 1.14 ft²		PATTERN #5: 1 per 1.00 ft²		PATTERN #6: 1 per 0.84 ft²	
											
SYSTEM W-2; ZONE 1, 2 & 3; FIELD, PERIMETER & CORNER AREA INSULATION ATTACHMENT:											
Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)							
				120	130	140	150	160	170	180	
B	Open	0 < h ≤ 30	1-Field	#1	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#1	#1	#1	#2	#2	#2
			3-Corners	#1	#1	#2	#2	#4	#4	#5	#5
		30 < h ≤ 40	1-Field	#1	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#1	#1	#2	#2	#2	#2
			3-Corners	#1	#2	#2	#3	#4	#5	#6	#6

TABLE 2 (CONTINUED): WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER; SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

SYSTEM W-2; ZONE 1, 2 & 3; FIELD, PERIMETER & CORNER AREA INSULATION ATTACHMENT:										
Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)						
				120	130	140	150	160	170	180
B	Enclosed	0 < h ≤ 30	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#1	#1	#2	#2	#2
			3-Corners	#1	#2	#2	#3	#4	#5	#6
		30 < h ≤ 40	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#1	#1	#2	#2	#3
			3-Corners	#1	#2	#2	#4	#4	#5	#6
C	Open	0 < h ≤ 15	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#1	#1	#2	#2	#3
			3-Corners	#1	#2	#3	#4	#5	#6	#6
		15 < h ≤ 20	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#1	#2	#2	#3	#4
			3-Corners	#2	#2	#3	#4	#5	#6	N/A
		20 < h ≤ 30	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#2	#2	#2	#4	#4
			3-Corners	#2	#3	#4	#5	#6	N/A	N/A
	30 < h ≤ 40	1-Field	#1	#1	#1	#1	#1	#1	#1	
		2-Perimeters	#1	#1	#2	#2	#3	#4	#5	
		3-Corners	#2	#3	#4	#5	#6	N/A	N/A	
	Enclosed	0 < h ≤ 15	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#1	#2	#2	#3	#4
			3-Corners	#2	#2	#3	#4	#5	#6	N/A
		15 < h ≤ 20	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#2	#2	#2	#4	#4
			3-Corners	#2	#2	#4	#5	#6	#6	N/A
20 < h ≤ 30		1-Field	#1	#1	#1	#1	#1	#1	#2	
		2-Perimeters	#1	#1	#2	#2	#3	#4	#5	
		3-Corners	#2	#3	#4	#5	#6	N/A	N/A	
30 < h ≤ 40	1-Field	#1	#1	#1	#1	#1	#2	#2		
	2-Perimeters	#1	#2	#2	#3	#4	#5	#6		
	3-Corners	#2	#4	#5	#6	N/A	N/A	N/A		

TABLE 2 (CONTINUED): WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER; SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

SYSTEM W-2; ZONE 1, 2 & 3; FIELD, PERIMETER & CORNER AREA INSULATION ATTACHMENT:										
Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)						
				120	130	140	150	160	170	180
D	Open	0 < h ≤ 15	1-Field	#1	#1	#1	#1	#1	#1	#1
			2-Perimeters	#1	#1	#2	#2	#3	#4	#5
			3-Corners	#2	#3	#4	#5	#6	N/A	N/A
		15 < h ≤ 20	1-Field	#1	#1	#1	#1	#1	#1	#2
			2-Perimeters	#1	#1	#2	#2	#3	#4	#5
			3-Corners	#2	#4	#5	#6	#6	N/A	N/A
		20 < h ≤ 30	1-Field	#1	#1	#1	#1	#1	#1	#2
			2-Perimeters	#1	#2	#2	#3	#4	#5	#6
			3-Corners	#3	#4	#5	#6	N/A	N/A	N/A
		30 < h ≤ 40	1-Field	#1	#1	#1	#1	#1	#2	#2
			2-Perimeters	#1	#2	#2	#3	#4	#5	#6
			3-Corners	#3	#4	#6	#6	N/A	N/A	N/A
	Enclosed	0 < h ≤ 15	1-Field	#1	#1	#1	#1	#1	#2	#2
			2-Perimeters	#1	#1	#2	#2	#4	#5	#5
			3-Corners	#2	#4	#5	#6	#6	N/A	N/A
		15 < h ≤ 20	1-Field	#1	#1	#1	#1	#1	#2	#2
			2-Perimeters	#1	#2	#2	#3	#4	#5	#6
			3-Corners	#3	#4	#5	#6	N/A	N/A	N/A
		20 < h ≤ 30	1-Field	#1	#1	#1	#1	#2	#2	#2
			2-Perimeters	#1	#2	#2	#4	#5	#5	#6
			3-Corners	#3	#5	#6	#6	N/A	N/A	N/A
		30 < h ≤ 40	1-Field	#1	#1	#1	#1	#2	#2	N/A
			2-Perimeters	#2	#2	#3	#4	#5	#6	
			3-Corners	#4	#5	#6	N/A	N/A	N/A	

TABLE 3: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER; SYSTEM TYPE D: INSULATION, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);
 Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)

System No.	Deck (See Note 1)	Insulation Layer(s)		Base or Anchor Sheet						Roof Cover		MDP (psf)
		Type	Attach	Base	Fasteners	Attach				Ply	Cap	
						At Lap		Staggered Center Rows(s)				
						W	X	Y	Z			
W-3	Min. 15/32-inch plywood; See Note 1	Min. 1.5-inch, One or more layers, any combination	Prelim. Attach	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base; Yosemite	Flintfast 3 in. Insulation Plates with FlintFast #12 or #14	4	6	3	6	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-97.5

SYSTEM W-3; ZONE 2 & 3; PERIMETER & CORNER AREA BASE SHEET ATTACHMENT:

Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)																							
				120			130			140			150			160			170			180					
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z			
B	Open	0 < h ≤ 30	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6			
		30 < h ≤ 40	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
	Enclosed	0 < h ≤ 30	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
		3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	
C	Open	0 < h ≤ 15	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7			
		15 < h ≤ 20	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7			
		20 < h ≤ 30	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	3	6	6	3	6
30 < h ≤ 40	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6		
	3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	3	6	6	3	6		

TABLE 3 (CONTINUED): WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER; SYSTEM TYPE D: INSULATION, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);
 Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)

SYSTEM W-3; ZONE 2 & 3; PERIMETER & CORNER AREA BASE SHEET ATTACHMENT:																											
Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed - V _{ult} (mph)																							
				120			130			140			150			160			170			180					
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z			
C	Enclosed	0 < h ≤ 15	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	4	7	
		15 < h ≤ 20	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	4	7	6	4	6
		20 < h ≤ 30	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	4	7	6	4	6
		30 < h ≤ 40	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	4	7	6	4	6	7	5	7
D	Open	0 < h ≤ 15	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	4	7	6	4	6
		15 < h ≤ 20	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	4	7	6	4	6	6	4	6
		20 < h ≤ 30	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	4	7	6	4	6	7	5	7
		30 < h ≤ 40	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	7	4	7	6	4	6	6	4	6	6	4	6	6	5	6
	Enclosed	0 < h ≤ 15	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7	6	4	7	6	4	6	6	4	6
		15 < h ≤ 20	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	6	3	6	6	4	6	6	4	6	6	4	6	6	5	6
		20 < h ≤ 30	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6
			3-Corners	6	3	6	6	3	6	6	3	6	7	4	7	6	4	6	6	4	6	6	4	6	6	5	6
		30 < h ≤ 40	2-Perimeters	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	6	3	6	7	4	7
			3-Corners	6	3	6	6	3	6	6	3	6	6	4	6	6	4	6	6	5	6	6	5	6	6	5	6

TABLE 4: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF); SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);
 Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)

System No.	Deck (See Note 1)	Base Sheet						Roof Cover		MDP (psf)
		Base	Fasteners	Attachment				Ply	Cap	
				At Lap		Staggered Center Row(s)				
				W	X	Y	Z			

SYSTEM DESCRIPTION WITH ZONE 1 (FIELD AREA) BASE SHEET ATTACHMENT:

W-4	Min. 19/32-inch plywood; See Note 1	Flintlastic SA NailBase	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	2	8	3	8	(Optional) SBS-SA	SBS-SA	-60.0
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SYSTEM W-4; ZONE 2 & 3; PERIMETER & CORNER AREA BASE SHEET ATTACHMENT:

Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)																							
				120			130			140			150			160			170			180					
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z			
B	Open	0 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8
			3-Corners	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4			
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8
			3-Corners	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	4	3	4	4	3	4	4	3	4
	Enclosed	0 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8
			3-Corners	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	4	3	4	4	3	4
C	Open	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7
			3-Corners	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	4	3	4	4	3	4	4	3	4
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	3	4	4	3	4
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	6	3	6
			3-Corners	8	3	8	8	3	8	7	3	7	4	3	4	4	3	4	4	3	4	4	3	4	4	3	4
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	5	3	5
			3-Corners	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	5	3	5	4	3	4	4	3	4

TABLE 4 (CONTINUED): WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF); SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);
 Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)

SYSTEM W-4; ZONE 2 & 3; PERIMETER & CORNER AREA BASE SHEET ATTACHMENT:

Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)																							
				120			130			140			150			160			170			180					
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z			
C	Enclosed	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	3	4	4	4	4
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	5	3	5
			3-Corners	8	3	8	8	3	8	7	3	7	5	3	5	4	3	4	4	3	4	4	3	4	4	4	4
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	7	3	7	5	3	5
			3-Corners	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	4	4	4	4	4	4	5	4
30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	5	3	5	4	3	4		
	3-Corners	8	3	8	7	3	7	5	3	5	4	3	4	4	4	4	4	4	4	4	4	4	4	5	4		
D	Open	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	4	3	4
			3-Corners	8	3	8	8	3	8	7	3	7	4	3	4	4	3	4	4	4	4	4	4	4	4	5	4
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	7	3	7	4	3	4
			3-Corners	8	3	8	7	3	7	5	3	5	4	3	4	4	3	4	4	4	4	4	4	4	4	5	4
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	5	3	5	4	3	4
			3-Corners	8	3	8	7	3	7	4	3	4	4	3	4	4	4	4	4	5	4	4	4	4	4	5	4
	30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	4	3	4	4	3	4	4	3	4	
		3-Corners	7	3	7	5	3	5	4	3	4	4	3	4	4	4	4	4	5	4	4	4	4	4	6	4	
	Enclosed	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	5	3	5	4	3	4
			3-Corners	8	3	8	7	3	7	5	3	5	4	3	4	4	3	4	4	4	4	4	4	4	4	5	4
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	4	3	4	4	3	4	4	3	4
			3-Corners	8	3	8	7	3	7	6	3	6	5	3	5	4	4	4	4	5	4	4	4	4	4	5	4
20 < h ≤ 30		2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	5	3	5	4	3	4	4	3	4	4	3	4	
		3-Corners	7	3	7	5	3	5	4	3	4	4	3	4	4	4	4	4	5	4	4	4	4	4	6	4	
30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	4	3	4	4	3	4	4	3	4	N/A				
	3-Corners	7	3	7	4	3	4	4	3	4	4	4	4	4	5	4	4	5	4	N/A							

TABLE 5: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF); SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);
 Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)

System No.	Deck (See Note 1)	Base Sheet						Roof Cover		MDP (psf)
		Base	Fasteners	Attachment				Ply	Cap	
				At Lap		Staggered Center Row(s)				
				W	X	Y	Z			

SYSTEM DESCRIPTION WITH ZONE 1 (FIELD AREA) BASE SHEET ATTACHMENT:

W-5	Min. 19/32-inch plywood; See Note 1	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base; Yosemite	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	4	8	3	8	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0
-----	-------------------------------------	--	---	---	---	---	---	---------------------------------	--------------------------	-------

SYSTEM W-5; ZONE 2 & 3; PERIMETER & CORNER AREA BASE SHEET ATTACHMENT:

Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)																							
				120			130			140			150			160			170			180					
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z			
B	Open	0 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8
			3-Corners	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4			
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8
			3-Corners	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	6	3	6	4	3	4			
	Enclosed	0 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8
			3-Corners	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	6	3	6	4	3	4			
C	Open	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	6	3	6	4	3	4	4	4	4			
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	7	3	7
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	4	4			
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	6	3	6
			3-Corners	8	3	8	7	3	7	6	3	6	6	3	6	4	3	4	4	4	4	4	4	5	4		
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	6	3	6
			3-Corners	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	5	4	4	4	5	4		

TABLE 5 (CONTINUED): WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF); SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER
 NOMENCLATURE: W = MINIMUM SIDE LAP WIDTH (INCH); X = MAXIMUM SIDE LAP FASTENER SPACING (INCH O.C.);
 Y = MINIMUM # OF STAGGERED CENTER ROWS; Z = MAXIMUM CENTER ROW FASTENER SPACING (INCH O.C.)

SYSTEM W-5; ZONE 2 & 3; PERIMETER & CORNER AREA BASE SHEET ATTACHMENT:																								
Exposure	Enclosure	Roof Height (ft)	Zone	Ultimate Design Wind Speed – V _{ult} (mph)																				
				120			130			140			150			160			170			180		
				X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
C	Enclosed	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	5	3	5	4	3	4	4	4	4
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6
			3-Corners	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	4	4
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	6	3	6
			3-Corners	8	3	8	7	3	7	6	3	6	5	3	5	4	3	4	4	4	4	4	5	4
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	5	3	5
			3-Corners	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	4	4	4	5	4
D	Open	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6
			3-Corners	8	3	8	8	3	8	7	3	7	5	3	5	4	3	4	4	4	4	4	5	4
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	6	3	6
			3-Corners	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	4	4	4	5	4
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4
			3-Corners	8	3	8	7	3	7	5	3	5	4	3	4	4	4	4	4	5	4	4	5	4
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	7	3	7	5	3	5	4	3	4
			3-Corners	7	3	7	6	3	6	5	3	5	4	3	4	4	4	4	4	5	4	4	6	4
	Enclosed	0 < h ≤ 15	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	5	3	5
			3-Corners	8	3	8	7	3	7	6	3	6	4	3	4	4	3	4	4	4	4	4	5	4
		15 < h ≤ 20	2-Perimeters	8	3	8	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4
			3-Corners	8	3	8	7	3	7	6	3	6	5	3	5	4	4	4	4	5	4	4	5	4
		20 < h ≤ 30	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	5	3	5	4	3	4
			3-Corners	7	3	7	6	3	6	4	3	4	4	3	4	4	4	4	4	5	4	4	6	4
		30 < h ≤ 40	2-Perimeters	8	3	8	8	3	8	8	3	8	7	3	7	6	3	6	4	3	4	N/A		
			3-Corners	7	3	7	6	3	6	4	3	4	4	4	4	4	5	4	4	5	4			



CERTIFICATE OF LIABILITY INSURANCE

ASTOR-1 OP ID: LM
DATE (MM/DD/YYYY)
06/24/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Insurance Affiliates Agency 300 Park Avenue South, Ste 200 Winter Park, FL 32789 James R. Abrams		CONTACT PHONE (A/C, No., Ext) E-MAIL ADDRESS:	FAX (A/C, No.)
INSURED Astor Construction Services, Inc. Mike Denmon 55637 Lee Street Astor, FL 32102		INSURER(S) AFFORDING COVERAGE INSURER A: Security National Ins INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC #	

COVERAGES

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL INSURER (A/C, No., Ext)	POLICY NUMBER	POLICY PERIOD (MM/DD/YYYY)	POST KEY EXP. (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJ. <input type="checkbox"/> LOC AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$ WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	X	SES1107904	12/20/2013	12/20/2014	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (EA occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 100,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPOP AGG \$ 2,000,000 COMBINED SINGLE LIMIT (EA accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (PER ACCIDENT) \$ EACH OCCURRENCE \$ AGGREGATE \$ WC STATUTORY LIMITS OTH: E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Certificate holder is included as additional insured for General Liability where required by written contract.

CERTIFICATE HOLDER

CANCELLATION

City of Belle Isle 1600 Nela Avenue Belle Isle, FL 32809	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE James R. Abrams
--	--

ACORD 25 (2010/05)

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190219



JEFF ATWATER
CHIEF FINANCIAL OFFICER

STATE OF FLORIDA
DEPARTMENT OF FINANCIAL SERVICES
DIVISION OF WORKERS' COMPENSATION

**** CERTIFICATE OF ELECTION TO BE EXEMPT FROM FLORIDA WORKERS' COMPENSATION LAW ****
CONSTRUCTION INDUSTRY EXEMPTION

This certifies that the individual listed below has elected to be exempt from Florida Workers' Compensation law.

EFFECTIVE DATE: 4/20/2013

EXPIRATION DATE: 4/20/2015

PERSON: DENMON

MICHAEL

L

FEIN: 202155485

BUSINESS NAME AND ADDRESS:

ASTOR CONSTRUCTION SERVICES INC

55637 LEE STREET

ASTOR

FL

32102

SCOPES OF BUSINESS OR TRADE:

LICENSED GENERAL CONTRACTOR ROOFING - ALL KINDS AND DRIVER

Pursuant to Chapter 440.05(14), F.S., an officer of a corporation who elects exemption from this chapter by filing a certificate of election under this section may not recover benefits or compensation under this chapter. Pursuant to Chapter 440.05(12), F.S., Certificates of election to be exempt... apply only within the scope of the business or trade listed on the notice of election to be exempt. Pursuant to Chapter 440.05(13), F.S., Notices of election to be exempt and certificates of election to be exempt shall be subject to revocation if, at any time after the filing of the notice or the issuance of the certificate, the person named on the notice or certificate no longer meets the requirements of this section for issuance of a certificate. The department shall revoke a certificate at any time for failure of the person named on the certificate to meet the requirements of this section.

DFS-F2-DWC-252 CERTIFICATE OF ELECTION TO BE EXEMPT REVISED 07-12

QUESTIONS? (850)413-1609

6/28/19



STATE OF FLORIDA AC# 6174726
 DEPARTMENT OF BUSINESS AND
 PROFESSIONAL REGULATION

CCC1329705 06/20/12 118211978

CERTIFIED ROOFING CONTRACTOR
 DENMON, MICHAEL LLOYD
 ASTOR CONSTRUCTION SERVICES INC

IS CERTIFIED under the provisions of Ch. 489 FS
 Expiration date: AUG 31, 2014 L12062600660



STATE OF FLORIDA AC# 6174809
 DEPARTMENT OF BUSINESS AND
 PROFESSIONAL REGULATION

CGC1509339 09/20/12 118212023

CERTIFIED GENERAL CONTRACTOR
 DENMON, MICHAEL LLOYD
 ASTOR CONSTRUCTION SERVICES INC

IS CERTIFIED under the provisions of Ch. 489 FS
 Expiration date: AUG 31, 2014 L12062600743

18219