### **ASPHALT SHINGLES or WOOD SHAKES/SHINGLES**

(NEW CONSTRUCTION - INCLUDE FORM 100 IF "REVISION" OR "ROOFING SUB-PERMIT" IS REQUIRED ON THE PLANS FOR A NEW STRUCTURE)

SITE ADDRESS:	
Sloped Roof Pitch:/ 12 Mean Roof He	ght:Ft Sloped Roof Area (SQRs):
□ <u>AERIAL DEPICTION</u> of Structure is included (per G	ogle Earth, Pictometry, EagleView, etc.)
**SUPPLEMENTAL Details and Information (Identi	y all items related to the <u>site-specific conditions</u> )
□ MANDATED RETROFITS- Existing Wood decks, in	lude Mandated Roof-to-Wall Connection Retrofit Form
Tie-In Detail (FL LICENSED ENGINEER or ROOFING CONSULTAR	r) Repair (<25% ROOF AREA- INCLUDE DETAILED SCOPE-OF-WORK)
Re-Nail Deck (IF STRUCTURE WAS PERMITTED PRIOR TO 5/1/5	(engineering details attached)
Re-cover (one additional layer only/ must be allowed i	( PRODUCT APPROVAL)
Skylights/ Vents/ etc. ( <u>REPLACEMENT ONLY</u> ) Provide	L or NOA #(ATTACHED)
$\Box$ FLAT Roof Deck portion included in Reroofing Sc	P <b>e</b> (PROVIDE FORM 400-FLAT ROOF)

### UNDERLAYMENT Method & Material (Select one):

<u>A</u>		<u>B</u>			<u>c</u>	<u>[</u>	<u>)</u>		<u>E</u>	
Self-Adhere	ed	□ <u>4" Wide</u>	<u>Strip</u>	$\Box 3^{3/4}$	Wide Strip	□ <u>2 L</u>	ayers of	$\Box$ <u>2</u>	Layers	
(Direct to Dec	<u>ck</u> )	(ASTM D1970)		( <u>A</u> A	<u>MA 711</u> )	<u>30</u>	# Felt	<u>Synt</u>	thetic U/L	
**NOT an Opti Wood Shake/Shi		Over all Joir (Per Table R9			Joints/Seams ble R905.1.1.1)	(ASTN	M Approved)		T an Option Shake/Shingl	
Self – Adher (ASTM D19		4" Wide Str adhering	rip of self- polymer-		Vide Strip of ering flexible	Two ASTM	layers of D226 Type	Two reinfor	layers ced synthe	of etic
Polymer-Mod		modified	bitumen	flashing	tape per		STM D4869		ayment.	
Bitumen		membrane p		AAMA	711 applied	Туре	III or IV.	(Provid	de FL/NO	<u>A</u> ).
Underlayme	ent	D1970 app		over all j	oints with <u>30#</u>	Layers	to be lapped	Layer t	to be lapped	1 by
Applied direc	tly to	all joints wit	th <u>30# felt</u>	felt on to	<u>op</u>	<u>at 19"</u>	<u>O.C</u>	<u>min.</u> 1	nalf width	of
entire roof d	leck	<u>on top</u>						rolls.		

### **PRODUCT** Specifications:

<u>Manufacturer</u>	Product Name	<u>Material Type</u>	NOA or FL Approval #

## Applicant's Affidavit: I hereby certify that I have read the material on all pages of this document and have FULLY provided ALL the information requested.

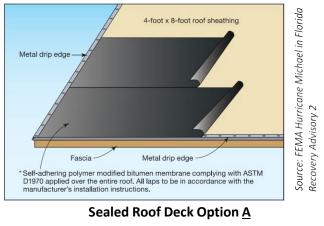
Qua	lifier	Name
-----	--------	------

Qualifier Signature

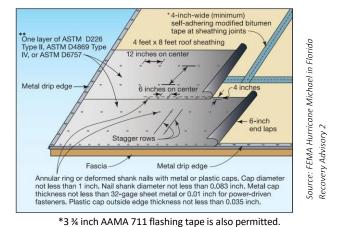
Date

Town of Haverhill Building Department Phone: (561) 689-0370 Ext. 2 - email: jwible@townofhaverhill-fl.gov Source: PBCBZ Accessed: July 18, 2022

## Underlayment Options (CIRCLE One)

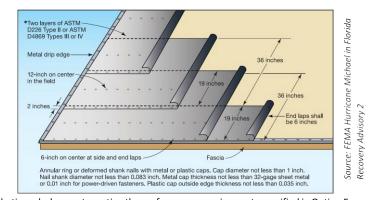


[NOTE: <u>A</u> is NOT an Option for Wood Shake/Shingle]



\*\*Synthetic underlayment meeting the performance requirements specified in Option E may also be used.

#### Sealed Roof Deck Option <u>B</u> or <u>C</u>



\*Synthetic underlayment meeting the performance requirements specified in Option E may also be used.

Sealed Roof Deck Option <u>D</u> or <u>E</u> [NOTE: <u>E</u> is NOT an Option for Wood Shake/Shingle]

### **CONCRETE or CLAY TILE**

(NEW CONSTRUCTION – INCLUDE FORM 100 IF "REVISION" OR "ROOFING SUB-PERMIT" IS REQUIRED ON THE PLANS FOR A NEW STRUCTURE)

SITE ADDRESS:						
Sloped Roof Pitch:	/ 12*	Mean Roof Height:	Ft	Sloped Roof Area (SQRs):		
Roof Design:	□ Gable Ro □ Hip Roof		<b>sign Pressures:</b> ned from Tables on P			
$\Box$ AERIAL DEPICTION of Structure is included (per Google Earth, Pictometry, EagleView, etc.)						
**SUPPLEMENTAL	Details and In	formation (Identify all	items related	to the site-specific conditions)		
<ul> <li>MANDATED RETROFITS- Existing Wood decks, include Mandated Roof-to-Wall Connection Retrofit Form</li> <li>Tie-In Detail (DESIGN PROFESSIONAL or ROOFING CONSULTANT)</li> <li>Re-Nail Deck (IF STRUCTURE WAS PERMITTED PRIOR TO 5/1/99)</li> <li>Battens (Engineering may be required if fasteners not in Approval)</li> <li>Skylights/ Vents/ etc. (REPLACEMENT ONLY)</li> <li>Provide FL or NOA #(ATTACHED)</li> <li>FLAT Roof Deck portion included in Reroofing Scope (PROVIDE FORM 400-FLAT ROOF)</li> </ul>						
BASE SHEET/CAP SI	<u>HEET</u> Specific	ations: <u>(Identify One S</u>	ystem)			
		Double Plv		Single Plv		

	Double Ply		<u>Single Ply</u>
Base Sheet	Cap Sheet		Direct-to-Deck
Туре:	Self-Adhered	□ Other	Self-Adhered
<ul> <li>Mechanically Attached</li> <li>Self-Adhered</li> <li>(EXPOSURE NOT TO EXCEED 90 DAYS.)</li> </ul>	□ Heat Applied □ Cold Applied FL or NOA# System:		Type: FL or NOA# System:

### **<u>ROOF TILE</u>** Specifications:

<u>Manufacturer</u>	Product Name	<u>Material Type</u>	NOA or FL Approval #

### **<u>ROOF TILE ATTACHMENT</u>** Details (Attachment details SHALL be identified/circled in Product Approval)

MECHANICAL Per: □ FRSA or □ NOA	FL or NOA#	FOAM ADHESIVE *	MORTAR * FL or NOA#
<ul> <li># Ring Shank Nails</li> <li># Smooth Shank Nails, w/clip</li> <li># 8 Screws</li> </ul>	Paddy:	Paddy Size: Paddy Weight (g): Moment Resistance (ft-lbf):	Allowable Moment Resistance: (ft-lbf) Per:

\* Slopes over 6/12 require additional mechanical fasteners (per FL/NOA – FRSA Manual or RAS 120, as applicable)

## Applicant's Affidavit: I hereby certify that I have read the material on all pages of this document and have FULLY provided ALL the information requested.

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### **TABLE 2 GC**

Gable Roof – ASCE 7-16	
Exposure C – Tile Factor = 1.407	ft³

Roof SlopesRoof Height (ft)Roof ZonesMa (ft-lbf)10-15LPZ36.1HPZ41.520HPZ44.020HPZ44.0HPZ44.0HPZ44.0HPZ44.240HPZ44.240HPZ44.250LPZ46.350HPZ46.360HPZ55.260HPZ55.260HPZ31.6HPZ31.6HPZ33.420HPZ33.460HPZ33.440HPZ36.4100HPZ36.440HPZ36.461260HPZ60HPZ55.2100-15LPZ38.761260HPZ40.155.212127.1121230.1612 to 12127.140HPZ31.240HPZ31.2612 to 12127.140HPZ33.140HPZ33.140HPZ33.1612 to 12127.140HPZ33.140HPZ33.140HPZ33.140HPZ34.750HPZ34.7612 to 121060HPZ40.1HPZ34.740.1HPZ34.740.1		Mean		170
(if)20ines(ifinity)(if)1236.1HPZ36.141.520141.220HPZ44.0HPZ44.044.0HPZ44.044.0HPZ44.240HPZ50.850LPZ46.350HPZ53.260HPZ55.260HPZ55.26120.15HPZ4.5:12 to less than 6:120.1510114.5:12 to less than 6:123011111230111112301111121131114115111611171181191101101111121131141151161121121121141151161171181191191101111121131141151161171 <td></td> <td>Roof Height</td> <td></td> <td></td>		Roof Height		
0-15HPZ41.520LPZ38.240LPZ44.040HPZ44.240HPZ44.240HPZ50.850LPZ46.350HPZ53.2600HPZ55.2600HPZ31.6HPZ44.0400HPZ33.46120.15HPZ40LPZ33.461230LPZ61230LPZ61260HPZ61260HPZ6120.15LPZ61230LPZ61230LPZ61230LPZ61230LPZ61220HPZ40LPZ31.240LPZ31.261240LPZ30LPZ33.161240LPZ30LPZ33.140HPZ43.740HPZ43.750HPZ33.140HPZ46.440HPZ46.450HPZ46.440HPZ46.4	Slopes	-	Zones	(ft-lbf)
11111201111130111113011111401111140111115011111501111160111		0.15	LPZ	36.1
20HPZ44.030LPZ41.630HPZ47.940LPZ44.240HPZ50.850LPZ46.350HPZ53.260HPZ55.260LPZ31.6HPZ31.610-15LPZ33.420HPZ33.440HPZ36.410116:1230LPZ36.440HPZ36.4101250.86:1260HPZ36.76:120HPZ50.86:12 to0HPZ55.26:12 to0HPZ55.26:12 to30LPZ37.96:12 to30LPZ31.26:12 to30LPZ31.26:12 to30LPZ33.16:12 to40HPZ40.112:1240HPZ43.750HPZ33.1HPZ40.1HPZ50HPZ40.112:1240HPZ50HPZ40.1HPZ40.4HPZ40.412:1240HPZ40.1HPZ40.1HPZ40.1HPZ40.1HPZ40.1HPZ40.1HPZ40.1HPZ40.1HPZ40.1HPZ40.1 </td <td></td> <td>0-15</td> <td>HPZ</td> <td>41.5</td>		0-15	HPZ	41.5
Less than 4.5:1230LPZ44.0HPZ41.6HPZ47.940HPZ50.850LPZ46.350HPZ53.260HPZ55.260HPZ55.260HPZ31.6HPZ44.040HPZ33.461220HPZ30LPZ36.4HPZ44.040HPZ44.061230LPZ61230LPZ61260HPZ61260HPZ61260LPZ61260LPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260HPZ61260101011601260126012601260141015601610176018101960196010101010101010101010 <t< td=""><td></td><td>20</td><td>LPZ</td><td>38.2</td></t<>		20	LPZ	38.2
Less than 4.5:1230HPZ47.940LPZ44.240HPZ50.810010250.210010255.210010231.610010231.610010231.610010231.610010231.610010231.610010231.610010231.610010231.610010236.410010236.410010236.410010236.410010236.410010236.410010236.410010236.410010236.410010236.410010236.410010236.410010237.910010236.41212201021212201021212301021212401021212401021212401021212401021212401021212401021212401021212401021212401021212401021213102102121440102121540102 <td></td> <td>20</td> <td>HPZ</td> <td>44.0</td>		20	HPZ	44.0
Less than 4.5:12         Impsoint		20	LPZ	41.6
4.5:1240LPZ44.2HPZ50.850LPZ46.3HPZ53.260HPZ55.2HPZ31.6HPZ41.51120HPZ33.411120HPZ36.411130HPZ36.440HPZ36.440HPZ36.450HPZ36.450HPZ36.46:1260HPZ6:1260LPZ6:120-15LPZ6:12201HPZ55.2111120111 <td></td> <td>30</td> <td>HPZ</td> <td>47.9</td>		30	HPZ	47.9
40HPZ50.811150111153.2111011		40	LPZ	44.2
50         HPZ         53.2           60         LPZ         48.0           HPZ         55.2           HPZ         31.6           HPZ         41.5           20         HPZ         41.5           4.5:12 to         20         HPZ         44.0           20         HPZ         44.0           4.5:12 to         30         LPZ         36.4           30         HPZ         47.9           6:12         40         HPZ         50.8           6:12         40         HPZ         50.8           6:12         60         HPZ         50.2           60         HPZ         50.8           1PZ         53.2         40.5           60         HPZ         53.2           60         HPZ         55.2           1PZ         55.2         1PZ           60         HPZ         20.1           1PZ         37.9         1PZ           20         HPZ         40.1           1PZ         31.2         1PZ           30         HPZ         43.7           1PZ         33.1         1PZ		40	HPZ	50.8
Implement         Implement         53.2           60         Implement         48.0           HPZ         55.2           HPZ         31.6           HPZ         41.5           20         Implement           30         Implement           30         Implement           40         Implement           40         Implement           40         Implement           40         Implement           40         Implement           60         Implement           60         Implement           60         Implement           60         Implement           40         Implement           Implement         Implement           40         Implement           40         Implement           40         Implement           40         Implement           <		50	LPZ	46.3
60         HPZ         55.2 $-15$ $LPZ$ 31.6 $HPZ$ 41.5 $20$ $LPZ$ 33.4 $20$ $LPZ$ 33.4 $20$ $HPZ$ 44.0 $20$ $HPZ$ 44.0 $30$ $LPZ$ 36.4 $30$ $LPZ$ 36.4 $40$ $HPZ$ 47.9 $40$ $HPZ$ 40.5 $40$ $HPZ$ 50.8 $6:12$ $60$ $HPZ$ 40.5 $60$ $HPZ$ 53.2 $60$ $HPZ$ 55.2 $60$ $HPZ$ 55.2 $60$ $HPZ$ 37.9 $LPZ$ 31.2         31.2 $6:12$ to $30$ $HPZ$ 40.1 $40$ $HPZ$ 33.1 $HPZ$ 43.7         40.4 $HPZ$ 46.4         40.4 $12:12$ $40.1$ $HPZ$ 34.7		50	HPZ	53.2
HPZ         55.2           0-15         LPZ         31.6           HPZ         41.5         41.5           20         HPZ         44.0           20         HPZ         44.0           4.5:12 to         30         LPZ         36.4           30         LPZ         36.4         44.0           4.5:12 to         30         LPZ         36.4           6:12         40         HPZ         47.9           40         LPZ         38.7         40.5           50         LPZ         38.7           6:12 to         60         HPZ         50.8           6:12 to         60         HPZ         55.2           6:12 to         0-15         LPZ         27.1           HPZ         25.2         27.1         40.1           12:12         20         HPZ         26.8           HPZ         31.2         31.2         31.2           6:12 to         40         LPZ         33.1           HPZ         46.4         40.1         46.4           12:12         40.1         HPZ         34.7           50         HPZ         34.7 </td <td></td> <td rowspan="2">60</td> <td>LPZ</td> <td>48.0</td>		60	LPZ	48.0
0-15         HPZ         41.5           20         LPZ         33.4           4.5:12 to less than 6:12         30         LPZ         36.4           40         HPZ         47.9           40         LPZ         38.7           40         HPZ         40.5           6:12         40         LPZ         38.7           40         LPZ         50.8         LPZ         40.5           50         LPZ         40.5         14.7         40.5           60         HPZ         53.2         40.5         14.7         42.0           60         HPZ         55.2         40.5         14.7         42.0           60         HPZ         55.2         14.7         40.1         14.7         37.9           20         LPZ         27.1         14.7         31.2         31.2         31.2           6:12 to 12:12         30         LPZ         33.1         14.7         46.4         46.4           50         HPZ         34.7         50.6         14.7         50.6         14.7			HPZ	55.2
4.5:12 to         20         LPZ         33.4           4.5:12 to         30         LPZ         36.4           40         HPZ         44.0           40         HPZ         36.4           6:12         40         HPZ         47.9           40         HPZ         50.8           1         LPZ         38.7           40         HPZ         50.8           1         HPZ         40.5           50         LPZ         40.5           50         HPZ         53.2           60         HPZ         55.2           60         HPZ         55.2           60         HPZ         55.2           60         HPZ         20.1           1         HPZ         37.9           20         LPZ         31.2           6:12 to         30         LPZ         31.2           6:12 to         40         LPZ         33.1           HPZ         46.4         40.4         46.4           50         HPZ         34.7           50         HPZ         34.7		0-15	LPZ	31.6
20         HPZ         44.0           30         LPZ         36.4           4.5:12 to less than 6:12         30         HPZ         47.9           40         HPZ         38.7           40         HPZ         50.8           40         HPZ         50.8           40         HPZ         50.8           50         HPZ         40.5           50         HPZ         53.2           60         HPZ         55.2           60         HPZ         55.2           60         HPZ         55.2           60         HPZ         37.9           20         LPZ         37.9           20         LPZ         26.8           HPZ         30.1         1           6:12 to 12:12         40         LPZ         31.2           6:12 to 12:12         40         LPZ         33.1           HPZ         46.4         46.4           50         HPZ         34.7           50         HPZ         48.6			HPZ	41.5
		20	LPZ	33.4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			HPZ	44.0
$\begin{array}{c c c c c c c } \hline \mbox{$HPZ$} & 47.9 \\ \hline \mbox{$HPZ$} & 38.7 \\ \hline \mbox{$HPZ$} & 50.8 \\ \hline \mbox{$HPZ$} & 53.2 \\ \hline \mbox{$HPZ$} & 55.2 \\ \hline \mbox{$HPZ$} & 37.9 \\ \hline \mbox{$HPZ$} & 40.1 \\ \hline \mbox{$HPZ$} & 43.7 \\ \hline \mbox{$HPZ$} & 43.7 \\ \hline \mbox{$HPZ$} & 43.7 \\ \hline \mbox{$HPZ$} & 46.4 \\ \hline \mbox{$HPZ$} & 34.7 \\ \hline \mbox{$HPZ$} & 48.6 \\ \hline $H$		30	LPZ	36.4
6:12 $40$ $LPZ$ $38.7$ $HPZ$ $50.8$ $50$ $LPZ$ $40.5$ $50$ $HPZ$ $53.2$ $60$ $HPZ$ $55.2$ $60$ $HPZ$ $27.1$ $HPZ$ $27.1$ $HPZ$ $0-15$ $HPZ$ $27.1$ $HPZ$ $27.1$ $HPZ$ $20$ $LPZ$ $26.8$ $HPZ$ $40.1$ $HPZ$ $40$ $LPZ$ $31.2$ $40$ $HPZ$ $43.7$ $40$ $HPZ$ $43.7$ $40$ $HPZ$ $34.7$ $50$ $HPZ$ $34.7$ $48.6$ $HPZ$ $48.6$			HPZ	47.9
HPZ         50.8           LPZ         40.5           50         HPZ         53.2           HPZ         53.2         42.0           60         HPZ         55.2           HPZ         27.1         55.2           1HPZ         37.9         142.0           1HPZ         27.1         26.8           1HPZ         26.8         1492           20         1LPZ         26.8           1HPZ         31.2         40.1           30         1LPZ         31.2           40         1LPZ         33.1           12:12         40         14.7           50         1LPZ         34.7           50         1HPZ         48.6		40	LPZ	38.7
50         HPZ         53.2           60         LPZ         42.0           HPZ         55.2           1         LPZ         27.1           1         HPZ         37.9           20         LPZ         26.8           1         HPZ         40.1           20         LPZ         31.2           30         LPZ         33.1           12:12         40         LPZ         33.1           6:12 to         40         LPZ         33.1           6:12 to         12:12         40         LPZ         33.1           6:12 to         12:12         40.1         12:12         12:12			HPZ	50.8
		50	LPZ	40.5
			HPZ	53.2
		00	LPZ	42.0
		00	HPZ	55.2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		0.15	LPZ	27.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		0-15	HPZ	37.9
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		20	LPZ	26.8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		20	HPZ	40.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		30	LPZ	31.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		30	HPZ	43.7
$   \begin{array}{c cccccccccccccccccccccccccccccccccc$		40	LPZ	33.1
50 HPZ 48.6	12:12	40	HPZ	46.4
HPZ 48.6		50	LPZ	34.7
60 LPZ 36.0			HPZ	48.6
		60	LPZ	36.0

TABLE 2 HC Hip Roof – ASCE 7-16 Exposure C – Tile Factor = 1.407 ft<sup>3</sup>

Expo	sure C – Til	e Fact	or = 1.40
	Mean		170
Roof	Roof	Roof	Ma
Slopes	Height (ft)	Zones	(ft-lbf)
	0-15	LPZ	32.5
	0.10	HPZ	32.5
	20	LPZ	34.4
	20	HPZ	34.4
	30	LPZ	37.5
Less than	50	HPZ	37.5
4.5:12	40	LPZ	39.8
	40	HPZ	39.8
		LPZ	41.7
	50	HPZ	41.7
	00	LPZ	43.2
	60	HPZ	43.2
	0.45	LPZ	27.1
	0-15	HPZ	27.1
		LPZ	28.7
	20	HPZ	28.7
		LPZ	31.2
4.5:12 to	30	HPZ	31.2
less that 6:12	40	LPZ	33.1
-	40	HPZ	33.1
	50	LPZ	34.7
	50	HPZ	34.7
	00	LPZ	36.0
	60	HPZ	36.0
		LPZ	34.3
	0-15	HPZ	41.5
	66	LPZ	36.3
	20	HPZ	44.0
	66	LPZ	39.5
	30	HPZ	47.9
6:12 to	10	LPZ	42.0
12:12	40	HPZ	50.8
		LPZ	44.0
	50	HPZ	53.2
	60	LPZ	45.6
l 			

LPZ = Low Pressure Zones 1, 2e, 2n, & 2r for Gable Roofs HPZ = High Pressure Zones 3e & 3r for Gable Roofs

LPZ - Low Pressure Zones 1, 2e & 2r for Hip Roofs HPZ - High Pressure Zones 3 for Hip Roofs

 $h/B \le 0.80$  values used where applicable (most conservative)

\*\*FOR MEAN ROOF HEIGHTS OVER 60', DESIGN PRESSURES MUST BE DETERMINED BY DESIGN PROFESSIONAL

### **METAL ROOFING**

(NEW CONSTRUCTION – INCLUDE FORM 300 IF "REVISION" OR "ROOFING SUB-PERMIT" IS REQUIRED ON THE PLANS FOR A NEW STRUCTURE)

SITE ADDRESS:					
Sloped Roof Pitch:	/ 12 Mea	n Roof Height:	Ft	Sloped Roof Are	a (SQRs):
	of Structure is included	l (per Google Earth,	Pictomet	try, EagleView, etc	.)
	T Pressure:	(psf)			
**SUPPLEMENTAL	Details and Informatio	n (Identify all items	related t	o the site-specific	conditions)
	ROFITS- Existing Wood	d decks, include <b>Man</b>	dated Ro	oof-to-Wall Conne	ction Retrofit Form
🗌 Tie-In Detail (FLI	ICENSED ENGINEER or ROOFIN	IG CONSULTANT)	epair (<259	% ROOF AREA- INCLUDE D	ETAILED SCOPE-OF-WORK)
🗌 Re-Nail Deck (IF	STRUCTURE WAS PERMITTED F	PRIOR TO 5/1/99)	attens (EN	GINEERING DETAILS ATTA	CHED)
Skylights/ Vents	5/ etc. (REPLACEMENT ONLY	Provide FL or NOA	#		(ATTACHED)
FLAT Roof Deck	portion included in Re	roofing Scope (PROVID	E FORM 400	)-FLAT ROOF)	
UNDERLAYMENT Meth	od & Material (Select	one Method):	☐ FL or N	IOA #	(ATTACHED)
<u>A</u>	<u>B</u>	<u>C</u>		<u>D</u>	<u>E</u>
□ Self-Adhered	□ 4" Wide Strip	$\Box$ 3 <sup>3</sup> / <sub>4</sub> " Wide	Strip	□ 2 Lavers of	$\Box$ 2 Lavers

Self-Adhered	□ <u>4" Wide Strip</u>	$\Box$ <u>3 <sup>3</sup>/4</u> " Wide Strip	$\Box$ <u>2 Layers of</u>	$\Box$ <u>2 Layers</u>
(Direct to Deck)	<u>(ASTM D1970)</u>	( <u>AAMA 711</u> )	<u>30# Felt</u>	Synthetic U/L
**NOT an Option for Wood Shake/Shingle**	Over all Joints/Seams (Per Table R905.1.1.1)	Over all Joints/Seams (Per Table R905.1.1.1)	(ASTM Approved)	**NOT an Option for Wood Shake/Shingle**
Self – Adhered	4" Wide Strip of self-	3 <sup>3</sup> / <sub>4</sub> " Wide Strip of	Two layers of	Two layers of
(ASTM D1970)	adhering polymer-	self-adhering flexible	ASTM D226 Type II	reinforced synthetic
Polymer-Modified	modified bitumen	flashing tape per	or ASTM D4869	underlayment.
Bitumen Underlayment	membrane per ASTM	AAMA 711 applied	Type III or IV.	(Provide FL/NOA).
Applied directly to entire	D1970 applied over all	over all joints with 30#	Layers to be lapped	Layer to be lapped by
roof deck	joints with <u>30# felt on top</u>	<u>felt on top</u>	<u>at 19" O.C</u>	min. half width of rolls.

### METAL PANEL SPECIFICATIONS:

<u>Manufacturer</u>	Product Name	Panel Type	FL or NOA Approval #

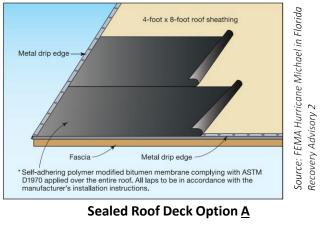
### **METAL PANEL ATTACHMENT**: (Attachment details **SHALL be identified/ circled** in Product Approval)

Maximum Allowed Pressure (FL/NOA)	FASTENER T	FASTENER/CLIP Spacing	
	□ Fasteners*	Clips*	
(psf)	*Screws (size & quantity): _		(inches)

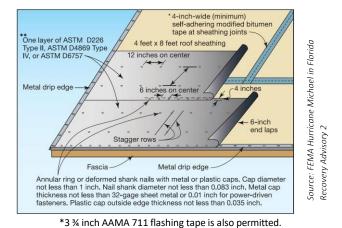
## Applicant's Affidavit: I hereby certify that I have read the material on all pages of this document and have FULLY provided ALL the information requested.

				pplications. If the roof heig 1 30 feet, these charts do no				
				MEAN ROOF HE	IGHT = 15 FEET			
EL.	Durf			Gable Roof			Hip R	oof
Flat	Roof	1.51	to 4:12	4.1 to 6:12	6.1 to 12:12	1.51 t	to 4:12	4.1 to 6:12
Positive*	15.4/38.0	Positi	ive 23.2	Positive 23.2	Positive 34.7	Positiv	ve 28.3	Positive 28.3
Zone		Zone	Roof	Roof	Roof	Zone	Roof	Roof
1	-60.5	1, 2e	-70.1	-54	-63.7	1	-63.7	-50.8
1'	-34.8	2n & 2r	-102	-86.2	-70.1	2e	-89.4	-70.1
2	-79.8	3e	-102	-86.2	-86.7	2r	-83	-70.1
3*	-109	3r	-102	-102	-70.1	3	-89.4	-70.1
				MEAN ROOF HEI	GHT = 20 FEET			
				Gable Roof		Hip R	oof	
Flat	Roof	1.51	o 4:12	4.1 to 6:12	6.1 to 12:12	1.51 t	o 4:12	4.1 to 6:12
Positive*	16.4/40.3	Posit	ve 24.6	Positive 24.6	Positive 36.9	Positiv	ve 30.1	Positive 30.1
Zone		Zone	Roof	Roof	Roof	Zone	Roof	Roof
1	-64.2	1, 2e	-74.5	-57.4	-67.7	1	-67.6	-54
1'	-36.9	2n & 2r	-109	-91.5	-74.5	2e	-95	-74.5
2	-84.8	3e	-109	-91.5	-92.1	2r	-88.1	-74.5
3*	-116	3r	-129	-108	-74.5	3	-95	-74.5
		<b>I</b>		MEAN ROOF HEI	GHT = 25 FEET			
	D C	Gable Roof				Hip Roof		
Fla	Roof	1.51	o 4:12	4.1 to 6:12	6.1 to 12:12	1.51 to 4:12		4.1 to 6:12
Positive*	17.2/42.3	Posit	ve 25.8	Positive 25.8	Positive 38.7	Positiv	ve 31.5	Positive 31.5
Zone		Zone	Roof	Roof	Roof	Zone	Roof	Roof
1	-67.3	1, 2e	-78.1	-60.2	-70.9	1	-70.9	-58.6
1'	-38.7	2n & 2r	-114	-96	-78.1	2e	-99.6	-78.1
2	-88.8	3e	-114	-96	-96.6	2r	-92.4	-78.1
3*	-121	3r	-135	-113	-78.1	3	-99.6	-78.1
				MEAN ROOF HEI	<u>GHT = 30 FEET</u>			
				Gable Roof			Hip R	oof
Flat	Roof	1.51	o 4:12	4.1 to 6:12	6.1 to 12:12	1.51 t	o 4:12	4.1 to 6:12
Positive*	17.9/43.9	Posit	ve 26.8	Positive 26.8	Positive 40.2	Positiv	ve 32.8	Positive 32.8
Zone		Zone	Roof	Roof	Roof	Zone	Roof	Roof
1	-70	1, 2e	-81.1	-62.6	-73.7	1	-73.7	-58.8
1'	-40.2	2n & 2r	-118	-99.8	-81.1	2e	-103	-81.1
2	-92.3	3e	-118	-99.8	-100	2r	-96	-81.1
3*	-126	3r	-141	-118	-81.1	3	-103	-81.1

## Underlayment Options (CIRCLE One)

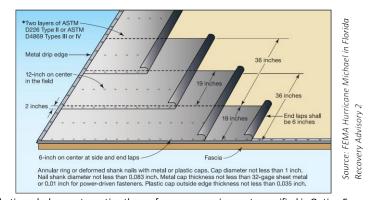






\*\*Synthetic underlayment meeting the performance requirements specified in Option E may also be used.

#### Sealed Roof Deck Option <u>B</u> or <u>C</u>



\*Synthetic underlayment meeting the performance requirements specified in Option E may also be used.

Sealed Roof Deck Option <u>D</u> or <u>E</u> [NOTE: <u>E</u> is NOT an Option for Wood Shake/Shingle]

### **FLAT ROOFING**

(NEW CONSTRUCTION – INCLUDE FORM 400 IF "REVISION" OR "ROOFING SUB-PERMIT" IS REQUIRED ON THE PLANS FOR A NEW STRUCTURE)

Roof Area (SQRs):	Roof Height:	(ft)
ogle Earth, Pictometry, Ea	gleView, etc.)	
(psf) * <u>Perimeter/Corn</u>	<b>er</b> (Zones 2,3):	(psf)
n center each way fastening of ti -builder. <b>Sify all items related to the</b> <b>Stude Mandated Roof-to-W</b> T) Repair (<25% ROOF AREA-II 19) Sheath-Over (ENGINEERI 10ST BE COMPATIBLE WITH EXISTING FL or NOA # (If A>B: See En  roval or Provide Additional Specifi	n-tagged base sheets wi site-specific conditi /all Connection Retu NCLUDE DETAILED SCOPE-C NG DETAILS ATTACHED) MATERIALS) (ATTA hanced Fastening Requiren	thin 4 ft. of ions) rofit Form DF-WORK) ACHED)
System:		
	Roof Area (SQRs): ogle Earth, Pictometry, Ea (psf) * <u>Perimeter/Corn</u> PPROVED TESTING AGENCY) CHITECT or ROOFING CONSULTANT- n center each way fastening of ti builder. ify all items related to the lude Mandated Roof-to-W (If ADD A ADD A ADD A ADD A ADD A ADD A D D Sheath-Over (ENGINEERI UST BE COMPATIBLE WITH EXISTING FL or NOA # n (If ADD A ADD A ADD A ADD A ADD A roval or Provide Additional Speci ets/ Cap Sheet/ Other) (If ADD A ADD A ADD A ADD A ADD A (If ADD A ADD A ADD A ADD A ADD A (If ADD A ADD A ADD A ADD A ADD A ADD A (If ADD A ADD A ADD A ADD A ADD A ADD A (If ADD A ADD A ADD A ADD A ADD A ADD A (If ADD A ADD A ADD A ADD A ADD A ADD A (If ADD A ADD A (If ADD A AD	Roof Area (SQRs):Roof Height:         ogle Earth, Pictometry, EagleView, etc.)        (psf) *Perimeter/Corner (Zones 2,3):         PPROVED TESTING AGENCY)         CHITECT or ROOFING CONSULTANT- ONLY IF allowed in product the center each way fastening of tin-tagged base sheets with builder.         ify all items related to the site-specific condit         Iude Mandated Roof-to-Wall Connection Returns         m        (If A>B: See Enhanced Fastening Requirer         roval or Provide Additional Specifications):         ets/ Cap Sheet/ Other)

SIMPLIFIED ROOF UPLIFT CHART FOR ROOFING APPLICATIONS
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This simplified chart represents the worse-case wind pressures for the various roof slopes and heights. This chart is based on a Tributary Area = 10 SF which is required for roofing applications. If the roof height is less than 30 feet, but not exactly 15, 20, or 25 feet, you will need to go to the next higher roof height. If your roof is higher than 30 feet, these charts do not apply. Refer to Roof Chart Diagrams on Page 1 for Roof Zone Locations.

	$\underline{\text{MEAN ROOF HEIGHT}} = 15 \text{ FEET}$								
	_			Gable Roof		Hip I		Hip Roof	
Flat	Roof	1.51	to 4:12	4.1 to 6:12	6.1 to 12:12	1.51	to 4:12	4.1 to 6:12	
Positive*	15.4/38.0	Posit	ive 23.2	Positive 23.2	Positive 34.7	Positi	ve 28.3	Positive 28.3	
Zone		Zone	Roof	Roof	Roof	Zone	Roof	Roof	
1	-60.5	1, 2e	-70.1	-54	-63.7	1	-63.7	-50.8	
1'	-34.8	2n & 2r	-102	-86.2	-70.1	2e	-89.4	-70.1	
2	-79.8	3e	-102	-86.2	-86.7	2r	-83	-70.1	
3*	-109	3r	-102	-102	-70.1	3	-89.4	-70.1	

#### MEAN ROOF HEIGHT = 20 FEET

				Gable Roof			Hip	Roof
Flat	Roof	1.51	o 4:12	4.1 to 6:12	6.1 to 12:12	1.51 to 4:12		4.1 to 6:12
Positive*	16.4/40.3	Posit	ve 24.6	Positive 24.6	Positive 36.9	Positi	ve 30.1	Positive 30.1
Zone		Zone	Roof	Roof	Roof	Zone	Roof	Roof
1	-64.2	1, 2e	-74.5	-57.4	-67.7	1	-67.6	-54
1'	-36.9	2n & 2r	-109	-91.5	-74.5	2e	-95	-74.5
2	-84.8	3e	-109	-91.5	-92.1	2r	-88.1	-74.5
3*	-116	3r	-129	-108	-74.5	3	-95	-74.5

#### MEAN ROOF HEIGHT = 25 FEET Gable Roof Hip Roof Flat Roof 1.51 o 4:12 6.1 to 12:12 1.51 to 4:12 4.1 to 6:12 4.1 to 6:12 17.2/42.3 Positve 25.8 Positive 25.8 Positive 38.7 Positive 31.5 Positive 31.5 Positive\* Zone Zone Roof Roof Roof Zone Roof Roof 1 -67.3 1, 2e -78.1 -60.2 -70.9 1 -70.9 -58.6 1' -38.7 2n & 2r -114 -96 -78.1 2e -99.6 -78.1 2 3e 2r -88.8 -114 -96 -96.6 -92.4 -78.1 3\* -121 3r -135 -113 -78.1 3 -99.6 -78.1

				MEAN ROOF HE	IGHT = 30 FEET			
	_		Gable Roof Hip R		.oof			
Flat	Roof	1.51	o 4:12	4.1 to 6:12	6.1 to 12:12	1.51 to 4:12 4.1 t		4.1 to 6:12
Positive*	17.9/43.9	Posit	ve 26.8	Positive 26.8	Positive 40.2	Positi	ve 32.8	Positive 32.8
Zone		Zone	Roof	Roof	Roof	Zone	Roof	Roof
1	-70	1, 2e	-81.1	-62.6	-73.7	1	-73.7	-58.8
1'	-40.2	2n & 2r	-118	-99.8	-81.1	2e	-103	-81.1
2	-92.3	3e	-118	-99.8	-100	2r	-96	-81.1
3*	-126	3r	-141	-118	-81.1	3	-103	-81.1
*If Parapet >	>= 3Ft occurs a	around entire b	ouilding use the s	ame Zone 2 pressure for Z	one 3 and use the higher pos	itive pressure s	hown.	

## **Mandated Retrofits of Roof-to-Wall Connection**

# THIS FORM MUST BE FILLED OUT AND INCLUDED WITH ALL RE-ROOFING APPLICATIONS FOR EXISTING STRUCTURES WITH WOOD ROOF DECKS.

### Address:

For the purpose of this document, "Sections" as cited below are from the Florida Building Code-Existing Building, 7<sup>TH</sup> Edition (2020) Section 706.8, unless otherwise noted.

When the roof covering on an existing structure with a wood roof deck is removed and replaced...the structure shall be evaluated for mandated retrofits of the roof-to-wall connections in accordance with Section 706.8.

1.	<b>Yes</b> – The application	nal construction of the building applied for on or after <u>Janu</u> date was on or after January 1, 1990. e and permit submittal. (Attach documentation verifying the ap	
		late was prior to January 1, 1990. <i>ions and details below</i> .	
2.	Applicant must provide of	one of the following to document the value of the building.	
	Copy of current home	insurance summary sheet.	
	Copy of the latest Tax Value determines the	Bill or Property Appraiser Valuation for the structure (the <i>Appr</i> threshold amount).	raised Improvement
3.	Based on the documenta	ation provided, is the value of the Building <u>\$300,000 or mo</u>	<u>re</u> ?
	5	ued at less than \$300,000	
		re and permit submittal.	
		ation exceeds \$300,000	ing a superstimute
	Ennanced Roof-to-V	<i>Wall connections are <u>required unless meeting</u> one of the follow</i>	ing exceptions:
	Exception 1:	Cost of "evaluation and roof-to-wall connections" at gable e exceed 15% of the cost of the roof replacement (attach pro	
	Exception 2:	Analysis submitted by FL Design Professional validates the load path connections are compliant for the applicable wind	
<u>cc</u>	MPLIANCE Options to Co	mplete Mandated Retrofits (Identify one)	
	Prescriptive Retrofit	Procedures.	
	<ul> <li>Priority of work shares</li> </ul>	ections will be enhanced using the prescriptive measures in Se all be determined by Section 706.8.1.7.	ections 706.8.1.3 – 7.
	Details provided o	n page 2	
	Professional Design     Dravida angineera	design plan, and identify datails on page 2	
	Provide engineere	ed design plan, and identify details on page 2	
	completed and submitted	nnections are required, the following page (Connection Detail along with a roof plan of the building, including span distances hould indicate areas to be retrofitted, connectors to be used, a	and gable/ hip
	requirements. Please inclu	ude product approvals for all the connectors specified.	
Qu	alifier or Owner/Builder Nar	ne (Print) Qualifier or Owner/Builder Signature	Date

## Roof to Wall Mandated Retrofits (Cont.)

## MANDATED RETROFIT CONNECTION DETAILS

### **Exterior Wall Construction:**

- □ Other explain:

### **Roof Geometry:**

Gable

□ Hip

□ Flat

Other explain: \_\_\_\_\_

### Existing Anchors

Identify existing straps/anchors and fasteners (quantity & size) at areas proposed for retrofit.

Strap/Anchor: \_\_\_\_\_ Fasteners: \_\_\_\_\_

Determine if Existing Straps were manufactured and rated for four (4) fasteners at each end.

□ YES - Existing Straps were manufactured and rated for four (4) fasteners at each end 

NOTE: A Roofing Contractor (CCC) may install the additional fasteners to the existing straps – Details shall be included in primary Reroof permit scope of work. -----

□ NO - Existing Straps were not manufactured and rated for four (4) fasteners at each end Retrofit straps/anchors shall be added and installed (CGC, CBC or CRC required)

**NOTE:** Installation of new straps/ anchors is outside the scope of a Roofing Contractor (CCC), and requires an appropriately licensed building Contractor (CGC, CBC or CRC).

Retrofit Straps/ Anchors (Minimum uplift capacity of 500 pounds each, unless designed by FL P.E.)

"B" Subpermit ("Mandated Retrofits, GC required") shall be added to the primary Reroof permit.

Manufacturer: \_\_\_\_\_

Type/ Model: \_\_\_\_\_

 Fasteners:
 (Nails, Screws, Bolts / Size / Quantity / Minimum Embedment / Spacing / etc.)

Qualifier or Owner/Builder Name (Print) Qualifier or Owner/Builder Signature