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 e (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.

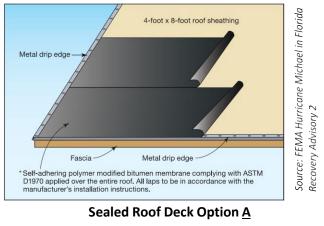
| Qua | lifier | Name |
|-----|--------|------|
|-----|--------|------|

Qualifier Signature

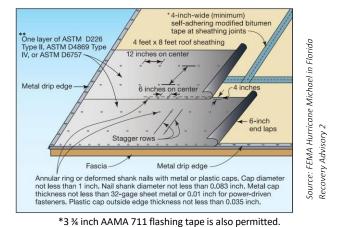
Date

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)

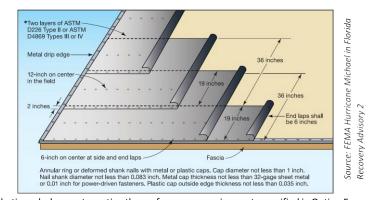


[NOTE: <u>A</u> is NOT an Option for Wood Shake/Shingle]



**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 | | sign Pressures: 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) | | |
| MANDATED RETROFITS- Existing Wood decks, include Mandated Roof-to-Wall Connection Retrofit Form Tie-In Detail (DESIGN PROFESSIONAL or ROOFING CONSULTANT) Re-Nail Deck (IF STRUCTURE WAS PERMITTED PRIOR TO 5/1/99) Battens (Engineering may be required if fasteners not in Approval) Skylights/ Vents/ etc. (REPLACEMENT ONLY) Provide FL or NOA #(ATTACHED) FLAT Roof Deck portion included in Reroofing Scope (PROVIDE FORM 400-FLAT ROOF) | | | | | | |
| 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 |
| Mechanically Attached Self-Adhered (EXPOSURE NOT TO EXCEED 90 DAYS.) | □ 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# |
|--|------------|---|--|
| # Ring Shank Nails # Smooth Shank Nails, w/clip # 8 Screws | 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.

-

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 ft³

| 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 Man | 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 ³ / ₄ " Wide | Strip | □ 2 Lavers of | \Box 2 Lavers |

| Self-Adhered | □ <u>4" Wide Strip</u> | \Box <u>3 ³/4</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 ³ / ₄ " 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 # |
|---------------------|--------------|------------|----------------------|
| | | | |

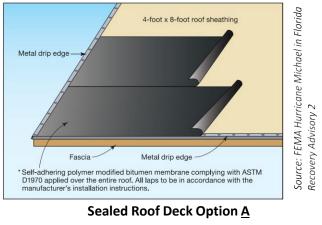
METAL PANEL ATTACHMENT: (Attachment details **SHALL be identified/ circled** in Product Approval)

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

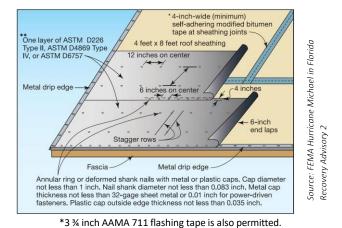
Applicant's Affidavit: I hereby certify that I have read the material on all pages of this document and have FULLY provided ALL the information requested.

| | | | | 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 |
| | | I | | 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)

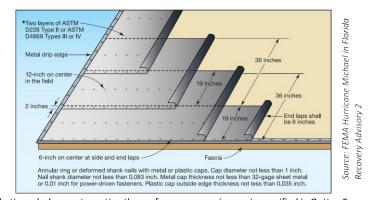






**Synthetic underlayment meeting the performance requirements specified in Option E may also be used.

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> | er (Zones 2,3): | (psf) |
| n center each way fastening of ti -builder. Sify all items related to the Stude Mandated Roof-to-W 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 |
|---|
|---|

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, 7TH 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. | Yes – 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. | |
| | Priority of work shares | 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