

*sales@thermafoam.com*

ThermaFoam R-Control

---

# NAILBASE

## ROOF APPLICATIONS CONSTRUCTION MANUAL

Note: Information deemed reliable at time of printing.  
Please visit [www.thermafoam.com](http://www.thermafoam.com) for the latest information.



# ROOF APPLICATIONS CONSTRUCTION MANUAL

When you choose ThermaFoam R-Control Nailbase, you're collaborating with a team of experts who work with you every step of the way. We're here to answer your questions, solve your problems, and do everything we can to make sure your project proceeds smoothly—and ends successfully.

ThermaFoam R-Control products are manufactured by ThermaFoam, LLC. ThermaFoam adhere to strict, consistent standards to ensure high-quality.

We offer architects, designers and builders the best of both worlds: the resources of the country's largest provider of ThermaFoam R-Control Nailbase products and systems, and the superior attention and customer service of a local supplier.

**Note:** Information deemed reliable at time of printing. Please visit [www.thermafoam.com](http://www.thermafoam.com) for the latest information. January 2021.

# Table of Contents

## R-Control Nailbase

---

### Details

|                                    |         |
|------------------------------------|---------|
| Sizes and Dimensions . . . . .     | FC-100  |
| Sizes and Dimensions . . . . .     | FC-100a |
| Sizes and Dimensions . . . . .     | FC-100b |
| Roof Ridge . . . . .               | FC-101  |
| Roof Ridge . . . . .               | FC-101a |
| Vented Roof Ridge . . . . .        | FC-101b |
| Roof Valley . . . . .              | FC-102  |
| Roof Valley . . . . .              | FC-102a |
| Square Cut Eave . . . . .          | FC-103  |
| Plumb Cut Eave . . . . .           | FC-103a |
| Vented Eave . . . . .              | FC-103b |
| Wall Intersection . . . . .        | FC-104  |
| Wall Intersection . . . . .        | FC-104a |
| Vented Wall Intersection . . . . . | FC-104b |
| Gable End . . . . .                | FC-105  |
| Vented Gable . . . . .             | FC-105a |
| Spline Connection . . . . .        | FC-106  |
| Butt Connection . . . . .          | FC-106a |

---

### Technical Bulletins

|  |                   |
|--|-------------------|
| Fastening Requirements for Sloped Roofs . . .  | Nailbase No. 4001 |
| Asphalt Shingles . . . . .                     | Nailbase No. 4002 |
| Metal Roof Ventilation with Enkamat 7020 . . . | Nailbase No. 4003 |
| Ventilation Accessory Products . . . . .       | Nailbase No. 4006 |

# General Recommendations

---

## ThermaFoam R-Control Nailbase Sizes

ThermaFoam R-Control Nailbase is made in a variety of sizes, most commonly 4' x 8'. Consult ThermaFoam for sizes, thicknesses, and fabrication services available in your area.

---

## Environmentally Safe

The core material for ThermaFoam R-Control Nailbase, ThermaFoam R-Control insulation, contains no CFCs, HCFCs, HFCs or formaldehyde and is recyclable. ThermaFoam R-Control insulation is inert, non-nutritive and highly stable. ThermaFoam encourages you to support recycling and energy conservation.

---

## Warranty

ThermaFoam provides a 50-year warranty covering thermal performance. Contact ThermaFoam for details regarding the warranty program.

---

## Handling - Storage - Protection

ThermaFoam R-Control Nailbase should be stored in a fully supported manner and protected from weather. Cover stored ThermaFoam R-Control Nailbase with tarps or similar protective wraps. Exposure 1 OSB facings are used in ThermaFoam R-Control Nailbase manufacture; however, panels used for roof systems must have temporary roofing applied at the time of installation. Apply finished roofing when immediately practical.

Metal roof systems have inherent properties that may cause ThermaFoam R-Control Nailbase roofs covered with these materials to become hotter than other roof systems. When installing metal roof systems on ThermaFoam R-Control Nailbase, additional design considerations may be necessary to protect the roofing underlayment and the ThermaFoam R-Control Nailbase from excessive temperatures. These design precautions may include the use of a ventilated air space above the ThermaFoam R-Control Nailbase to minimize temperature exposure. Consult ThermaFoam for local recommendations.

Molded polystyrene contains a flame retardant additive. However, the molded polystyrene should be considered combustible and used with code approved thermal barriers and should not be stored near any open flame or source of ignition. Do not install or use molded polystyrene with coal-tar pitch or highly solvent extended mastics, adhesives or sealants. Consult ThermaFoam for suggested adhesives, sealants, and assembly specifications not otherwise detailed in this manual.

## General Recommendations - cont'd

---

### Low VOC Do-All-Ply and Splines

ThermaFoam R-Control Nailbase may be joined as needed using splines. These attachments are made with nails, staples, or screws and Low VOC Do-All-Ply.

Spline Connection and Low VOC Do-All-Ply use shall be as specified by the design professional based upon structure design, climate zone, and moisture vapor analysis.

---

### Vapor Retarders

ThermaFoam R-Control Nailbase may require the use of a vapor retarder to ensure long term durable roof structures. Consult with a local design professional for a recommendation.

---

### Special Treatments

ThermaFoam R-Control Nailbase can be produced with ThermaFoam R-Control insulation with borate that protects the core insulation from potential termite damage. In addition, the OSB facings can be coated with FrameGuard that protects the OSB from mold, mildew and termite damage. Please contact ThermaFoam to learn about specifications for these special treatments.



---

### Disclaimer

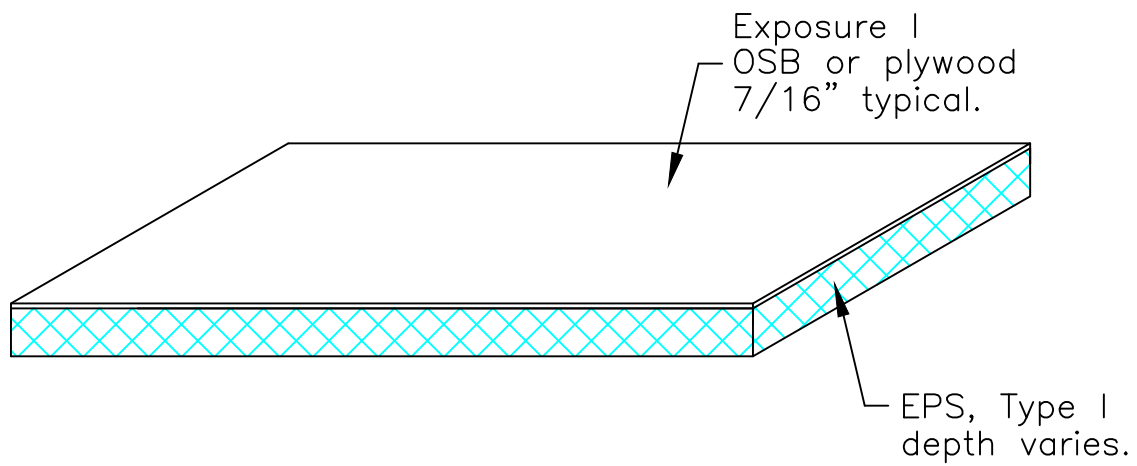
Details, illustrations, pictures and guidelines provided herein give basic information and illustrate examples of ThermaFoam R-Control Nailbase installation. The basic information provided herein is not intended to cover every potential use and application of ThermaFoam R-Control Nailbase. It is the responsibility of the installer to become familiar with his specific application and determine if ThermaFoam R-Control Nailbase is suitable. By commencing work, the installer accepts full responsibility for the proper and safe installation of ThermaFoam R-Control Nailbase at his job site. Adding an insulation component may change the behavior of a roof assembly with regard to air movement, water vapor transmittance, bulk water management and heating, cooling and ventilation systems. It is the responsibility of the owner or the owner's representative to design the insulated roof assembly to perform in a manner ensuring function and durability. Furthermore, it is the sole responsibility of the installer to meet all federal and local regulatory requirements for job site safety for himself, his workers and any others on the job site while in the execution of all phases of ThermaFoam R-Control Nailbase installation.

Nailbase.

Width/Length: 4' x 8' standard.

Thickness: 2", 4", 6", 7-3/4", 9-3/4", 11-3/4" standard.

Custom width, length, and thickness available.



ISOMETRIC

Scale: NTS

Updated 6-1-20

Nailbase

TITLE:  
Sizes and Dimensions

NO.  
NB-100

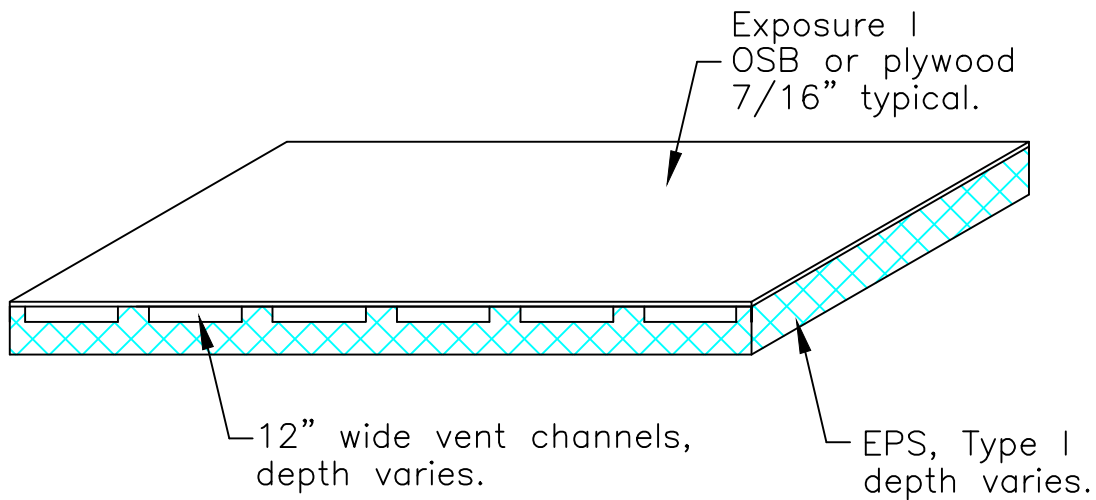
Nailbase Vent-1.

Width/Length: 4' x 8' standard.

Thickness: 2", 4", 6", 7-3/4", 9-3/4", 11-3/4" standard.

Vent Channel Depth: 1/2", 1", 1-1/2", 2" standard.

Custom width, length, thickness, and vent channel depth available.



# ISOMETRIC

Scale: NTS

Updated 6-1-20

## Nailbase

TITLE:  
Sizes and Dimensions

NO.  
NB-100a

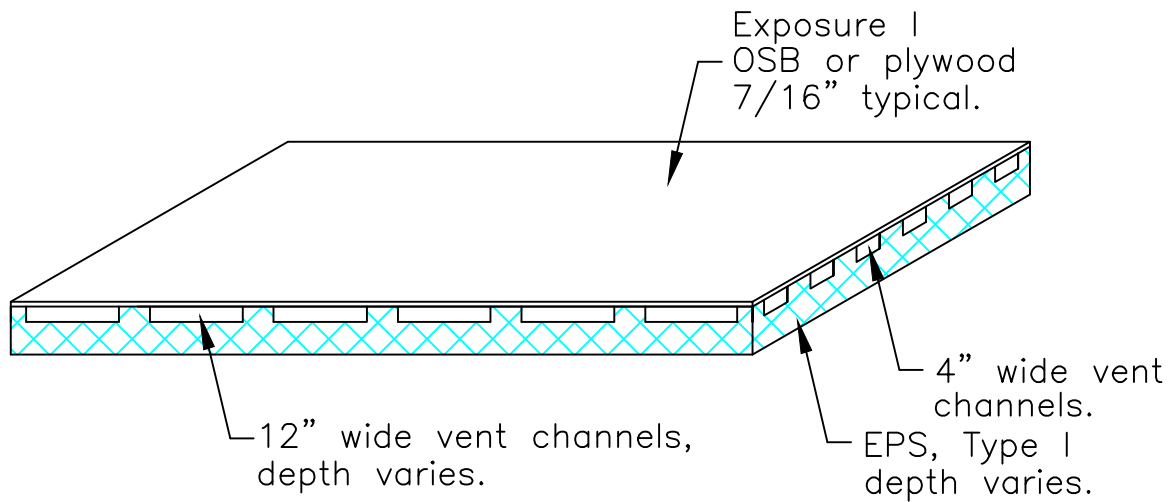
Nailbase Vent-2.

Width/Length: 4' x 8' standard.

Thickness: 2", 4", 6", 7-3/4", 9-3/4", 11-3/4" standard.

Vent Channel Depth: 1/2", 1", 1-1/2", 2" standard.

Custom width, length, thickness, and vent channel depth available.



# ISOMETRIC

Scale: NTS

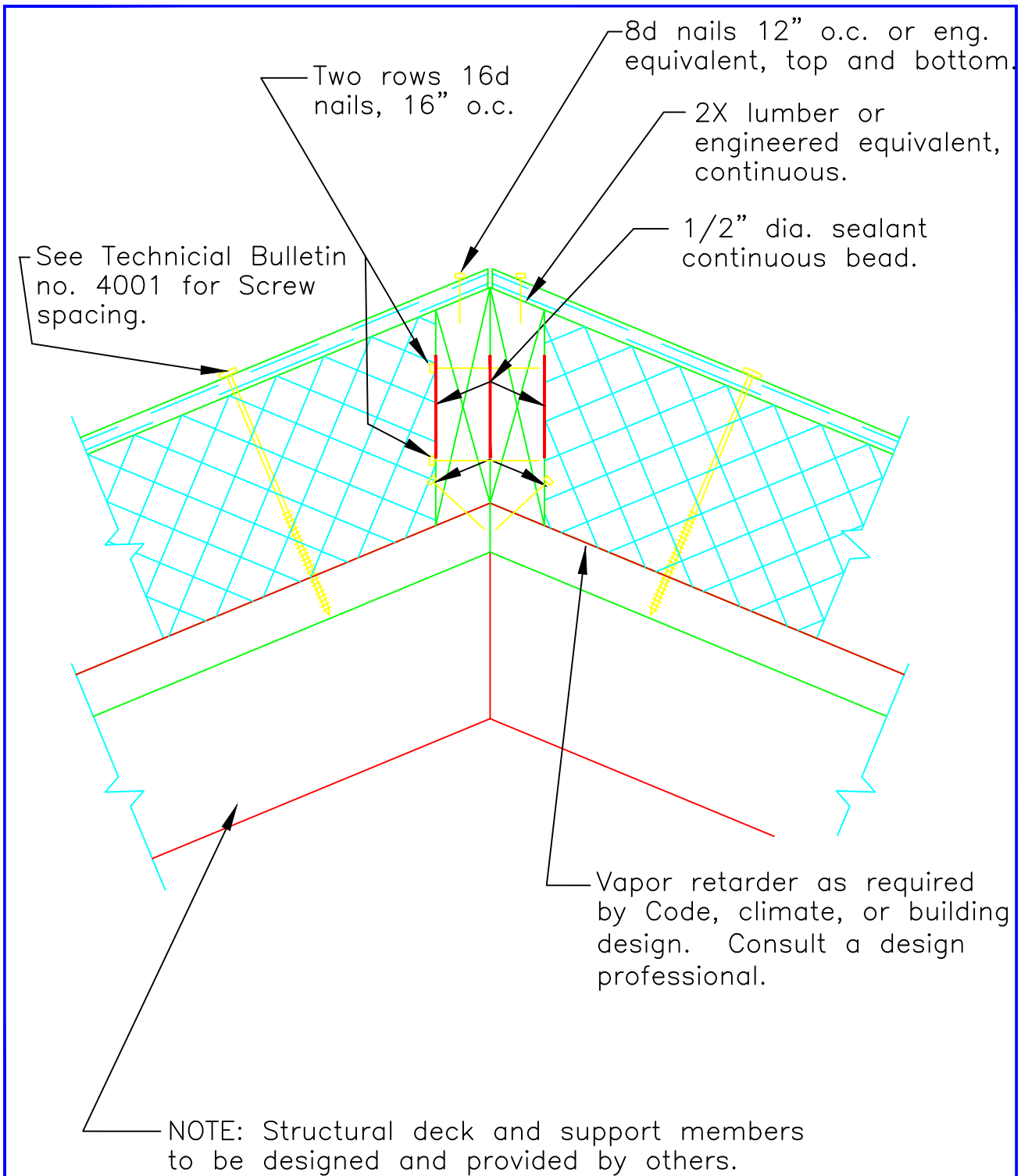
Updated 6-1-20

## Nailbase

TITLE:  
Sizes and Dimensions

NO.  
NB-100b





# SECTION

Scale: NTS

Updated 6-1-20

## Nailbase

TITLE:

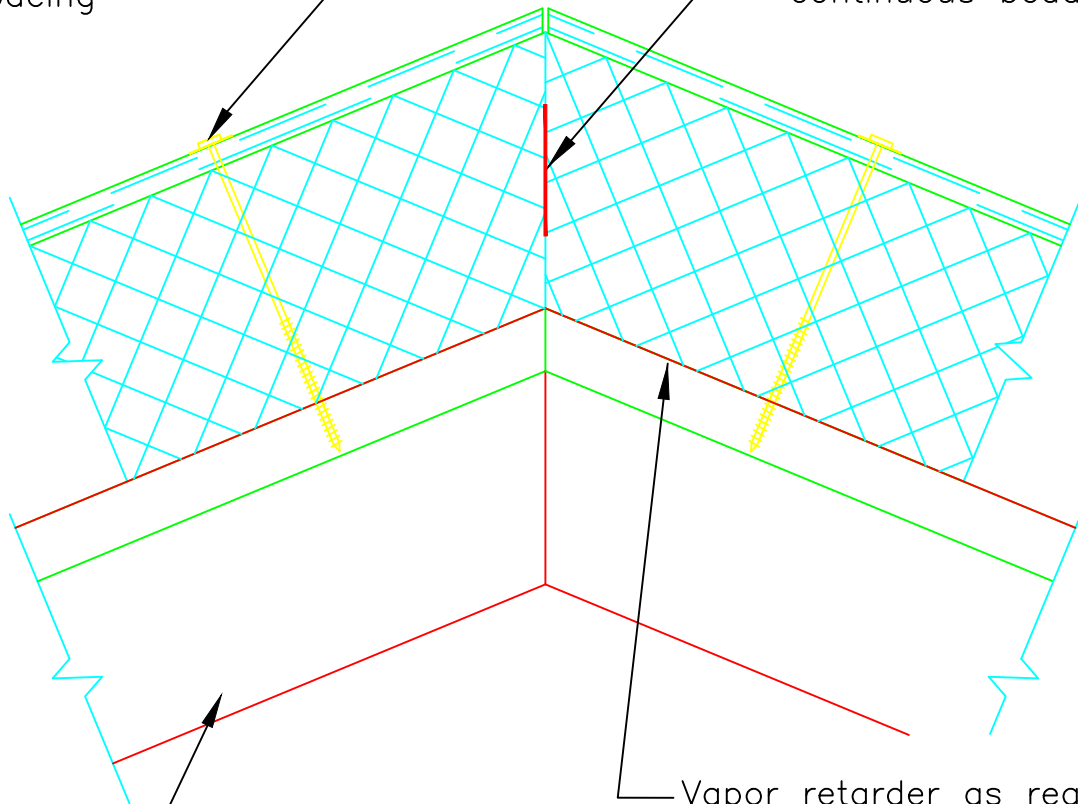
Roof Ridge

NO.

NB-101

See Technical Bulletin  
no. 4001 for Screw  
spacing

1/2" dia. sealant  
continuous bead.



Vapor retarder as required  
by Code, climate, or building  
design. Consult a design  
professional.

NOTE: Structural deck and support members  
to be designed and provided by others.

## SECTION

Scale: NTS

Updated 6-1-20

### Nailbase

TITLE:

Roof Ridge

NO.

NB-101a

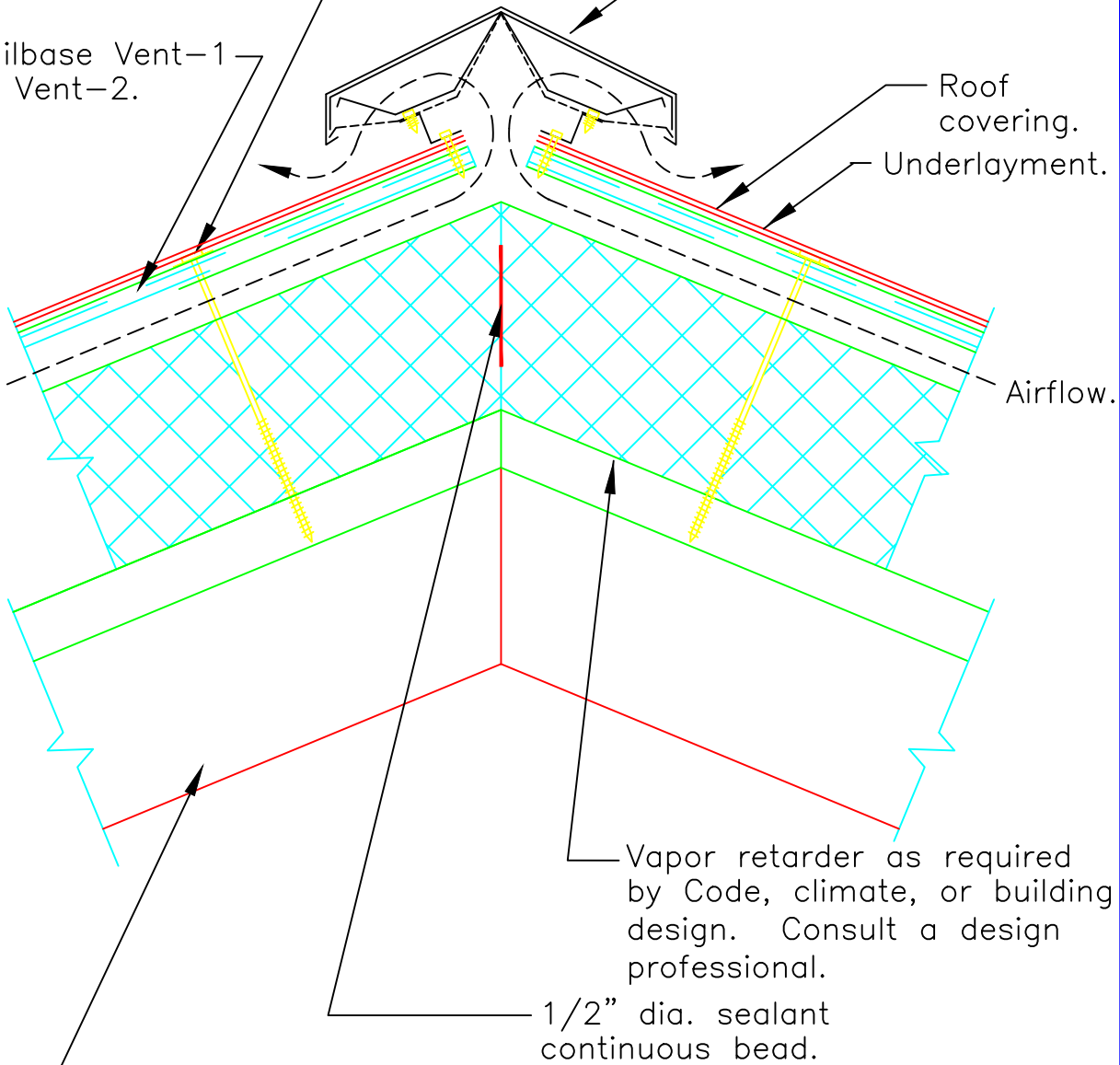
See Technical Bulletin  
no. 4001 for screw  
spacing.

Nailbase Vent-1  
or Vent-2.

HI-PERF ridge  
vent by METAL-ERA  
or equivalent.

Roof  
covering.

Underlayment.



Airflow.

Vapor retarder as required  
by Code, climate, or building  
design. Consult a design  
professional.

1/2" dia. sealant  
continuous bead.

NOTE: Structural deck and support members  
to be designed and provided by others.

# SECTION

Scale: NTS

Updated 6-1-20

## Nailbase

TITLE:

Vented Roof Ridge

NO.

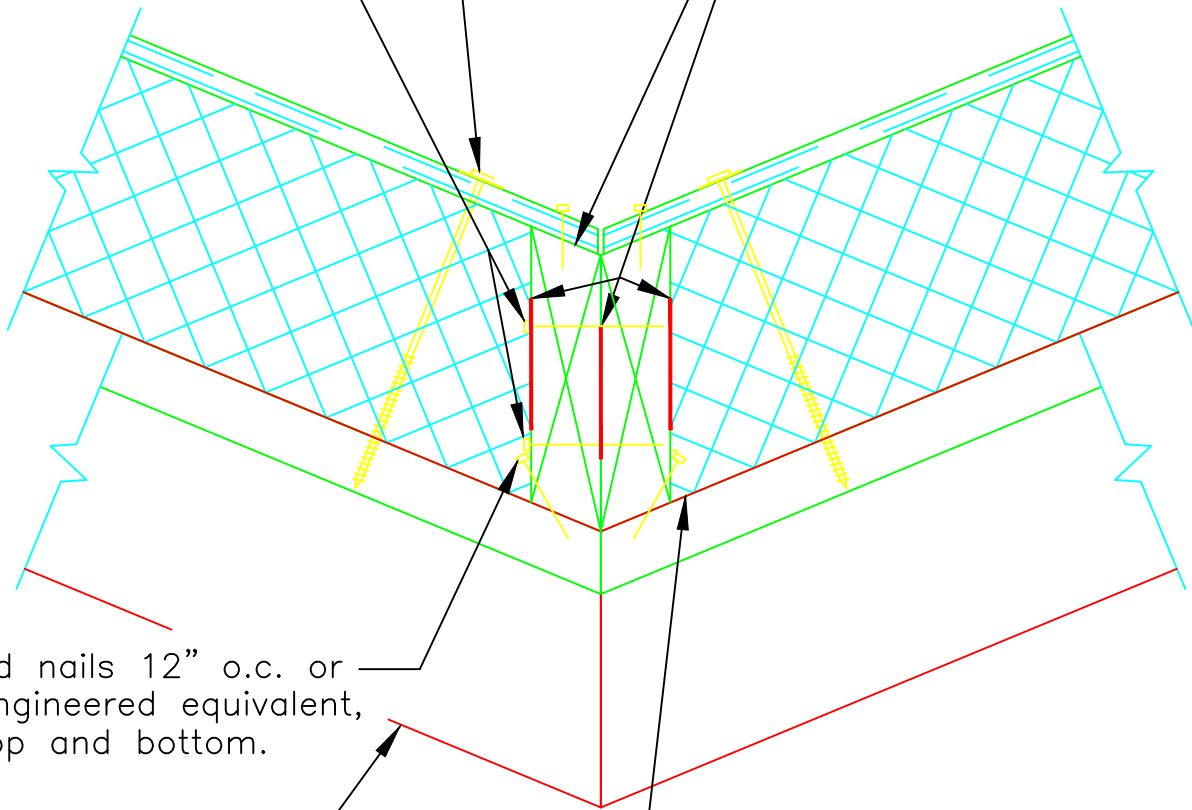
NB-101b

See Technical Bulletin  
no. 4001 for Screw  
spacing

Two rows 16d  
nails, 16" o.c.

2X lumber or  
engineered equivalent,  
continuous.

1/2" dia. sealant  
continuous bead.



8d nails 12" o.c. or  
engineered equivalent,  
top and bottom.

Vapor retarder as required  
by Code, climate, or building  
design. Consult a design  
professional.

NOTE: Structural deck and support members  
to be designed and provided by others.

## SECTION

Scale: NTS

Updated 6-1-20

### Nailbase

TITLE:

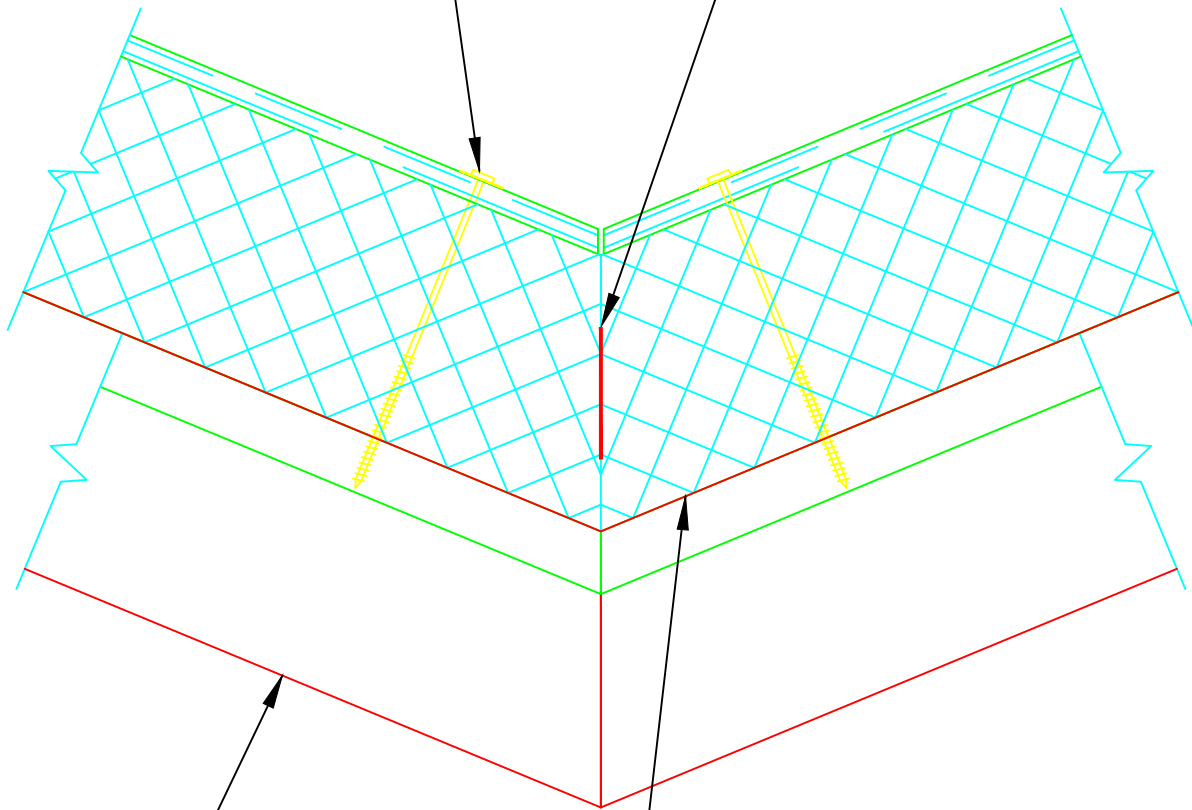
Roof Valley

NO.

NB-102

See Technical Bulletin  
no. 4001 for Screw  
spacing

1/2" dia. sealant  
continuous bead.



Vapor retarder as required  
by code, climate, or building  
design. Consult a design  
professional.

NOTE: Structural deck and support members  
to be designed and provided by others.

## SECTION

Scale: NTS

Updated 6-1-20

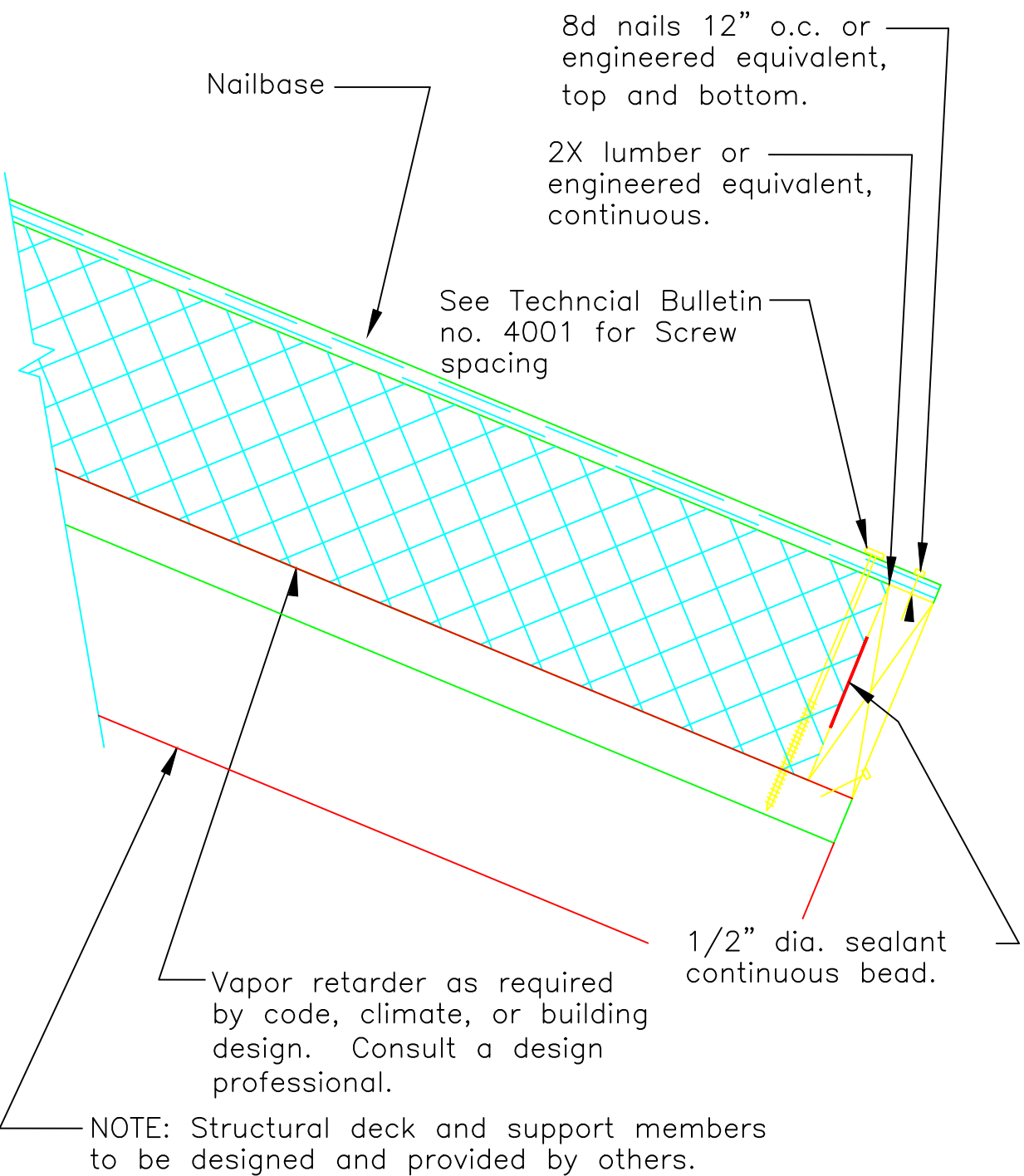
### Nailbase

TITLE:

Roof Valley

NO.

NB-102a



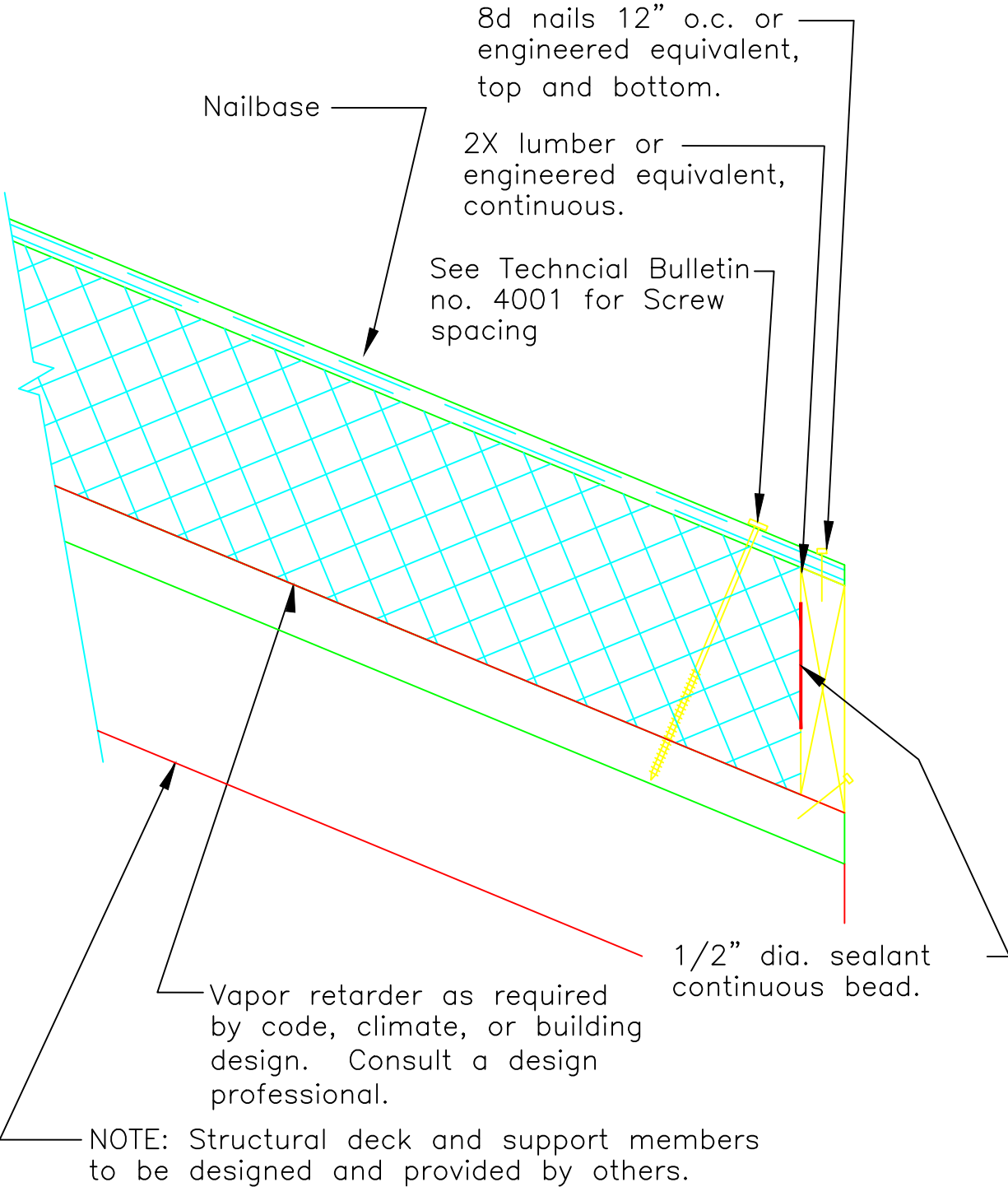
# SECTION

Scale: NTS

Updated 6-1-20

## Nailbase

|        |                 |     |        |
|--------|-----------------|-----|--------|
| TITLE: | Square Cut Eave | NO. | NB-103 |
|--------|-----------------|-----|--------|



# SECTION

Scale: NTS

Updated 6-1-20

|                          |                |
|--------------------------|----------------|
| Nailbase                 |                |
| TITLE:<br>Plumb Cut Eave | NO.<br>NB-103a |

Nailbase Vent-1 or Vent-2.

HI-PERF vented fascia by METAL-ERA or equivalent.

Roof covering.

Underlayment.

See Technical Bulletin no. 4001 for screw spacing.

Vapor retarder as required by code, climate, or building design. Consult a design professional.

NOTE: Structural deck and support members designed and provided by others.

Airflow.

# SECTION

Scale: NTS

Updated 6-1-20

## Nailbase

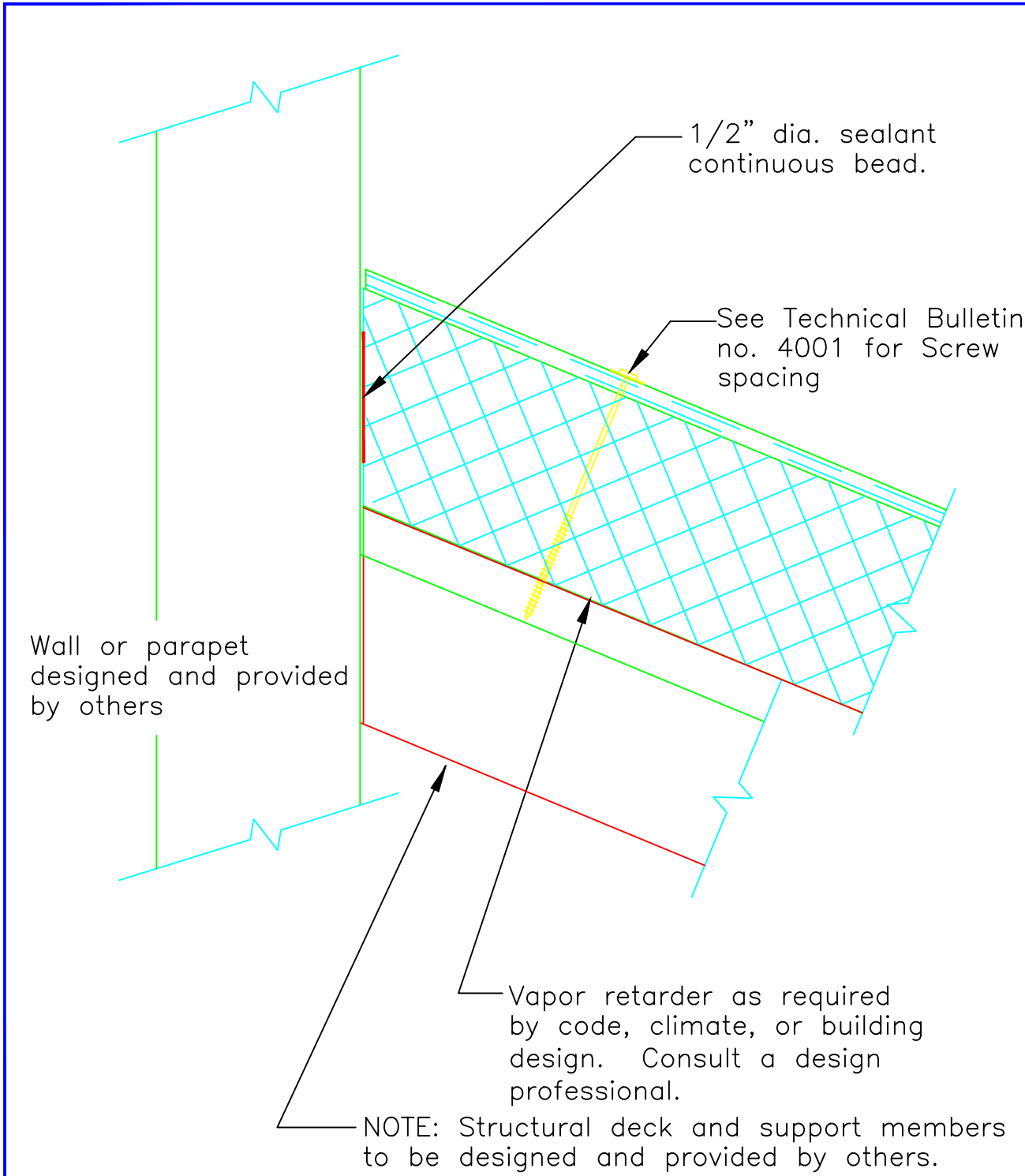
TITLE:

Vented Eave

NO.

NB-103b





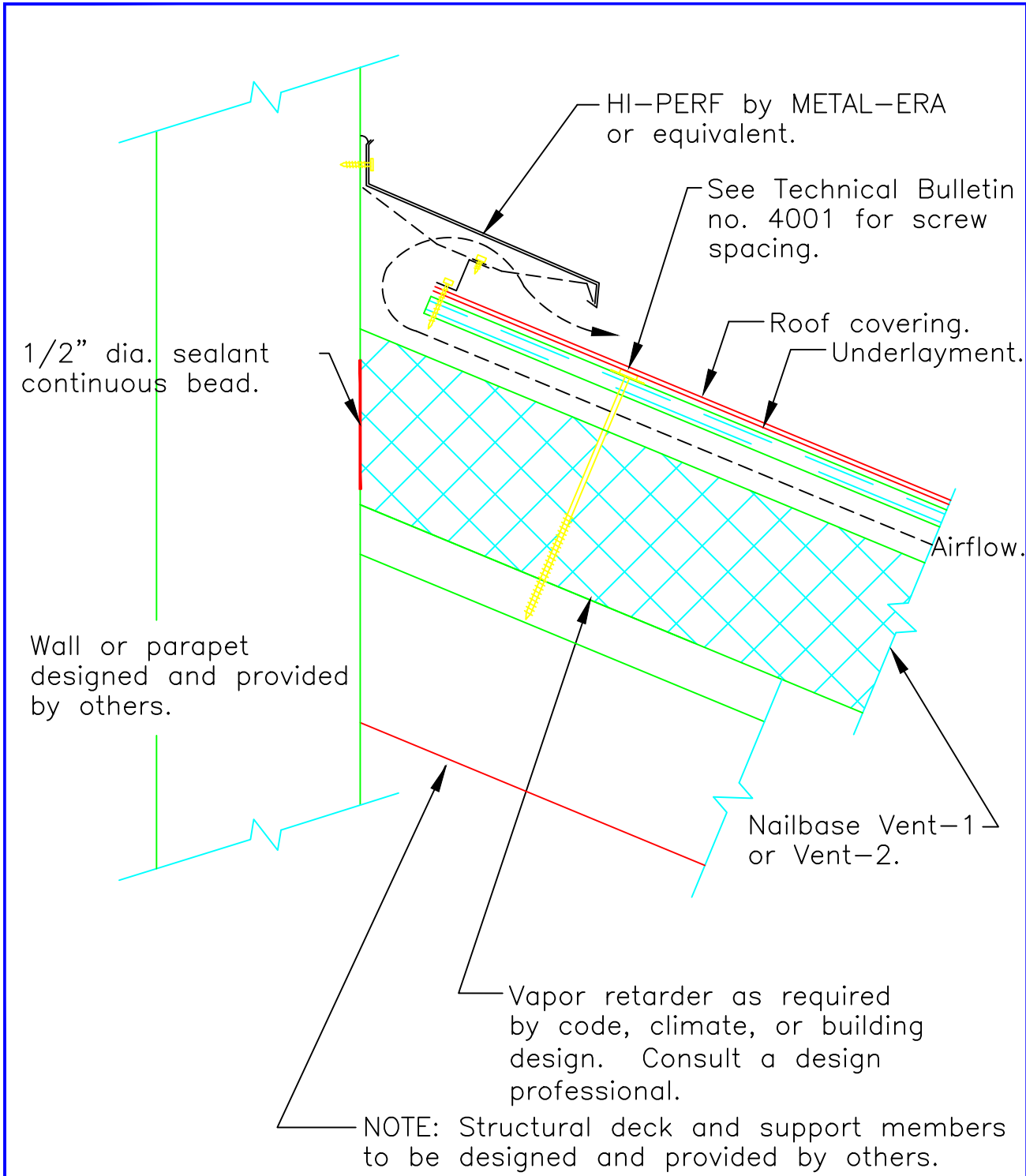
# SECTION

Scale: NTS

Updated 6-1-20

## Nailbase

|                   |         |
|-------------------|---------|
| TITLE:            | NO.     |
| Wall Intersection | NB-104a |



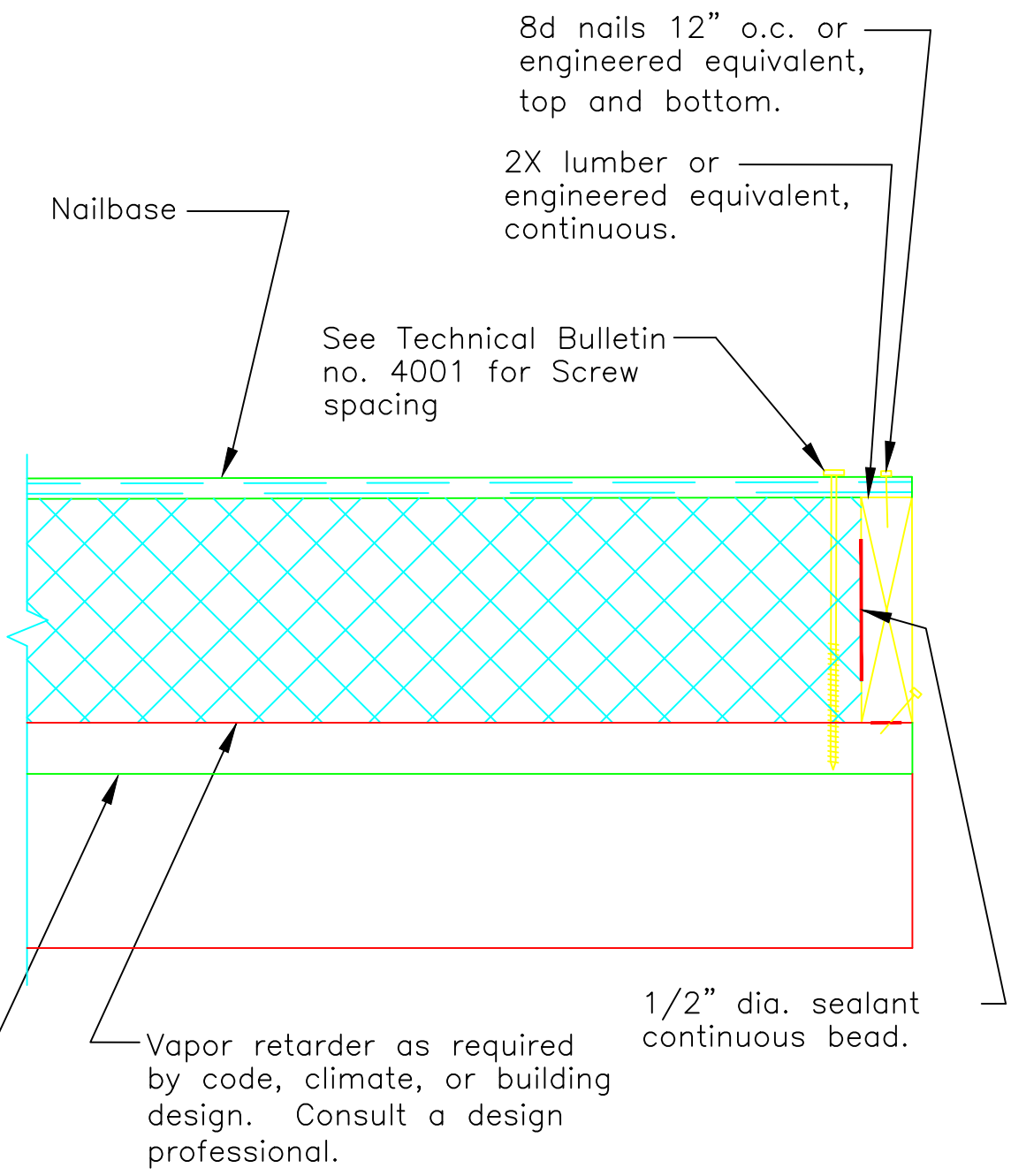
# SECTION

Scale: NTS

Updated 6-1-20

## Nailbase

|                                    |                |
|------------------------------------|----------------|
| TITLE:<br>Vented Wall Intersection | NO.<br>NB-104b |
|------------------------------------|----------------|



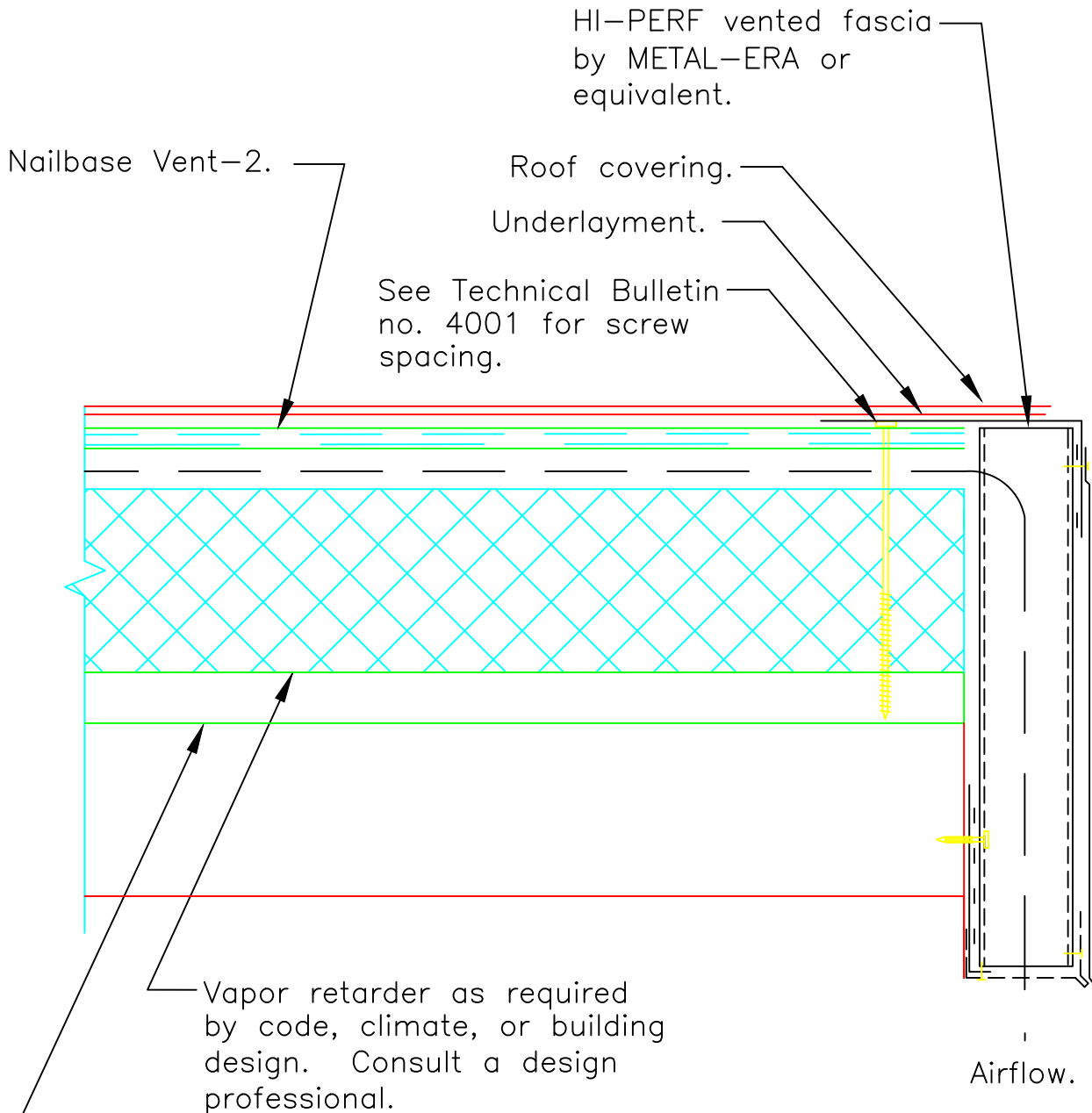
NOTE: Structural deck and support members to be designed and provided by others.

# SECTION

Scale: NTS

Updated 6-1-20

|                     |               |
|---------------------|---------------|
| Nailbase            |               |
| TITLE:<br>Gable End | NO.<br>NB-105 |



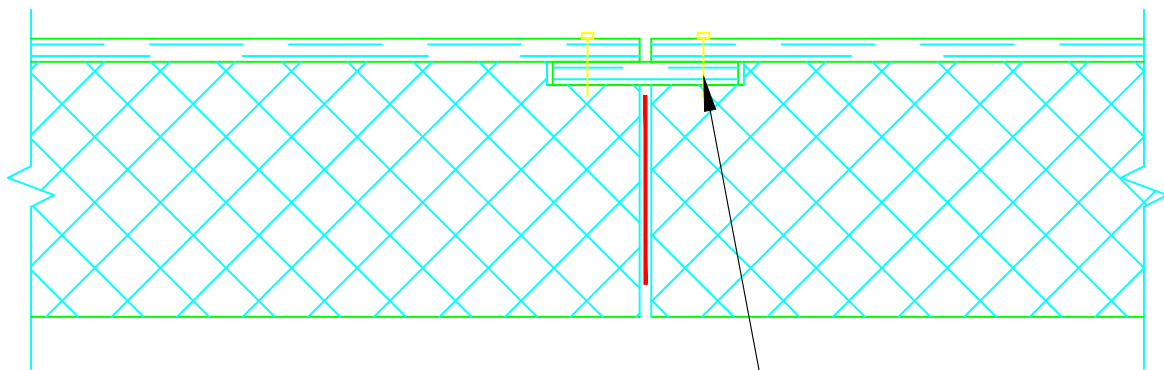
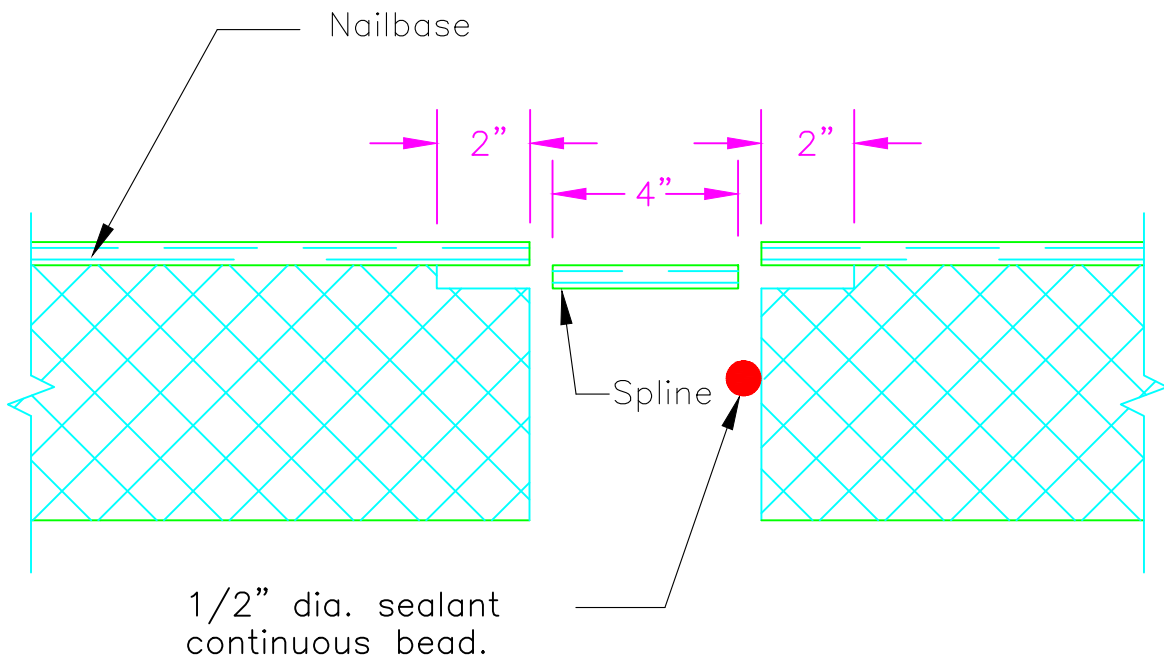
NOTE: Structural deck and support members to be designed and provided by others.

# SECTION

Scale: NTS

Updated 6-1-20

|                        |                |
|------------------------|----------------|
| Nailbase               |                |
| TITLE:<br>Vented Gable | NO.<br>NB-105a |



Nailing on each side of OSB joint to be:  
 6" o/c using 8d nails  
 6" o/c using 14GAx1 1/2" staples  
 4" o/c using 16GAx1 1/2" staples

Note: Spline material to conform to:  
 DOC PS2-92, min thickness equal to panel OSB thickness

## SECTION

Scale: NTS

Updated 6-1-20

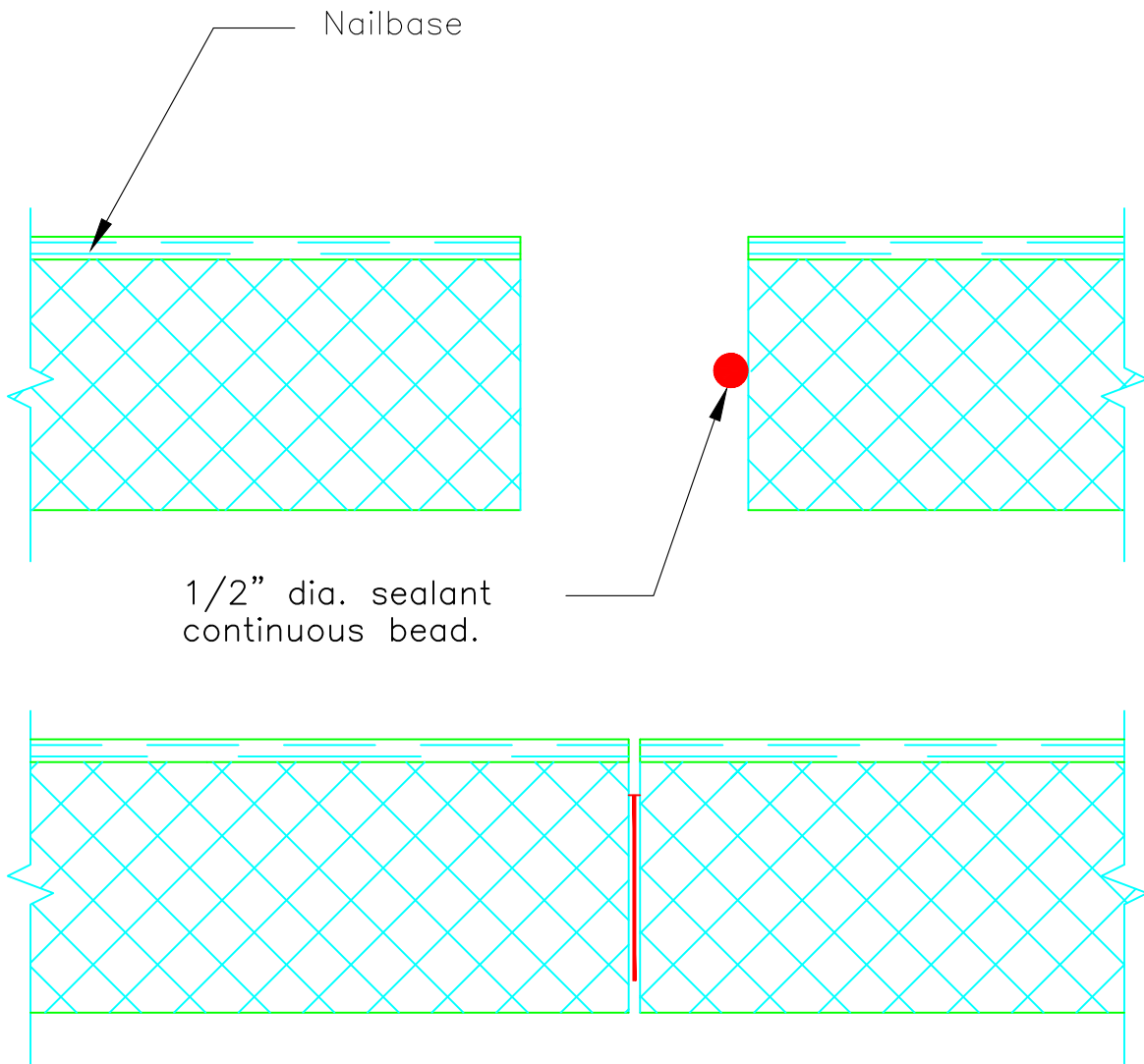
### Nailbase

TITLE:

Spline Connection

NO.

NB-106



# SECTION

Scale: NTS

Updated 6-1-20

## Nailbase

TITLE:

Butt Connection

NO.

NB-106a

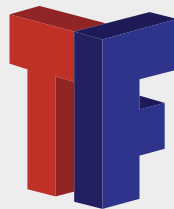
**Product Availability and Support.**

Foam-Control Nailbase is supported by a team of experts who work with you to answer your questions, offer solutions, and do everything they can to make sure your project goes smoothly and ends successfully.

**Ready to take control? Start here.**

If you're ready to have Foam-Control contribute to your next project, just contact your nearest Foam-Control Nailbase manufacturer and Technical Sales Representative. We will be happy to give you design consultation, information about Foam-Control products, pricing, and answers to all of your questions.

**NEED INFORMATION OR A QUOTE**



***sales@thermafoam.com***  
***www.thermafoam.com***



**1240 Hwy 77**  
**Hillsboro, TX 76645**

**Office: 254-582-2730**  
**Fax: 254-582-2811**