



R-Shield®

NAILBASE

ROOF APPLICATIONS CONSTRUCTION MANUAL

Note: Information deemed reliable at time of printing.
Please visit www.rshieldinsulation.com for the latest information.



ROOF APPLICATIONS CONSTRUCTION MANUAL

When you choose R-Shield 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.

R-Shield products are manufactured by Premier Building Systems. Premier Building Systems adhere to strict, consistent standards to ensure high-quality.

This network allows us to offer architects, designers and builders the best of both worlds: the resources of the country's largest provider of R-Shield 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.rshieldinsulation.com for the latest information.
Sept. 2022.

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General Recommendations

R-Shield Nailbase Sizes

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

Environmentally Safe

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

Warranty

Premier Building Systems provide a 50-year warranty covering thermal performance. Contact Premier Building Systems for details regarding the warranty program.

Handling - Storage - Protection

R-Shield Nailbase should be stored in a fully supported manner and protected from weather. Cover stored R-Shield Nailbase with tarps or similar protective wraps. Exposure 1 OSB facings are used in R-Shield 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 R-Shield Nailbase roofs covered with these materials to become hotter than other roof systems. When installing metal roof systems on R-Shield Nailbase, additional design considerations may be necessary to protect the roofing underlayment and the R-Shield Nailbase from excessive temperatures. These design precautions may include the use of a ventilated air space above the R-Shield Nailbase to minimize temperature exposure. Consult Premier Building Systems for local recommendations.

Expanded polystyrene contains a flame retardant additive. However, the expanded 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 expanded polystyrene with coal-tar pitch or highly solvent extended mastics, adhesives or sealants. Consult Premier Building Systems for suggested adhesives, sealants, and assembly specifications not otherwise detailed in this manual.

General Recommendations - cont'd

Low VOC Sealant and Splines

R-Shield Nailbase may be joined as needed using splines. These attachments are made with nails, staples, or screws and Low VOC Sealant.

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

Vapor Retarders

R-Shield 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

One of the most destructive forces anywhere is termites. R-Shield can be manufactured with a proven and safe additive, that effectively resists termites.

R-Shield is treated to meet ICC ES AC239, "Acceptance Criteria for Termite-Resistant Foam Plastics."

Disclaimer

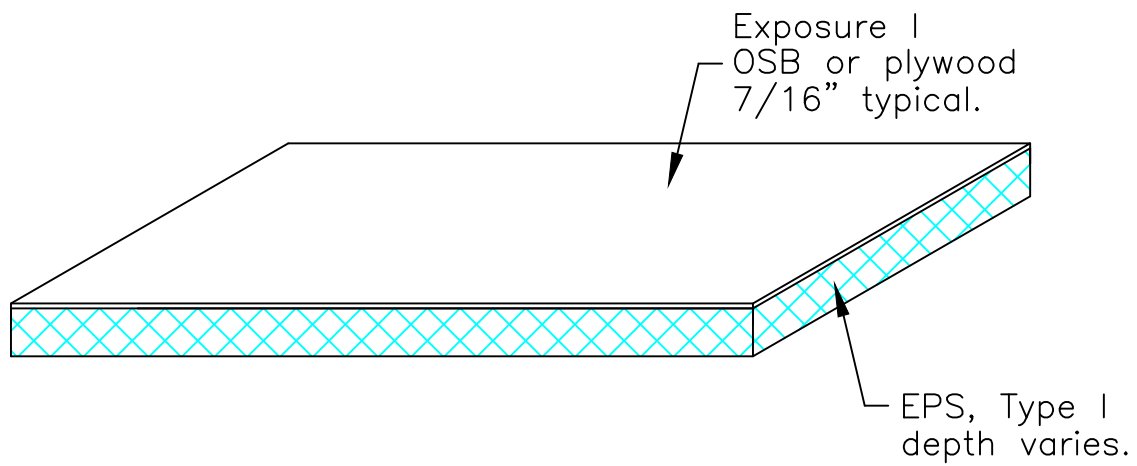
Details, illustrations, pictures and guidelines provided herein give basic information and illustrate examples of R-Shield Nailbase installation. The basic information provide herein is not intended to cover every potential use and application of R-Shield Nailbase. It is the responsibility of the installer to become familiar with his specific application and determine if R-Shield Nailbase is suitable. By commencing work, the installer accepts full responsibility for the proper and safe installation of R-Shield 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 R-Shield 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

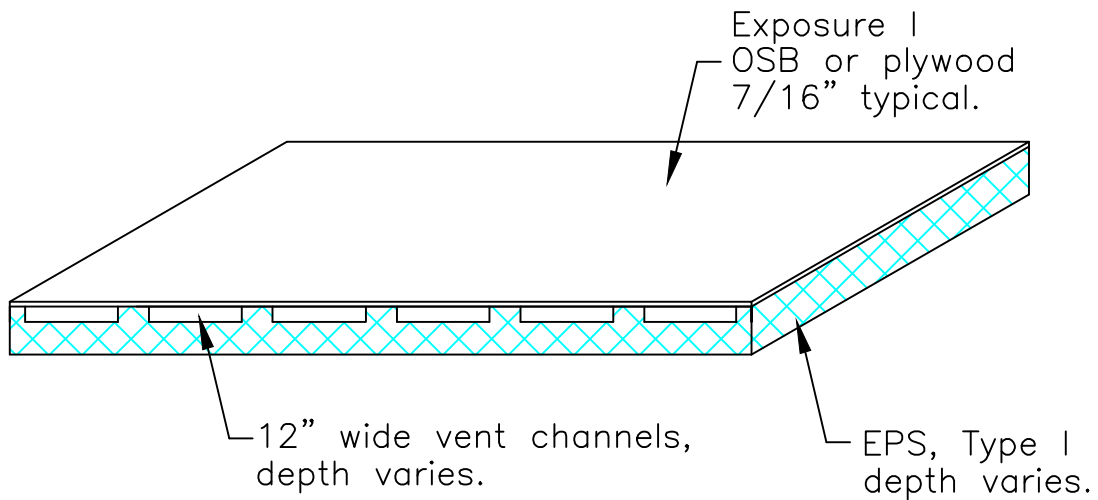
Nailbase Vent-1.

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

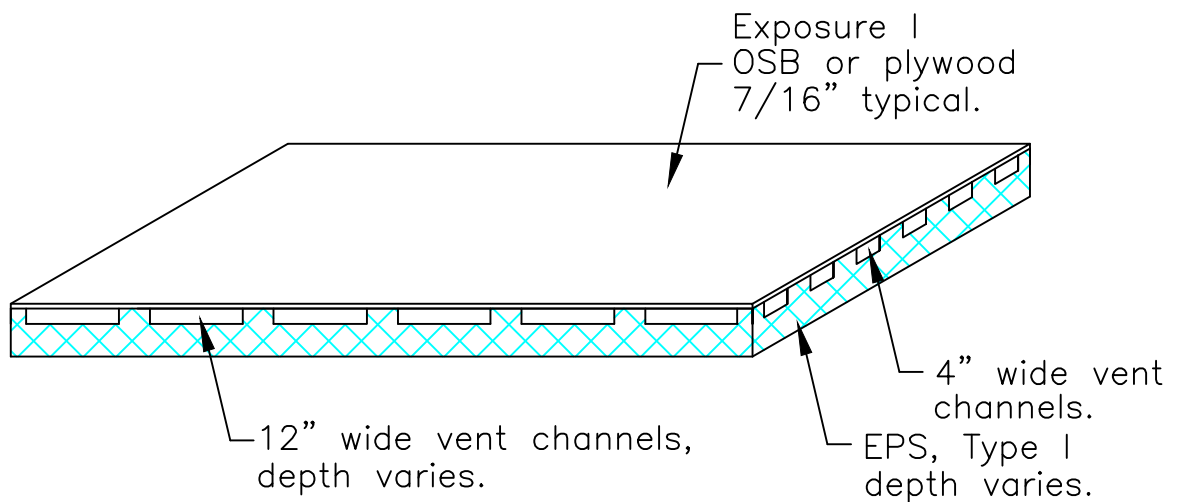
Nailbase Vent-2.

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

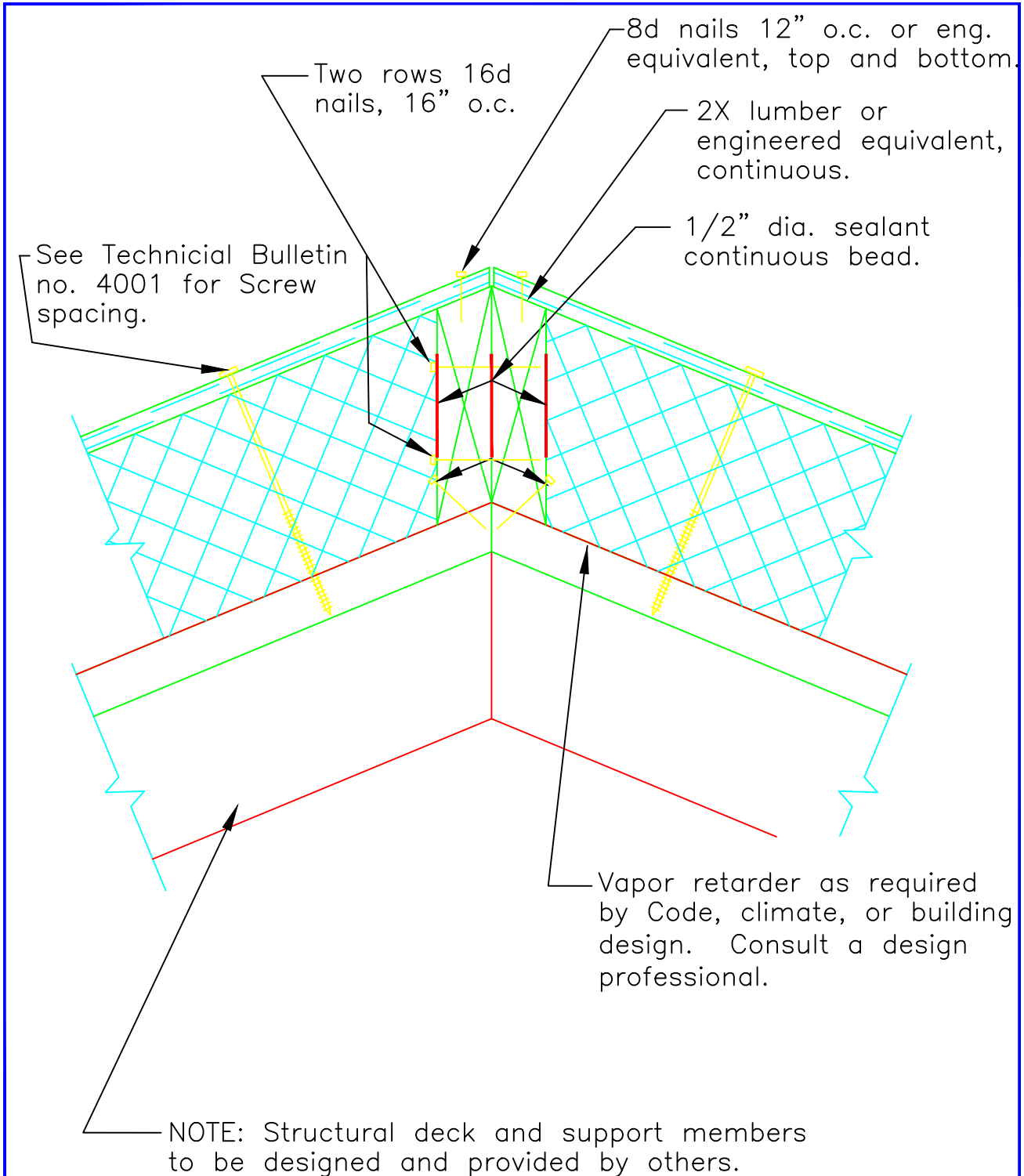
Scale: NTS

Updated 6-1-20

Nailbase

TITLE:
Sizes and Dimensions

NO.
NB-100b



SECTION

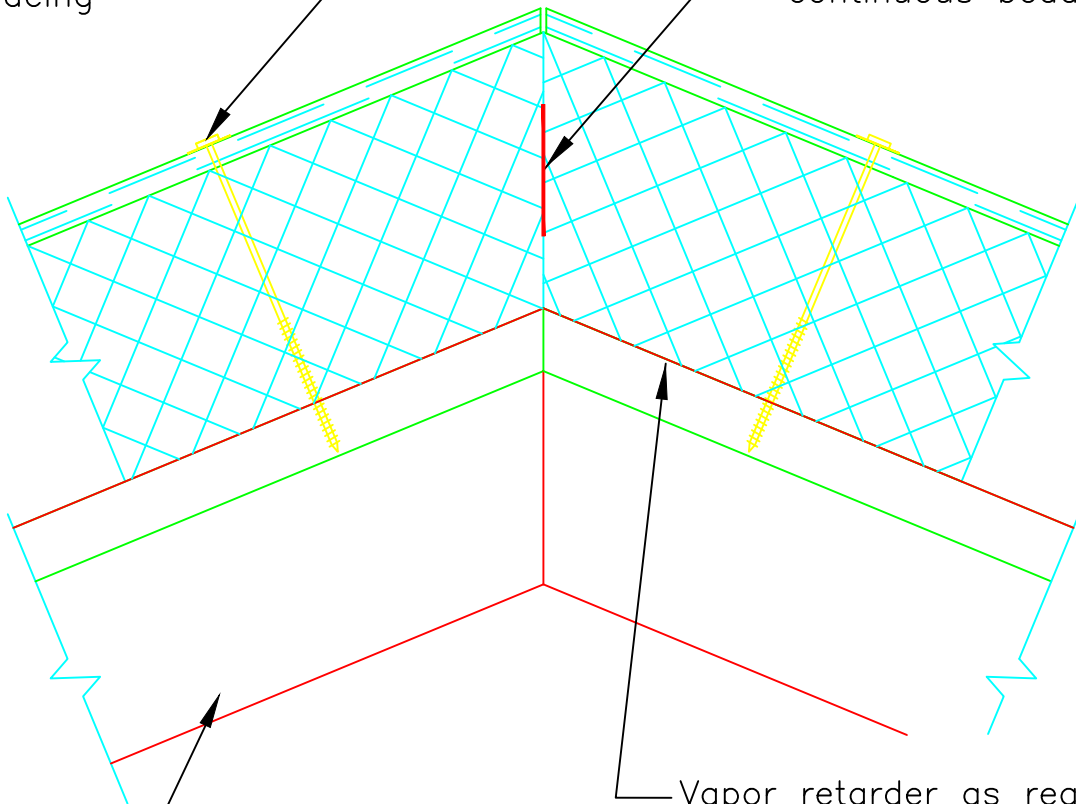
Scale: NTS

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.

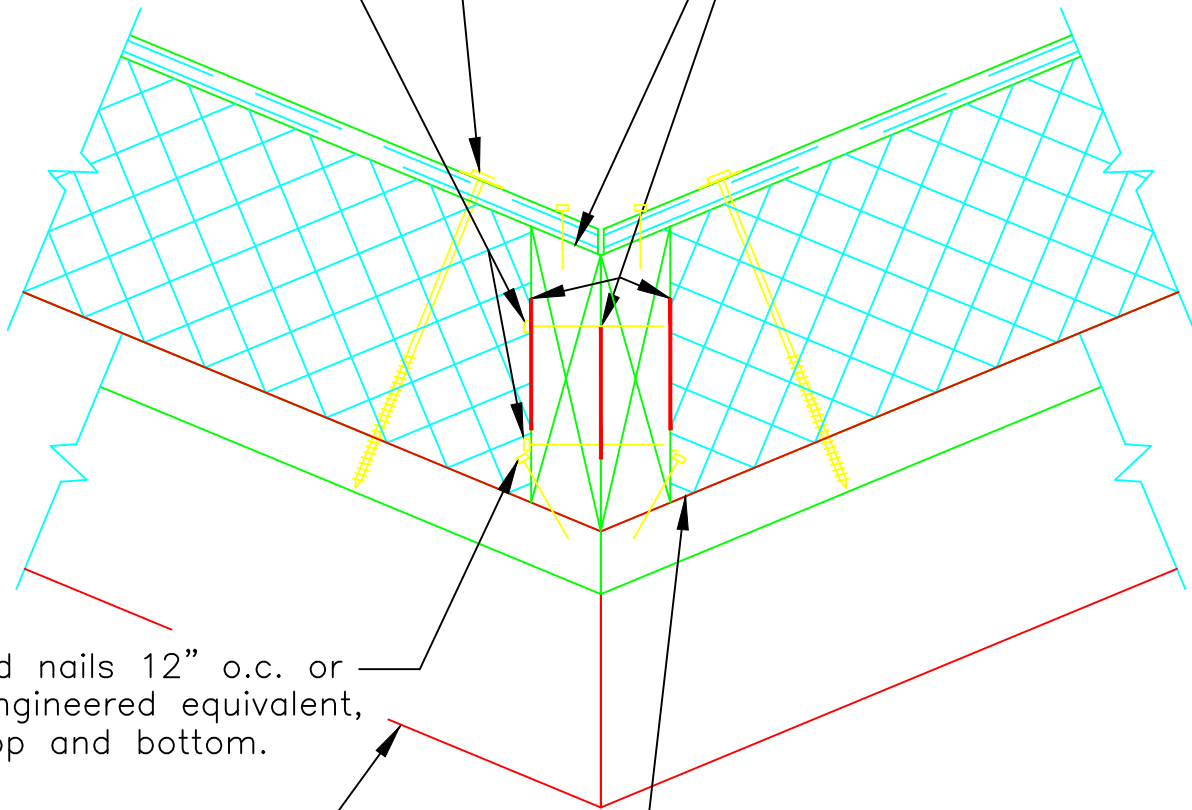
NB-101b

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:

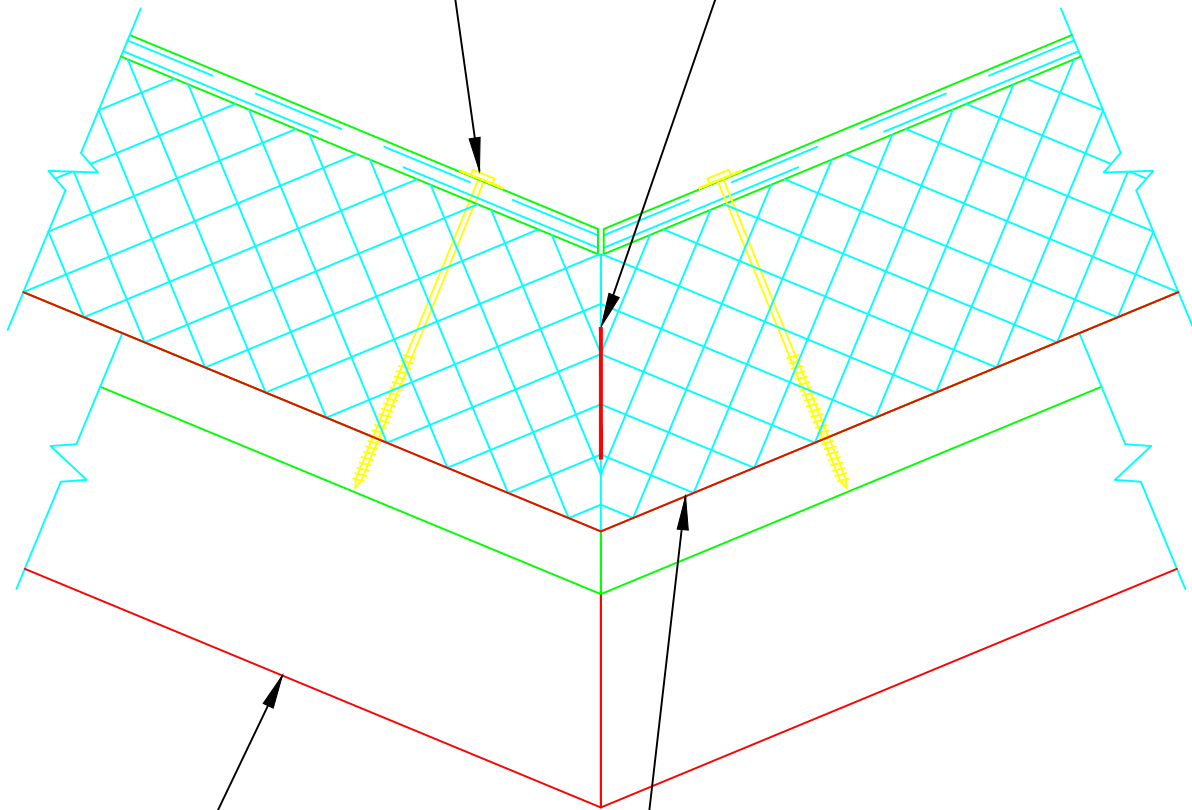
Roof Valley

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

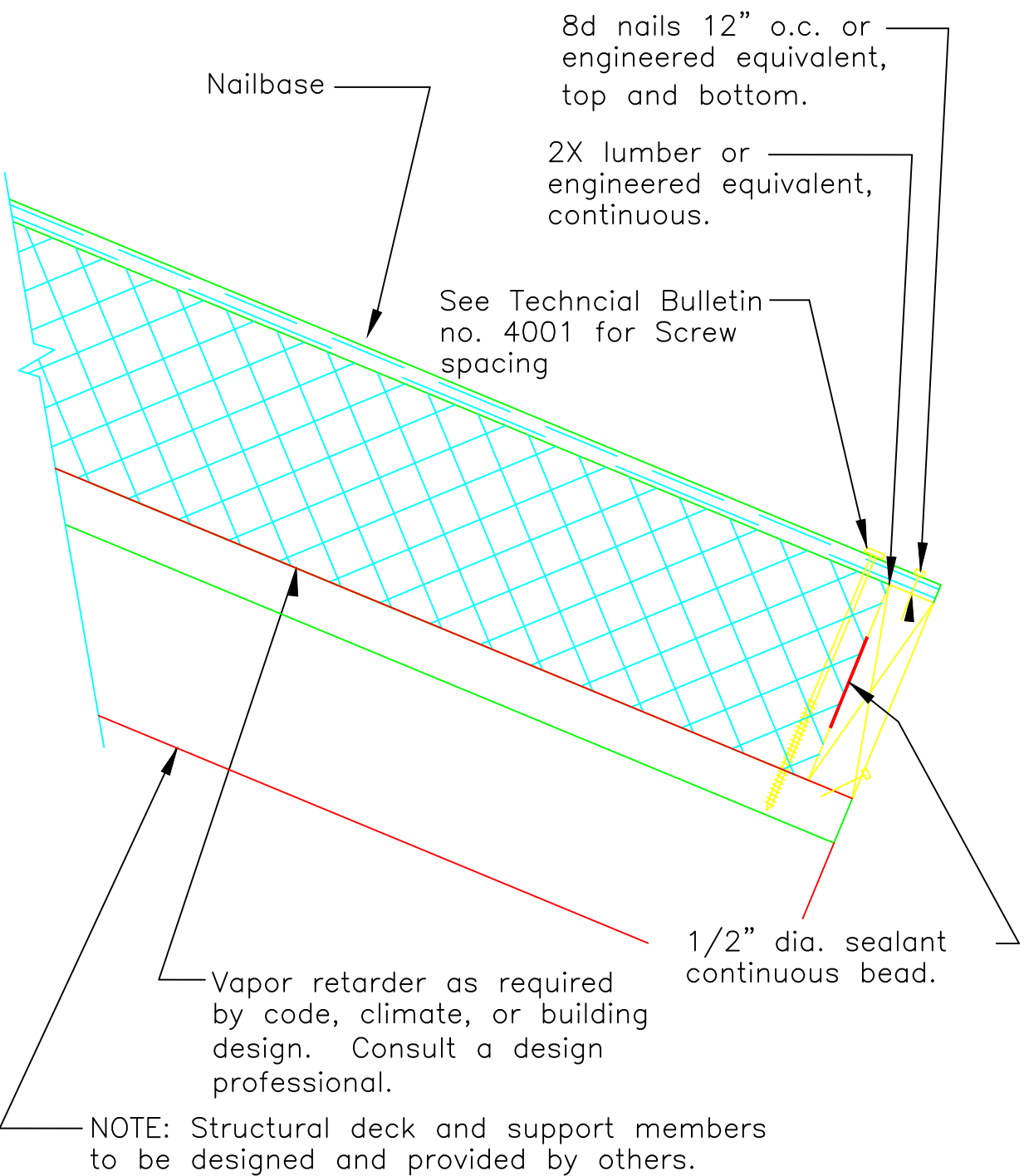
Nailbase

TITLE:

Roof Valley

NO.

NB-102a



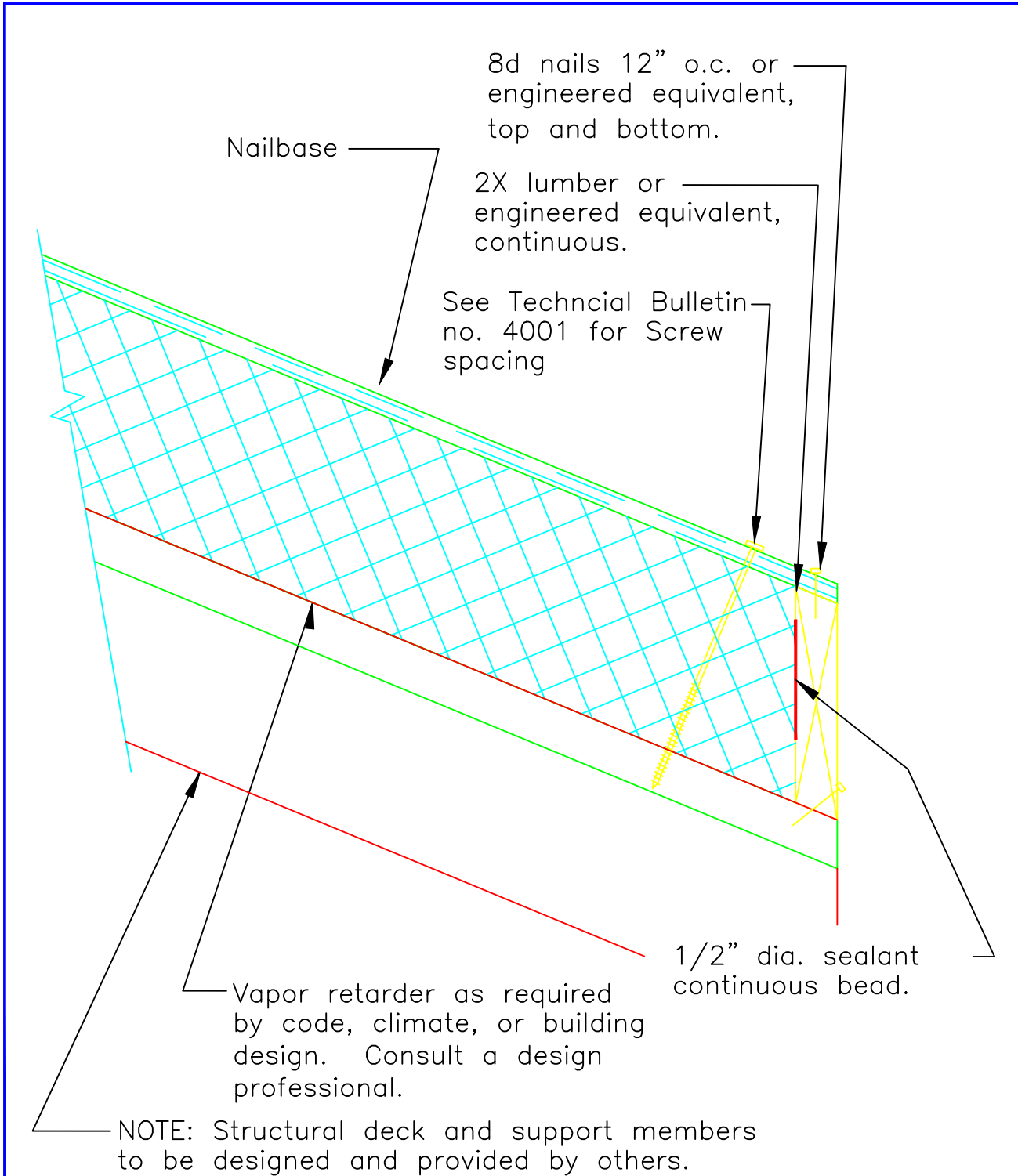
SECTION

Scale: NTS

Updated 6-1-20

Nailbase

TITLE:	Square Cut Eave	NO.	NB-103
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SECTION

Scale: NTS

Updated 6-1-20

Nailbase	
TITLE: Plumb Cut Eave	NO. 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

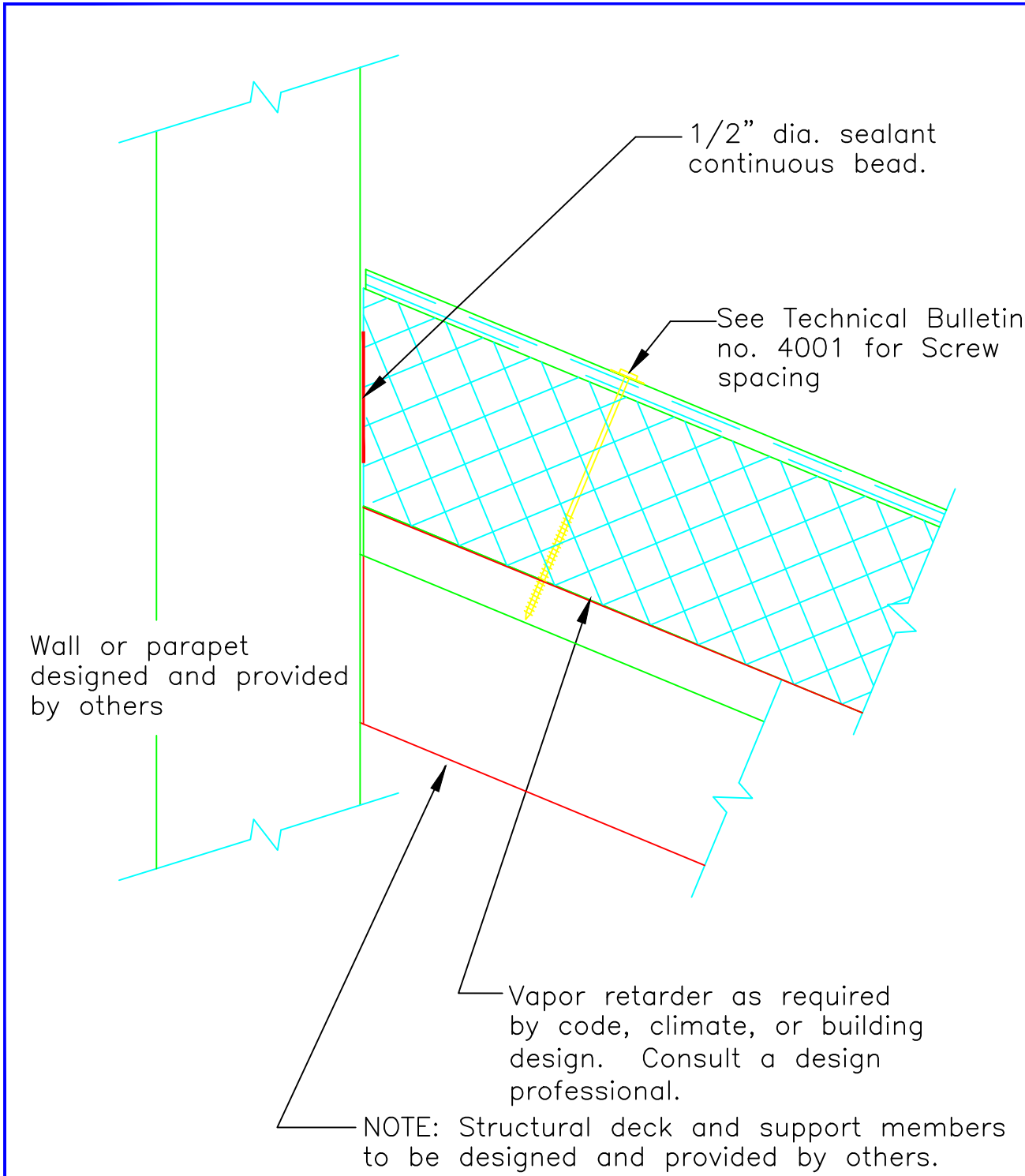
Nailbase

TITLE:

Vented Eave

NO.

NB-103b



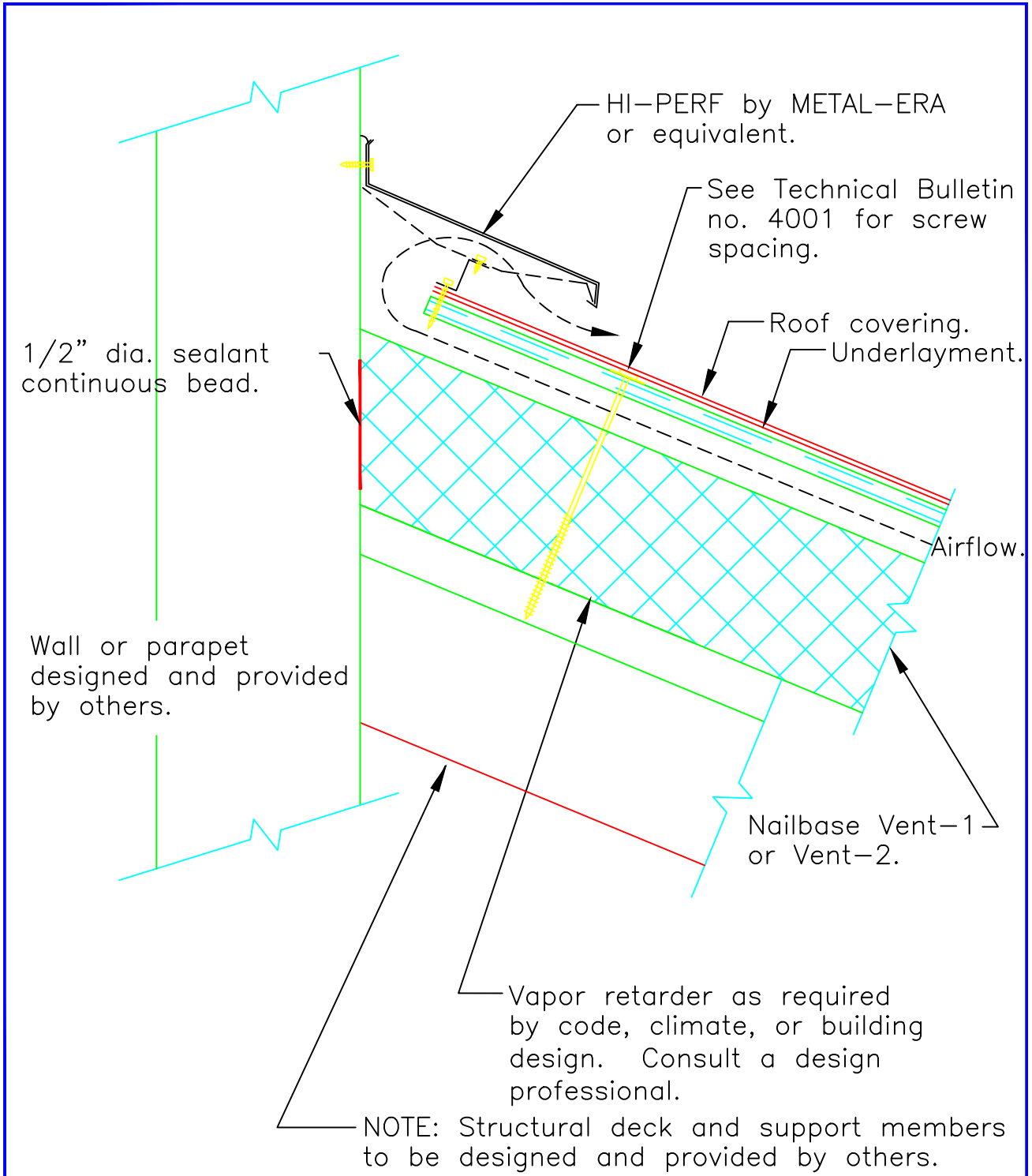
SECTION

Scale: NTS

Updated 6-1-20

Nailbase

TITLE:	NO.
Wall Intersection	NB-104a

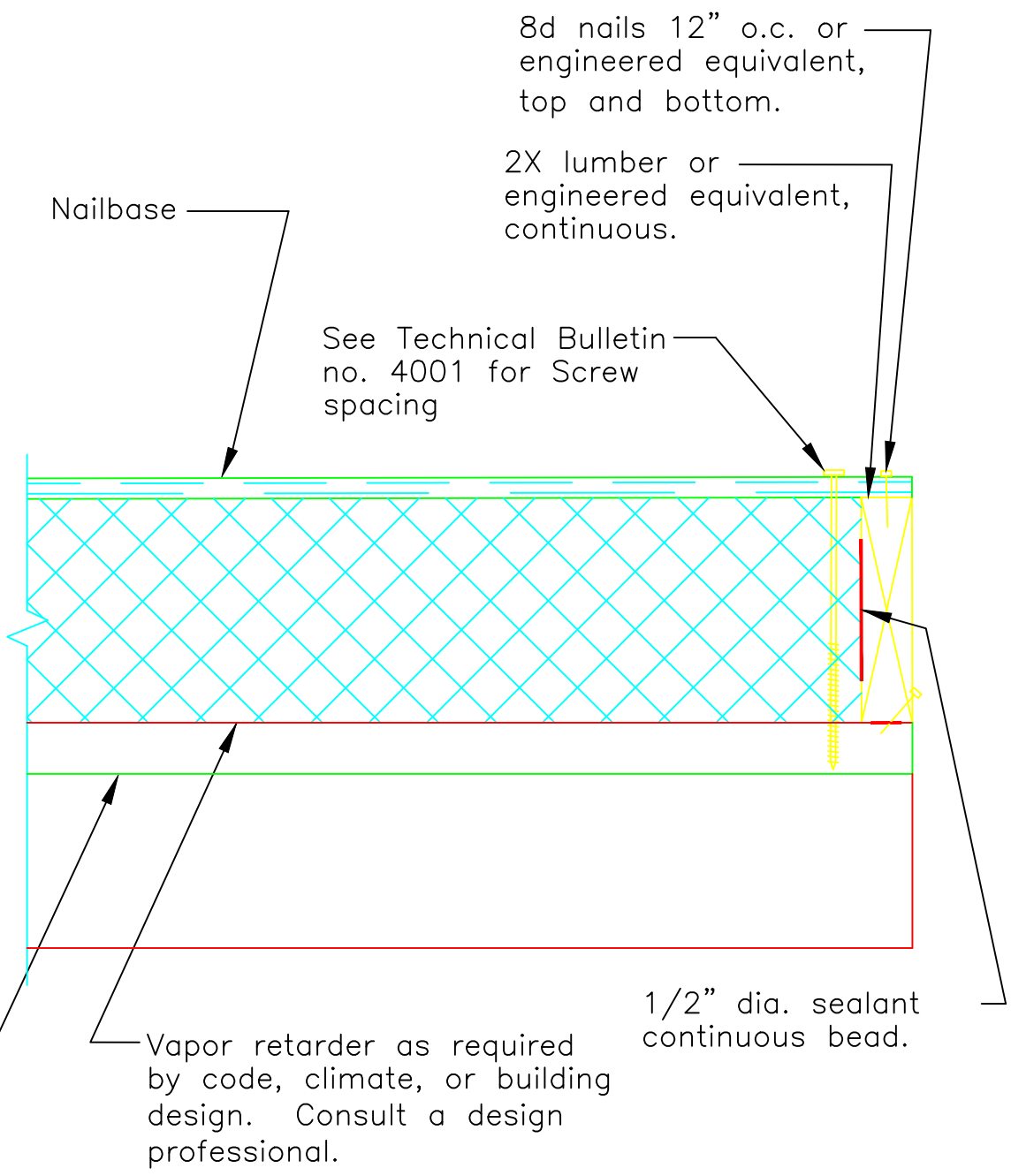


SECTION

Scale: NTS

Updated 6-1-20

Nailbase	
TITLE: Vented Wall Intersection	NO. NB-104b

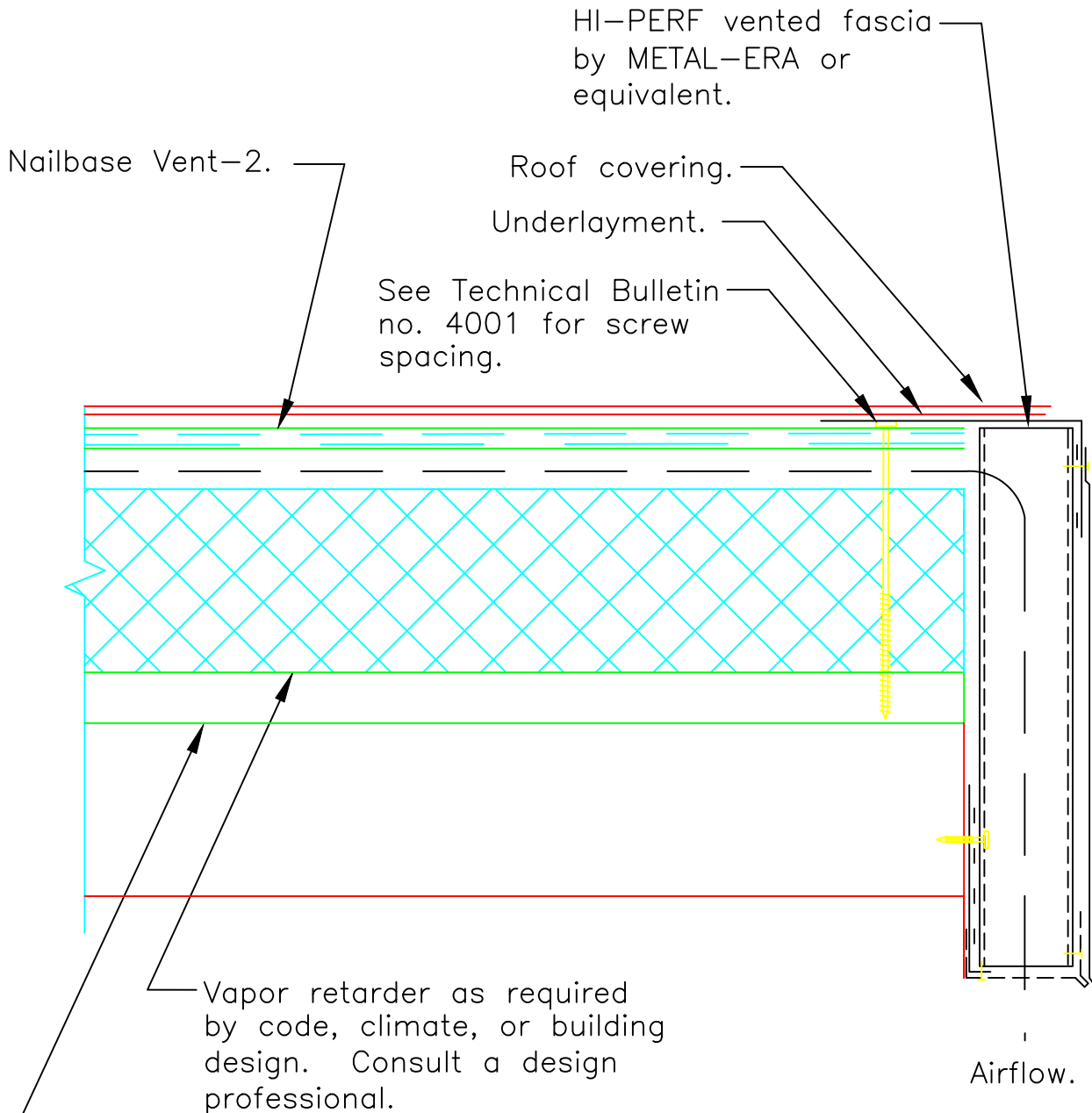


SECTION

Scale: NTS

Updated 6-1-20

Nailbase	
TITLE: Gable End	NO. NB-105



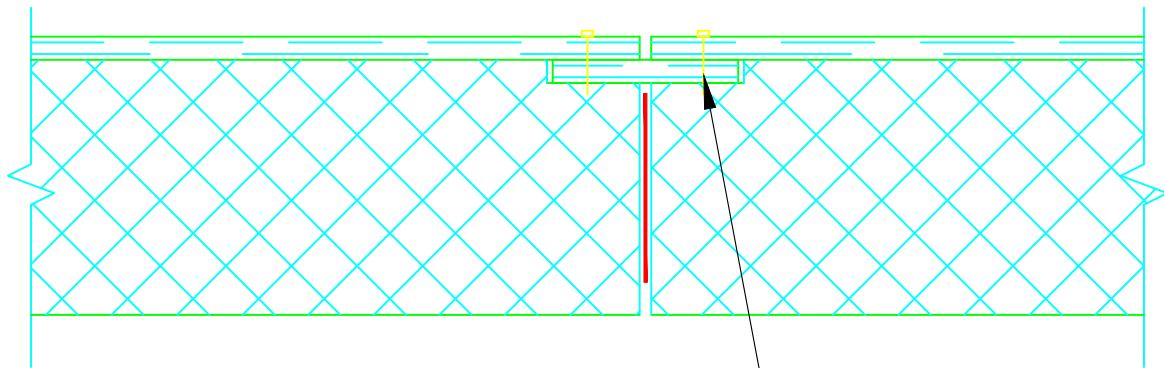
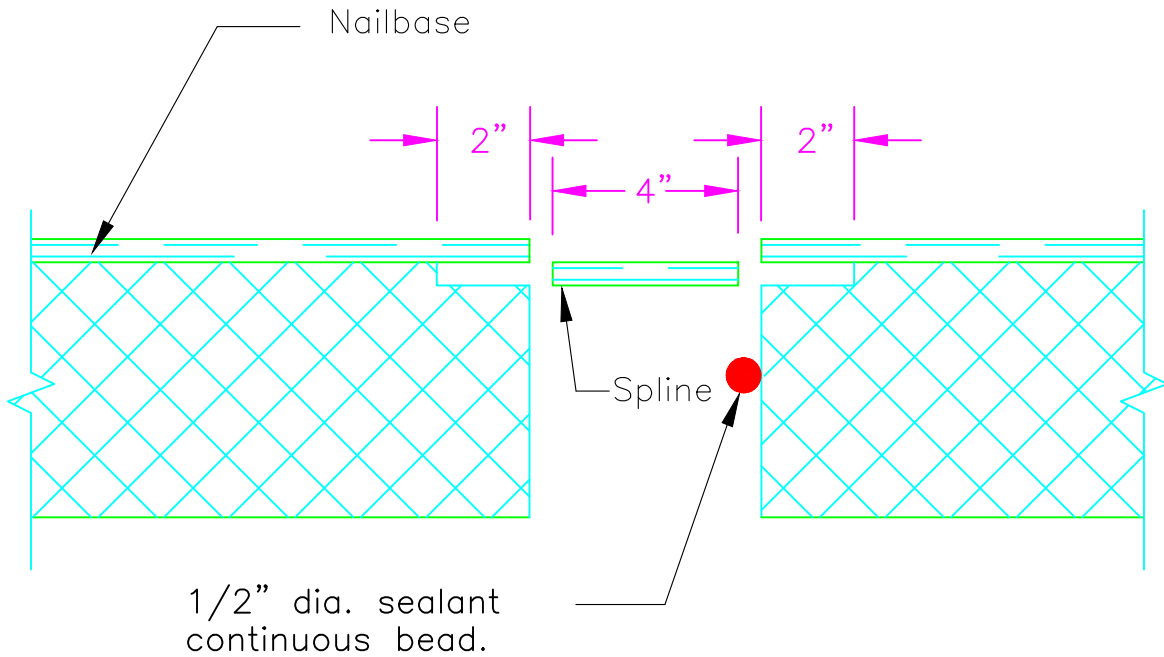
NOTE: Structural deck and support members to be designed and provided by others.

SECTION

Scale: NTS

Updated 6-1-20

Nailbase	
TITLE: Vented Gable	NO. 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

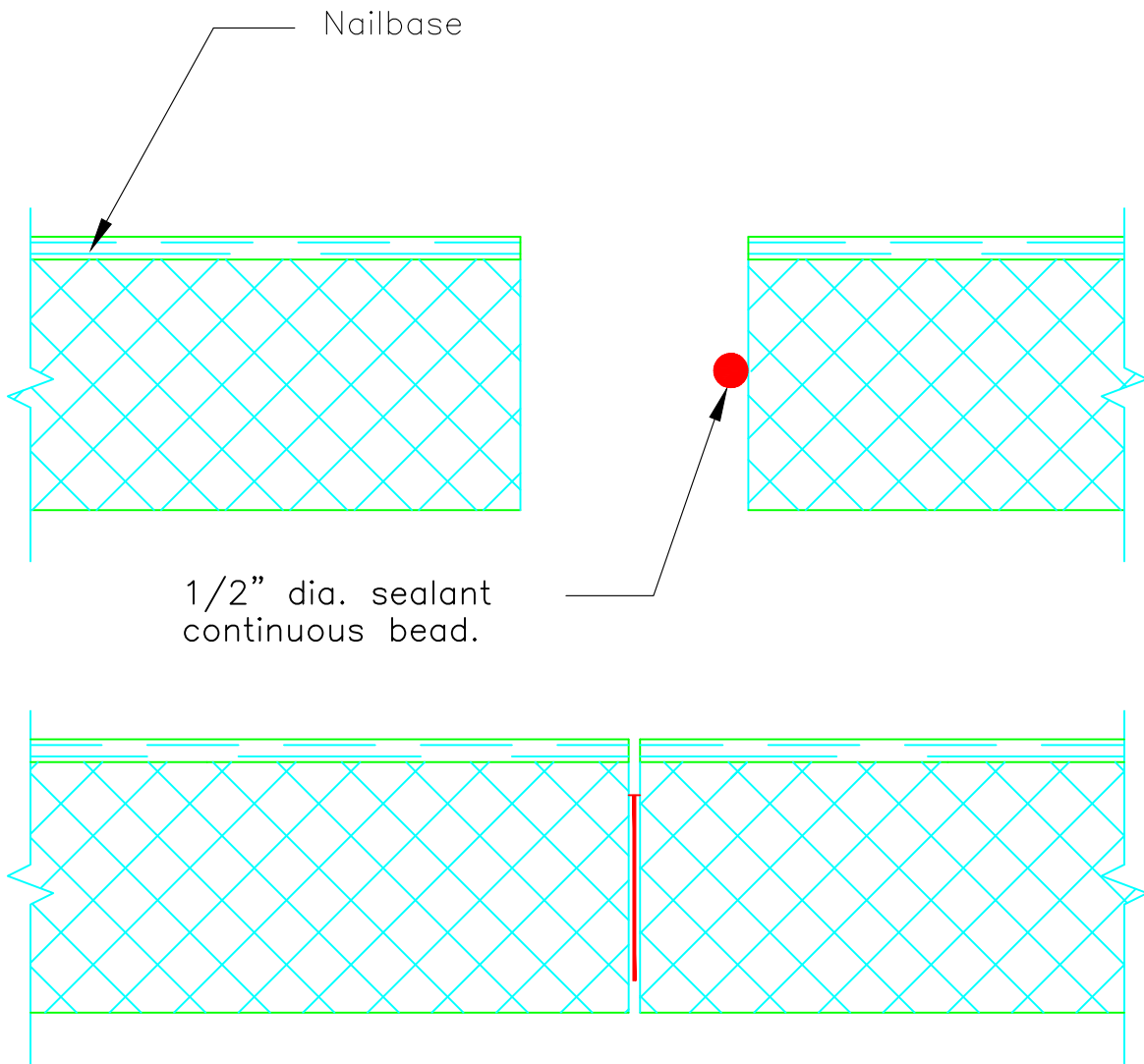
Nailbase

TITLE:

Spline Connection

NO.

NB-106



SECTION

Scale: NTS

Updated 6-1-20

Nailbase

TITLE:

Butt Connection

NO.

NB-106a

Product Availability and Support.

R-Shield 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 R-Shield Nailbase contribute to your next project, just contact your Premier Building Systems Technical Sales Representative. We will be happy to give you design consultation, information about R-Shield Nailbase products, pricing, and answers to all of your questions.

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