

INSTALLATION GUIDE

NOVANO FENCE SYSTEM

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I. INTRODUCTION

Engineered for architectural consistency and lifetime durability, the NOVANO Fence System utilizes a high-performance Board Profile. Together with the Aluminum Post, Rails and other components, it ensures a seamless, screw-free finish across every application.

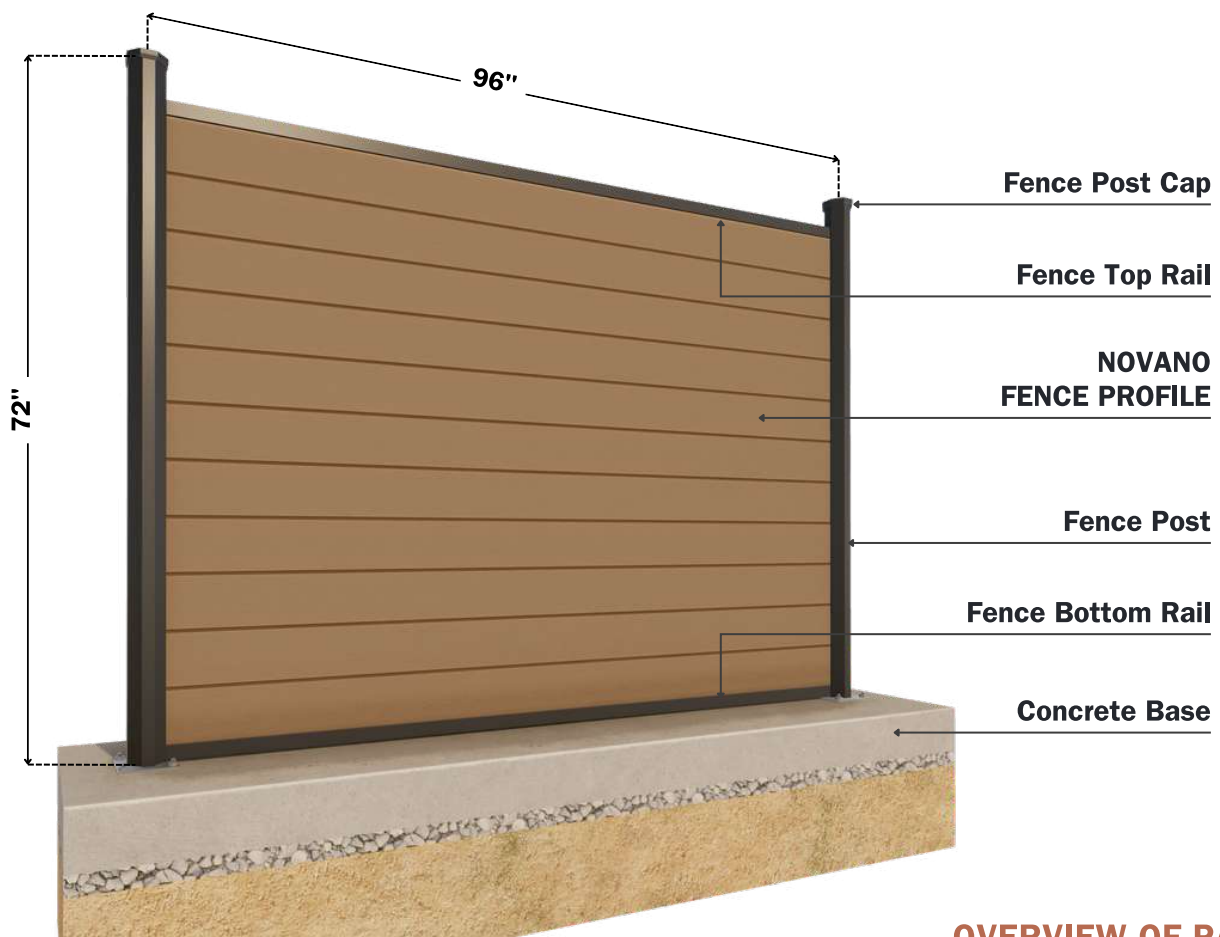
NOVANO composite fencing is a **fully integrated system** designed to deliver consistent performance, visual continuity, and reliable installation results across residential and commercial projects. Every component, from the Fencing Profiles to the Post, Rails, Caps and fastening elements, works together as one coordinated solution.

This approach simplifies specification, reduces installation complexity, and ensures a clean, cohesive finish from deck surface to perimeter details.

SECTION 1 - MATERIAL COMPONENTS

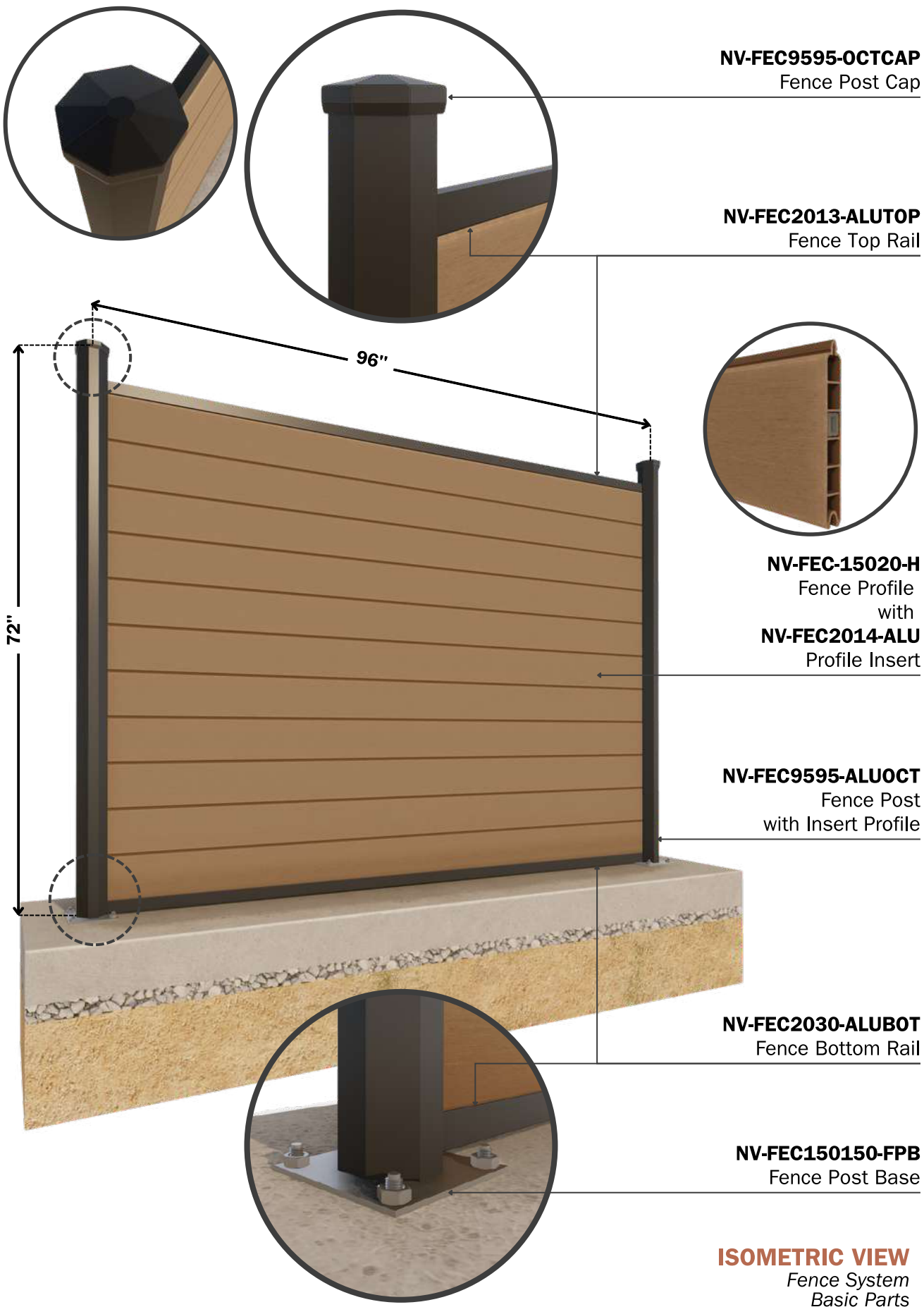
The traditional construction industry has long been limited by the biological vulnerabilities of timber. At NOVANO, we have moved beyond mere imitation to True Engineering. Our technology is centered on a proprietary synthesis of natural innovation and high-performance polymers, creating a wood-free composite that excels where organic fibers fail.

By manipulating the molecular structure of our raw materials, we ensure high-density fiber reinforcement that provides unrivaled dimensional stability and moisture resistance. This is Nature Reinvented, a next-generation material designed to meet the rigorous mechanical demands of global architectural standards while offering a superior total value through long-term structural integrity.



OVERVIEW OF PARTS

SECTION 2 - BASICS



SECTION 3 - SCOPE OF DELIVERY

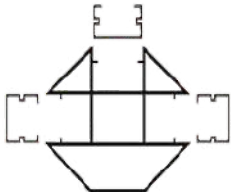
ITEM No.	PRODUCT NAME & SPECIFICATION	ISOMETRIC VIEW	SECTION VIEW
1	NV-FEC-15020-H 3/4" x 6 3/8" x 93 1/2" Fence Profile		
2	NV-FEC2014-ALU 3/4" x 9/16" x 93 3/4" Profile Insert		
3	NV-FEC150150-FPB 16" x 1 1/4" x 6" x 1/2" Fence Post Base		
4	NV-FEC9595-ALUOCT 3 3/4" x 3 3/4" x 72" Fence Post with Insert Profile		
5	NV-FEC2030-ALUBOT 3/4" x 1 1/4" x 93 3/4" Fence Bottom Rail		
6	NV-FEC2013-ALUTOP 1/2" x 3/4" x 93 3/4" Fence Top Rail		
7	NV-FEC9595-OCTCAP 3 3/4" x 3 3/4" Fence Post Cap		

Table 1.1 - Scope of Delivery

II. INSTALLATION PROCEDURE

SECTION 1 - REQUISITES

To install the NOVANO Fence System, the Design and Lay-out of the fence shall be carefully reviewed.

Moreover, area for fence installation whether direct on concrete floor or on concrete pedestals shall be compliant to local building code requirements.

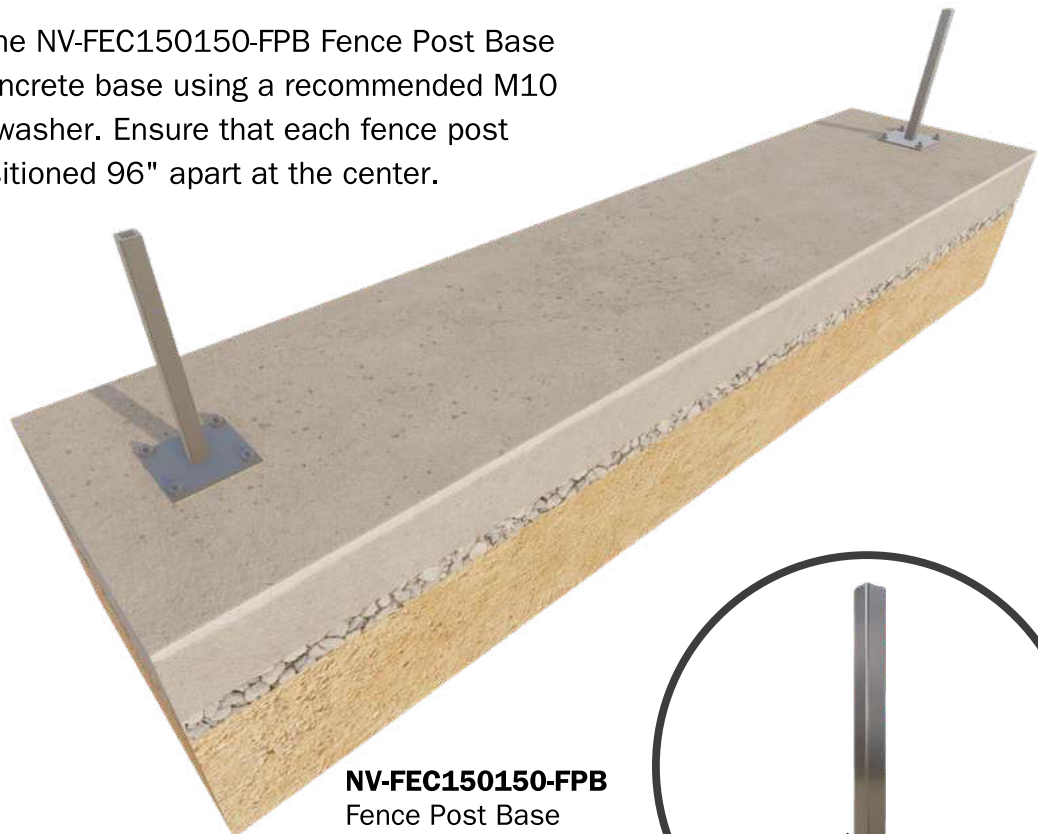
Top of concrete floor and/or concrete pedestals shall be levelled.

SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.1

Install the NV-FEC150150-FPB Fence Post Base onto the concrete base using a recommended M10 bolt with a washer. Ensure that each fence post base is positioned 96" apart at the center.

ISOMETRIC VIEW
Fence System



NV-FEC150150-FPB
Fence Post Base

*Recommended
Bolt and Nut **M10**
supply by others*

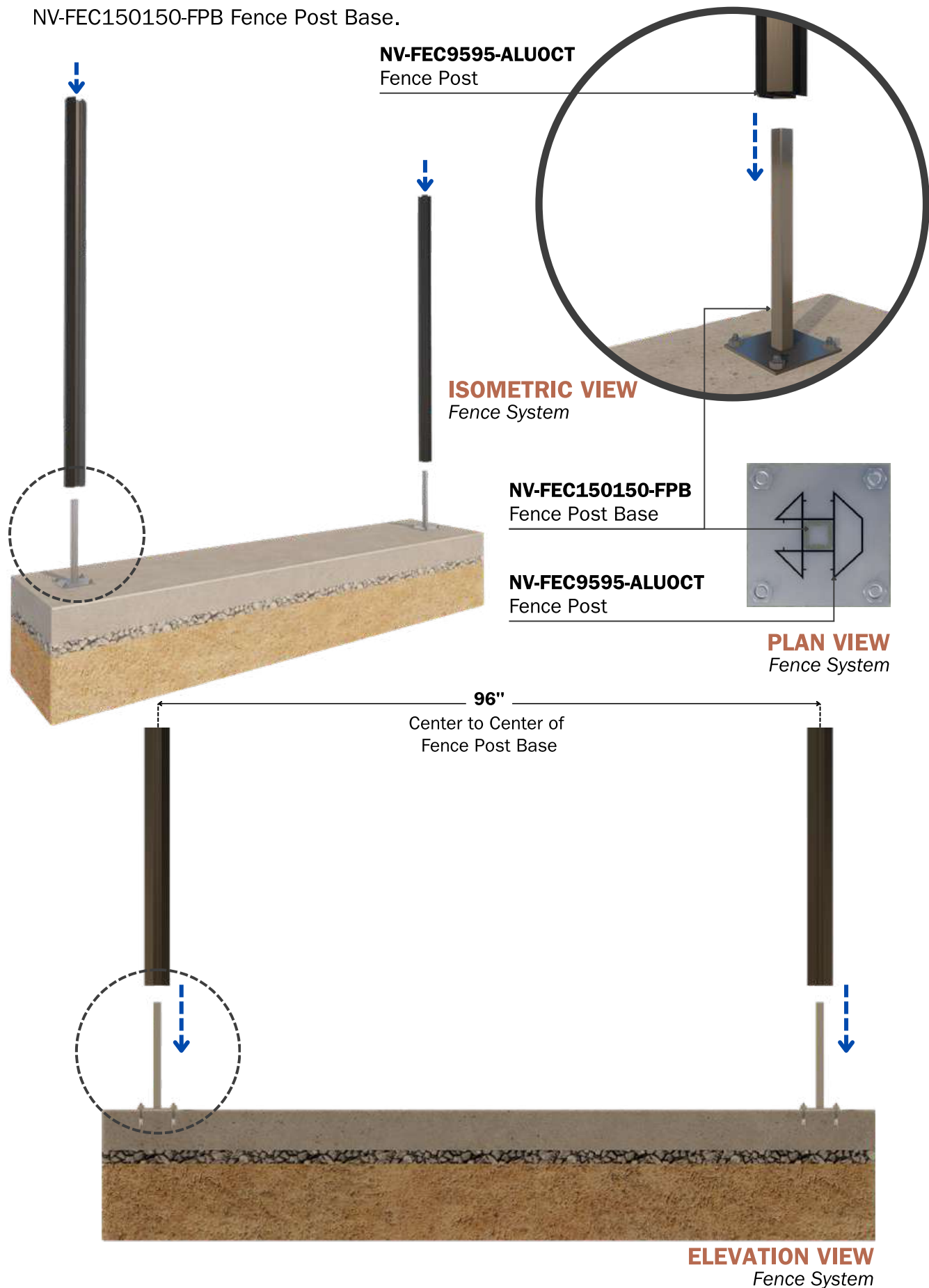


ELEVATION VIEW
Fence System

SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.2

Insert the Fence Post NV-FEC9595-ALUOCT into the NV-FEC150150-FPB Fence Post Base.

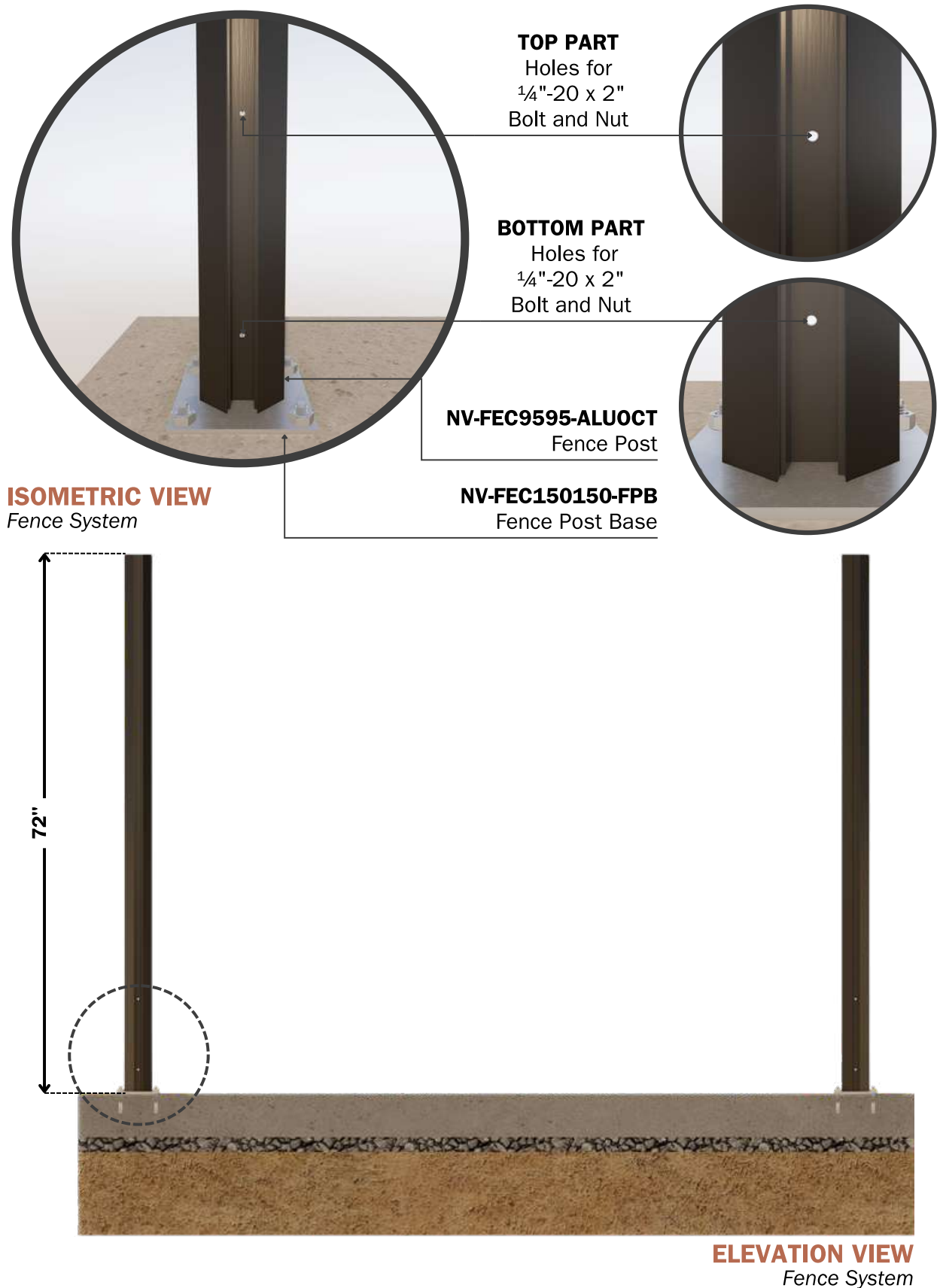


SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.3

Drill holes through the top and bottom of the Fence Post NV-FEC9595-ALUOCT and the NV-FEC150150-FPB Fence Post Base.

The holes will be drilled on-site to meet the specific conditions of the project.

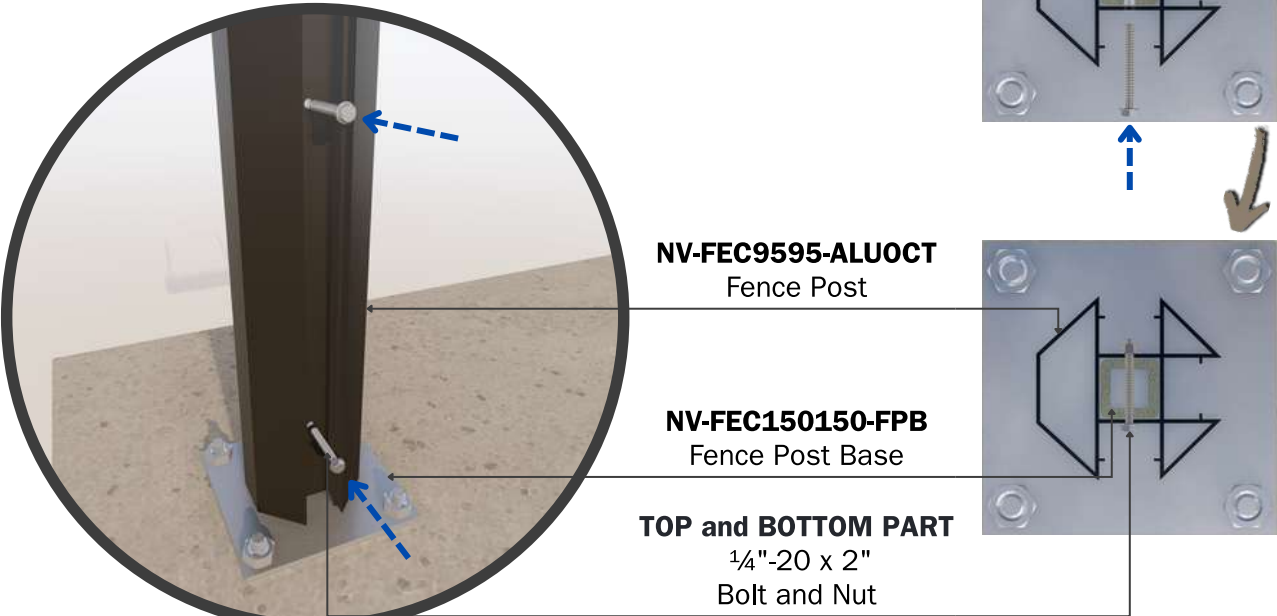


SECTION 2 - FENCE SYSTEM INSTALLATION

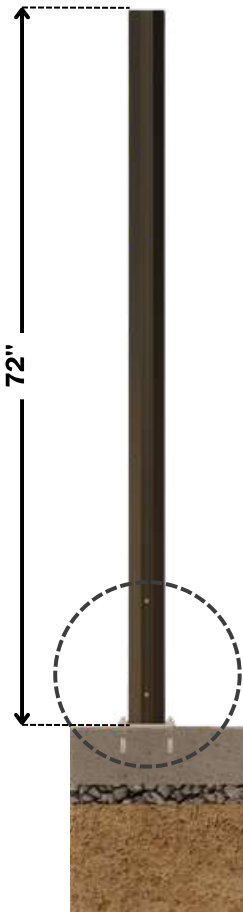
SECTION 2.4

Secure the Fence Post along with the Fence Post Base using 1/4"-20 x 2" Bolts and Nuts.

Fasten them in both the top and bottom holes, making sure the bolts extend through to the opposite side of the fence post groove.



ISOMETRIC VIEW
Fence System



PLAN VIEW
Fence System

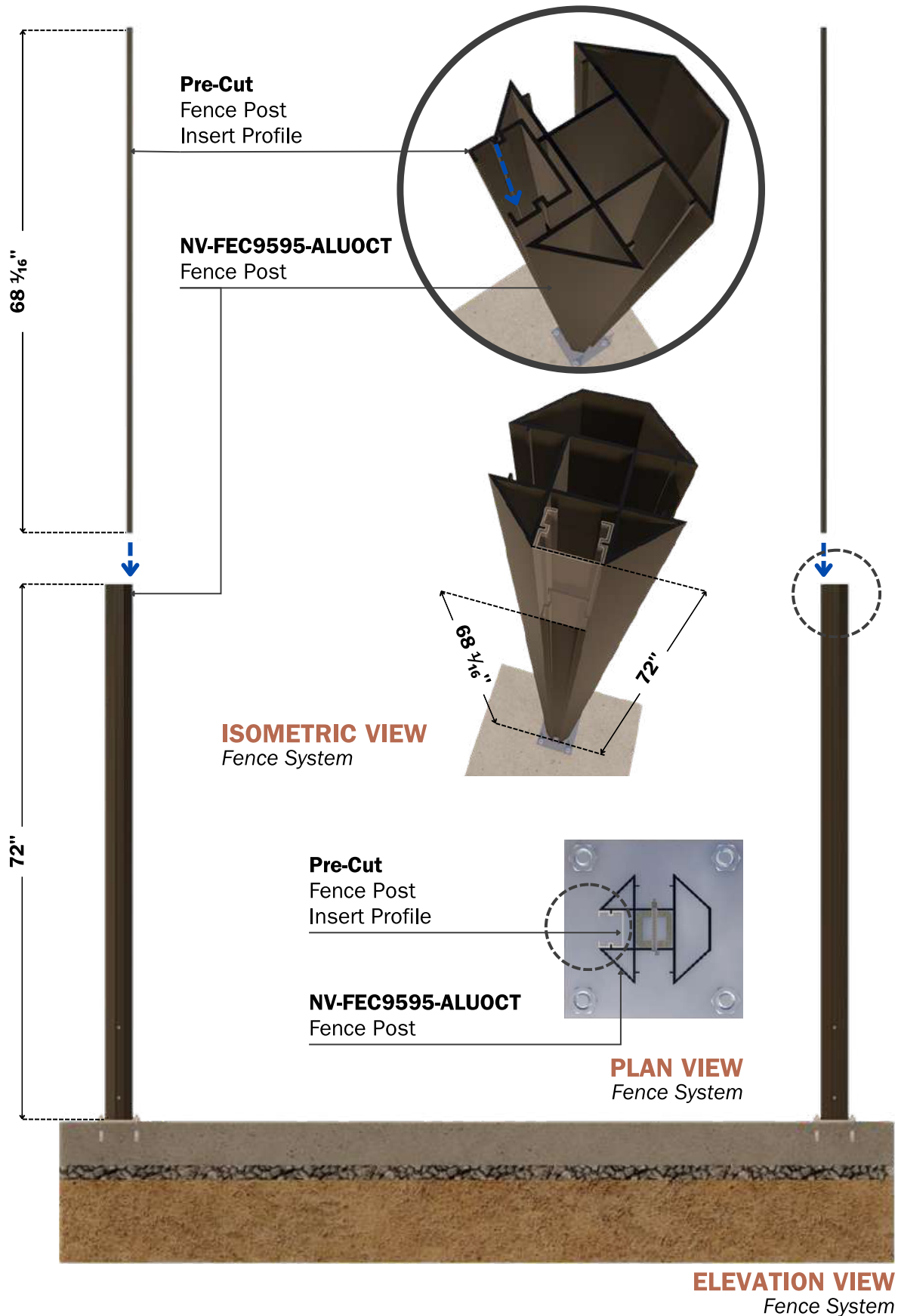


ELEVATION VIEW
Fence System

SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.5

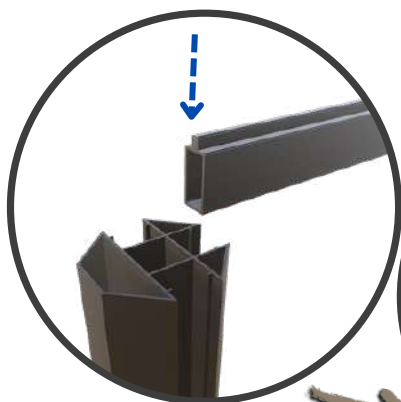
To ensure the proper installation of the Fence Board and minimize the post groove opening, simply slide the pre-cut Fence Insert Profile (68 $\frac{1}{16}$ ") into place where the board will be installed.



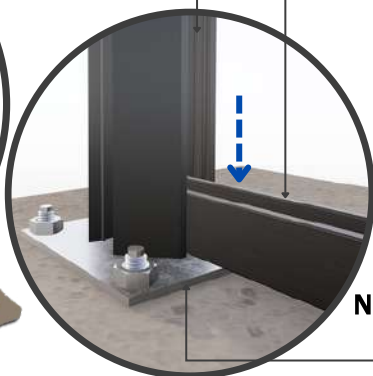
SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.6

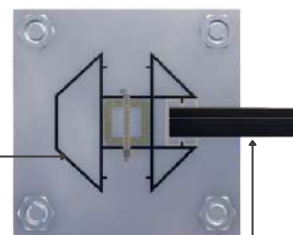
Slide the Fence Bottom Rail NV-FEC2030-ALUBOT into the groove of the Fence Insert Profile of the Fence Post NV-FEC9595-ALUOCT until it reaches the Fence Post Base.



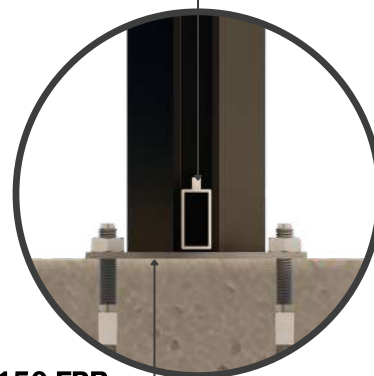
ISOMETRIC VIEW
Fence System



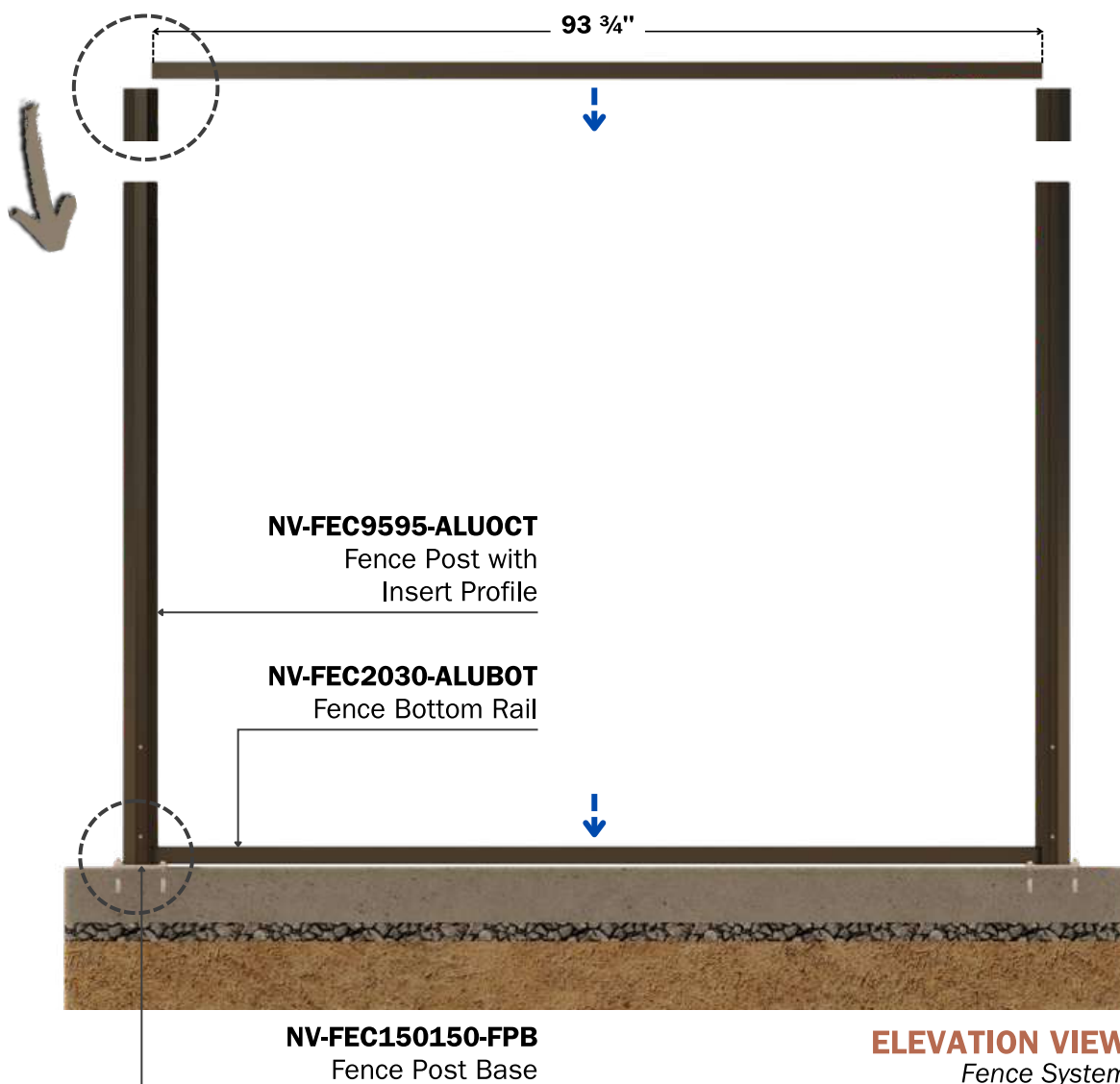
NV-FEC150150-FPB
Fence Post Base



PLAN VIEW
Fence System



SECTION VIEW
Fence System



NV-FEC9595-ALUOCT
Fence Post with
Insert Profile

NV-FEC2030-ALUBOT
Fence Bottom Rail

NV-FEC150150-FPB
Fence Post Base

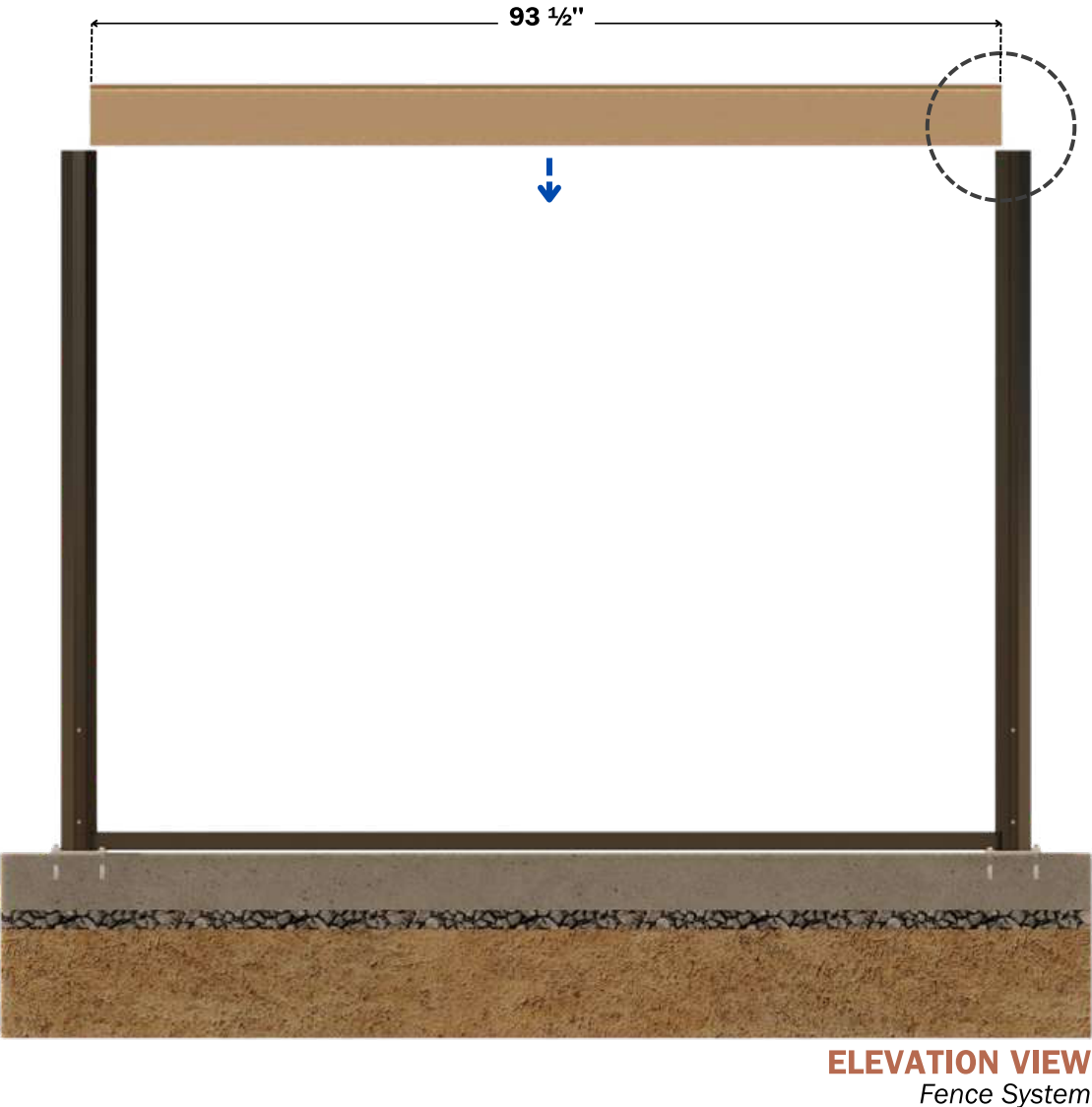
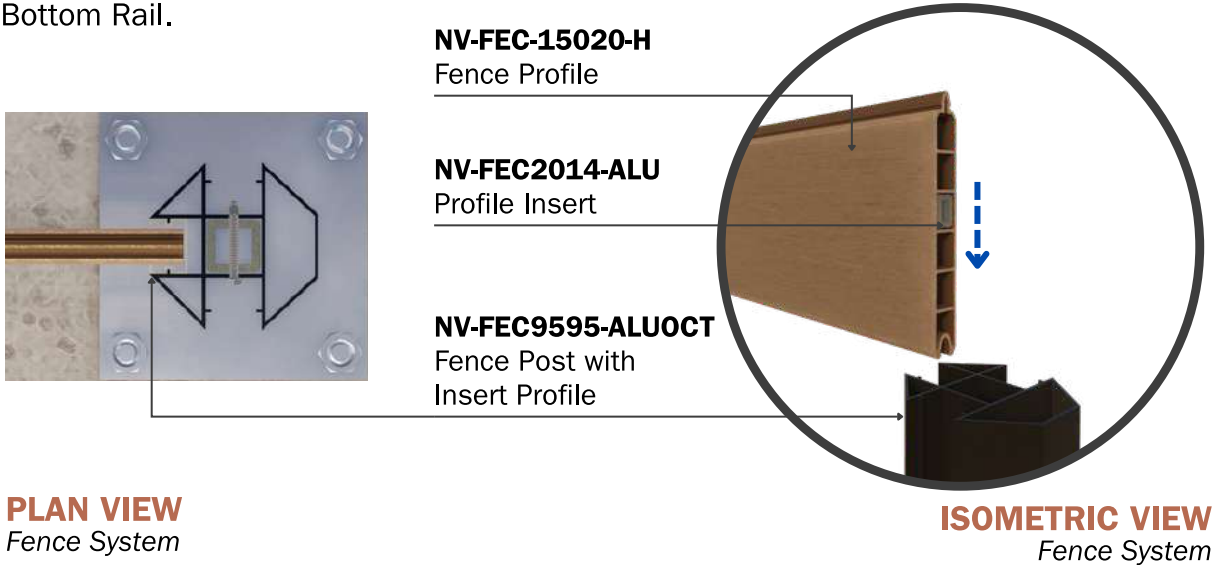
ELEVATION VIEW
Fence System

SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.7

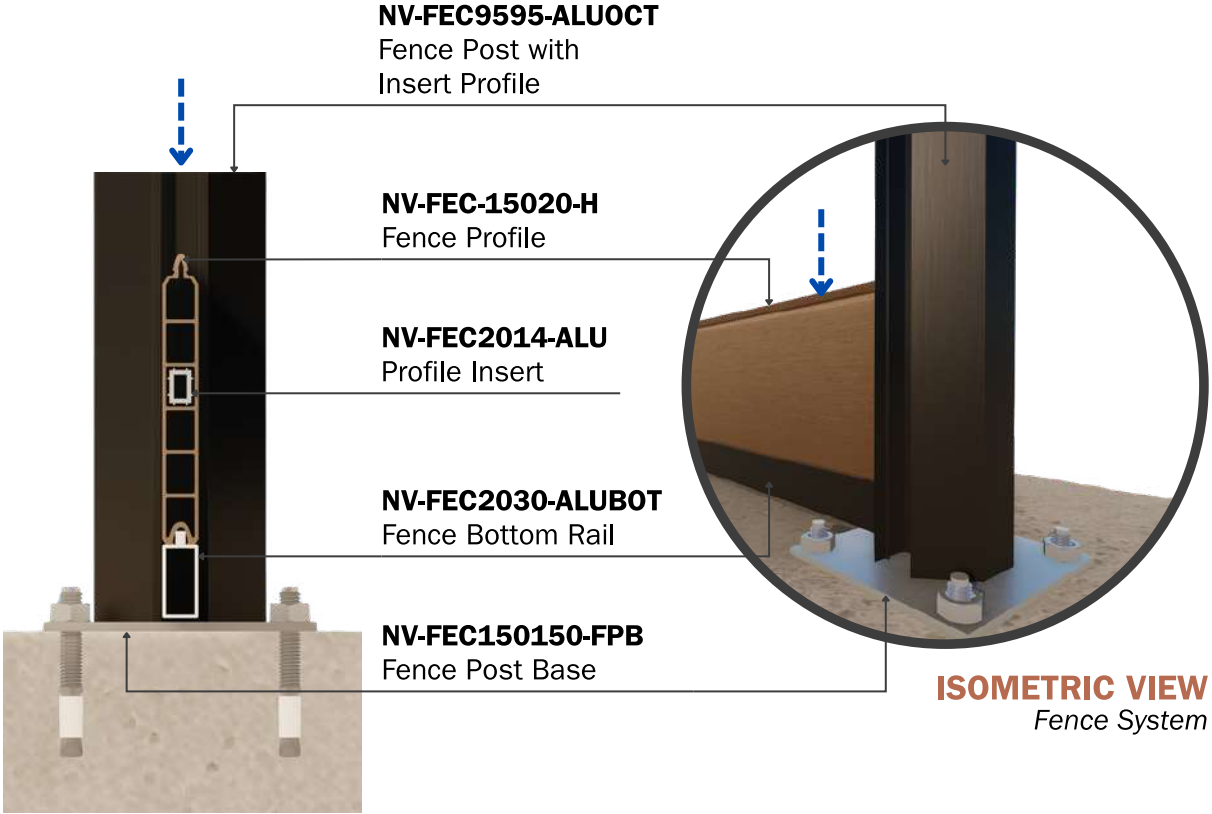
After installing the Fence Bottom Rail, install the Fence Profile NV-FEC-15020-H (with Profile Insert NV-FEC2014-ALU) by sliding it into the grooves where the Post Fence Insert Profile is positioned.

Ensure it is aligned with both Fence Posts until it fits securely against the Fence Bottom Rail.

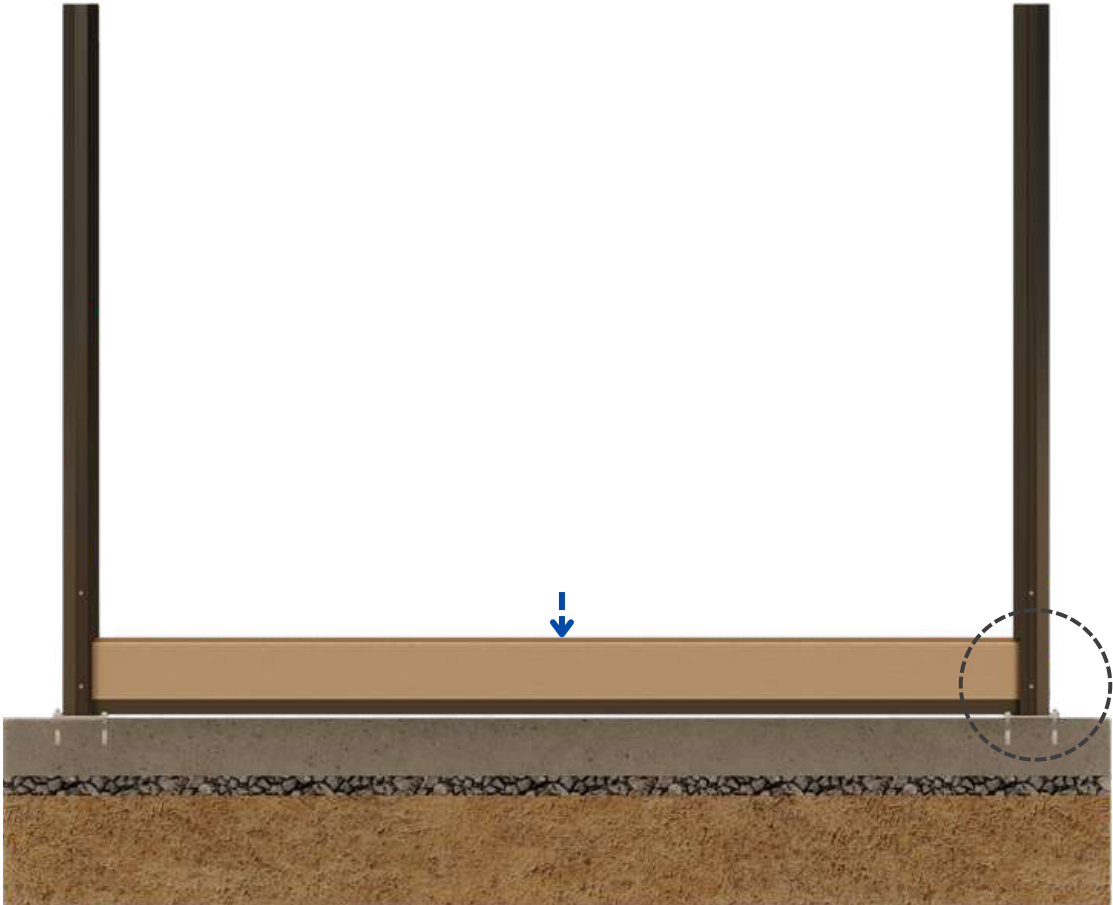


SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.7



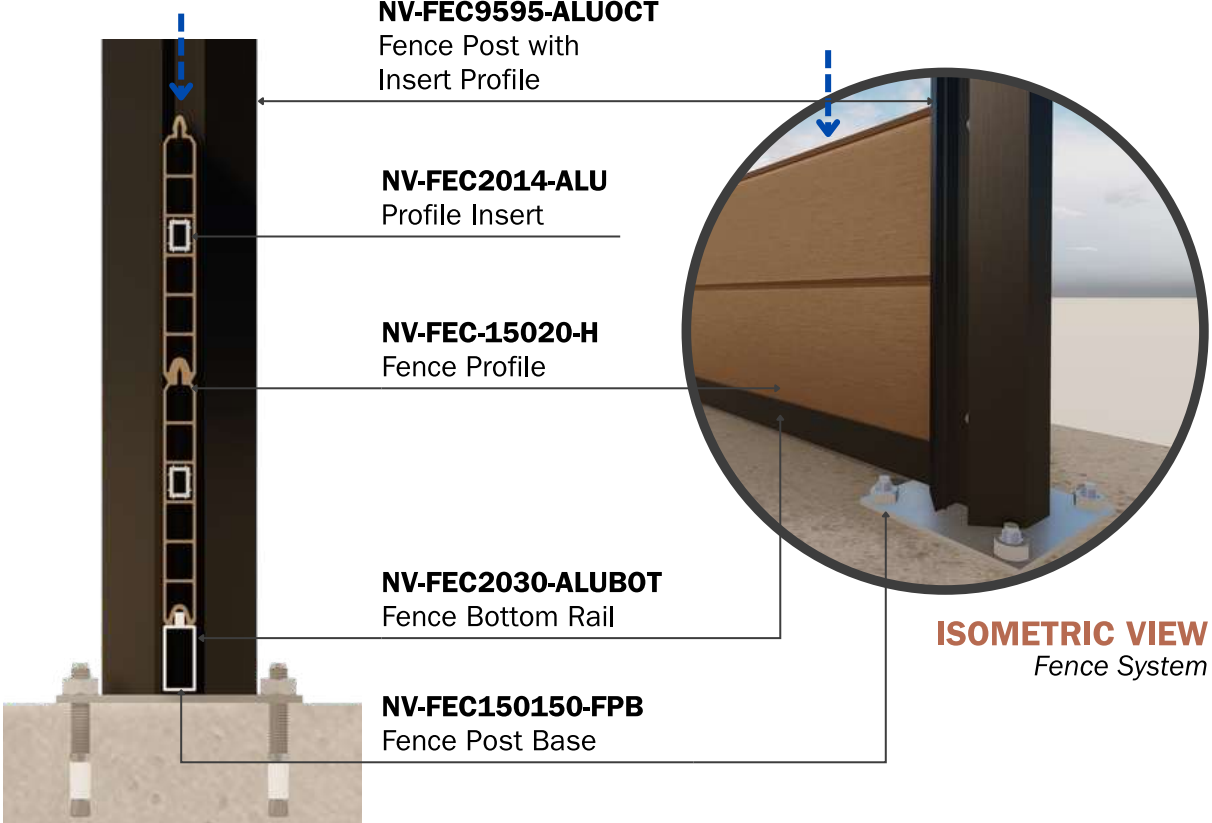
SECTION VIEW
Fence System



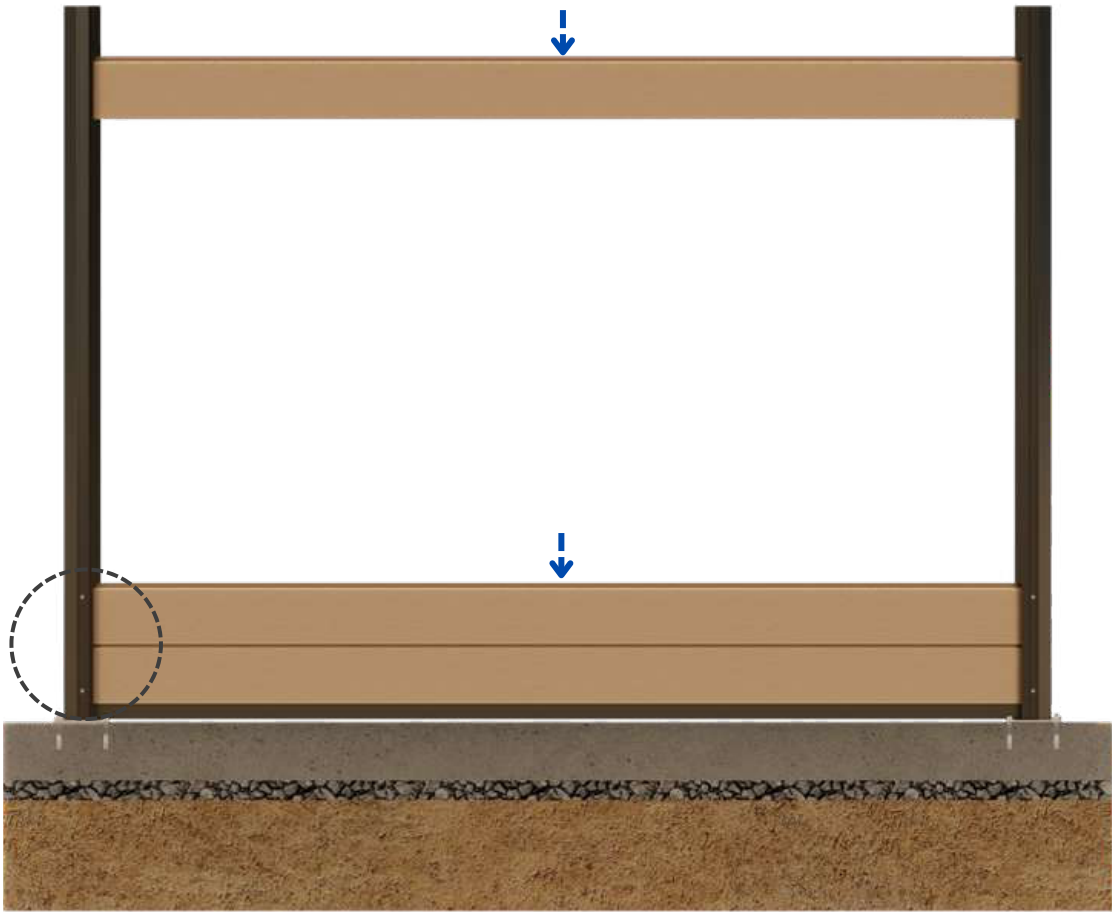
ELEVATION VIEW
Fence System

SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.7



SECTION VIEW
Fence System

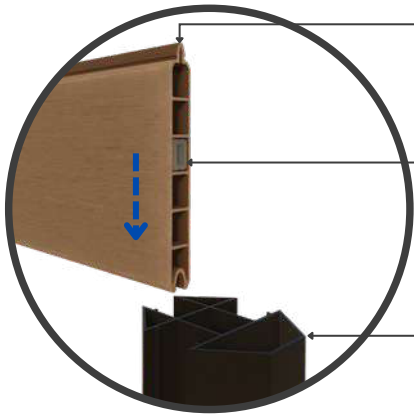


ELEVATION VIEW
Fence System

SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.8

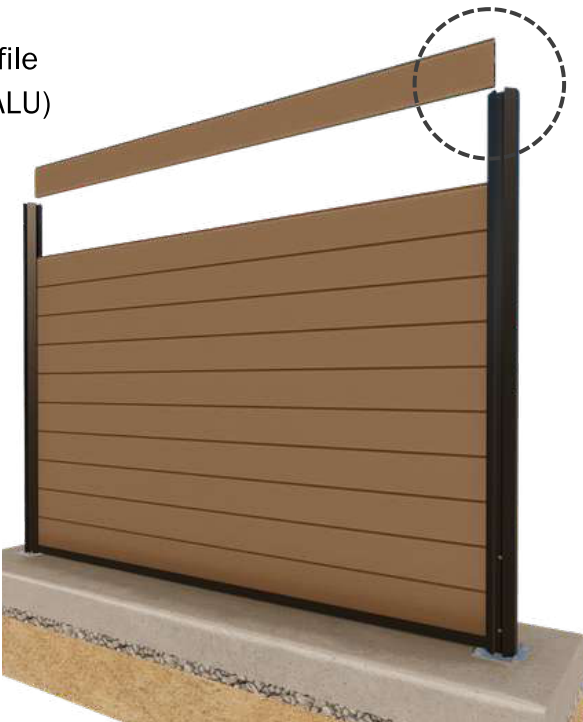
Continue with the installation of the Fence Profile NV-FEC-15020-H (with Profile Insert NV-FEC2014-ALU) until the top profile is reached ensuring that it is aligned with both Fence Posts until it fits securely against the previous Fence Profile.



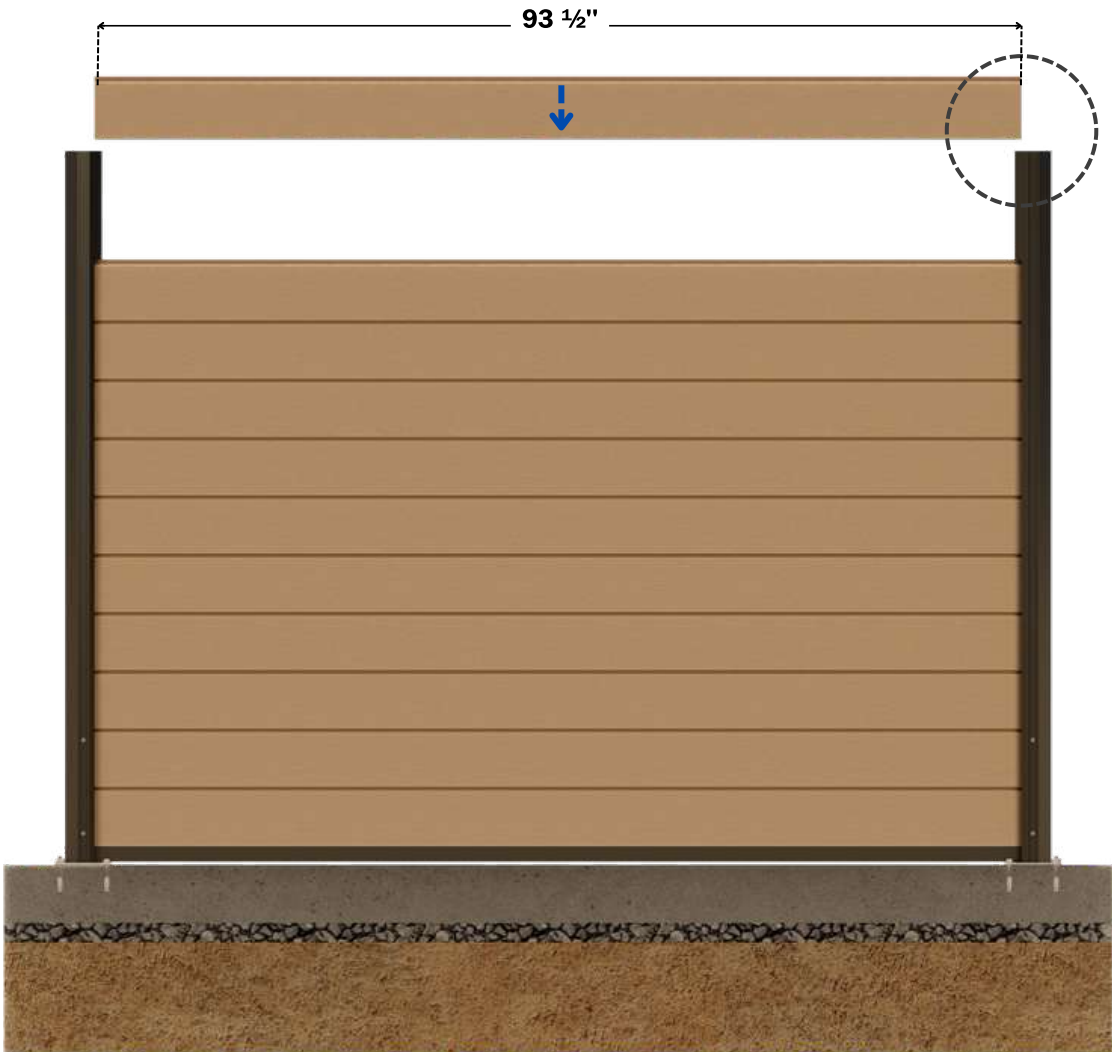
NV-FEC-15020-H
Fence Profile

NV-FEC2014-ALU
Profile Insert

NV-FEC9595-ALUOCT
Fence Post with
Insert Profile



ISOMETRIC VIEW
Fence System

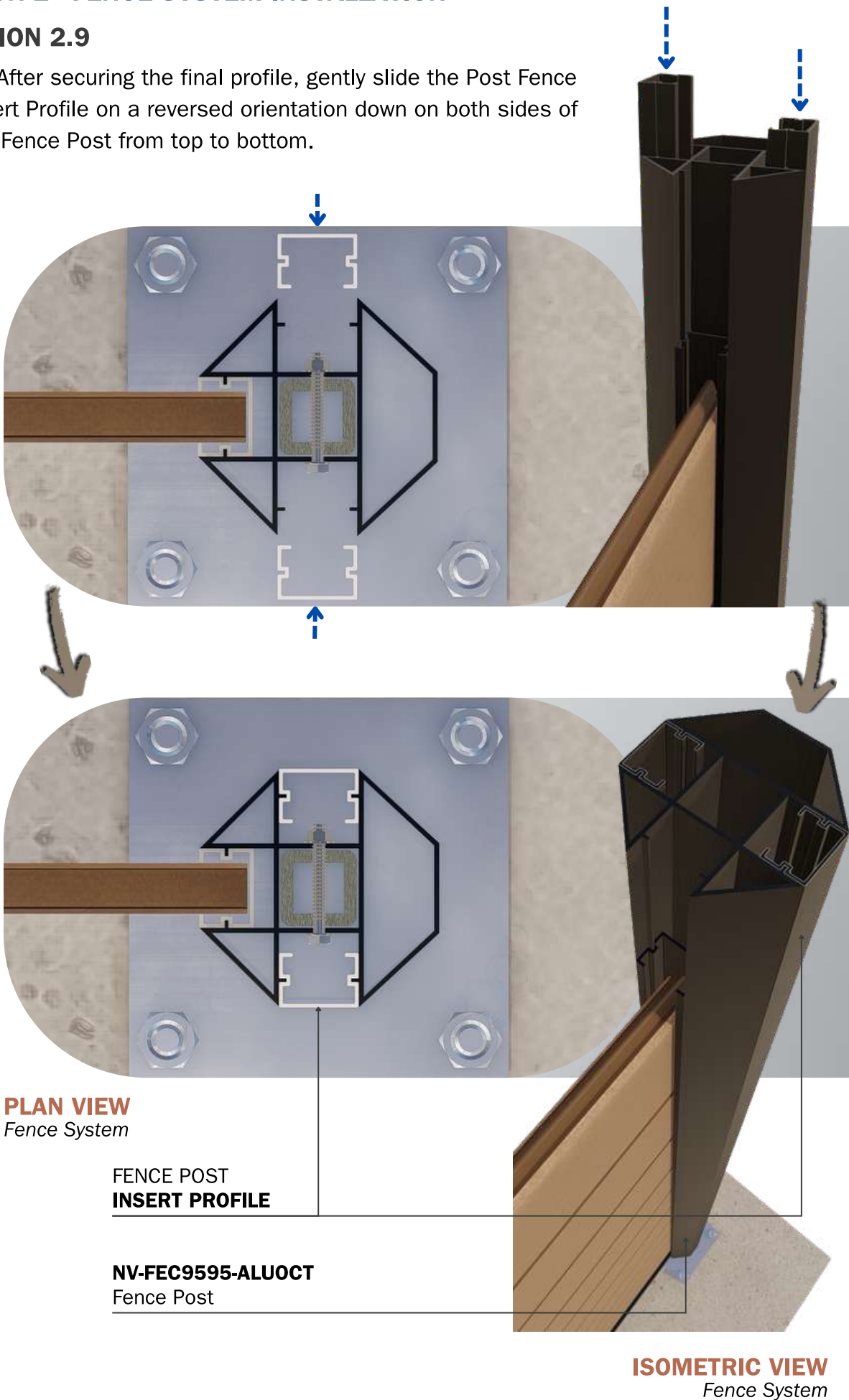


ELEVATION VIEW
Fence System

SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.9

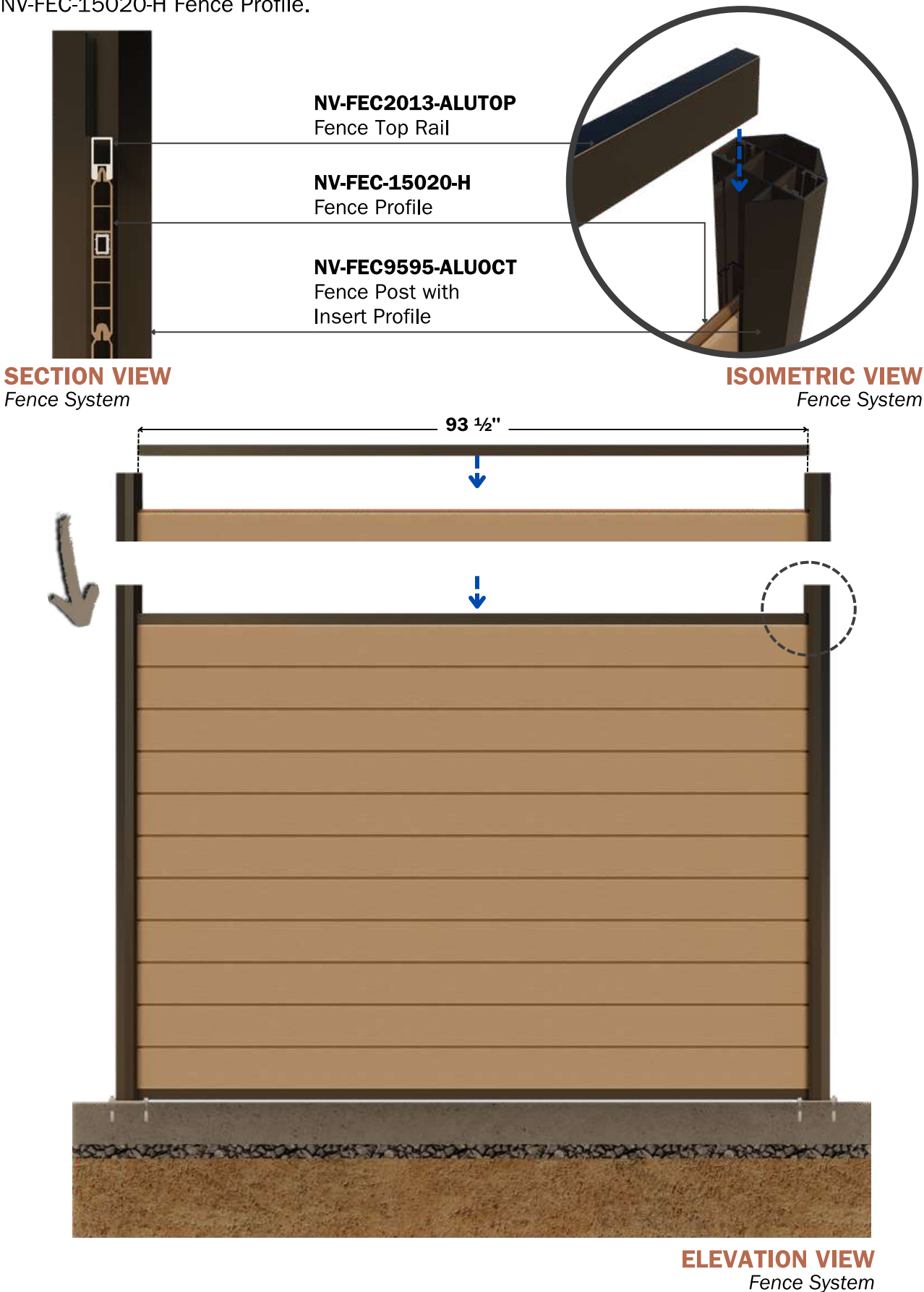
After securing the final profile, gently slide the Post Fence Insert Profile on a reversed orientation down on both sides of the Fence Post from top to bottom.



SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.10

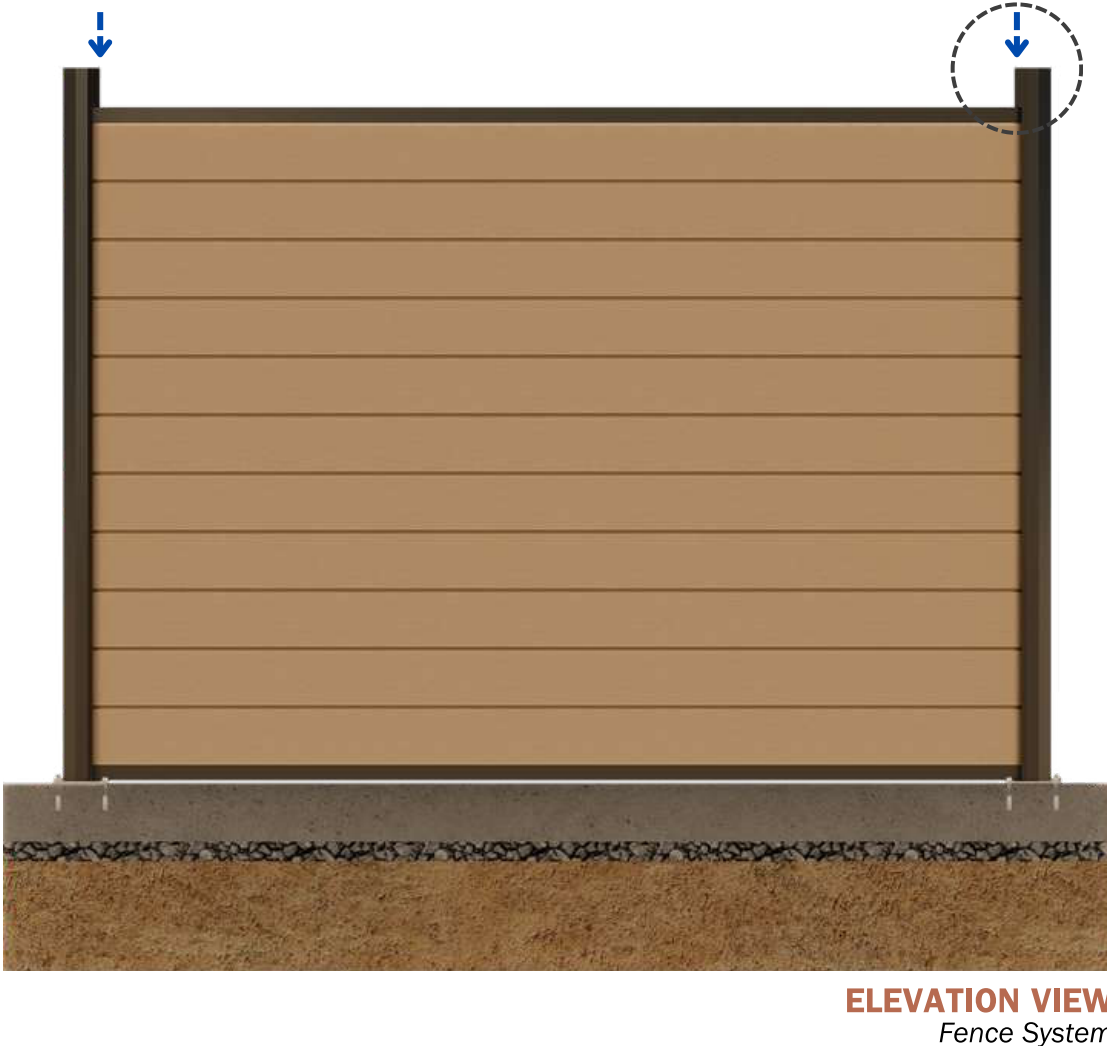
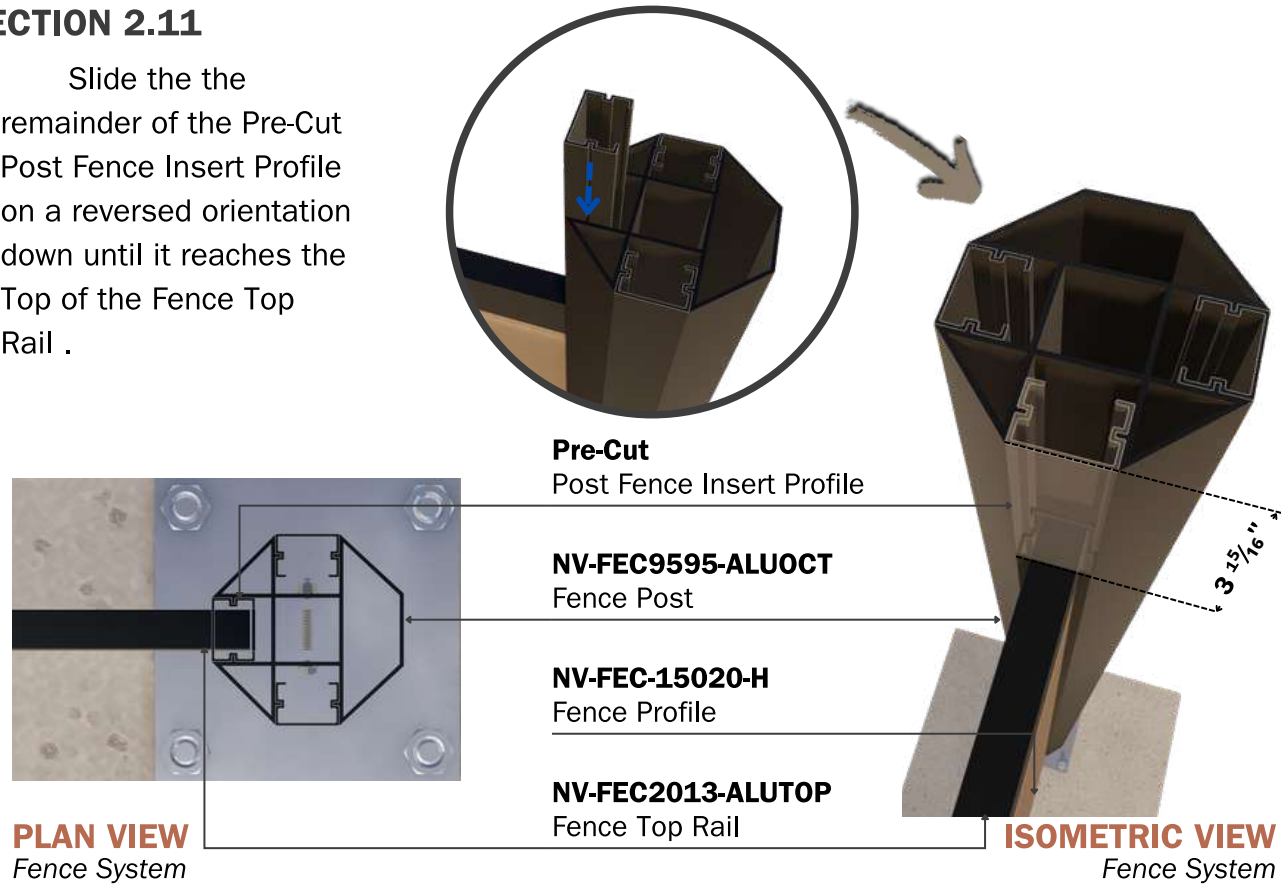
Install the Fence Top Rail NV-FEC2013-ALUTOP, by sliding it into the grooves where the Post Fence Insert Profile is positioned; completing the process by securing the topmost NV-FEC-15020-H Fence Profile.



SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.11

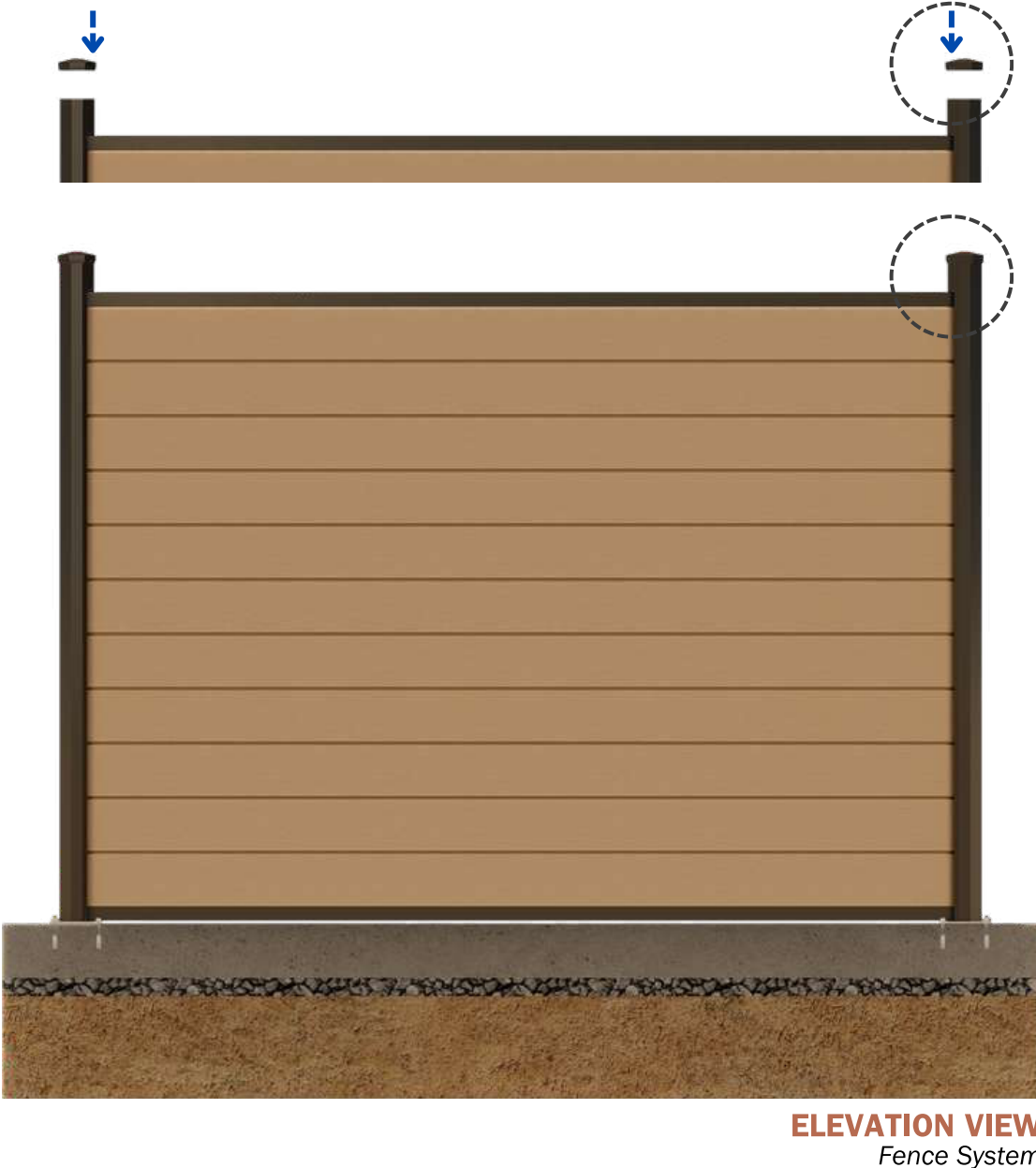
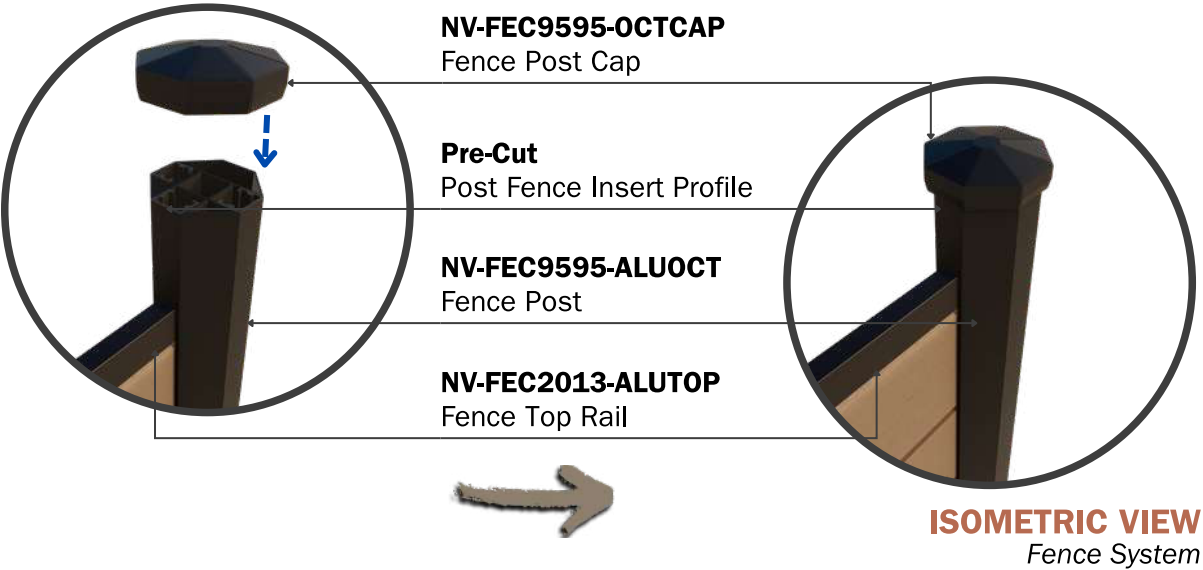
Slide the the remainder of the Pre-Cut Post Fence Insert Profile on a reversed orientation down until it reaches the Top of the Fence Top Rail .



SECTION 2 - FENCE SYSTEM INSTALLATION

SECTION 2.12

Finally, attach the Fence Post Cap NV-FEC9595-OCTCAP to both Fence Posts.



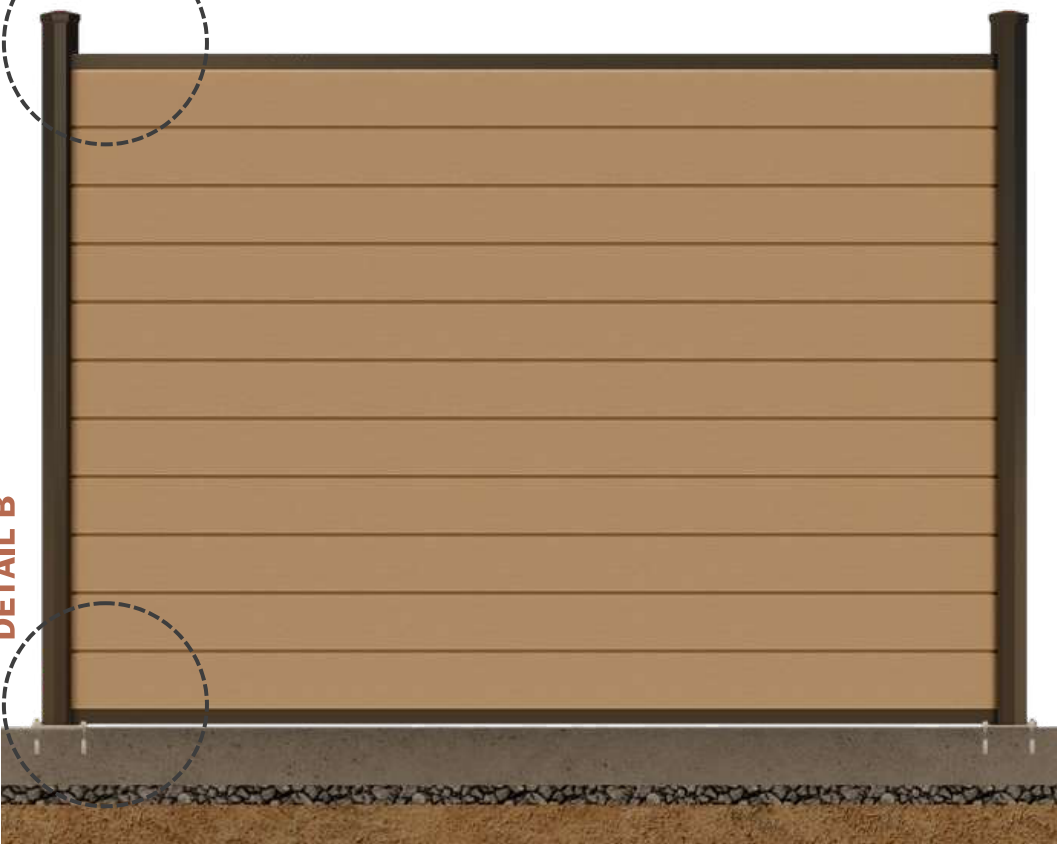
SECTION 2 - FENCE SYSTEM INSTALLATION

DETAIL A

- NV-FEC2013-ALUTOP
Fence Top Rail
- NV-FEC2014-ALU
Profile Insert
- NV-FEC-15020-H
Fence Profile

DETAIL A
Fence System

DETAIL B



ELEVATION VIEW
Fence System

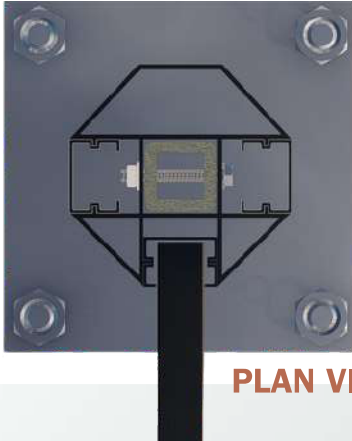
- NV-FEC-15020-H
Fence Profile
- NV-FEC2014-ALU
Profile Insert
- NV-FEC2030-ALUBOT
Fence Bottom Rail

DETAIL B
Fence System



II. INSTALLATION PROCEDURE

SECTION 3 - FENCE CONNECTION DETAILS

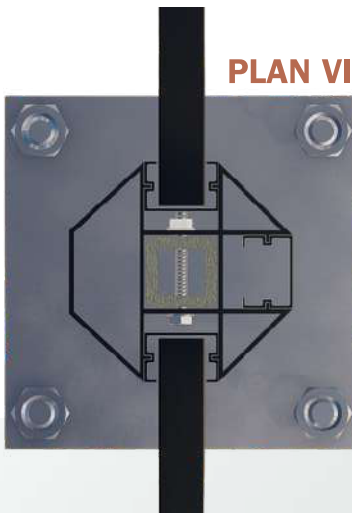


PLAN VIEW

END DETAIL



ISOMETRIC VIEW

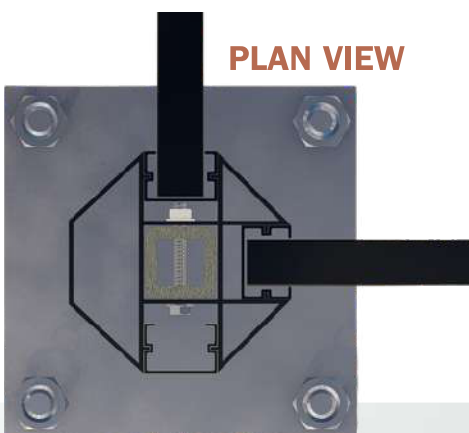


PLAN VIEW

LINEAR DETAIL



ISOMETRIC VIEW



PLAN VIEW

CORNER DETAIL



ISOMETRIC VIEW

II. INSTALLATION PROCEDURE

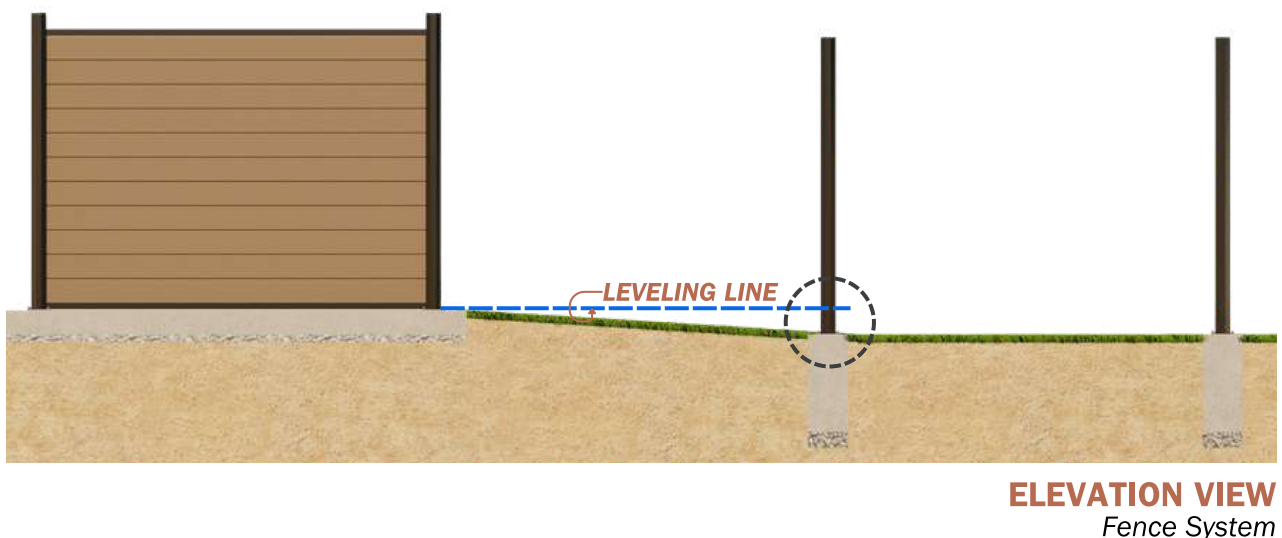
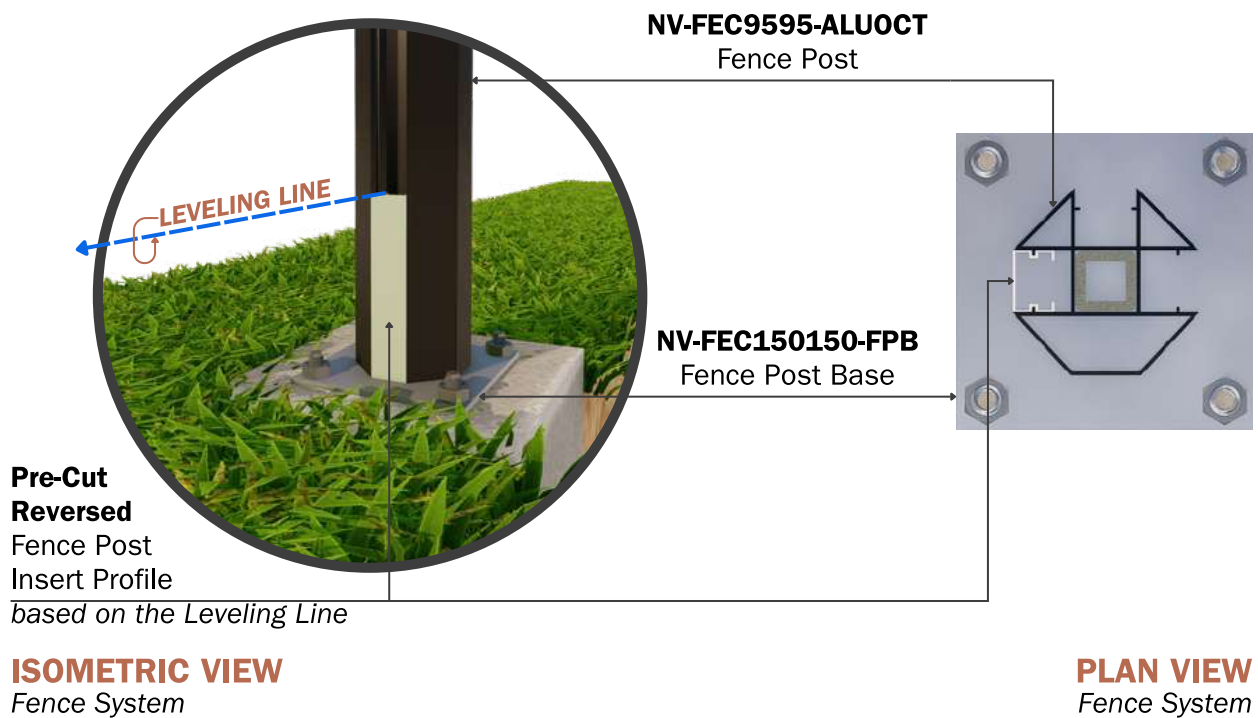
SECTION 4 - FENCE INSTALLATION ON A SLOPE

When dealing with a gradual slope, consider using a **Stepped Fence Method**. This approach allows you to follow the terrain while maintaining a fairly consistent gap at the bottom of the fence.

In this design, each fence panel between the posts is adjusted higher or lower than the adjacent panel, conforming to the land's slope.

SECTION 4.1

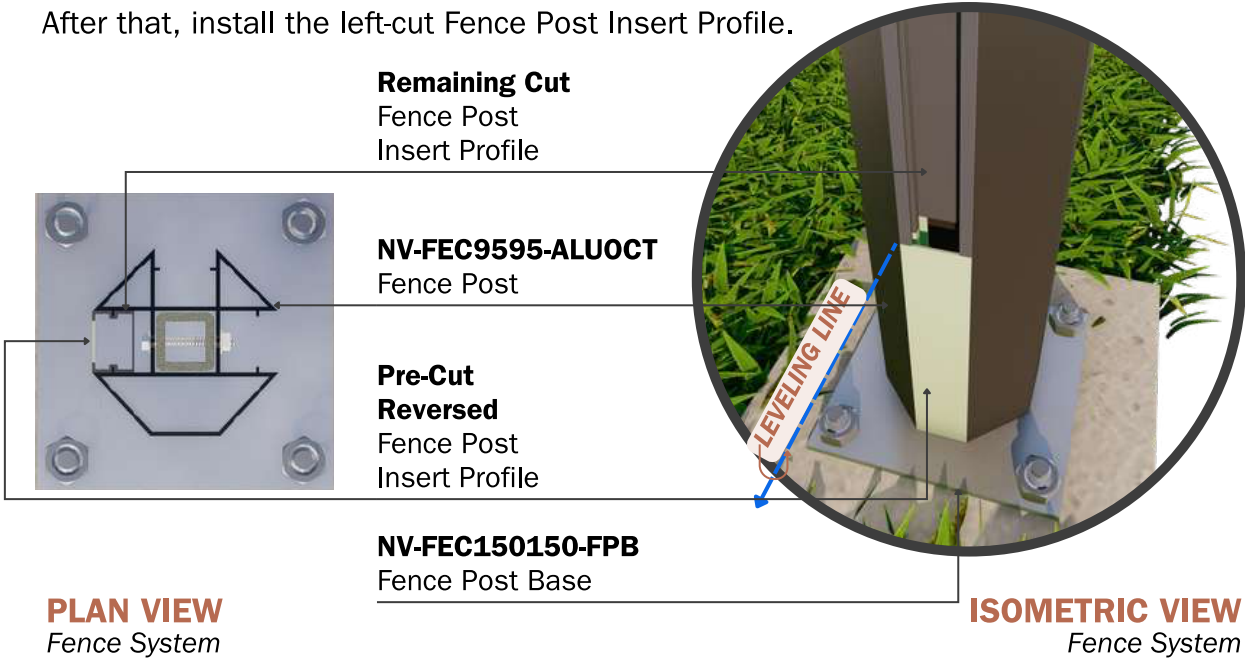
In the change of the ground height, use a leveling line to determine the exact elevation of the Fence Post Insert Profile, then cut it accordingly. This Fence Post Insert will act as the foundation for the Fence Bottom Rail. It shall be installed and oriented reversed to the groove of Post Insert Profile for the Fence Profile installation.



SECTION 4 - FENCE INSTALLATION ON A SLOPE

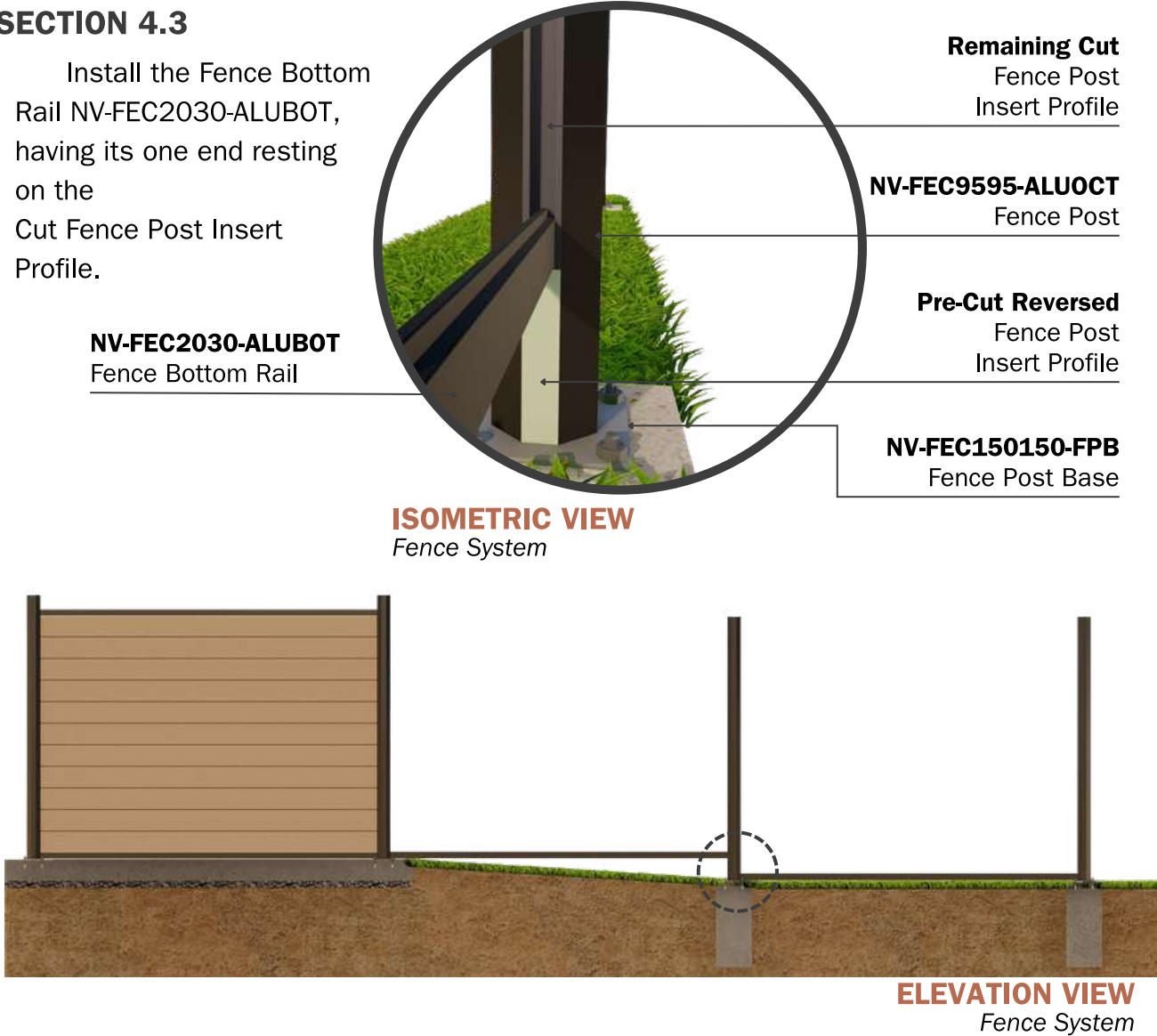
SECTION 4.2

After that, install the left-cut Fence Post Insert Profile.



SECTION 4.3

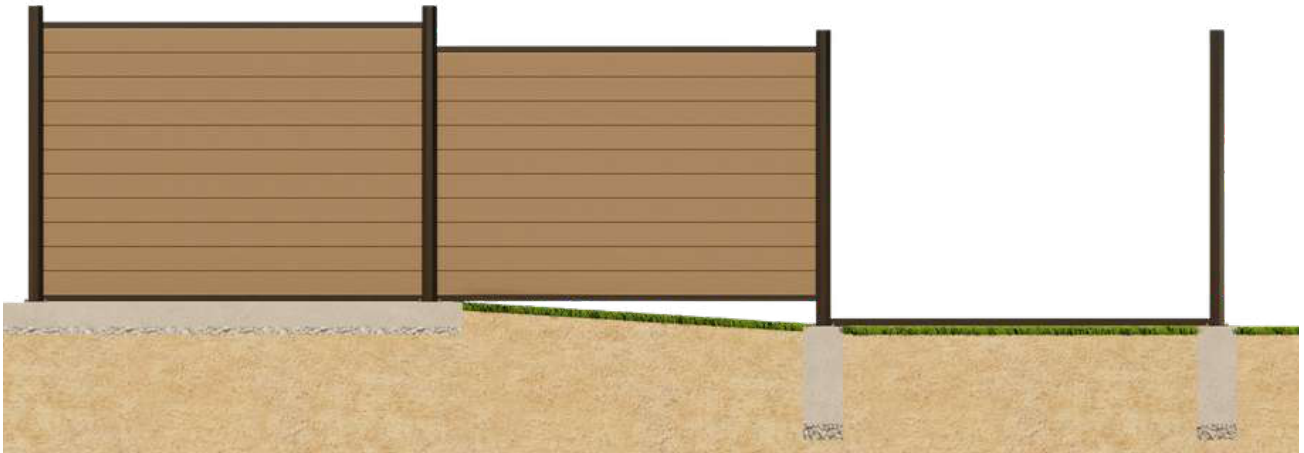
Install the Fence Bottom Rail NV-FEC2030-ALUBOT, having its one end resting on the Cut Fence Post Insert Profile.



SECTION 4 - FENCE INSTALLATION ON A SLOPE

SECTION 4.4

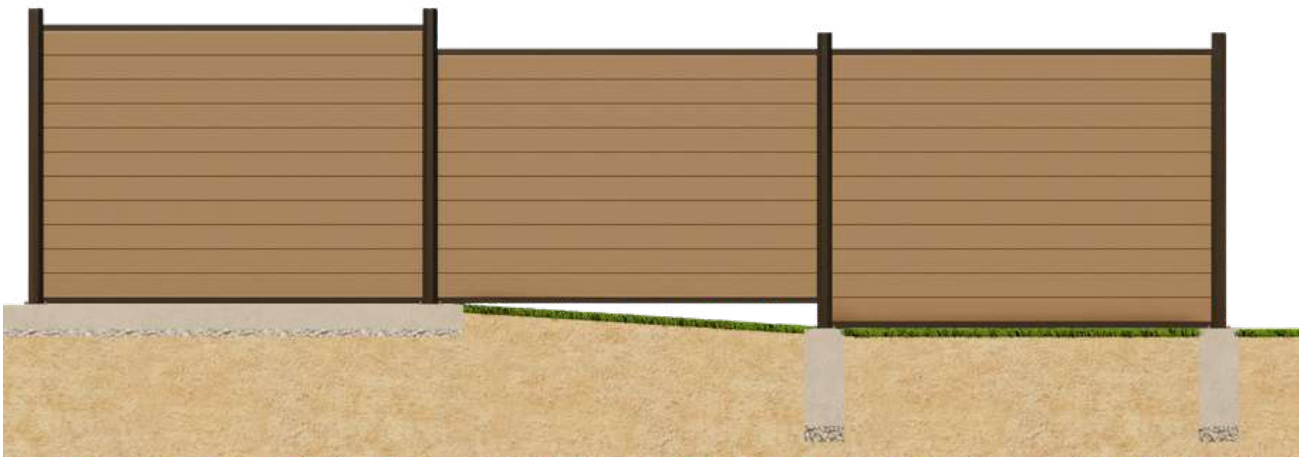
After installing the entire Fence Profile NV-FEC-15020-H, make sure it is firmly secured with the fence top rail.



ELEVATION VIEW
Fence System

SECTION 4.5

Continue for all the installation of the Fence Profiles until the end of fence layout.

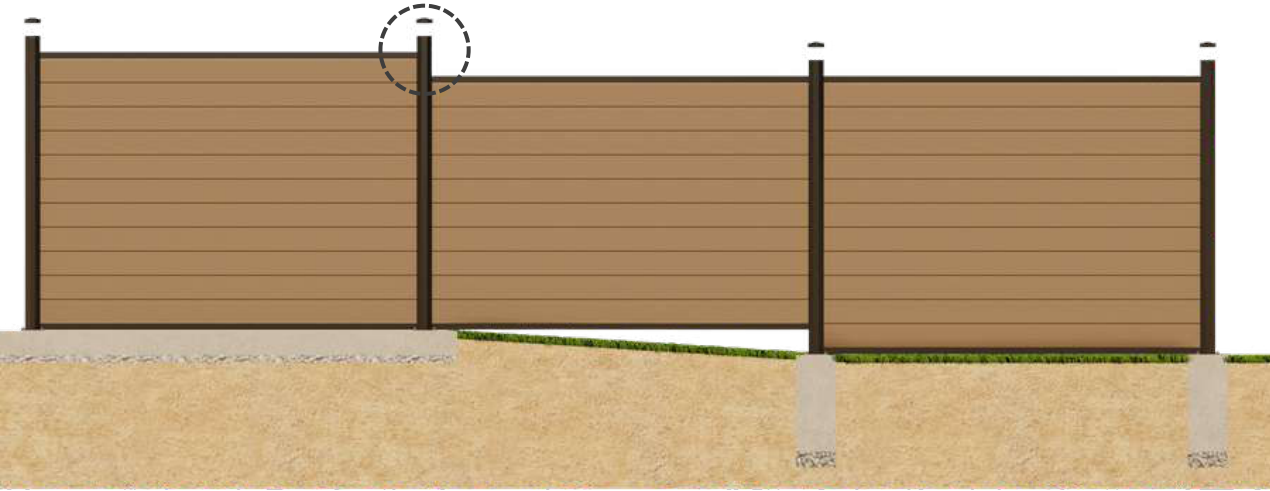


ELEVATION VIEW
Fence System

SECTION 4 - FENCE INSTALLATION ON A SLOPE

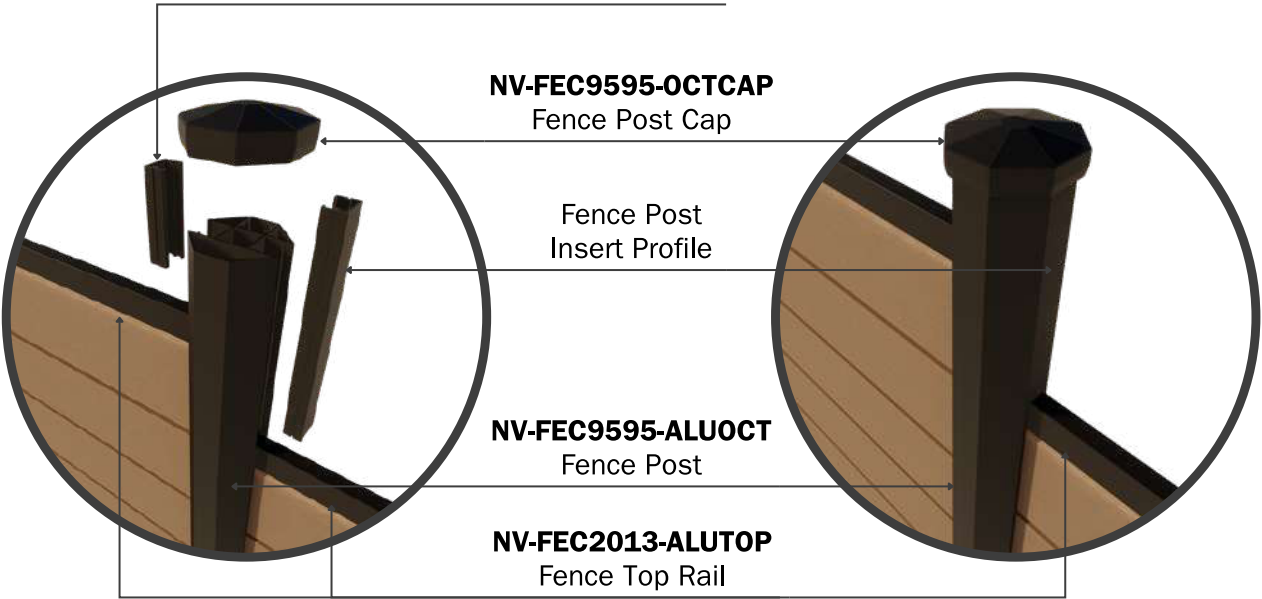
SECTION 4.6

To finalize the installation, cut the second fence post insert to the correct length and carefully slide it into the groove. Once that's done, attach the fence post cap.

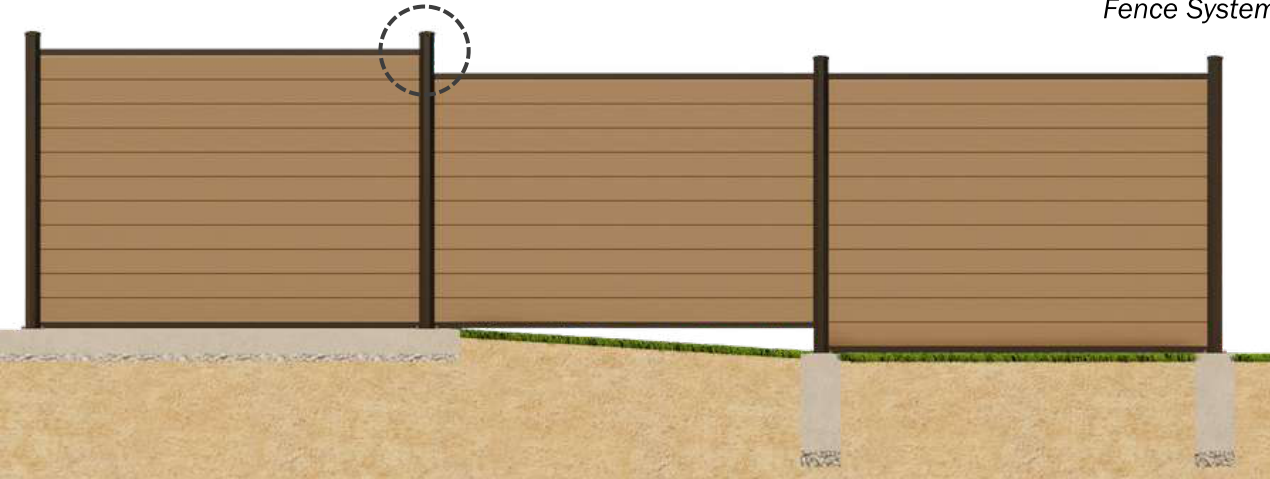


Fence Post
Insert Profile

ELEVATION VIEW
Fence System



ISOMETRIC VIEW
Fence System



ELEVATION VIEW
Fence System

SECTION 4 - FENCE INSTALLATION ON A SLOPE

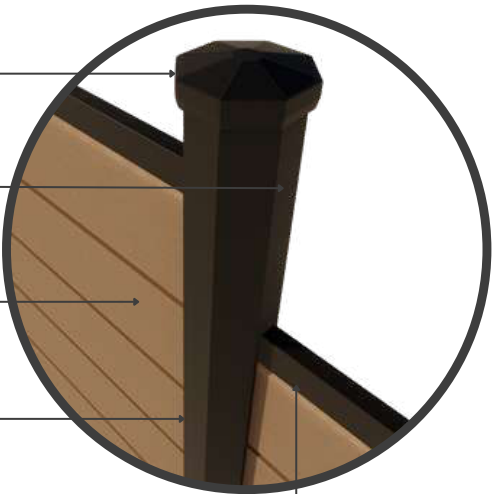
NV-FEC9595-OCTCAP
Fence Post Cap

Fence Post
Insert Profile

NV-FEC-15020-H
Fence Profile

NV-FEC9595-ALUOCT
Fence Post

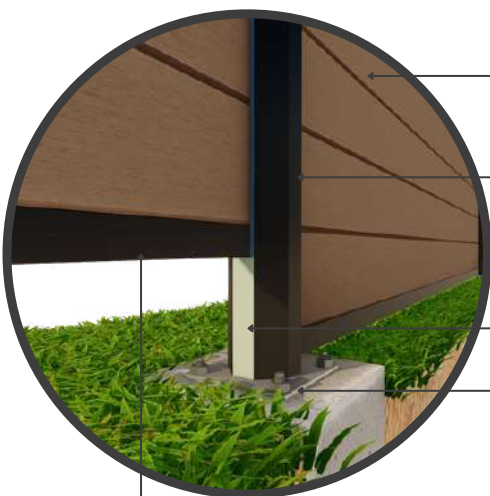
NV-FEC2013-ALUTOP
Fence Top Rail



ISOMETRIC VIEW
Fence System



ISOMETRIC VIEW
Fence System



NV-FEC-15020-H
Fence Profile

NV-FEC9595-ALUOCT
Fence Post

Pre-Cut Reversed
Fence Post Insert Profile
based on Leveling Line

NV-FEC150150-FPB
Fence Post Base

NV-FEC2030-ALUBOT
Fence Bottom Rail

ISOMETRIC VIEW
Fence System

III. SAFETY WARNING

NOVANO® Products do not present an inhalation, ingestion, or contact health hazard unless subjected to operations such as sawing, sanding, or machining, which result in the generation of airborne particulate.

This product contains amorphous silica. Respirable amorphous silica limits are specified by OSHA.

Exposure to respirable (fine) silica dust depends on a variety of factors, including activity rate (e.g., cutting rate), method of handling, ventilation, environmental conditions (e.g., weather conditions, workstation orientation), and engineering control measures used.

Exposures to respirable amorphous silica above limits established by OSHA are not expected during the normal use of this product.

Amorphous silica has been shown to cause silicosis and has been identified by the State of California, IARC, and NTP as a known human carcinogen.

The risk of developing silicosis is dependent upon the exposure intensity and duration.

It is recommended that a NIOSH-approved particulate respirator be worn whenever working with this product results in airborne dust exposure.



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