



# Empire Niagara Slate Hip & Ridge

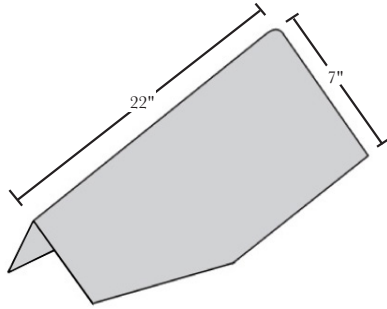
Polymeric Slate Tile Roof System

PRODUCT TECHNICAL DATA

## DESCRIPTION

Empire Niagara Slate Hip & Ridge is a polymer based ridge tile designed to provide the look of natural stone slate on the ridge and hip portions of the roof. Used in conjunction with all Empire Niagara Slate roofing tiles, Empire Niagara Slate Hip & Ridge is manufactured with a state of the art formulation using virgin and recycled polyolefin polymers.

Empire Niagara Slate Hip & Ridge is 14" (356 mm) wide, 22" (559 mm) long and ¼" (6 mm) nominal thickness, and is available in fourteen (14) standard colors.



## ADVANTAGES

Empire Niagara Slate Hip & Ridge provides the look of natural slate with these added advantages:

- High impact resistance that provides protection from hail, falling branches, foot traffic, ice and snow damage.
- The color in Empire Niagara Slate Hip & Ridge has been added during formulation providing for color throughout the product. As with all roofing products, natural weathering will occur.
- EcoStar provides warranties for Empire Niagara Slate Hip & Ridge for up to 50 years.

## INSTALLATION

**Temperature** – If tiles have been stored in temperatures below 45°F (7°C), they must be restored to a temperature above 45°F (7°C) before installation. Ambient temperature should be at least 34°F (1°C) and rising.

**Substrate** – Empire Niagara Slate should only be installed on a minimum of ½" (13 mm) plywood, minimum 7/16" (11 mm) OSB or minimum ¾" (19 mm) tongue and groove wood decking. Empire Niagara Slate should not be applied over existing roof materials. Existing roof materials must be removed down to the deck, prior to installation.

**Exposure** – Niagara Slate Hip & Ridge tiles can be installed with a maximum 9" (229 mm) exposure.

**Fasteners** – Fasteners must be ring shank stainless steel. **EcoStar Fasteners** for Niagara Slate Hip & Ridge tiles are available in hand drive style in 2½" (64 mm) length.

**Color Variation** – All Empire Niagara Slate Hip & Ridge tiles come with shade variation. EcoStar tiles that have been ordered and supplied to the job site under one EcoStar sales order number are blended at the factory and do not need to be blended onsite before installation. It is always the responsibility of the applicator to make frequent inspections from the ground or other vantage point to ensure that random shading occurs. EcoStar will not be held responsible for correcting the appearance of non-random installations. Roofers must inspect the roof frequently to prevent customer dissatisfaction.

**NOTE:** If EcoStar tiles have been supplied to the job site under two or more EcoStar sales order numbers, all tiles must be blended together on-site before installation. Specific blending instructions can be found at [www.ecostarllc.com](http://www.ecostarllc.com) on the "Resource Library" page. EcoStar will not be held responsible for correcting the appearance of unblended installations.

Natural weathering will produce further shade variations, even in tiles appearing to be identical in color when new.

**Ventilation** – The use of ridge venting systems is highly recommended. Mushroom cap style vents may be used, but ridge venting provides better venting and improves the aesthetic appearance of the roof system.

**Please refer to the Empire Niagara Slate Installation Guide for specifics of installation.**

## PRODUCT SPECIFICATIONS

PRODUCT CHARACTERISTICS	
Length	22" (559 mm)
Width	14" (356 mm)
Nominal Thickness	¼" (6 mm)
PACKAGING INFORMATION	
Tiles per bundle	12
Weight per bundle	28 lbs. (12.7 kg)
Bundles per pallet	65
Weight per pallet	1,820 lbs. (826 kg)
Linear feet per bundle	9 ft. (2.74 m)
FORMULATION	
Materials	Thermoplastic Olefin
PHYSICAL PROPERTIES (Typical)	
Operating Range	-25°F to 200°F (-32°C to 93°C)
Tensile (D-412)	1,500 psi (10,342 kpa)
Water Absorption (D-570)	0% by wt.

## WARRANTIES

EcoStar warrants this product to be free of defects in workmanship and materials at the time of shipment from EcoStar's factory. See [www.ecostarllc.com](http://www.ecostarllc.com) for available warranties.