

# KnuckleHead

## Rooftop Strut Support System



Strut KnuckleHeads are designed to accommodate standard metal strut for supporting a wide range of mechanical equipment and pipelines

Height is adjustable by rotating head—total height ranges from 3.2" to 5" depending on strut size

Strong, tough weatherproof, UV- stable, impervious to freeze-thaw cycles

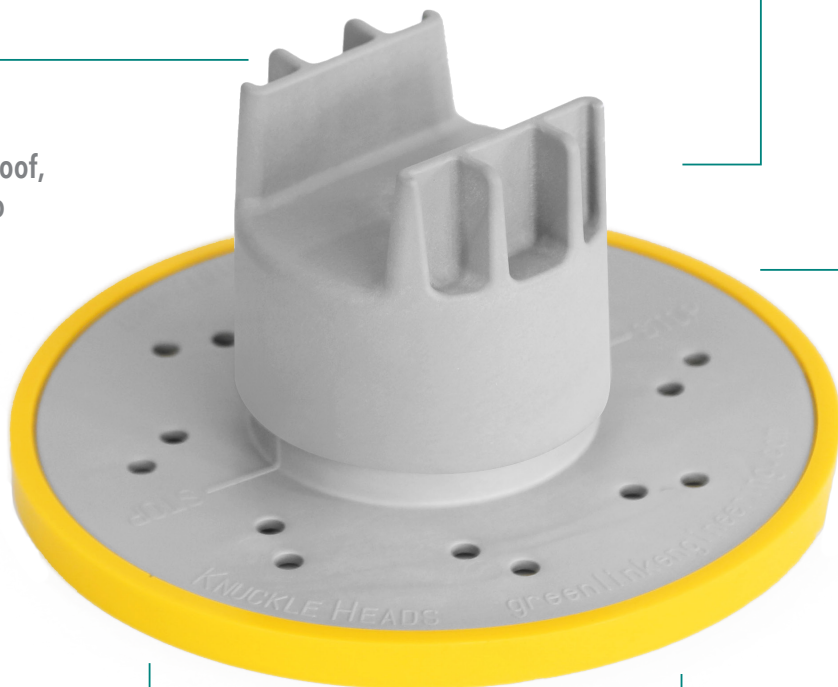
Bases feature four holes for mechanical attachment

Each KnuckleHead can support up to 600 lbs.

KnuckleHead Bases can be loose laid, mechanically attached and/or bonded with GreenLink Adhesive/ Sealant

Matte-finish nylon allows bonding with adhesive

Molded from Green Link military-grade glass-reinforced nylon resin, which has metal-like properties



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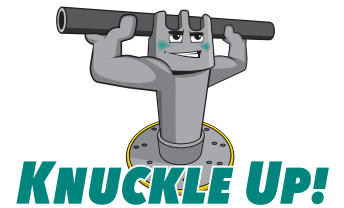
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Original design, engineered from the ground up with the contractor in mind, featuring innovative Green Link technology. All made in the U.S.A.

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# KnuckleHead

## Rooftop Strut Support System



Strut Supports are designed for a wide variety of applications including air conditioning units, solar panels, oversized pipes and other HVAC equipment that is to be installed on commercial roofs. They are designed to elevate up to 5" above the mounting surface, but KnuckleHead extensions are available for raising roof-mounted pipe and equipment to higher elevations up to 18". Strut Supports are also available to build frame assemblies for larger projects. Strut supports are lightweight, so they add little to total roof load, prevent low points and depressions that invite ponding water and ice build-up.

### KIT CONTENTS

#### Bases

KnuckleHead Bases are composed of military-grade reinforced nylon which is strong, durable and weatherproof. Each base can support 600 pounds and features a vertical steel bolt for mounting the head, and four holes in the center for accepting mechanical fasteners for attachment.

Two base designs are available. The standard Universal Base features a 7-inch diameter and 38 square inches of surface area. The Big Base features the standard Universal Base over-molded in the center of a larger polymer component with a 12-inch diameter and 113.1 square inches of surface area. The Big Base provides more stability at heights over 12 inches, for example, when using extensions. It also provides greater load distribution, reducing point loading on the roof resulting from heavier equipment. The Big Base includes a tough, weatherproof, slip-resistant KnucklePad, which is molded onto the base. Compatible with all roof membranes including PVC, and tinted "safety yellow," this custom-engineered polymer pad protects the roof membrane, eliminating the need for slip sheets.



### INSTALLATION

The bases can be installed free-standing or attached. The Universal Base can be attached by driving screws through the four holes in its center directly into the roof deck. This secures the installation. Applying Green Link Adhesive/Sealant to the KnuckleHead Base further strengthens the installation. When adhesive is used, it should be applied across the bottom of the base and on each screw head to prevent roof leaks caused by penetrations. The base features 16 holes, allowing adhesive to squeeze out as the base is pressed onto the roof surface. This creates "adhesive rivets" which strengthen the bond.

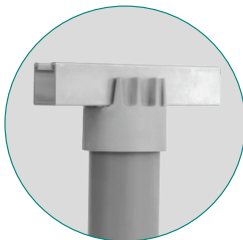
The Big Base can also be attached, but in most cases, attachment is unnecessary because the larger surface area provides sufficient stability.

When the Universal Base is free-standing, KnucklePads can be placed on the bases to protect the roof membrane and reduce movement resulting from equipment vibration and wind. Typically, ground installations are free standing on a concrete slab. Applying Green Link Adhesive/Sealant is optional for securing ground installations.

### FEATURES

#### Protection

KnuckleHeads prevent damage to the membrane caused by ponding water, wind, ice, flying debris or seismic events and protect the integrity of roof-mounted structures and equipment.



#### Leveling

Because HVAC equipment must be perfectly level to perform optimally, Strut KnuckleHeads can be rotated to adjust height within a range of 3.2 to 5 inches, depending on strut size.

#### Durability

KnuckleHead installations have been performing in the field for more than 20 years with continual exposure to high temperatures, moisture, freeze-thaw cycles, UV exposure and stress, and they have shown no signs of deterioration.

#### Adhesive/Sealant

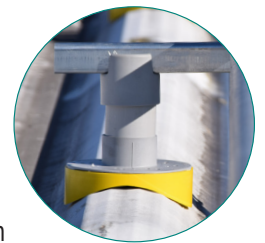
Green Link Adhesive/Sealant is an environmentally safe, proprietary formulation designed to adhere to the KnuckleHead base as well as to most roof membranes including PVC, EPDM, acrylic and primed TPO. The adhesive can be used to strengthen attached systems, or by itself without mechanical fasteners where penetrating the roof membrane is not desired. Green Link Adhesive/Sealant creates a strong bond delivering more than 275 psi shear strength.

#### Extensions

KnuckleHead Extensions increase elevations of pipes, struts, solar arrays or walkways. Kits include an 8-, 12-, or 18-inch extension cylinder that fits into the Universal Base, a threaded rod and coupling and Green Link Adhesive/Sealant.

#### Customization

Green Link can custom cut metal strut, or design and manufacture special support elements such as this custom-molded base pads for a corrugated metal roof.



#### Warranty

A 10-year warranty is available. Please contact Green Link for details.