

KnuckleHead

Solar Support System

Designed to accept standard strut framing to create 15 degree angled structures for solar energy collection

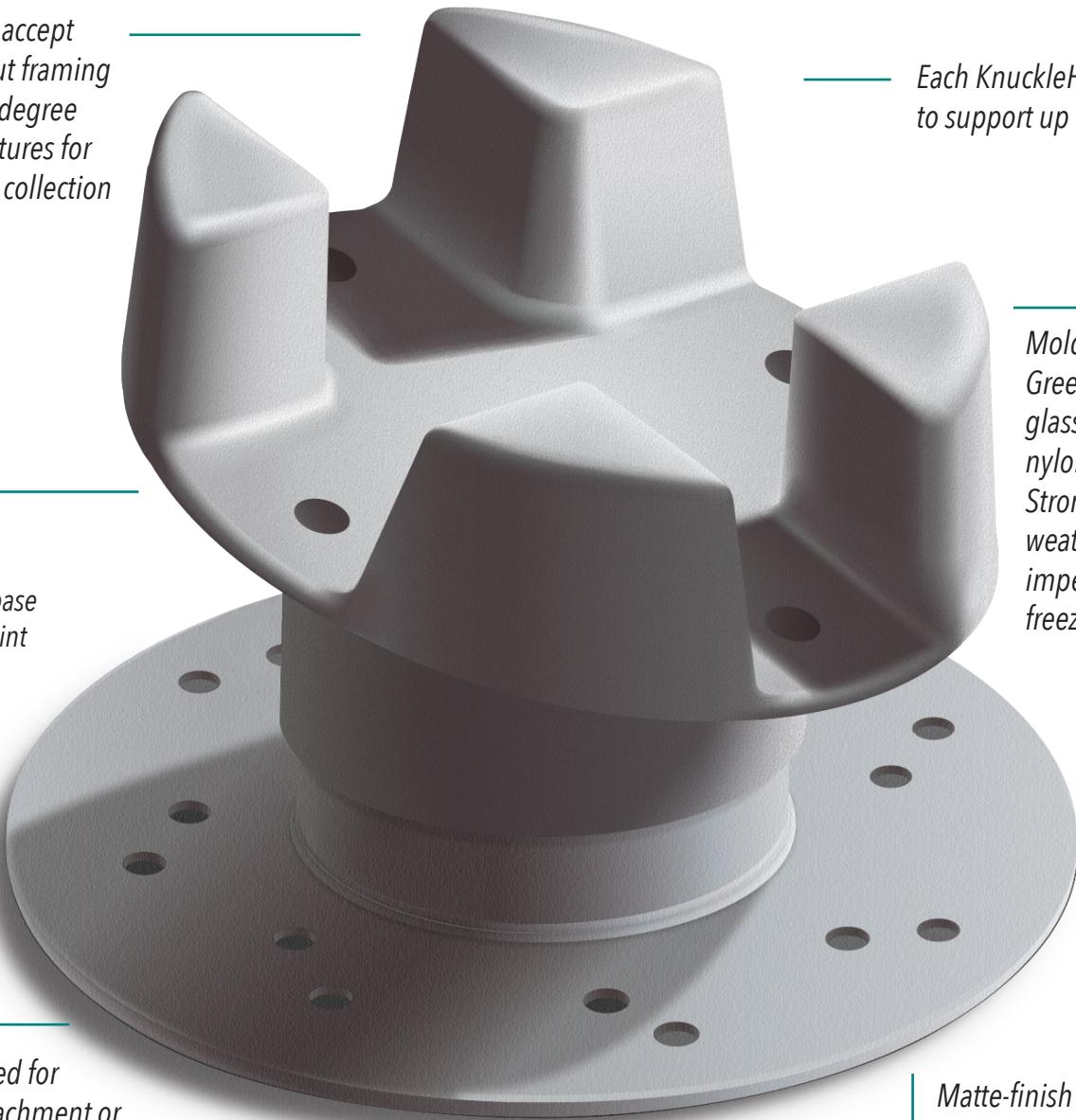
2" to 3" adjustable height from base to support point

Base designed for adhesive attachment or mechanical fastening for seismic/wind uplift specification

Each KnuckleHead is able to support up to 600 lbs.

Molded from GreenLink Type 1 glass-reinforced nylon resin. Strong, tough, weatherproof, impervious to freeze-thaw cycles

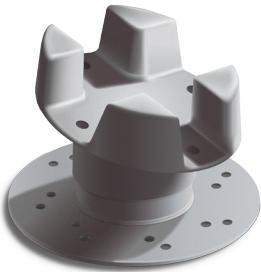
Matte-finish nylon allows bonding with adhesive



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269.216.9229 | 888.672.9897 | 3400 Covington Rd. Kalamazoo, MI 49001 USA | www.greenlinkengineering.com



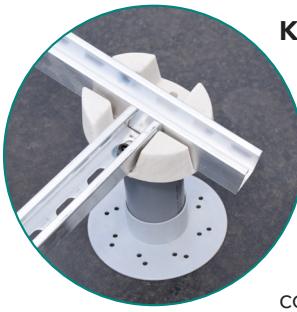
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Knucklehead Solar Supports provide critical benefits: 1) They protect low-slope commercial roofing systems from damage due to movement and excessive dead loads and 2) they prevent damage to the PV arrays resulting from wind uplift. Molded from GreenLink Type 1 glass-reinforced nylon resin, they are lightweight, UV-stable, non-corrosive, non-conductive, and highly durable. Solar Knuckleheads accept a 1 $\frac{1}{8}$ inch (41.2 mm) wide framing profile. Front and rear supports are engineered to create 15 degree angled structures for solar energy collection. Each head also functions as an elbow connector which permanently fixtures perpendicular strut members in the same 15 degree plane. Each unit can support up to 600 lbs. of load.

Important points about The KnuckleHead Support System



KnuckleHead Solar Supports are engineered to install easily. They feature fewer components and require less labor to assemble.

They will prevent damage caused by water. Lightweight KnuckleHeads avoid problems caused by ballasted solar energy collector arrays, which can cause depressions in the roofing system resulting in water pooling and loss of insulative properties.

Each support can mitigate up to 720 lbs. of wind uplift force. The number of supports for each PV module should be based on predictable wind uplift.

Solar KnuckleHeads can be attached directly to the roof substrate either mechanically combined with ChemLink M-1® Structural Adhesive/Sealant or with M-1® alone.

Where the protocols of the original single-ply membrane manufacturer and/or warranty provider must be met, a Halo Target Flashing can be applied. MB, EPDM, PVC, and TPO Halo Target Flashings are available from GREEN LINK. Flashings are heat welded and/or adhered to the KnuckleHead base and to the roofing membrane.

In some applications, M-1® Structural/Adhesive Sealant by itself is sufficient to create a strong bond with more than 400 psi shear strength to ensure KnuckleHead integrity under high wind conditions or seismic events. Pipe straps are available to provide additional security.

When mechanical fasteners are used, M-1® should be applied around the perimeter of the base and on each screw head to prevent roof leaks caused by penetration.

The base features 12 holes, allowing adhesive to squeeze out as the base is pressed onto the roof surface. This creates "adhesive rivets" which strengthen the bond.



KnuckleHead installations have been performing in the field for more than 10 years, with constant exposure to high temperatures, freeze-thaw cycles, UV exposure and stress, and they have shown no signs of deterioration.

M-1® is environmentally safe and presents no toxic risk to contractors or building occupants. It is solvent-free, isocyanate-free, non-flammable and odorless.

A 10-year warranty is available. Please contact GREEN LINK for details.



Strut Pipe Support



Lite Pipe Support



Heavy Pipe Support



Paver Support



Extensions



Chem Link M-1®
Structural
Adhesive/Sealant