

# SKY-WEB II®

## Fall Protection and Insulation Support System

The Sky-Web II® System is a light weight mesh passive restraint system that provides leading edge fall protection for roofers on pre-engineered metal buildings. It does this by securing a “web” of knotted nylon mesh to the perimeter of the roof’s secondary structural members.

### Safety and Efficiency

By providing a continuous layer of Sky-Web II® mesh



over the secondary roof members, workers can work at the leading edge of the roofing process without being tied off. This freedom from being tied off

creates increased roofing efficiencies and accelerates the overall erecting process.

With the Sky-Web II® system a worker will only fall a short distance before being caught by the system. The system cannot protect against injuries from falls onto structural members and tie-off systems are still required for workers near the perimeter of the building and during the Sky-Web II® installation process.

### Installation

Sky-Web II® is a made-to-order product that arrives at the job site with all of the instructions and required hardware necessary to complete the installation.

The system consists of a 2-3/4" x 2-3/4" knotted nylon mesh that can accommodate every building configuration, with the exception of skews, hips and valleys. Its



attachment is made around the perimeter of the building with v-straps that are attached to the secondary roof members with specially designed self-tapping screws. Attachment rings are pre-attached to the v straps. Only one ring is to be field-installed at the end of each v strap.



The mesh is then easily secured to the rings by the installer.

Individual mesh pieces can be made in one piece to any

building width and up to 60' in bay length, thus eliminating the need to make numerous field splices. The mesh-to-mesh connections are made with a pre-loaded lacing needle for a secure, seamless appearance.

An installation deployment sled is also available for use by the installer. This sled slides easily over the secondary roof members, fanning the mesh out as it travels across the width of the building.



Once construction is complete, the mesh remains as a permanent part of the roof system, providing support for the insulation materials. The product's white color blends well with most fiberglass insulation facings, maintaining an attractive and nearly invisible appearance.

## Specifications

### GENERAL

- The Fall Protection and Insulation Support System is the Sky-Web II® system as furnished by L&L Insulations and installed in accordance with the manufacturer's instructions.
- The system is compatible with most pre-engineered metal roof systems.
- The system must be installed over the top of the roof's secondary structural members with adequate structural attachment in accordance with the manufacturer's installation instructions.

### DESCRIPTION

- The basic mesh is a knotted mesh on a nominal 2-3/4" by 2-3/4" grid. The mesh is made from twisted twine of DuPont nylon Type 6-6 fiber. The mesh covering interior bays is made from #21 twine. The mesh covering end bays is made from #21 twine except a 6 foot strip along the edge which is made from #30 twine. This edge is color coded for identification.
- The mesh has a double selvage along the two edges in the machine direction.
- The mesh is furnished in single pieces in any building width by up to 60' in building length. This means that a building that is 200' wide with 30' bays will have pieces furnished that are 200' by 60' in size. The pieces will normally be ordered so that splices can be made over frame lines.

### PROPERTIES

- The #21 twine and the #30 twine used to make the mesh have a minimum tensile strength of 205 pounds and 265 pounds, respectively. The #21 twine has a runnage of 960 feet per pound and the #30 twine has a runnage of 605 feet per pound.
- The cord used to make the mesh-to-mesh edge connections is a #36 DuPont nylon Type 6-6 white braided twine. It has a minimum tensile strength of 350 pounds and a runnage of 533 feet per pound.
- The mesh weight is 0.012 pounds per square foot.

### APPLICATION

- The roof structural system must be in place prior to installation of the Sky-Web II® system.
- The Sky-Web II® system remains in place after the metal roofing is installed.
- The system must be fastened to structural framing at the perimeter of the building. Mesh-to-mesh connections must be made above the interior frames.
- The installed system should conform to the geometry of the fiberglass blanket insulation in order to maintain the roof system's designed insulation value.

### FASTENERS AND HARDWARE

Connections to the eave members and to the gable members are made with 1/8" diameter wire clips looped through 20 gauge steel v-straps in accordance with the manufacturer's instructions. The steel v-straps are fastened to the framing with self-drilling screws in accordance with the manufacturer's installation instructions.

### FIRE HAZARD CLASSIFICATION

The Sky-Web II® system has a Flame Spread Index of 3 or less and a Smoke Developed Index of less than 10 as tested in accordance with U.L. 723.

### OSHA INFORMATION

The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) does not provide approvals or endorsements of products or methods. However, OSHA does evaluate concepts to ascertain their likelihood of providing compliance with applicable safety standards. OSHA reviewed the Sky-Web II® system and concluded that, when properly installed, it would "... provide adequate interior fall protection and be in compliance with OSHA's fall protection standards." The Sky-Web II® system does not, however, eliminate the fall hazard from the perimeter of the roof. OSHA document 29 CFR 1926.501 (b), requires that workers be protected from falls along all roof edges to which they are exposed. Quality assurance testing, witnessed by an independent consulting firm, provided verification of the system's capabilities.

DuPont is a trademark of E. I. du Pont de Nemours and Company Corporation. Sky-Web II® is a registered trademark of Butler Manufacturing Company. This system is covered by US Patents #5,251,415, 5,406,764 and 5,778,628.

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For additional information and pricing, contact your L&L Insulations sales representative or call 800 747-5385.