OSHA Regulations: Rooftop Walkway, Safety Handrail & Access Ladders

Fall accidents resulting in injuries and fatalities continue to occur at construction sites despite the introduction of the OSHA construction standards in 1971. Increased tightening of OSHA regulations for rooftop safety continues. This is no exception for the pre-engineered metal building and metal roofing industry.

Data collected from the Bureau of Labor Statistics (BLS) survey of occupational injuries and illnesses show that during 1999, nearly 300,000 workers in private industry sustained injuries involving days away from work as a result of falls. In 1999, an estimated 80 workers were injured in falls through skylights, 100 in falls through existing roof openings, and 617 in falls through existing floor openings. Most injuries occurred in construction, though many injuries occurred in other industries such as manufacturing, retail trade, and services. The U.S. Department of Labor has listed falls as one of the leading causes of traumatic occupational death representing 10% of all traumatic occupational deaths for which a cause was identified.

OSHA has implemented and continues to update the standards for handrails, currently they are as follows: (visit www.osha.gov for more information)

Guarding floor and wall openings and holes. - 1910.23(e)(1)

A standard railing shall consist of top rail, intermediate rail, and posts, and shall have a vertical height of 42 inches nominal from upper surface of top rail to floor, platform, runway, or ramp level. The top rail shall be smooth-surfaced throughout the length of the railing. The intermediate rail shall be approximately halfway between the top rail and the floor, platform, runway, or ramp. The ends of the rails shall not overhang the terminal posts except where such overhang does not constitute a projection hazard.

Guarding of edges. - 1917.112(c)(1)

They shall be capable of withstanding a force of at least 200 pounds (890 N) applied in any direction at mid-span of the top rail (when used), or at the uppermost point if there is no top rail.

With this information in mind Design Components, Inc. located in Atlanta, GA offers three products to assist the metal building contractor in providing a safer building, a safer environment for its workers and the building owner's maintenance personnel. One is an OSHA approved safety handrail system. This can be used as a perimeter railing and attaches to any standing seam metal roof without penetrating it. It is also available for any screw down "R" panel roofs. For instance the city of New York requires a perimeter railing on all buildings with eave heights of 20' or more. Recently St. Johns University located in NYC purchased and installed such a perimeter railing from DCI.

The second product is called METALWALK and it provides a safe and secure walking tread way that is attached to any standing seam metal roof without penetration and it can also incorporate the safety handrail system seamlessly with it. Other options include level platforms, toe board, custom painting to match roof, “Safety Yellow” handrail and “R” panel attachment as well.

The third product is a roof access ladder with safety cage and walk thru handrail. This is an industrial grade ladder system, fully welded steel construction and is available in “Safety Yellow” or “Gray Enamel Primer” finish. OSHA standard 1910.27 requires all ladders 20’ or higher to have a safety cage but it is recommended for even lower eave heights for added security and protection. Other ladder options include security cage entry gate, security ladder bottom guard and safety chain attachment.

Please visit us at www.metalwalk.com or call toll free 800/868-9910 for more information and a full product catalog.