

TECHNICAL BULLETIN

WIRE DECKING CHANNEL SUPPORTS

An integral part of a welded wire deck is the metal channel welded to the wires comprising the deck. Channels help to contribute to the overall strength of the deck and play an important role in work load capacities. Through testing, it is obvious as to the importance of having enough channels. Typically, the more channels added to a deck, the higher the working load capacity.

Workplace safety should be first and foremost when considering the design of a wire deck. Understanding the importance of having a structurally sound platform necessitates knowing some things about the materials used in their construction. In particular, what differences can be found in a deck employing structural steel sheet versus standard steel sheet channels?

STRUCTURAL STEEL SHEET

Material ordered under structural steel sheet must meet predetermined criteria specified by the deck manufacturer. The criteria may be the chemical composition of the steel and/or mechanical characteristics such as tensile strength, elongation, and yield to name a few. Other items such as quantity, coating type, width and thickness, packaging, etc. are all necessary to assure the correct product is received.

STANDARD STEEL SHEET

Material ordered under standard steel sheet is similar to structural sheet steel when quantifying width and thickness, coating type, packaging, etc., but lacks to define the specific mechanical requirements needed for structural steel sheet products. In place of these important working characteristics, the specifications for this type of material reference temper and bend requirements, as well as hardness. Depending on the temper: hard, half-hard, quarter-hard, etc., overall mechanical performance of the steel will vary, and important characteristics such as tensile strength and elongation are considered approximate values, not pass/fail criteria.

SUMMARY

Knowing the difference in material properties is an important part of any manufactured product. Being able to specify the exact performance characteristics needed in the material to ensure that you get the desired end result will make the finished product more consistent from lot to lot.

Since it is our goal to provide the most consistent wire decking on the market, J&L uses only structural steel sheet channel supports. Work load capacities are highly dependent on the mechanical characteristics of a deck's components, and knowing what you place into a deck will ensure that the deck performs as expected. Manufacturers that use standard steel sheet for their channels cannot claim the same. Although one can expect a reasonable level of consistency from standard steel sheet, the mechanical properties are approximate and the tolerance of their performance values can be wide and varied causing inconsistencies in work load capacities.

Know what's in your deck when you place your next order, and consider J&L for all your decking needs.



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