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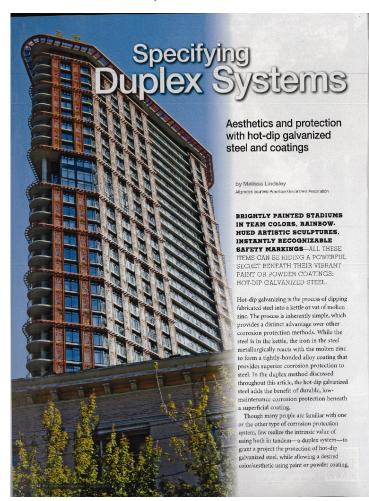
Barbara Matejka reviews "Specifying Duplex Systems" for publication in The Construction Specifier

Barbara is on the Editorial Advisory Board for The Construction Specifier, a publication of the Construction Specifications Institute, Alexandra, Virginia. The article, written by Melissa Lindsley, can be found in the August 2013 edition and discusses coatings on steel products (shown in part below).

Barbara is a Certified Construction Specifier and LEED-Accredited Professional in Building Design and Construction. She has been with HHSDR for 27 years and is an Associate with the firm.

HHSDR celebrated its 60th year of providing professional design services to our clients. We Build Relationships by providing responsive, quality services. The Pittsburgh Builders Exchange continues to rank our firm as the most active in terms of projects in the bid phase or under construction.

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It is a common misconception to think painting or powder-costing over galvanting is difficult or not worth the extra step. To the contrary, it is often possible to duplex with minimal additional effort, and the results can greatly extend the project's life. A duplex system can withstand some of the toughest environments imaginable, with little to maintenance. In fact, due to the synergistic effect, a structure can last up to 2.5 times longer, maintenance-free, by incorporating a duplex system. By following a few simple preparation steps outlined in ASTM specifications, a galvanized piece can be painted or powder-coated to meet any color requirement.

Duplex applications

A duplex system can be applied to structures from public and private sectors; everything from radio towers, bridges, pipes, stadium structures, and artistic sculptures can successfully implement a system of paint or powder coating over galvanized setel. Specifiers may elect to call for duplex for numerous reasons, but 'aesthetics' is often the chief one. For instance, many sport stadiums want to take advantage of durable hot-dip galvanized sicel, but need to feature team colors in the stands or bleachers. Painting or powder coating over galvanized set allows the best of both worlds.

galvanized steel allows the best of both worlds. Perhaps the structure is meant to blend in to the surroundings, or maybe to stand out with a vibrant color, as with the Chinatown Park Entrance Gate on page 44. Duplexing opens up a world of visual options, without sacrificing low-maintenance corrosion protection.

A duplex system also might be used to accommodate safety regulations. Duplexing can enable the color-coding of gas, steam, or chemical pipes. It can also identify hazardous work areas and walkways, and mark high-voltage electrical lines and equipment. For example, the Federal Aviation Administrations (FAA) requires structures taller than 61 m (200 ft) to be painted in the alternating pattern of white and international orange. Duplesing these types of projects will ensure the proper color-coding is in place without sacrificing corrosion protection on often difficult to maintain structures.

Perhaps more important than superficial appearance concerns, an overlooked benefit of duplexing is the extended corrosion resistance. When galvanized steel is painted or powder-coated, the system provides a more sophisticated manner of corrosion protection through a synergistic effect. The exterior layer of paint

The Thurston Avenue Bridge on Cornell University's campus (thaca, New York) showcases a duplex system of galvanized

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