

TABS WALL SYSTEMS—The Significance of Structural Steel

Third Quarter

The TABS Wall System is the ONLY thin veneer metal panel system in today's market that incorporates structural steel into its assembly.

There are at least 6 steel metal panel systems competing in the commercial market for new, remedial and prefabricated installation of thin veneer materials. TABS is one of three (3) systems that supply panels that are hot dipped G 90 galvanized <u>and</u> thermal set paint coated; the other three (3) do not thermal set paint coat and in some cases are only G 60 galvanized.

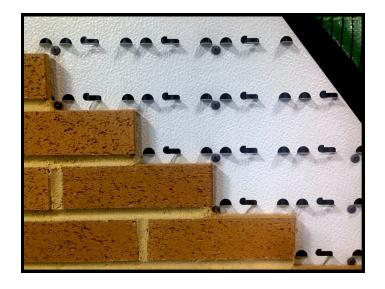
THE SIGNIFICANCE of G 90 GALVANIZATION

Galvanization is the process of applying a zinc coating to steel by immersing in hot molten zinc. A metallic bond occurs resulting in a zinc coating that completely coats all surfaces, including the edges. The zinc thickness is controlled by the amount of time the steel is immersed as well as the speed at which it is removed. The layer of zinc which bonds to the steel provides a dual protection against corrosion. It first protects as an overall barrier coating. Zinc's secondary defense is called upon to protect cut edges, punches and scratching via galvanic action. Zinc is a sacrificial anode coating for steel.

Steel that is G 90 galvanized will resist oxidation 50% longer than steel that is only G 60 galvanized; the coating is 50% thicker.

THE SIGNIFICANCE of THERMAL SET PAINT COATINGS

Just as zinc serves as a sacrificial coating for steel, thermal set paint coatings are an additional sacrificial element protecting the zinc coating. The addition of the paint coating further increases the life expectancy of the steel by offering additional resistance.



TABS WALL SYSTEMS—The Significance of Structural Steel

Third Quarter

THE SIGNIFICANCE of STRUCTURAL GRADE STEEL

Structural grade 33 steel (.018m - ASTM A-653) offers the following advantages over architectural grade steel:

- · A tighter range for mechanical properties, allowing for better forming consistency from panel to panel
- More consistent bending of support tabs
- A greater fastener pull through resistance under loadings
- Higher phosphorus content yielding higher tensile strength
- Higher phosphorus content yielding better atmospheric corrosion resistance
- Higher Manganese content, as a hardening agent, yielding better wear resistance

A steel support panel system that was not G 90 galvanized and painted after less than 7 years

