



American Galvanizers Association *Galvanize It!* Seminar Program Outline



1-Hour Core Seminar (HSW Credit) (Scheduled – Classroom)

- I. **Introduction and Learning Objectives**
 - a. Structural Steel: Strong & Sustainable

- II. **Hot-Dip Galvanizing (HDG) Process**

- III. **What is Zinc?**
 - a. Zinc – Natural, Essential, Common
 - b. Other Zinc Coatings

- IV. **Why Hot-Dip Galvanizing**
 - a. Corrosion Protection
 - i. Barrier protection
 - ii. Cathodic Protection
 - iii. Zinc Patina
 - b. Durability
 - i. Abrasion Resistance
 - ii. Uniform Protection
 - iii. Complete Coverage
 - c. Longevity
 - i. In Atmosphere
 - ii. In Soil
 - iii. Moisture Rich Environments
 - iv. In Concrete
 - v. In Other Environments
 - d. Availability & Versatility
 - i. Abundant
 - ii. Efficiency
 - iii. Safety
 - e. Aesthetics
 - i. Modern, Natural Appearance
 - ii. Duplex Systems
 - f. Sustainability
 - i. Environmental Advantages
 - ii. Economic Advantages

- V. **Design and Specification**

- VI. **Summary**

Revised: October 2016



American Galvanizers Association *Galvanize It!* Seminar Program Outline



2-Hour Core Seminar (HSW Credit) (Scheduled – Classroom)

- I. Introduction and Learning Objectives**
- II. Structural Steel: Strong & Sustainable**
- III. Hot-Dip Galvanizing (HDG) Process**
- IV. What is Zinc?**
 - a. Zinc – Natural, Essential, Common
 - b. Other Zinc Coatings
- V. Why Hot-Dip Galvanizing**
 - a. Corrosion Protection
 - i. Barrier protection
 - ii. Cathodic Protection
 - iii. Zinc Patina
 - b. Durability
 - i. Abrasion Resistance
 - ii. Uniform Protection
 - iii. Complete Coverage
 - c. Longevity
 - i. In Atmosphere
 - ii. In Soil
 - iii. In water
 - iv. In other environments
 - d. Availability & Versatility
 - i. Abundant
 - ii. Efficiency
 - iii. Safety
 - e. Aesthetics
 - i. Modern, Natural Appearance
 - ii. Duplex Systems
 - f. Sustainability
 - i. Environmental Advantages
 - ii. Economic Advantages
- VI. Design & Fabrication**
 - a. Steel Chemistry/Surface Conditions
 - b. Size & Shape
 - c. Process Temperature Concerns
 - d. Venting & Drainage
 - e. Welding
 - f. Threaded & Moving Parts
 - g. Additional Design Considerations



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VII. Specifications & Inspection

- a. ASTM Standards
- b. ASTM Supporting Specifications
- c. Other Standards
- d. Coating Thickness
- e. Adherence
- f. Finish & Appearance
- g. Weathering
- h. Touch-Up & Repair
- i. Storage & Handling

VIII. Duplex Systems: Painting/Powder Coating Hot-Dip Galvanized Steel

- j. Why Duplex?
- k. Preparation/Surface Conditions
- l. Case Study

IX. Summary