



# 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