

2003 EXCELLENCE IN HOT-DIP GALVANIZING BUILDING & ARCHITECTURE



REIMAN GARDENS CONSERVATORY

A-Plus Galvanizing, Inc.

Location: Ames, Iowa

Fabricator: Metal Fabricators

Architect:

Architects Smith Metzger

Engineer: Charles Saul

Contractor:

Story Construction

The Reiman Gardens Conservatory was designed to educate and entertain with its vast foliage displays and featured Exotic Butterfly Flight House. The building — a marriage of custom galvanized steel and a delicate glass curtain wall — is visible to the over 250,000 visitors expected annually. Hot-dip galvanized steel was selected by the architect for corrosion prevention based on his previous positive experience with its performance in harsh environments.

The Exotic Butterfly Flight House, one of only a handful in North America, experiences extreme temperature variations unique to it and its location — temperature may contrast by as much as 105° F (85° F on the inside and -20° F on the outside). The high humidity conditions maintained (95%) also required a durable coating on the steel. Hot-dip galvanizing proved ideal for both of these unique environmental challenges.

Over 50 tons of steel were hot-dip galvanized, including columns, trusses (and a butterfly backbone truss), and the highly-visible butterfly wings on the exterior of the Flight House. Specifically chosen for its durability, the hot-dip galvanized steel of the conservatory also serves as an aesthetically pleasing complement to the delicate flight of its butterfly inhabitants.

