

## Case Study - Gyeongju Tower

### Project Description:

The Gyeongju Tower is a landmark architectural achievement located in Gyeongju City, North Gyeongsang Province, South Korea. This remarkable 17-story [82 meter] building was built with a cut-out in the center resembling the legendary nine-story Hwanryongsa Temple's Wooden Pagoda that was the largest pagoda in South Korea. It was built during the Silla period in the 6<sup>th</sup> century. The Gyeongju Tower is part of the Gyeongju World Cultural Expo Park. It has an observation lounge, exhibition hall, and hosts various cultural events drawing nearly 1 million visitors annually.

### Challenges:

The principal architect, building owners and city officials wanted a show piece structure in the center of the Gyeongju Cultural Expo Park. They were interested in a reflective, metallic finish that would illuminate the structure and show off their ancestral heritage. They were also insistent that the composite panel must have a durable finish, be corrosion resistant and have a consistent panel-to-panel match quality.

### Solution:

Mr. J.H Lee, President of Garmco Myunghwa Ltd., presented the architect with samples of Lorin's ClearMatt® finish. According to Mr. Lee, the building owners commented that "the clear anodized finish maintained the aluminum's reflective properties like they were looking for and did not cover it up like silver paint. There are too many buildings in Korea that are painted—and you can tell". Since the anodized aluminum



was processed in a continuous coil operation, the panel-to-panel match quality far exceeded their expectations as compared to batch anodizing producers. Since the aluminum oxide layer is three times harder than the aluminum itself, durability of the finish was not a concern. Lorin Industries ... The Finishing Solution Provider!



### Application:

Honeycomb Composite Panels

### Product:

Lorin ClearMatt® Architectural Class II Anodize Film

### Scope:

212,400 ft<sup>2</sup> (19,700 m<sup>2</sup>); 120,000 lbs. (54,000 kgs)  
of Anodized Aluminum

### Metals Contractor and Service Center:

Garmco Myunghwa Ltd., Seoul, South Korea

### Architects:

Mr. JEON, JAE-WOO Firm: Dong-Nam Asia Pacific

Mr. Lee, JONG-SU Firm: Gil-Lok