



Great Mountain Poultry (GMP), the highly-successful family-owned business in Taiwan that raises egg layers and sells eggs, knows its business. After all, it has been doing business for generations. And it also recognizes the importance of enhancing facility durability and product safety wherever possible.

World-class partnership

Canada's Zer-O-Loc provides Taiwan's Great Mountain Poultry with the ideal solution for ratcheting up the durability and safety of this processor's egg-layer barns.

SitL Technologies, a Vancouver-based company, is working along with GMP overseeing and managing the full development of its brand new facility in Taiwan. Most recently SitL contracted with Richmond, British Columbia Canada-based Zer-O-Loc to construct the walls and ceilings in each of Great Mountain Poultry's 15 barns that will house thousands of GMP's egg layers. Zer-O-Loc is a major worldwide producer of EPS (expanded polystyrene) insulated panel and door systems for the food industry. To date, three GMP barns have been completed.

The perfect solution

Prior to the start of this project, GMP's previous facilities had been constructed primarily of wood and wire. As a result, the barns were not optimally insulated. This presented a major problem since egg layers need a consistent temperature climate to yield maximum number of eggs. Furthermore, wood as a building material also presented increased potential for

the onset and consequent spread of diseases, such as the avian flu —a lethal and financially devastating disease for poultry growers and egg producers.

Alfred Lam, Vice President of SitL Technologies, understood the need to construct the new facility with wall panels that were not made of wood. And Zer-O-Loc provided Lam with the ideal solution: the Zer-O-Loc EPS (expanded polystyrene)

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insulated panel system where "one wall does it all." Zer-O-Loc's system consists of a brand of expanded polystyrene insulation, which is manufactured by the company, and clad with a high-gloss, pre-painted white galvanized steel finish.

Major system features include:

- Panel has good structural properties; good stable thermal properties to withstand wide temperature variations.
- Walk-on suspended ceilings provide a sanitary working environment isolating plumbing, electrical, and other services above the ceiling panels. This allows for maintenance above the ceiling while production continues below.
- Easily cleanable.
- Flexible in that it allows customers to add doors and windows where ever desired.



- Woodless, which prevents entry of rodents and insects plus inhibits bacteria growth.
- Less joints than more conventional construction systems.
- Bright, reflective surface, which reduces indoor lighting requirements.

Durable and safe

Each of GMP's barns house approximately 66,000 birds. This fully-automated barn complex features automatic feeding, egg retrieval, and manure extraction processes.

Since making the decision to construct the walls and ceilings of the facilities using Zer-O-Loc's system, Lam and his clients are happy with their choice — and for several reasons.

"It allows for easy maintenance checking and repair," he says of the recently completed barns. "One unit does it all in terms of structure, insulation, and cleanliness. The barns are now brighter for house management. What's more, the readily washable and cleanable wall and ceiling panels assist in maintaining a clean and sanitary environment. Finally, rodent entry is further limited due to double-steel construction.

"We were allowed to choose from different panel thicknesses for better temperature control, which will translate to energy savings for the company," he adds. "What's more, we are matching our doors with these same factors."

Once construction is completed, the facility will be Good Agricultural Practice-, Good Manufacturing Practice-, and HACCP (Hazard Analysis and Critical Control Point)-compliant. As a result of the Zer-O-Loc system, GMP is enhancing the safety of its entire process — from farm to processing.

More benefits

Other benefits will also be incurred. Since Zer-O-Loc's materials possess superior structural properties, the minimal amount of structural supports and attachments will be needed resulting in sizeable savings on building costs. And since the building materials also enhanced the insulation properties, GMP will be able to maintain optimum egg-laying climates more effectively.

The walls have a minimum amount of joints between the individual panels, thus reducing the potential for harmful bacteria to breed and grow, as well as the entry of insects and rodents. The remaining GMP barns are scheduled for completion within the next 18 to 24 months. Once this project is complete, Great Mountain Poultry will include: 15 layer barns, two brooder barns, four manure processing buildings, a grading and processing center, and a cold store utilizing Zer-O-Loc's EPS (expanded polystyrene) insulated panel system. As a result, GMP will not only enhance the safety of its entire process, but it also will reduce operating costs plus optimize egg production. **NP**