Heather Gardens Energy Conservation Measures

Installer: Frank Kriews
Location: Denver, CO
Type of Job: Roof Foam
Square Footage of Job: 18,100
Equipment Used: Grace H-40, Graco 60:1 Extreme
Number of people needed for the Job: 6
Number of days required by the Job: 5
Foam and coatings used: WDG System 14

**Project Description:** Heather Gardens Association is a large senior living condominium complex in Denver that was looking for long-term roofing solutions for their 35 year old gravel surfaced BUR roofs installed over a 4:12 sloped plywood roof deck installed over structural rafters. The majority of the interior space is cathedral style ceiling construction with batten insulation installed between the rafters. The initial concern was waterproofing, but after our initial discussion, maintaining a constant interior ambient temperature and energy expenses were additional concerns. We proposed to install a minimum of 1.5” of SPF over the existing roof assembly with options to increase the SPF thickness to 2” and 2½”. The energy calculations performed showed a significant amount of energy and money will be saved on a yearly basis. The economic analysis demonstrates that replacing the roofs as proposed to be a feasible and sound investment. All of these calculations were made based on the side of being conservative, higher actual results are anticipated. All work needed to be performed with the residents present, creating difficulties with constant pedestrian traffic and curious observers. Fall protection anchors were added for our employees and the maintenance personnel.

**Benefits of using Foam:** See project description.