

# Energy Shield, Inc.

## Wyndham Gardens Hotel

### Novi, Michigan



Type of Job: **Total roof replacement**  
Square footage of Job: **52,500**  
Equipment Used: **Gusmer foam and paint equipment**  
Number of people needed for the Job: **8**  
Number of days required by the Job: **45 days**  
Special Requirements: **none**  
Foam and coatings used:  
**Bay Systems foam w/ light tan silicone/granules**



**Project Description:** The hotel was 18 years old and currently had two separate layers of EPDM rubber held in-place by river-rock ballast. One layer was installed initially, the 2nd after 10 years, and the roof had always leaked. Problems were severe; rooms could not be occupied, and the kitchen was disrupted during heavy rains. The roof deck was light-weight tapered concrete and there was not any additional insulation. Around the perimeter was a metal facade which gave the appearance of a "Hip Roof". The facade was supported by 900+ supports, each penetrating the roof. There were numerous other penetrations bringing the total to over 1,000 on the roof. The roof replacement system consisted of: Full removal of the EPDM rubber roofs, and rock ballast down to the deck. Mechanically attach a Firestone MB basesheet using special fasteners at 1' O.C. Over the basesheet, spray-apply a 2-inch average of SPF, 3-lb. density. Coat the foam with the GE/Bayer tan silicone membrane with tan granules into top coat.

**Benefits of using Foam:** The foam provided for an effective means of sealing around the hundreds of penetrations and around the perimeter. It also provided a more walkable surface as compared to the river-rock, and an R-14 was added to the building. Job was completed in May of 2007, and has not leaked since.



*Industry Excellence Awards*

Category: Roof Foam Greater Than 40,000 sq. ft.