PROJECT PROFILE

Market: Residential Type: Multifamily Location: Bronx, NY



SPRAY FOAM ROOF INSULATION FOR DUNN DEVELOPMENT

PROJECT SCOPI	E & SPECS	1 2
Developer / Owner:	Dunn Development Corp.	
Project Services:	NYESRDA MPP	
Building Size:	5-6 story walk-ups; 18 buildings total; 294 units; 331,800 sq. ft.	
Primary Energy Conservation Measures:	Spray Foam Insulation Roof; Seal Attic Ventila- tion	
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Dunn Development owns a large portfolio of pre-war, multifamily residences which are seeking NYSERDA funds through the Multifamily Performance Program (MPP) to help finance major renovations to the façade and heating systems. A major energy issue across the portfolio was heat loss through leaky, poorly insulated roofs. Among the proposed options, the owner was very receptive to implementing an emerging measure in air sealing and insulation, Roof Spray Foam Insulation, to reach the required overall 15% energy savings. Given the relatively recent acceptance of this technology, this made the project a perfect candidate for a case study to determine the insulation's true effectiveness.

Steven Winter Associates (SWA) initially performed the energy modeling of the portfolio, through the NYSERDA ERP tool. Along with the installation of the spray foam roof insulation, the other large proposed measure was installation of high efficiency heating and DHW boilers. Site inspections revealed poorly installed fiberglass batts and no air barrier in the vented attic. This greatly reduced the effective R-value of the insulation and allowed conditioned air to be lost to the exterior through cracks in the roof and skylights. This provided the ideal circumstance to evaluate spray foam roof insulation as it would provide an effective air barrier, seal cracks, and enhance the R-value of the roof. The roof insulation measure contributed to the overall projection of energy savings which range from 15-25% across the 18 building portfolio.