

# Solar Energy Management Energy Analysis For Lynx in Orlando, Florida Finds Quick ROI.



2 ½ year payback based on actual utility consumption projections 6 months after installation.

## **Project Summary:**

SEM Type of film: 8 mil Madico Silver (RS 440 with wet glaze attachment) Window Area Covered: 15,000 sq feet. Payback period: 2 ½ years

#### The Challenge:

Solar Energy Management was referred to Lynx transit in Orlando by Jeremy Susac head of the energy department for the state of Florida to help them solve the buildings heat induction and energy use. The Lynx Operations Center (IOC) building, an iconic building built in 2007, was designed with dark blue tinted windows, yet J.Marsh McLawhorn, Chief Government Affairs Officer, used to say, "It gets so hot on some days during the summer that I have to leave at about 3:30PM. They can't get my office below 82 degrees no matter how much air they divert from other parts of the building." This along with glare issues from the hot Florida sun; rising energy costs and the location's vulnerability to hurricanes were opportunities for improvement. Solar Energy Management's team did an energy analysis of the building and provided two low hanging fruit energy saving solutions. One was implementation of specialized solar window film, the other lighting upgrades and auto dimming controls.

### **SEM's Solutions:**

SEM worked with Madico Solar Film group and after an analysis of the glass proposed installing an 8 mil silver RS 440 film. This film is a high performance safety film that provides energy control, heat reduction, carbon emission reduction, glare reduction, storm mitigation and increased productivity from improved comfort levels. The SEM and Madico RS 440 film selection for Lynx boasts a 57% total solar energy rejection statistic while transmitting 42% visible light. Further the 8mil thick design and wet glaze attachment system will help contain flying glass shards should the windows shatter under load of a blast or high wind storm. SEM assisted Lynx in preparing the submittals required for the American Recovery and Reinvestment Act (ARRA) funding.

#### **Results:**

From January to July of 2010, Lynx has saved in excess of 155,000 Kilowatts Hours compared to the prior year. At this rate, the film will result in a 2 ½ year payback with projected reduction in CO2 emissions of 300,000 lbs per year. Also occupant comfort has been increased significantly. J.Marsh McLawhorn said just after the installation "Since the day they installed my office's film, I've been able to leave my blinds open, use the natural light and enjoy the view" Scott Meeks, the supervisor of Facility Maintenance of Lynx said, "By this time last year, I would have had at least 20 complaints about heat. This year to date zero"! Contact Solar Energy Management at 888/948-4765 to have a energy analysis done on your building.