

How Effective is 3M Sun Control Window Film

CASE STUDY

Parkway Place, North York



PROBLEM:

Our tenants on the south, east and west elevations were having major problems with overheated offices due to the solar heat load. Even with our two chillers operating at full capacity we were unable to achieve the tenant comfort that we desired. Additionally, we needed to address our overall operating costs associated with energy consumption and ensure that we had the 'greenest' building possible.

SOLUTION:

To address these problems, we implemented three major changes. With regards to equipment, we upgraded the HVAC controller and implemented changes to the cooling tower efficiency. To address the heat load in summer as well as the heat loss in winter, we had our local 3M Window Film Dealer/Applicator install the 3M Low 'E' All Season Sun Control Window Film Solution on the south, west and east elevations.

RESULTS:

Our most encouraging result is the feedback from our tenants that their offices are now comfortable even during the hottest period in the day. They have indicated they can now enjoy the daylight without having to use blinds to block the sun. From an energy standpoint, we have been able to keep the building cool utilizing only one of our two chillers which saves roughly 50% on our energy consumption. Additionally, we have been able to significantly reduce the peak power demand charges in the late afternoon. Payback on the overall project is expected to be 3 years and at least 50% can be attributed to the installation of the sun control film. We expect to continue to save energy in the winter months by reducing heat loss through the glass by approximately 30% with the use of the 3M All Season Low E window film. The added bonus of the film is that it gives our building a much more attractive uniform appearance. Our local 3M Window Film Dealer/Applicator managed the entire project in a timely and professional manner with our tenants and we would recommend their services to any property manager with similar challenges.

Gary Lepage
Property Manager
Oxford Properties