

Amber 81 Film Makes Outdoors Safe for Student with Photosensitivity Condition

The Challenge:

A school in Scotland was searching for a way to meet the outdoor needs of a student who suffered from EPP, a rare photosensitivity condition affecting one in 300,000 people. Individuals with EPP must avoid all forms of strong light including sunlight and even operating room lights.

In conjunction with the local government, the school erected a special outdoor shelter to allow the student to study and play outside without suffering any ill effects. The shelter featured a covered roof and large windows on all sides. The windows were added to preserve the outdoor views for the student.

Understanding that the untreated windows offered little to no protection against the sun's harmful rays, the school began to research solutions to increase the protection on the glazing. It is essential for those with EPP to avoid sunlight in the form of both ultraviolet and visible light. Therefore, standard UV blocking window films would offer little to no protection to the student.

The Solution:

The school contacted ARC Window Films in search of a film that could provide the results they required. Neil Brabbs of ARC Window Films suggested a film from the Solution Series by Madico, Amber 81.

Brabbs explained, "Sensitivity with EPP continues well above 400nm, so standard UV window films do not offer adequate protection. Amber 81 offers protection up to 550nm, filtering out the dangerous wavelengths, yet still letting a safe range of visible light pass through. The unique, amber color of the film is what gives it this extra blocking capability."

The Results:

All of the students at the school, not just the one with EPP, enjoy using the shelter for outdoor activities and lessons while being protected from the sun's harmful rays. The school administration is also proud to have discovered a way to include all students during time spent outdoors.

Another common application for Amber 81 film is in medical operating rooms. The same powerful rays that are present in sunlight can also be found in the strong lights of operating rooms. Healthcare professionals can apply Amber 81 film directly over their lights to prevent harm to patients with photosensitivity disorders.

Wherever there is glass... We can improve it.



Project Summary:

Project: School Outdoor Shelter
 Location: Dumfries, Scotland
 Installer: ARC Window Films
 Film Type: Madico Amber 81
 Date: March 2014
 Scope: 21 windows