









Building codes in North America — including the International Building Code (IBC) and National Building Code of Canada (NBC) — require glazing in certain applications to be fire-rated in schools and other public and commercial buildings.

Such is the case with the Durham District School Board's (DDSB) Brooklin High School, opened in autumn 2015. Serving the Greater Toronto Area (GTA) community of Brooklin, the new 173,200 square foot (16,090 m²) high school includes extensive glazing throughout to provide natural light and visibility for students and staff.

To fulfill code requirements for defending against the spread of deadly flames and smoke in case of a fire, Aerloc Industries (Dundas, Ontario) installed 3,500 square feet (325 m²) of high-performance fire-rated glass ceramic in doors, sidelites, transoms and interior windows throughout the school. One captivating use of the glazing is in a second floor lofted space overlooking a common area. With the clarity of ordinary window glass, the 45-minute rated glazing provides essential life safety while helping to create a welcoming school environment. In addition to fire protection, the multi-functional glass ceramic is also impact safety rated, to help prevent injuries from glass breakage if students run into it — important in a busy school serving 1,125 teenagers in grades 9 to 12.

For the fire-rated glazing, Aerloc Industries installed two products from Technical Glass Products (TGP): FireLite Plus® and FireLite® NT. Both products are clear and wireless glass ceramics with available fire-ratings ranging from 20-180 minutes, and passing both the code required fire test and hose stream test. The two glazing lines are impact safety rated in accordance with ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II), and are available in large sizes. Such fire-rated glazing provides essential passive protection against fire to supplement fire alarms and automatic sprinklers and automatic fire doors.

The full FireLite family of products is manufactured with TGP's UltraHD® Technology, a process that improves the color, clarity and surface quality of fire-rated ceramic glass, resulting in superior aesthetics.

Take a video tour of the new Brooklin High School building, and hear students' and staffs' thoughts on the facility: https://www.youtube.com/watch?v=knyV8Bs2rhM

