



HVAC/UVGI ENGINEERED SOLUTIONS

L2B Environmental Systems Inc. provides consulting mechanical and electrical design, engineering and project management coupled with an unparalleled understanding of ultraviolet germicidal irradiation (UVGI) as it applies to air purification. We strive to deliver practical and cost effective indoor air quality (IAQ) solutions to our clients within budget and on schedule. Experience is the cornerstone of L2B Environmental Systems Inc. Our engineering staff has over three decades of both design and on-site experience in HVAC engineering consulting services as well as in the construction trades. This experience allows us to provide timely solutions to meet project objectives and schedules.

THE COMPANY

- L2B Environmental Systems Inc. is a Canadian company specializing in IAQ (Indoor Air Quality) solutions. We provide consulting engineering services to Healthcare, Commercial and Institutional sectors and offer innovative HVAC and UVGI solutions to meet or exceed today's requirements for a safe and healthy indoor environment.
- At L2B, we work closely with our clients to define and achieve project goals in order to maximize air quality levels in healthcare settings, process environments and commercial buildings with realistic, cost effective solutions.
- We have a professional staff comprised of mechanical and electrical engineers as well as UVGI specialists who fully understand these new and technically demanding fields, thus making our services unique in the field of HVAC and IAQ solutions.
- L2B engineering professionals have an in depth understanding of HVAC/UVGI applications that result in system designs that can maximize energy performance as well as IAQ.
- L2B has been awarded seven patents, which form the basis for the design and performance of our air purification products and systems.
- In-house research and development (R&D) is the cornerstone of L2B's technologies and products.
- We have designed our HVAC/UVGI systems for maximum risk mitigation against the threats of virus pandemics, bio-terrorism and the spread of airborne disease in sensitive areas such as hospitals.

TEAM PROVEN EXPERIENCE

- Through our proven experience in designing and implementing UVGI air purification systems, we bring unparalleled expertise when providing effective and economical solutions to reduce the health risks of airborne pathogens and the risks associated with airborne volatile organic compounds (VOCs).

- We have played a pivotal role in the development of environmental guidelines to reduce TB transmission in Homeless Shelters and Drop-in Centres for the City of Toronto.
- We have a depth of professional experience with renovation projects and have demonstrated our knowledge and thorough understanding of HVAC design.
- We have demonstrated unparalleled knowledge in applying UVGI air purification technologies in a wide range of applications.

Professional Participation:

- P.E.O. certified and a member of ASHRAE.
- Certified Healthcare Facility Design Professionals.
- In July of 2008, L2B was invited to participate in the first ever Symposium on "Engineering Methods for the Control of Airborne Infections: An International Perspective" at Harvard School of Public Health in Boston Mass. USA.
- Continued participation in the "Global Health Delivery" online discussion group.
- Participated in LEEDS building system design and implementation.

Building IAQ Assessments

- L2B assigns a team of engineers and technicians to assess the installed mechanical and electrical infrastructure with respect to delivering optimal, comfortable and healthy working environments.
- We provide a full briefing report and on-site presentation to the end-user describing their HVAC system, assessment findings and recommendations covering operational conditions, replacement and/or maintenance needs complete with cost estimates. Our report provides a thorough analysis of the systems, zoning and control of the existing buildings mechanical HVAC systems.
- Assessment results correlated to the "As-Built" drawings and zoning of the HVAC systems.



HVAC/UVGI ENGINEERED SOLUTIONS CLIENT & PROJECT LIST

- **Dept. of National Defence, CFB Borden:** Construction Engineering and Technical Services Department
- **Dept. of National Defence, CFB Borden:** Sprinkler System design in Officers Mess, Museum and CE
- **County of Simcoe:** Treasurer Department
- **City of Orillia:** O.P.P. Headquarters HVAC upgrades
- **City of Midland:** Public Library, Heritage building HVAC design and Council Chamber HVAC upgrade
- **City of Barrie:** Courthouse washroom upgrades and boiler plant flue upgrade
- **City of Toronto Public Health Department:** TB Shelter Assessments and development of guidelines
- **New Lowel:** Conversion of Heritage school house to Public Library
- **Beeton:** HVAC design for new Beeton Public Library
- **Barrie Hydro:** Mechanical systems replacement
- **Saga Inn Resort, Wasaga Beach:** Mechanical and electrical design
- **Devil's Glen Resort, Collingwood:** Renovation of Clubhouse and addition, new HVAC system including hydronics.
- **Vespra Hills Golf Club, Minesing:** Full geothermal, HVAC and plumbing design
- **Shasha Bread:** Air purification system design and specification
- **Archdiocese of Toronto:** Wasaga Beach church addition, Perkinsfield heating system design, St. Ann's Penetanguishene heating system design
- **St. Stephen's Shelter:** Indoor air purification system, turnkey design, specification and installation
- **RMA Architect:** Angus Motel, Leslie Frost Centre-Plumbing, Christian Fellowship Church Building
- **Peter Archer and Associates, Architect:** Numerous designs and specifications for industrial, commercial and residential constructions in Barrie and surrounding areas
- **Hall Management:** 10 storey apartment building sanitary system replacement

- Office building renovation including LEEDS certification, **Barrie**
- SNC Lavalin: Profac Facilities Management Service Inc., **Orillia**
- Maclean Engineering and Marketing Co., **Collingwood**
- Moffet and Duncan Architects Inc., **Etobicoke**
- Formworks Architect, **Barrie**
- Jeffery Architect, **Barrie**
- Standard Construction Phase services included in all projects

Healthcare HVAC Projects Completed:

- **Barrie Royal Victoria Hospital:** Emergency triage and waiting area air purification system installation
- **Southlake Regional Health Centre:** Emergency room, MRI waiting room and general areas ventilation upgrades including UVGI systems
- **Dr. Guirguis Out-patient Surgery Unit:** HVAC/UVGI system upgrade
- **Collingwood Early Childhood Educational Centre:** Mechanical design for the re-modeling of the existing building complete with new hydronic/forced air HVAC system
- **Beausoleil First Nation Health Care Facility:** HVAC design
- **Beausoleil First Nation Child Care Facility:** Renovation and mechanical systems design
- **Collingwood Collegiate Institute Special Needs Room:** Mechanical systems design and construction phase services
- **Penetang Mental Health Facility:** Renovation project including mechanical system design
- **Huronion Regional Mental Health Care Centre:** Design and renovation of the existing health care facilities including new mechanical systems and radiant overhead heating
- **Huronion Regional Mental Health Care Centre For The Mentally Handicapped:** Design, specification and air balancing of overhead HVAC system