



# **Mann Engineering**

*Energy Management Specialists*

150 Bridgeland Avenue,  
Suite 101  
Toronto, Ontario, Canada  
M6A 1Z5

Phone (416) 201 9109  
Fax (416) 201 8050  
[www.mannengineering.com](http://www.mannengineering.com)

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## **New Limited Time Programs:**

1. **Run it Right** – Receive free and subsidized operational improvements for gas systems now!
2. **OPsaver** – Receive free operational improvements for electric systems AND get incentives based on performance. No risk to owners!
3. **EPP** – Aggressively reduce your energy consumption and receive 60% more incentives through this large scale savings program.
4. **Cogeneration** – Mann will pay YOU for the rights to install and operate a cogeneration (aka combined heat and power) plant. This will reduce your hydro bill AND earn you income. Emergency generation capabilities are also available.
5. **Net Metering Solar** – Reduce your hydro costs by owning your own renewable solar system.
6. **Garage Air Curtains** – For parking garages and loading docks, the majority of heat loss occurs through the vehicle door. Installing air curtains can reduce this loss by 80%!

## **Markets Served by Mann Engineering**

1. **Multi-residential buildings (including apartment and condominiums)**
2. **Commercial buildings**
3. **Retail buildings**
4. **Multi-purpose buildings/facilities**
5. **Industrial buildings**
6. **Municipal buildings**
7. **Academic buildings**
8. **Social Housing**
9. **Hospitals**

## **Engineering Services Available from Mann Engineering**

1. **Mechanical Consulting Engineering** – Mann has 30 years of designing, retrofitting, improving and troubleshooting mechanical systems, with an emphasis on efficiency and payback.
2. **Electrical Consulting Engineering** – Mann offers high quality electrical engineering for competitive rates with real construction experience to ensure realistic budgeting and design.
3. **Building Envelope Consulting Engineering** – Mann specializes in improving thermal insulation, reducing heat loss through balconies and garages, and window coatings (increase R-value at a lower cost than replacing windows).
4. **Feasibility Studies** – If you are thinking about a significant project, you should get a professional engineer to review the site in detail before you spend any money on design or construction.



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Authorized by the Association of Professional Engineers of Ontario to offer professional engineering services



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5. **Peer Reviews** – Want a second set of eyes to review your engineering drawings before you make a significant capital expenditure? As we say in the industry, measure twice, cut once!
6. **Suite conversions or expansion** – Mann has assisted several clients convert unused parking garage space or laundry rooms to fully functional, highly rentable suites.
7. **Code Compliance** – Get one of our experienced engineers to review systems that have been red tagged, shut off or do not comply with current code.

## **Energy Management Services Available from Mann Engineering**

1. **Boiler Retrofits** – Mann has completed hundreds of boiler retrofits, specializing in improving system efficiency, increasing equipment lifespan and ensuring cost-effective designs.
2. **Chiller and Cooling Tower Retrofits** – Mann specializes in difficult accessibility and quick turnaround retrofits, as well as maximum energy savings and incentives.
3. **Booster Pump Retrofits** – By installing our custom controls and VFD on the booster pumps, we can reduce energy consumption by 30-50%!
4. **Building Automation Systems and System Optimization** – Mann has been installing BAS for over 30 years, actively providing energy savings, improving occupant comfort and reducing downtime and repair costs.
5. **Global Adjustment and Demand Reduction** – Commercial and industrial buildings are spending 30-50% of their hydro bill on this mysterious global adjustment. Mann has proprietary solutions to reduce this cost by up to 80%.
6. **Lighting Retrofits** – Mann has installed over 100,000 LED bulbs over the last 3 years alone; all the while ensuring proper lighting levels, long lifespan and less than 0.5% failure rates.
7. **Water Retrofits** – Save up to 70% on your water bills!
8. **CO Sensors for Garages** – Reduce your heat loss and electricity consumption.
9. **VFD Installations** – Mann has been installing VFDs for over 20 years and works with all major brands.
10. **Renewable Energy** – Interested in reducing your building environmental footprint? Geothermal, solar and co-generation are all great ways to take you off the grid!
11. **Cogeneration (aka Combined Heat and Power)** – Mann provides engineering studies, design, construction and project management. Typical paybacks are 3-7 years!

## **Other Services Available from Mann Engineering**

1. **BOMA, LEED, EnergyStar** – Building values can increase and operating costs can decrease by meeting BOMA, LEED or EnergyStar certifications. Mann has experience submitting the applications and evaluating the work required to meet your targeted certification level.
2. **IR Scans of electrical systems** – Determine if any critical electrical systems are on the verge of failure.
3. **Indoor Air Quality measurements** – We can take measurements of the CO, CO<sub>2</sub>, NO<sub>2</sub>, refrigerant and other gases that occupants are breathing in and compare to safe levels.



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4. **Utility Consumption Investigations** – Not sure who's meter is paying for what? Want to know why one area of the building is consuming more utilities than another? We can help.
  5. **Harmonic Analysis** – Power quality issues are very common these days. Let us review your power in detail and provide recommendations for lowering your power factor (which saves you money!) and improving the power quality (which will increase the life of your electrical system).
  6. **Riser Pipe Replacements** – Mann has teamed up with some of the most experienced pipe replacement solution providers to develop a low cost, reduced downtime solution to replacing your risers.
  7. **Mold assessments** – Mold grows very quickly and affects building construction and occupant health. Mann can review and test for mold to prevent/correct the problem before it grows.
  8. **Fan-coil replacements and servicing** – Regularly cleaning your fan coil unit (or radiators) can reduce fan power, improve indoor air quality and prevent mold.
  9. **Expert Witness Testimony and Analysis** – Act as expert witness for legal proceedings with regards to mechanical and electrical systems and equipment.
  10. **Incentive Applications** – Mann completes hundreds of IESO, Enbridge, NRCan, Union Gas and other incentive applications with 100% client satisfaction and maximum incentives with minimal client involvement.

## **Special Offers**

1. **Financing** – Mann can offer competitive financing rates for projects to make retrofits cash flow neutral in many cases.
2. **Construction Bonding** – Mann has a \$15 million bonding facility, allowing 100% third party guarantee to the building owner that everything will be completed on-time and work properly.
3. **Performance Guarantees** – Mann offers energy savings, certification, incentives and performance guarantees, either in-house or through third party, upon request at competitive rates.
4. **Maintenance and Monitoring** – In order to ensure after the retrofit is complete that the building owner receives the expected performance and energy savings, Mann offers high quality maintenance and monitoring services.



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