Willis, Robert L
FAG Bearing Ltd.
Plant Engineering 801 Ontario St
Stratford, Ont. N5A 6T2
phone: 5192713230
fax: 5192738533

Rulton, Alan
Bay View Sheet Metal Inc.
5 Bayview Court
London, Ont. N5W 5W4
phone: 452-3963
fax: 455-2358

Rutherford, William
Vanderwesen & Rutherford Ltd.
P.O. Box 1149, 7242 Colonel Talbot Road,
Lambeth St. London, Ont. N6P 1R2
phone: 652-5047
fax: 652-5058
email: war@vreng.com

Scott, William
Axis Products Limited
5 Main St
Brodhagen, Ont. N0K 1B0
phone: (519) 345-2258
fax: (519) 345-2575
email: wscott@axisproducts.on.ca

Shaw, Eric
Baymar Supply Ltd.
301 Consortium Court,
London, Ont. N6E 2S8
phone: 964-002
fax: 680-7039
email: ewshaw@baymarsupply.com

Simic, David
Tecmar Engineering Inc.
117 N Front St
Sarnia, Ont. N7T 1T1
phone: (519) 383-6029
fax: (519) 336-7677
email: simics@tecsar.com

Smiley, Rob
TSM Ltd.
1376 Lougar Avenue
Sarnia, Ont. N7S 5N7
phone: (519) 336-7409
fax: (519) 336-7761
email: tsmld@csourse.net

Smith, Charles
Boilersmith Ltd.
156 Main Street South, P.O. Box 70
Seaforth, Ont. N0K 1W0
phone: fax:
email: boilers@boilersmith.com

Soan, Edward
Soan Mechanical Ltd.
11 Bayview Ct
London, Ont. N5W 5W4
phone: 455-1530
fax: 455-1164
email: ted@soanmechanical.com
Belimo Aircontrols (CAN), Inc.
5716 Coopers Avenue, Unit 14-16
Mississauga, Ont. L4Z 2E8

Besterd Mechanical
795 Central Avenue
London, Ont. NSW 3R1

BML Multi Trades Group Ltd.
15 Ryan Place
Brantford, Ont. N3T 5V7

Boilersmith Ltd.
156 Main Street South, P O Box 70
Seaford, Ont. NOK 1W0

Brescia University College
1285 Western Road
London, Ont. N6G 1H2

Carrier Canada Ltd
354 Neptune Crescent
London, Ont. N6M 1A1

Chorley & Bisset
389 York Street, Suite 2B
London, Ont. N6B 3R4

Cimco Refrigeration
89-41 Adelaide St N.
London, Ont. N6B 3P4

City Of London
300 Dufferin Ave
Building Division
London, Ont. N6A 4L9

Climate Control
85-41 Adelaide Street North
London, Ont. N6B 3P4

Comstock Canada Ltd.
1200 Trafalgar St
London, Ont. N5Z 1H5

David Benedetti

Richard Donohue

Gerald Catt

Charles Smith

Bruce Morgan

Mark Broughton, Pete Edmision,
John Bisset, Dennis Dawa,
Owen Glendon, Peter Golem,
Ron Granger, Derek Vakaras

Mainstone, Warren
Con-Eng Contractors Ltd.
2026 Oxford Street East
London, Ont. N5V 2Z8

Mark, Susan
University of Western Ontario
Services Building
1151 Richmond Street North
London, Ont. N6A 5B9

Martinuzzi, Robert
University of Western Ontario
London, Ont. N6A 5B9

McDonald, John
Royal Air Conditioning
480 Huntington Drive
London, Ont. N6G 4J1

Moore, Robert
Technicair Ltd.
90 Towerline Place
London, Ont. N6E 2T3

Morasch, Craig
Engineered Air
Division of Airtex Manufacturing
60 Meg Drive, Unit 11
London, Ont. N6E 3T8

Morgan, Bruce
Brescia University College
1285 Western Road
London, Ont. N6G 1H2

Nemeth, Imre
Marshall And Murray Inc.
825 Wellington Street
London, Ont. N8A 3R8

phone: 455-8180
fax: 453-2364
email: coneng@cims.net

phone: 681-2111
fax: 681-3020
email: smartinu@julian.uwo.ca

phone: 681-0561
email: 

phone: 980-7280
fax: 680-7281
email: 

phone: 649-1700
fax: 649-1707
email: cmorasch@sympatico.ca

phone: 432-8353
email: 

phone: 433-3908
fax: 433-9453
email: main@marshallmurray.com
ECR International
PO Box 900 6800 Base Line Road
Wallaceburg, Ont. N8A 5E5

Engineered Air
Division of Airtex Manufacturing
60 Meg Drive, Unit 11
London, Ont. N5E 3T6

Erie Sheet Metal Inc.
248 Hamilton Crescent
Dorchester, Ont. N0L 1G4

FAG Bearing Ltd.
801 Ontario St
Stratford, Ont. N5A 6T2

Fanshawe College
1460 Oxford St
London, Ont. N5Y 5R6

Great Lakes Industrial Controls
Unit B, 11 Paulander Drive
Kitchener, Ontario N2M 5B6

HTS Engineering Ltd
Unit B, 11 Paulander Drive
Kitchener, Ontario N2M 5B6

Hasting & Prince Edward District School Board
156 Ann Street
Belleville, Ont. K8N 1N9

High-Tech Engineering
137 Kendall St
Point Edward, Ont. N7V 4G6

Honeywell Ltd
119 Exeter Rd
London, Ont. N8L 1A4

Integrated Engineering
291 Boler Road
London, Ont. N6K 2J9

Jutzi, Brian
D.H. Jutzi Ltd.
279 Lorne Ave
Stratford, Ont. N5A 6T1
phone: (519) 271-9831
fax: (519) 271-1246
email: brianjutzi@jutzi.com

Kelly, John
Trane Sales Agency-London
8 Belleisle Ct
London, Ont. N5V 4L2
phone: 453-3016
fax: 453-3024
email: jkelly2@trane.com

Kilmer, Tom
Kilmer Environmental Inc.
208 Britannia Road East, Unit 1
Mississauga, Ont. L4Z 1S8
phone: (905) 890-8908 ext. 25
fax: (905) 890-8915
email: tom@kilmerenv.com

Kirkwood, Michael
Stantec Consulting Ltd.
1505 Laperriere Ave 4th Floor
Ottawa, Ont. K1Z 7T1
phone: (613) 724-4087
fax: (613) 722-2799
email: mkirkwood@stantec.com

Kuni, Scott
York International
RR#2 4 Tike Road
St. Thomas Ont. N5P 3S6
phone: 637-2375
fax: 637-2375
email: scott.kuni@york.com

Labate, Bruno
St. Josephs Health Care London
Physical Environment Services
801 Commissioners Road East
London, Ont. N6C 5J1
phone: 685-4292
fax: 685-4066
email: bruno.labate@sjhc.london.on.ca

Lainsbury, Edward
E H Price Ltd.
10 Pacific Ct
London, Ont. N5V 3K4
phone: 451-5100
fax: 451-8728
email: elainsbury@price-hvac.com

Lange, Ted
Culliton Bros Ltd.
473 Douro St
Stratford, Ont. N5A 6W3
phone: (519) 271-1014
fax: (519) 271-22-5
email: 
Ontario Lottery & Gaming Corporation
5530 Harvester Rd
London, Ont. L7L 5V4

Palser Enterprises Ltd.
Po Box 28136
London, Ont. N6H 5R2

Pollard Engineering Limited
P O Box 22089
London, Ont. N6C 4N0

Polycon Industries
65 Independence Place
Guelph, Ont. N1K 1H8

Ray-Tec Radiant Heaters Ltd.
3392 Wonderland Rd S Bldg Unit 5
London ON N6K 3C5

Royal Air Conditioning
480 Huntingdon Drive
London, Ont. N6C 4J1

Smylie & Crow Associates Inc.
1 Wortley Rd
London, Ont. N6C 3N7

SNC Lavalin Inc.
265 Front St North St 301
Sarnia, Ont. N7T 7X1

Snc-Lavalin Engineers & Constructors
265 N Front Street, Suite 301
Sarnia, Ont. N7T 7X1

Stanete Consulting Ltd.
1535 Laserbe Ave. 4th Floor
Ottawa, Ont. N1Z 7T1

Scan Mechanical Ltd.
11 Bayview Ct.
London, Ont. N5W 5W4

Ellis, Kim
Engineered Air
60 Meg Drive Unit #11
London, Ont. N6E 3T6

Fagan, Micheal
24 Mill Street
Zurich, Ontario N0M 2T0

Flowers, Kirk
Ray-Tec Radiant Heaters Ltd.
3392 Wonderland Rd S Bldg Unit 5
London ON N6K 3C5

Glendon, Owen
Chorley & Bisset Ltd
369 York Street, Suite 2B,
London, Ont. N6B 3R4

Golem, Peter
Chorley & Bisset Ltd
369 York Street, Suite 2B,
London, Ont. N6B 3R4

Goodwin, Robert
Smylie & Crow Associates Inc.
1 Wortley Road
London, Ont. N6C 3N7

Goyette, Jeffrey
Technicair Ltd
90 Towerline Place
London, Ont. N6E 2T3

Granger, Ronald
Chorley & Bisset
369 York Street, Suite 2B,
London, Ont. N6B 3R4

Scott Baker
Hugh Paser
Tom Pollard
Janusz Widz
Kirk Flowers
John McDonald
Joe Claessens, Jay Dillman,
Bob Goodwin, Jamie Whitty
Mathew Ma
David Lin
Micheal Kirkwood
Andy Scan, Ted Scan

phone: 649-1700
fax: 649-1707
email: london@engineeredair.com

phone: (519) 235-7436

phone: 659-1010
fax: 657-4398
email: raytec@canada.com

phone: 679-8660
fax: 679-2145
email: owen.glendon@chorley.com

phone: 670-8660
fax: 672-5918
email: peter.golem@chorley.com

phone: 672-6511
fax: 672-5918
email: bob@smyliecrow.com

phone: 660-7280
fax: 680-7281
email: dgoyette@bestard.ca

phone: 679-8660
fax: 679-2145
email: ron.granger@chorley.com
Vanderweuten & Rutherford Ltd.
Po Box 1149, 7242 Colonel Talbot Road, Lambeth St., London, Ont. N6P 1R2

William Rutherford

Vicataulic
65 Worcester Road,
Rexdale Ont. N9W 5N7

Murray Dow

Weishaupt Corp.
6280 Danville Rd.
Mississauga, Ont. L5T 2H7

Frank Brown

Westminster Mechanical
45288 Ferguson Line
Belmont, Ont. N0L 1B0

Ed Rinas

York International
RR#2 4 Tice Road
St. Thomas Ont. N5P 3S0

Scott Kunl

Claessens, Joe
Smylie & Crow Associates Inc.
1 Wortley Road
London ON N6C 3N7

phone: 672-8511
fax: 672-5908
email: joe@smyliecrown.com

Clarke, Norman
Trane Sales Agency-London
8 Beechtree Ct.
London, Ont. N5V 4L2

phone: 453-3010
fax: 453-3024
email: niclarks@trans.com

Clemance, Charles
3M Canada Company
Po Box 5757
London, Ont. N6A 4T1

phone: 452-6104
fax: 452-6167
email: csclerance@mmm.com

Cooper, James
Bartley Services
354 Neptune Crescent
London, Ont. N6M 1A1

phone: 659-0420
fax: 659-0423
email: jcooper@bartleyservices.com

Dahmer, James
Keller Engineering Associates Inc.
1390 Prince Of Wales Drive
Ottawa, Ont. K2C 3N6

phone: (613) 224-1544
fax: (613) 224-1842
email:

Dawe, Dennis
Chorley & Bisset Ltd
369 York Street, Suite 2B.
London, Ont. N6B 3R4

phone: 678-8660
fax: 678-2145
email: dennis.dawe@chorley.com

Deneau, Bradley
City Of London - Building Division
300 Dufferin Ave. Po Box 5035
London, Ont. N6A 4L9

phone: 661-8428
fax: 661-5184
email: bdeneau@city.london.on.ca

Dillman, Jay
Smylie & Crow Associates Inc.
1 Wortley Road
London ON N6C 3N7

phone: 672-8511
fax: 672-5906
email: jay@smyliecrown.com
CONVERSIONS

°F = (9/5 * °C) + 32
°C = (°F - 32) / 1.8

Sensible heat (Btu/h) = 1.08 x Q x ΔT
Q = air flow (cfm)
ΔT = change in dry bulb temperature (°F)

Latent Heat (Btu/h) = 0.68 x Q x Δg
Q = air flow (cfm)
Δg = change in moisture (grains/pound)

water required for heating or cooling

\[ q = \frac{500 \times \Delta t}{gpm} \]

R = thermal resistance (ft²°F-Btu/ft²°F-Btu)  
U = thermal transmittance (ft²°F-Btu/ft²°F-Btu)

R\cdot x 0.1761 = RSI
RSI \times 5.078 = R
1/R = U
1/RSI = USI

R = \frac{m²°C}{W}
USI = \frac{W}{m²°C}

Arcese, Terry  
HTS Engineering Ltd  
Unit B, 11 Paulander Drive  
Kitchener, Ontario N2M 5B6  
phone: (519) 570-1800  
fax: (519) 741-9380  
email: terrys@htseng.com

Archer, Robert  
Abram Steel Metal  
1606 London Road  
Sarnia, Ont. N7T 7H2  
phone: (519) 542-3479  
email: avellic@novechem.com

Attard, Joe  
Thames Valley District School Board  
Facility Services  
951 Leathorne St.  
London, Ont. N5Z 3M7  
phone: 452-2435  
fax: 452-2411  
email: t.jdavidiuk@tvdsb.on.ca

Avellino, Thomas  
Novex Chemicals (Canada) Ltd.  
P.O. Box 3063  
Sarnia, Ont. N7T 8C7  
phone: 519/882-2911  
email: avelllic@novechem

Azzopardi, John  
Baymar Supply Ltd  
3200 Jefferson Blvd  
Windsor, Ont. N8T 2W8  
phone: (519) 974-5800  
fax: (519) 974-5803  
email: jazzopardi@baymariansupplier.com

Baasner, Frank  
Andronovski & Associates Ltd  
350 Speedvale Ave W Unit B  
Guelph, Ont. N1H 7M7  
phone: (519) 821-2880  
fax: (519) 821-2383  
email:

Barker, Wayne  
Honeywell Ltd  
41 Adelaide Street North Unit 5  
London, Ont. N6B 3P4  
phone: 652-4217  
fax: 640-1915  
email: wayne.barker@honeywell.com

Barker, Scott  
Ontario Lottery & Gaming Corporation  
5530 Harvester Rd  
London, Ont. L7L 5V4  
phone: (905) 333-5110  
fax: (905) 333-5988  
email: sbarker@olg.on.ca
ASHRAE, the American Society of Heating, Refrigerating and Air-Conditioning Engineers is an international organization of 50,000 persons with chapters throughout the world. The Society is organized for the sole purpose of advancing the arts and sciences of heating, ventilation, air conditioning and refrigeration for the public’s benefit through research, standards writing, continuing education and publications.

Through its membership, ASHRAE writes standards that set uniform methods of testing and rating equipment and establish accepted practices for the HVAC&R industry worldwide, such as the design of energy efficient buildings. The Society’s research program, currently more than 100 research projects worth nearly $8 million, investigates numerous issues, such as identifying new refrigerants that are environmentally safe. ASHRAE organizes broad-based technical programs for presentation at its semi-annual meetings and co-sponsors the International Air-Conditioning, Heating, Refrigerating Exposition, the largest HVAC&R trade show in North America.

ASHRAE’s Long Range Plan establishes goals for five or more years into the future. It begins with a vision of what ASHRAE should be in the future, taking into account external factors that will impact the Society and the industry it embraces. The plan consists of three parts: mission statement, vision statement and goals.

Mission Statement
ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members.

Vision Statement
ASHRAE
- will be the global leader in the arts and sciences of heating, ventilation, air conditioning and refrigeration.
- will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.
- will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

Goals
- Provide comprehensive education programs that enhance opportunity for professional growth.
- Respond to current and emerging heating, ventilating, air-conditioning and refrigerating issues.
- Ensure timely transfer of information.
- Provide for diverse global growth