

AIR CONDITIONING
and
REFRIGERATION INDUSTRIES
PROVINCIAL COLLECT

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I.C.I. CONSTRUCTION 1992-1995

NON I.C.I. CONSTRUCTION,
SERVICE & MAINTENANCE 1992-1995

BETWEEN: O.R.A.C.
ONTARIO REFRIGERATION AND AIR
CONDITIONING CONTRACTORS ASSOCIATION

and

U.A. LOCAL 787
REFRIGERATION WORKERS OF ONTARIO
UNITED ASSOCIATION

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I.C.I. CONSTRUCTION
COLLECTIVE AGREEMENT
(1992)

between

O.R.A.C.

and

U.A. LOCAL 787

Article 4: EMPLOYER

The term "Employer" in this Agreement is construed to mean the Association, any Company, partnership, sole proprietorship, or otherwise which is bound by this Agreement.

Article 5: RECOGNITION

5:01 The Association recognizes Local Union 787 as the sole and exclusive bargaining agent for all Journeymen Foremen, Journeymen and Apprentice Refrigeration and Air Conditioning Mechanics, save and except persons above the rank of working Foremen, employed by Employers in the Province of Ontario in the industrial, commercial and institutional construction sector (hereinafter referred to as the I.C.I. Construction Sector) of the Refrigeration and Air Conditioning trade.

(a) The Union recognizes the Association as the sole and exclusive bargaining agent for employers of Local 787 members employed in the I.C.I. Construction Sector of the Province of Ontario.

(b) Subject to the express terms of this Agreement and specifically to Article 8 Paragraph 8.03 (a) and (b), the Union recognizes the right of the Employer to operate and manage his business in accordance with his commitments and responsibilities.

The following are solely and exclusively the responsibility of the Employer:

- (1) The location of Company workshops and warehouses.
- (2) Designation of work to be done and responsibilities of each employee.
- (3) Scheduling of work.
- (4) Methods and means by which the work is to be accomplished within the provisions of all Safety Regulations.
- (5) The right to decide on the number of employees needed by the Company at any time.
- (6) The control of all operations and buildings, machinery and tools owned or rented by the Company. The direction of the employees, including the right to hire, suspend or discharge for just cause and the right to relieve employees from duty because of lack of work or other legitimate reasons is vested exclusively with the Employer subject to this Agreement and in particular, subject to the grievance and arbitration procedures provided herein.
- (7) The Employer agrees that in the exercising of its management rights and in the administration of this Agreement, it shall do so in a fair and reasonable manner.

5:02 Except as may otherwise be provided for herein:

(a) All employees covered by this Agreement shall, as a condition of employment or continued employment, be members of the Union in good standing.

(b) In the event that an employee fails to tender to the Union the required initiation fee or monthly dues and for any reason becomes a suspended member of the Union, the Employer will not assign work to such employee upon request by the Union.

5:03 Employers will obtain from the Union all persons required to perform any of the work described in Appendix "A" attached hereto, except if Union members are not available, the Employer may hire other qualified workers, provided they make application to join the Union before employment commences. For clarification, the intent is, if the Employer requires a specifically trained employee and none are available on the Union "out of work" list, an Employer may, if he decides the workers on the list are not suitable, hire an employee provided Article 25 has been adhered to. The Union will notify the Employer within 48 hours of the worker's acceptance.

5:04 The Union shall take reasonable steps to ensure that none of its members are employed by Employers not bound by this Agreement with the Union. This is not to be construed to prevent a member securing employment outside of his trade.

5:05 No member of the Union while employed by an Employer bound by this Agreement shall perform work as outlined in Appendix "A" of this Agreement for anyone other than his Employer without permission from both his Employer and the Union.

Article 6: EMPLOYEE

6:01 Under the terms of this Agreement there shall be the following categories or classes of employees:

Journeyman Foreman
Journeyman Mechanic
Apprentices
Students

which categories or classes are defined as follows:

6:02 JOURNEYMAN FOREMAN – Shall be an employee with the qualifications of a Journeyman Mechanic, and who has been requested to take charge of a job over 3 consecutive days duration where 2 additional Local 787 Journeymen are employed. On any job where 3 or more Local 787 Journeymen are employed a foreman must be designated and he must be a member of Local 787.

A Journeyman Mechanic who has been requested to take charge of a job as Journeyman Foreman shall hold the position and pay of a Journeyman Foreman for the duration of the job.

6:03 JOURNEYMAN MECHANIC – Shall designate a person who holds a valid Certificate of Qualification for the Province of Ontario and who has passed any examination which may be required by the Local 787 Examining Board.

6:04 APPRENTICE – Shall designate any person who engages himself for a minimum period to an Employer for the purpose of learning the trade as laid down by the Ontario Apprenticeship and Tradesmen’s Qualification Act. He will attend all courses of study as laid down by *the* Act and by the Joint Training and Apprenticeship Committee.

The Employer shall be permitted a ratio of one Apprentice for the first Journeyman member, and then permitted an additional Apprentice for every three additional Journeyman members employed.

6:05 STUDENTS – For the purpose of this Agreement, the term “student” shall mean a person who, except for summer vacation period or work study period, would normally be attending full time at High School, Vocational School, or University and taking subjects relating to the Refrigeration and Air Conditioning Trade.

The intention of this clause is to enable an Employer to give practical experience during summer months to a person whose declared intention is to seek employment in the Trade upon graduation from school, and is not intended as a source of casual labour.

(a) The Employer involved must employ the maximum number of Apprentices as allowed by the ratio stated in Article 6:04 before hiring a student.

(b) The foregoing notwithstanding, no Employer shall employ more than one “student” for every eight (8) Union members employed, except, any Employer employing at least five (5) members of the Union may hire one “student”.

(c) Students will be required to pick up a temporary work card and work referral slip prior to starting work.

Article 7: RESPONSIBILITY OF EMPLOYEES

For the purpose of establishing a minimum responsibility, employees will be described in three (3) categories:

Journeyman Foreman Journeyman Mechanic
Apprentice-Student

7:01 GENERAL — The Employee shall:

(a) Assume his position with his Employer according to his qualifications in the industry and shall accept the following as the minimum requirements and terms of his employment, but shall not be limited to them or relieved of further responsibility delegated by the Employer.

(b) Arrive ready for work suitably and neatly dressed at the normal starting time unless prevented by his Employer from doing so.

(c) While in the possession of an Employer's tools, equipment, materials, vehicles or other Employers property take all reasonable precautions to prevent damage, loss, theft, breakage, misuse, etc.

(d) Ensure that an Employer's vehicle, when provided for his use, is employed in accordance with the "Company Policy" and operated in a manner which will result in maximum useful life and maximum economy. While all costs for maintenance and repairs are borne by the Employer, the employee will advise the Employer immediately and in writing, with a copy to be retained by the employee, of any servicing that may be required to keep the vehicle in good and safe running order and presentable in appearance.

(e) When representing his Employer, make every effort, according to his qualifications, to look after the best interests of the Employer.

(f) All employees shall be required to have and wear approved safety boots or shoes, and safety hats as a condition of employment. The employee shall provide the safety hat at his own expense unless the Employer demands a safety hat of a particular colour or style, in which case the Employer shall supply it/them at the Employer's expense. Safety hats supplied by the Employer shall be returned to the Employer by the employee on termination of employment. It shall be the responsibility of the employee to be knowledgeable of the Safety Regulations under the Occupational Health and Safety Act 1978.

7:02 A JOURNEYMAN FOREMAN SHALL:

(a) Direct all phases of a project for which he was appointed foreman and be capable of instructing Journeymen and Apprentices in the actual installation work from drawings and instructions given by his Employer and perform the work of a Journeyman Mechanic when so required by his Employer.

7:03 JOURNEYMAN MECHANIC

(a) Journeyman Mechanic shall when issued a specific job assume the role of mechanic and representative of the Employer

and take the initiative to perform the work, according to the best practice of this industry. Where circumstances are beyond his control he shall immediately advise his superiors.

(b) When working with an Apprentice, a Journeyman Mechanic shall guide and instruct the Apprentice to ensure that the production of the Apprentice is of the best quality.

(c) A Journeyman Mechanic shall take reasonable steps to ensure that upon his leaving a job, the safety of other employees of the Employer engaged at the project are not in jeopardy due to unsecured equipment or materials. Upon completing a project or leaving a project for a sustained period of time, a Journeyman Mechanic shall clean up the job site or shall make arrangements to have this done according to the project requirements.

7:04 APPRENTICE—The responsibility of an Apprentice is covered under the direction of the Joint Training and Apprenticeship Committee.

(a) He will work under direct supervision of a Journeyman member of the Union and be responsible to the Journeyman for the work which he has performed. He shall follow the instructions and directions of the Journeyman.

Article 8: RESPONSIBILITY OF EMPLOYER

8:01 An Employer shall attempt to keep an indentured Apprentice active in his relative training until completion of his Apprenticeship. Should the Employer find it necessary to lay off an Apprentice, that Apprentice or an Apprentice with the same years of experience or greater shall be recalled or hired when work becomes available. If the Apprentice or Apprentices with the same years of experience or greater are not available at the time of recall, this provision shall not apply.

8:02 Before hiring a member of Local 787, an Employer must present a written copy of the Employer's "Company Policy", a copy MUST be deposited on file at the Union office and the employee shall sign an appropriate form as proof that he has received a copy of the Employer's "Company Policy". Policy shall include working hours, the wearing of uniforms, and use of Employers/employees vehicles, etc.

The "Company Policy" shall not contravene this Agreement or any other applicable legislation.

Revision of "Company Policies" must be deposited on file at the Union office and each and every employee affected by the change must be advised.

8:03 The Employer shall:

(a) Assign exclusively to members of the Union all of the work described in Appendix "A", attached hereto and forming part of this Agreement.

(b) Employers will not sublet refrigeration or air conditioning work to non-union contractors.

8:04 The Employer will keep Company vehicles in proper mechanical and safe condition. If a dispute arises, the governing body will be "The Ministry of Transportation and Communications Vehicle Inspection Section".

(a) All Employer's vans will be equipped with metal safety shields or bulkheads of equivalent strength between the driver and the load. The Employer's vehicles will be equipped with First Aid Kits, Fire Extinguishers and Safety Flares.

(b) It is the employees responsibility to notify the Employer of any deficiencies in either 8:04 or 8:04(a).

8:05 The Employer shall show proof of Insurance Coverage (minimum \$1,000,000.00 Public Liability and Property Damage) of vehicle and employee during working hours, and after working hours while using vehicle according to "Company Policy". Written proof and permission must be issued to employee involved.

8:06 It shall be the responsibility of the Employer to comply with the regulations under the Occupational Health and Safety Act, 1978, on all jobs where Union members are employed.

8:07 The Employer will provide the employees with credit cards, pump keys, cash or other suitable methods of paying for gas, oil, service and minor repairs to Employer's vehicle, parking fees, etc. In some instances an employee may be required to purchase minor material in which case he shall be provided with a cash floater if he requests it. If a cash floater is provided, it will be replenished at suitable intervals on submission of receipts for money spent. The cash floater is for the benefit of the Employer and must be available at all working time for that purpose.

Article 9: UNION STEWARDS

9:01 The Union may appoint, and the Employer shall recognize a Steward for each shop, job or area. The Employer's General Manager shall be notified in writing of the name of the Steward when the appointment becomes effective. The Steward shall be recognized as the representative of the Union for the shop, job or area in which he is working and no discrimination shall be shown against him for carrying out his Union duties. He shall not be laid

off, transferred or discharged by reason of executing his Union duties and responsibilities as a Steward.

9:02 The Steward shall assist in adjusting differences which may arise out of the interpretation, application or alleged violation of his Agreement.

9:03 He shall see that the provisions of this Agreement are complied with and report any infractions to the office of the Union. This also applies to safety regulations.

Article 10: UNION REPRESENTATIVE

10:01 An official representative of the Union shall have access to projects during working hours providing this is within the control of the Employer.

10:02 An official representative of the Union when entering a project shall when practicable, advise the Superintendent or employer of his visit and at no time shall he interfere with job progress unless there is a matter of dispute on the job, in which case the matter must be discussed with the job Superintendent or foreman, so that no unnecessary work stoppage occurs.

10:03 An official representative of the Union shall be granted unpaid leave of absence when required for Union business provided that reasonable notice is given to the Employer.

Article 11: HOURS OF LABOUR

11.01 The ordinary hours of work shall be eight (8) consecutive hours per day not including time ~~for~~ lunch, between 8:00 a.m. and 5:00 p.m. Monday to Friday inclusive with one half hour off for lunch making a regular work week of 40 hours. Normal job starting and job quitting times to be determined by the Employer in accordance with area or Employer's practice provided they are within the ordinary hours of work. Changes to normal starting and quitting times for special reasons may be arranged between the Employer and employee by mutual agreement. Any Employer wishing to revise normal starting and quitting time shall provide 7 days notice to the employees.

11:02 **SHOW UP PAY** - Unless an employee is informed prior to the end of the previous work day he should not report to work on the following work day, such employee shall be paid an amount equal to four hours wages (including vacation pay and all other financial benefits provided for in this Agreement) and must take work available.

11.03 **BEREAVEMENT LEAVE**- In the event of a death in the employee's immediate family, i.e. the employee's children, parents, grandparents, brothers, sisters, **spouse**, spouse's parents, grandparents,

the Employer will grant the employee up to 3 days leave of absence with pay for the purpose of making arrangements for, or attending the funeral or memorial service. Pay shall be at the employee's straight time rate and shall be paid only for claims which occur on a day on which the employee would be regularly scheduled to work.

11:04 In the event that an accident occurs whilst a Union member is on Employer business, which necessitates the member having to visit a doctor or hospital for treatment, etc., the time lost by the member shall be paid for by the Employer. If it is necessary for a Local 787 member to be taken for treatment by a second member, his lost time will also be paid for by the Employer. It is the intent that members would only be paid up to the completion of the shift which they were working at the time treatment was required.

11:05 JURY DUTY – Jury Duty Compensation will be paid if a member of the Union is summoned for Jury Duty or as a Crown Subpoenaed Witness. For each day that he is compensated by the Crown, he shall be compensated by the Employer at \$25.00 per day and by the Union at \$25.00 per day up to a maximum of 20 calendar weeks or 20 working days. Proof of payment by the Crown shall be presented to the Employer and to the Union.

Article 12: OVERTIME

12:01 All time worked between the regular closing time of one day and the regular starting time of the following day shall be paid at overtime rates. Travelling time between the regular closing time of one day and regular starting time of the following day will be paid at straight time.

12:02 Overtime shall be paid for at the rate of double time for hours worked from regular closing time until regular starting time on week days, and all hours worked on Saturday, Sunday and Statutory Holidays recognized in 12:03.

12:03 STATUTORY HOLIDAYS -- Recognized Statutory Holidays are New Year's Day, "Heritage Day" (if declared: Good Friday, Victoria Day, Canada Day, Simcoe Day, Labour Day, Thanksgiving Day, Christmas Day, and Boxing Day. Where Statutory Holidays fall on a Saturday or Sunday, the next work day or work days shall be designated as Statutory Holiday(s) or as designated by the Government.

12:04 SHIFT WORK – Where it is necessary for a worker to work a night shift instead of a day shift or both night and day shifts because of tying in with other trades or construction schedules, or where life may be endangered or property damaged, or a shift commencing any time after regular closing time, the worker shall work 8 hours for 9 hour pay.

Shift rates apply only to shifts starting after Sunday midnight and finishing Friday midnight. All hours over 8 hours worked in any one shift as described in **12:04** shall be paid for at overtime rates. No worker shall be required to work more than one shift in any **24** hour period.

12:05 If any man reports late for work, no overtime will be paid until a full day or shift has been completed from the time of reporting. A man is not late if he is asked to report after normal starting time,

Article 13: TRAVEL

13:01 The free zone shall be the area within a 50 km radius from the Employer's permanent place of business, shop, branch office or depot.

13:02 Employees will be on the job within the free zone by regular starting time. Workers travelling to a job outside the free zone shall be at the boundary of the zone nearest to the job site by regular starting time and regular quitting time.

13:03 Any member not supplied with transportation by the Employer and therefore uses his own vehicle shall receive **\$0.40** (cents) per km for the **use** of his own vehicle while on Employer's business. For the purpose of computing mileage, it will be assumed that the day begins and ends at the shop and mileage will be computed from shop to shop, shop to job, job to job and job to shop.

In a situation where an employee is required to **use** his **own** vehicle on a one call or one day basis, the employee will be paid the mileage rate as above or **\$25.00** per day or per call whichever is the greater amount. In situations where an employee is required to use his own vehicle on a regular basis (weekly), he will be paid the mileage rate as above or the minimum of **\$100.00** weekly, whichever is the greater amount. Under no circumstances will the daily amount of **\$25.00** accumulate to exceed the weekly minimum amount of **\$100.00** in any one pay period.

Employees shall not carry more than their personal tools plus 45.5 kg (100lbs.) of Employer's tools and supplies in their personal vehicle.

13:04 Travel Expenses are to be paid at the same time as wages are paid.

13:05 It is agreed that each employee will carry a minimum of **\$1,000,000.00** Public Liability and Property Damage Insurance on his vehicle at business rates if vehicle is used on Employer's business and that he will file a copy of the policy endorsement with the Employer.

13:06 The Employer agrees to pay parking fees incurred by employee while on Employer's business.

13:07 All employees sent out of the free zone to work and who do not return daily to their normal residence shall receive expenses incurred in obtaining meals and accommodation, and other legitimate expenses incurred, including transportation costs whether by air, train, bus, etc. If travelling at night by train, a sleeper is provided.

13:08 Expense money shall be advanced to each employee for meals and lodging sufficient for the expected duration of the job, (or weekly if the job is expected to last longer than seven days) and a detailed amount substantiated by receipts shall be submitted to the Employer by the employee.

13:09 If an employee is requested to use his vehicle for a job outside the free zone, any travelling involved during the course of the job or jobs, including return trips as outlined in 13:10 will be done in the employee's vehicle at the rate outlined in 13:03.

13:10 During the course of a job where the employee does not return to his normal residence daily he will be entitled to return home on the following basis:

(a) every week for jobs within 161 km (100 miles) of the free zone.

(b) every two weeks for the jobs within 644 km (400 miles) of the free zone.

(c) every three weeks for jobs over 644 km (400 miles) from the free zone.

If the employee does not wish to return home at the above stated intervals the Employer will continue the payment for lodging and meals during the weekend. If the employee does return home he will receive transportation costs as outlined in Article 13:07 but will not receive payment for travelling time. Travel arrangement will be controlled by the Employer.

13:11 When on jobs out of the free zone over five (5) days duration all employees shall be allowed one personal phone call of 3-minutes limit, per week paid by the Employer.

13:12 Employees will not be expected to use their own money for expenses incurred on behalf of the Employer.

13:13 In cases where, for Employer's reasons, the employee has the use of an Employer supplied vehicle to drive from employee's place of residence to the free zone, the employee shall, if requested, reimburse the Employer for the use of the vehicle at a rate not greater than specified in Article 13:03.

Article 14: WAGE RATES

14:01 The Province of Ontario is divided into four zones as indicated on the map inserted at the end of this Agreement. The location of the dividing lines between the zones is described in Appendix C of this Agreement.

14:02 If a man works outside his zone, or out of the Province, he is to be paid the prevailing rates for the zone in which he is working, provided it is not less than that paid in his own zone.

14:03 The following charts show the hourly rates which will apply from date of Memorandum of Agreement to April 30th, 1995 for all Local 787 Journeyman members and U.A. members of other locals working on a Travel Card in Local 787.

JOURNEYMAN WAGE PACKAGE

	Basic Rate	10% V&S.HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1				
05/01/92	\$29.14	\$2.91	\$2.74	\$34.79
05/01/93	\$30.14	\$3.01	\$2.94	\$36.09
05/01/94	\$31.14	\$3.11	\$3.34	\$37.59
Zone 2				
05/01/92	\$28.64	\$2.86	\$2.74	\$34.24
05/01/93	\$29.64	\$2.96	\$2.94	\$35.54
05/01/94	\$30.64	\$3.06	\$3.34	\$37.04
Zone 3				
05/01/92	\$28.14	\$2.81	\$2.74	\$33.69
05/01/93	\$29.14	\$2.91	\$2.94	\$34.99
05/01/94	\$30.14	\$3.01	\$3.34	\$36.49
Zone 4				
05/01/92	\$27.64	\$2.76	\$2.74	\$33.14
05/01/93	\$28.64	\$2.86	\$2.94	\$34.44
05/01/94	\$29.64	\$2.96	\$3.34	\$35.94

14:04 APPRENTICE RATES

(a) Apprentice Hourly Rates for this Agreement are based on the following charts.

APPRENTICE WAGE PACKAGE— MAY 1, 1992

	Basic Rate	10% V&S.HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1				
Term 1	\$10.48	\$1.05	\$2.74	\$14.27
2	\$13.57	\$1.36	\$2.74	\$17.67
3	\$16.66	\$1.67	\$2.74	\$21.07
4	\$19.80	\$1.98	\$2.74	\$24.52
5	\$22.91	\$2.29	\$2.74	\$27.94
Zone 2				
Term 1	\$10.28	\$1.03	\$2.74	\$14.05
2	\$13.31	\$1.33	\$2.74	\$17.38
3	\$16.36	\$1.64	\$2.74	\$20.74
4	\$19.45	\$1.94	\$2.74	\$24.13
5	\$22.51	\$2.25	\$2.74	\$27.50

Zone 3				
Term				
1	\$10.08	\$1.01	\$2.74	\$13.83
2	\$13.05	\$1.31	\$2.74	\$17.10
3	\$16.06	\$1.61	\$2.74	\$20.41
4	\$19.08	\$1.91	\$2.74	\$23.73
5	\$22.11	\$2.21	\$2.74	\$27.06

Zone 4				
Term				
1	\$ 9.88	\$.99	\$2.74	\$13.61
2	\$12.78	\$1.28	\$2.74	\$16.80
3	\$15.76	\$1.58	\$2.74	\$20.08
4	\$18.74	\$1.87	\$2.74	\$23.35
5	\$21.71	\$2.17	\$2.74	\$26.62

APPRENTICE WAGE PACKAGE — MAY 1, 1993

	Basic Rate	10% V&S.HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1				
Term				
1	\$10.83	\$1.08	\$2.94	\$14.85
2	\$14.03	\$1.40	\$2.94	\$18.37
3	\$17.23	\$1.72	\$2.94	\$21.89
4	\$20.49	\$2.05	\$2.94	\$25.46
5	\$23.69	\$2.37	\$2.94	\$29.00
Zone 2				
Term				
1	\$10.63	\$1.06	\$2.94	\$14.63
2	\$13.76	\$1.38	\$2.94	\$18.08
3	\$16.92	\$1.70	\$2.94	\$21.56
4	\$20.12	\$2.01	\$2.94	\$25.07
5	\$23.29	\$2.33	\$2.94	\$28.56
Zone 3				
Term				
1	\$10.43	\$1.04	\$2.94	\$14.41
2	\$13.51	\$1.35	\$2.94	\$17.80
3	\$16.63	\$1.66	\$2.94	\$21.23
4	\$19.75	\$1.98	\$2.94	\$24.67
5	\$22.89	\$2.29	\$2.94	\$28.12
Zone 4				
Term				
1	\$10.23	\$1.02	\$2.94	\$14.19
2	\$13.24	\$1.32	\$2.94	\$17.50
3	\$16.33	\$1.63	\$2.94	\$20.90
4	\$19.41	\$1.94	\$2.94	\$24.29
5	\$22.49	\$2.25	\$2.94	\$27.68

APPRENTICE WAGE PACKAGE — MAY 1, 1994

	Basic Rate	10% V&S.HP.	Pension H&W Trng. Ind. Fund	Total Pkg.
one 1				
Term 1	\$11.01	\$1.10	\$3.34	\$15.45
2	\$14.35	\$1.43	\$3.34	\$19.12
3	\$17.68	\$1.77	\$3.34	\$22.79
4	\$21.06	\$2.11	\$3.34	\$26.51
5	\$24.42	\$2.44	\$3.34	\$30.20
one 2				
Term 1	\$10.81	\$1.08	\$3.34	\$15.23
2	\$14.08	\$1.41	\$3.34	\$18.83
3	\$17.38	\$1.74	\$3.34	\$22.46
4	\$20.71	\$2.07	\$3.34	\$26.12
5	\$24.02	\$2.40	\$3.34	\$29.76
one 3				
Term 1	\$10.61	\$1.06	\$3.34	\$15.01
2	\$13.83	\$1.38	\$3.34	\$18.55
3	\$17.08	\$1.71	\$3.34	\$22.13
4	\$20.34	\$2.03	\$3.34	\$25.72
5	\$23.62	\$2.36	\$3.34	\$29.37
one 4				
Term 1	\$10.41	\$1.04	\$3.34	\$14.79
2	\$13.55	\$1.36	\$3.34	\$18.25
3	\$16.78	\$1.68	\$3.34	\$21.80
4	\$20.00	\$2.00	\$3.34	\$25.34
5	\$23.22	\$2.32	\$3.34	\$28.88

(b) If during the term of this Agreement the Apprenticeship and Tradesmen's Qualification Act is amended, the Apprentice rates listed will be amended accordingly. No employed Apprentice will receive a reduction in his basic hourly wage.

(c) Advancement in Apprentice Rates will be by Referral Slip from the Union office only. A Referral Slip will be issued when the apprentice has met his responsibilities as outlined in the J.T.A.C. standards section 9 (b) and 10(f) and the J.T.A.C. office has verified the Apprentice's records with the Employer.

(d) Apprentices upon completion of their Apprenticeship will advance to the Journeyman basic rate.

14:05 STUDENTS – Basic rate will be the same as laid down for a first term Apprentice including Vacation Pay and contributions to the benefit Plan.

14:06 JOURNEYMAN FOREMAN — The basic hourly rate of a Journeyman Foreman shall be the basic Journeyman's rate plus 10%.

14:07 PAY DAY — The "normal work week" shall consist of five 8 hour days. Pay Day shall be once a week. If the pay is to be cheque, it will be given to the employee before the end of his shift on Thursday or deposited in his Branch of a Chartered Bank or Trust Company by Friday. If by cash, before the end of his shift on Friday.

If pay cheques are mailed to the employee's residence they must be mailed in sufficient time to arrive by Thursday afternoon of the appropriate week.

14:08 TIMESHEETS — Pay will be made for hours claimed on time sheets. Time sheets must be signed by an authorized representative of the customer as far as possible. No alteration of the time sheets or the hours contained therein will be made by the Employer or his representative.

Article 15: VACATION PAY AND STATUTORY HOLIDAY PAY

15:01 Vacation and Statutory Holiday Pay shall be paid at the rate of 10% of basic earnings for all categories of employees during the term of this Agreement. 5% shall be regarded as Vacation Pay and 5% shall be regarded as Statutory Holiday Pay.

15:02 Vacation and Statutory Holiday Pay will be paid every month to the "Vacation and Statutory Holiday Pay Trust Fund" and administered by trustees elected by Local 787.

It will be seldom that the end of the month will coincide with an Employer's pay week, therefore the Vacation and Statutory Holiday Pay may be calculated to the end of the first pay period of the following month.

15:03 Vacation and Statutory Holiday Pay shall be recorded weekly. Income Tax on Vacation and Statutory Holiday Pay will be calculated and be paid out of the employee's hourly rate weekly. Pay cheque stubs will show actual amount of Vacation and Statutory Holiday Pay.

15:04 Vacation periods will occur preferably between May and September. A schedule is to be posted on each Employer's notice board before the month of May.

15:05 Vacation periods will be allocated by seniority and shall begin and end at the shop.

15:06 It is the intent of this Agreement that the employee shall be permitted to take three (3) weeks vacation annually, two (2) weeks during the recognized period as per 15:04. If it is impractical to

permit holidays during the recognized period owing to the pressure of work, then an alternative period shall be mutually agreed upon.

Article 16: JOINT TRAINING AND APPRENTICESHIP COMMITTEE

16:01 To assure the Industry of an adequate supply of properly trained and skilled Journeymen, Apprentice and Journeyman training shall be under the jurisdiction of the Joint Training and Apprenticeship Committee, composed of four (4) representatives from the Union and four (4) representatives from O.R.A.C.

16:02 The Committee will administer the Training Fund in accordance with the terms and conditions of the "Refrigeration Worker's Local 787 — O.R.A.C. Training Trust Fund Agreement".

16:03 All prospective Apprentices must be approved by the Joint Training and Apprenticeship Committee before being employed.

16:04 To enable this Committee to fulfill its obligations as related above, the Association and the Union shall allocate to it the necessary sum of money as outlined in Article 17:01.

Article 17: REFRIGERATION WORKER'S LOCAL 787 — O.R.A.C. TRAINING TRUST FUND

17:01 Effective May 1, 1992 each Employer bound by this Agreement shall contribute to the "Refrigeration Worker's Local 787 - O.R.A.C. Training Trust Fund" monthly, \$0.15 (cents) for each hour earned by each employee. Effective May 1, 1993 this contribution increases by \$0.10 (cents) to \$0.25 (cents).

17:02 Contributions as specified in Article 17:01 will be made as outlined in Article 21:00.

Article 18: INDUSTRY FUND

18:01 Each Employer bound by this Agreement shall contribute to the Industry Fund monthly, the sum of \$0.04 (cents) for each hour earned by each of his employees. Such amounts on receipt shall be immediately paid to O.R.A.C. as each Employer's contribution for the general purposes of O.R.A.C. Should O.R.A.C. require an increase during the term of this Agreement, such increase shall be determined by the Board of Directors of O.R.A.C.

18:02 The Industry Fund shall be administered by the Board of Directors of O.R.A.C.

18:03 Contributions as specified in 18:01 will be made as outlined in Article 21:00.

Article 19: WELFARE AND PENSION TRUST FUND

19:01 Effective May 1, 1992 each Employer bound by this Agreement shall contribute to the "Local 787 Welfare Trust Fund" on behalf of each employee in his employ the sum of \$0.95 (cents) for each hour earned to be administered by Trustees elected by Local 787. Effective May 1, 1994, this contribution increases by \$0.10 (cents) to \$1.05.

19:02 Effective May 1, 1992 each Employer bound by this Agreement shall contribute to the "Local 787 Pension Trust Fund" on behalf of each employee in his employ the sum of \$1.60 for each hour earned to be administered by Trustees elected by Local 787. Effective May 1, 1993 this contribution increases by \$0.10 (cents) to \$1.70. Effective May 1, 1994 the \$1.70 contribution increases by \$0.30 (cents) to \$2.00.

19:03 Notwithstanding the provision of section Sa (9) and (10) of the Workers Compensation Act amendment of 1989, each employer throughout the first year after a work related injury to a worker shall make contributions on behalf of the injured worker to the U.A. Local 787 Benefit Plan for Health and Welfare Benefits and Pension Benefits at the amounts specified in articles 19:01 and 19:02 respectively based on the work week as outlined in article 11:01 of the Collective Agreement when the worker is absent from work because of a work related injury.

19:04 Contributions as specified in Articles 19:01, 19:02 and 19:03 will be made as outlined in Article 21:00.

Article 20: UNION DUES CHECK-OFF AND R.R.S.P. DEDUCTIONS

20:01 The Employer shall deduct from the employees wages in the first pay of the month (or after returning to work if the employee is absent the first pay of the month) a sum equivalent to one month's dues which is calculated on twice (2X) the employee's basic hourly rate that he/she is being paid prior to the vacation pay calculation.

The employer shall also deduct "Union Field Dues" from each employees weekly wages the amount of \$0.10/hour for all hours earned.

20:02 Each employer shall deduct from each employee's weekly pay cheque voluntary R.R.S.P. deductions as requested by the employee by written authorization.

The hourly deduction will be made from the employee's pretax earnings.

20:03 Deductions as specified in Articles 20:01 and 20:02 will be made as outlined in Article 21:00.

Article 21 : MONTHLY REPORTS OF CONTRIBUTIONS AND DEDUCTIONS

21:01 Each month's submission of employer contributions and deductions as outlined in Articles 15, 17, 18, 19 and 20, must be made on the forms supplied by the Administrator. The same basic information is required for the J.T.A.C., Industry Fund, Welfare Trust Fund, Pension Trust Fund, Vacation and Statutory Holiday Pay Trust Fund, Union Dues Check-Off and R.R.S.P. Deductions.

All such funds and deductions will be combined for payment and report purposes. ~~Contributions~~ and deductions shall be reported ~~and paid for~~ each employee.

The earnings of each employee (basic rate x hours earned) must be reported in the appropriate spaces, totalled and the 10% multiplier applied to the total basic earnings of all employees as required in Article 15.

Effective May 1, 1992 a combined contribution rate of \$2.74 will be applied to the hours earned by each employee as required in Articles 17, 18, 19:01 and 19:02. Effective May 1, 1993 the combined contribution rate will increase to \$2.94 and effective May 1, 1994 the combined contribution rate will increase to \$3.34.

Union dues deductions and R.R.S.P. deductions of each employee as outlined in Article 20 must be reported in the appropriate spaces.

21:02 The Employer monthly report forms, together with a cheque for the full amount and made payable to the U.A. Local 787 Benefit Plan shall be sent to:

U.A. Local 787 Benefit Plan
419 Deerhurst Drive
Brampton, Ontario
L6T 5K3

21:03 The report forms and cheque must reach the Administrator on or before the 15th of the month following the month for which deductions and contributions are being made.

21:04 If an Employer does not remit reports and contributions in accordance with Article 21:03, he shall be considered to be in default and shall forthwith pay to the appropriate fund or the Union as liquidated damages and not as a penalty an amount equal to the greater of \$250.00 or 12% per annum calculated and compounded monthly on all amounts outstanding.

Consideration for interruptions in postal delivery will be given provided the Employer contacts the Administrator prior to the deadline as outlined in Article 21:03.

In the event that any proceedings are instituted to force a compliance with Article 21, the defaulting Employer shall be required to pay an additional \$250.00 to cover legal and/or administration costs.

The Administrator shall contact the defaulting Employer prior to applying this article.

21:05 If payment has not been received within 30 days after receiving written notice from the Administrator, the Union may withdraw its men from that Employer only. This action will not be considered an illegal strike.

Article 22: OWNER OPERATOR

22:01 It is agreed that owner-operators, as independent contractors or otherwise, are employees for the purpose of this Agreement and shall be covered by the same as herein set forth:

(a) As a condition of any owner-operator performing any work covered by this Agreement, it is agreed that:

(i) He shall be a member of the Union in good standing.

(ii) He shall assign, let or sub-let any work covered by this Agreement subject to the terms thereof;

(iii) Contributions to the Refrigeration Worker's Local 787 – O.R.A.C. Training Fund, Welfare Trust Fund, Pension Trust Fund and Industry Fund, shall be paid and remitted or deducted and remitted, as the case may be, by or on behalf of such owner operators as and when required by this Agreement and Schedules thereto.

Article 23: COFFEE BREAK

23:01 The Employer, shall permit a "coffee break period" of 15 minutes duration in each half of a shift, whether during a normal day or on shift work.

Article 24: PICKET LINES

24:01 Employees may honour a picket line established by any Trade Union or its members in support of a lawful strike at a project where an Employer is engaged. Such action shall not constitute an unlawful strike within the provisions of this Agreement and the Employer shall not institute or commence any applications, actions or proceedings of any nature whatsoever under the Ontario Labour Relations Act, this Collective Agreement or otherwise against the Union or any of its officers, officials, servants, employers, agents or members in connection with any such action.

Article 25: HIRING, LAY-OFF AND TERMINATION

25:01 It shall be the responsibility of the Employer or his hiring agent to verify that Journeymen are in possession of an Ontario Certificate of Qualification, and that a registered Apprentice make the necessary arrangement to have his indenture papers transferred to the J.T.A.C.

Non registered workers beginning their Apprenticeship will be registered as early as possible.

25:02 Prior to hiring, a new employee shall be presented with a copy of the "Company Policy", with which he will be expected to conform if hired (As per Article 8:02).

25:03 Prior to the new employee starting work, the Employer must receive a Work Referral Slip as issued by the Union, showing that the employee is a member of the Union in good standing and the month to which his dues are paid.

The employee will sign a Dues Deduction Authorization form which will permit the Employer to deduct dues from wages and remit the same on the monthly report form.

25:04 Should it become necessary to reduce the work force, the employer shall lay off **due to** a lack of work. For the purpose of lay **off**, no notice is required. However if an employee is not recalled within 13 weeks the employee shall be deemed to be terminated and subject to the termination pay in lieu of notice provisions of Article 25:05.

This temporary lay **off** period may be increased to 35 weeks provided the employer continues to make Health and Welfare and Pension Contributions **on** behalf of the employee based **upon** the work week as outlined in Article 11:01.

25:05 (a) **No** Employer shall terminate the employment of an employee who has been employed for three months or more **unless** the Employer gives,

- (1) one weeks notice in writing to the employee if his or her period of employment is less than one year;
- (2) two weeks notice in writing to the employee if his or her period of employment is one year or more but less than three years;
- (3) three weeks notice in writing to the employee if his or her period of employment is three years or more but less than four years;
- (4) four weeks notice in writing to the employee if his or her period of employment is four years or more but less than five years;
- (5) five weeks notice in writing **to** the employee if his or her period of employment is five years or more but less than six years;
- (6) six weeks notice in writing to the employee if his or her period of employment is six years or more but less than seven years;
- (7) **seven** weeks notice in writing to the employee if his or her period of employment is seven years or more but less than eight years;
- (8) eight weeks notice in writing **to** the employee if his or her **period** of employment is eight years **or** more.

(b) The Employer also agrees that during this notice period, the employee will not receive any less than his regular weeks wages, vacation pay and benefits for each week of notice. "Week" as defined in Article 11:01.

(c) In the event the Employer does not give an employee written notice, he shall pay the employee his regular wages, vacation pay and benefits for the period of notice the employee is entitled to.

(d) In circumstances where an employees is unable to return all the Employer's property to the employer's place of business prior to end of his regular scheduled shift, the employee shall be paid his regular wages, vacation pay and benefits up to a maximum of four hours.

(e) If an employee is terminated for just cause the Employer is not required to give notice, but the employee is entitled to the conditions outlined in 25:05 (d).

(f) If an employee wishes to terminate his employment with the Employer he shall give a minimum of two weeks written notice.

The Employer shall continue to employ him as outlined in article 25:05 (b) or pay him in lieu of notice.

(g) On termination the employee shall receive all monies owed to him on his next pay period or be sent to employee's last known home address.

(h) If the conditions as set out in 25:05 (a) through (g) are not complied with it shall be termed grounds for a grievance and referred to the Ontario Labour Relations Board under Section 126 of the Ontario Labour Relations Act as per Article 27:03.

Article 26: TOOLS AND UNIFORMS

26:01 The Employer shall supply:
all pipe wrenches, vices, taps and dies
all electric tools
all electric measuring instruments
all machinist measuring instruments
all air and gas measuring devices
all gas containers
all welding equipment, including wearing apparel and safety accessories
specialty tools
vacuum pumps
power tools
wrenches over 1"

26:02 Each Journeyman, and Apprentice after completion of his first year, shall have and maintain a complete set of hand tools necessary to install air conditioning and/or refrigeration equipment. Employees will not supply tools listed in 26:01.

26:03 The employee will supply to the Employer at the time of employment a list of personal tools as mentioned in Article 26:02. It will be the responsibility of the employee to keep the list up to date for the purpose of replacement as outlined in Article 26:09.

26:04 Those tools supplied by the Employer will be maintained by the Employer. If these tools are lost or damaged, through the negligence of the Employer or other employees, then the Employer is responsible for the repair or replacing same.

26:05 Those tools supplied by the employee will be maintained by the employee. If **these tools** are lost or damaged through the negligence of the Employer or other employees, then the Employer is responsible for repair or replacing same.

26:06 The Employer agrees to supply non durable items used on Employers work, i.e. files, cutter wheels, reactor plates, gauges, hoses, drill bits, thermometers, etc.

26:07 Uniforms will be supplied by the Employer at no cost to the employee and the employee must wear the uniform.

The following list is the minimum requirement of an Employer supplied uniform:

- 6 Shirts
- 3 Pants
- 1 Jacket (service)
- 1 Parka or Bomber Jacket

This is not to be construed to designate a maximum quantity.

26:08 Safety boots will be supplied by the Employer at no cost to the employee, up to a maximum amount of \$95.00.

26:09 If an employee's tools are lost due to fire, flood, or forcible entry of job box, job shack or vehicle, etc., management must be notified immediately. Listed personal tools as required in Article 26.03 (to a maximum value of \$1,500.00) will be replaced immediately by the Employer. In the event of theft by forcible entry, the police and management must be notified immediately.

Article 27: GRIEVANCE PROCEDURE

27:01 Any employee who feels that he has been unjustly dismissed, unjustly laid off, unjustly suspended or unjustly dealt with in violation of this Agreement, must inform the Employer and the Union in writing within 5 working days of the violation and the matter will be dealt with from then on as a grievance.

27:02 Should any dispute arise between an Employer and the Union relating to the interpretation, application, or administration of this Agreement, including any question as to whether a matter is arbitrable or where an allegation is made that this Agreement has been violated or should any local trouble of any kind arise, there

shall be no suspension of work on account of such dispute, but an earnest effort shall be made by both parties hereto to settle without delay any such dispute in respect of which the following grievance procedure is set up.

First: The employee concerned may either alone or accompanied by the Steward of his department take the matter directly to his Foreman.

Second: If a settlement is not reached within a reasonable time the Steward may either alone or accompanied by a member of the Committee take the matter to the Department Manager.

Third: If a settlement is not reached with the Department Manager within a reasonable time, the matter may be discussed between the Steward, accompanied if so desired by a representative of the Union, and the Employer.

27:03 Grievances regarding delinquency of wages, fringes, pension, and welfare will be referred to Section 126 of the Ontario Labour Relations Act.

Article 28: ARBITRATION

28:01 Both parties to this Agreement agree that a grievance concerning the interpretation, application, administration or alleged violation of this Agreement and including any question as to whether the matter is arbitrable which has been properly carried through all the steps of the Grievance Procedure outlined in Article 27 above and which has not been settled will be referred to a Board of Arbitration at the written request of either of the parties hereto.

28:02 The Board of Arbitration shall consist of a single Arbitrator who shall be selected by mutual agreement between the Employer and/or O.R.A.C. and the Union within fourteen (14) calendar days from the receipt of the notice of intent to arbitrate. In the event of failure to agree, the parties shall submit a joint request to the Ministry of Labour of the Province of Ontario to appoint an Arbitrator.

28:03 The decision of the Arbitrator will be final and binding on both parties.

28:04 The Arbitrator shall not have any power to alter or change any of the provisions of this Agreement or to substitute any new provisions for any existing provisions, nor to give any decision inconsistent with the terms and provisions of this Agreement.

28:05 The expense of the Arbitrator shall be borne equally by the parties.

Article 29: JURISDICTIONAL DISPUTE

Jurisdictional disputes with other trades which cannot be resolved at a Local level will be referred to the National Joint Board.

Article 30: STRIKE OR LOCK-OUT

30:01 There shall be no strike or lock-out during the term of this Agreement. Neither the Union nor any of the employees covered by this Agreement will collectively, concertedly or individually induce, engage or participate, directly or indirectly, in any strike, picketing, slowdown, stoppage or other curtailment or interference with the Employer's operation, or interference with the flow of materials or persons in or out of places where the Employer is doing business. The Union agrees to exert every effort through its Local Officers and Representatives to end any unauthorized interruptions of work.

The Employer will not lockout any of the employees covered by this Agreement. The parties agree that, in the manner set forth in Articles 27 and 28, they will submit to arbitration all grievances and disputes that may arise between them and any misunderstanding as to the meaning or intent of all or any part of this Agreement; provided however, the Employer shall not be required to resort to the grievance and arbitration procedures prior to resorting to other remedies in the event of violation of this Article.

30:02 In the event notice of modification of this Agreement is given by either party in accordance with Article 31 and agreement is not reached on the terms of a new Agreement, both parties agree to continue work under the terms of this Agreement on a day-to-day basis until such time that either a new Agreement has been reached or the matter has been settled by Arbitration.

30:03 After one party serves upon the other notice of desire to bargain for a new Collective Agreement, and in the event that the issues remaining in dispute cannot be settled through the negotiation process, the parties shall execute an irrevocable agreement to refer all matters remaining in dispute between them to a Board of Arbitration for final and binding determination in accordance with Section 38(1) of the **Labour Relations Act**. Where either party elects to refer the remaining issues in dispute to arbitration, each of the parties shall appoint a nominee of the Board of Arbitration. The two members appointed by the parties shall appoint a third member who shall act as Chairperson. Where the two members fail to agree upon a third member, either party may request the Office of Arbitration to appoint a Chairperson. The Board shall hear the issues in dispute and shall render a decision which will be final and binding upon the parties and upon any

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employee or Employer affected by it. The decision of the majority shall be the decision of the Board, but if there is no majority, the decision of the Chairperson shall govern. Each party shall be responsible for the fees and expenses of the nominee appointed by it and shall be jointly responsible for the fees and expenses of the Chairperson.

Article 31 : DURATION OF AGREEMENT

31:01 This Agreement shall remain in force until April 30, 1995 and shall remain in force from year to year thereafter unless either Party to this Agreement gives notice in writing to the other party within a period which shall not be more than 120 days or less than 90 days prior to the expiration of each term, of its intention to terminate this Agreement or seek amendments to same.

31:02 It is agreed that every effort will be made, by both parties to this Agreement, to conclude negotiations for a new Agreement before this Agreement expires. Should a new Agreement not be forthcoming prior to the termination date, work will continue under paragraph 30:02 and employees shall be entitled to retroactive pay for up to 30 calendar days.

31:03 Settlement of the wage package which includes Basic rate, Vacation Pay, Health and Welfare and Pension shall be the Journeymen's average wage package adjustment negotiated by the Plumbers/Pipefitters, Electricians and Sheet Metal Workers in I.C.I. Sector for Toronto and will be applied to the four zones in this Collective Agreement.

31:04 In respect to this Agreement, the signatory parties agree that at least once a year no later than ninety (90) days prior to the Anniversary Date the Union and ORAC will convene a meeting for the purpose of appraising the effectiveness of this Agreement.

If any article or provision of this Agreement shall be declared ineffective or undesirable, by mutual consent, the Union and ORAC will suspend, substitute, delete or amend any such article or provision of this Agreement to maintain the effectiveness and intent of this Agreement.

31:05 Notices: All notices required to be sent to the Union pursuant to this Agreement shall be effectively given when mailed to:

U.A. Local 787
419 Deerhurst Drive
Brampton, Ontario
L6T5K3

All notices required to be sent to the Employer pursuant to this Agreement shall be effectively given when mailed to:

The Ontario Refrigeration & Air Conditioning
Contractors Association
1400 Bayly Street
Office Mall 11, Unit 7A
Pickering, Ontario
L1W 3R2

31:06 In witness to this Collective Agreement the members of the Negotiating Committee of both parties have hereby signed their names giving effect to this Agreement as of May 14, 1992.

Ontario Refrigeration & Air Conditioning Contractors Association

Marv Lindgren (Chairman)
Vern Barney
Dave Honsberger
Dave Underwood
Bruce Wilson (Alternate)

United Association of Journeymen and Apprentices of the Plumbers and Pipe Fitting Industry of the United States and Canada, Local 787.

Joe Carricato (Chairman)
Al Butterfield
Tony Finelli
Ebb Harford

APPENDIX "A"

CONSTRUCTION DEFINITION

Construction is the original: custom prefabrication, or custom fabrication, or erection, or installation, or joining together or handling, or setting up, or charging, or start-up, or testing, or adjusting, or system balancing; including hydronics and air in any form of any equipment used in the air conditioning and refrigeration trade in the ICI construction sector. Where any component of a previously completed construction job is subsequently replaced with another component of a different size or capacity for the purpose of substantially changing the overall use, design, capacity or intent of the original system, such work is construction work. Construction covers all piping hanger materials for the installation of air conditioning and refrigeration equipment and systems regardless of size, and the installation of all manufactured equipment, built up or packaged, including the setting of same such as air handlers, condensers, towers, chillers, compressors, free standing coils and the installation of reheat coils controls where attached, condensate drain lines and refrigerated market equipment.

Work of the following types shall be deemed to come under the jurisdiction of this Agreement:

(a) All piping and components used for primary and secondary refrigeration and cooling systems and the setting, hanging and installation of all units and fixtures for air conditioning systems, combination heat/cool units, heat pumps, ice making equipment, humidifying units, dehumidifying units, refrigeration units and cooling units and the charging testing and start up of all such equipment and systems.

(b) The laying out and cutting of all holes, chases, and channels, the setting and erection of bolts, inserts, stands, brackets, supports, sleeves, thimbles, hangers, conduit and boxes, tubing raceways used in connection with the refrigeration and air conditioning industry.

(c) All gas and arc welding, brazed, soldered, caulked, expanded and rolled joints in connection with the refrigeration and air conditioning industry.

(d) Laying out, cutting, bending and fabricating, or all pipe work of every description relating to (a) by whatever mode or method.

(e) All methods of stress relieving of all pipe joints made by every mode or method in the refrigeration and air conditioning industry.

(f) The assembling and erection of tanks used in the refrigeration and air conditioning industry.

(g) The handling and using of all tools and equipment that may be necessary for the erection and installation of all work and materials used in the refrigeration and air conditioning industry.

(h) The dismantling and repair for reuse of all refrigeration and air conditioning equipment which involves the recovery, reclaim and reuse of any refrigerants.

(i) All piping for cataracts, cascades (i.e. artificial water falls), make-up water fountain, captured waters, water towers, cooling towers, and spray ponds used for industrial manufacturing, commercial or for any other purposes in the refrigeration and air conditioning industry.

(j) Piping herein specified means pipe made from metals, tiles, glass, rubber, plastic, or any other kind of material or product manufactured into pipe useable in the refrigeration and air conditioning industry regardless of size.

(k) Hoisting, setting up, hanging and installing all equipment supplied by the refrigeration and air conditioning industry.

(l) Installation and erection of sectional walk-in boxes and cold storage rooms, installation and erection of prefabricated insulated panels for cold storage rooms and installation and erection of temperature controlled displayed cases and cabinets used for display and storage of all items or products requiring a temperature controlled environment.

(m) All piping to stoves, fire grates, blast and heating furnaces, ovens, driers, heaters, oil burners, stokers and boilers and cooking utensils, etc. of every description.

APPENDIX "B" DEFINITION OF ZONES

The definitions of the work zones as outlined below are determined from the lines drawn on a map of Ontario held in the union office together with the MASTER copy of this Collective Agreement.

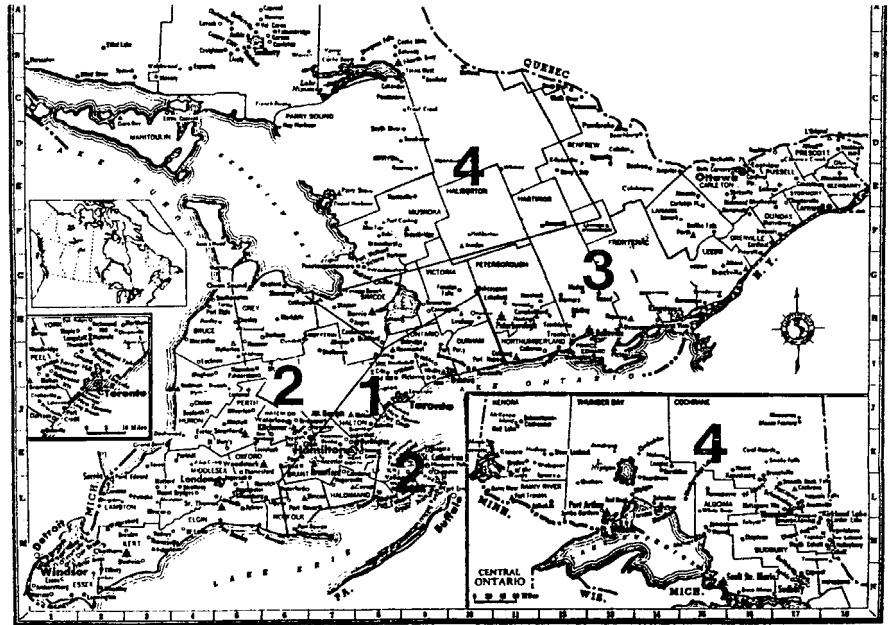
Zone 1—Is that portion of southern Ontario enclosed by (A) a straight line on its south eastern boundary drawn through the eastern limits of the town of Winona and the western limits of the town of Dunnville and extending to Lake Erie on the south and Lake Ontario on the north. (B) a straight line drawn from the north shore of Lake Erie, through the eastern limits of the town of Langton and the centre of the town of Otterville to terminate at the southern limits of the town of Norwich. (C) a straight line drawn from the southern limits of the town of Norwich north easterly through the southern limits of the town of Newmarket to the northern limits of the town of Mount Albert; then a straight line from the town of Mount Albert to the southern limits of the town of Bobcaygeon. (D) a straight line from the southern limits of the town of Bobcaygeon through the eastern limits of the town of Port Hope to the north shore of Lake Ontario.

Zone 2—Is shown on the map in two sections, (A) is all of the area

east of the straight line from Winona to Dunnville up to the International border and includes Grimsby, St. Catharines, Welland, Niagara Falls, Fort Erie, etc., (B) is all of the area in south western Ontario west of the boundary of Zone 1 and Zone 2.

Zone 3—Is the area (A) east of a straight line drawn from the south western limits of the town of Collingwood, through the north eastern limits of the town of Newmarket, and ends where the line joins the northern boundary of Zone 1. (B) that area east of the line running north from Lake Ontario and making the eastern boundary of Zone (I). (C) that area south of a straight line drawn from Nottawasaga Bay through the northern limits of the town of Elmvale to the town of White located on Highway 511 (approximately 50 miles east of the centre of Ottawa). (D) that area east of a straight line drawn from the town of Wensley on the south through the town of Killaloe Station and terminating at the Ottawa River, where this line and the line indicated in (C) intersect will be the termination point of each of the lines.

Zone 4—Is that area of the Province of Ontario north of the line forming the northern boundary of Zone 3 and the line drawn as noted in (D) of Zone 3.



APPENDIX "C"
I.C.I. CONSTRUCTION
COLLECTIVE AGREEMENT
List of Employers

- ✓ 379064 Ontario Limited
Ram Aire
Unit 2, 19 Kenview Blvd.
Brampton, Ont. L6T 5G6
Phone: 458-4770
- 398362 Ontario Ltd.
O/A Etobicoke Sheet Metal
20 Bethridge Road
Rexdale, Ont. M9W 1N1
Phone: 743-3522
- ✓ 462289 Ontario Limited
Tri-Air Systems
2370 Midland Avenue, Unit 6
Scarborough, Ont. M1S 5C6
Phone: 759-6787
- 559019 Ontario Limited
Atlantic Cooling
100 Sandiford Drive, Unit 43
Stouffville, Ont. L4A 8 A1
Phone: 642-2200
- 696533 Ontario Inc.
O/A &gar-Paterson
221 Barton Street East, Unit A
Stoney Creek, Ont. L8E 2K3
Phone 573-9660
- 946766 Ontario Limited
Summit Mechanical
P.O. Box 1446
Peterborough, Ont. K9J 7H6
Phone: 705-740-0202
- 967431 Ontario Inc.
CTM/Corp Tech Management
4380 South Service Road, #25
Burlington, Ont. L7L 5Y6
Phone: 637-5533

979797 Ontario Ltd.
C & L Industrial Refrigeration
1875 Leslie Street, Unit 16
Don Mills, Ont. M3B 2M5
Phone: 445-7565

A & W Refrigeration & Air Conditioning
4854 Bathurst St., Apt. 412
Willowdale, Ont. M2R 1X3
Phone: 635-6866

A.C.T. Mechanical Contractors Ltd.
991 Matheson Blvd. East, Unit 14
Mississauga, Ont. L4W 2V3
Phone: 624-4883

Ainsworth Electric Co. Limited
131 Bermondsey Rd.
Toronto, Ont. M4A 1X4
Phone: 751-4420

Air Con Systems
1710 Charles Street
Whitby, Ont. L1N 1C2
Phone: 427-1995

Air Force Air Cond. Systems 1989 Ltd.
P.O. 719
Suite 211, Gormley Centre
Gormley, Ont. L0H 1G0
Phone: 887-1888

Air Stream Mechanical Systems
101 Kingsview Drive
Bolton, Ont. L7E 3V6
Phone: 857-5505

Airco
Box 2664, Station A
Sudbury, Ont. P3A 5J2
Phone: 705-673-2210

Airco Mechanical Ltd.
1 Ashbridge Circle, #8
Woodbridge, Ont. L4L 1A5
Phone: 631-2200

Albern Mechanical Limited
106 Rayette Road
Concord, Ont. L4K 2G3
Phone: 669-6582

Amber Air Conditioning Ltd.
P.O. **Box 108**
Woodbridge, Ont. **L4L 1A9**
Phone: **748-6552**

Ambient Mechanical Ltd.
175 Toryork Drive, Unit **10**
Weston, Ont. **M9L 2Y7**
Phone: **745-7112**

Ansell Mechanical Ltd.
P.O. **Box 1836**
Peterborough, Ont. **K9J 6Y5**
Phone: **705-740-2000**

✓ APV Canada Inc.
6555 Cote de Liesse
Montreal, Quebec **H4T 1E6**
Phone: **514-737-0006**
Branch Operations:
Toronto

Arch-Air Conditioning Inc.
43 Mahogany Court, **Box 1, Unit 9**
Aurora, Ont. **L4G 6M8**
Phone: **800-267-1444**

Art Blake Refrigeration Limited
60 Pacific Court, Unit **7**
London, Ont. **N5V 3K4**
Phone: **519-659-5808**

Associated Mechanical Systems Inc.
200 West Beaver Creek Road, Unit **13**
Richmond Hill, Ont. **L4B 1B4**
Phone: **731-2119**

Avery Air-Cond. & Heating Service
527 Edgeley Blvd., Units **5 & 6**
Concord, Ont. **L4K 4G6**
Phone: **660-4599**

/ B I C Mechanical Ltd.
100 Westmore Drive, Unit **14**
Rexdale, Ont. **M9V 5C3**
Phone: **748-9199**

B I Temperature Control
1251 Gorham Street, Unit **11**
Newmarket, Ont. **L3Y 5G9**
Phone: **853-0841**

Barron Refrigeration Limited
Rosemount Avenue, Unit 2
Weston, Ont. M9N 3B3
Phone: 240-1893

Beaver Engineering Limited
2345 Stanfield Road, Suite 300
Mississauga, Ont. L4Y 4A6
Phone: 276-4002
Branch Operations:
Toronto, Weston, Mississauga,
Hamilton, London, Sarnia,
Windsor, Oshawa, Ottawa

Beebe Mechanical Systems
345 North May Street
Thunder Bay, Ont. P7C 3R3
Phone: 807-623-4181

Bering Mechanical Ltd.
261 Bering Avenue
Toronto, Ont. M8Z 3A5
Phone: 231-1414

Black & McDonald Limited
101 Parliament Street
Toronto, Ont. M5A 2Y7
Phone: 366-2541
Branch Operations:
Toronto, Hamilton, London

Black & McDonald Limited
2460 Don Reid Drive
Ottawa, Ont. K1H 8P5
Phone: 613-526-1216
Branch Operations:
Ottawa, Kingston

Blenkhorn and Sawle Limited
100 Grantham Avenue
P.O. Box 3010
St. Catharines, Ont. L2R 7B9
Phone: 800-263-6570

Bonair Htg & A/C Ltd.
74 Martin Ross Avenue
Downsview, Ont. M3J 2L4
Phone: 661-4060

Brady & Seidner Associates Ltd.
801 Alness Street
Toronto, Ont. M3J 2H8
Phone: 661-1981

- ✓ Broom's Mech. Contracting Limited
3440 Fairview Street
Burlington, Ont. L7N 2R5
Phone: 634-7701
- Canadian Commandaire Inc.
90 Nolan Court, Unit 34
Markham, Ont. L3R 4L9
Phone: 494-2317
- Cardinal Mechanical Systems Inc.
20 Dalcourt Drive
Scarborough, Ont. M1E 3H1
Phone: 724-5093
- Carmichael Engineering Ltd.
c/o 3822 Ave. Decourtra
Montreal, Quebec H3S 1C1
Phone: 514-735-4361
Branch Operations:
Ottawa, Mississauga
- ✓ Carr Aire Ltd.
171 Rink Street, Suite 142
Peterborough, Ont. K9J 2J6
Phone: 705-749-6623
- Carrier Canada Limited
1900 Minnesota Court, Suite 200
Mississauga, Ont. L5N 3C9
Phone: 826-9508
Branch Operations:
Rexdale, Hamilton, London,
Kingston, Ottawa
- Cascade Mechanical Services Limited
64 Martin Ross Avenue, Unit #12
Downsview, Ont. M3J 2L6
Phone: 665-6093
- Centigrade Air Conditioning Ltd.
1630 Sismet Road, Unit 2
Mississauga, Ont. L4W 1R5
Phone: 629-1876
- Central Refrigeration & Air Conditioning
20 Oakview Avenue
Nepean, Ont. K2G 3A1
Phone: 613-224-0948
- Chad Air Systems
1006 Rouge Valley Drive
Pickering, Ont. L1V 4G4
Phone: 286-4499

- Cimco
 - 65 Villiers Street
 - Toronto, Ont. M5A 3S1
 - Phone: 465-7581
 - Branch Operations:
 - London, Ottawa
 - Circa Refrigeration Inc.
 - 27 Fisherman Dr., Unit 4
 - Brampton, Ont. L7A 1E2
 - Phone: 454-0648
 - Clow Darling Limited
 - P.O. Box 578**
 - Thunder Bay, Ont. P7C 4W4
 - Phone: 807-623-7485
 - Comstock Canada
 - 3455 Landmark Road
 - Burlington, Ont. L7M 1T4
 - Phone: 335-3333
 - Comstock Canada
 - P.O. **Box 11475**, Postal Station **H**
 - Nepean, Ont. K2H 9C8
 - Phone: 613-726-1983
 - Cornstock Canada
 - 60 Tiffield Road
 - Scarborough, Ont. M1V 3J1
 - Phone: 293-8800
 - Concept Air Systems Ltd.
 - 400 Matheson Blvd. East
 - Units 12 & 13
 - Mississauga, Ont. L4Z 1N8
 - Phone: 568-9252
 - Consistent Cooling Inc.
 - 360 Guelph Street, Unit 45
 - Georgetown, Ont. L7G 4B5
 - Phone: 846-2036
 - Constant Temperature Control Ltd.
 - 11 Millwick Drive
 - Weston, Ont. M9L 1Y4
 - Phone: 741-6520
 - Cool Check Air Conditioning Limited
 - 25 Coronet Road, Unit 4
 - Etobicoke, Ont. M8Z 2L8
 - Phone: 236-1000
 - Coolbreeze Service Limited
 - 6500 Northwest Drive
 - Mississauga, Ont. L4V 1K4
 - Phone: 672-7887

- ✓ D J Diamond Refrigeration Cont. Ltd.
 147 Blue Heron Drive
 Hyde Park, Ont. **NOM 1Z0**
 Phone: **519-472-6262**
- Demand Air Systems Ltd.
 164 Trowers Road
 Woodbridge, Ont. L4L 5Z3
 Phone: **746-2005**
- ✓ Dial One Temp Air Control
 5 Sandhill Court
 Brampton, Ont. L6T 5J5
 Phone: **458-9988**
- Doray's Refrigeration & Air Conditioning
 R.R. #3
 Kerwood N.E.R., Ont. **NOM 2B0**
 Phone: **519-247-3624**
- Douglass Refrigeration Incorporated
 P.O. **Box 2199**
 800 Confederation Street
 Sarnia, Ont. N7T 2E3
 Phone: **519-344-6994**
- Drennan Refrigeration Inc.
 1777 Oxford Street East
 London, Ont. **N5V 2Z6**
 Phone: **519-453-9100**
- ✓ Dunlis Mechanical Services Ltd.
 2 Carson Court
 Brampton, Ont. L6T 4P8
 Phone: **793-6026**
- E S Fox Ltd.
 P.O. **Box 10**
 61 Thorold Road
 Welland, Ont. L3B 5P1
 Phone: **735-2401**
 Branch Operations:
 St. Catherines, Kingston
- Earlscourt Heating & Air Cond.
 6214 Kestrel Road
 Mississauga, Ont. **L5T 1Y9**
 Phone: **670-9002**
- Enera Controls
 6740 Davand Drive
 Mississauga, Ont. **L5T 2K9**
 Phone: **670-2656**

Enviroins Services

P.O. Box 2329
Sarnia, Ont. **N7T 7S6**
Phone: **519-332-6111**

Executive Air Conditioning Inc.
23 Passmore Avenue, Units 11 - 13
Scarborough, Ont. M1V 4T3
Phone: **293-6224**

Francis Contracting Ltd.
29 Cleopatra Drive
Nepean, Ont. **K2G 0B6**
Phone: **613-723-4700**

G D R Mechanical Inc.
7362 Ashburn Road, R.R. #1
Brooklin, Ont. LOB 1C0
Phone: **427-6838**

General Air Systems Inc.
65 Woodstream Blvd., Unit 17
Woodbridge, Ont. **L4L 7X6**
Phone: **740-2188**

Gordon Wright Electric Limited
6260 Don Murie Street
Niagara Falls, Ont. L2E 6X8
Phone: **356-5730**

Grant Refrigeration
15 Wellington Street West
Creemore, Ont. **L0M 1G0**
Phone: **705-466-2319**

Grayco Air
1895 Clements Road
Building B, Unit 146
Pickering, Ont. L1W 3V5
Phone: **428-0283**

Graywood Electric
259 Edgeley Blvd., Unit 5
Concord, Ont. **L4K 3Y5**
Phone: **660-0878**

H Griffiths Company Limited
285 Norfinch Drive
Downsview, Ont. **M3N 1Y8**
Phone: **661-7070**

H.V.A.C. Consultants Inc.
239 Weldrick Road
Richmond Hill, Ont. L4C 5J2
Phone: 883-3493

✓ HECO
24 Hiscott Street
St. Catharines, Ont. L2R 1C6
Phone: 688-6350

Highland Refrigeration Services Ltd.
P.O. Box 614
Aurora, Ont. L4G 4J9
Phone: 841-9767

✓ Honeywell Limited
740 Ellesmere Road
Scarborough, Ont. M1P 2V9
Phone: 293-8111
Branch Operations:
North York, Mississauga, Hamilton,
London, Windsor, Sudbury, Ottawa,
Thunder Bay

Hylton Heating and Cooling
1 Northolt Crescent
Markham, Ont. L3R 6P5
Phone: 477-5785

I.C.E.A. Systems Corp.
61 Advance Road, Unit #3
Etobicoke, Ont. M8Z 2S6
Phone: 239-4446

Inter Wide Services Ltd.
4120 Steeles Avenue West, Unit 11
Woodbridge, Ont. L4L 4V2
Phone: 744-7212

✓ Isotherm Engineering Ltd.
P.O. Box 196,
Clarkson Postal Station
Mississauga, Ont. L5J 3Y1
Phone: 279-2563

J L Energy Consultants Ltd.
265 6th Concession East
Millgrove, Ont. L0R 1V0
Phone: 333-5900

J L Wilson and Sons Limited
41 Fima Crescent
Toronto, Ont. M8W 3R1
Phone: 252-3138

J R Hemborg Ltd.
1071 Warden Avenue
Scarborough, Ont. M1R 2P4
Phone: 751-8415

J R Mechanical Systems Ltd.
29 Nuggett Court
Brampton, Ont. L6T 5A9
Phone: 458-6200

J W Aubie Heating & Air Cond. Ltd.
105 Carrington Drive
Richmond Hill, Ont. L4C 7X8
Phone: 883-1848

John Baycroft Mechanical Systems
1050 Britannia Road East, Unit 22
Mississauga, Ont. L4W 4N9
Phone: 670-2665

Johnson Controls
7400 Birchmount Road
Markham, Ont. L3R 5V4
Phone: 494-1575
Branch Operations:
Markham, Mississauga, Burlington,
London, Windsor, Ottawa

Johnston & Damery Limited
7171 Torbram Road, Unit # 12
Mississauga, Ont. L4T 3W4
Phone: 672-8585

Jordan Boiler Repair Incorporated
385 Calderstone Crescent
Scarborough, Ont. M1C 3A3
Phone: 282-9902

Kendale Mechanical Ltd.
71 Mountainview Road North, Unit 4
Georgetown, Ont. L7G 4J6
Phone: 897-2555

Landis & Gyr Powers Ltd.
1200 Courtney Park Drive
Mississauga, Ont. L5T 1S2
Phone: 670-0133
Branch Operations:
Mississauga, Hamilton, Ottawa

✓ Leda Refrigeration Limited (1984)

34 Racine Road
Rexdale, Ont. M9W 2Z3
Phone: 745-7333

✓ M A S Mechanical Ltd.

200 Signet Drive
Weston, Ont. M9L 1T7
Phone: 740-5051

M.T.I. Ltd.

220 Royal Crest Court, Unit 18
Markham, Ont. L3R 9Y2
Phone: 513-1953

Major Air Systems Ltd.

20 Mural Street, Unit 1B
Richmond Hill, Ont. L4B 1G6
Phone: 764-3200

Mapleridge Mechanical

1402 Altona Road
Pickering, Ont. L1V 1M1
Phone: 286-9758

Margell Mechanical Contractors Ltd.

149 Milvan Drive
Weston, Ont. M9L 1Z8
Phone: 749-1717

Mayfair Mechanical Contractors

570 Hood Road, Unit 12A
Markham, Ont. L3R 4G7
Phone: 475-6051

Mechanical Aire Services Ltd.

5080 Timberlea Blvd., Unit 12
Mississauga, Ont. L4W 4M2
Phone: 629-4494

Mechanical Equipment Services

1255A Reid Street, Unit #8
Richmond Hill, Ont. L4B 1E9
Phone: 881-8900

Metro Mechanical Services Ltd.

180 Wings Road, Unit 13
Woodbridge, Ont. L4L 6C6
Phone: 856-4752

Michael Mechanical Services Ltd.

4161 Sladeview Crescent, Unit 1
Mississauga, Ont. L5L 5R3
Phone: 607-3230
Branch Operations:
Ottawa, Toronto

Michael Mechanical Sew. (Tor.) Limited
4161 Sladeview Crescent, Unit 1
Mississauga, Ont. L5L 5R3
Phone: 607-3230

Mitchell Refrigeration Ltd.
1635 Sismet Road, Unit 27
Mississauga, Ont. L4W 1W5
Phone: 624-1162

N & N Sheet Metal
1351 Winterberry Drive
Burlington, Ont. L7P 4T7
Phone: 332-8824

Neelands Refrigeration Limited
1252 Northside Road
Burlington, Ont. L7M 1H6
Phone: 332-4555

Nelco Mechanical Limited
77 Edwin Street, P.O. **Box** 1086
Kitchener, Ont. N2G 4G6
Phone: 519-744-6511

North York Mechanical Ltd.
2250 Midland Avenue, Unit 1
Scarborough, Ont. M1P 4R9
Phone: 321-5010

Northern Air Environmental Tech Inc.
107 Tycos Drive
Toronto, Ont. M6B 1W3
Phone: 789-7511

Nortown Air Systems
49 Densley Avenue
Toronto, Ont. M6M 2P5
Phone: 235-2727

Oakwood Mechanical Systems Ltd.
P.O. **Box** 157
Bowmanville, Ont. L1C 3K9
Phone: 623-5165

Ontario Air Systems
1793 Appleview Road
Pickering, Ont. L1V 1T7
Phone: 837-1675

Ontario Electrical Construction Ltd.
494 King Street East
Toronto, Ont. M5A 1L8
Phone: 363-5741

P M A Mechanical Inc.
P.O. **Box 27**
Nobleton, Ont. **L0G 1N0**
Phone: **948-2149**

Pamar Mechanical Ltd.
14 Connie Crescent, Unit **7**
Concord, Ont. **L4K 2W8**
Phone: **660-4187**

Penn Refrigeration Limited
18 Seapark Drive, Unit **5**
St. Catharines, Ont. **L2M 6S6**
Phone: **685-4255**

Philip Doyle Mechanical Inc.
79 Covington Street
Hamilton, Ont. **L8E 2Y4**
Phone: **561-0545**

Prime Air Control Inc.
26 Underhill Drive, Unit **1112**
North York, Ont. **M3A 2J4**
Phone: **287-2454**

Principal Heating Company Limited
67 Penn Drive
Weston, Ont. **M9L 2A6**
Phone: **741-3030**

Pro-Tech Mechanical Services Ltd.
685 Hamilton Road
London, Ont. **N5Z 1T4**
Phone: **519-452-1631**

R E Comer Refrigeration
415 Big Bay Point Road
Barrie, Ont. **L4N 3Z3**
Phone: **705-721-1960**

R N Mechanical
1220 Ellesmere Road
Scarborough, Ont. **M1P 2X5**
Phone: **299-4439**

Readair Mechanical Services Ltd.
271 Nantuckett Blvd.
Scarborough, Ont. **M1P 2P2**
Phone: **759-9355**

Robcan Air Conditioning Ltd.
7955 Torbram Road, Unit 19
Brampton, Ont. L6T 5B9
Phone: 459-4455

Robertson & Associates Mech. Cont.
35 Stafford Road
Nepean, Ont. K2H 8V8
Phone: 613-596-2744

Rosetown Central Refrigeration
195 Wilkinson Road
Brampton, Ont. L6T 4X1
Phone: 451-3147

Rothmar Manufacturing Corporation
1234 Reid Street, Unit #3
Richmond Hill, Ont. L4B 1C1
Phone: 250-8588

RRM Service Co.
Box 5192, Terminal A
Toronto, Ont. M5W 1P8
Phone: 237-4659

Sarnia Commercial & Ind. Refrigeration Ltd.
835 Ontario Street
Sarnia, Ont. N7T 1N1
Phone: 519-336-0930

Sartech Mechanical Services Ltd.
708 Charlesworth Drive
Sarnia, Ont. N7V 2R9
Phone: 519-383-8236

Sayers & Associates Limited
2240 Argenta Road
Mississauga, Ont. L5N 2X6
Phone: 821-4500

Scott Mechanical Limited
5155 Spectrum Way, Unit 33
Mississauga, Ont. LAW 5A1
Phone: 625-4724

Sentry Air Systems
5359 Timberlea Blvd., Unit 52
Mississauga, Ont. LAW 4N5
Phone: 629-4766

Shea Control Systems Ltd.
304 Grays Road North
Stoney Creek, Ont. L8E 1V5
Phone: 561-9731

Sherway Temperature Control
1 Whitmore Road, Units 1 & 2
Woodbridge, Ont. L4L 8G4
Phone: 850-8585

Solomon Energy Systems Limited
P.O. Box 1660, Highway 89 W
Alliston, Ont. L0M 1A0
Phone: 705-435-6243

Spring Water Ice Ltd.
2060 Hadfield Court,
Burlington, Ont. L7M 3V4
Phone: 689-6464

Springbank Mechanical Systems Ltd.
3170 Ridgeway Drive, Unit 15
Mississauga, Ont. L5L 5R4
Phone: 569-8990

Stan Newmarch Mechanical Ltd.
165 Fielding Road, R. R. #2
Lively, Ont. P0M 2E0
Phone: 705-682-0691

✓ Standard Mechanical Systems Limited
3055 Universal Drive
Mississauga, Ont. L4X 2E2
Phone: 625-9505
Branch Operations:
Mississauga, Ottawa

! Stannair Conditioning Inc.
1726 Mattawa Avenue
Mississauga, Ont. L4X 1K1
Phone: 270-2930
Branch Operations:
Mississauga, Markham, Barrie,
Kingston, Ottawa

! State Contractors
2150 Islington Avenue, 4th Floor
Etobicoke, Ont. M9P 3V4
Phone: 240-0610

Strickland Mechanical
P.O. **Box** 338, Conn. #4
Virgil, Ont. **L0S** 1T0
Phone: 468-3721

Superior Trade Services Limited
50 Thornmount Drive, Unit 30
Scarborough, Ont. M1B 3J4
Phone: 281-3351

Sutherland-Schultz Limited
859 Courtland Avenue East
Kitchener, Ont. N2C 1K4
Phone: 519-743-4123

Sydenham Sales and Service Limited
P.O. **Box** 1657
Kingston, Ont. K7L 5C8
Phone: 613-548-8699

T & D Air Cond. Processes Inc.
13 Casper Crescent
Brampton, Ont. L6W 4N3
Phone: 792-6688

Techaire Systems Canada Inc.
5 Sandhill Court, Unit D
Brampton, Ont. L6T 5J5
Phone: 790-0700

Techore Heating & Cooling Co.
P.O. **Box** 160
Streetsville, Ont. L5M 2B8
Phone: 828-8976

Thermal Mechanical Systems
910 Memorial Avenue
Thunder Bay, Ont. P7B 3Z9
Phone: 807-345-5200

Trane Service Agency (Hamilton)
10 Sanford Avenue North
Hamilton, Ont. L8L 5Y6
Phone: 528-8648

Trane Service Agency (Toronto)
4051 Gordon Baker Road
Scarborough, Ont. M1W 2P3
Phone: 499-5100

Trane Service Agency (London)
8 Belleisle Court
London, Ont. N5V 4L2
Phone: 519-453-3010

Trane Service Agency (Kitchener)
38 McBrine Avenue, Unit 7
Kitchener, Ont. N2R 1G8
Phone: 519-895-0950

Trans Air Mechanical Ltd.
658 Merlin Court
Oshawa, Ont. L1K 1M3
Phone: 434-8132

Transcool Inc.
1764 Oxford Street East, Unit J-11
London, Ont. N5V 3R6
Phone: 519-457-2390

✓ Trisar Limited
1376 Lougar Avenue
Sarnia, Ont. N7S 5N7
Phone: 519-336-7400

✓ Westaire Air Conditioning & Htg. Ltd.
70 Wesley Avenue
Mississauga, Ont. L5H 2M9
Phone: 278-8868

✓ Wm. Roberts Electrical & Mechanical
P.O. Box 1296
Kitchener, Ont. N2G 4H3
Phone: 519-578-2230

Xtra Mechanical Limited
606 Rivermede Road, Unit 13
Concord, Ont. L4K 2H6
Phone: 738-8802

✓ York Air Conditioning Limited
375 Matheson Blvd. East
Mississauga, Ont. L4Z 1X8
Phone: 890-7499
Branch Operations:
Mississauga, Ottawa

**PROVINCIAL NON I.C.I. CONSTRUCTION,
SERVICE AND MAINTENANCE
COLLECTIVE AGREEMENT
(1992)**

between

O.R.A.C.

and

U.A. LOCAL 787

**NON I.C.I. CONSTRUCTION,
SERVICE AND MAINTENANCE
COLLECTIVE AGREEMENT
(1992)**

BETWEEN:

The Unionized Maintenance and Service Contractor Members of the Ontario Refrigeration and Air Conditioning contractor: Association, as listed in the Appendix "D", herein referred to as O.R.A.C.

AND

Local 787 of the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada, designated as the Employee Bargaining Agency under the Ontario Labour Relations Act and hereir referred to as the "Union".

TERRITORIAL JURISDICTION

The Territorial Jurisdiction of this Agreement is the whole are within the boundaries of the Province of Ontario.

Article 1: PURPOSE

The purpose of this Collective Agreement is to establish and maintain terms and conditions of employment between the Association, the Employer, and the members of the Union, and to provide a method of settling any differences which may arise between them.

Article 2: AGREEMENT

This Agreement constitutes the entire Agreement between the parties. No modification to any of the terms or conditions of this Agreement shall be valid unless made in writing and signed by both parties.

Article 3: CONTEXT

This Agreement shall be read and construed as if all orthographical and grammatical changes had been made and wherever the singular and masculine are used throughout they shall be construed as if the plural and feminine or neuter had been used where the context or the parties hereto require.

Article 4: EMPLOYER

The term "Employer" in this Agreement is construed to mean the Association, any company, partnership, sole proprietorship, or otherwise which is bound by this Agreement.

Article 5: RECOGNITION

5:01 The Association recognizes Local Union 787 as the sole and exclusive bargaining agent for all Journeymen Foremen, Journeymen and Apprentice Refrigeration and Air Conditioning Mechanics, Maintenance Mechanics, save and except persons above the rank of working Foreman, employed by Employers in the Province of Ontario engaged in all of the Employers maintenance and/or service activities and all construction work in the Province of Ontario, other than construction work in the Industrial, Commercial and Institutional Sector in the Refrigeration and Air Conditioning trade.

(a) Subject to the express terms of this Collective Agreement and specifically to Article 8 Paragraph 8:03 (a) and (b), the Union recognizes the right of the Employer to operate and manage his business in accordance with his commitments and responsibilities.

(b) Non-bargaining unit management employees of the Employer or the Employer's vendors or contractors may be involved in any job for the purpose of instruction and training.

The following are solely and exclusively the responsibility of the Employer:

- (1) The location of Company workshops and warehouses.
- (2) Designation of work to be done and responsibilities of each employee.
- (3) Scheduling of work.
- (4) Methods and means by which the work is to be accomplished within the provisions of all Safety Regulations.
- (5) The right to decide on the number of employees needed by the Company at any time.
- (6) The control of all operations and buildings, machinery and tools owned or rented by the Company. The direction of the employees, including the right to hire, suspend or discharge for just cause and the right to relieve employees from duty because of lack of work or other legitimate reasons is vested exclusively with the Employer subject to this Agreement and in particular, subject to the grievance and arbitration procedures provided herein.
- (7) The Employer agrees that in the exercising of its management rights and in the administration of this Agreement, it shall do so in fair and reasonable manner.

5:02 Except as may otherwise be provided for herein:

(a) All employees covered by this Agreement shall, as condition of employment or continued employment, be members of the Union in good standing.

(b) In the event that an employee fails to tender to the Union the required initiation fee or monthly dues and for any reason becomes a suspended member of the Union, the Employer will not assign work to such employee upon request by the Union.

5:03 Employers will obtain from the Union all persons required to perform any of the work described in Appendix "A" and "E" attached hereto, except if Union members are not available, the Employer may hire other qualified workers, provided they make application to join the Union before employment commences. For clarification, the intent is, if the Employer requires a specifically trained employee and none are available on the Union "out of work" list, an Employer may, if he decides the workers on the list are not suitable, hire an employee provided Article 25 has been adhered to. The Union will notify the Employer within 48 hours of the worker's acceptance.

(a) The Employer shall retain the right to reject for just cause any applicant referred by the Union. The Employer shall retain the right to terminate any employee for just cause providing the Employer so states in a termination notice.

5:04 The Union shall take reasonable steps to ensure that none of its members are employed by Employers not bound by this Agreement with the Union. This is not to be construed to prevent a member securing employment outside of his trade.

5:05 No member of the Union while employed by an Employer bound by this Agreement shall perform work as outlined in Appendix "A" and "B" of this Agreement for anyone other than his Employer without permission from both his Employer and the Union.

Article 6: EMPLOYEE

6:01 Under the terms of this Agreement there shall be the following categories or classes of employees:

Journeyman Foreman
Journeyman Mechanic
Apprentices
Maintenance Mechanics
Students

which categories or classes are defined as follows:

6:02 JOURNEYMAN FOREMAN — The determination of the number of foremen, if any, is solely the responsibility of the employer. The Employer's salaried personnel may handle all the dispatching and assignment of duties.

6:03 JOURNEYMAN MECHANIC — Shall designate a person who holds a valid Certificate of Qualification for the Province of Ontario and who has passed any examination which may be required by the Local 787 Examining Board.

6:04 APPRENTICE — Shall designate any person who engages himself for a minimum period to an Employer for the purpose of learning the trade as laid down by the Ontario Apprenticeship and Tradesmen's Qualification Act. He will attend all courses of study as laid down by the Act and by the Joint Training and Apprenticeship Committee.

The Employer shall be permitted a ratio of one Apprentice for the first Journeyman member, and then permitted an additional apprentice for every three additional Journeymen members employed.

6:05 MAINTENANCE MECHANICS — Must be qualified to perform and shall be allowed to perform the work listed in Appendix "B".

6:06 STUDENTS — For the purpose of this Agreement, the term "student" shall mean a person who, except for summer vacation period or work study period, would normally be attending full time at High School, Vocational School, or University and taking subjects relating to the Refrigeration and Air Conditioning Trade.

The intention of this clause is to enable an Employer to give practical experience during summer months to a person whose declared intention is to seek employment in the Trade upon graduation from school, and is not intended as a source of casual labour.

(a) The Employer involved must employ the maximum number of apprentices as allowed by the ratio stated in Article 6:04 before hiring student.

(b) The foregoing notwithstanding, no Employer shall employ more than one "student" for every eight (8) union members employed, except, any Employer employing at least five (5) members of the union may hire one "student".

(c) Students will be required to pick up a temporary work card and work referral slip prior to starting work.

Article 7: RESPONSIBILITY OF EMPLOYEES

For the purpose of establishing a minimum responsibility employees will be described in four (4) categories:

Journeyman Foreman
Journeyman Mechanic
Apprentice (Student)
Maintenance Mechanic

7:01 GENERAL — The Employee shall:

(a) Assume his position with his Employer according to his qualifications in the industry and shall accept the following as the minimum requirements and terms of his employment, but shall not be limited to them or relieved of further responsibility delegated by the Employer.

(b) Arrive ready for work suitably and neatly dressed at the normal starting time unless prevented by his Employer from doing so.

(c) While in the possession of an Employer's tools, equipment, materials, vehicles or other Employer's property take a reasonable precautions to prevent damage, loss, theft, breakage, misuse, etc.

(d) Ensure that an Employer's vehicle, when provided for his use, is employed in accordance with the "Company Policy" and operated in a manner which will result in maximum useful life at maximum economy. While all costs for maintenance and repair are borne by the Employer, the employee will advise the Employer immediately and in writing, with a copy to be retained by the employee, of any servicing that may be required to keep the vehicle in good and safe running order and presentable appearance.

(e) When representing his Employer, make every effort according to his qualifications, to look after the best interests of the Employer.

(f) All employees shall be required to have and wear approved safety boots or shoes, and safety hats as a condition of employment. The employee shall provide the safety hat at his own expense unless the Employer demands a safety hat of a particular colour or style, in which case the Employer shall supply it/ them at the Employer's expense. Safety hats supplied by the Employer shall be returned to the Employer by the employee on termination of employment. It shall be the responsibility of the employee to be knowledgeable of the Safety Regulations under the Occupation Health and Safety Act 1978.

7:02 JOURNEYMAN FOREMAN -- Shall be capable of instructing Journeymen and Apprentices in the actual repair work from instructions given by his Employer and perform the work of a journeyman Mechanic when so required by his Employer.

7:03 JOURNEYMAN MECHANIC

(a) Journeyman Mechanic shall when issued a specific job assume the role of a mechanic and representative of the Employer and take the initiative to perform the work, according to the best practice of this industry. Where circumstances are beyond his control he shall immediately advise his superiors.

(b) When working with an Apprentice, a Journeyman Mechanic shall guide and instruct the Apprentice to ensure that the production of the Apprentice is of the best possible quality.

(c) A Journeyman Mechanic shall take reasonable steps to ensure that upon his leaving a job, the safety of other employees of the Employer engaged at the project are not in jeopardy due to unsecured equipment or materials. Upon completing a project or leaving a project for a sustained period of time, a Journeyman Mechanic shall clean up the job site or shall make arrangements to have this done according to the project requirements.

7:04 APPRENTICE -- The responsibility of an Apprentice is covered under the direction of the Joint Training and Apprenticeship Committee.

(a) He will work under direct supervision of a Journeyman member of the Union and be responsible to the Journeyman for the work which he has performed. He shall follow the instructions and directions of the Journeyman.

7:05 MAINTENANCE MECHANICS -- Under the terms of this agreement, there shall be the following categories or classes of Maintenance Mechanics:

1. Junior Maintenance Mechanic
2. Maintenance Mechanic

Which categories or classes are defined as:

JUNIOR MAINTENANCE MECHANIC -- A person employed for maintenance and has had no formal training by the Employer, and will receive starting rate, as shown in Article 14, until he is qualified.

MAINTENANCE MECHANIC -- A person employed for maintenance and has received training as the Employer deems necessary, and will receive full rate as shown in Article 14.

Article 8: RESPONSIBILITY OF EMPLOYER

8:01 An Employer shall attempt to keep an indenture Apprentice active in his relative training until completion of his Apprenticeship. Should the Employer find it necessary to lay off an Apprentice, that Apprentice or an Apprentice with the same years of experience or greater shall be recalled or hired when work becomes available. If the Apprentice or Apprentices with the same years of experience or greater are not available at the time of recall, this provision shall not apply.

8:02 Before hiring a member of Local 787, an Employer must present a written copy of the Employer's "Company Policy", a copy MUST be deposited on file at the Union office and the employee shall sign an appropriate form as proof that he has received a copy of the Employer's "Company Policy". Policies shall include such items as working hours, the wearing of uniforms, and use of Employers/employees vehicles, etc.

The "Company Policy" shall not contravene this Agreement or any other applicable legislation.

Revision of "Company Policies" must be deposited on file at the Union office and each and every employee affected by the change must be advised.

8:03 The Employer shall:

(a) Assign exclusively to members of the Union all of the work described in Appendix "A" and "B", attached hereto and forming part of this Agreement.

(b) Employers will not sublet refrigeration or air conditioning work to non-union contractors.

8:04 The Employer will keep Company vehicles in proper mechanical and safe condition. If a dispute arises, the governing body will be "The Ministry of Transportation and Communication Vehicle Inspection Section".

(a) All Employer's vans will be equipped with metal safe shields or bulkheads of equivalent strength between the driver and the load. The Employer's vehicles will be equipped with First Aid Kits, Fire Extinguishers and Safety Flares.

(b) It is the employees responsibility to notify the Employer of any deficiencies in either 8:04 or 8:04(a).

8:05 The Employer shall show proof of Insurance Coverage (minimum \$1,000,000.00 Public Liability and Property Damage) of vehicle and employee during working hours, and after working hours while using vehicle according to "Company Policy". Written proof and permission must be issued to employees involved.

8:06 It shall be the responsibility of the Employer to comply with the regulations under the Occupational Health and Safety Act, 1978, on all jobs where Union members are employed.

8:07 The Employer will provide employees with credit cards, pump keys, cash or other suitable methods of paying for gas, oil, service and minor repairs to Employer's vehicle, parking fees, etc. In some instances an employee may be required to purchase minor material in which case he shall be provided with a cash floater if he requests it. If a cash floater is provided, it will be replenished at suitable intervals on submission of receipts for money spent. The cash floater is for the benefit of the Employer and must be available at all working time for that purpose.

Article 9: UNION STEWARDS

9:01 The Union may appoint, and the Employer shall recognize a Steward for each shop, job or area. The Employer's General Manager shall be notified in writing of the name of the Steward when the appointment becomes effective. The Steward shall be recognized as the representative of the Union for the shop, job or area in which he is working and no discrimination shall be shown against him for carrying out his Union duties. He shall not be laid off, transferred or discharged by reason of executing his Union duties and responsibilities as a Steward.

9:02 The Steward shall assist in adjusting differences which may arise out of the interpretation, application or alleged violation of this Agreement.

9:03 He shall see that the provisions of this Agreement are complied with and report any infractions to the office of the Union. This also applies to safety regulations.

Article 10: UNION REPRESENTATIVE

10:01 An official representative of the Union shall have access to projects during working hours providing this is within the control of the Employer.

10:02 An official representative of the Union when entering a project shall when practicable, advise the Superintendent or Employer of his visit and at no time shall he interfere with job progress unless there is a matter of dispute on the job, in which case the matter must be discussed with the job Superintendent or Foreman, so that no unnecessary work stoppage occurs.

10:03 An official representative of the Union shall be granted unpaid leave of absence when required for Union business provided that reasonable notice is given to the Employer.

Article 11 : HOURS OF LABOUR

11:01 The ordinary hours of work shall be eight consecutive hours per day not including time for lunch, between 7:30 a.m. and 5:30 p.m. Monday to Friday inclusive with one half hour off for lunch making a regular work week of 40 hours. Normal job starting and job quitting times to be determined by the Employer in accordance with area or Employer's practice provided they are within the ordinary hours of work.

Changes to normal starting and quitting times for special reasons may be arranged between the Employer and employee by mutual agreement. Any Employer wishing to revise normal starting and quitting time shall provide 7 days notice to the employees.

11:02 It is recognized by both parties to this Agreement that the industry has a responsibility to provide emergency service to its customers outside of normal working hours.

11:03 Employees who have been requested by the Employer to provide such service, and agree to do so, will be required to be available to accept calls outside normal working hours, and, as compensation for inconvenience incurred, will be paid "stand-by" pay in addition to hours worked, as outlined in 11:04. This emergency work will be offered on an equal basis *to* all qualified Journeymen mechanics available in the service of the Employer.

11:04 **STAND-BY** – When an employee is requested by the Employer to stand-by and be available to perform emergency work outside of the scheduled hours of work, he shall be paid the following:

Monday – 1/2 hour at the man's straight time rate plus actual hours worked at the prevailing rate.

Tuesday – 1/2 hour at the man's straight time rate plus actual hours worked at the prevailing rate.

Wednesday – 1/2 hour at the man's straight time rate plus actual hours worked *at* the prevailing rate.

Thursday – 1/2 hour at the man's straight time rate plus actual hours worked at the prevailing rate.

Friday – 1/2 hour at the man's straight time rate plus actual hours worked at the prevailing rate.

Saturday – 1 hour at the man's straight time rate plus actual hours worked at the prevailing rate.

Sunday – 1 hour at the man's straight time rate plus actual hours worked at the prevailing rate.

Statutory Holidays – 1 hour at the man's straight time rate plus actual hours worked at the prevailing rate.

11:05 SHOW UP PAY – Unless an employee is informed prior to the end of the previous work day he should not report to work on the following work day, such employee shall be paid an amount equal to four hours wages (including vacation pay and all other financial benefits provided for in this Agreement) and must take work available.

11:06 BEREAVEMENT LEAVE – In the event of a death in the employee's immediate family, i.e. the employee's children, parents, grandparents, brothers, sisters, spouse, spouse's parents, grandparents, the Employer will grant to the employee up to 3 days leave of absence with pay for the purpose of making arrangements for, or attending the funeral or memorial service. Pay shall be at the employee's straight time rate and shall be paid only for claims which occur on a day or days which the employee would be regularly scheduled to work.

11:07 In the event that an accident occurs whilst a Union member is on Employer business, which necessitates the member having to visit a doctor or hospital for treatment, etc., the time lost by the member shall be paid for by the Employer. If it is necessary for a Local 787 member to be taken for treatment by a second member, his time will also be paid for by the Employer. It is the intent that members would only be paid up to the completion of the shift which they were working at the time treatment was required.

11:08 JURY DUTY – Jury Duty Compensation will be paid if a member of the Union is summoned for Jury Duty or as a Crown Subpoenaed Witness. For each day that he is compensated for by the Crown, he shall be compensated by the Employer at \$25.00 per day and by the Union at \$25.00 per day up to a maximum of 4 calendar weeks or 20 working days. Proof of payment by the Crown shall be presented to the Employer and to the Union.

Article 12: OVERTIME

12:01 All time worked before and after the established work day of eight (8) hours, Monday through Friday, and all time worked on Saturday, Sunday and Statutory Holidays recognized in 12:02 shall be paid for at time and one-half or as provided for by the Provincial Law whichever is greater.

12:02 STATUTORY HOLIDAYS – Recognized Statutory Holidays are New Year's Day, "Heritage Day" (if declared), Good Friday, Victoria Day, Canada Day, Simcoe Day, Labour Day, Thanksgiving Day, Christmas Day, and Boxing Day. When Statutory Holidays fall on a Saturday or Sunday, the next work day or work days shall be designated as Statutory Holiday(s) or as designated by the Government.

12:03 SHIFT WORK – On repair work where it is necessary for a mechanic to work a night shift instead of a day shift or both night and day shifts, the worker shall be paid a 15% shift premium.

Shift rates apply only to shift starting after Sunday midnight and finishing Friday midnight.

12:04 PERMANENT SHIFT WORK CONDITIONS — For plants, complex and/or projects, a four-cycle shift system may be operated when work is performed on a seven (7) day continuing basis. The Names of those men employed on permanent shift will be published, showing shift rotation and the working shift or the day off for each man, for a period of at least three (3) months.

Shift rates apply only to shifts starting after Sunday midnight and finishing Friday midnight. All hours over 8 hours worked in any one shift as described in 12:06 shall be paid for at overtime rates. No worker shall be required to work more than one shift in any 24 hour period.

12:05 The shift rate premium for the second shift shall not be less than 10% of the first shift rate and the shift rate premium for the third shift shall not be less than 15% of the first shift rate.

12:06 The standard work day under permanent shift working conditions shall be eight (8) hours of continuous employment, including one-half (1/2) hour paid lunch period. Forty (40) hours per week shall constitute a week's work. All time worked in excess of eight (8) hours per day and all time worked on either one of the two scheduled off days shall be paid for at a rate not to be less than time and one-half.

12:07 If any man reports late for work, no overtime will be paid until a full day or shift has been completed from time of reporting. A man is not late if he is asked to report after normal starting time.

Article 13: TRAVEL

13:01 The free zone shall be the area within a 50 km radius from the Employer's permanent place of business, shop, branch office or depot.

13:02 Employees will be on the job within the free zone by regular starting time. Workers travelling to a job outside the free zone shall be at the boundary of the zone nearest to the job site by regular starting time and regular quitting time.

13:03 Any member not supplied with transportation by the Employer and therefore uses his own vehicle shall receive \$0.40 (cents) per km for the use of his own vehicle while on Employer's business. For the purpose of computing mileage, it will be assumed that the day begins and ends at the shop and mileage will be computed from shop to shop, shop to job, job to job and job to shop.

In a situation where an employee is required to use his own vehicle on a one call or one day basis, the employee will be paid the mileage rate as above or \$25.00 per day or per call whichever is the greater amount. In situations where an employee is required to use his own vehicle on a regular basis (weekly), he will be paid the mileage rate as above or the minimum of \$100.00 weekly, whichever is the greater amount. Under no circumstances will the daily amount of \$25.00 accumulate to exceed the weekly minimum amount of \$100.00 in any one pay period.

Employees shall not carry more than their personal tools plus 45.5 kg (100 lbs.) of Employer's tools and supplies in their personal vehicle.

13:04 Travel Expenses are to be paid at the same time as wages are paid.

13:05 It is agreed that each employee will carry a minimum of **1,000,000.00** Public Liability and Property Damage Insurance on his vehicle at business rates if vehicle is used on Employer's business and that he will file a copy of the policy endorsement with the Employer.

13:06 The Employer agrees to pay parking fees incurred by employee while on Employer's business.

13:07 All employees sent out of the free zone to work and who do not return daily to their normal residence shall receive expenses incurred in obtaining meals and accommodation, and other legitimate expenses incurred, including transportation costs whether by air, train, bus, etc. If travelling at night by train, a sleeper is provided.

13:08 Expense money shall be advanced to each employee for meals and lodging sufficient for the expected duration of the job, (or weekly if the job is expected to last longer than seven days) and a detailed amount substantiated by receipts shall be submitted to the Employer by the employee.

13:09 If an employee is requested to use his vehicle for a job outside the free zone, any travelling involved during the course of the job or jobs, including return trips as outlined in **13:10** will be done in the employee's vehicle at the rate outlined in **13:03**.

13:10 During the course of a job where the employee does not return to his normal residence daily he will be entitled to return home on the following basis:

- (a) every week for jobs within 161 km (100 miles) of the free zone.
- (b) every two weeks for the jobs within 644 km (400 miles) of the free zone.
- (c) every three weeks for jobs over 644 km (400 miles) from the free zone.

If the employee does not wish to return home at the above stated intervals the Employer will continue the payment for lodging and meals during the weekend. If the employee does return home he will receive transportation costs as outlined in Article **13:07** but will not receive payment for travelling time. Travel arrangement will be controlled by the Employer.

13:11 When on jobs out of the free zone over five (5) days duration all employees shall be allowed one personal phone call of 3-minutes per week paid by the Employer.

13:12 Employees will not be expected to use their own money for expenses incurred on behalf of the Employer.

13:13 In cases where, for Employer's reasons, the employee has the use of an Employer supplied vehicle to drive from employee's place of residence to the free zone, the employee shall, if requested, reimburse the Employer for the use of the vehicle at a rate not greater than specified in Article **13:03**.

Article 14: WAGE RATES

14:01 The Province of Ontario is divided into four zones as indicated on the map inserted at the end of this Agreement. The location of the dividing lines between the zones is described in Appendix C of this Agreement.

14:02 If a man works outside his zone, or out of the Province, he is to be paid the prevailing rates for the zone in which he is working, provided it is not less than that paid in his own zone.

14:03 The following charts show the hourly rates which will apply from date of Memorandum of Agreement to April 30th, 1995 for all Local 787 Journeyman members and U.A. members of other locals working on a Travel Card in Local 787.

JOURNEYMAN WAGE PACKAGE

	Basic Rate	10% V&S.HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1				
05/01/92	\$29.14	\$2.91	\$2.74	\$34.79
05/01/93	\$30.14	\$3.01	\$2.94	\$36.09
05/01/94	\$31.14	\$3.11	\$3.34	\$37.59
Zone 2				
05/01/92	\$28.64	\$2.86	\$2.74	\$34.24
05/01/93	\$29.64	\$2.96	\$2.94	\$35.54
05/01/94	\$30.64	\$3.06	\$3.34	\$37.04
Zone 3				
05/01/92	\$28.14	\$2.81	\$2.74	\$33.69
05/01/93	\$29.14	\$2.91	\$2.94	\$34.99
05/01/94	\$30.14	\$3.01	\$3.34	\$36.49
Zone 4				
05/01/92	\$27.64	\$2.76	\$2.74	\$33.14
05/01/93	\$28.64	\$2.86	\$2.94	\$34.44
05/01/94	\$29.64	\$2.96	\$3.34	\$35.94

14:04 APPRENTICE RATES

(a) Apprentice Hourly Rates for this Agreement are based on the following charts.

APPRENTICE WAGE PACKAGE — MAY 1, 1992

	Basic Rate	10% V&S.HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1				
Term 1	\$10.48	\$1.05	\$2.74	\$14.27
2	\$13.57	\$1.36	\$2.74	\$17.67
3	\$16.66	\$1.67	\$2.74	\$21.07
4	\$19.80	\$1.98	\$2.74	\$24.52
5	\$22.91	\$2.29	\$2.74	\$27.94
Zone 2				
Term 1	\$10.28	\$1.03	\$2.74	\$14.05
2	\$13.31	\$1.33	\$2.74	\$17.38
3	\$16.36	\$1.64	\$2.74	\$20.74
4	\$19.45	\$1.94	\$2.74	\$24.13
5	\$22.51	\$2.25	\$2.74	\$27.50
Zone 3				
Term 1	\$10.08	\$1.01	\$2.74	\$13.83
2	\$13.05	\$1.31	\$2.74	\$17.10
3	\$16.06	\$1.61	\$2.74	\$20.41
4	\$19.08	\$1.91	\$2.74	\$23.73
5	\$22.11	\$2.21	\$2.74	\$27.06

Zone	Term	Basic Rate	10% V&S,HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1	Term 1	\$ 9.88	\$.99	\$2.74	\$13.61
	Z	\$12.78	\$1.28	\$2.74	\$16.80
	E	\$15.76	\$1.58	\$2.74	\$20.08
	4	\$18.74	\$1.87	\$2.74	\$23.35
	S	\$21.71	\$2.17	\$2.74	\$26.62

APPRENTICE WAGE PACKAGE — MAY 1, 1993

Zone	Term	Basic Rate	10% V&S,HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1	Term 1	\$10.83	\$1.08	\$2.94	\$14.85
	Z	\$14.03	\$1.40	\$2.94	\$18.37
	E	\$17.23	\$1.72	\$2.94	\$21.89
	4	\$20.49	\$2.05	\$2.94	\$25.46
	S	\$23.69	\$2.37	\$2.94	\$29.00
Zone 2	Term 1	\$10.63	\$1.06	\$2.94	\$14.63
	Z	\$13.76	\$1.38	\$2.94	\$18.08
	3	\$16.92	\$1.70	\$2.94	\$21.56
	4	\$20.12	\$2.01	\$2.94	\$25.07
	S	\$23.29	\$2.33	\$2.94	\$28.56
Zone 3	Term 1	\$10.43	\$1.04	\$2.94	\$14.41
	Z	\$13.51	\$1.35	\$2.94	\$17.80
	3	\$16.63	\$1.66	\$2.94	\$21.23
	4	\$19.75	\$1.98	\$2.94	\$24.67
	S	\$22.89	\$2.29	\$2.94	\$28.12
Zone 4	Term 1	\$10.23	\$1.02	\$2.94	\$14.19
	Z	\$13.24	\$1.32	\$2.94	\$17.50
	2	\$16.33	\$1.63	\$2.94	\$20.90
	4	\$19.41	\$1.94	\$2.94	\$24.29
	S	\$22.49	\$2.25	\$2.94	\$27.68

APPRENTICE WAGE PACKAGE — MAY 1, 1994

Zone	Term	Basic Rate	10% V&S,HP.	Pension H&W Tng. Ind. Fund	Total Pkg.
Zone 1	Term 1	\$11.01	\$1.10	\$3.34	\$15.45
	Z	\$14.35	\$1.43	\$3.34	\$19.12
	3	\$17.68	\$1.77	\$3.34	\$22.79
	4	\$21.06	\$2.11	\$3.34	\$26.51
	S	\$24.42	\$2.44	\$3.34	\$30.20
Zone 2	Term 1	\$10.81	\$1.08	\$3.34	\$15.23
	Z	\$14.08	\$1.41	\$3.34	\$18.83
	E	\$17.38	\$1.74	\$3.34	\$22.46
	4	\$20.71	\$2.07	\$3.34	\$26.12
	S	\$24.02	\$2.40	\$3.34	\$29.76
Zone 3	Term 1	\$10.61	\$1.06	\$3.34	\$15.01
	Z	\$13.83	\$1.38	\$3.34	\$18.55
	3	\$17.08	\$1.71	\$3.34	\$22.13

4	\$20.34	\$2.03	\$3.34	\$25.72
5	\$23.62	\$2.36	\$3.34	\$29.37
Zone 4				
Term 1	\$10.41	\$1.04	\$3.34	\$14.79
2	\$13.55	\$1.36	\$3.34	\$18.25
3	\$16.78	\$1.68	\$3.34	\$21.80
4	\$20.00	\$2.00	\$3.34	\$25.34
5	\$23.22	\$2.32	\$3.34	\$28.88

(b) If during the term of this Agreement the Apprenticeship and Tradesmen's Qualification Act is amended, the Apprentice rates listed will be amended accordingly. No employed Apprentice will receive a reduction in his basic hourly wage.

(c) Advancement in Apprentice Rates will be by Referral Slip from the Union office only. A Referral Slip will be issued when the Apprentice has met his responsibilities as outlined in the J.T.A.C. Standards section 9 (b) and 10 (f) and the J.T.A.C. office has verified the Apprentice's records with the Employer.

(d) Apprentices upon completion of their Apprenticeship will advance to the Journeyman basic rate.

14:05 MAINTENANCE MECHANIC WAGE PACKAGE

	Basic Rate	10% V&S.H.P.	Pension H&W Tng. Ind. Fund	Total Pkg.
May 1, 1992				
JrMM	\$10.48	\$1.05	\$2.74	\$14.27
MM	\$13.57	\$1.36	\$2.74	\$17.67
May 1, 1993				
JrMM	\$10.83	\$1.08	\$2.94	\$14.85
MM	\$14.03	\$1.40	\$2.94	\$18.37
May 1, 1994				
JrMM	\$11.01	\$1.10	\$3.34	\$15.45
MM	\$14.35	\$1.43	\$3.34	\$19.12

14:06 STUDENTS – Basic rate will be the same as laid down for a first term Apprentice including Vacation Pay and contributions to the Benefit Plan.

14:07 JOURNEYMAN FOREMAN – The basic hourly rate of a Journeyman Foreman shall be the basic Journeyman's rate plus 10%.

14:08 PAY DAY – The "normal work week" shall consist of five 8 hour days. Pay Day shall be once a week. If the pay is to be a cheque, it will be given to the employee before the end of his shift on Thursday or deposited in his Branch of a Chartered Bank or Trust Company by Friday. If by cash, before the end of his shift on Friday.

If pay cheques are mailed to the employee's residence they must be mailed in sufficient time to arrive by Thursday afternoon of the appropriate week.

14:09 TIME SHEETS – Pay will be made for hours claimed on time sheets. Time sheets must be signed by an authorized representative of the customer as far as possible. No alteration of the time sheets or the hours contained therein will be made by the Employer or his representative.

**Article 15: VACATION PAY AND
STATUTORY HOLIDAY PAY**

15:01 Vacation and Statutory Holiday Pay shall be paid at the rate of 10% of basic earnings for all categories of employees during the term of this Agreement. 5% shall be regarded as Vacation Pay and 5% shall be regarded as Statutory Holiday Pay.

15:02 Vacation and Statutory Holiday Pay will be paid every month to the "Vacation and Statutory Holiday Pay Trust Fund" as administered by trustees elected by Local 787.

It will be seldom that the end of the month will coincide with an Employer's pay week, therefore the Vacation and Statutory Holiday Pay must be calculated to the end of the first pay period of the following month.

15:03 Vacation and Statutory Holiday Pay shall be recorded weekly. Income Tax on Vacation and Statutory Holiday Pay will be calculated and paid out of the employee's hourly rate weekly. Pay cheque stubs will show the actual amount of Vacation and Statutory Holiday Pay.

15:04 Vacation periods will occur preferably between May and September. A schedule is to be posted on each Employer's notice board before the month of May.

15:05 Vacation periods will be allocated by seniority and shall begin and end at the shop.

15:06 It is the intent of this Agreement that the employee shall be permitted to take three (3) weeks vacation annually, two (2) weeks during the recognized period as per 15:04. If it is impractical to permit holidays during the recognized period owing to the pressure of work, then an alternative period shall be mutually agreed upon.

**Article 16: JOINT TRAINING AND
APPRENTICESHIP COMMITTEE**

16:01 To assure the Industry of an adequate supply of properly trained and skilled Journeymen, Apprentice and Journeyman training shall be under the jurisdiction of the Joint Training and Apprenticeship Committee, composed of four (4) representatives from the Union and four (4) representatives from O.R.A.C.

16:02 The Committee will administer the Training Fund in accordance with the terms and conditions of the "Refrigeration Worker's Local 787 - O.R.A.C. Training Trust Fund Agreement".

16:03 All prospective Apprentices must be approved by the Joint Training and Apprenticeship Committee before being employed.

16:04 To enable this Committee to fulfill its obligations as related above, the Association and the Union shall allocate to it the necessary sum of money as outlined in Article 17:01.

**Article 17: REFRIGERATIONWORKER'S LOCAL
787 – O.R.A.C. TRAINING TRUST FUND**

17:01 Effective May 1, 1992 each Employer bound by this Agreement shall contribute to the "Refrigeration Worker's Local 787 - O.R.A.C. Training Trust Fund" monthly, \$0.15 (cents) for each hour earned by each employee. Effective May 1, 1993 this contribution increases by \$0.10 (cents) to \$0.25 (cents).

Article 18: INDUSTRY FUND

18:01 Each Employer bound by this Agreement shall contribute to the Industry Fund monthly, the sum of **\$0.04** (cents) for each hour earned by each of his employees. Such amounts on receipt shall be immediately paid to O.R.A.C. as each Employer's contribution for the general purposes of O.R.A.C. Should O.R.A.C. require an increase during the term of this Agreement, such increase shall be determined by the Board of Directors of O.R.A.C.

18:02 The Industry Fund shall be administered by the Board of Directors of O.R.A.C.

18:03 Contributions as specified in 18:01 will be made as outlined in Article 21:00.

Article 19: WELFARE AND PENSION TRUST FUND

19:01 Effective May 1, 1992 each Employer bound by this Agreement shall contribute to the "Local 787 Welfare Trust Fund" on behalf of each employee in his employ the sum of **\$0.95** (cents) for each hour earned to be administered by Trustees elected by Local 787. Effective May 1, 1994, this contribution increases by \$0.10 (cents) to \$1.05.

19:02 Effective May 1, 1992 each Employer bound by this Agreement shall contribute to the "Local 787 Pension Trust Fund" on behalf of each employee in his employ the sum of \$1.60 for each hour earned to be administered by Trustees elected by Local 787. Effective May 1, 1993 this contribution increases by \$0.10 (cents) to \$1.70. Effective May 1, 1994 the \$1.70 contribution increases by \$0.30 (cents) to \$2.00.

19:03 Notwithstanding the provision of section 5a (9) and (10) of the Workers Compensation Act amendment of 1989, each Employer throughout the first year after a work related injury to a worker shall make contributions on behalf of the injured worker to the U.A. Local 787 Benefit Plan for Health and Welfare Benefits and Pension Benefits at the amounts specified in articles 19:01 and 19:02 respectively based on the work week as outlined in article 11:01 of the Collective Agreement when the worker is absent from work because of a work related injury.

19:04 Contributions as specified in Articles 19:01, 19:02 and 19:03 will be made as outlined in Article 21:00.

Article 20: UNION DUES CHECK-OFF AND R.R.S.P. DEDUCTIONS

20:01 The Employer shall deduct from the employees wages in the first pay of the month (or after returning to work if the employee is absent the first pay of the month) a sum equivalent to one month's dues which is calculated on twice (2x) the employee's basic hourly rate that he/she is being paid prior to the vacation pay calculation.

The Employer shall also deduct "Union Field Dues" from each employees weekly wages the amount of \$0.10/hour for all hours earned.

20:02 Each Employer shall deduct from each employee's weekly pay cheque voluntary R.R.S.P. deductions as requested by the employee by written authorization.

The hourly deduction will be made from the employee's pretax earnings.

20:03 Deductions as specified in Articles 20:01 and 20:02 will be made as outlined in Article 21:00.

Article 21: MONTHLY REPORTS OF CONTRIBUTIONS AND DEDUCTIONS

21:01 Each month's submission of employer contributions and deductions as outlined in Articles 15, 17, 18, 19 and 20, must be made on the forms supplied by the Administrator. The same basic information is required for the J.T.A.C., Industry Fund, Welfare Trust Fund, Pension Trust Fund, Vacation and Statutory Holiday Pay Trust Fund, Union Dues Check-Off and R.R.S.P. Deductions. All such funds and deductions will be combined for payment and report purposes. Contributions and deductions shall be reported and paid for each employee.

The earnings of each of each employee (basic rate x hours earned) must be reported in the appropriate spaces, totalled and the 10% multiplier applied to the total basic earnings of all employees as required in Article 15.

Effective May 1, 1992 a combined contribution rate of \$2.74 will be applied to the hours earned by each employee as required in Articles 17, 18, 19:01 and 19:02. Effective May 1, 1993 the combined contribution rate will increase to \$2.94 and effective May 1, 1994 the combined contribution rate will increase to \$3.34.

Union dues deductions and R.R.S.P. deductions of each employee as outlined in Article 20 must be reported in the appropriate spaces.

21:02 The Employer monthly report forms, together with a cheque for the full amount and made payable to the U.A. Local 787 Benefit Plan shall be sent to:

U.A. Local 787 Benefit Plan
419 Deerpark Drive
Brampton, Ontario
L6T5K3

21:03 The report forms and cheque must reach the Administrator on or before the 15th of the month following the month for which deductions and contributions are being made.

21:04 If an Employer does not remit reports and contributions in accordance with Article 21:03, he shall be considered to be in

default and shall forthwith pay to the appropriate fund or the Union as liquidated damages and not as a penalty an amount equal to the greater of \$250.00 or 12% per annum calculated and compounded monthly on all amounts outstanding.

Consideration for interruptions in postal delivery will be given provided the Employer contacts the Administrator prior to the deadline as outlined in Article 21:03.

In the event that any proceedings are instituted to force compliance with Article 21, the defaulting Employer shall be required to pay an additional \$250.00 to cover legal and/or administration costs.

The Administrator shall contact the defaulting Employer prior to applying this article.

21:05 If payment has not been received within 30 days after receiving written notice from the Administrator, the Union may withdraw its men from that Employer only. This action will not be considered an illegal strike.

Article 22: OWNER OPERATOR

22:01 It is agreed that owner-operators, as independent contractors or otherwise, are employees for the purpose of this Agreement and shall be covered by the same as hereinafter set forth;

(a) As a condition of any owner-operator performing any work covered by this Agreement, it is agreed that:

(i) He shall be a member of the Union in good standing.

(ii) He shall assign, let or sub-let any work covered by this Agreement subject to the terms thereof;

(iii) Contributions to the Refrigeration Worker's Local 787 – O.R.A.C. Training Fund, Welfare Trust Fund, Pension Trust Fund and Industry Fund, shall be paid and remitted or deducted and remitted, as the case may be, by or on behalf of such owner-operators as and when required by this Agreement and Schedule thereto.

Article 23: COFFEE BREAK

23:01 The Employer, shall permit a "coffee break period" of 15 minutes duration in each half of a shift, whether during a normal day or on shift work.

Article 24: PICKET LINES

24:01 Employees may honour a picket line established by any Trade Union or its members in support of a lawful strike at a project where an Employer is engaged. Such action shall not

constitute an unlawful strike within the provisions of this Agreement and the Employer shall not institute or commence any applications, actions or proceedings of any nature whatsoever under the Ontario Labour Relations Act, this Collective Agreement or otherwise against the Union or any of its officers, officials, servants, Employers, agents or members in connection with any such action.

Article 25: HIRING, LAY-OFF AND TERMINATION

25:01 It shall be the responsibility of the Employer or his hiring agent to verify that Journeymen are in possession of an Ontario Certificate of Qualification, and that a registered Apprentice make the necessary arrangement to have his indenture papers transferred to the J.T.A.C.

Non registered workers beginning their Apprenticeship will be registered as early as possible.

25:02 Prior to hiring, a new employee shall be presented with a copy of the "Company Policy", with which he will be expected to conform if hired (**As** per Article 8:02).

25:03 Prior to the new employee starting work, the Employer must receive a Work Referral Slip as issued by the Union, showing that the employee is a member of the Union in good standing and the month **to** which his dues are paid. The employee will sign a Dues Deduction Authorization form which will permit the Employer to deduct dues from wages and remit the same **on** the monthly report form.

25:04 Should it become necessary **to** reduce the work force, the employer shall lay **off** due to a lack of work. For the purpose of lay off, no notice is required. However if an employee is **not** recalled within 13 weeks the employee shall be deemed to be terminated and subject to the termination pay in lieu of notice provisions of Article 25:05.

This temporary lay off period may be increased to 35 weeks provided the employer continues **to** make Health and Welfare and Pension Contributions **on** behalf of the employee based **upon** the work week **as** outlined in Article 11:01.

25:05 No Employer shall terminate the employment of an employee who has been employed for three months or more unless the Employer gives,

(1) one weeks notice in writing to the employee if his or her period of employment is less than one year;

(2) two weeks notice in writing to the employee if his or her period of employment is one year or more but less than three years;

(3) three weeks notice in writing to the employee if his or her period of employment is three years or more but less than four years;

(4) four weeks notice in writing to the employee if his or her period of employment is four years or more but less than five years;

(5) five weeks notice in writing to the employee if his or her period of employment is five years or more but less than six years;

(6) six weeks notice in writing to the employee if his or her period of employment is six years or more but less than seven years;

(7) seven weeks notice in writing to the employee if his or her period of employment is seven years or more but less than eight years;

(8) eight weeks notice in writing to the employee if his or her period of employment is eight years or more.

(b) The Employer also agrees that during this notice period, the employee will not receive any less than his regular weeks wages, vacation pay and benefits for each week of notice. "Week" as defined in Article 11:01.

(c) In the event the Employer does not give an employee written notice, he shall pay the employee his regular wages, vacation pay and benefits for the period of notice the employee is entitled to.

(d) In circumstances where an employees is unable to return all the Employer's property to the employer's place of business prior to end of his regular scheduled shift, the employee shall be paid his regular wages, vacation pay and benefits up to a maximum of four hours.

(e) If an employee is terminated for just cause the Employer is not required to give notice, but the employee is entitled to the conditions outlined in 25:05 (d).

(f) If an employee wishes to terminate his employment with the Employer he shall give a minimum of two weeks written notice.

The Employer shall continue to employ him as outlined in article 25:05 (b) or pay him in lieu of notice.

(g) On termination the employee shall receive all monies owed to him on his next pay period or be sent to employee's last known home address.

(h) If the conditions as set out in 25:05 (a) through (g) are not complied with it shall be termed grounds for a grievance and referred to the Ontario Labour Relations Board under Section 126 of the Ontario Labour Relations Act as per Article 27:03.

Article 26: TOOLS AND UNIFORMS

26:01 The Employer shall supply:
all pipe wrenches, vices, taps and dies
all electric tools
all electric measuring instruments
all machinist measuring instruments
all air and gas measuring devices
all gas containers
all welding equipment, including wearing apparel and safety accessories
specialty tools
vacuum pumps
power tools
wrenches over 1''

26:02 Each Journeyman, and Apprentice after completion of his first year, shall have and maintain a complete set of hand tools necessary to install air conditioning and/or refrigeration equipment. Employees will not supply tools listed in 26:01.

26:03 The employee will supply to the Employer at the time of employment a list of personal tools as mentioned in Article 26:02. It will be the responsibility of the employee to keep the list up to date for the purpose of replacement as outlined in Article 26:09.

26:04 Those tools supplied by the Employer will be maintained by the Employer. If these tools are lost or damaged, through the negligence of the Employer or other employees, then the Employer is responsible for the repair or replacing same.

26:05 Those tools supplied by the employee will be maintained by the employee. If these tools are lost or damaged through the negligence of the Employer or other employees, then the Employer is responsible for repair or replacing same.

26:06 The Employer agrees to supply non durable items used on employers work, i.e. files, cutter wheels, reactor plates, gauges, sockets, drill bits, thermometers, etc.

26:07 Uniforms will be supplied by the Employer at no cost to the employee and the employee must wear the uniform.

The following list is the minimum requirement of an Employer supplied uniform:

- 6 Shirts
- 3 Pants
- 1 Jacket (service)
- 1 Parka or Bomber Jacket

This is not to be construed to designate a maximum quantity.

26:08 Safety boots will be supplied by the Employer at no cost to the employee, up to a maximum amount of \$95.00.

26:09 If an employee's tools are lost due to fire, flood, or forcible entry of job box, job shack, or vehicle, etc., management must be notified immediately. Listed personal tools as required in Article 26.03 (to a maximum value of \$1,500.00) will be replaced immediately by the Employer. In the event of theft by forcible entry, the police and management must be notified immediately.

Article 27: GRIEVANCE PROCEDURE

27:01 Any employee who feels that he has been unjustly dismissed, unjustly laid off, unjustly suspended or unjustly dealt with in violation of this Agreement must inform the Employer and the Union in writing within 5 working days of the violation and the matter will be dealt with from then on as a grievance.

27:02 Should a dispute arise between an Employer and the Union relating to the interpretation, application, or administration of this Agreement, including any question as to whether a matter is arbitrable or where any allegation is made that this Agreement has been violated or should any local trouble of any kind arise, there shall be no suspension of work on account of such dispute, but an earnest effort shall be made by both parties hereto to settle without delay any such dispute in respect of which the following grievance procedure is set up.

First: The employee concerned may either alone or accompanied by the Steward of his department take the matter directly to his Foreman.

Second: If a settlement is not reached within a reasonable time the Steward may either alone or accompanied by a member of the Committee take the matter to the Department Manager.

Third: If a settlement is not reached with the Department Manager within a reasonable time, the matter may be discussed between the Steward, accompanied if so desired by a representative of the Union, and the Employer.

27:03 Grievances regarding delinquency of wages, fringes, pension and welfare will be referred to Section 126 of the Ontario Labour Relations Act.

Article 28: ARBITRATION

28:01 Both parties to this Agreement agree that a grievance concerning the interpretation, application, administration or alleged violation of this Agreement and including any question as to whether the matter is arbitrable which has been properly carried through all the steps of the Grievance Procedure outlined in Article

27 above and which has not been settled will be referred to a Board of Arbitration at the written request of either of the parties hereto.

28:02 The Board of Arbitration shall consist of a single Arbitrator who shall be selected by mutual agreement between the Company and/or O.R.A.C. and the Union within fourteen (14) calendar days from the receipt of the notice of intent to arbitrate. In the event of failure to agree, the parties shall submit a joint request to the Ministry of Labour of the Province of Ontario to appoint an Arbitrator.

28:03 The decision of the Arbitrator will be final and binding on both parties.

28:04 The Arbitrator shall not have any power to alter or change any of the provisions of this Agreement or to substitute any new provisions for any existing provisions, nor to give any decision inconsistent with the terms and provisions of this Agreement.

28:05 The expense of the Arbitrator shall be borne equally by the parties.

Article 29: JURISDICTIONAL DISPUTE

Jurisdictional disputes with other trades which cannot be resolved at a Local level will be referred to the National Joint Board.

Article 30: STRIKE OR LOCK-OUT

30:01 There shall be no strike or lock-out during the term of this Agreement. Neither the Union nor any of the employees covered by this Agreement will collectively, concertedly or individually induce, engage or participate, directly or indirectly, in any strike, picketing, slowdown, stoppage or other curtailment or interference with the Employer's operation, or interference with the flow of materials or persons in or out of places where the Employer is doing business. The Union agrees to exert every effort through its Local Officers and Representatives to end any unauthorized interruptions of work.

The Employer will not lockout any of the employees covered by this Agreement. The parties agree that, in the manner set forth in articles 27 and 28, they will submit to arbitration all grievances and disputes that may arise between them and any misunderstanding as to the meaning or intent of all or any part of this Agreement; provided however, the Employer shall not be required to resort to the grievance and arbitration procedures prior to resorting to other remedies in the event of violation of this article.

30:02 In the event notice of modification of this Agreement is given by either party in accordance with Article 31 and agreement is not reached on the terms of a new Agreement, both parties agree to continue work under the terms of this Agreement on a day-to-day basis until such time that either a new Agreement has been reached or the matter has been settled by Arbitration.

30:03 After one party serves upon the other notice of desire to bargain for a new Collective Agreement, and in the event that the issues remaining in dispute cannot be settled through the negotiation process, the parties shall execute an irrevocable agreement to refer all matters remaining in dispute between them to a Board of Arbitration for final and binding determination in accordance with Section 38(1) of the Labour Relations Act, Where either party elects to refer the remaining issues in dispute to arbitration, each of the parties shall appoint a nominee of the Board of Arbitration. The two members appointed by the parties shall appoint a third member who shall act as Chairperson. Where the two members fail to agree upon a third member, either party may request the Office of Arbitration to appoint a Chairperson. The Board shall hear the issues in dispute and shall render a decision which will be final and binding upon the parties and upon any employee or Employer affected by it. The decision of the majority shall be the decision of the Board, but if there is no majority, the decision of the Chairperson shall govern. Each party shall be responsible for the fees and expenses of the nominee appointed by it and shall be jointly responsible for the fees and expenses of the Chairperson.

Article 31 : DURATION OF AGREEMENT

31:01 This Agreement shall remain in force until April 30, 1995 and shall remain in force from year to year thereafter unless either party to this Agreement gives notice in writing to the other party within a period which shall not be more than 120 days or less than 90 days prior to the expiration of each term, of its intention to terminate this Agreement and seek amendments to same.

31:02 It is agreed that every effort will be made, by both parties to this Agreement, to conclude negotiations for a new Agreement before this Agreement expires. Should a new Agreement not be forthcoming prior to the termination date, work will continue under paragraph 30:02 and employees shall be entitled to retroactive pay for up to 30 calendar days.

31:03 Settlement of the wage package which includes Basic Rate Vacation Pay, Health and Welfare and Pension shall be the Journeymen's average wage package adjustment negotiated by the Plumbers/Pipefitters, Electricians and Sheet Metal Workers in I.C.

Sector for Toronto and will be applied to the four zones in this Collective Agreement

31:04 In respect to this Agreement, the signatory parties agree that at least once a year no later than ninety (90) days prior to the Anniversary Date the Union and ORAC will convene a meeting for the purpose of appraising the effectiveness of this Agreement.

If any article or provision of this Agreement shall be declared ineffective or undesirable, by mutual consent, the Union and ORAC will suspend, substitute, delete or amend any such article or provision of this Agreement to maintain the effectiveness and intent of this Agreement.

31:05 Notices: All notices required to be sent to the Union pursuant to this Agreement shall be effectively given when mailed to:

U.A. Local 787
419 Deerhurst Drive
Brampton, Ontario
L6T 5K3

All notices required to be sent to the Employer pursuant to this Agreement shall be effectively given when mailed to:

The Ontario Refrigeration & Air Conditioning
Contractors Association
1400 Bayly Street
Office Mall 11, Unit 7A
Pickering, Ontario
L1W 3R2

Article 32: SAVINGS CLAUSE

32:01 This Agreement will be no less favourable to O.R.A.C. Employers per Appendix "D" than any other Agreement signed by Local 787 with any other Employer or Association.

32:02 If any article or provision of this Agreement shall be declared invalid, inoperative, or unenforceable by any competent authority of the executive, legislative, judicial or administrative branch of the Federal or any Provincial Government, the Employer and the Union shall suspend the operation of such article or provision during the period of its invalidity and shall substitute, by mutual consent, in its place an article or provision which will meet the objections to its invalidity, and which will be in accord with the intent and purpose of the article or provision in question.

32:03 In witness to this Collective Agreement the members of the Negotiating Committee of both parties have hereby signed their names giving effect to this Agreement as of May 14, 1992.

Ontario Refrigeration & Air Conditioning Contractors Association
Maw Lindgren (Chairman)
Vern Barney
Dave Honsberger
Dave Underwood
Bruce Wilson (Alternate)

United Association of Journeymen and Apprentices of the
Plumbers and Pipe Fitting Industry of the United States and
Canada, Local 787
Joe Carricato (Chairman)
Al Butterfield
Tony Finelli
Bob Harford

APPENDIX "A"

JURISDICTION

Work of the following types shall be deemed to come under the jurisdiction of this Agreement:

(a) The service, repair and maintenance of all controls, all pipes and components used for primary and secondary refrigeration and cooling systems and fixtures for air conditioning systems, combination heat/cool units, heat pumps, ice making equipment, humidifying and dehumidifying units, refrigeration units and cooling units and the charging testing and start up of all such equipment and systems.

(b) The service, repair and maintenance of all holes, chase channels, bolts, inserts, stands, brackets, supports, sleeves, thimble hangers, conduit and boxes, tubing raceways used in connection with the refrigeration and air conditioning industry.

(c) The service, repair and maintenance of all gas and arc welded, brazed, soldered, caulked, expanded and rolled joints in connection with the refrigeration and air conditioning industry.

(d) The service, repair and maintenance of all pipe work of every description relating to (a) by whatever mode or method.

(e) The service, repair and maintenance of all methods of stress relieving of all pipe joints made by every mode or method in the refrigeration and air conditioning industry.

(f) The service, repair and maintenance of all tanks used in the refrigeration and air conditioning industry.

(g) The service, repair, maintenance, handling and using of all tools and equipment that may be necessary for all work and materials used in the refrigeration and air conditioning industry.

(h) The dismantling and repair for reuse of all refrigeration and air conditioning equipment which involves the recovery, reclaim and reuse of any refrigerants.

(i) The service, repair and maintenance of all controls and piping for fountains, cascades (i.e. artificial water falls), make-up water fountain, hot and cold waters, water towers, cooling towers, and spray ponds used in industrial manufacturing, commercial or for any other purposes in the refrigeration and air conditioning industry.

(j) Piping herein specified means pipe made from metals, tiles, glass, rubber, plastic, or any other kind of material or product manufactured or pipe useable in the refrigeration and air conditioning industry regardless of size.

(k) The service, repair and maintenance of all equipment supplied by the refrigeration and air conditioning industry.

(l) The service, repair and maintenance of all controls of sectional walk-in boxes and cold storage rooms, temperature controlled display cases and cabinets used for display and storage of all items or products requiring a temperature controlled environment.

(m) The service, repair and maintenance of all piping to stoves, fireplaces, blast and heating furnaces, ovens, driers, heaters, oil burners, boilers and cooking utensils, etc... of every description.

APPENDIX "B"

All routine maintenance and inspections regardless of size or location of the mechanical equipment being inspected or maintained, where this work is done as a periodic routine service inspection and maintenance procedure by the Employer, such as:

(a) Filter changing and maintenance thereof.

(b) All oil and greasing.

(c) All belt adjusting or replacement.

(d) Cleaning of cooling towers, coils, evaporator and condenser vessels and water treatment.

(e) General housekeeping.

(f) Delivery of parts and equipment.

(g) In an area where a problem exists with non-union competition, the assignment of Maintenance Mechanics duties in agreement with the local Union Business Manager may be adjusted to meet local conditions.

(h) Cleaning, repairing and routine maintenance of solar energy equipment.

(i) Helper for Service and Maintenance Journeymen and Apprentices, as long as the apprentices are fully employed.

(j) All aspects of residential comfort systems in a residential dwelling.

APPENDIX "C" DEFINITION OF ZONES

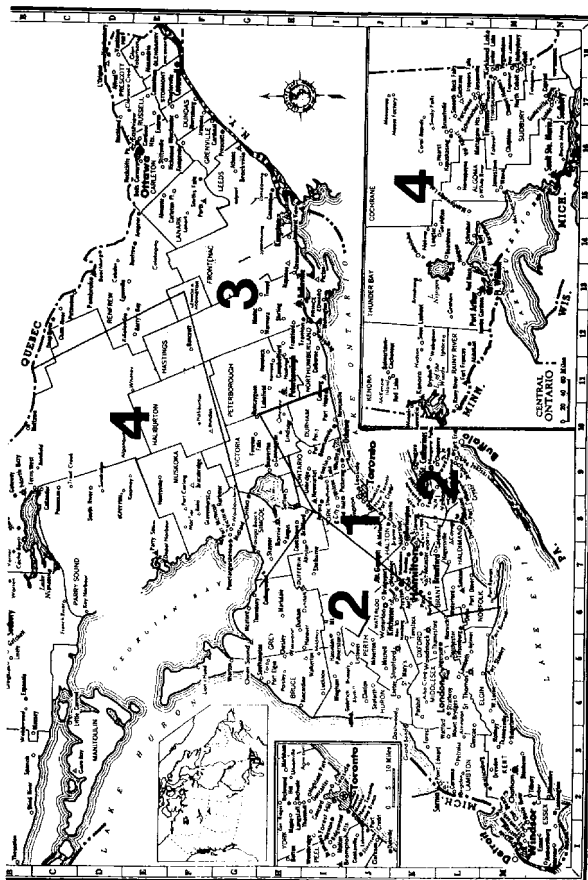
The definitions of the work zones as outlined below are determined from the lines drawn on a map of Ontario held in the Union office together with the MASTER copy of this Collective Agreement.

Zone 1—Is that portion of Southern Ontario enclosed by (A) a straight line on its south eastern boundary drawn through the eastern limits of the town of Dunnville and extending to Lake Erie on the south and Lake Ontario on the north. (B) a straight line drawn from the north shore of Lake Erie, through the eastern limits of the town of Langton and the centre of the town of Otterville to terminate at the southern limits of the town of Norwich. (C) a straight line drawn from the southern limits of the town of Norwich north easterly through the southern limits of the town of Newmarket to the northern limits of the town of Mount Albert; then a straight line from the town of Mount Albert to the southern limits of the town of Bobcaygeon. (D) a straight line from the southern limits of the town of Bobcaygeon through the eastern limits of the town of Port Hope to the north shore of Lake Ontario.

Zone 2—Is shown on the map in two sections, (A) is all of the area east of the straight line from Winona to Dunnville up to the International border and includes Grimsby, St. Catharines, Welland, Niagara Falls, Fort Erie, etc., (B) is all of the area in south western Ontario west of the boundary of Zone 1 and Zone 2.

Zone 3—Is that area (A) east of a straight line drawn from the southern western limits of the town of Collingwood, through the north eastern limits of the town of Newmarket, and ends where the line joins the northern boundary of Zone 1. (B) that area east of the line running north from Lake Ontario and making the eastern boundary of Zone 1. (C) that area south of a straight line drawn from Nottawasaga Bay through the northern limits of the town of Elmvale to the town of Whitchurch located on Highway 511 (approximately 50 miles east of the centre of Ottawa). (D) that area east of a straight line drawn from the town of Wensley on the south through the town of Killaloe Station and terminating at the Ottawa River, where this line and the line indicated in (C) intersect will be the termination point of each of the lines.

Zone 4—Is that area of the Province of Ontario north of the line
ning the northern boundary of Zone 3 and the line drawn as noted
D) of Zone 3.



APPENDIX "D"
O.R.A.C. NON I.C.I. CONSTRUCTION,
SERVICE, MAINTENANCE
COLLECTIVE AGREEMENT
List of Employers

379064 Ontario Limited — Ram Aire
462289 Ontario Limited — Tri-Air Systems
559019 Ontario Limited — Atlantic Cooling
979797 Ontario Ltd. — C & L Industrial Refg.
Ainsworth Electric Co. Limited
Albern Mechanical Limited
Ambient Mechanical Ltd.
APV Canada Inc.
Associated Mechanical Systems Inc.
B I C Mechanical Ltd.
Beaver Engineering Limited
Black & McDonald Limited - Toronto
Black & McDonald Limited - Ottawa
Blenkhorn and Sawle Limited
Broom's Mech. Contracting Limited
Carrier Canada Limited
Centigrade Air Conditioning Ltd.
Central Refrigeration & Air Cond.
Cimco
Comstock Canada - Burlington
Comstock Canada - Nepean
Comstock Canada - Scarborough
Coolbreeze Service Limited
D J Diamond Refrigeration Cont. Ltd.
Dial One Temp Air Control
Dunlis Mechanical Services Ltd.
E S Fox Ltd.
Earlscourt Heating & Air Cond.
Executive Air Conditioning Inc.
H Griffiths Company Limited
HECO
Honeywell Limited
Isotherm Engineering Ltd.
J L Wilson and Sons Limited

Johnson Controls
Johnston & Damery Limited
Landis & Gyr Powers Ltd.
Leda Refrigeration Limited (1984)
M A S Mechanical Ltd.
Mayfair Mechanical Contractors
Mechanical Aire Services Ltd.
Neelands Refrigeration Limited
Nelco Mechanical Limited
Northern Air Environmental Tech Inc.
Nortown Air Systems
Ontario Electrical Construction Ltd.
Pro-Tech Mechanical Services Ltd.
Readair Mechanical Services Ltd.
Rosetown Central Refrigeration
RRM Service Co.
Sayers & Associates Limited
Sherway Temperature Control
Standard Mechanical Systems Limited
Stannair Conditioning Inc.
State Contractors
Sutherland-Schultz Limited
Techaire Systems Canada Inc.
Trane Service Agency (Toronto)
Trisar Limited
Westaire Air Conditioning & Htg. Ltd.
Wm. Roberts Electrical & Mechanical
York Air Conditioning Limited

**INDEPENDENT
NON I.C.I. CONSTRUCTION,
SERVICE, MAINTENANCE
COLLECTIVE AGREEMENT
List of Employers**

398362 Ontario Ltd. — O/A Etobicoke Sheet Metal
696533 Ontario Inc. — O/A Bogar-Paterson
946766 Ontario Limited — Summit Mechanical
967431 Ontario Inc. — CTM/Corp Tech Management
A & W Refrigeration & Air Cond.
A.C.T. Mechanical Contractors Ltd.
Air Con Systems
Air Force Air Cond. Systems 1989 Ltd.
Air Stream Mechanical Systems
AircO
AircO Mechanical Ltd.
Amber Air Conditioning Ltd.
Ansell Mechanical Ltd.
Arch-Air Conditioning Inc.
Art Blake Refrigeration Limited
Avery Air-Cond. & Heating Service
B I Temperature Control
Barron Refrigeration Limited
Beebe Mechanical Systems
Bering Mechanical Ltd.
Bonair Htg & A/C Ltd.
Brady & Seidner Associates Ltd.
Canadian Commandaire Inc.
Cardinal Mechanical Systems Inc.
Carmichael Engineering Ltd.
Carr Aire Ltd.
Cascade Mechanical Services Limited
Chad Air Systems
Circa Refrigeration Inc.
Clow Darling Limited
Concept Air Systems Ltd.
Consistent Cooling Inc.
Constant Temperature Control Ltd.
Cool Check Air Conditioning Limited
Demand Air Systems Ltd.
Doray's Refrigeration & Air Cond.

Douglas Refrigeration Incorporated
Drennan Refrigeration Inc.
Enera Controls
Environs Services
Francis Contracting Ltd.
G D R Mechanical Inc.
General Air Systems Inc.
Gordon Wright Electric Limited
Grant Refrigeration
Grayco Air
Graywood Electric
H.V.A.C. Consultants Inc.
Highland Refrigeration Services Ltd.
Hylton Heating and Cooling
I.C.E.A. Systems Corp.
Inter Wide Services Ltd.
J L Energy Consultants Ltd.
J R Hernborg Ltd.
J R Mechanical Systems Ltd.
J W Aubie Heating & Air Cond. Ltd.
John Baycroft Mechanical Systems
Jordan Boiler Repair Incorporated
Kendale Mechanical Ltd.
M.T.I. Ltd.
Major Air Systems Ltd.
Mapleridge Mechanical
Margell Mechanical Contractors Ltd.
Mechanical Equipment Services
Metro Mechanical Services Ltd.
Michael Mechanical Services Ltd.
Michael Mechanical Services (Toronto) Limited
Mitchell Refrigeration Ltd.
N & N Sheet Metal
North York Mechanical Ltd.
Oakwood Mechanical Systems Ltd.
Ontario Air Systems
P M A Mechanical Inc.
Pamar Mechanical Ltd.
Penn Refrigeration Limited
Philip Doyle Mechanical Inc.
Prime Air Control Inc.
Principal Heating Company Limited
R E Corner Refrigeration
R N Mechanical

Robcan *Air* Conditioning Ltd.
Robertson & Associates Mech. Cont.
Rothmar Manufacturing Corporation
Sarnia Commercial & Ind. Refrigeration Ltd.
Sartech Mechanical Services Ltd.
Scott Mechanical Limited
Sentry Air Systems
Shea Control Systems Ltd.
Solomon Energy Systems Limited
Spring Water Ice Ltd.
Springbank Mechanical Systems Ltd.
Stan Newmarch Mechanical Ltd.
Strickland Mechanical
Superior Trade Services Limited
Sydenham Sales and Service Limited
T & D Air Cond. Processes Inc.
Techore Heating & Cooling Co.
Thermal Mechanical Systems
Trane Service Agency (Hamilton)
Trane Service Agency (London)
Trane Service Agency (Kitchener)
Trans Air Mechanical Ltd.
Transcool Inc.
Xtra Mechanical Limited

Values, Formulas and Conversion Charts

*A practical pocket guide
for Journeymen
and Apprentice Refrigeration
and Air Conditioning
Mechanics*

**THERE IS NO SUBSTITUTE
FOR U.A. SKILLED
CRAFTSMEN**

A.F.L. C.I.O.

REFRIGERANTS

VAPOR PRESSURE, PSIG

TEMP. F°	COLOR CODE							R-717 Ammon.
	Orange 11	White 12	Green 22	Purple 113	Blue 114	Yellow 500	Orchid 502	
-50	28.9	15.4	6.1		27.2		0.0	14.3
-45	28.7	13.3	2.7		26.7		2.0	11.7
-40	28.4	11.0	0.5		26.1	7.9	4.3	8.7
-35	28.1	8.4	2.5		25.5	4.8	6.7	5.4
-30	27.8	5.5	4.8	29.3	24.7	1.4	9.4	1.6
-25	27.4	2.3	7.3	29.2	23.9	1.1	12.3	1.25
-20	27.0	0.6	10.1	29.1	22.9	3.1	15.5	3.6
-15	26.5	2.4	13.1	28.9	21.8	5.4	19.0	6.1
-10	26.0	4.5	16.4	28.7	20.6	7.8	22.8	9.0
-5	25.4	6.7	20.0	28.5	19.3	10.4	26.9	12.9
0	24.7	9.2	23.9	28.2	17.8	13.3	31.2	15.7
5	24.0	11.8	28.1	27.9	16.1	16.4	36.0	19.6
10	23.1	14.6	32.7	27.6	14.3	19.8	41.1	23.8
15	22.1	17.7	37.7	27.2	12.3	23.4	46.6	28.5
20	21.1	21.0	43.0	26.8	10.1	27.3	52.4	33.5
25	19.9	24.6	48.7	26.3	7.6	31.6	58.7	39.0
30	18.6	28.5	54.8	25.8	5.0	36.1	65.4	45.0
35	17.2	32.6	61.4	25.2	2.1	41.0	72.6	51.5
40	15.6	37.0	68.5	24.5	0.5	46.2	80.2	58.6
45	13.9	41.7	76.0	23.8	2.2	51.8	87.7	66.3
50	12.0	46.7	84.0	22.9	4.0	57.8	96.9	74.5
55	10.0	52.0	92.5	22.1	6.0	64.1	109.7	83.4
60	7.7	57.7	101.6	21.0	8.1	71.0	115.6	92.9
65	5.3	63.8	111.2	19.9	10.4	78.1	125.8	103.1
70	2.6	70.2	121.4	18.7	12.9	85.8	136.6	114.1
75	0.1	77.0	132.2	17.3	15.5	93.9	147.9	125.8
80	1.6	84.2	143.6	15.9	18.3	102.5	159.9	138.3
85	3.2	91.8	155.6	14.3	21.4	111.5	172.5	151.7
90	5.0	99.8	168.4	12.5	24.6	121.2	185.8	165.9
95	6.8	108.3	181.8	10.6	28.0	131.3	199.7	181.1
100	8.9	117.2	195.9	8.6	31.7	141.9	214.4	197.2
105	11.1	126.6	210.7	6.4	35.6	153.1	229.7	214.2
110	13.4	136.4	226.3	4.0	39.7	164.9	245.8	232.3
115	15.9	146.8	242.7	1.4	44.1	177.4	266.1	251.5
120	18.5	157.7	259.9	0.7	48.7	190.3	280.3	271.7
125	21.3	169.1	277.9	2.2	53.7	204.0	298.7	293.1
130	24.3	181.0	296.8	3.7	58.8	218.2	318.0	315.0
135	27.4	193.5	316.5	5.4	64.3	233.2	338.1	335.0
140	30.8	206.6	337.2	7.2	70.1	248.8	359.2	365.0
145	34.4	220.3	358.8	9.2	76.3		381.1	390.0
150	38.2	234.6	381.5	11.2	82.6		404.0	420.0

Bold Numerals-Inches Hg. Below 1 ATM

IC-11C

Temp (F°)	SUVA™ Centri-LP HCFC 123	SUVA™ Chill-LP HCFC 124	SUVA™ Freez-HP HFC 125	SUVA™ Cold-MP HFC 134a
100	29.9	29.2	24.4	27.8
-90	29.8	28.8	21.7	26.9
-80	29.7	28.2	18.1	25.6
-70	29.6	27.4	13.3	23.8
60	29.5	26.3	7.1	21.5
-50	29.2	24.8	0.3	18.5
-40	28.9	22.8	4.9	14.7
-30	28.5	20.2	10.6	9.8
-20	27.8	18.9	17.4	3.8
-10	27.0	12.7	25.6	1.8
0	26.0	7.6	33.1	6.3
10	24.7	1.4	46.3	11.6
20	23.0	3.0	59.2	18.1
30	20.8	7.5	74.1	25.1
40	18.2	12.7	91.2	34.5
50	15.0	18.8	110.6	44.9
60	11.2	25.9	132.8	56.9
70	6.6	34.1	157.8	70.7
80	1.1	43.5	186.0	86.4
90	2.6	54.1	217.5	104.2
100	6.3	66.2	252.7	124.3
110	10.5	79.7	291.6	146.8
120	15.4	94.9	334.3	171.9
130	21.0	111.7	380.3	199.8
140	27.3	130.4	430.2	230.5
150	34.5	151.0	482.1	264.4
160	42.5	173.6		301.5
170	51.5	198.4		342.0
180	61.4	225.6		385.9
190	72.5	255.1		433.6
200	84.7	287.3		485.0
210	98.1	322.1		540.3
220	112.8	359.9		
230	128.9	400.6		
240	146.3	444.5		
250	165.3	491.8		
260	185.8			
270	207.9			
280	231.8			
290	257.5			
300	285.0			

*Vapor pressures are shown as PSIG. Bold figures are shown as inches of mercury vacuum.

Chemical Names and Formulas for SUVA Refrigerants

Registered Trademark	Chemical Name	Formula	Boiling Point °F
SUVA Centri-LP HCFC 123	Ethane, 2,2-Dichloro, 1,1,1, Trifluoro	CHCl ₂ CF ₃	82.2
SUVA Chill-LP HCFC 124	Ethane, 2, Chloro-1,1,1 2-Tetrafluoro	CHClFCF ₃	12.2
SUVA Freez-HP HFC 125	Ethane, Pentafluoro	CHF ₂ CF ₃	-55.3
SUVA Cold-MP HFC 134a	Ethane, 1,1,1,2- Tetrafluoro	CH ₂ FCF ₃	-15.7

REFRIGERANT LINE CAPACITIES IN TONS

Copper Tube		Line Size O.D.				
Type L		1/2	5/8	7/8	1-1/8	1-3/8
R-12 40°F Evap.	Liquid Line	2.03	4.00	10.5	21.8	37.8
	Dischg. Line	.47	.88	2.30	4.67	8.02
	Suct'n Line*	.30	.56	1.46	2.98	5.24
R-22 40°F Evap.	Liquid Line	3.5	6.4	17.0	34.4	60.0
	Dischg. Line	.86	1.63	4.32	8.64	15.1
	Suct'n Line*	.59	1.10	2.89	5.82	9.96
R-502 40°F Evap.	Liquid Line	2.19	4.17	11.0	23.3	40.6
	Dischg. Line	.68	1.29	3.50	7.10	12.7
	Suct'n Line*	.48	.90	2.52	5.03	9.00
Iron Pipe		3/8	1/2	3/4	1	1-1/4
R-717 0°F Evap.	Liquid Line	11.6	23.5	53.2	105.0	225.0
	Dischg. Line	—	3.43	7.55	15.0	39.2
	Suction Line	—	—	—	3.46	8.90

Copper Tube		Line Size O.D.				
Type L		1-5/8	2-1/8	2-5/8	3-1/8	3-5/8
R-12 40°F Evap.	Liquid Line	60.4	125.0	223.0	355.0	533.0
	Dischg. Line	13.0	26.5	46.7	75.3	110.0
	Suct'n Line'	8.20	17.0	30.0	48.0	71.1
R-22 40°F Evap.	Liquid Line	95.0	200.0	354.0	572.0	860.0
	Dischg. Line	23.6	49.8	87.0	136.0	203.0
	Suct'n Line*	15.95	33.2	58.1	93.1	139.5
R-502 40°F Evap.	Liquid Line	65.5	139.0	250.0	406.0	625.0
	Dischg. Line	20.0	42.6	76.5	127.0	186.0
	Suct'n Line*	14.4	30.2	54.7	89.6	133.0
Iron Pipe		1-1/2	2	2-1/2	3	4
R-717 0°F Evap.	Liquid Line	351.0	805.0	1280.0	2270.0	4630.0
	Dischg. Line	58.0	113.0	180.0	316.0	640.0
	Suct'n Line*	13.7	26.2	42.2	73.9	151.0

*Capacities indicated are based on a pressure drop equal to 2°F loss per 100 ft. equivalent line length. All other capacities are based on a 1°F loss.

Measuring Operating Superheat

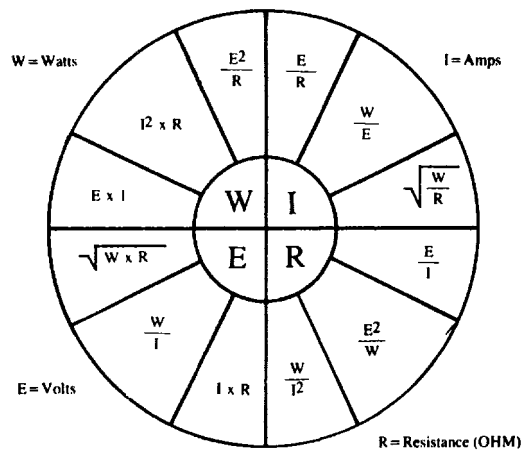
1. Determine suction pressure with accurate gauge at evaporator outlet. On closely coupled installations, suction pressure may be read at compressor suction connection.
2. From refrigerant pressure-temperature tables, determine saturation temperature at observed suction pressure.
3. Measure temperature of suction gas at Thermo Valve remote bulb location.
4. Subtract saturation temperature read from tables in step No. 2 from temperature measured in step No. 3. Difference is superheat of suction gas.

Heating Values of Various Fuels

Coal=25 million Btu per ton (average)
 1 ton coal=2 cords wood (approximately)
 Oil (domestic grades)=136,000 to 140,000 Btu per gallon.
 Gas (manufactured)=500 to 550 Btu per cubic foot
 Gas (natural)=1000 to 1100 Btu per cubic foot
 Gas (propane)=2509 Btu per cubic foot=21,500 Btu per pound=91,160 Btu per gallo
 Gas (butane)=3200 Btu per cubic foot=21,300 Btu per pound=100,000 Btu per gallo
 1 pound Steam at 15 psig=1164 Btu

MISCELLANEOUS ELECTRICAL FORMULAS

OHM's Law Made Easy



Power — A.C. Circuits:

$$\text{Power Factor} = \frac{\text{Watts}}{\text{Volts} \times \text{Amperes}}$$

$$\text{Three Phase Kilowatts} = \frac{\text{Volts} \times \text{Amperes} \times \text{Power Factor} \times 1.732}{1000}$$

$$\text{Three Phase Volt-Amperes} = \text{Volts} \times \text{Amperes} \times 1.732$$

$$\text{Three Phase Amperes} = \frac{746 \times \text{Horsepower}}{1.732 \times \text{Volts} \times \text{Efficiency} \times \text{Power Factor}}$$

$$\text{Single Phase Kilowatts} = \frac{\text{Volts} \times \text{Amperes} \times \text{Power Factor}}{1000}$$

$$\text{Single Phase Amperes} = \frac{746 \times \text{Horsepower}}{\text{Volts} \times \text{Efficiency} \times \text{Power Factor}}$$

Power — D.C. Circuits:

$$\text{Watts} = \text{Volts} \times \text{Amperes}$$

$$\text{Amperes} = \frac{\text{Watts}}{\text{Volts}}$$

$$\text{Horsepower} = \frac{\text{Volts} \times \text{Amperes} \times \text{Efficiency}}{746}$$

Motor Application Formulas:

$$\text{Torque (lb.-ft.)} = \frac{\text{Horsepower} \times 5250}{\text{RPM}}$$

For Pumps:

$$\text{Horsepower} = \frac{\text{GPM} \times \text{Head in Feet} \times \text{Specific Gravity}}{3960 \times \text{Efficiency of pump}}$$

For Fans and Blowers:

$$\text{Horsepower} = \frac{\text{CFM} \times \text{Pressure (in H}_2\text{O)}}{6350 \times \text{Efficiency}}$$

$$\text{Pumping Brake Horsepower} = \frac{\text{GPM} \times \text{Head (Feet)}}{3960 \times \text{Efficiency (60-75\%)}}$$

$$\text{Synchronous RPM} = \frac{\text{Hertz} \times 120}{\text{Poles}}$$

$$\text{Percent Slip} = \frac{\text{Synchronous RPM} - \text{Full Load RPM}}{\text{Synchronous RPM}} \times 100$$

$$\text{SEER or HSPF} = \frac{\text{BTU Output Per Season}}{\text{Watts Input Per Season}} \quad \text{EER or COP} = \frac{\text{BTU Output Steady State}}{\text{Watts Input Steady State}}$$

Fan Law 1:

$$\text{New CMF} = \frac{\text{New RPM} \times \text{Existing CFM}}{\text{Existing RPM}}$$

or

$$\text{New RPM} = \frac{\text{New CFM} \times \text{Existing RPM}}{\text{Existing CFM}}$$

Fan Law 2:

$$\text{New Static Pressure} = \left(\frac{\text{New RPM}}{\text{Existing RPM}} \right)^2 \times \text{Existing Static Pressure}$$

Fan Law 3:

$$\text{New HP} = \left(\frac{\text{New RPM}}{\text{Existing RPM}} \right)^3 \times \text{Existing HP}$$

$$\text{New Pulley Diameter} = \frac{\text{Existing Pulley Diameter} \times \text{New Speed}}{\text{Existing Speed}}$$

V-Belt Size:

$$\text{O.C.} = (D_m + D_f) 1.57 + 2L$$

Pulley Speeds:

$$\text{SF} = \frac{D_m \times S_m}{D_f}$$

O.C. = Outside Circumference

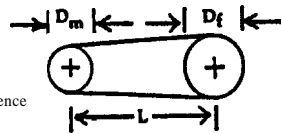
S_m = RPM of Motor

S_f = RPM of Fan

L = Length Dimension Between Centers

D_m = Diameter of Motor Pulley

D_f = Diameter of Fan Pulley



filtration

$$\text{Volume (Ft}^3) \div 60 = \text{CFM (Equivalent to one air change per hour)}$$

$$\text{Number of Air Changes} \times \text{CFM Per Air Change} \times 1.08 \times \text{T.D. (Temperature Difference)} = \text{Btuh}$$

$$\text{GPM} = \frac{\text{BTU/hr}}{500} \times \square \text{ T (}^\circ\text{F)}$$

$$\text{Cooling Tower GPM (compression)} = \frac{\text{Tons} \times 30}{\square \text{ T (}^\circ\text{F)}}$$

$$\text{Cooling Tower GPM (absorption)} = \frac{\text{Tons} \times 62}{\square \text{ T (}^\circ\text{F)}}$$

$$\text{Chiller GPM} = \frac{\text{Tons} \times 24}{\square \text{ T (}^\circ\text{F)}}$$

$$\text{Hot Water Usage KWh/Month} = \frac{\text{Gallons/Month} \times 8.33 \times \square \text{ T (}^\circ\text{F)}}{3413}$$

$$\text{Sensible Heat, BTU/HR} = \text{CFM} \times 1.08 \times \square \text{ T (}^\circ\text{F)}$$

$$\text{Latent Heat, BTU/HR} = \text{CFM} \times 0.68 \times \square \text{ g (grains)}$$

$$\text{Total Heat, BTU/HR} = \text{CFM} \times 4.5 \times \square \text{ h (enthalpy)}$$

USEFUL CONVERSION FACTORS

To Convert	To	Multiply By
Feet of water	Inches of Mercury	0.8826
Feet of water	Pounds/sq. inch	0.4335
Gallons of water	Pounds of water	8.3452
Gallons of No. 2 oil	BTU's	140,000
Horsepower	Kilowatts	0.7457
Horsepower	Btu/Hr.	2545
Horsepower (boiler)	Btu/Hr.	33479
Horsepower (boiler)	Kilowatts	9.803
Inches of Mercury	Feet of water	1.133
Inches of Mercury	Pounds/sq. inch	0.4912
Kilowatts	Btu/Hr.	3413
Kilowatts	Watts	1000
Kilowatt-hours	Btu	3413
Pounds of water	Cubic feet	0.01602
Pounds of water	Gallons	0.1198
Pounds/sq. inch	Feet of water	2.307
Therms of Gas	BTU's	100,000
Tons (refrigeration)	Btu/Hr.	12,000
Watts	Btu/Hr.	3.413
Watt-hours	Btu	3.413

VACUUM CONVERSION CHART

	Gauge Psig.	Absolute Psia.	mm of Mercury	Microns	Boiling Temp of Water °C
	250	264.7			
	200	214.7			
	100	114.7			
	0	14.696	760	760,000	212
Inches Mercury below one atmosphere (gauge)	10.24	9.629	500	500,000	192
	22.05	3.865	200	200,000	151
	25.98	1.935	100	100,000	124
	27.95	0.968	50	50,000	101
	28.94	0.481	25	25,000	78
	29.53	0.192	10	10,000	52
	29.72	0.099	5	5,000	35
	29.842	0.039	2	2,000	15
	29.882	0.019	1.00	1,000	+1*
	29.901	0.010	0.50	500	-11
	29.917	0.002	0.10	100	-38
	29.919	0.001	0.05	50	-50
	29.9206	0.0002	0.01	10	-70
	29.921	0	0	0	

*Recommended Field Evacuation Conditions