

READ THIS PAGE FIRST

1. **Howard-McCray would like to thank you for purchasing one of our units.**
PLEASE READ THIS MANUAL CAREFULLY BEFORE PROCEEDING WITH THE INSTALLATION OR OPERATING OF THIS UNIT.
2. **Environment** - These display cabinets are made to operate at 75°F and 55% relative humidity. Temperature and/or humidity greater than the factory recommendations will hinder the performance of this cabinet.
3. **Cabinet Set-Up** – A qualified electrician should provide proper voltage the cabinet, this is extremely critical to the proper operation of this unit. Failure to have this unit installed by a qualified electrician may VOID all the warranties on this unit.
4. **Location** – This cabinet must not be located in the direct rays of the sun or near radiant heat sources. A minimum of 3" of free air space is required at the rear of the cabinet.
5. **Never spray water into the cabinet.** This will cause damage to the seals.
6. **If additional assistance is required, please call us at 1-800-344-8222.**

READ THIS PAGE FIRST



Installation and Operating Instructions For

CHS34N, 35 & 40E Series **Hot Food Service Cases**

Important Instructions

**Please Read carefully
Before attempting to
install or operate the cabinet**

**Keep this Book for
Future Reference**

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Leg Installation Drawing ----- 1SH7789

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CHS34N Cross Section View -----

CHS34N-4, 6, 8 Plan View ----- 8D8010

CHS35 Cross Section View ----- 4D8007

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CHS40E Cross Section View ----- 4M8007

CHS40E-4, 6, 8 Plan View----- 4D8008

Warranty Information -----

**The following instructions are for the benefit of the new owner and the installing contractor.
They should be studied carefully before attempting to install or operate the cabinet.
This manual is the property of the owner and should remain in the owner's possession.**

Engineering Specifications

Model No.	Cabinet Dimensions D x H* x L	Heating Wells	Door Size	Number of Doors	Display Glass Size
CHS34N-4	34-1/2 x 55 x 48	3	24 1/2 x 18 1/2	2	19 3/4 x 43.00
CHS34N-6	34-1/2 x 55 x 72	4	24 1/2 x 29 1/2	2	19 3/4 x 67.00
CHS34N-8	34-1/2 x 55 x 96	6	24 1/2 x 18 1/2	4	19 3/4 x 91.00
CHS35-4	35-1/2 x 52 x 50	3	19-1/4 x 19-9/16	2	19-3/4 x 43
CHS35-6	35-1/2 x 52 x 71	4	19-1/4 x 29-13/16	2	19-3/4 x 64
CHS35-8	35-1/2 x 52 x 95	6	19-1/4 x 19-9/16	4	19-3/4 x 88
CHS40E-4	40 x 53 x 52-1/2	3	23-9/16 x 20-7/8	2	19-3/4 x 45-21/32
CHS40E-6	40 x 53 x 76-1/2	4	23-9/16 x 31-3/8	2	19-3/4 x 69-21/32
CHS40E-8	40 x 53 x 105-1/2	6	23-9/16 x 20-7/8	4	19-3/4 x 93-21/32

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Model No.	Well Voltage/Phase/Cycle	AMP Draw	Light Voltage	AMP Draw	Light Fuse Size
CHS34N-4	240/3/60	11.6	115/60/1	4.4	5
CHS34N-6	240/3/60	17.6	115/60/1	5.8	8
CHS34N-8	240/3/60	23.1	115/60/1	8.7	10
CHS35-4	240/3/60	11.6	115/60/1	4.4	5
CHS35-6	240/3/60	17.6	115/60/1	5.8	8
CHS35-8	240/3/60	23.1	115/60/1	8.7	10
CHS40E-4	240/3/60	11.6	115/60/1	4.4	5
CHS40E-6	240/3/60	17.6	115/60/1	5.8	8
CHS40E-8	240/3/60	23.1	115/60/1	8.7	10
CHS34N-4	240/1/60	20.0	115/60/1	4.4	5
CHS34N-6	240/1/60	26.7	115/60/1	5.8	8
CHS34N-8	240/1/60	40.0	115/60/1	8.7	10
CHS35-4	240/1/60	20.0	115/60/1	4.4	5
CHS35-6	240/1/60	26.7	115/60/1	5.8	8
CHS35-8	240/1/60	40.0	115/60/1	8.7	10
CHS40E-4	240/1/60	20.0	115/60/1	4.4	5
CHS40E-6	240/1/60	26.7	115/60/1	5.8	8
CHS40E-8	240/1/60	40.0	115/60/1	8.7	10
CHS34N-4	208/3/60	10.0	115/60/1	4.4	5
CHS34N-6	208/3/60	15.3	115/60/1	5.8	8
CHS34N-8	208/3/60	20.0	115/60/1	8.7	10
CHS35-4	208/3/60	10.0	115/60/1	4.4	5
CHS35-6	208/3/60	15.3	115/60/1	5.8	8
CHS35-8	208/3/60	20.0	115/60/1	8.7	10
CHS34N-4	208/1/60	17.3	115/60/1	4.4	5
CHS4N-6	208/1/60	23.1	115/60/1	5.8	8
CHS4N-8	208/1/60	34.6	115/60/1	8.7	10
CHS35-4	208/1/60	17.3	115/60/1	4.4	5
CHS35-6	208/1/60	23.1	115/60/1	5.8	8
CHS35-8	208/1/60	34.6	115/60/1	8.7	10
CHS40E-4	208/1/60	17.3	115/60/1	4.4	5
CHS40E-6	208/1/60	23.1	115/60/1	5.8	8
CHS40E-8	208/1/60	34.6	115/60/1	8.7	10

Installation and Operating Instructions

The following instructions are for the benefit of the new owner and the installing contractor. They should be studied carefully before attempting to install or service the cabinet. This manual is the property of the owner and should remain in the owner's possession.

Receiving and Inspection Procedure

1) The cabinet has been carefully operation tested and inspected before crating and has been determined to be in good operating condition before leaving the factory.

2) Upon arrival of the cabinet, the crate should be inspected thoroughly for any damage that may have occurred in transit. In the event that any damage is discovered, it should be noted on the delivery ticket or Bill of landing and signed to that effect. An immediate claim should then be filed against the carrier giving them the description and the amount of damage.

3) After the crate has been removed, the cabinet should be inspected carefully for any damage. If there is any concealed damage, the carrier should be notified at once. Confirm any claims in writing.

4) Our company can assume no responsibility for filing freight claims as the equipment was in good order on a clear Bill of Landing, F.O.B. Philadelphia. However, the factory will assist, if required.

Installing the Cabinet

1) Locate the cabinet in a well ventilated area; this will assist in the removal or elimination of condensation on the front glass.

2) It is important to realize that the cabinet is heavy and of course will weigh much more when loaded. For this reason, it is necessary that the floor and supports are sufficient to accommodate the strain.

3) It is important that the cabinet be leveled, from front to back and from side to side. This will allow the waste water to drain properly.

4) The waste water drains must be connected to a sanitary drain.

5) It is always a good idea to have a competent electrician to make the electrical connections to the cabinet. The cabinet has two (2) electrical power supply box for the heater wells. The smaller of the electrical power boxes are for the lights. To obtain the electrical power voltage

requirements of the cabinet, check the serial & rating plate, located on the rear of the cabinet.

Note: The voltage supplied to the heater wells must be the same as shown on the serial & rating plate, otherwise the wells will not be able to heat properly.

McCray Steam Table Operating Instructions

This Unit is to be used for holding temperature only.

General Installation:

- 1) Always clean equipment thoroughly before first use. (See general cleaning instructions.)
- 2) Check rating label for your model designation & electrical rating.
- 3) For best results, use stainless steel countertops.
- 4) All dimensions in parenthesis in centimeters, unless noted.

General Operating Instructions:

- 1) All food service equipment should be operated by trained personnel.
- 2) Do not allow your customers to come in contact with any surface labeled "CAUTION HOT."
- 3) Where applicable: Never pour cold water into dry heated units.
- 4) Where applicable, do not cook, warm or hold food directly in liner pans (well pans). Always use steam table pans/insets, etc.
- 5) Never hold food below 150°F (66°C)

Wet set-up and operation procedures:

1) Before filling the wells with water, make sure that the water cut-off valves are in the "OFF" position. Fill the steam table wells with 1" (approximately 1 gallon) of hot water, excessive water will cause condensation on the front glass. Make sure every well is filled with water, even if you are not going to use it.

All wells must have water in them and must be turned "ON" to maintain proper heat in the Steam Table cavity.

Add hot water 120°-140°F (50°-60°C) to well pan: (12x20) use: 3.75 Quarts (15 Cups) (3.5 Litres)

2) Put the steam table display pans you intend to use in each well opening. This will allow the pans to heat up as the unit heats up. This also helps eliminate condensation on the front glass.

2) Turn thermostat control to "10" setting or if equipped with infinite control to "7" or "High". Preheat for approximately 30 minutes.

3) Place covered inset with preheated product into well.

4) Re-adjust control after another 30 minutes of operation to acquire desired temperature depending on the amount and thickness of product.

5) Keep inset/steamtable pan(s) covered to maintain ideal serving temperature.

6) All wells must have water in them and must be turned "ON" to maintain proper heat in the Steam Table cavity. Do not let well run dry.

Each individual food warmer is controlled by an infinite temperature control with a positive "OFF" position and a Red signal light, to indicate when the well is heating. Units have upper limit thermostats which prevent accidental overheating. All units are supplied with individual drains connected to a 3/4" copper drain. The food warmer units are Underwriter's Recognized and meet the standards of the National Sanitation Foundation. Each well has one (1) 175W Max. Heat lamp located over them.

General Cleaning Instructions:

1) The Steam Table and wells should be cleaned every day, with detergent and water only, to maintain its appearance. NEVER clean any electrical unit by immersing it in water. Turn off before surface cleaning.

2) Always clean equipment thoroughly before first use. Clean unit daily. Use warm, soapy

water (except where noted on charts). Mild cleansers and PLASTIC scouring pads may be used to remove baked-on food and water scale.

3) Make sure each will control switch knob is turned "OFF". When the steam table is cool, use a mild soap solution to wipe off the surface. Turn off electrical units before cleaning or servicing. All service should be performed by an authorized service agency.

Clean food spills from the will cavity.

NEVER use oven cleaners on the surfaces and NEVER put Drano or other types of drain cleaners in the wells. This will cause the steal to deteriorate and the Steam Table will start to leak.

Proper care and maintenance of the unit will ensure a longer life span for the unit and prevent unnecessary repairs.

Caster or Leg Installation

Most cabinets are supplied with a set of casters. These casters are shipped as separate items and will need to be installed before the cabinet is located in position. See the ***Caster Installation*** drawing for exact instructions.

Some cabinets are ordered and supplied with adjustable legs. These legs and mounting plates are shipped as separate items and will need to be installed before the cabinet is located in position. See the ***Leg Installation*** drawing for exact instructions.

NOTE When installing either Casters or Legs, take all necessary safety precautions when elevating the cabinet.

Keep this Page for Your Records:

Dear Customer:

We wish to congratulate you on your judgment. We are very proud to have been privileged to serve you with Howard-McCray equipment to fill your requirements.

Howard-McCray equipment is the product of a company dedicated in producing products of quality, incorporating progressive features on a timely basis and backed by a warranty which provides confidence.

Should you have any questions regarding features, operation, or service, call the Howard-McCray Assistance Center toll free. (800-344-8222)

Thank you,

Howard-McCray

Customer Installation Record:

Cabinet Model Number _____

Serial Number _____

Condensing Unit Model Number and Horsepower _____

Type of Control _____

Refrigerant _____

Thermostat _____

Other _____

Defrost Period _____

Date of Start-Up _____

Other Remarks _____

Installing Contractor _____

Address _____

Phone Number _____

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NOTES:

This image shows a full page of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

90-171

Cabinet Wiring Diagram (*CHS34N & CHS35 & 40E-4 3PHASE*)----- 4M6509

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Cabinet Wiring Diagram (*CHS34N & CHS35 & 40E-6 3PHASE*)----- 6M6509

90-171

Cabinet Wiring Diagram (*CHS 34N & CHS35 & 40E-8 3PHASE*)----- 8M6509

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Cabinet Wiring Diagram (*CHS34N & CHS35 & 40E-4 1PHASE*)----- 4M6510

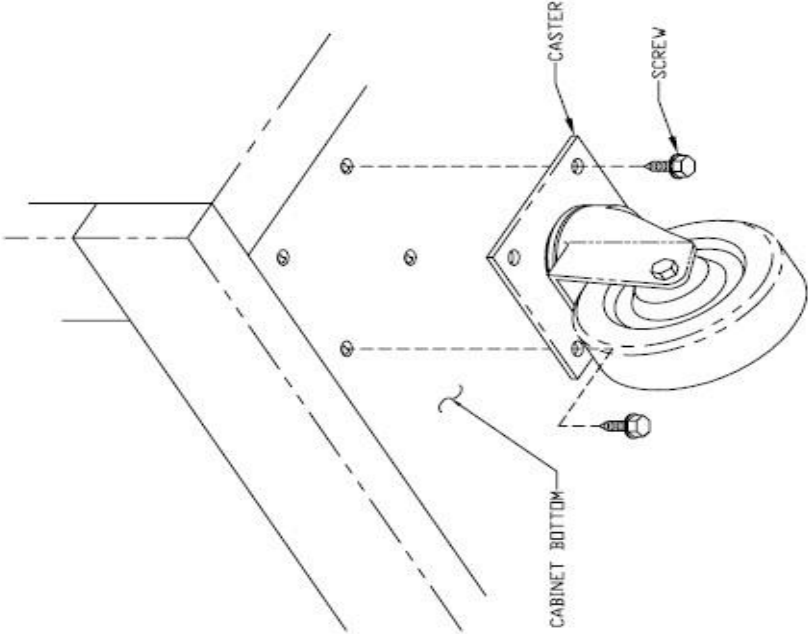
90-171

Cabinet Wiring Diagram (*CHS 34N & CHS35 & 40E-6 1PHASE*)----- 6M6510

90-171

Cabinet Wiring Diagram (*CHS 34N & CHS35 & 40E-8 1PHASE*)----- 8M6510

[illegible]

ITEM	QTY	PART NO.	DESCRIPTION																	
<div></div> <div><p>CASTER ATTACHMENT:</p><ol style="list-style-type: none">1) RAISE CABINET FAR ENOUGH OFF OF FLOOR (MIN 6") TO ALLOW CASTER INSTALLATION.2) ATTACH CASTER TO CABINET BOTTOM WITH THE PROVIDED SCREWS.<p>NOTE: AT THE FRONT RIGHT AND LEFT CORNERS OF THE CABINET INSTALL THE (2) CASTERS WITH THE BRAKE.</p><ol style="list-style-type: none">3) GENTLY LOWER THE CABINET TO THE FLOOR AND PUSH INTO PLACE.<p>CAUTION: DO NOT LEAN OR TILT THE CABINET WHEN INSTALLING OR MOVING.</p><ol style="list-style-type: none">4) AFTER THE CABINET IS IN POSITION, LOCK THE (2) FRONT CASTERS WITH THE BRAKE, SO THAT THE CABINET WILL NOT MOVE.</div>																				
<div><div><i>Howard/McCray</i></div><div><table><tr><td colspan="2">PART NAME</td></tr><tr><td colspan="2">CASTER INSTALLATION</td></tr><tr><td>DRAWN</td><td>DATE</td></tr><tr><td>~(W)</td><td>10/29/06</td></tr><tr><td>SCALE</td><td>SHEET</td></tr><tr><td>1/25</td><td>1</td></tr><tr><td colspan="2">DRAWING NO.</td></tr><tr><td colspan="2">1SH7790</td></tr></table></div></div>				PART NAME		CASTER INSTALLATION		DRAWN	DATE	~(W)	10/29/06	SCALE	SHEET	1/25	1	DRAWING NO.		1SH7790		
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CHS34N CROSS SECTION

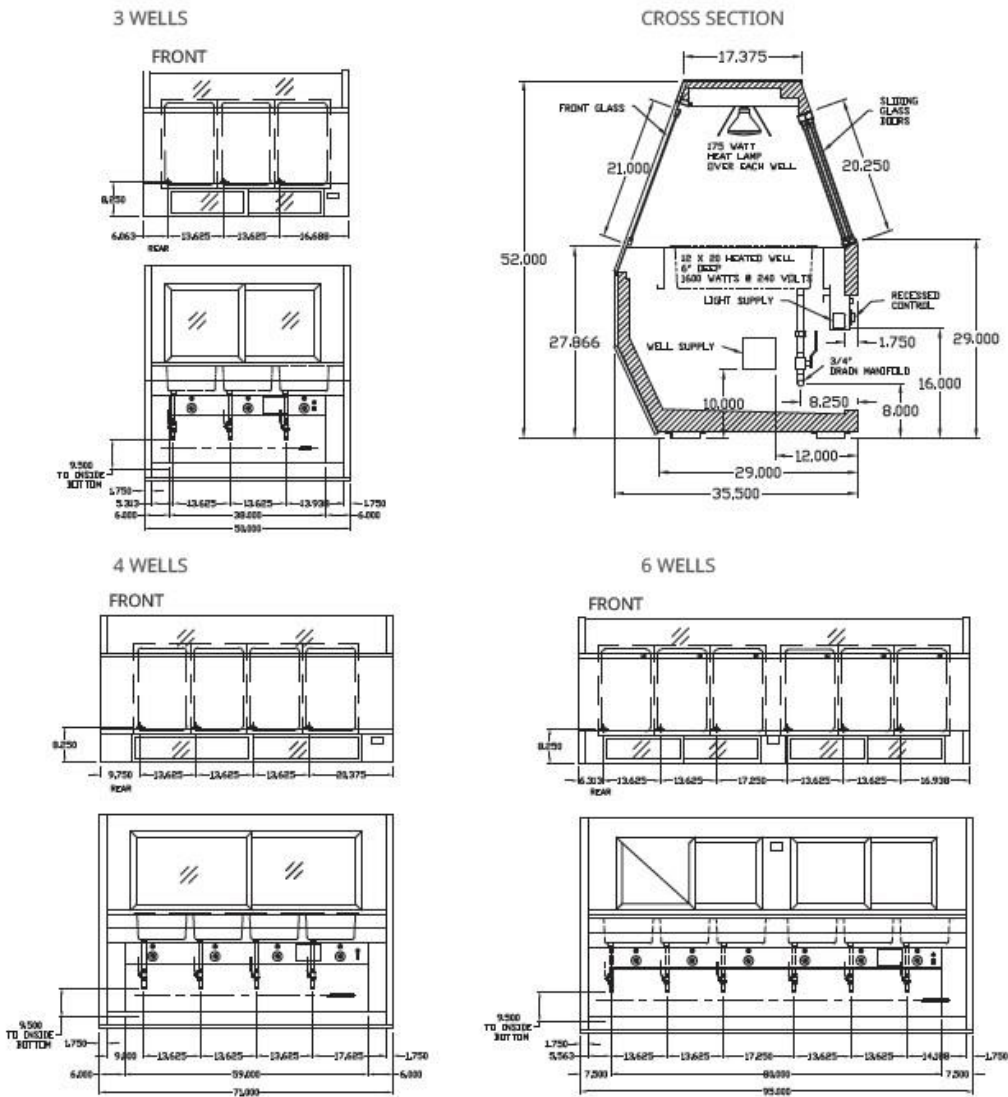
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CHS34N-PLAN VIEW

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CHS35 CROSS SECTION

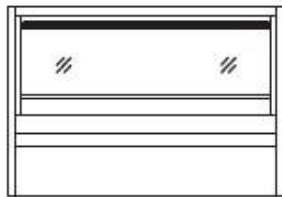
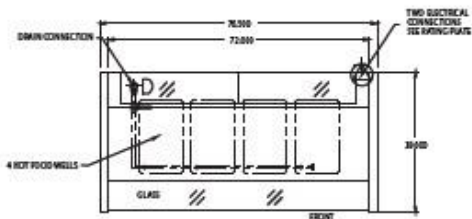
DRAWINGS • SIDE VIEW • PLAN VIEW



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CHS40E CROSS SECTION

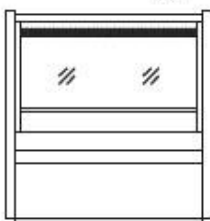
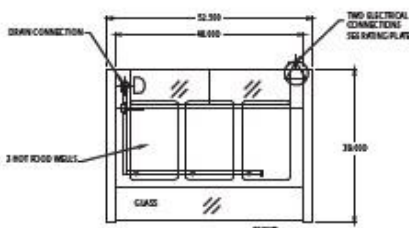
DRAWINGS • SIDE VIEW • PLAN VIEW



CHS40E-6

6' ELECTRICAL INFO

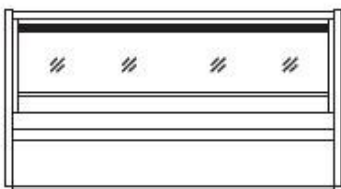
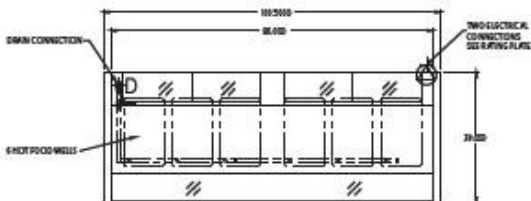
208/120V SINGLE PHASE 23.1/5.8 AMPS 30/15 FUSE
240/120V SINGLE PHASE 26.7/5.8 AMPS 35/15 FUSE
208/120V 3PHASE 15.3/5.8 AMPS 20/15 FUSE
240/120 3PHASE 17.6/5.8 AMPS 25/15 FUSE



CHS40E-4

4' ELECTRICAL INFO

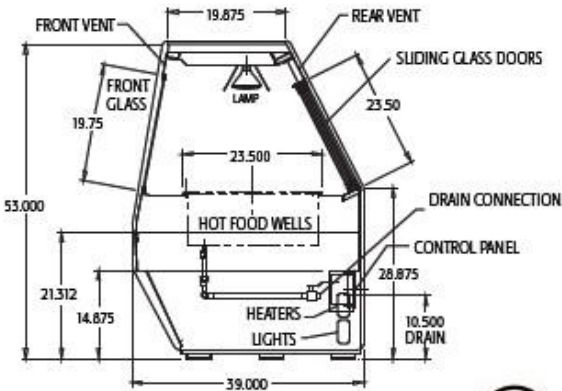
208/120V SINGLE PHASE 17.3/4.4 AMPS 25/15 FUSE
240/120V SINGLE PHASE 20.0/4.4 AMPS 25/15 FUSE
208/120V 3PHASE 10.0/4.4 AMPS 15/15 FUSE
240/120 3PHASE 11.6/4.4 AMPS 15/15 FUSE



CHS40E-8

8' ELECTRICAL INFO

208/120V SINGLE PHASE 34.6/8.7 AMPS 40/15 FUSE
240/120V SINGLE PHASE 40.0/8.7 AMPS 50/15 FUSE
208/120V 3PHASE 20.0/8.7 AMPS 25/15 FUSE
240/120 3PHASE 23.1/8.7 AMPS 30/15 FUSE



Howard-McCray

Issued 1/1/24

The warranty does not cover product loss or consequential damage.

TO ACTIVATE THE WARRANTY, THE FOLLOWING MUST BE COMPLETE:

1. Payment in full to Howard McCray.
2. Installed by a Qualified Refrigeration Company (1)
3. Warranty card must be completed and mailed within 14 days of installation

Warranty includes, but is not limited to, Refrigerators, Freezers and display cases sold in the Continental United States to the original Dealer and the respective customer. The warranty must be activated before any claims can be processed.

This warranty cannot be transferred under any circumstances.

Howard McCray

products are made for commercial use only, any warranty claim for residential

use will be denied and void immediately.

(1) A Qualified Refrigeration Company is defined as a fully licensed and insured refrigeration company that handles food service equipment.



All Warranty Claims must include the following or they will not be processed. The required is:

1. Service Authorization Number (SA#) – Provided by Howard McCray
2. Date of service
3. Model number of unit being serviced
4. Serial number of unit being serviced
5. Copy of wholesaler receipt for all parts replaced including compressor.

Please fill out Request for Warranty Reimbursement Form – **Schedule D**

The Recommended Service Allowances by HMC is listed on **Schedule B**

ITEMS NOT COVERED BY WARRANTY

Product Loss

Expansion Valves on Remote units

Light bulbs of any type except LED – **See Schedule C**

Adjustments of any type including thermostats, time clocks, expansion valves,

Hinges or controls - electronic or manual

Broken or cracked glass

Improper installation

Electrical surges which cause components to burn out

Damages due to spraying water into the unit

Claims not submitted within 60 days of date of service

Equipment that has experienced other stress or hazards such as floods, fire or other acts of nature.

One call per unit per problem

All Howard McCray equipment is intended in for indoor use with ambient temperatures exceeding 75 degrees and 55% relative humidity.



SCHEDULE B – LABOR RATES

Travel time - Not to exceed 1 hours max charge is \$ 60.00

Labor hours - Overtime is not permitted

Reclaim fee - Maximum allowance is \$ 25.00 Allowances

SCHEDULE C - PARTS WARRANTY

Some Parts are covered by 1 year Original factory warranty. These parts will be replaced by the original factory supplying these parts or designated wholesaler as listed.

Hot Wells are covered by APW and all claims must contain APW serial number.

It is the responsibility of the repairing refrigeration company to return these parts to HMC.

In order for the claim to be processed.

The part must be MARKED with:

Service Authorization # (SA#)

Model#

Serial #

All reimbursement request for parts must include wholesaler invoice copy except for

Sight Glass & Filter Driers. The current reimbursement rates for these parts are:

Request for Warranty Reimbursement – Schedule D

Howard/McCray
HMC Enterprises LLC
831 E. Cayuga St
Philadelphia, PA 19124

For questions related to warranty:
tsc@howardmccray.com
For Technical Service:
techservice@howardmccray.com

Today's Date: _____ Date of Service: _____

Service Authorization Number (SA#) _____

Model Number _____

Serial Number _____

Service Company _____

Address _____

City _____ State/Province _____

Zip Code _____ Contact Phone Number: _____

Email Address: _____

Service Performed: _____

Labor Rate per hour: _____

Labor Hours to perform service _____

Travel Time: _____

Checklist:

Copy of refrigeration wholesaler invoices for all parts used: _____

Original Service invoice from your company: _____

Copy or Photo of Compressor Tag: _____

Service Authorization on all documents: _____

Name & Contact Number: _____