

# Horizon™ Chewblet® ice icemaker

□ 1000 series, □ 1400 series or □ 1800 series  
with remote air-cooled condensing unit

(See model number guide)

## Short form specification

Icemaker to be a Follett® Horizon Chewblet ice icemaker model HCD\_\_\_\_\_ [Insert size/series, condenser & installation/mounting, from model number guide]  
 without remote condensing unit or  
 with remote air-cooled condensing unit, capable of producing compressed nugget ice using an efficient, sanitary horizontal evaporator/auger system and delivering ice by a flexible wire reinforced, transport tube to  ice storage bin,  ice and water dispenser,  
 ice and beverage dispenser,  drop-in dispenser or  Ice Manager™ diverter valve system and provided with a stainless steel frame and exterior, slide-out evaporator unit with utility docking station, front-mounted unit status display, automatic self-flush, and semi-automatic cleaning & sanitizing system, plus all the features listed below and mounting/performance-enhancing accessories checked:



## Horizon performance features

- Produces popular Chewblet ice (see Ice production tables on page 8):
  - 1000 series - up to 900 pounds (409 kg) in 24 hours or
  - 1400 series - up to 1333 pounds (605 kg) in 24 hours
  - 1800 series - up to 1580 pounds (717 kg) in 24 hours
  - Flexible tube ice-delivery-system allows Satellite-fill™ from up to 75 ft (22.9 m) from bin/dispenser
- Horizontal evaporator maximizes ice production
- Uses less water than cube icemakers
- Rejects less heat than a typical cube icemaker
- Quiet operation without noisy batch harvest cycles

## Unique Chewblet ice advantages

- Consumer-preferred chewable ice for beverages
- More reliable dispensing compared to nugget or pellet ice
- Slow melting – maintains beverage temperature & quality
- Higher liquid displacement than cube ice

## Key Horizon design features

- Compact design offers in-cabinet/undercounter, floor stand, wall bracket, on-fountain dispenser, or on-bin mounting
- Stainless steel frame & exterior
- Standard slide-out docking-station design allows removal of evaporator unit without disconnecting utilities
- Unique auger design reduces loads on gearmotor, bearings and seals
- Easy-to-read LED operating status & diagnostic display
- 10 ft (3 m) flexible ice transport tube and insulation standard with Satellite-fill models
- Uses environmentally responsible R404A refrigerant with zero ODP (ozone depletion potential)

## Sanitation and safety features

- Aluminum-bronze evaporator has antimicrobial properties
- Automatic self-flushing reduces water scale buildup
- Floatless, sealed design inhibits formation of biofilms
- Semi-automatic cleaning & sanitizing system

## Product warranty

- 3 years, parts & labor
- 5 years parts on compressor

## Agency approvals



## Available accessories

- Harmony™ conversion top kit for ice and beverage dispensers (see page 3 for compatible ice and beverage dispenser models and top kit numbers)
- Water filter kit (Item# 00130286 - see form# 9905 for dimensions)
  - \_\_\_ ea. extra primary water filter cartridge
  - \_\_\_ ea. extra pre-filter cartridge
- Wall mount bracket (see accessory form# 3311)
- Icemaker stand, height-adjustable (see accessory form# 3311)
- Longer ice transport tube, specify length: \_\_\_ ft/m in 5 ft/1.5 m increments (10 ft/3 m is standard)
- 35 ft (10.7 m) refrigeration lines (P/N: 00193227 – not pre-charged) for HCD1000 and HCD1400
- 35 ft (10.7 m) refrigeration lines (P/N: 00977785 – not pre-charged) for HCD1800
- Timer to control one or two Horizon icemakers (see accessory form# 3311)

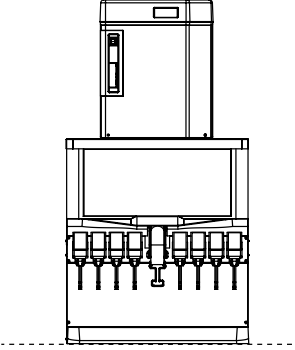
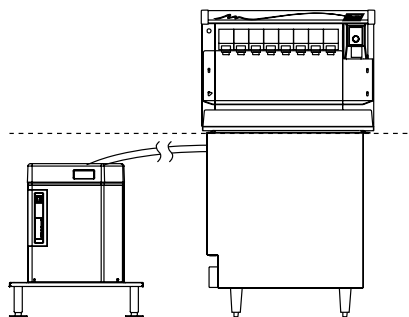
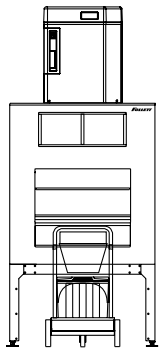
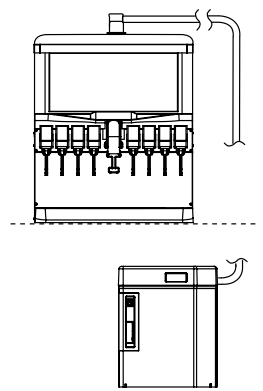
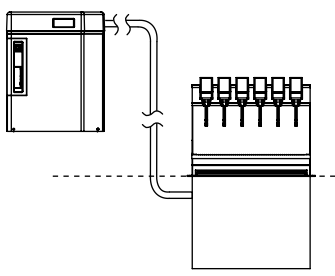
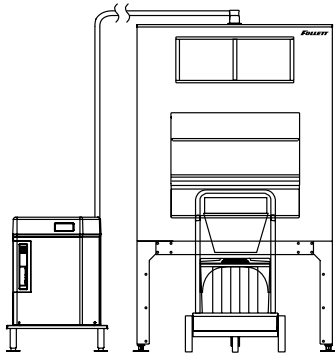
## Model number guide

Use/application	Condenser	Installation/mounting	
		top mounted	Satellite-fill
with ice storage bins	with	HCD1000RBT	HCD1000RBS
	without	HCD1000NBT	HCD1000NBS
	with	HCD1400RBT	HCD1400RBS
	without	HCD1400NBT	HCD1400NBS
	with	HCD1800RBT	HCD1800RBS
	without	HCD1800NBT	HCD1800NBS
with Follett Vision™ line dispensers	with		HCD1000RVS
	without		HCD1000NVS
	with		HCD1400RVS
	without		HCD1400NVS
	with		HCD1800RVS
	without		HCD1800NVS
with ice/beverage dispensers (by others)	with	HCD1000RHT*	HCD1000RHS
	without	HCD1000NHT*	HCD1000NHS
	with	HCD1400RHT*	HCD1400RHS
	without	HCD1400NHT*	HCD1400NHS
	with	HCD1800RHT*	HCD1800RHS
	without	HCD1800NHT*	HCD1800NHS
for drop-in dispensers	with		HCD1000RJS
	without		HCD1000NJS
	with		HCD1400RJS
	without		HCD1400NJS
	with		HCD1800RJS
	without		HCD1800NJS
with Ice Manager diverter valve system	with		HCD1000RMS
	without		HCD1000NMS
	with		HCD1400RMS
	without		HCD1400NMS
	with		HCD1800RMS
	without		HCD1800NMS

\* Requires Harmony top kit (see page 3 for part number)

## 1 Locating the icemaker

Horizon remote condensing unit Chewblet ice icemakers allow top-mounting or Satellite-fill ice-through-a-tube technology with icemaker mounting in a base cabinet, on a wall or on a floor stand up to 75 ft (22.9 m) from the dispenser or ice bin. Evaporator/icemaker must be mounted within 100 feet (30.5 m) of Follett remote condensing unit. Satellite-fill applications require special attention to service access and ice tube runs (see page 3-5).

Top mounting – ice & beverage dispensers (by others)	Satellite-fill – Follett low-profile Vision ice & beverage dispensers	Top mount on Follett ice storage bins
		
<p><b>Important specifier notes:</b></p> <ol style="list-style-type: none"> <li>1. Dispenser must be compatible with nugget ice. See page 3 for compatible ice &amp; beverage dispenser models and top kit numbers.</li> <li>2. Verify ceiling or soffit height to ensure sufficient top clearance.</li> </ol>	<p><b>Important specifier notes:</b></p> <ol style="list-style-type: none"> <li>1. See page 3-5 for critical clearance &amp; venting requirements.</li> </ol>	<p><b>Important specifier notes:</b></p> <ol style="list-style-type: none"> <li>1. See form# B300 for bin sizing.</li> <li>2. Verify ceiling or soffit height to ensure top clearance.</li> <li>3. Locate floor sink or grate &amp; drains in front of storage bin.</li> <li>4. Do not position bin drain lines to block Ice•Device™ bin cart.</li> </ol>
Satellite-fill – ice & beverage dispensers (by others)	Satellite-fill – drop-in beverage dispensers (by others)	Satellite-fill for Follett ice storage bins
		
<p><b>Important specifier notes:</b></p> <ol style="list-style-type: none"> <li>1. Dispenser must be compatible with nugget ice. See page 3 for compatible ice &amp; beverage dispenser models.</li> </ol>	<p><b>Important specifier notes:</b></p> <ol style="list-style-type: none"> <li>1. See form# 3425 for qualified applications.</li> </ol>	<p><b>Important specifier notes:</b></p> <ol style="list-style-type: none"> <li>1. See form# B300 for bin sizing.</li> <li>3. Locate floor sink or grate &amp; drains in front of storage bin.</li> <li>4. Do not position bin drain lines to block Ice•Device bin cart.</li> </ol>

## 1 Locating the icemaker (continued)

Top mounting – compatible ice & beverage dispensers*					
Manufacturer	Model Number	Width in (cm)	Depth in (cm)	Height** in (cm)	Harmony top kit – specify “F” for front facing, or “B” for backward facing units
					HCD1000 & HCD1400 series
Lancer dispensers	4500-30N	30.0 ( 76)	30.5 (78)	36.50 ( 93)	HTL30RC-F
	FS-22N	22.0 ( 56)	30.5 (78)	42.13 (107)	HTL22RC-F
	FS-30N	30.0 ( 76)	30.5 (78)	42.13 (107)	HTL30RC- (F or B)
	FS-44N #	44.0 (119)	30.5 (78)	42.13 (107)	(2) HTL22RC-F
Cornelius dispensers	DB/ED/DF 200 series	30.0 ( 76)	30.0 (76)	34.38 ( 87)	HTC30RC-F
	DB/ED/DF 250 series	30.0 ( 76)	30.0 (76)	38.38 ( 98)	HTC30RC-F
	DB/ED/DF 300 series	44.0 (119)	30.0 (76)	34.00 ( 86)	HTC44RC- (F or B)
	FlavorFusion	30.0 ( 76)	30.7 (78)	39.38 (100)	HTC30RC-10F-FF
	IDC200	30.0 ( 76)	30.7 (78)	39.38 (100)	HTC30RC-10F-IDC
	IDC250	30.0 ( 76)	30.7 (78)	36.38 ( 92)	HTC30RC-10F-IDC
SerVend dispensers	MDH-302	42.8 (109)	31.0 (79)	32.38 ( 82)	HTS44RC- (F or B)†
	MDH-402	60.0 (152)	30.5 (78)	32.38 ( 82)	HTS60RC- §(F or B)†

\*All approved dispensers can be filled with a Satellite-fill Horizon icemaker model without a top kit.  
 § 60-inch models: Please specify number of Horizon icemakers and location. D = 2; R = 1 on right side; L = 1 on left side  
 † Requires minimum 0.5" (1.27 cm) clearance between back of dispenser and wall.  
 \*\* Net height after installation of top kit (excluding height of icemaker).  
 # F-44N consists of 2 separate 22" (55.9 cm) dispensers. A top kit is needed for each Horizon icemaker ordered.

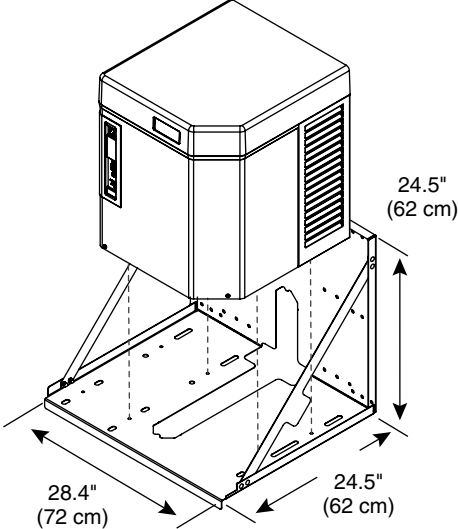
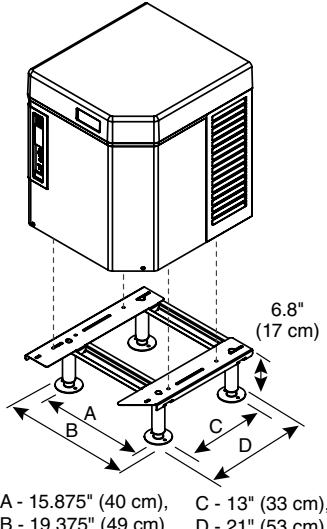
## 2 Undercounter/in-cabinet mounting

### Cabinet details

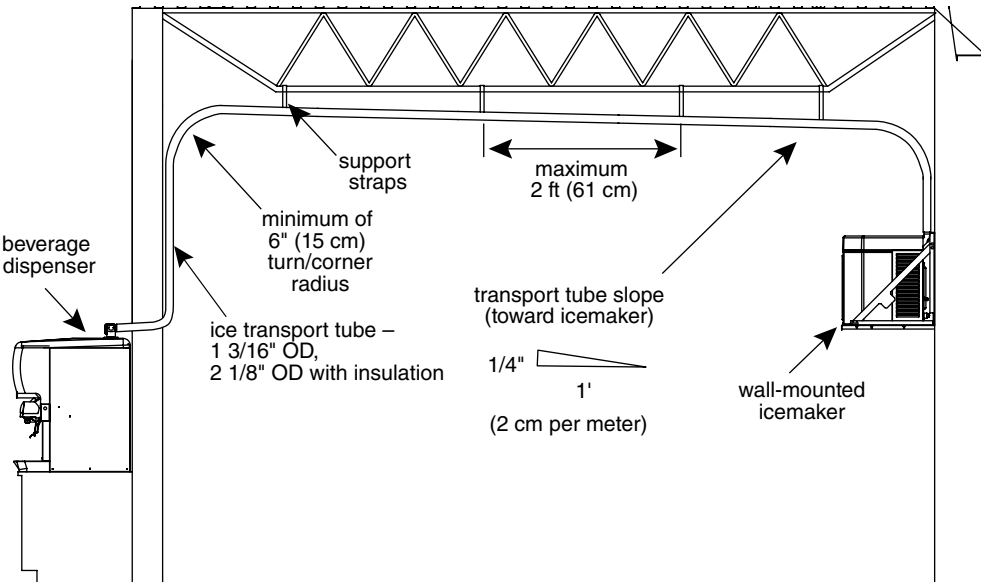
**Important specifier notes**

- Cabinet door opening must meet minimum size requirements shown and be free of obstructions to allow icemaker to slide out (no lip or utilities to block removal).
- Cabinet base must be capable of supporting icemaker and allow icemaker to rest flat on cabinet bottom.
- No counter supports, electric or plumbing can run in front of the icemaker.
- Ice transport tube needs minimum 1/4" per foot (2 cm per meter) pitch toward icemaker and should be secured to prevent dips and traps from forming. See page 4.

3 Horizon icemaker mounting accessories

Optional wall mount bracket	Optional machine stand	Important specifier notes:
 <p>28.4" (72 cm)</p> <p>24.5" (62 cm)</p> <p>24.5" (62 cm)</p>	 <p>6.8" (17 cm)</p> <p>A - 15.875" (40 cm), C - 13" (33 cm), B - 19.375" (49 cm) D - 21" (53 cm)</p>	<ol style="list-style-type: none"> <li>1. For secure wall mounting, specify optional wall mount bracket.</li> <li>2. Wall and fasteners must support the weight of the icemaker, bracket, supply water and ice. <b>Use of a backing board may be required with hollow wall construction.</b></li> <li>3. Machine stand mounting adds 6.8" (17 cm) to height of icemaker.</li> <li>4. No dips in tube routing allowed.</li> <li>5. Ice transport tube needs minimum 1/4" per foot (2 cm per meter) pitch toward icemaker and should be secured to prevent dips and traps from forming.</li> </ol>

4 Horizon ice tube runs - specifier guidelines

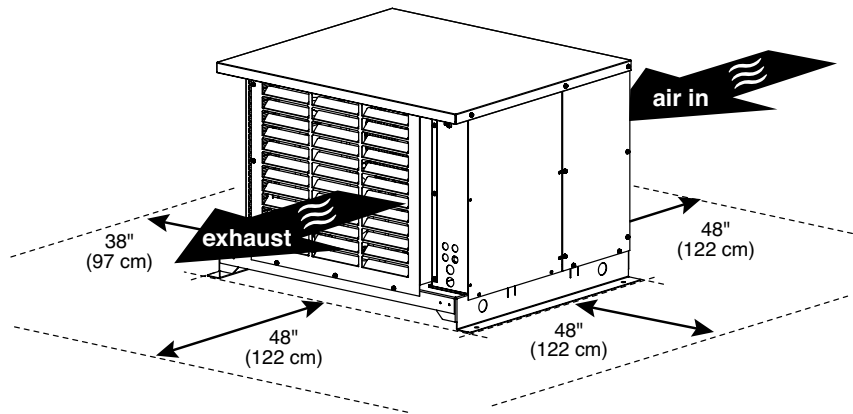
Satellite-fill long tube runs		Important specifier notes:
 <p>beverage dispenser</p> <p>support straps</p> <p>minimum of 6" (15 cm) turn/corner radius</p> <p>ice transport tube – 1 3/16" OD, 2 1/8" OD with insulation</p> <p>maximum 2 ft (61 cm)</p> <p>transport tube slope (toward icemaker)</p> <p>1/4" 1' (2 cm per meter)</p> <p>wall-mounted icemaker</p>	<ol style="list-style-type: none"> <li>1. 75 ft (23 m) maximum ice transport tube run.</li> <li>2. Tubing routing bends must have a 6" (15 cm) radius or larger.</li> <li>3. If not supported from underneath, secure insulated ice transport tube at least every 2 ft (61 cm) to prevent dips or traps.</li> <li>4. Relative humidity levels above 80% in areas where the icemaker or ice transport tube are located may produce excessive condensation that will cause water damage.</li> <li>5. Contact factory for recommendations on running tubing through a decorative soffit or chase.</li> </ol>	

5 Remote condensing unit

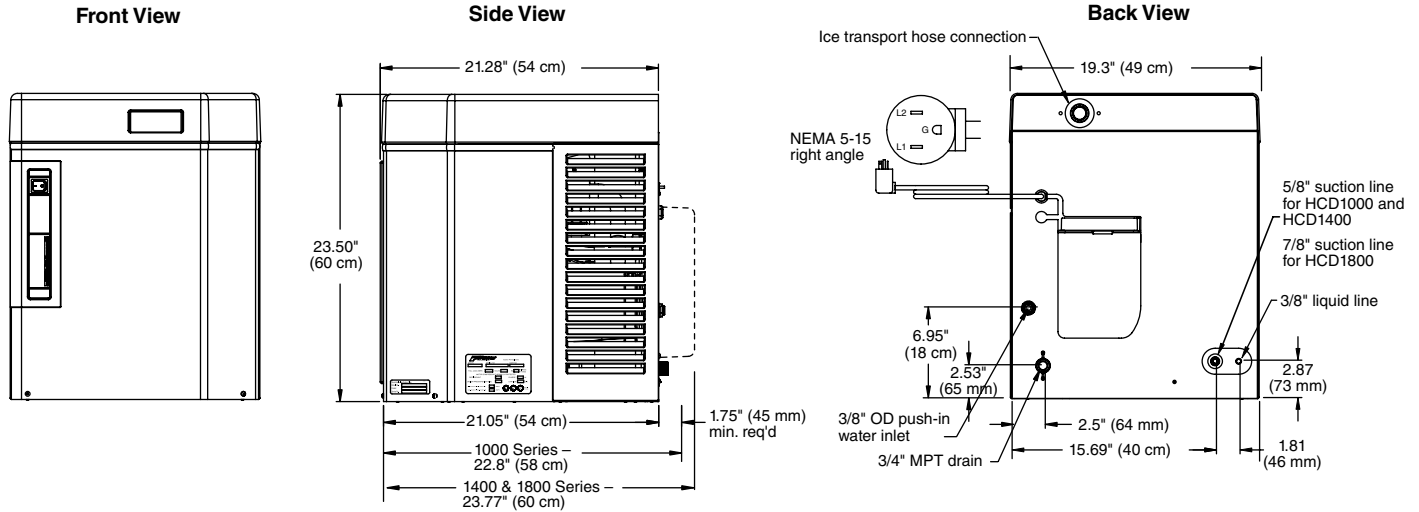
Condensing unit installation specifications

Important specifier notes:

1. Provide front, back and side clearances as shown.
2. The maximum refrigerant line run length is 100 ft (30.5 m). Installations with up to 50 ft (15.2 m) line run require:  
1000 Series – 8 lbs (4 kg) of refrigerant  
1400 Series – 11 lbs (5 kg) of refrigerant  
1800 Series – 11 lbs (5 kg) of refrigerant  
(consult installation manual for correct refrigerant charge if line run exceeds 50 ft (15.2 m)).
3. The maximum line rise above the evaporator is 35 ft (10.7 m). Condensing unit above evaporator unit – 35 ft (10.7 m) (installations with rise over 20 ft (6.1 m) require additional suction line s-trap at midpoint rise).
4. The evaporator can only be mounted a maximum of 15 ft (4.6 m) above the condensing unit.  
Note: The service loop is not included when calculating length, rise or drop in the tubing run.



Note: To connect evaporator/icemaker to rack systems, see page 7.



**Evaporator utility requirements/unit specifications**

Models	HCD1000	HCD1400/HCD1800
Shipping weight	180 lbs (68 kg)	190 lbs (86 kg)
<b>Standard electrical</b>		
Voltage	115	115
Phase	1-phase	1-phase
Hertz	60 cycles	60 cycles
Amps	6 (max.)	6 (max.)
Circuit	15 Amps	15 Amps
Cord	7 ft (2 m)	7 ft (2 m)
Plug	NEMA 5-15	NEMA 5-15

**Evaporator unit operating limits**

All models	Minimum	Maximum
Air temperature	50 F (10 C)	100 F (38 C)
Water temperature	45 F (7 C)	90 F (32 C)
Potable water pressure	10 psi (69 kpa)	70 psi (483 kpa)

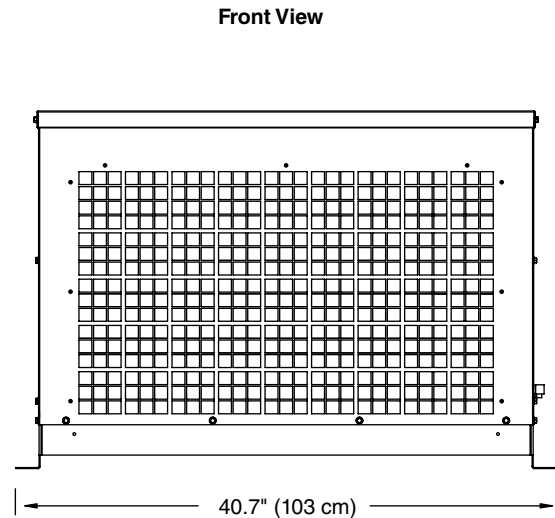
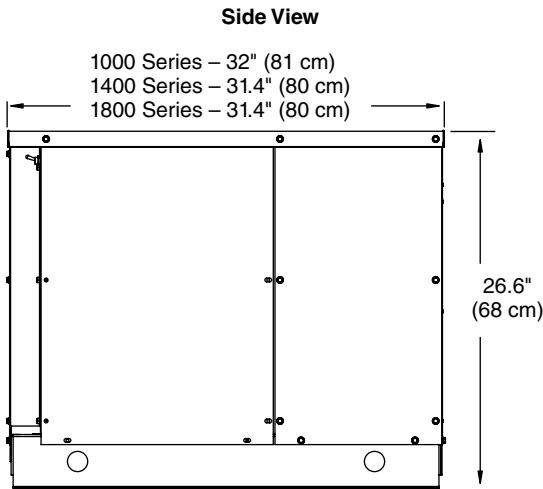
**Energy & water consumption\***

Models	HCD1000	HCD1400	HCD1800
Electricity per 100 lbs (46 kg) of ice	5.1 kWh	4.8 kWh	4.8 kWh
Water per 100 lbs (46 kg) of ice	13.6 gal (52 L)	13.2 gal (50 L)	13.2 gal (50 L)

\* 90 F (32 C) air temp & 70 F (21 C) water temp

**Important specification/installation notes:**

- 10 ft (3 m) of ice transport tube and insulation are provided with Satellite-fill models only. Longer tubes available as an accessory, at extra cost.
- In Satellite-fill applications, ice enters through top of ice storage bin or countertop ice and beverage dispenser. For side entry, contact factory.
- Separate icemaker and condensing unit drain lines required for water-cooled models.
- Drains should be hard piped and insulated. Maintain at least a 1/4" per foot (2 cm per meter) slope away from icemaker.
- Follett recommends installation of an in-line water filtration system. See available accessories on page 1.



**Condensing unit requirements/unit specifications**

Models	HCD1000	HCD1400	HCD1800
Shipping weight	225 lbs (102 kg)	330 lbs (150 kg)	385 lbs (175 kg)
<b>Standard electrical</b>			
Voltage	208-230	208-230	208-230
Phase	1-phase	1-phase	1-phase
Hertz	60 cycles	60 cycles	60 cycles
Amps	7.4 (max.)	14.7 (max.)	15 (max.)
Circuit	15 Amps	30 Amps	50 Amps

**Condensing unit operating limits**

All models	Minimum	Maximum
Air temperature	-20 F (29 C)	120 F (49 C)

**Condensing unit location/installation limits**

All Models	
Maximum refrigerant line run length:	100 ft (30.5 m)
Maximum line rise above evaporator:	35 ft (10.7 m)
Evaporator mounting above condenser:	15 ft (4.6 m)
or maximum refrigeration line drop:	15 ft (4.6 m)

**Cooling capacity for icemakers connected to rack systems**

Models	HCD1000	HCD1400	HCD1800
BTU/hr (Kcal/hr) at 0 F (-18 C) evaporator, 90 F (32 C) ambient air (HCD1000N, HCD1400N units only)	7,700 (1940)	10,000 (2520)	13,000 (3275)
Rack Systems* EPR Value – set to	0 F (-18 C)		

**Condensing unit specification/installation notes:**

- HCD1400 model condensing units have a liquid suction line heat exchanger. The entire liquid line should be insulated separately from the suction line.
  - Outdoor installation of low side is not recommended and will void warranty.
- \* EPR to be supplied by installer

**Ice production – 1000 series**

Inlet water temperature	Ambient air temperature F (C)					24 hour ice production lbs/kg
	60 (16)	70 (21)	80 (27)	90 (32)	100 (38)	
50 F (10 C)	944 (429)	900 (409)	853 (387)	819 (372)	791 (359)	
60 F (16 C)	887 (493)	866 (393)	837 (380)	800 (363)	756 (343)	
70 F (21 C)	833 (378)	824 (374)	804 (365)	765 (347)	710 (322)	
80 F (27 C)	784 (356)	774 (351)	752 (342)	714 (324)	656 (298)	
90 F (32 C)	740 (336)	714 (324)	680 (309)	640 (291)	594 (270)	

**Ice production – 1400 series**

Inlet water temperature	Ambient air temperature F (C)					24 hour ice production lbs/kg
	60 (16)	70 (21)	80 (27)	90 (32)	100 (38)	
50 F (10 C)	1354 (614)	1333 (605)	1260 (571)	1243 (564)	1227 (556)	
60 F (16 C)	1293 (586)	1272 (577)	1225 (556)	1208 (548)	1192 (541)	
70 F (21 C)	1229 (557)	1208 (548)	1190 (540)	1172 (532)	1157 (525)	
80 F (27 C)	1167 (529)	1146 (520)	1102 (500)	1084 (492)	1069 (485)	
90 F (32 C)	1107 (502)	1060 (481)	1013 (460)	995 (451)	980 (445)	

**Ice production – 1800 series**

Inlet water temperature	Ambient air temperature F (C)					24 hour ice production lbs/kg
	60 (16)	70 (21)	80 (27)	90 (32)	100 (38)	
50 F (10 C)	1669 (757)	1580 (717)	1479 (671)	1422 (645)	1366 (620)	
60 F (16 C)	1596 (724)	1528 (693)	1451 (658)	1387 (629)	1310 (594)	
70 F (21 C)	1523 (691)	1474 (669)	1424 (646)	1350 (612)	1254 (569)	
80 F (27 C)	1440 (653)	1387 (629)	1332 (604)	1267 (575)	1191 (540)	
90 F (32 C)	1356 (615)	1298 (589)	1240 (562)	1183 (537)	1127 (511)	



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