



**CRYSTAL**  
merchandiser®

## Crystal Merchandiser® RVL30 Specs

Low Temp Reach-In Remote Display Cases

2-Door, 3-Door, 4-Door, and 5-Door Cases; Back-to-Back (BB) Cases

### Applications



Ice Cream



Frozen Food

### Quick Specs

**Energy (Btu/h per Door)\***

**Frozen Food:** 925 at -7°F Evaporator

**Ice Cream:** 1,005 at -16°F Evaporator

\*when used with parallel rack system

**Merchandising (5-Door)**

**Facings:** 70.2 ft<sup>2</sup>

**Packout:** 136.1 ft<sup>3</sup> with 30" x 24" deep shelves

### Features & Options

#### Go Green

Remote cases ready for CO<sub>2</sub>, 90-bar rating available.

#### High Humidity

Control climate challenges with advanced humidity package.

#### CoolView® Doors

30" wide x 74" tall CoolView® Illusion® Doors

#### LED Lighting

ChillBrite® 4000K LED Lighting

#### Versatility

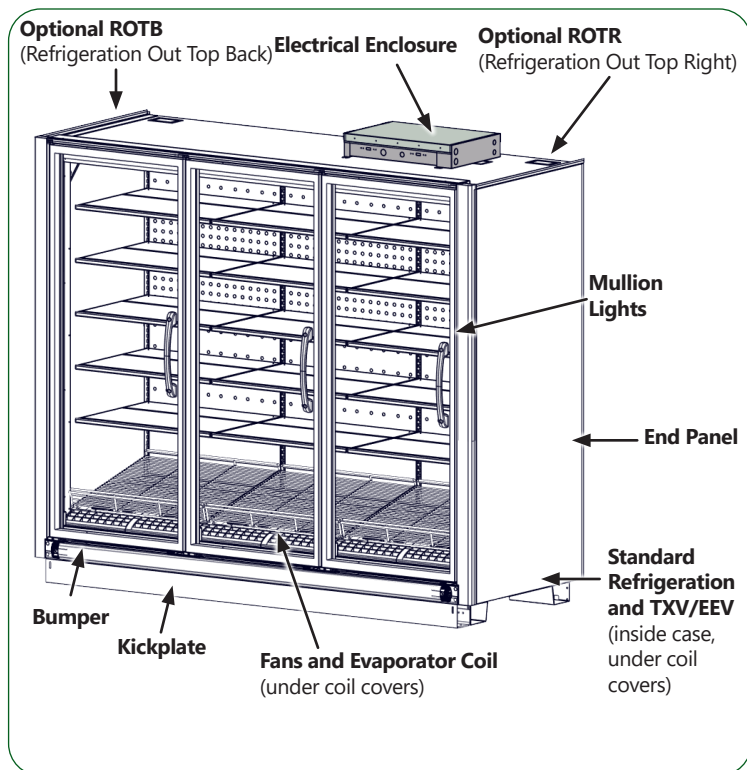
Save on floor space and energy by choosing a back-to-back case.

#### Additional Models

The Crystal low temp lineup offers a standard, back-to-back, ice merchandiser, dual temp case.

#### Hybrid™ Display Case

Available as Hybrid™ cases with R-404A or R-448A.



Manuals and Instructions:  
<https://www.zero-zone.com/rvmc-rvlc>



#### Contact Us:

800-247-4496

[www.zero-zone.com](http://www.zero-zone.com)

Specifications are subject to change without notice. All dimensions are nominal.  
Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.



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## Refrigeration Data



Set Points	Frozen Food (FF)	Ice Cream (IC)
Evaporator Temperature (°F) <sup>1</sup>	-7	-16
Discharge Air Temperature (°F) (w/ 8°F Superheat)	-3	-12

Notes:

- For high-glide refrigerants, use dew point for unit sizing. Adjust evaporator pressure as needed to maintain discharge air temperatures.



	Lineup Data		Individual Case Data (includes 1 pair of end panels)							
	Per Door Avg		2-Door		3-Door		4-Door		5-Door	
Energy Use with Parallel Rack System <sup>2</sup>	FF	IC	FF	IC	FF	IC	FF	IC	FF	IC
RVLC30 Baseline Btu/h	925	1,005	2,130	2,430	3,280	3,540	4,300	4,640	5,330	5,750
RVLC30BB Baseline Btu/h (Each Side)	850	920	1,980	2,260	3,055	3,285	4,000	4,300	4,955	5,325
Energy Use with Condensing Unit <sup>2</sup>	FF	IC	FF	IC	FF	IC	FF	IC	FF	IC
RVLC30 Baseline Btu/h	980	1,065	2,260	2,575	3,475	3,750	4,560	4,920	5,650	6,095
RVLC30BB Baseline Btu/h	900	975	2,100	2,395	3,240	3,480	4,240	4,560	5,250	5,645
Btu/h Adders	FF	IC	FF	IC	FF	IC	FF	IC	FF	IC
Anti-Sweat High-Humidity Package	+100	+100	+200	+200	+300	+300	+400	+400	+500	+500
End Panels	Btu/h Per Case									
Glass Windowed End Panel (1-Pair) <sup>3</sup>	+315	+350								

Notes:

- Baseline Evaporator Btu/h based on LED lighting (Zero Zone ChillBrite® 4000K), standard-energy doors (Zero Zone CoolView® Illusion®), and ECM or SSC electronic fan motors.
- Glass windowed end panels only available with 2 1/2" end panels.



Refrigeration Piping: R-404A & R-448A <sup>4</sup>	Outlet Size (in.)			
	2-Door	3-Door	4-Door	5-Door
Suction Line O.D. (Standard Refrigeration Exit)	7/8	7/8	7/8	7/8
Suction Line O.D. (Top Refrigeration Exit)	3/8	5/8	5/8	5/8
Liquid Line O.D. (Electric Defrost)	3/8	3/8	3/8	3/8
Liquid Line O.D. (Hot Gas Defrost)	1/2	1/2	1/2	1/2
Refrigeration Piping: CO <sub>2</sub> <sup>4</sup>	2-Door	3-Door	4-Door	5-Door
Suction Line O.D. (Standard Refrigeration Exit)	1/2	1/2	1/2	1/2
Suction Line O.D. (Top Refrigeration Exit)	1/2	1/2	1/2	1/2
Liquid Line O.D. (Electric Defrost)	3/8	3/8	3/8	3/8
Liquid Line O.D. (Hot Gas Defrost)	1/2	1/2	1/2	1/2

Notes:

- Read the Installation & Operation Manual for more about refrigeration piping to properly size individual risers for circuits of more than one case.



Electrical & Energy Data <sup>5</sup>



Fan Motors (115V)	Per Door Avg		2-Door		3-Door		4-Door		5-Door	
Number of Fans			2		3		4		5	
Fan Motors (115V)	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
High-Efficiency Electronic (ECM or SSC)	0.42	24	0.84	48	1.26	72	1.68	96	2.1	120
Lighting System (120V)	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
LED Lighting	0.16	19	0.32	39	0.48	58	0.63	77	0.79	96
Anti-Sweat Heat (115V)	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
Standard-Energy Doors (CoolView® Illusion®) <sup>6</sup>	0.74	85	1.50	173	2.23	257	2.97	341	3.70	425
High-Humidity Package (CoolView® Illusion®) <sup>7</sup>	1.08	125	2.22	255	3.29	378	4.35	501	5.42	623
Defrost Heaters <sup>8, 9</sup>	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
Single Phase (120V/1/60Hz or 208V/1/60Hz)	4.00	832	8.00	1,680	12.00	2,496	16.00	3,328	20.00	4,160
Three Phase (208V/3/60Hz)	2.31	832	4.66	1,680	6.93	2,496	9.23	3,328	11.55	4,160

Notes:

- 5. Amps are based on electrical nameplate values. Watts are based on laboratory observations of actual energy use.
- 6. Standard doors include glass heat, rail heat, mullion heat, and a deep coil.
- 7. High-humidity package includes 10% increase in glass heat, rail heat, and mullion heat. This package also includes a deep coil and an anti-sweat controller.
- 8. Electric Defrost: 1 per day. Defrost termination temperature setting is 50°F. Failsafe time is 55 minutes. Refer to the Installation & Operation Manual for details.
- 9. Hot Gas Defrost: 1 per day. Defrost termination temperature setting is 65°F. Failsafe time is 30 minutes. Refer to the Installation & Operation Manual for details. Zero Zone recommends 1 riser per refrigeration circuit when utilizing hot gas defrost.

Physical Data



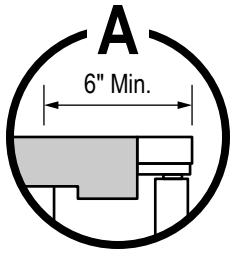
Merchandising	2-Door	3-Door	4-Door	5-Door
Facings (ft. <sup>2</sup> )	28.4	42.3	56.3	70.2
Packout (ft. <sup>3</sup> ) 22" Shelves <sup>10</sup>	51.5	76.7	101.9	127.1
Packout (ft. <sup>3</sup> ) 24" Shelves <sup>10</sup>	55.1	82.1	109.2	136.1
Shipping Weight without End Panels <sup>11</sup>	2-Door	3-Door	4-Door	5-Door
RVLC30 Weight (lbs.)	755	1,055	1,420	1,800
RVLC30BB Weight (lbs.)	1,450	2,030	2,740	3,480
Shipping Weight with Solid End Panels <sup>11</sup>	2-Door	3-Door	4-Door	5-Door
RVLC30 Weight (lbs.)	815	1,115	1,480	1,860
RVLC30BB Weight (lbs.)	1,570	2,150	2,860	3,600
Shipping Weight with Windowed End <sup>11</sup>	2-Door	3-Door	4-Door	5-Door
RVLC30 Weight (lbs.)	865	1,165	1,530	1,910

Notes:

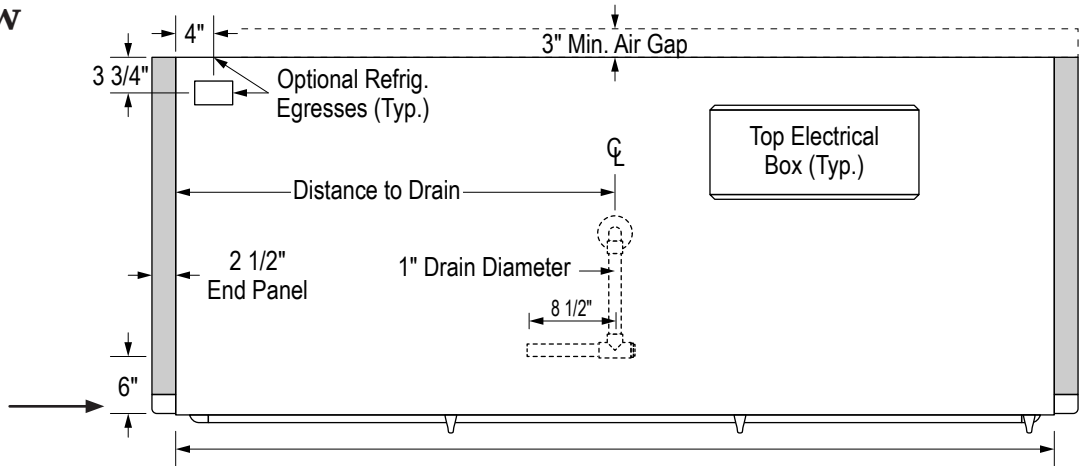
- 10. Available with 6" tall bottom baskets instead of bottom wire racks.
- 11. Each solid end panel: 30 lbs for RVLC30 or 60 lbs for RVLC30BB. Each windowed end panel: 55 lbs for RVLC30.



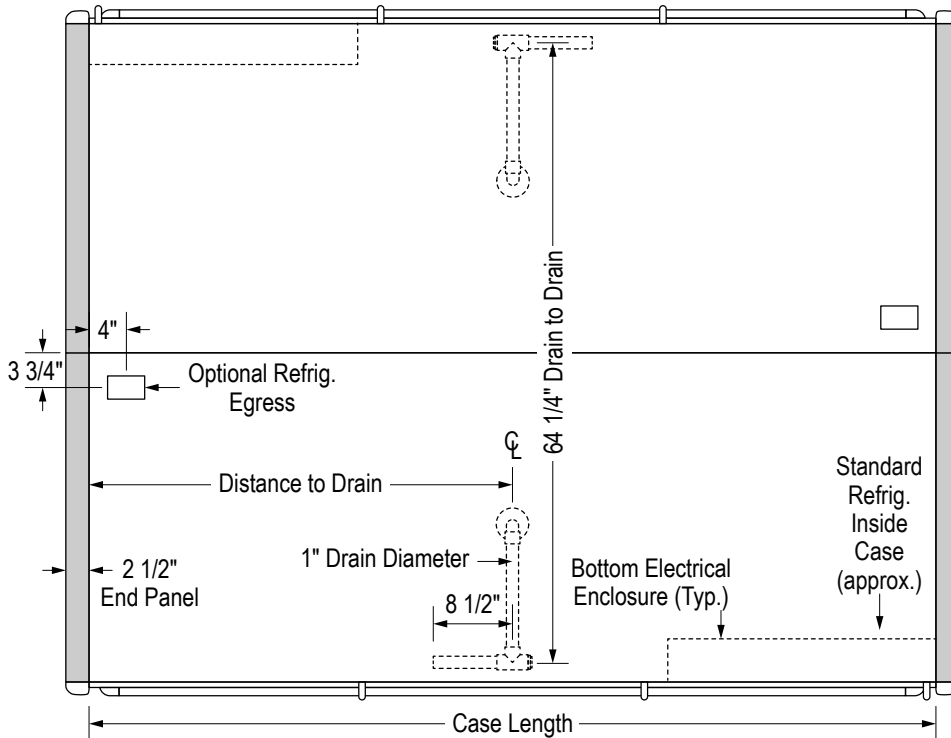
RVLC30 Top View



Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



RVLC30BB Top View



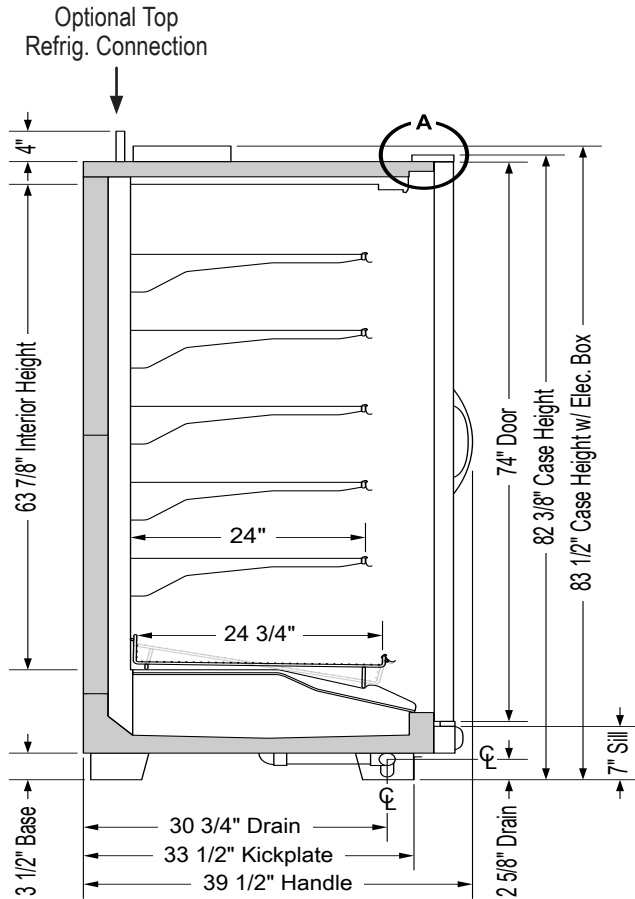
Case Dimensions



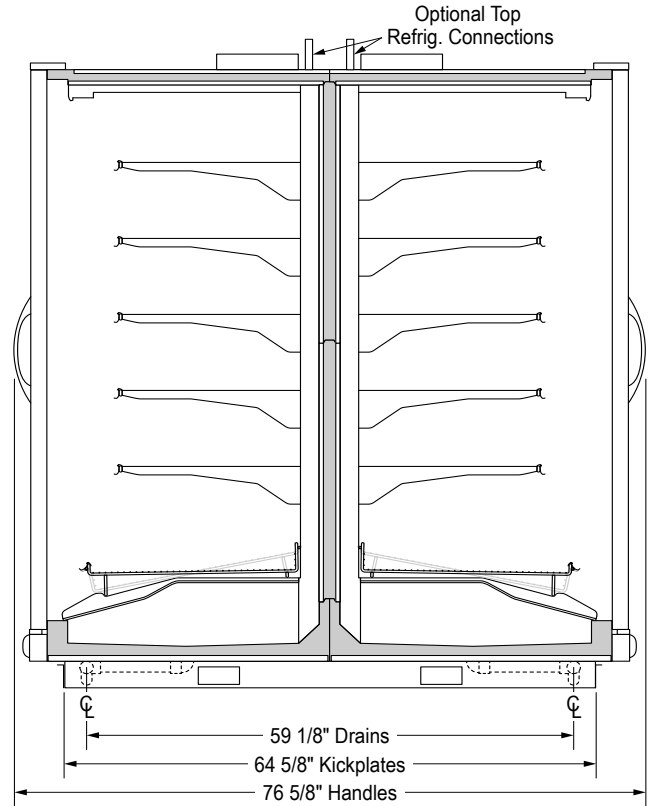
Measurements	2-Door	3-Door	4-Door	5-Door
Case Length (in.) without End Panels	62 1/8	92 1/2	123	153 3/8
Case Length (in.) with End Panels	67 1/8	97 1/2	128 3/4	158 3/8
Distance to Drain (in.) without End Panels	31	46 1/4	61 1/2	76 3/4



RVLC30 End View



RVLC30BB Back-to-Back End View



Base Notes:

- Base height options available: 1 3/4", 3 1/2", or 6 1/2".
- Changing bases affects case height and shipping height.
- Drain height from the floor: 2 5/8" with 3 1/2" base.
- Use 1 3/4" tall bases to fit through 80" doorways (shipping height = 79 5/8"). These bases must use hat channel rails.

Shelf Notes:

- 22" or 24" deep shelves.
- 2-position (0°, 10°) or 4-position (0°, 5°, 10°, 15°) shelves
- Available with 6" tall bottom baskets instead of bottom wire racks.