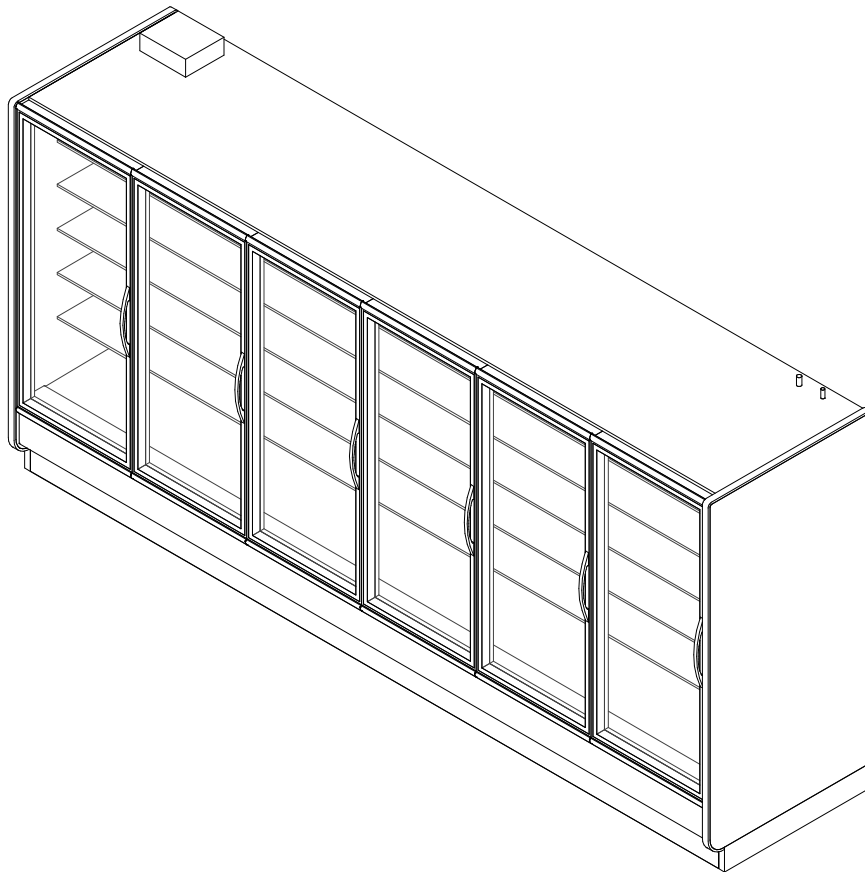


GENERAL NOTES

- 4-foot Bi-Swing cases consist of 2 (24") doors
- 6-foot Bi-Swing cases consist of 3 (24") doors
- 8-foot case Bi-swing consist of 4 (24") doors
- 12-foot cases Bi-swing consist of 6 (24") doors
- Lighting controls - occupancy sensors are required.
- Option 1: OEM Provided: Lighting controls (on/off) are standard unless otherwise specified.
- Option 2: End User Provided: Lighting controls should be based on occupancy sensors. Store level A/S control should be set to 30% minimum off time at 75°F/55%RH.



SHIPPING WEIGHT	
Case	Weight
ORBH	---



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ELECTRICAL DATA			
Case Length	Fans Per Case	High Efficiency Fans	
		120 Volts	
		Amps	Watts
1 Door	1	0.22	26
2 Door	2	0.44	53
3 Door	3	0.66	79
4 Door	4	0.88	106
5 Door	5	1.10	132
6 Door	6	1.32	158
4'	1	0.22	26
6'	2	0.44	53
8'	2	0.44	53
12'	3	0.66	79

LIGHTING DATA									
Case Length	Door Size	OP45		OP55 (French Swing Only)		OP7 Single Swing		OP7 French Swing	
		120 Volts		120 Volts		120 Volts		120 Volts	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1 Door	31"	0.18	21.0	---	---	0.14	16.8	---	---
2 Door	30"	0.36	43.1	---	---	0.28	33.0	---	---
3 Door	30"	0.54	65.2	---	---	0.41	49.2	---	---
4 Door	30"	0.73	87.3	---	---	0.55	65.4	---	---
5 Door	30"	0.91	109.4	---	---	0.68	81.6	---	---
6 Door	30"	1.10	131.5	---	---	0.82	97.8	---	---
4'	24"	---	---	0.26	31.0	---	---	0.23	28.0
6'	24"	---	---	0.52	61.9	---	---	0.44	52.3
8'	24"	---	---	0.52	61.9	---	---	0.44	52.3
12'	24"	---	---	0.77	92.8	---	---	0.64	76.6

ANTI CONDENSATE DATA					
Case Length	Door Size	101 Frames		Vista Frames	
		Un Heated Doors		Un Heated Doors	
		ELMD, ELMH, I90		Vista C, I60	
		120 Volts		120 Volts	
		Amps	Watts	Amps	Watts
1 Door	31"	0.18	22	0.18	22
2 Door	30"	0.36	43	0.36	43
3 Door	30"	0.55	66	0.55	66
4 Door	30"	0.75	90	0.75	90
5 Door	30"	0.94	113	0.94	113
6 Door	30"	1.15	138	1.15	138
4'	24"	0.20	24	0.20	24
6'	24"	0.39	47	0.39	47
8'	24"	0.43	52	0.43	52
12'	24"	0.68	82	0.68	82



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GUIDELINES AND CONTROL SETTINGS								
Application	Case Length	Door Size	BTUH/Door		Superheat Set Point @ Bulb (°F)	Evaporator (°F)	Discharge Air (°F)	Discharge Air Velocity (FPM)
			Conventional	Parallel				
Beverage	1 - 6 Door	30"	620	570	4 - 6	34	40	215
Beverage	4'	24"	495	455	4 - 6	34	40	215
Beverage	6'	24"	495	455	4 - 6	34	40	215
Beverage	8'	24"	495	455	4 - 6	34	40	215
Beverage	12'	24"	495	455	4 - 6	34	40	215
Deli	1 - 6 Door	30"	675	620	4 - 6	30	36	215
Deli	4'	24"	540	495	4 - 6	30	36	215
Deli	6'	24"	540	495	4 - 6	30	36	215
Deli	8'	24"	540	495	4 - 6	30	36	215
Deli	12'	24"	540	495	4 - 6	30	36	215
Meat	1 - 6 Door	30"	715	660	4 - 6	28	34	215
Meat	4'	24"	570	525	4 - 6	28	34	215
Meat	6'	24"	570	525	4 - 6	28	34	215
Meat	8'	24"	570	525	4 - 6	28	34	215
Meat	12'	24"	570	525	4 - 6	28	34	215

DEFROST CONTROLS		
Defrosts Per Day	Timed-Off Defrost	
	Fail-Safe (Min)	Termination Temp (F)
4	30	47

NOTES

- "---" indicates that this feature is not an option on this case model.
- Data listed is for Optimax Radiant. For other lighting options please contact your sales representative.
- Anti-condensate heat values for Eliminaator represent a door with no heat on the glass.
- Listed discharge air velocity represents the average velocity at the peak of defrost.
- Temperature and defrost settings listed above are recommended start-up settings. Final operational settings may need to be adjusted for the store conditions in which the case operates.
- The recommended evaporator temperatures may need to be adjusted based on system setup, store conditions, etc. The minimum recommended evaporator temperature is 4°F below the listed evaporator temperature.
- Light wattages above reflect 100% run time. To determine actual daily energy usage at 75°F/55%RH conditions, reduce the light wattages below by 42%.



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High Reach-In Merchandiser
1, 2, 3, 4, 5 & 6 Door / 4', 6', 8' & 12' (Beverage / Dairy / Deli / Meat)

SECOND NATURE DATA								
Case Model	No. of Coils	Application	Front Sill height	BTUH/Door		GPM/ft (DR)	Supply Fluid Temp (°F)	Discharge Air Temp (°F)
				Conventional	Parallel			
ORBH (30" Door)	1	Beverage	Std. Reach In	620	570	0.07	20	38
ORBH (30" Door)	1	Deli/Dairy	Std. Reach In	675	620	0.10	20	36
ORBH (30" Door)	1	Meat	Std. Reach In	715	660	0.13	20	34
ORBH (30" Door)	1	Beverage	Std. Reach In	620	570	0.10	25	38
ORBH (30" Door)	1	Deli/Dairy	Std. Reach In	675	620	0.15	25	36
ORBH (30" Door)	1	Meat	Std. Reach In	715	660	0.19	25	34
ORBH (Per Foot)	1	Beverage	Std. Reach In	248	228	0.03	20	38
ORBH (Per Foot)	1	Deli/Dairy	Std. Reach In	270	248	0.04	20	36
ORBH (Per Foot)	1	Meat	Std. Reach In	285	263	0.05	20	34
ORBH (Per Foot)	1	Beverage	Std. Reach In	248	228	0.04	25	38
ORBH (Per Foot)	1	Deli/Dairy	Std. Reach In	270	248	0.06	25	36
ORBH (Per Foot)	1	Meat	Std. Reach In	285	263	0.07	25	34

SECOND NATURE DATA									
Case Model	No. of Coils	Application	Front Sill height	Supply Fluid Temp (°F)	No. of Defrost	Timed-Off Defrost		Warm Fluid Defrost	
						Fail-Safe (Min)	Termination Temp (°F)	Fail-Safe (Min)	Termination Temp (°F)
ORBH (30" Door)	1	Beverage	Std. Reach In	20	4	60	47	26	49
ORBH (30" Door)	1	Deli/Dairy	Std. Reach In	20	4	60	47	26	49
ORBH (30" Door)	1	Meat	Std. Reach In	20	4	60	47	26	49
ORBH (30" Door)	1	Beverage	Std. Reach In	25	4	45	47	26	49
ORBH (30" Door)	1	Deli/Dairy	Std. Reach In	25	4	45	47	26	49
ORBH (30" Door)	1	Meat	Std. Reach In	25	4	45	47	26	49
ORBH (Per Foot)	1	Beverage	Std. Reach In	20	4	60	47	26	49
ORBH (Per Foot)	1	Deli/Dairy	Std. Reach In	20	4	60	47	26	49
ORBH (Per Foot)	1	Meat	Std. Reach In	20	4	60	47	26	49
ORBH (Per Foot)	1	Beverage	Std. Reach In	25	4	45	47	26	49
ORBH (Per Foot)	1	Deli/Dairy	Std. Reach In	25	4	45	47	26	49
ORBH (Per Foot)	1	Meat	Std. Reach In	25	4	45	47	26	49

NOTES

- All medium temperature data listed is for 35% by wt. PROPYLENE GLYCOL.
- Inhibited Propylene Glycol solution with water, such as Dowfrost or equivalent. (Dowfrost is a trademark of the Dow Chemical Company).
- Flowrates are determined by ASHRAE test conditions and may need to be adjusted based on store conditions.
- ** Flowrates are per case

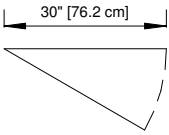
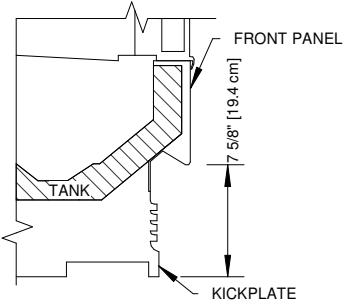
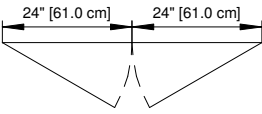
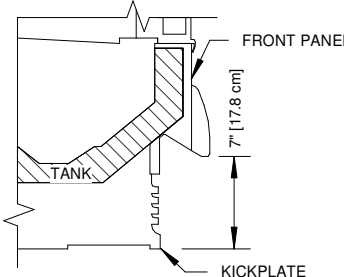
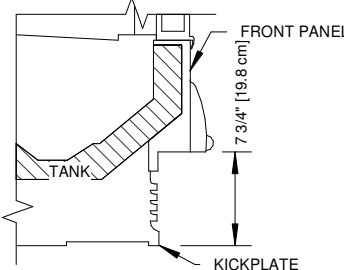
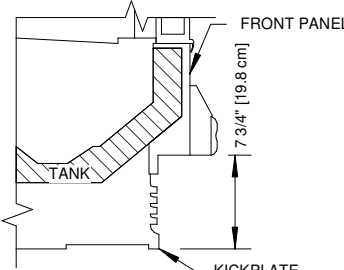


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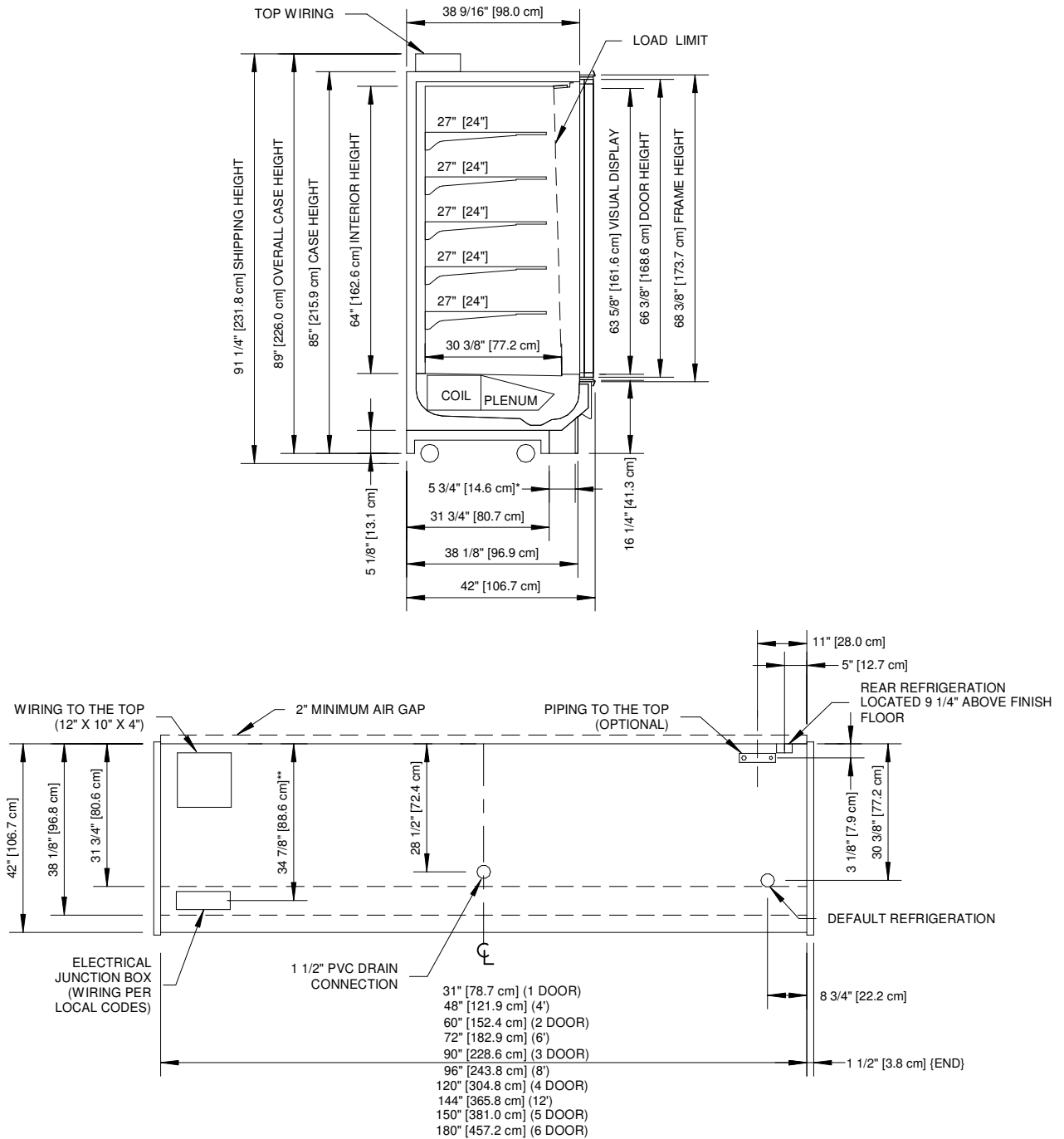
DOOR OPTIONS	FRONT OPTIONS
<p>STANDARD SWING DOOR 1, 2, 3, 4, 5, 6 - DOOR CASES</p>  <p>30° [76.2 cm]</p>	<p>FLAT FRONT (O SERIES)</p>  <p>FRONT PANEL TANK KICKPLATE 7 5/8" [19.4 cm]</p>
<p>BI-SWING DOOR 4', 6', 8' & 12' CASES</p>  <p>24° [61.0 cm] 24° [61.0 cm]</p>	<p>STREAMLINE BUMPER</p>  <p>FRONT PANEL TANK KICKPLATE 7" [17.8 cm]</p>
	<p>HALF BUMPER</p>  <p>FRONT PANEL TANK KICKPLATE 7 3/4" [19.8 cm]</p>
	<p>CLASSIC 2 BUMPER</p>  <p>FRONT PANEL TANK KICKPLATE 7 3/4" [19.8 cm]</p>



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NOTES

- * : STUB-UP AREA.
- ** : RECOMMENDED STUB-UP CENTERLINE FOR ELECTRICAL AND HUB DRAINS .
- Ends add approximately 1" to case height, 1/2" to the back & 1" to the front.



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