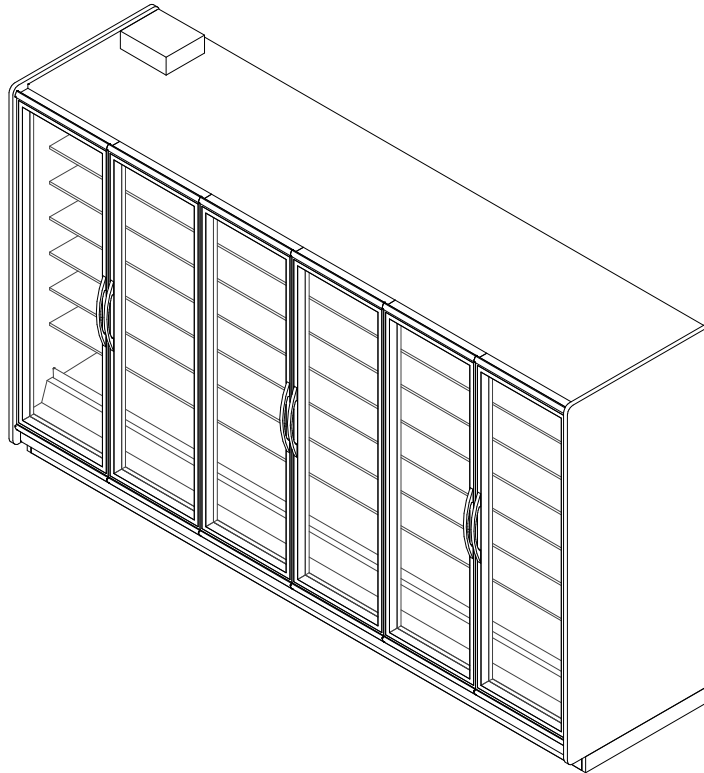


GENERAL NOTES

- 4-foot Bi-Swing cases consist of 2 (24") doors.
- 6-foot Bi-Swing cases consist of 3 (24") doors.
- 8-foot cases Bi-swing consist of 4 (24") doors.
- 12-foot cases Bi-swing consist of 6 (24") doors.
- Door frames are heated. Doors are not heated.
- 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.



SHIPPING WEIGHT	
Case	Weight
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ELECTRICAL DATA			
Case Length	Fans Per Case	High Efficiency Fans	
		120 Volts	
		Amps	Watts
2 Door	1	0.22	26
3 Door	2	0.43	52
4 Door	2	0.43	52
5 Door	3	0.65	78
4'	1	0.22	26
6'	2	0.43	52
8'	2	0.43	52
12'	3	0.65	78

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
2 Door	30"	0.36	43.1	---	---	0.33	39.7	---	---
3 Door	30"	0.54	65.2	---	---	0.49	59.0	---	---
4 Door	30"	0.73	87.3	---	---	0.65	78.3	---	---
5 Door	30"	0.91	109.4	---	---	0.81	97.6	---	---
4'	24"	---	---	0.26	31.0	---	---	0.27	32.6
6'	24"	---	---	0.52	61.9	---	---	0.52	62.0
8'	24"	---	---	0.52	61.9	---	---	0.52	62.0
12'	24"	---	---	0.77	92.8	---	---	0.76	91.4

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
2 Door	30"	0.36	43	0.36	43
3 Door	30"	0.57	68	0.57	68
4 Door	30"	0.79	95	0.79	95
5 Door	30"	0.98	118	0.98	118
4'	24"	0.19	23	0.19	23
6'	24"	0.40	48	0.40	48
8'	24"	0.44	53	0.44	53
12'	24"	0.70	84	0.70	84



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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	2 - 5 Door	30"	505	500	6 - 8	34	40	300
Beverage	4'	24"	405	400	6 - 8	34	40	300
Beverage	6'	24"	405	400	6 - 8	34	40	300
Beverage	8'	24"	405	400	6 - 8	34	40	300
Beverage	12'	24"	405	400	6 - 8	34	40	300
Deli	2 - 5 Door	30"	550	530	6 - 8	31	36	300
Deli	4'	24"	445	425	6 - 8	31	36	300
Deli	6'	24"	445	425	6 - 8	31	36	300
Deli	8'	24"	445	425	6 - 8	31	36	300
Deli	12'	24"	445	425	6 - 8	31	36	300
Meat	2 - 5 Door	30"	605	585	6 - 8	28	34	300
Meat	4'	24"	485	465	6 - 8	28	34	300
Meat	6'	24"	485	465	6 - 8	28	34	300
Meat	8'	24"	485	465	6 - 8	28	34	300
Meat	12'	24"	485	485	6 - 8	28	34	300

DEFROST CONTROLS

Defrosts Per Day	Timed-Off Defrost	
	Fail-Safe (Min)	Termination Temp (°F)
2	30	38

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.
- 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 above by 42%.



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Narrow Reach-In Merchandiser 2, 3, 4, & 5 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			
VNRB (30" Door)	1	Beverage	Std. Reach In	640	666	0.07	20	34
VNRB (30" Door)	1	Deli	Std. Reach In	710	697	0.10	20	31
VNRB (30" Door)	1	Meat	Std. Reach In	810	777	0.15	20	28
VNRB (30" Door)	1	Beverage	Std. Reach In	640	666	0.10	25	34
VNRB (30" Door)	1	Deli	Std. Reach In	740	697	0.16	25	31
VNRB (30" Door)	1	Meat	Std. Reach In	810	777	0.21	25	28
VNRB (Per Foot)	1	Beverage	Std. Reach In	268	266	0.03	20	34
VNRB (Per Foot)	1	Deli	Std. Reach In	284	139	0.04	20	31
VNRB (Per Foot)	1	Meat	Std. Reach In	324	311	0.06	20	28
VNRB (Per Foot)	1	Beverage	Std. Reach In	268	266	0.04	25	34
VNRB (Per Foot)	1	Deli	Std. Reach In	284	139	0.06	25	31
VNRB (Per Foot)	1	Meat	Std. Reach In	324	311	0.08	25	28

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)
VNRB (30" Door)	1	Beverage	Std. Reach In	20	2	60	47	26	49
VNRB (30" Door)	1	Deli	Std. Reach In	20	2	60	47	26	49
VNRB (30" Door)	1	Meat	Std. Reach In	20	2	60	47	26	49
VNRB (30" Door)	1	Beverage	Std. Reach In	25	2	60	47	26	49
VNRB (30" Door)	1	Deli	Std. Reach In	25	2	60	47	26	49
VNRB (30" Door)	1	Meat	Std. Reach In	25	2	60	47	26	49
VNRB (Per Foot)	1	Beverage	Std. Reach In	20	2	60	47	26	49
VNRB (Per Foot)	1	Deli	Std. Reach In	20	2	60	47	26	49
VNRB (Per Foot)	1	Meat	Std. Reach In	20	2	60	47	26	49
VNRB (Per Foot)	1	Beverage	Std. Reach In	25	2	45	42	26	49
VNRB (Per Foot)	1	Deli	Std. Reach In	25	2	45	42	26	49
VNRB (Per Foot)	1	Meat	Std. Reach In	25	2	45	42	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



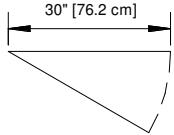
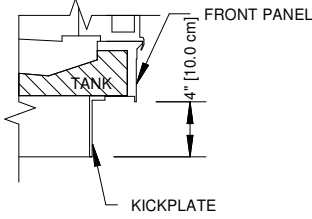
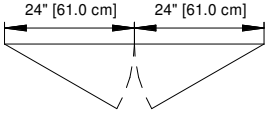
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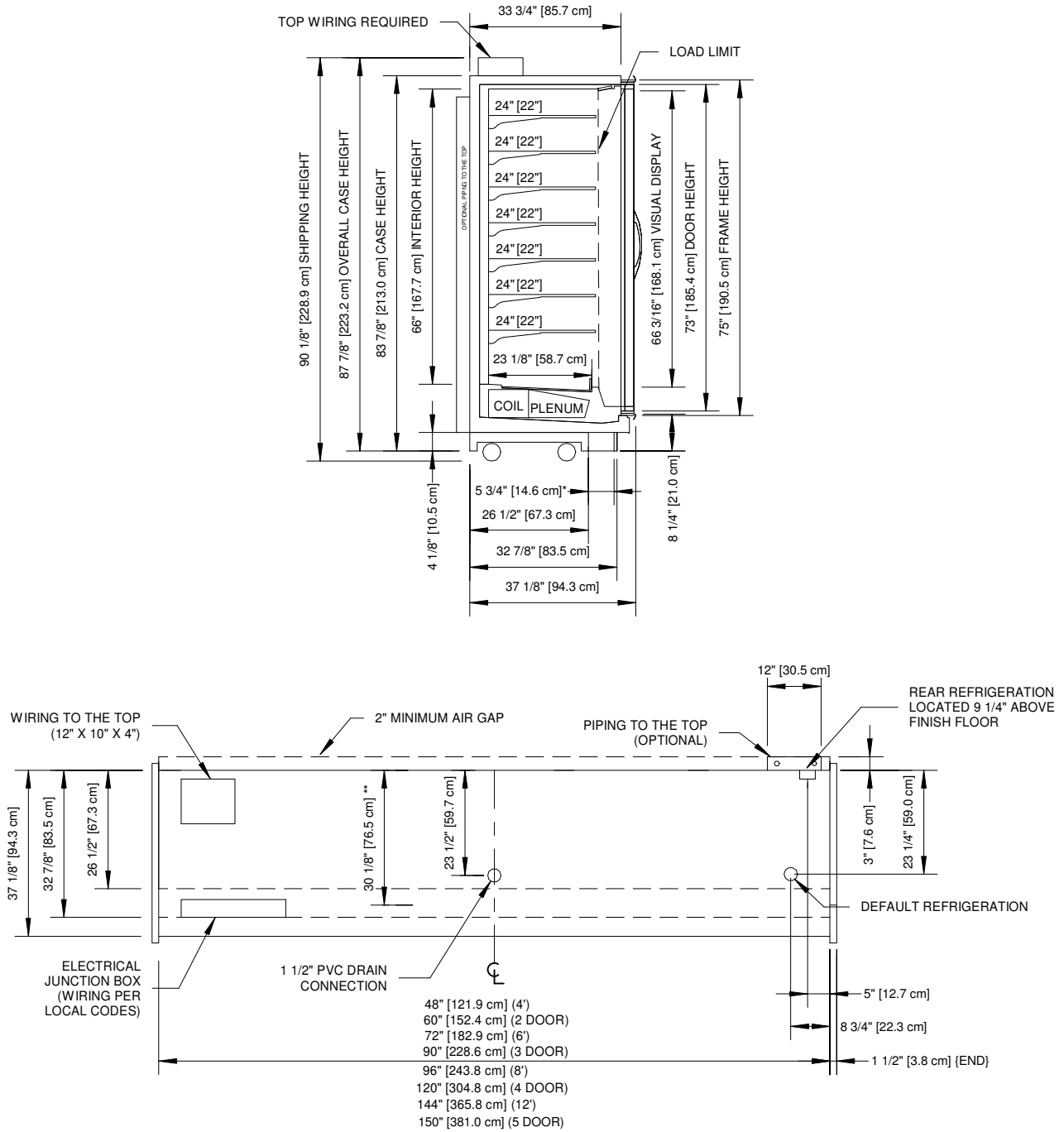
DOOR OPTIONS	FRONT OPTIONS
<p>STANDARD SWING DOOR 2,3,4,5 - DOOR CASES</p> 	<p>FLAT FRONT (V SERIES)</p> 
<p>BI- SWING DOOR 4', 6', 8' & 12' CASES</p> 	



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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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