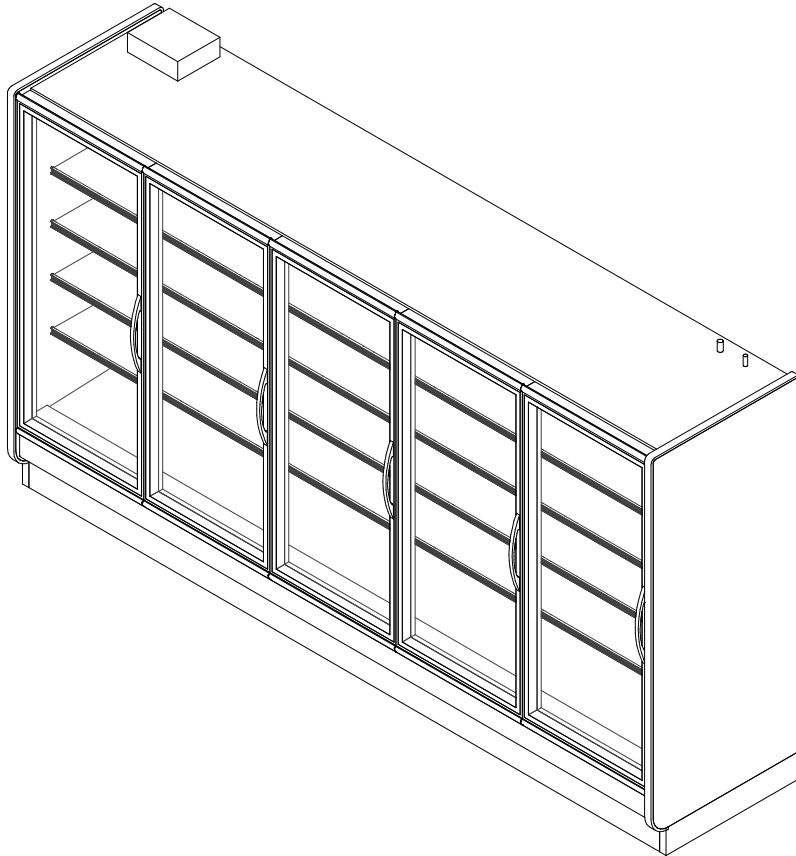


### GENERAL NOTES:

- Light controls - occupancy sensors are required.
- Option 1: OEM Provided: OEM anti-condensate and lighting controls (on/off) are standard unless otherwise specified.
- Option 2: End User Provided: Light 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
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COMPONENT

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ELECTRICAL DATA									
Case Length	Fans Per Case	High Efficiency Fans		Tank Heaters		Defrost Heaters (1-Phase)			
		120 Volts		120 Volts		208 Volts		240 Volts	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
2 Door	2	0.60	50	1.50	152	7.50	1552	8.60	2068
3 Door	3	1.00	75	1.60	171	10.90	2274	12.60	3018
4 Door	4	1.30	100	1.90	226	14.30	2984	16.60	3992
5 Door	5	1.60	125	2.30	275	17.50	3640	20.20	4840

LIGHTING DATA			
Case Length	Door Size	OP7 Single Swing	
		120 Volts	
		Amps	Watts
2 Door	30"	0.28	33.0
3 Door	30"	0.41	49.2
4 Door	30"	0.55	65.4
5 Door	30"	0.68	81.6

ANTI CONDENSATE DATA							
Case Length	Door Size	Individual Circuits					
		ELMD, I90 Doors				Door Frame	
		Heated Doors		Low E Doors		101-LE	
		120 Volts		120 Volts		120 Volts	
		Amps	Watts	Amps	Watts	Amps	Watts
2 Door	30"	0.64	76	0.38	45	1.26	151
3 Door	30"	0.95	114	0.57	68	1.76	211
4 Door	30"	1.27	152	0.76	91	2.29	275
5 Door	30"	1.59	191	0.95	114	2.78	334



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### GUIDELINES AND CONTROL SETTINGS {DIRECT EXPANSION HFC/CO2}

Application	Door Heat	Refrigeration Load Per Door (BTU/H)		Superheat Set Point @ Bulb (°F)	Evaporator (°F)	Discharge Air (°F)	Discharge Air Velocity (FPM)
		Conventional	Parallel				
Frozen Food	Heated Glass and Rail	1029	1008	3 - 5	- 7	- 1	250
Frozen Food	Unheated Glass/Heated Rail	974	954	3 - 5	- 7	- 1	250
Ice Cream	Heated Glass and Rail	1108	1081	3 - 5	- 15	- 8	250
Ice Cream	Unheated Glass/Heated Rail	1043	1018	3 - 5	- 15	- 8	250

### DEFROST CONTROLS {DIRECT EXPANSION HFC/CO2}

Defrosts Per Day	Electric Defrost			Hot Gas Defrost		
	Fail-Safe (Min)	Termination Temp (°F)	Run-Off Time (Min)	Fail-Safe (Min)	Termination Temp (°F)	Run-Off Time (Min)
1	46	50	0	24	73	13 - 15

### NOTES:

- "---" indicates that this feature is not an option on this case model.
- Door / Frame A/S circuits and fans share the same circuit (same cycle). Default jumpers can be removed in field if separate circuits are desired for A/S and fans.
- Drain heater and fan motors share the same circuit (separate cycles). Electrical circuits must be properly sized to accommodate the higher current draw of the tank heater
- Anti-condensate heat values for Low E doors 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.
- No run-off time required for electrical defrost.
- Typical electric defrost time is 20 minutes when ambient conditions are 75°F / 55%RH.
- Light and A/S 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% and reduce the A/S values above by the minimum off time.
- Discharge air temperature values represent readings taken within the upper air channel immediately behind/upstream of the honeycomb.
- For optimal performance in HFC applications, it is recommended to close the liquid line and close the suction line during defrost. Defrost parameters may need to be adjusted if other methods are used.

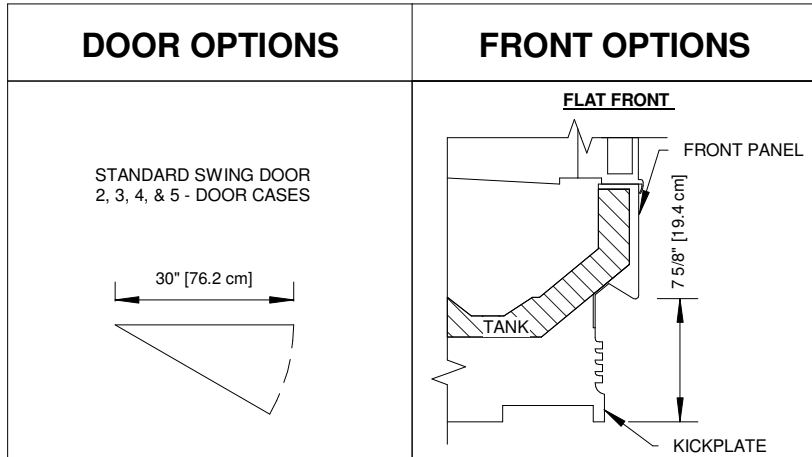


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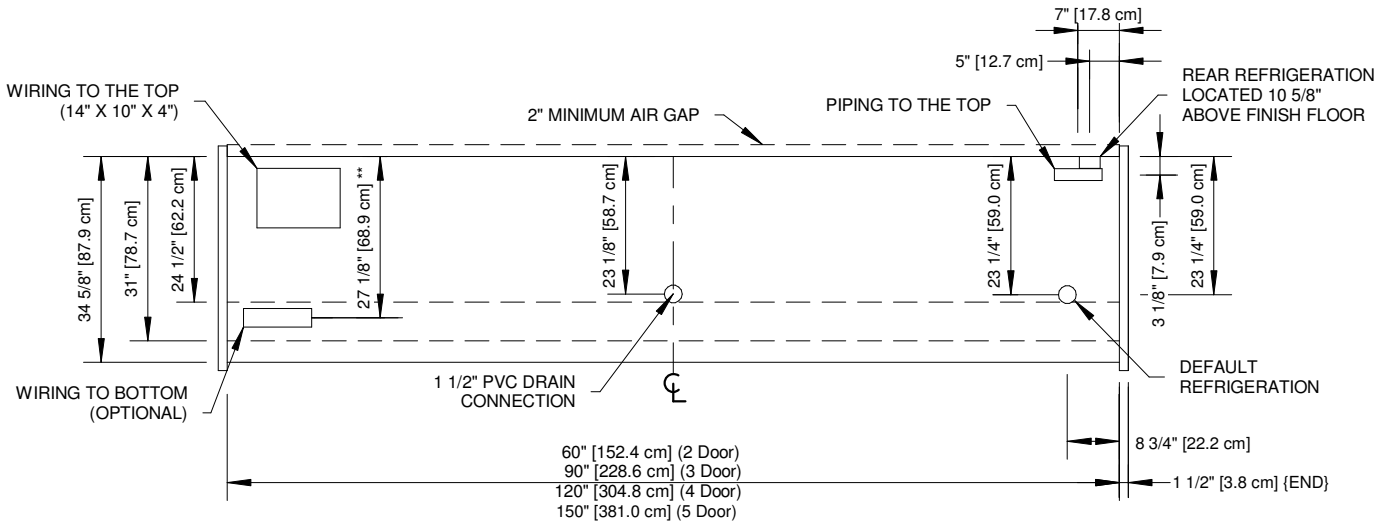
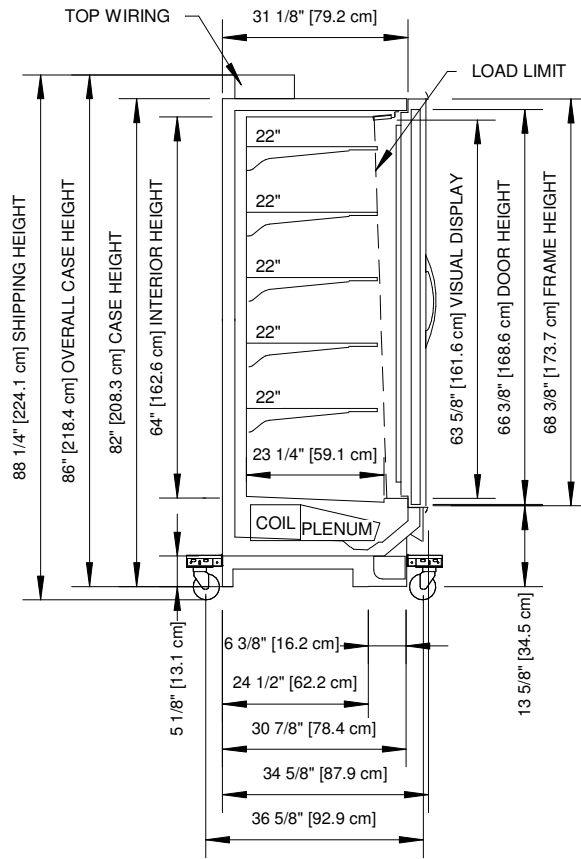
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**NOTES:**

- \* : 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.

DRAIN LOCATION FROM CENTERLINE				
CASE LENGTH	2DR	3DR	4DR	5DR
"X"	0"	- 0.5"	0"	0"



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