

**REFERENCE NOTES FOR ENGINEERING DATA**

- 8-foot cases can consist of 3 (32") doors or 4 (24") doors; 12-foot cases can consist of 4 (36") doors or 6 (24") doors.
- Data listed is for Optimax Radiant and low power Optimax Pro (high power available). For other lighting options please contact your sales representative.
- "0.00" indicates that feature is not an option on this case model.
- Anti-condensate heat values for Eliminaator and Vista C 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.
- 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.
- Light wattages below reflect 100% run time. To determine actual daily energy usage at 75°F/55%RH conditions, reduce the light wattages below by 42%.
- Rear loading cases are designed for the rear door to open into an operating cooler

**REFERENCE NOTES FOR CROSS SECTIONS**

\* : 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
- Wiring to the top adds approximately 4" to case height
- A 2" minimum air gap is required between the rear of the case and the wall
- Casters add approximately 2 1/4" to case height
- Suction line: (2 door or 3 door) - 5/8", suction lines (4 door, 5 door, & 6 door) - 7/8"
- Liquid line with hot gas defrost (all lengths)- 3/8"
- Liquid line (all lengths) - 1/2"
- Available shelf sizes: 24" & 27"
- Recommended configuration is (5) rows - 27" shelves
- Peg shelving systems are not to be used with rear-loading cases



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| ELECTRICAL DATA |               |                      |       |
|-----------------|---------------|----------------------|-------|
| Doors           | Fans Per Case | High Efficiency Fans |       |
|                 |               | 120 Volts            |       |
|                 |               | Amps                 | Watts |
| 8'              | 2             | 0.43                 | 52    |
| 12'             | 3             | 0.65                 | 78    |

| LIGHTING DATA |              |              |       |              |       |                   |       |
|---------------|--------------|--------------|-------|--------------|-------|-------------------|-------|
| Case Length   | Size of Door | LED Lighting |       |              |       |                   |       |
|               |              | Optimax Pro  |       | GE Immersion |       | Crossfire/Polaris |       |
|               |              | 120 Volts    |       | 120 Volts    |       | 120 Volts         |       |
|               |              | Amps         | Watts | Amps         | Watts | Amps              | Watts |
| 8'            | 24"          | 0.73         | 87.0  | 0.00         | 0.00  | 0.00              | 0.0   |
| 8'            | 32"          | 0.48         | 58.0  | 0.40         | 48.00 | 0.38              | 45.0  |
| 12'           | 24"          | 1.08         | 130.0 | 0.00         | 0.00  | 0.00              | 0.0   |
| 12'           | 36"          | 0.64         | 77.0  | 0.53         | 64.00 | 0.50              | 60.0  |

| GUIDLINES & CONTROL DATA |             |           |             |          |                 |                                 |                    |                        |
|--------------------------|-------------|-----------|-------------|----------|-----------------|---------------------------------|--------------------|------------------------|
| Application              | Case Length | Door Size | BTUH/door   |          | Evaporator (°F) | Superheat Set Point @ Bulb (°F) | Discharge Air (°F) | Discharge Air Velocity |
|                          |             |           | Coventional | Parallel |                 |                                 |                    |                        |
| Beverage                 | 8'          | 24"       | 718         | 678      | 34              | 6-8                             | 38                 | 380 (FPM)              |
| Beverage                 | 8'          | 32"       | 957         | 904      | 34              | 6-8                             | 38                 | 380 (FPM)              |
| Beverage                 | 12'         | 24"       | 718         | 678      | 34              | 6-8                             | 38                 | 380 (FPM)              |
| Beverage                 | 12'         | 36"       | 1077        | 1017     | 34              | 6-8                             | 38                 | 380 (FPM)              |
| Dairy/Deli               | 8'          | 24"       | 744         | 703      | 32              | 6-8                             | 36                 | 380 (FPM)              |
| Dairy/Deli               | 8'          | 32"       | 992         | 937      | 32              | 6-8                             | 36                 | 380 (FPM)              |
| Dairy/Deli               | 12'         | 24"       | 744         | 703      | 32              | 6-8                             | 36                 | 380 (FPM)              |
| Dairy/Deli               | 12'         | 36"       | 1116        | 1054     | 32              | 6-8                             | 36                 | 380 (FPM)              |
| Meat                     | 8'          | 24"       | 827         | 781      | 28              | 6-8                             | 34                 | 380 (FPM)              |
| Meat                     | 8'          | 32"       | 1102        | 1041     | 28              | 6-8                             | 34                 | 380 (FPM)              |
| Meat                     | 12'         | 24"       | 827         | 781      | 28              | 6-8                             | 34                 | 380 (FPM)              |
| Meat                     | 12'         | 36"       | 1241        | 1172     | 28              | 6-8                             | 34                 | 380 (FPM)              |

| ANTI CONDENSATE DATA |           |                 |                 |    |                     |      |
|----------------------|-----------|-----------------|-----------------|----|---------------------|------|
| Case Length          | Door Size | Number of Doors | 101 Frames      |    | Vista Frames        |      |
|                      |           |                 | Un Heated Doors |    | Un Heated Doors     |      |
|                      |           |                 | ELMD, ELMH, I90 |    | Vista C, I60, Elite |      |
|                      |           |                 | 120 V           |    | 120 V               |      |
| Amps                 | Watts     | Amps            | Watts           |    |                     |      |
| 8'                   | 24"       | 4               | 0.39            | 47 | 0.39                | 47.0 |
| 8'                   | 32"       | 3               | 0.51            | 61 | 0.51                | 61.0 |
| 12'                  | 24"       | 6               | 0.63            | 76 | 0.63                | 76.0 |
| 12'                  | 36"       | 4               | 0.74            | 89 | 0.74                | 89.0 |

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

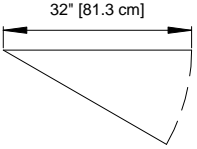
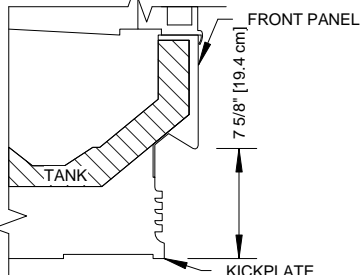
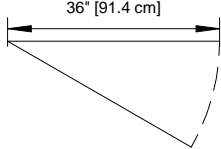
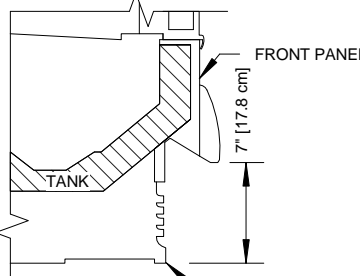
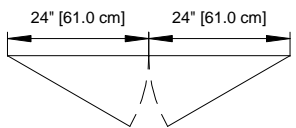
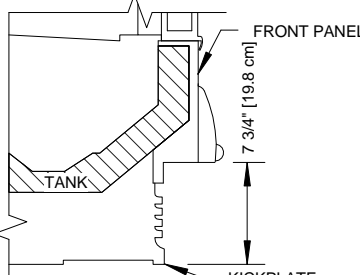


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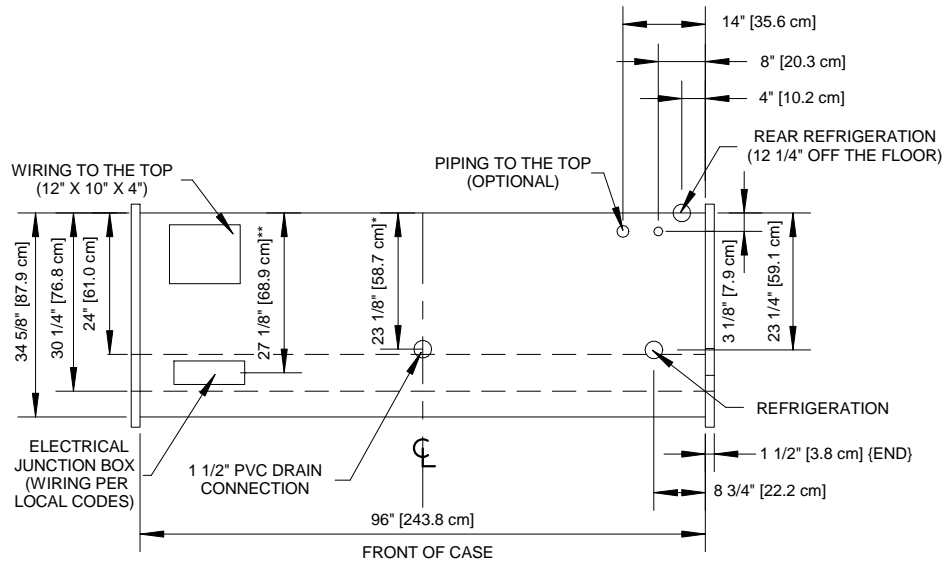
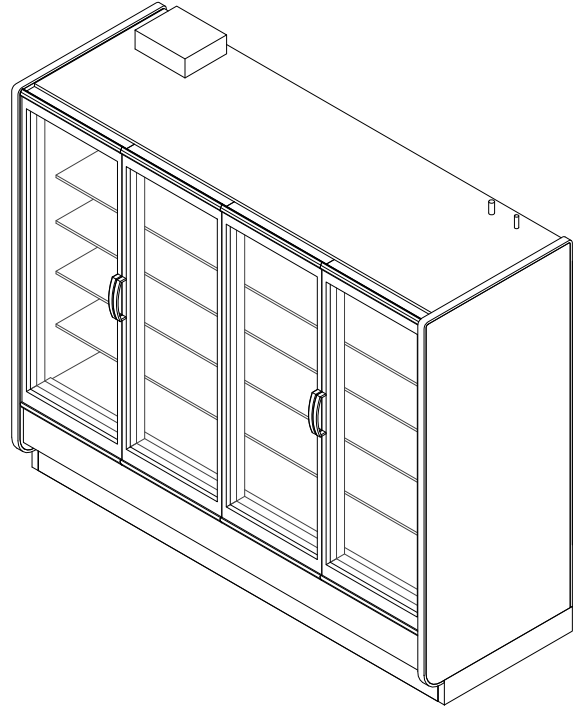
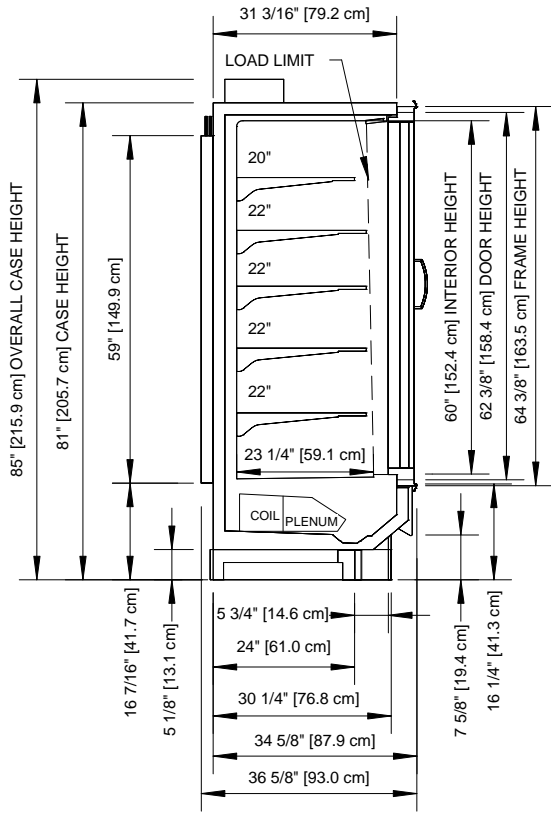
| DOOR OPTIONS  | FRONT OPTIONS  |
|---|--|
| <p>STANDARD SWING DOOR<br/>8' CASE</p>  <p>32" [81.3 cm]</p>                           | <p><b>FLAT FRONT (O SERIES)</b></p>  <p>FRONT PANEL<br/>7 5/8" [19.4 cm]<br/>TANK<br/>KICKPLATE</p> |
| <p>STANDARD SWING DOOR<br/>12' CASE</p>  <p>36" [91.4 cm]</p>                          | <p><b>STREAMLINE BUMPER</b></p>  <p>FRONT PANEL<br/>7" [17.8 cm]<br/>TANK<br/>KICKPLATE</p>         |
| <p>BI-SWING DOOR<br/>4,8' &amp; 12' CASES</p>  <p>24" [61.0 cm]    24" [61.0 cm]</p> | <p><b>HALF BUMPER</b></p>  <p>FRONT PANEL<br/>7 3/4" [19.8 cm]<br/>TANK<br/>KICKPLATE</p>          |



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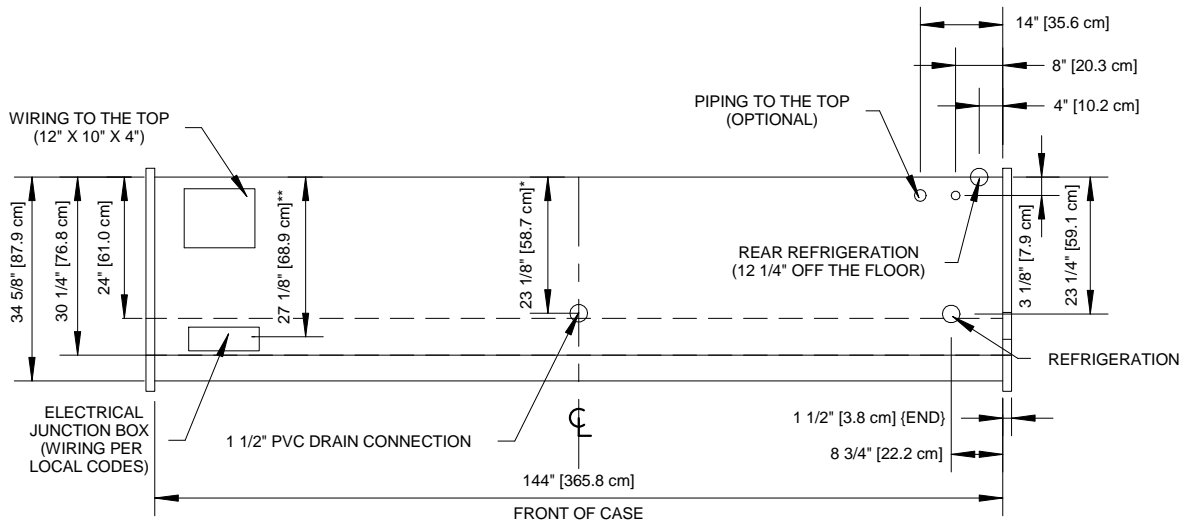
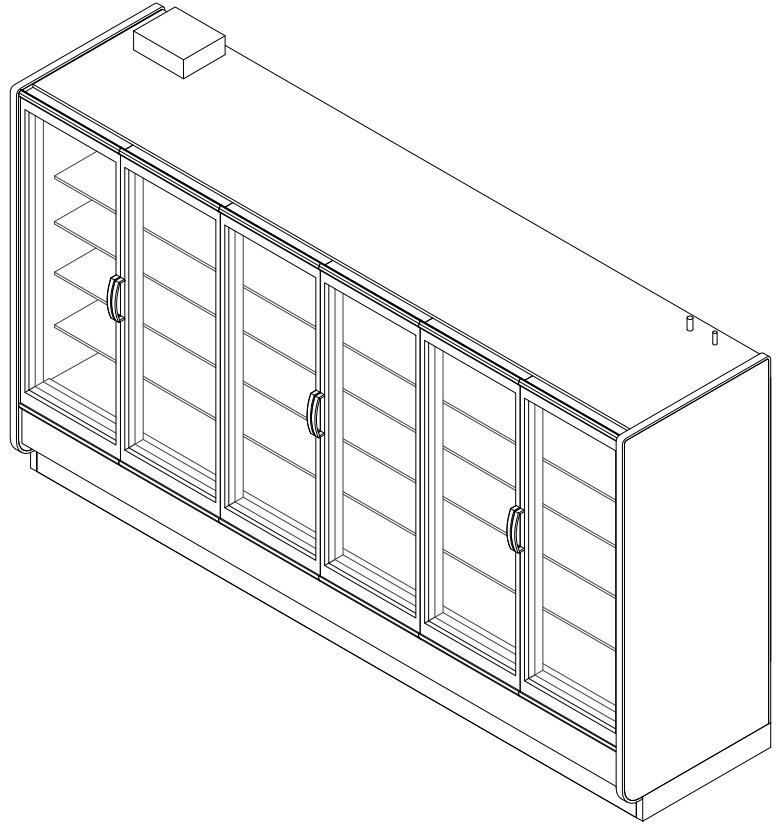
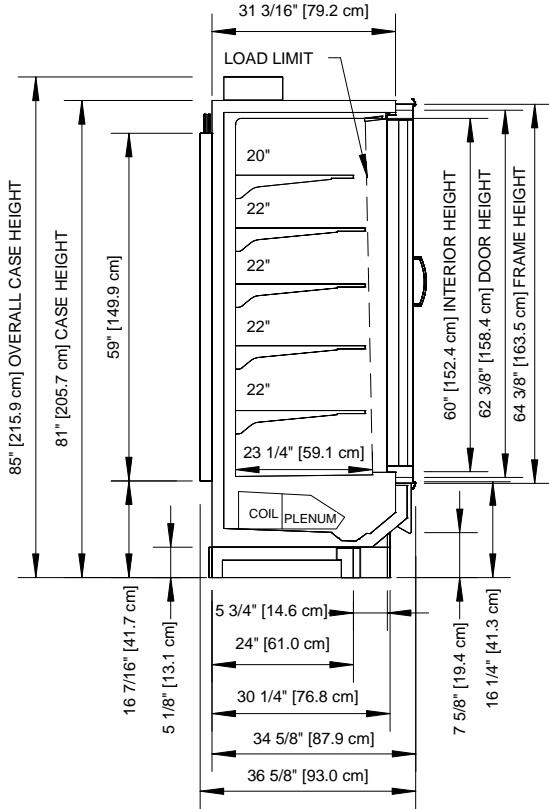
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### ONRBR 12'

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