

REFERENCE NOTES FOR ENGINEERING DATA:

- "0.00" Denotes option is not available
- Engineering Reference Sheet Notes:
- BTUH/ft notes:
- Load data represents the sum of both coils.
- Listed evaporator temperature represents unlighted shelves. For lighted shelves and/or aftermarket merchandising accessories, reduce the listed evaporator temperature by 2°F.
- BTUH load increases by 132 BTUH/ft when aftermarket merchandising accessories are utilized.
- Not intended for frozen juice application.
- 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.
- Not intended for frozen juice application.

REFERENCE NOTES FOR CROSS SECTIONS:

- * Stub up area
- ** Recommended stub-up centerline for electrical and hub drains

- Suction Line - 7/8", Liquid Line 3/8"
- Dashed lines signify area inside base rail, behind kickplate
- Casters add 2 1/4" to case height



ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX REFRIGERATED DISPLAY CASES FOR SALE IN THE UNITED STATES MEET OR EXCEED DEPARTMENT OF ENERGY 2017 REQUIREMENTS.

OIZ

Rev Date:	Rev #	Revision Description:
4-11-17	1	DOE 2017



ELECTRICAL DATA

Case Length	Fans Per Case	High Efficiency Fans		Anti Condensate Heaters		Defrost Heaters			
		120 Volts		120 Volts		208 Volts		240 Volts	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
8'	2	0.30	22.0	0.71	85.0	11.60	2400	13.30	3196
12'	3	0.45	33.0	1.03	123.0	17.30	3600	20.00	7495
12'	3	0.45	33.0	1.03	123.0	17.30	3600	20.00	7495

GUIDLINES AND CONTROL SETTINGS

Application	BTUH/ft		Super Heat Set Point @ bulb (°F)	Evaporator (°F)	Discharge Air (°F)	Discharge Air Velocity (FPM)
	Conventional	Parallel				
Frozen Foods	372	364	3 - 5	-12	-8	190
Medium Temp	223	217	6 - 8	27	32	190
Medium Temp	223	217	6 - 8	27	32	190

DEFROST CONTROLS

Application	Defrost Per Day	Run- Off Time (Min)		Electrical Defrost		Timed - Off Defrost		Hot Gas Defrost	
		Electric	Hot Gas	Fail-Safe (Min)	Termination Temp (°F)	Fail-Safe (Min)	Termination Temp (°F)	Fail-Safe (Min)	Termination Temp (°F)
Frozen Food	1	5	13 - 15	35	52	0.00	0.00	20	60
Medium Temp	1	5	13 - 15	40	42	45	42	20	60
Medium Temp	1	5	13 - 15	40	42	45	42	20	60



ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX REFRIGERATED DISPLAY CASES FOR SALE IN THE UNITED STATES MEET OR EXCEED DEPARTMENT OF ENERGY 2017 REQUIREMENTS.

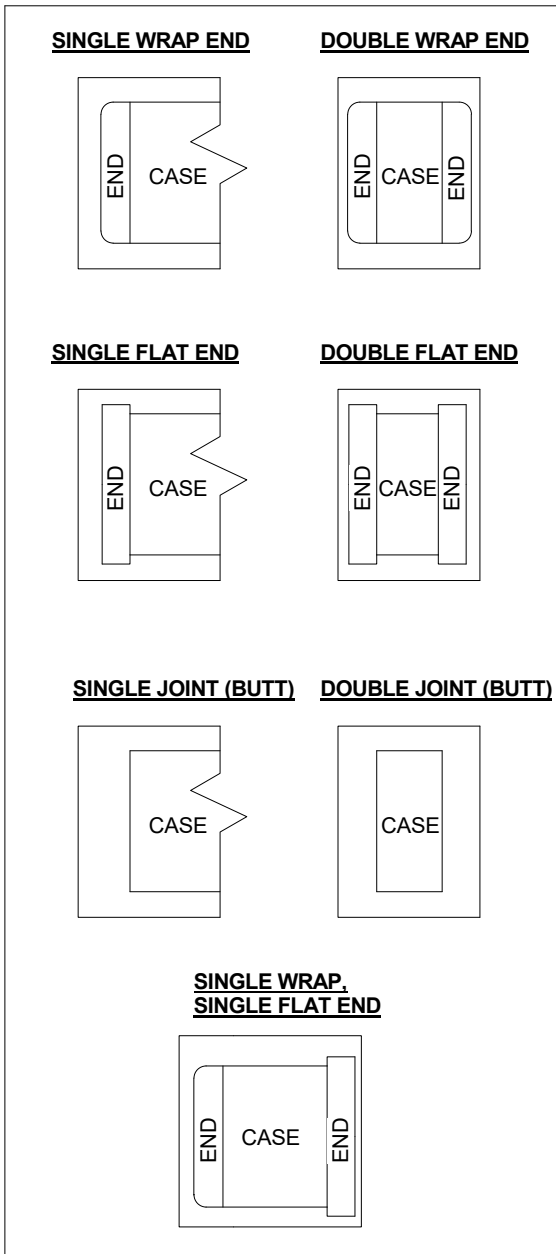
OIZ 1

Rev Date:	Rev #	Revision Description:
4-11-17		DOE 2017

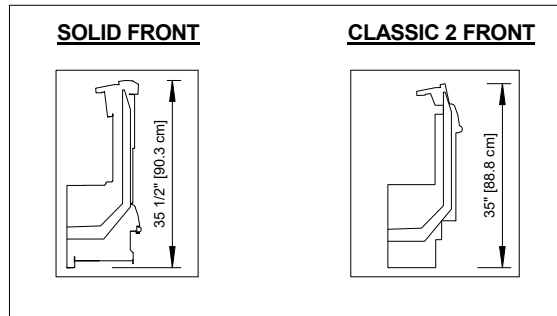


A BOWEN COMPANY

CASE CONFIGURATIONS



SOLID FRONT OPTIONS

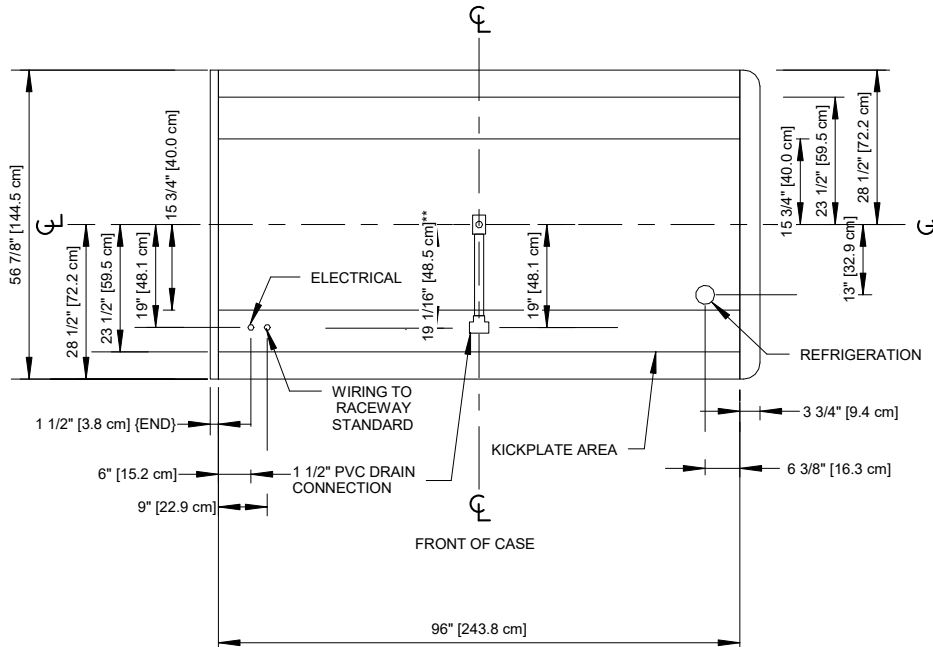
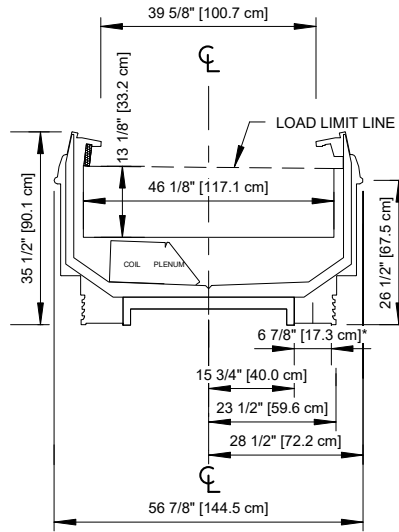


ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX REFRIGERATED DISPLAY CASES FOR SALE IN THE UNITED STATES MEET OR EXCEED DEPARTMENT OF ENERGY 2017 REQUIREMENTS.

OIZ

Rev Date:	Rev #	Revision Description:
9-27-17	1	DOE 2017



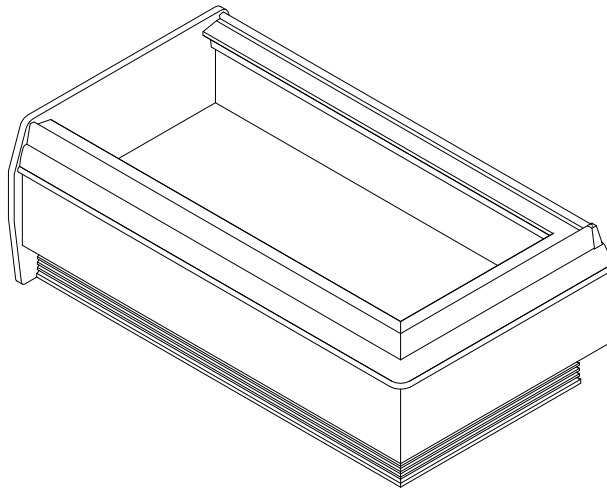


COMPONENT
ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX REFRIGERATED DISPLAY CASES FOR SALE IN THE UNITED STATES MEET OR EXCEED DEPARTMENT OF ENERGY 2017 REQUIREMENTS.

OIZ 8' 1-2

Rev Date:	Rev #	Revision Description:
4-11-17	1	DOE 2017

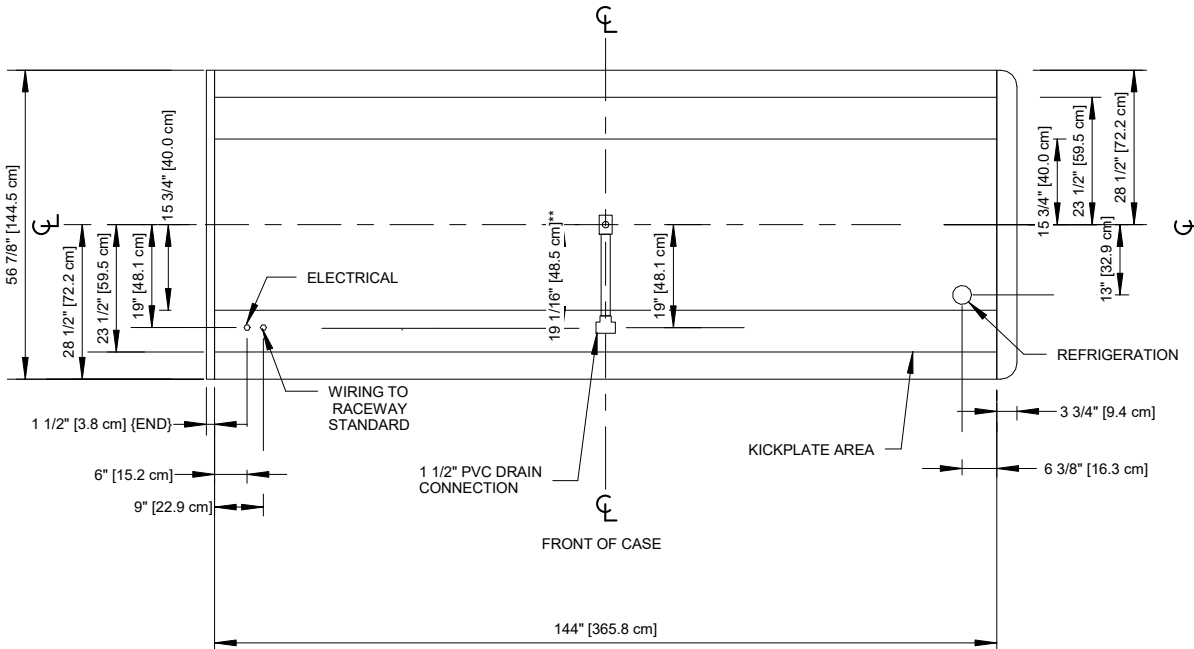
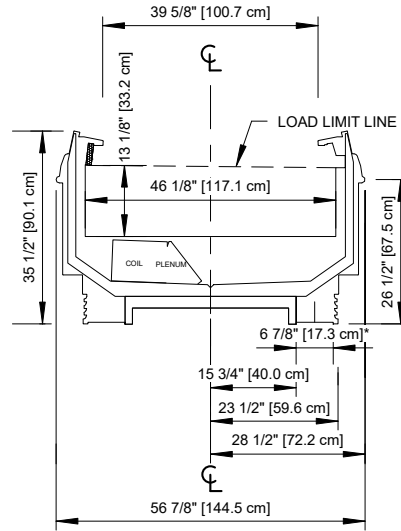




COMPONENT
ALL MEASUREMENTS ARE TAKEN PER
ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX
REFRIGERATED DISPLAY CASES FOR SALE IN THE
UNITED STATES MEET OR EXCEED DEPARTMENT OF
ENERGY 2017 REQUIREMENTS.

OIZ 8' 2-2

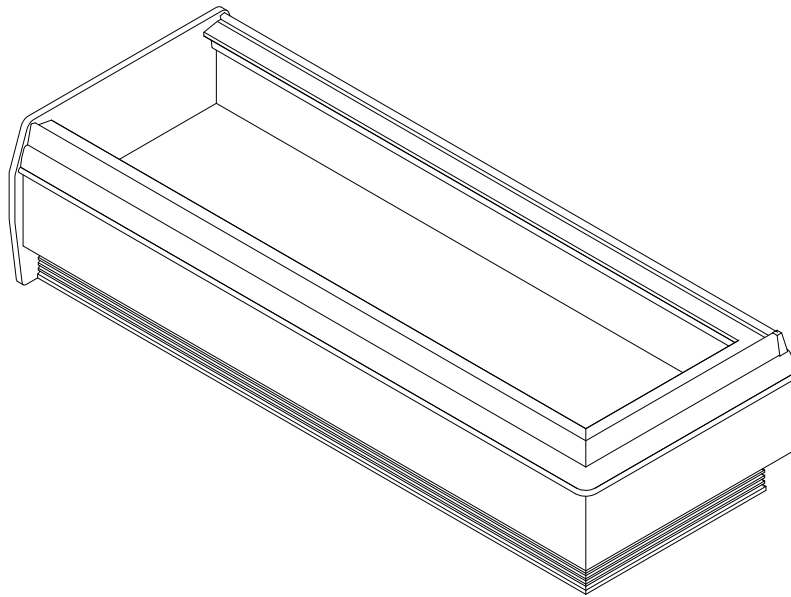
Rev Date:	Rev #	Revision Description:
4-11-17	1	DOE 2017



COMPONENT
ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX REFRIGERATED DISPLAY CASES FOR SALE IN THE UNITED STATES MEET OR EXCEED DEPARTMENT OF ENERGY 2017 REQUIREMENTS.

OIZ 12' 1-2

Rev Date:	Rev #	Revision Description:
4-11-17	1	DOE 2017



COMPONENT
ALL MEASUREMENTS ARE TAKEN PER
ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX
REFRIGERATED DISPLAY CASES FOR SALE IN THE
UNITED STATES MEET OR EXCEED DEPARTMENT OF
ENERGY 2017 REQUIREMENTS.

OIZ 12' 2-2

Rev Date:	Rev #	Revision Description:
4-11-17	1	DOE 2017