

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

| Item | Part # | Description | Wiring Item # | Item | Part # | Description | Wiring Item # |
|----------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------|---------------|---------------------------------------------|--------------------------------------------|---------------------------|---------------|
| FAN ASSEMBLIES, AND THERMOSTATS | | | | ELECTRIC DEFROST HEATERS (CONTINUED) | | | |
| A. | 12W Standard Energy Efficient Fan Assembly | | | ANTI-SWEAT HEATERS | | | |
| | 0477655 | Fan Motor, Evaporator (MO.4410546) | (1) | J. | Return Air Heater | | (10) |
| | 0142780 | Fan Blade (FB.0142780) embossing toward motor | | | 0486052 | 4 ft, (HE.4850701) | |
| B. | 0522287 | Fan Motor – Muffin, Ambient High Efficiency 120V, 4.5W, CW (MO.4411037) | (2) | | 0486053 | 6 ft, (HE.4850702) | |
| C. | 0440420 | Fan Motor, Reversing Non-Refrigerated (Electric Defrost) 120V, 9W, CW (MO.4410302) | (3) | | 0486054 | 8 ft, (HE.4850627) | |
| | 0141070 | Fan Blade (FB.0141070) embossing toward motor | | | 0486055 | 12 ft, (HE.4850660) | |
| | 0058698 | Fan Motor, Non-Refrigerated (Gas Defrost) 120V, 7W, CW (MO.4410102) | (3) | K. | Main Anti-Sweat Heater (Honeycomb Divider) | | (11) |
| | 0141070 | Fan Blade (FB.0141070) embossing toward motor | | | 0494989 | 4 ft (HE.4850723) | |
| D. | 0474130 | Standard Non-Adjustable Bi-metal Electric Defrost Thermostat (CT.4440737) | (4) | | 0494990 | 6 ft (HE.4850724) | |
| | 0358566 | Optional Non-Adjustable Bi-metal Gas Defrost Thermostat (CT.0358566) | | | 0494991 | 8 ft (HE.4850725) | |
| E. | Optional Adjustable Refrigeration Thermostat | | (5) | | 0494992 | 12 ft (HE.4850726) | |
| ELECTRIC DEFROST HEATERS | | | | L. | Optional Front Rail Heater | | (12) |
| F. | 0123592 | Relay, DPDT 208V coil (RL.4440495) | (6) | | 0494998 | 4 ft (HE.4850727) | |
| G. | 0442232 | Heater Limit Thermostat (CT.4481090) | (7) | | 0494999 | 6 ft (HE.4850728) | |
| H. | Defrost Heater | | (8) | | 0495000 | 8 ft (HE.4850729) | |
| | 0487482 | 4, 8 & 12 ft (HE.4481533) | | | 0495001 | 12 ft (HE.4850730) | |
| | 0495023 | 6 ft (HE.4850742) | | LAMPS AND BALLASTS | | | |
| I. | Defrost Heater | | (9) | M. | Ballast, Electronic | | (13) |
| | 0486060 | 4 ft (HE.4851042) | | | 0466233 | 1 lamp (BA.4481300) | |
| | 0486061 | 6 ft (HE.4850669) | | | 0466234 | 2 lamps (BA.4480823) | |
| | 0486062 | 8 ft (HE.4850692) | | | 0466235 | 3 lamps (BA.4480901) | |
| | 0486063 | 12 ft (HE.4850653) | | N. | Fluorescent Lamp | | (14) |
| | | | | | <i>Replace with like fixtures</i> | | |
| | | | | LED FIXTURES AND POWER SUPPLY | | | |
| | | | | P. | 0501213 | Power Supply (EP.4481861) | (15) |
| | | | | Q. | LED Canopy Fixture | | (16) |
| | | | | | <i>Replace with like fixtures</i> | | |
| | | | | R. | LED Shelf (Rail) Fixture | | (17) |
| | | | | | <i>Replace with like fixtures</i> | | |

NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available. Descriptions including size and color are at WWW.HUSSMANN.COM/SERVICEANDPARTS.

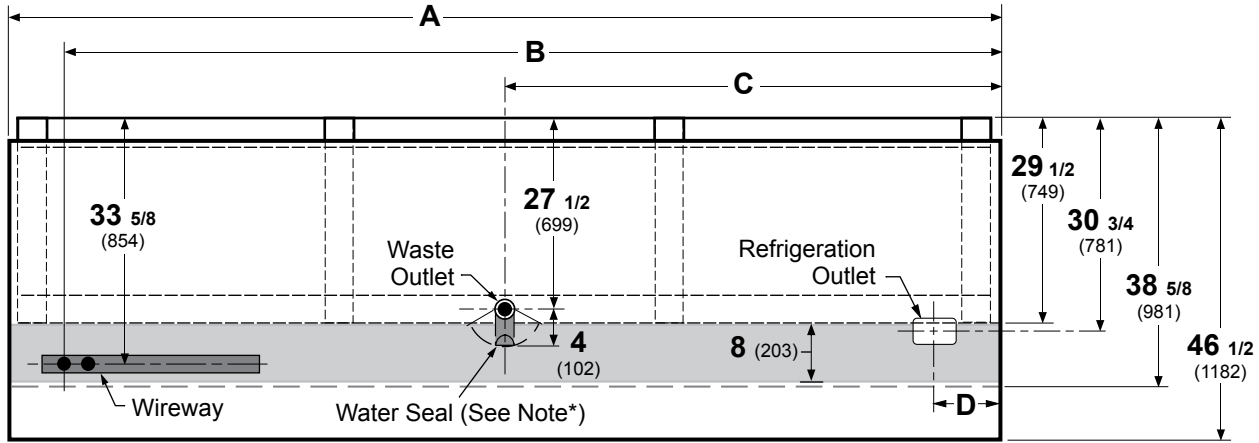
Note: Revision D updated cross section and plan view. Other changes marked by bar, underline or circle.

Engineering Plan Views

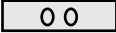



| PHYSICAL DATA | |
|---------------------------------|-------|
| Merchandiser Drip Pipe (in.) | 1 1/2 |
| Merchandiser Liquid Line (in.) | 3/8 |
| Merchandiser Suction Line (in.) | 1 1/8 |

F6L
Frozen
06-2010

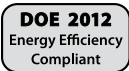
Dimensions shown as inches & (mm).



FRONT

| | 4 ft | 6 ft | 8 ft | 12 ft |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|----------------|
| General | | | | |
| (A) Case Length <i>(without ends or partitions)</i> | 48 1/4 (1226) | 72 1/4 (1835) | 96 3/8 (2448) | 144 1/2 (3670) |
| <i>NOTE: Each end or insulated partition adds 1 1/2 inch to lineup.</i> | | | | |
| Maximum O/S dimension back to front <i>(with bumper)</i> | 46 1/2 (1182) | 46 1/2 (1182) | 46 1/2 (1182) | 46 1/2 (1182) |
| Back of case to front of splashguard | 38 5/8 (981) | 38 5/8 (981) | 38 5/8 (981) | 38 5/8 (981) |
| Width of skid rail | 4 1/8 (105) | 4 1/8 (105) | 4 1/8 (105) | 4 1/8 (105) |
| RH end of case to outside edge of external support | 1 3/8 (35) | 1 3/8 (35) | 1 3/8 (35) | 1 3/8 (35) |
| Distance between inside edges of external support and center support | NA | 28 1/2 (724) | 40 1/2 (1029) | 40 1/2 (1029) |
| Distance between inside edges of center supports | NA | NA | NA | 43 7/8 (1114) |
| Distance between inside edges of external supports | 37 (940) | NA | NA | NA |
| Stub-up area between front skid rail and splashguard | 8 (203) | 8 (203) | 8 (203) | 8 (203) |
| Electrical Service  <i>(Electrical Field Wiring connection point)</i> | | | | |
| (B) RH End of case to center of farthest knockout | 40 1/4 (1022) | 64 1/4 (1632) | 88 3/8 (2245) | 138 7/8 (3527) |
| Back of case to center of end knockout | 35 3/8 (899) | 35 3/8 (899) | 35 3/8 (899) | 35 3/8 (899) |
| Length of electrical wireway | 34 5/8 (879) | 34 5/8 (879) | 34 5/8 (879) | 34 5/8 (879) |
| Waste Outlet  | | | | |
| (C) RH End of case to the center of waste outlet | 24 1/8 (613) | 48 1/8 (1222) | 72 1/4 (1835) | 72 1/4 (1835) |
| Back O/S of case to center of waste outlet | 27 1/2 (699) | 27 1/2 (699) | 27 1/2 (699) | 27 1/2 (699) |
| Water Seal  | | | | |
| Edge of water seal to center of waste outlet | 4 (102) | 4 (102) | 4 (102) | 4 (102) |
| Schedule 40 diameter drip pipe | 1 1/2 (38) | 1 1/2 (38) | 1 1/2 (38) | 1 1/2 (38) |
| <i>(Field installed water seal outlets, tees, and connectors are shipped with the merchandiser.)</i> | | | | |
| Refrigeration Outlet  | | | | |
| Back of case to center of refrigeration outlet | 30 5/8 (778) | 30 5/8 (778) | 30 5/8 (778) | 30 5/8 (778) |
| (D) RH end of case to center of refrigeration outlet | 9 (229) | 9 (229) | 9 (229) | 9 (229) |

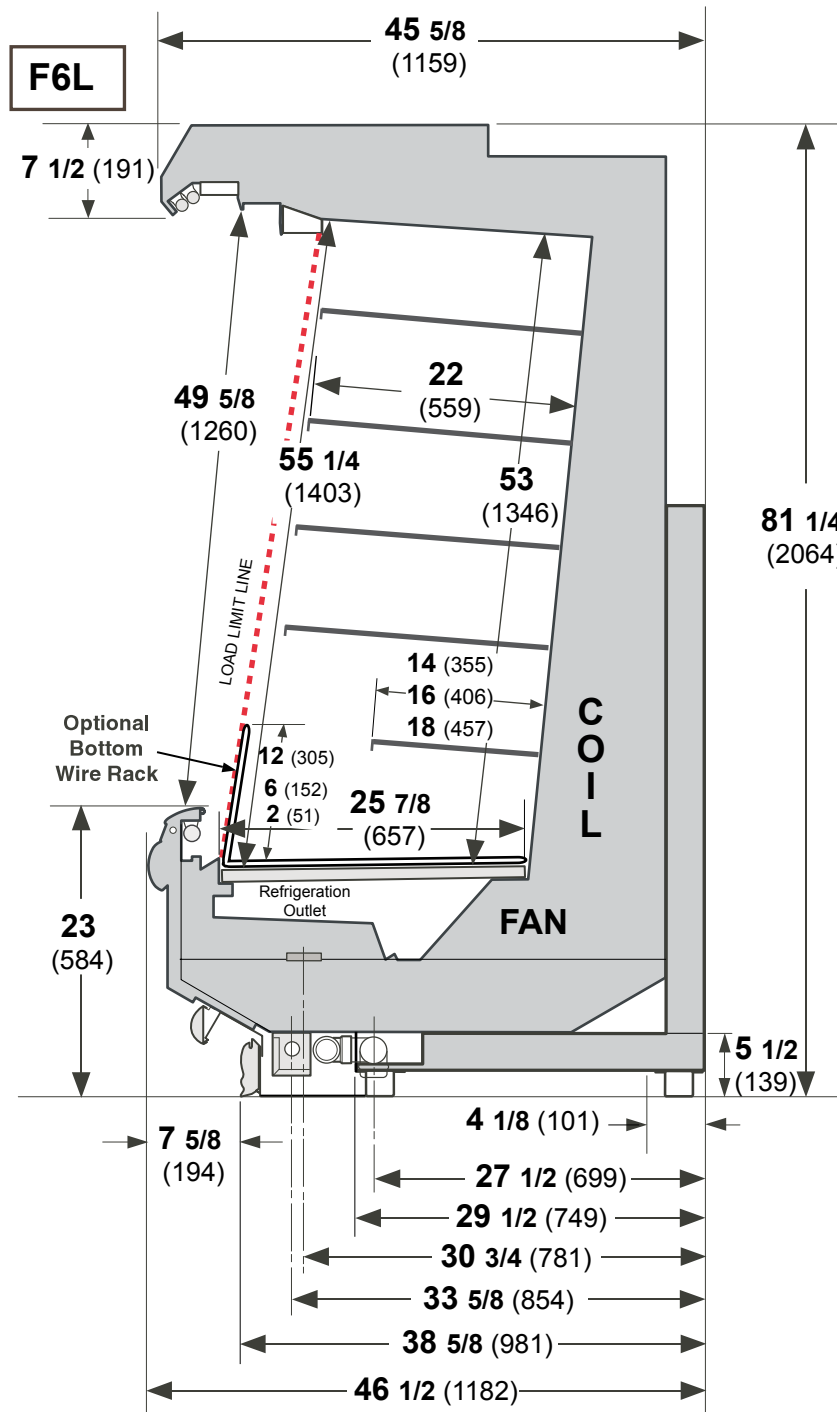
Multi-Deck, 6 Display Levels



Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2012 energy efficiency standards.

Excel F6L
Multi-Deck Frozen Food

Dimensions are shown as inches & (mm).



REFRIGERATION DATA

Note: This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

| | F6L | F6L* |
|--------------------|------|------|
| Discharge Air (°F) | -8 | -3 |
| Evaporator (°F) | -16 | -9 |
| Unit Sizing (°F) | -19 | -12 |
| <i>Btu/hr/ft*</i> | F6L | F6L* |
| Parallel | 1755 | 1660 |
| Conventional | 1850 | 1750 |

* = Non-0 Return Code

DEFROST DATA

| | F6L |
|---------------------------|-----|
| Frequency (hr) | 8 |
| Defrost Water (lb/ft/day) | 8.6 |

(± 15% based on case configuration and product loading).

ELECTRIC REVERSE AIR DEFROST

| | |
|--------------------|-----|
| Temp Term (°F) | 60° |
| Failsafe (minutes) | 30 |

GAS DEFROST

| | |
|--------------------|----|
| Temp Term (°F) | NA |
| Failsafe (minutes) | 22 |

| | |
|----------------|----|
| OFFTIME | NA |
|----------------|----|

CONVENTIONAL CONTROLS

Low Pressure Backup Control

| | F6L |
|-------------------|-----------|
| CI/CO (Temp °F)** | -20°/-39° |

| | |
|-------------------------------------------------------------------|-----|
| Indoor Unit Only, Pressure Defrost Termination (Temp °F)** | 48° |
|-------------------------------------------------------------------|-----|

**Use a Temperature Pressure Chart to determine PSIG conversions.

| Estimated Charge *** | F6L |
|----------------------|--------|
| 4 ft 1.8 lb 29 oz | 0.8 kg |
| 6 ft 2.5 lb 40 oz | 1.1 kg |
| 8 ft 3.5 lb 56 oz | 1.6 kg |
| 12 ft 5.1 lb 82 oz | 2.3 kg |

***This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately 0.5 lb (8 oz / 0.2 kg).

NSF Certification

This merchandiser model is manufactured to meet NSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

| |
|---------------------------------------------------|
| Excel F6L Multi-Deck Frozen Food |
|---------------------------------------------------|

Electrical Data

| Number of Fans | 4 ft | 6 ft | 8 ft | 12 ft | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|-------|-------|--------------|------|------|-------|
| Main Evaporator | 2 | 4 | 4 | 6 | | | | |
| Ambient | 1 | 2 | 2 | 3 | | | | |
| Non-Refrigerated | 1 | 2 | 2 | 3 | | | | |
| | Amperes | | | | Watts | | | |
| | 4 ft | 6 ft | 8 ft | 12 ft | 4 ft | 6 ft | 8 ft | 12 ft |
| Main Evaporator Fans (12W) | | | | | | | | |
| 120V 50/60 Hz Standard Energy Efficient | 0.60 | 1.20 | 1.20 | 1.80 | 36 | 72 | 72 | 108 |
| Ambient Fans (4.5W) | | | | | | | | |
| 120V 60Hz High Efficiency | 0.10 | 0.20 | 0.20 | 0.3 | 4.5 | 9 | 9 | 13.5 |
| Non-Refrigerated Fan (9W, Reversing) – Standard Electric Defrost Only | | | | | | | | |
| 120V 60Hz Standard | 0.24 | 0.48 | 0.48 | 0.72 | 25 | 50 | 50 | 75 |
| Non-Refrigerated Fans (7W) – Optional Gas Defrost Only | | | | | | | | |
| 120V 60Hz Standard | 0.50 | 1.00 | 1.00 | 1.50 | 39 | 78 | 78 | 117 |
| Anti-Sweat Heaters – Constant On | | | | | | | | |
| Main Divider Anti-sweat Heaters | 0.75 | 1.00 | 1.50 | 2.25 | 90 | 120 | 180 | 270 |
| Return Grille Air Heaters | 0.83 | 1.25 | 1.67 | 2.50 | 100 | 150 | 200 | 300 |
| Minimum Circuit Ampacity – Standard Electric Defrost | | | | | | | | |
| 120V 50/60 Hz Standard Energy Efficient | 1.74 | 3.60 | 4.23 | 6.34 | | | | |
| Minimum Circuit Ampacity – Optional Gas Defrost | | | | | | | | |
| 120V 50/60 Hz Standard Energy Efficient | 2.06 | 4.25 | 4.88 | 7.31 | | | | |
| Optional Hand Rail Anti-Sweat Heater 120V | 0.56 | 0.78 | 1.11 | 1.67 | 67 | 94 | 133 | 200 |
| Maximum Over Current Protection 120V | 20 | 20 | 20 | 20 | | | | |
| Maximum Over Current Protection 230V | NA | | | | | | | |
| Electric Defrost Heaters 208V 1ph | | | | | | | | |
| Modular U-Shaped | 3.29 | 4.76 | 6.58 | 9.87 | 685 | 990 | 1370 | 2055 |
| Full Length Rod | 4.71 | 7.07 | 9.42 | 14.15 | 980 | 1470 | 1960 | 2943 |
| Total Defrost Heaters | 8.00 | 11.83 | 16.00 | 24.02 | 1665 | 2460 | 3330 | 4998 |
| Standard Lighting (T-8 fluorescent) | | | | | | | | |
| 1 Row Canopy & 1 Row Rail | 0.49 | 0.80 | 0.98 | 1.42 | 59 | 92 | 118 | 170 |
| ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2012 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A. | | | | | | | | |
| Optional Lighting (T-8 fluorescent) | | | | | | | | |
| 2 Row Canopy & 1 Row Rail | 0.75 | 1.38 | 1.47 | 2.13 | 89 | 138 | 177 | 255 |
| Ecoshine II Canopy | | | | | | | | |
| Ecoshine II | 0.26 | 0.37 | 0.51 | 0.77 | 30.8 | 44.2 | 61.6 | 92.4 |
| Ecoshine II Plus | 0.23 | 0.35 | 0.46 | 0.70 | 27.8 | 41.4 | 55.6 | 83.4 |
| Ecoshine II Plus HO | 0.28 | 0.42 | 0.56 | 0.84 | 34.0 | 50.5 | 67.2 | 100.8 |
| 1 Row Rail | 0.09 | 0.13 | 0.17 | 0.26 | 10.2 | 15.3 | 20.5 | 30.7 |

Product Data

| | |
|--------------------------------------------------------|----------------------------------------------------|
| <i>Recommended Usable Cube</i> ¹ (Cu Ft/Ft) | 7.73 ft ³ /ft (0.72 m ³ /m) |
| <i>AHRI Total Display Area</i> ² (Sq Ft/Ft) | 4.14 ft ² /ft (1.26 m ² /m) |
| <i>Shelf Area</i> ³ (Sq Ft/Ft) | 11.32 ft ² /ft (3.45 m ² /m) |

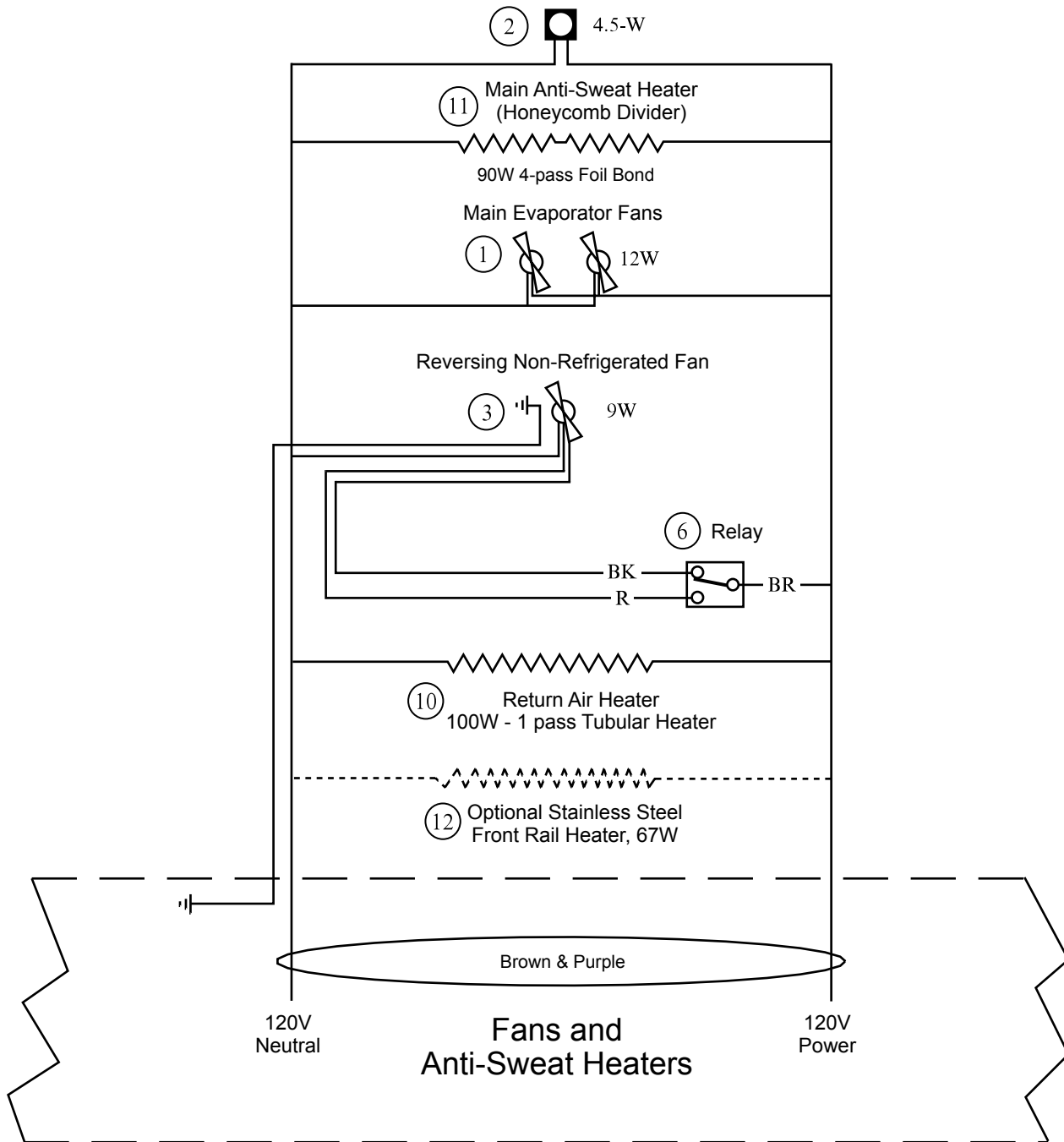
- ¹ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
- ² Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
- ³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (4) rows of 22-inch shelves and (1) row of 18-inch shelves.

| ESTIMATED SHIPPING WEIGHT ⁴ | | | | | |
|----------------------------------------------------------------------------|--------------|--------------|--------------|--------------|------------------|
| Case | <i>4 ft</i> | <i>6 ft</i> | <i>8 ft</i> | <i>12 ft</i> | Solid End |
| | | | | | <i>(each)</i> |
| lb (kg) | 1000 (454) | 1300 (590) | 1700 (771) | 2000 (907) | 100 (45) |
| ⁴ Actual weights will vary according to optional kits included. | | | | | |

Electric Defrost Fans & Anti-Sweat Heaters

4 ft. Wiring Diagram

Ambient Air Curtain - Muffin Fan



WARNING

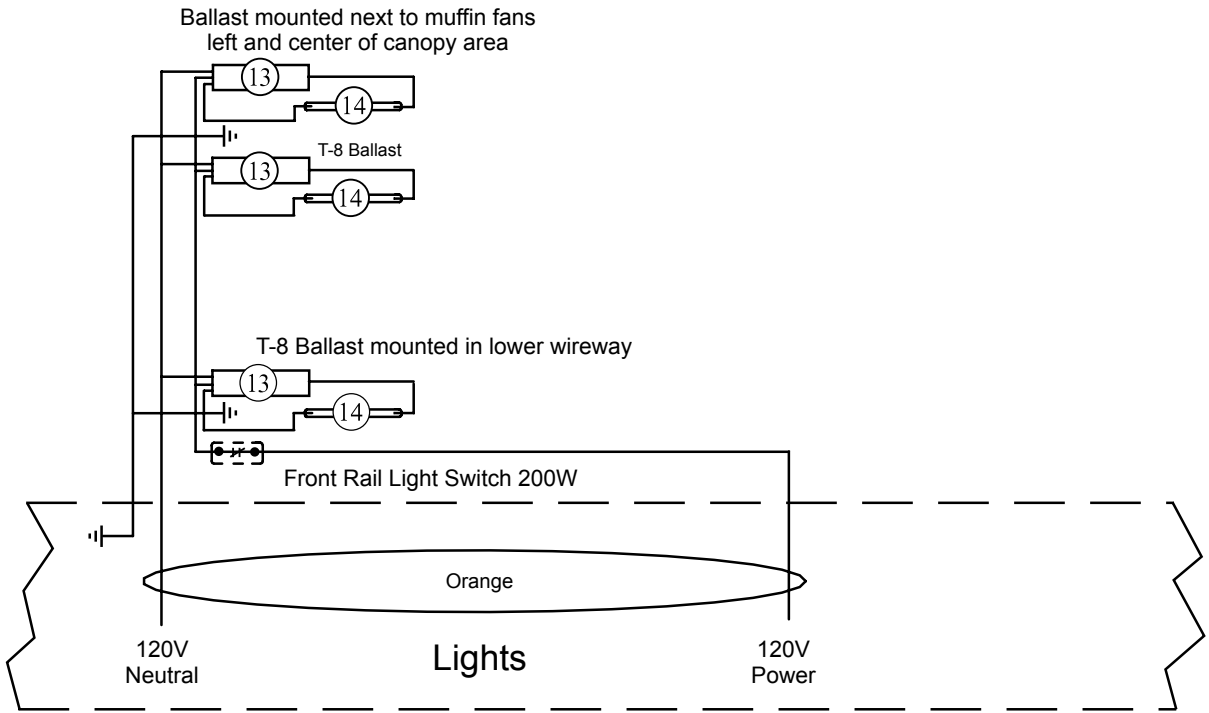
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red Y = Yellow G = Green BL = Blue BK = Black BR = Brown W = White

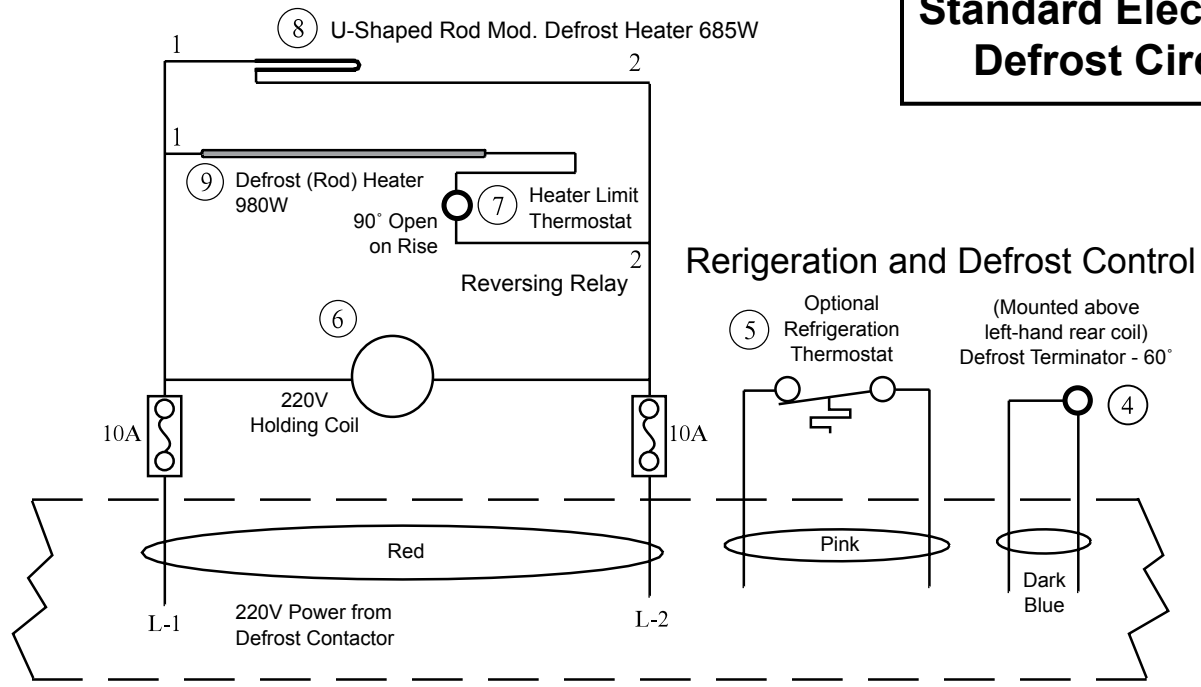
**Standard Electric
Light Circuit**

**4 ft. Wiring Diagram
Lighting Circuit**



**Standard Electric
Defrost Circuit**

Defrost Circuit



WARNING

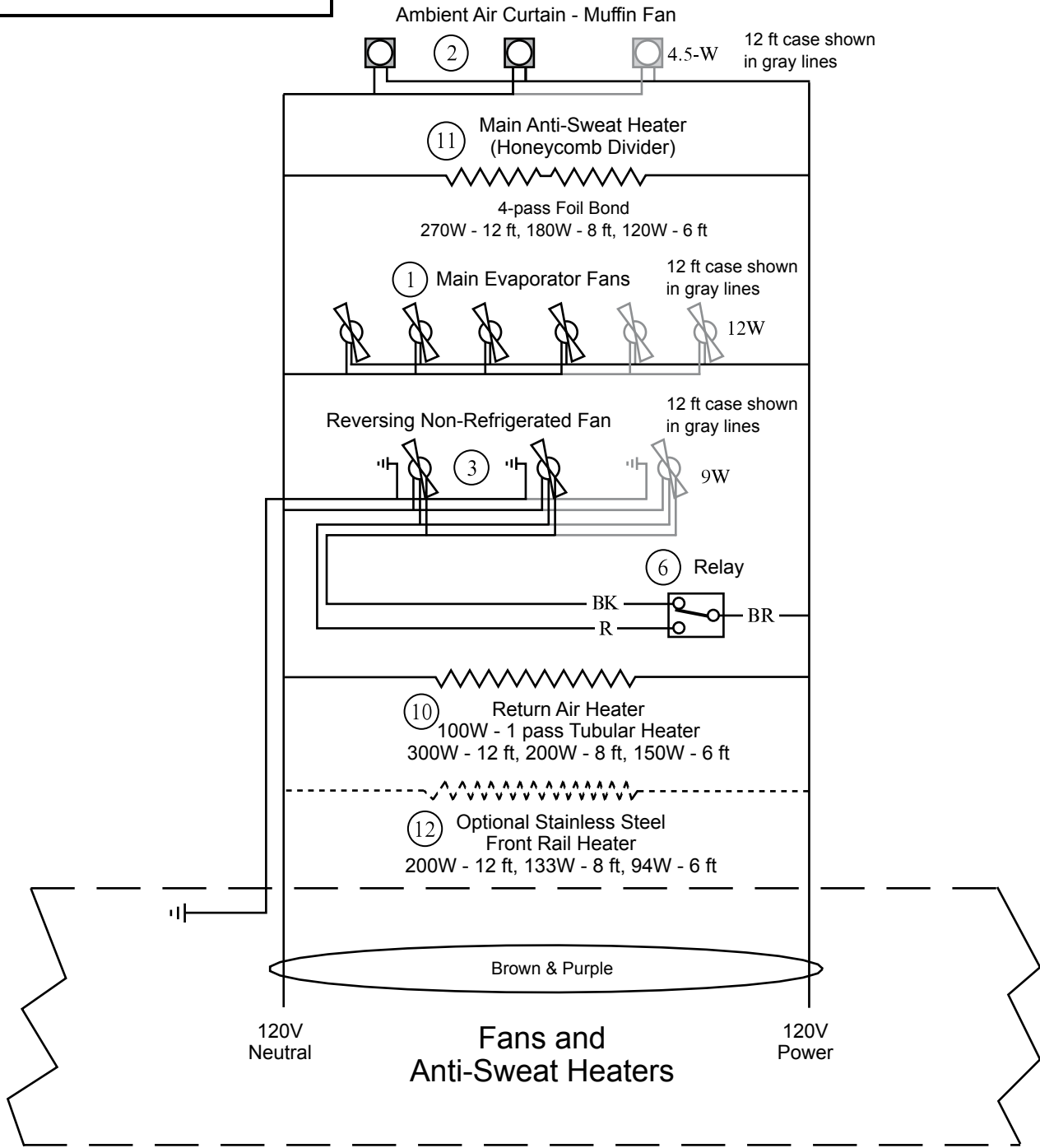
All components must have mechanical ground, and the merchandiser must be grounded.

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Electric Defrost Fans & Anti-Sweat Heaters

6, 8, & 12 ft. Wiring Diagram



WARNING

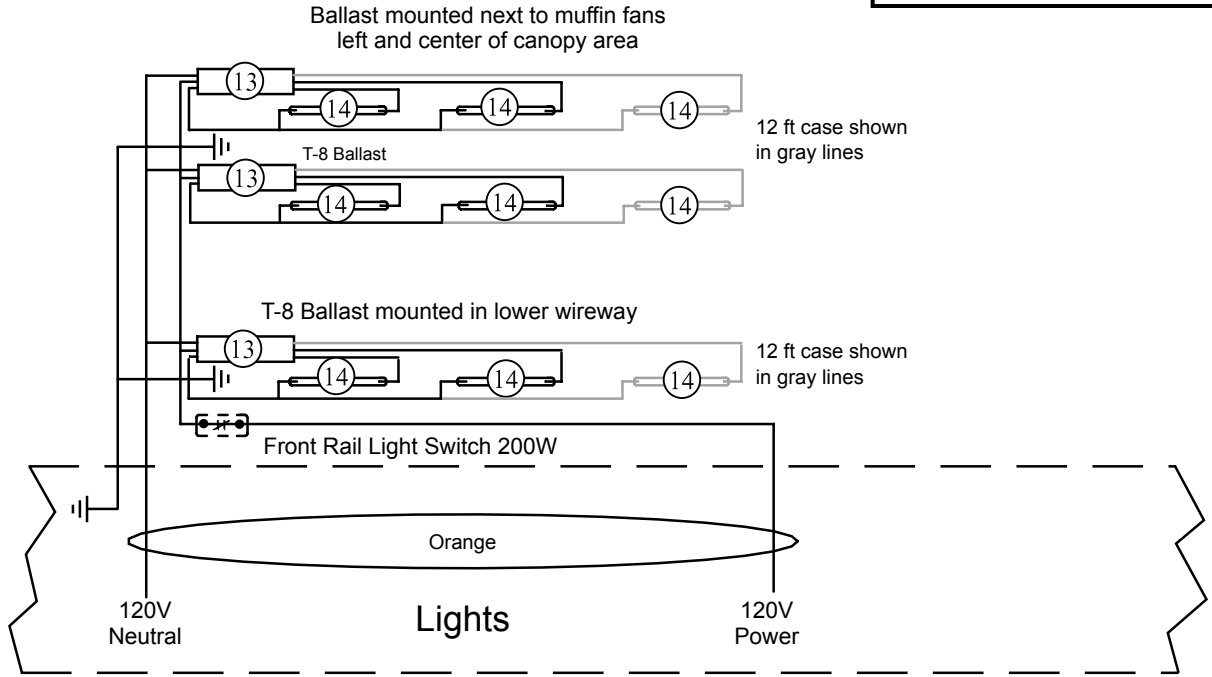
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CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS
Grayed components in 12 foot models only

R = Red Y = Yellow G = Green BL = Blue BK = Black BR = Brown W = White

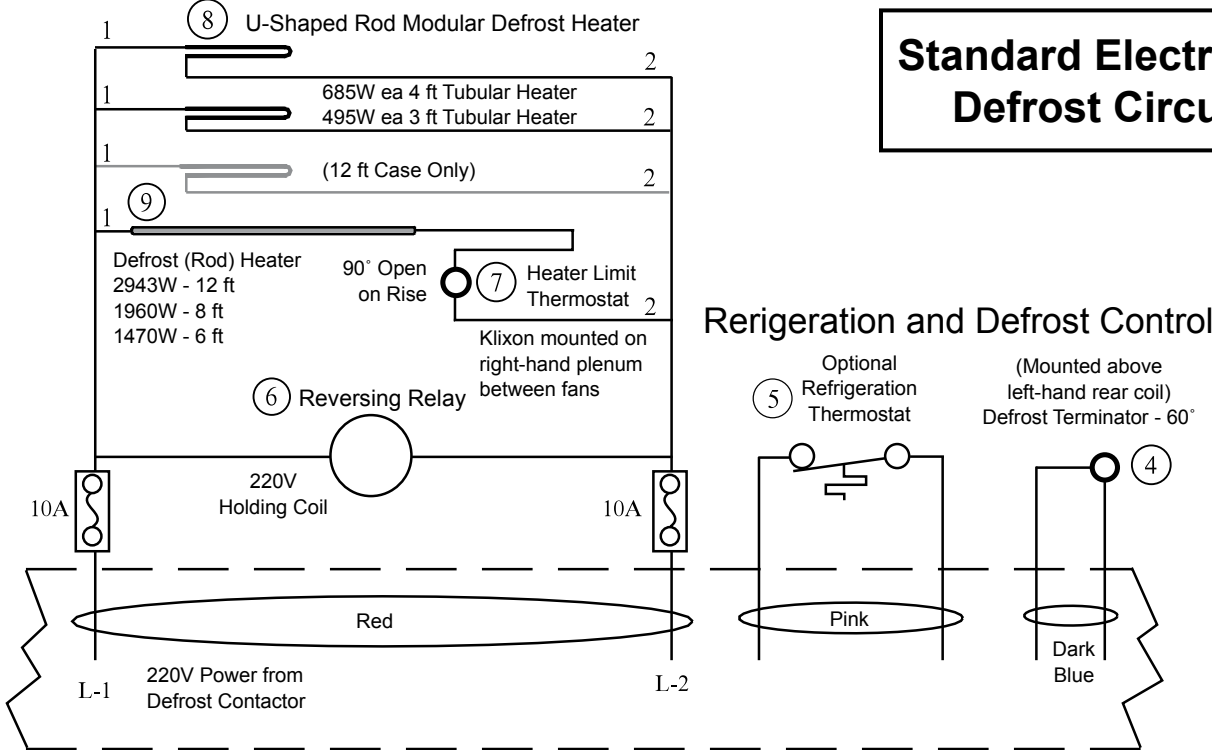
6, 8, & 12 ft. Wiring Diagram Lighting Circuit

Standard Electric Light Circuit



Defrost Circuit

Standard Electric Defrost Circuit



Refrigeration and Defrost Control

WARNING

All components must have mechanical ground, and the merchandiser must be grounded.

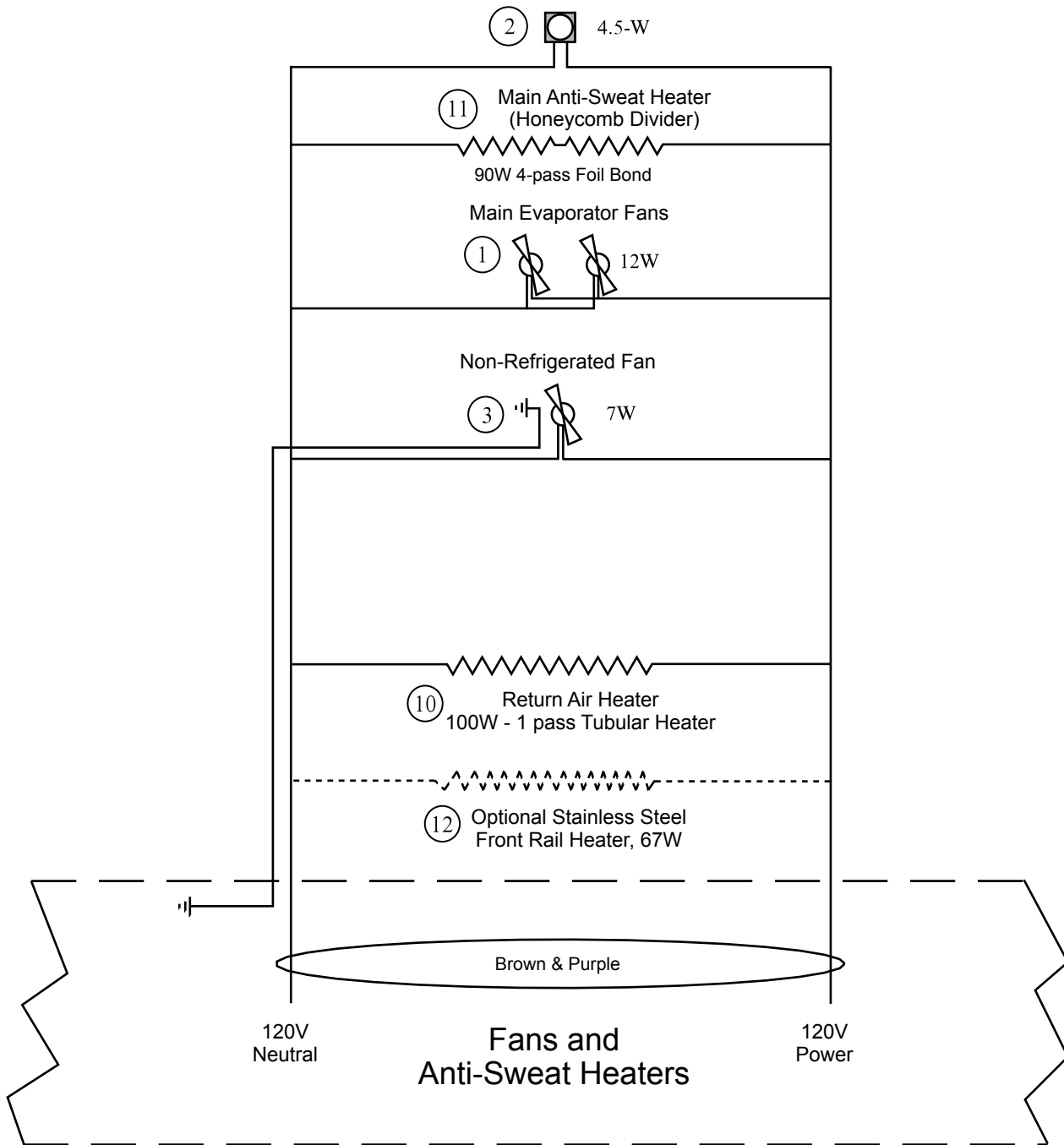
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS
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Gas Defrost Fans & Anti-Sweat Heaters

4 ft. Wiring Diagram

Ambient Air Curtain - Muffin Fan



WARNING

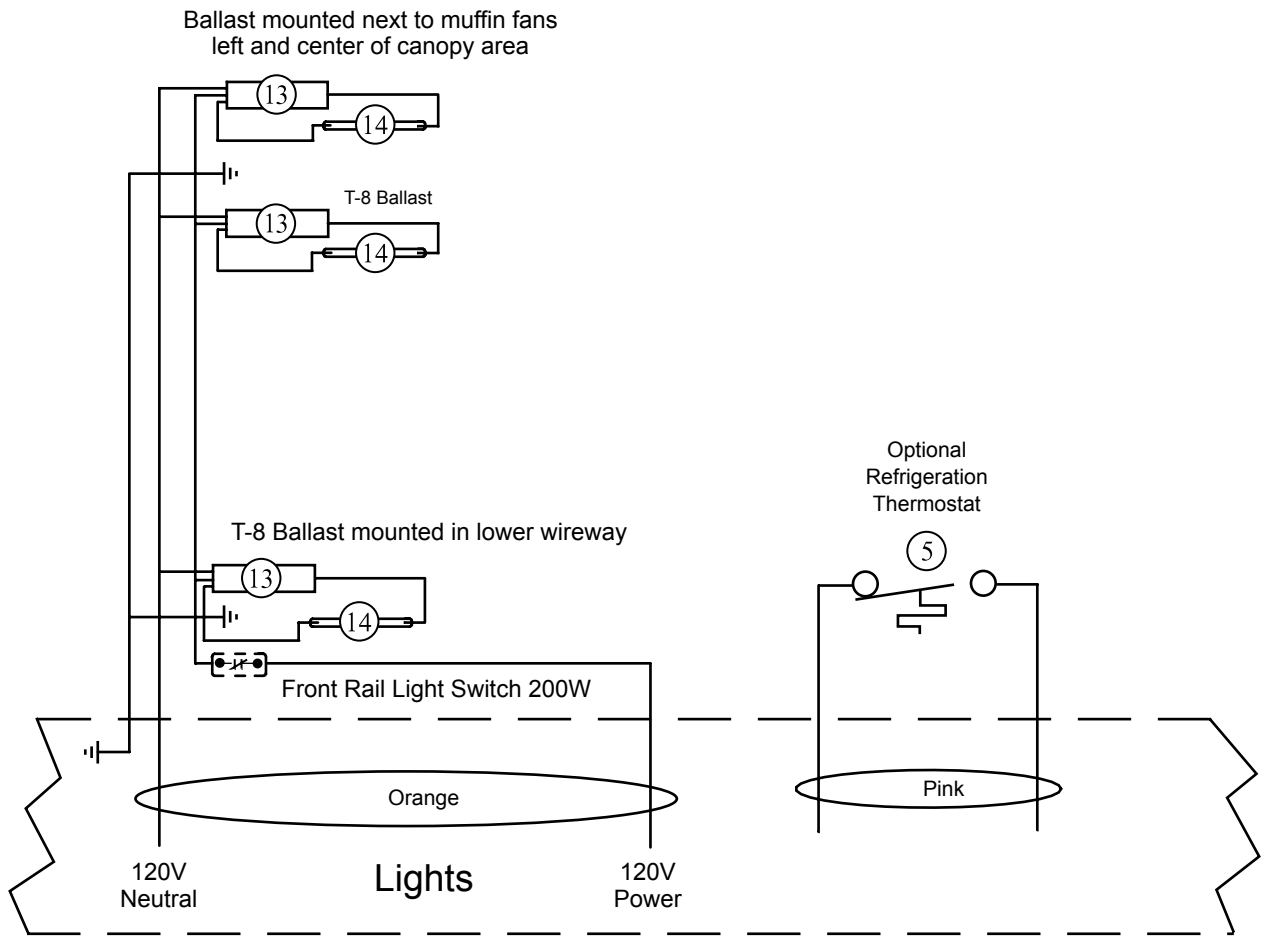
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Gas Defrost Light Circuit & Thermostat

4 ft. Wiring Diagram Lighting Circuit



WARNING

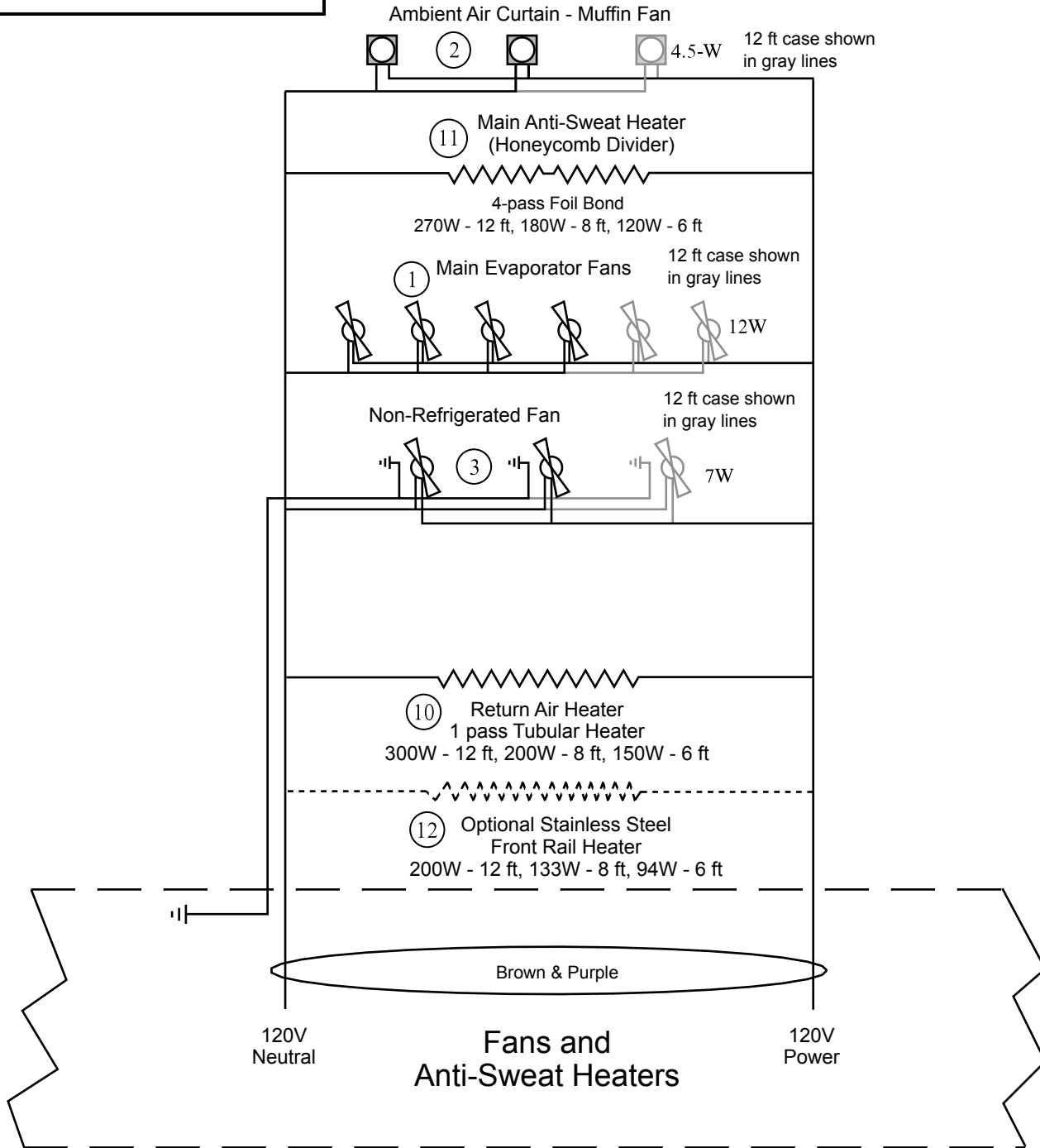
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

Gas Defrost Fans & Anti-Sweat Heaters

6, 8, & 12 ft. Wiring Diagram



WARNING

All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

Grayed components in 12 foot models only

R = Red

Y = Yellow

G = Green

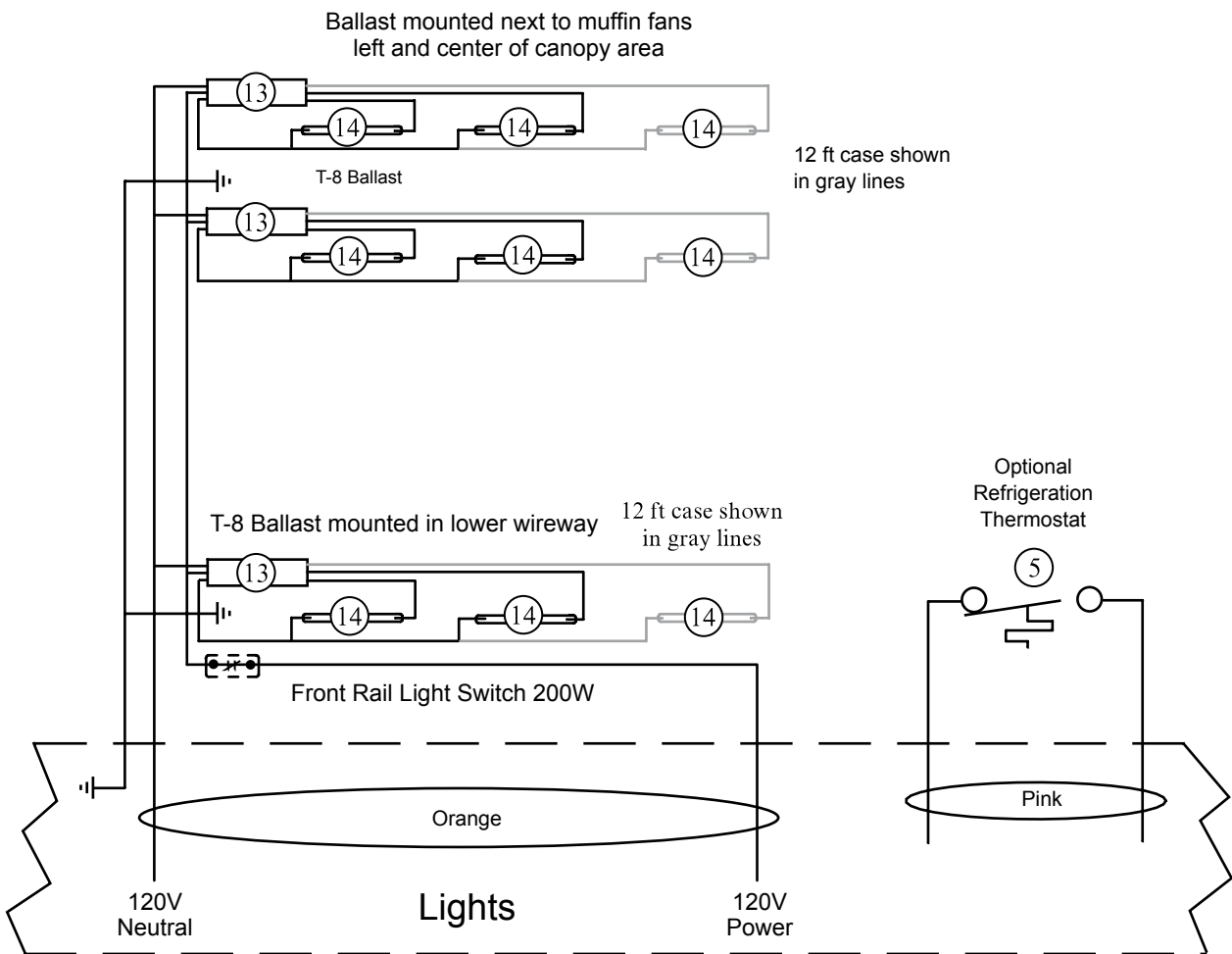
BL = Blue

BK = Black

W = White

Gas Defrost Light Circuit & Thermostat

6, 8, & 12 ft. Wiring Diagram Lighting Circuit



WARNING

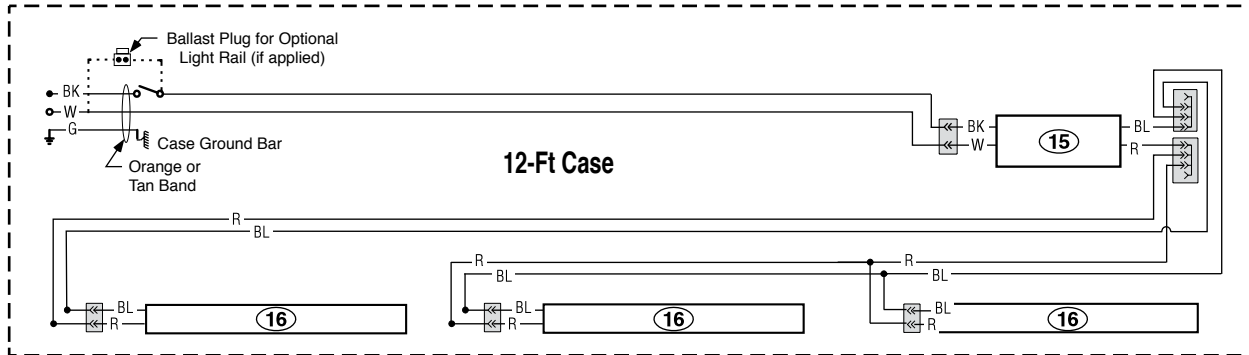
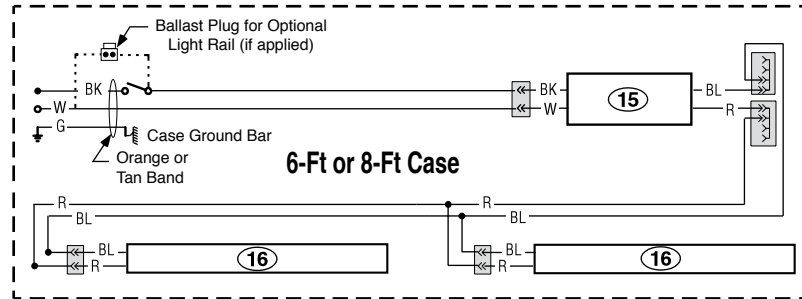
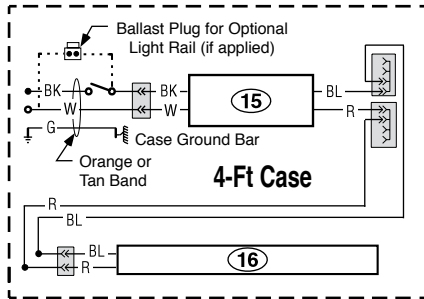
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS
Grayed components in 12 foot models only

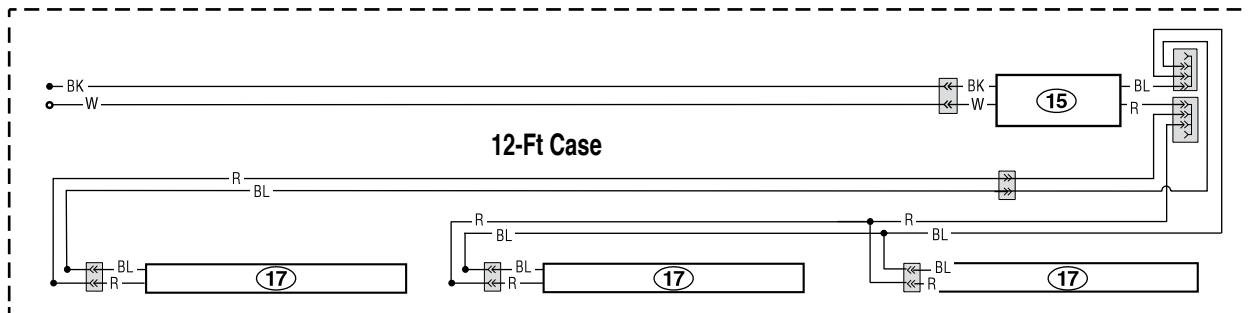
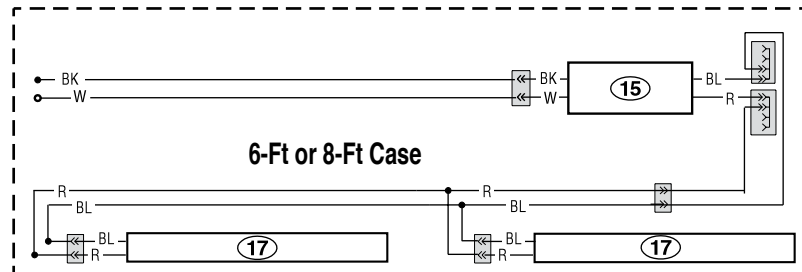
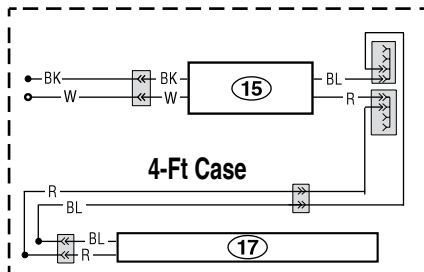
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Optional Canopy and Rail Light Circuits — LED Fixtures

EcoShine II LED Canopy Lighting – 1 Row



EcoShine II LED Rail Lighting – 1 Row



WARNING

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CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White
 ● = 120V POWER ○ = 120V NEUTRAL ⊥ = FIELD GROUND ≡ = CASE GROUND