

HUSSMANN®

LOWER MULLION FRAME HEATER UPGRADE

***FOR REACH-IN
GLASS DOORS***



This upgrade is intended only for cases currently operating below design envelope in environments with temperatures below 75° (Type I).

ANSI/NSF-7 Type I – Display Refrigerator / Freezer
Intended for 75°F / 55%RH Ambient Application.

INSTALLATION INSTRUCTIONS

P/N 0531808_A
March 2013

REVISION HISTORY

REVISION A — Revision A is Original Issue

ANSI Z535.5 DEFINITIONS



• **DANGER** – Indicate[s] a hazardous situation which, if not avoided, will result in death or serious injury.



• **WARNING** – Indicate[s] a hazardous situation which, if not avoided, could result in death or serious injury.



• **CAUTION** – Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.

• **NOTICE** – *Not related to personal injury* – Indicates[s] situations, which if not avoided, could result in damage to equipment.

Safety First!

Always wear protective eye wear and gloves.

CAUTION

Do not leave tools or equipment unattended that could create a hazardous obstruction in the work area.

IMPORTANT
KEEP IN STORE FOR FUTURE REFERENCE
Quality that sets industry standards!

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GENERAL

These instructions are for the field installation of an additional frame heater in the bottom mullion frame of Reach-In merchandisers. The heater is installed for reach-ins that operate in an environment below the products original design criteria with LED / standard lighting applied. These heaters add an additional 3 watts per foot.

TOOLS NEEDED

Standard hand tools plus: wide-blade painter's scraper, Volt / Amp / Ohm meter, rubber mallet.



⚠ WARNING

— LOCK OUT / TAG OUT —

To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.

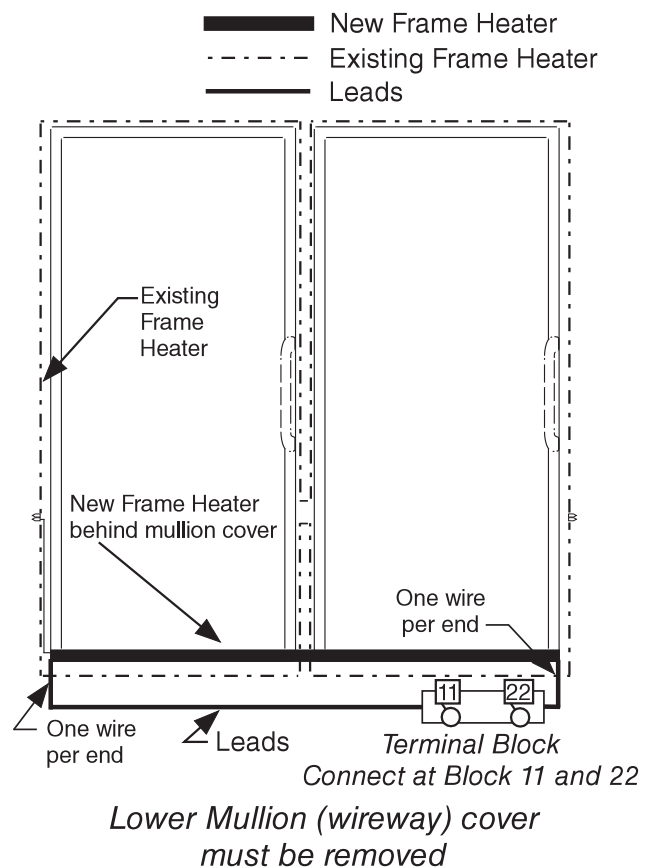
SERIAL PLATE LOCATION

The reach-in merchandiser's serial plate is located on the left-hand end of the interior top liner. Near the serial plate, each case carries a label identifying the type of application for which the case was certified.

**ANSI/NSF-7 Type I – Display Refrigerator / Freezer
Intended for 75°F / 55%RH Ambient Application**

**ANSI/NSF-7 Type II – Display Refrigerator / Freezer
Intended for 80°F / 55%RH Ambient Application**

**ANSI/NSF-7 – Display Refrigerator
Intended for Bulk Produce**



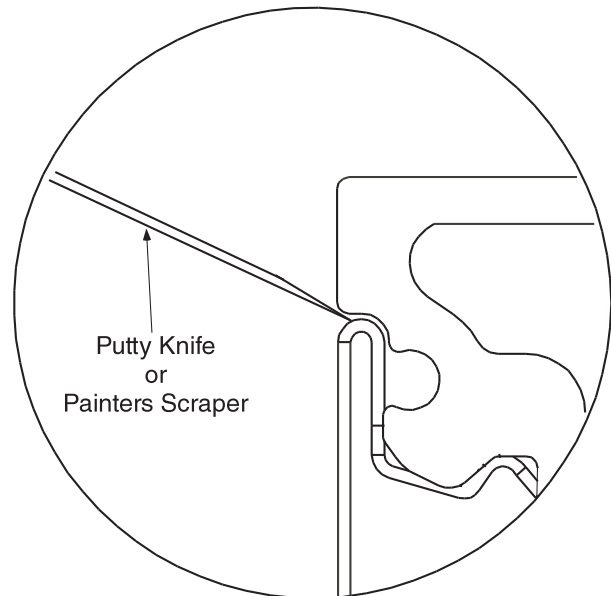
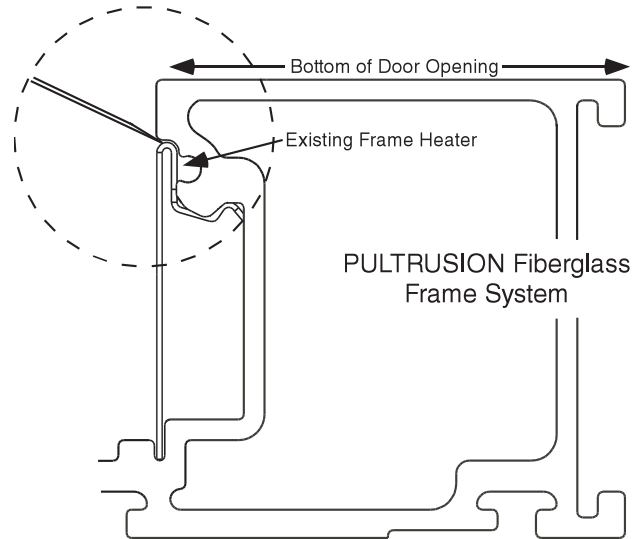
HEATER LOCATION

The heater is inserted into the lower front mullion (wireway) of Reach-In Merchandisers.

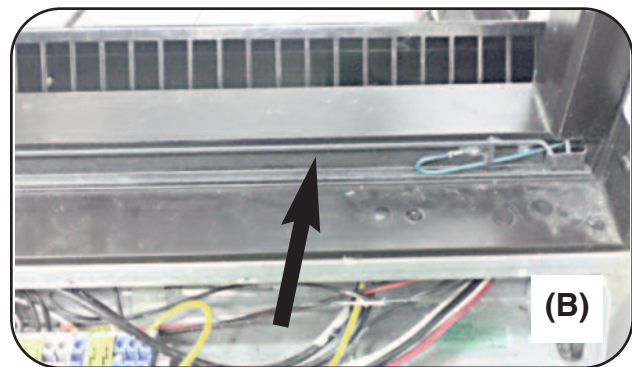
See illustrations at right.

REMOVING MULLION (WIREWAY COVER)

1. Disconnect power to the merchandiser.
2. Remove the merchandiser lower bumper and electrical wireway cover. Place both in a safe location. It is recommended that either the left hand or right hand end door (depending on swing) is removed to allow proper access for routing the black power lead down into the merchandiser electrical wireway.
3. Begin removing mullion wireway covers from the case frame. Start from the left end of the lineup of cases and work to right. Use a painter's scraper with a 2-in. wide beveled edge and rubber mallet. **DO NOT** use a screw driver to remove wireway covers as this can more easily damage the covers.
4. Insert beveled edge of putty knife/painters scraper in the center of the door opening to begin to un-snap the cover from the frame. While pushing inward, tap with rubber mallet and pry upwards. Once the cover begins to disengage from the frame, work in small increments. Using a second putty knife, gently pry the cover loose making it a point to observe how the mullion wire-way cover fits into the frame. This observation will help you when you replace them later.
5. Place removed wireway covers in a safe place. Also keep track of what covers go where so that the covers can be properly placed in the same locations.



Removing Wireway Cover

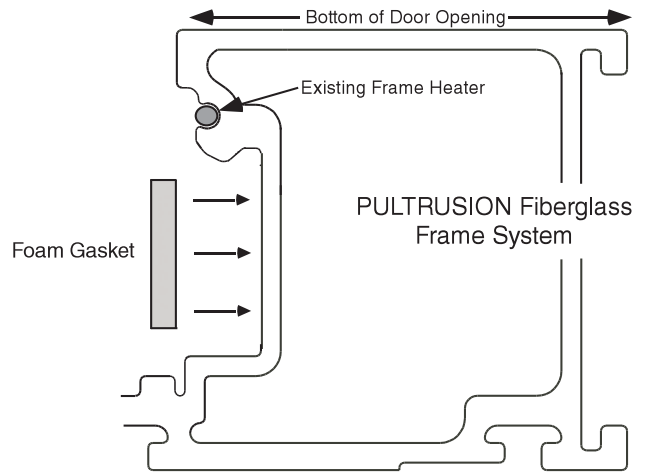


Wireway Cover Removed

INSTALLING FOAM GASKETS

NOTE: Foam Gasket is not provided with the kit. High Density Closed Cell “Weather Stripping” can be obtained from most local building supply stores. The foam should not exceed 1/4in. thick with a preferred width of 3/4in. , although 1/2in. width will work also. “Open Cell” tape may be used but **SHOULD NOT** exceed 3/8in. thick. If the tape is too thick you will not be able to reinstall the mullion covers.

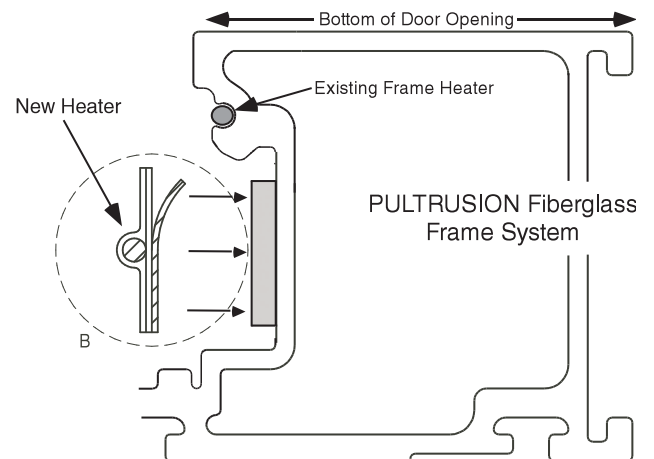
6. Remove the adhesive backing and install a layer of foam gasket in the center of the lower mullion, below the existing frame heater as shown in the illustration to the right.



NOTE: The gasket has the adhesive on the side opposite of the paper side. Gasket adhesive must be properly placed the first time. There can be no second attempt without tearing gasket or damaging adhesive.

CHECK NEW HEATER

8. Find the correct frame heater to install based on the number of doors of the merchandiser(s). Refer to the part numbers at right.



BEFORE INSTALLING THE NEW HEATER, CHECK THE CONTINUITY OF THE NEW (PROVIDED) FRAME HEATER USING A MULTI-METER.

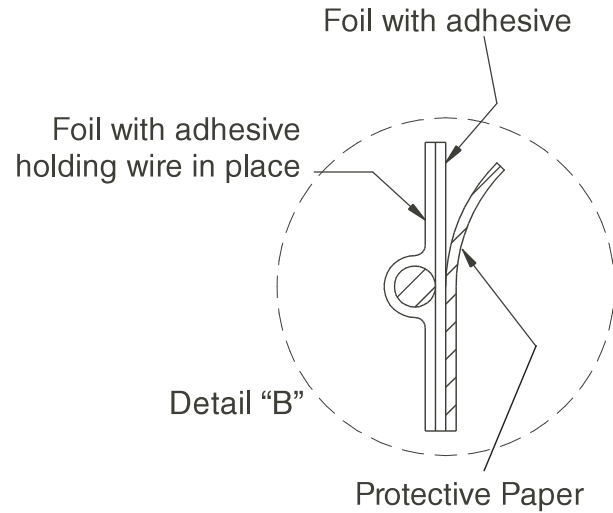
TIP: As the heater is placed in the mullion wireway, check the continuity of the heater using a multi-meter. Also make sure to check the frame heater to ground. Do not connect the frame heater to the terminal blocks at this point.

- HE.4851265 Heater Frame 2-door 15W
- HE.4851266 Heater Frame 3-door 22.5W
- HE.4851267 Heater Frame 4-door 30W
- HE.4851268 Heater Frame 5-door 38W

INSTALLING NEW HEATER

9. Find the longer black lead wire on the left hand end of the frame, and feed it through the plastic tubing so that it enters the merchandiser electrical wireway. Do not allow the butt connections to enter into the tubing at either end. Route the lead wire through the wireway to the right hand end electrical terminal block area. **DO NOT CONNECT TO THE TERMINAL BLOCK**

10. Working left to right, working in 2-foot sections, remove the protective paper from the foil-backed heater. Place the heater over the center of the foam gasket, and press into place.

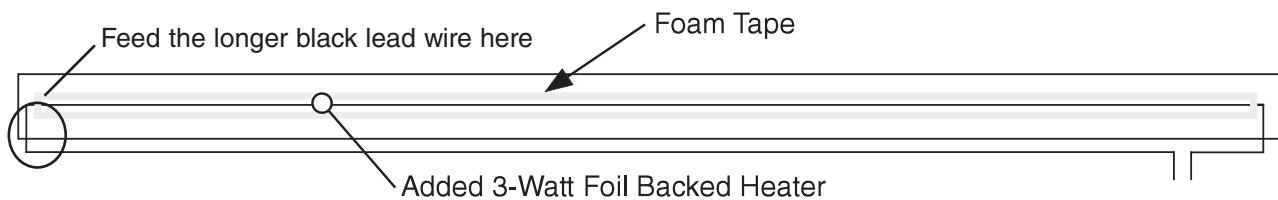
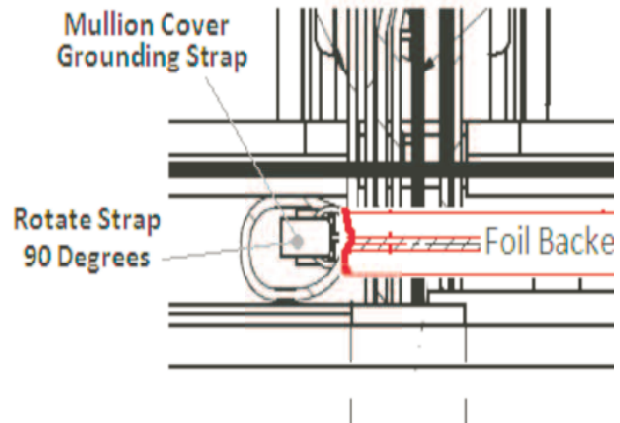


⚠ CAUTION

Across the lower frame area there are straps (Contact Spring) that provide a ground for the frame mullion covers. Adjust these straps (Rotate) as needed to ensure that the applied heater is not compromised and could be pinched when the cover is re-applied. DO NOT REMOVE GROUNDING STRAPS.

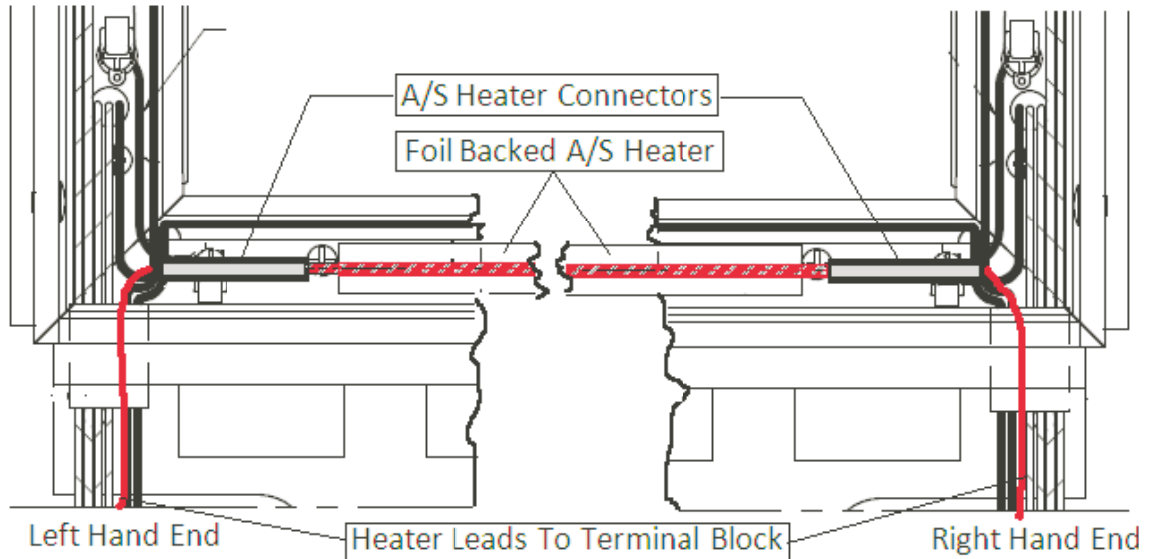
11. At the righthand end, feed the shorter black lead wire through the plastic sleeve down into the merchandiser electrical wireway.

12. Prior to replacing mullion wireway covers that were removed in Step 3, make a visual inspection to ensure there are no "pinch points" that may cause a short in the frame heater. If it appears that the frame heater will be pinched by the cover, then trim only the amount necessary to avoid pinching the heater wire. Ensure there are no electrical shorts in the new heater or the existing heater.





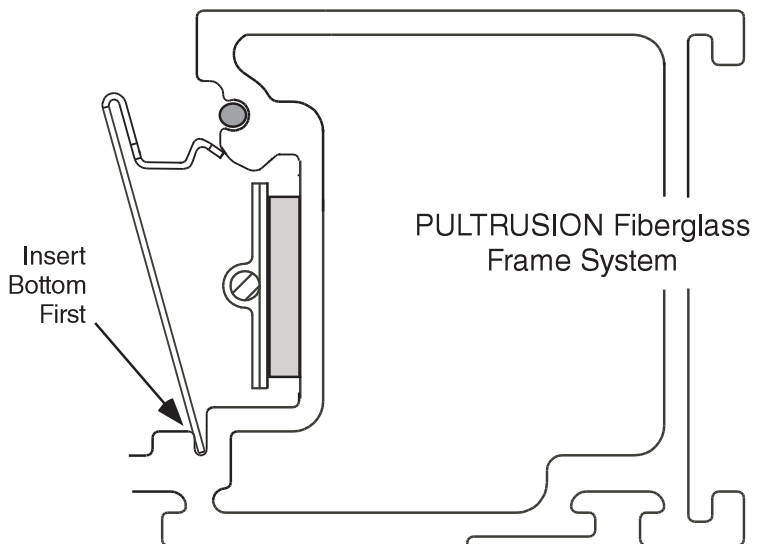
The installed heater should look like this at each end of the mullion frame



13. When replacing the mullion covers start at the left hand end, and make sure that the straight edge of the cover is inserted into the slot at the bottom for the full length of the cover. Verify the left / right position at the left hand where the horizontal and vertical mullion covers meet. Use the rubber mallet to snap the wireway covers into place. Use care when installing the lower wireway covers.

14. After the final cover is replaced, confirm that the heater is not open or shorted to ground. Reconnect the heater to terminals: 11 and 22. Turn ON the power, and verify that the heater is working. Check the Amp draw.

15. Replace the bumper retainer, wireway cover and lower bumper.



ADJUSTING CLOSING TORQUE

Always make sure there is one technician in front of the merchandiser that is being upgraded at all times. When taking breaks or leaving the work area, make sure all equipment is picked up and there is no hazardous conditions for foot traffic.

Listed on the following page are the part numbers for the frame wireway / mullion covers.

If the wireway covers are carefully removed and replaced as described in Step 3, no wireway covers should have to be replaced.

Replace any doors that were removed and adjust Closing Torque as needed.

Should any of the doors need adjustment:

Adjust closing torque by turning the bottom hinge pin in the direction the door closes. Use a 1/2 in. (13 mm) wrench. Turn the hinge pin until the door closes on its own, usually 3 to 4 clicks or 3/4 turn. See Figure 1.

DO NOT over-torque the hinge spring assembly. Excessive torque (over 1 full turn) will result in damage to the spring assembly and/or door. If door does not close on its own after one full turn (5 clicks), look for obstructions causing the door to hang up.



Figure 1. Adjusting Closing Torque

WIRING COLOR CODE

Leads for all electrical circuits are identified by a colored plastic band: neutral wire for each circuit has either White insulation or a White plastic sleeve in addition to the color band.

- | | | | |
|--------------|--------------------------------|--|----------------------|
| PINK | REFRIG. THERMOSTAT LOW TEMP. | ORANGE OR | |
| LIGHT BLUE | .REFRIG. THERMOSTAT NORM TEMP. | TAN | LIGHTS |
| DARK BLUE.. | DEFROST TERM. THERMOSTAT | MAROON .. | RECEPTACLES |
| PURPLE | CONDENSATE HEATERS | YELLOW | DEFROST HEATERS 120V |
| BROWN | FAN MOTORS | RED | DEFROST HEATERS 208V |
| GREEN* | GROUND | *EITHER COLORED SLEEVE OR COLORED INSULATION | |

**ELECTRICIAN NOTE: Use copper conductor wire only.
CASE MUST BE GROUNDED**

THESE ARE MARKER COLORS WIRES MAY VARY.

Mullion Wireway Cover Parts List

Description	Mfg Part No.	Aftermarket Part No.
Cover–Wireway 2 Door Top Lh Black (Bottom Rh)	0428566	TP.0428566
Cover–Wireway 2 Door Top Lh Gray (Bottom Rh)	0428575	TP.0428575
Cover–Wireway 2 Door Top Lh 311 Pearl (Bottom Rh)	0442048	TP.0442048
Cover–Wireway 2 Door Top Rh Black (Bottom Lh)	0428567	TP.0428567
Cover–Wireway 2 Door Top Rh Gray (Bottom Lh)	0428576	TP.0428576
Cover–Wireway 2 Door Top Rh 311 Pearl (Bottom Lh)	0442049	TP.0442049
Cover–Wireway 3 Door Top Lh Black (Bottom Rh)	0428568	TP.0428568
Cover–Wireway 3 Door Top Lh Gray (Bottom Rh)	0428577	TP.0428577
Cover–Wireway 3 Door Top Lh 311 Pearl (Bottom Rh)	0442088	TP.0442088
Cover–Wireway 3 Door Top Rh Black (Bottom Lh)	0428569	TP.0428569
Cover–Wireway 3 Door Top Rh Gray (Bottom Lh)	0428578	TP.0428578
Cover–Wireway 3 Door Top Rh 311 Pearl (Bottom Lh)	0442089	TP.0442089
Cover–Wireway 4 & 5 Door Top Lh Black (Bottom Rh)	0428570	TP.0428570
Cover–Wireway 4 & 5 Door Top Lh Gray (Bottom Rh)	0428579	TP.0428579
Cover–Wireway 4 & 5 Door Top Lh 311 Pearl (Bottom Rh)	0442094	TP.0442094
Cover–Wireway 4 & 5 Door Top Rh Black (Bottom Lh)	0428571	TP.0428571
Cover–Wireway 4 & 5 Door Top Rh Gray (Bottom Lh)	0428580	TP.0428580
Cover–Wireway 4 & 5 Door Top Rh 311 Pearl (Bottom Lh)	0442095	TP.0442095
Cover–Wireway 5 Door Center Black	0428572	TP.0428572
Cover–Wireway 5 Door Center Gray	0428581	TP.0428581
Cover–Wireway 5 Door Center 311 Pearl	0442100	TP.0442100
Cover–Wireway End Black — Standard	0428565	TP.0428565
Cover–Wireway End Gray — Standard	0428574	TP.0428574
Cover–Wireway End 311 Pearl — Standard	0442047	TP.0442047
Cover–Wireway End Black — RLT	0304949	TP.4978787
Cover–Wireway End Gray — RLT	0305004	TP.4978788
Cover–Wireway End 311 Pearl — RLT	N/A	N/A
Cover–Wireway Mullion Black — Standard	0428564	TP.0428564
Cover–Wireway Mullion Gray — Standard	0428573	TP.0428573
Cover–Wireway Mullion 311 Pearl — Standard	0442046	TP.0442046
Cover–Wireway Mullion Black — RLT	0304948	TP.4978791
Cover–Wireway Mullion Gray — RLT	0305003	TP.4978792
Cover–Wireway Mullion 311 Pearl — RLT	N/A	N/A

