

# User Manual



## Commercial Gas Ranges



351S24(L/N), 351S36(L/N), 351S60(L/N), 351S36G24(L/N), 351S60G24(L/N),  
351S60GS24(L/N), 351S36G12(L/N), 351S36SU(L/N), 351S36G36(L/N), 351S60G36(L/N),  
351S60G48(L/N), 351C36(L/N)



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Congratulations on your purchase of Cooking Performance Group commercial cooking equipment! At Cooking Performance Group, we take pride in the design, innovation, and quality of our products. To ensure optimal performance, we have outlined the following instructions and guidelines in this manual carefully for your review. Cooking Performance Group declines any responsibility in the event users do not follow the instructions or guidelines stated here.

## Contents

Safety Precautions .....	3
Gas Pressure .....	3
Start-Up .....	4–5
Gas Connection .....	6
Exhaust System .....	7
Operating Instructions .....	7–8
Warnings .....	8
Cleaning & Maintenance .....	9
Troubleshooting .....	10
Optional Casters .....	11
Accessories & Replacement Parts .....	11
Elevation Charts .....	12–13

## Product Overview

Boost efficiency and performance in your kitchen with CPG ranges! Configurations include standard or convection ovens, with optional range top griddles and broilers for maximum versatility. Plus, the independently controlled burners allow you to cook multiple meals simultaneously and adapt to different situations with ease. Store essential seasonings and supplies on the convenient back shelf to ensure that your staff is always well equipped. These ranges have a durable stainless steel construction that withstands daily wear and tear and is extremely easy to clean. The metal controls knobs can be easily wiped down, while the removable cast iron grates and pull-out crumb tray help to further expedite cleanup. Adjustable legs provide stability even on uneven floors, and a handy kick plate ensures internal component protection and easy-access servicing. Featuring 24", 36", and 60" configurations, CPG ranges are a versatile asset to busy commercial kitchens!

## Safety Precautions

### CAUTION:

- Failure to comply with the following operation instructions could lead to potential hazards and/or unsafe practice and could result in injury and damage to product and property.

### NOTICE:

- Local codes regarding installation vary greatly from one area to another. The National Fire Protection Association, Inc., states in its NFPA96 latest edition that Local codes are “Authority Having Jurisdiction” when it comes to requirement for installation of equipment. Therefore, installation should comply with all Local codes.
- This product is intended for commercial use only. Not for residential use. Use in residential applications will void warranty.

### WARNING:

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other equipment.
- Improper installation, adjustment, alteration, service or maintenance could lead to property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing CPG equipment. This manual must be retained for future reference.
- A factory authorized agent must handle all maintenance and repair.

## Gas Pressure

- The appliance and its individual shutoff valve (to be supplied by user) must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ PSI (3.45 kPa).
- The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ PSI (3.45 kPa).

## Start-Up

### INSTALLATION

THIS INSTALLATION IS TO BE CARRIED OUT BY A CERTIFIED TECHNICIAN. ISSUES RELATED TO INSTALLATION, SUCH AS ADJUSTMENTS AND CALIBRATIONS, ARE THE RESPONSIBILITY OF THE INSTALLER AND ARE NOT MATTERS OF WARRANTY. PROOF OF INSTALLATION MAY BE REQUIRED TO MAKE A WARRANTY CLAIM.

NOTE: Combustible Clearance Requirements: 6" sides, 6" back

### CAST IRON TOP GRATES

Seasoning grates before their first use and after each cleaning will help prevent rusting.

**NOTE:** Your new CPG range comes equipped with a plastic coating to help protect the finish from scratching during shipping. This protective plastic film should be peeled off prior to starting the range.

1. Remove grates and wash thoroughly with mild soap and warm water, then dry with a clean cloth. (For further cleaning instructions see Cleaning & Maintenance on pg. 8).
2. After drying, immediately season grates with vegetable oil. Do not season grates while on the range top.
3. After drying, immediately season grates with vegetable oil. We recommend Pan Sprease (999SRPANAP16). Do not season grates while on the range top. See our CPG Range Operation and Maintenance Video on our website for more information.

### OVEN

1. Wash and dry interior as well as oven racks with soap and water before first use. (For further cleaning instructions see Cleaning & Maintenance on pg. 8).
2. It is normal for an unpleasant smell to be noticeable the first time the oven is used. This is caused by burn-off of grease or solvent left over from manufacturing process. Before cooking in the oven, turn oven on and set to maximum temperature until smell dissipates.

### GRIDDLE (IF APPLICABLE)

**NOTE:** The griddle plate is steel, but the surface is relatively soft and can be scratched or dented by the careless use of a spatula or scraper. Be careful not to dent, scratch, or gouge plate surface. Do not attempt to break free food that may be on the spatula by tapping the corner edge of the spatula on the griddle surface.

1. Remove factory applied protective material by washing with hot water, mild detergent or soap solution. (For further cleaning instructions see Cleaning & Maintenance on pg. 8).
2. Because the metal surface of the griddle is porous, the griddle surface must be seasoned before the first use to prevent sticking and equipment longevity.



## TO SEASON:

- A). Heat the griddle top section at a low burner setting.
- B). Pour one ounce of cooking oil per square foot of surface and spread around to create a thin film using a cloth. (See table for oil amount based on your griddle width).

GRIDDLE WIDTH	OUNCES OF OIL
12"	1.8 oz.
24"	3.6 oz.
36"	5.4 oz.
48"	7.2 oz.

- C). Wipe off any excess oil.
- D). Heat griddle slowly for 15-20 minutes, then wipe away excess oil.
- E). Repeat procedure until griddle has a slick surface.

**NOTE:** Griddle surface may discolor during this process. This will not affect performance and is not a defect.

**NOTE:** For re-seasoning after cleaning the griddle follow the above process. The griddle may also require re-seasoning if product begins to stick or if the griddle is overheated.

## Oven Bypass Calibration Instructions

**NOTE:** Oven bypass setting should be calibrated following the startup / pilot lighting procedure in your CPG Commercial Gas Ranges User Manual on pgs. 4-7. Always re-calibrate the oven bypass settings if the thermostat is replaced.

**WARNING:** A licensed installer must perform the following steps.

### OVEN BYPASS SETTINGS CALIBRATION STEPS

1. Locate the oven temperature knob (it will be the knob with specific temperatures listed on it)
2. Remove the burner and oven knobs and the front faceplate
3. Locate the bypass screw as indicated in the image on the right.  
(60" ranges will have two oven controls, one for each oven)
4. Turn the bypass screw clockwise (in) until snug
5. Next, back the bypass screw out a 1/2 turn counter clock wise (
6. Set the oven to 350 F and allow oven burner to preheat oven cavity
7. Open Kick Plate under the oven door and view the burner flame through the inspection hole.
8. As the oven reaches 350 F the oven burner flame should throttle back. After 15 minutes check to ensure this is functioning properly
9. Next turn oven knob setting to 250 F. At this point we are in the bypass setting of the thermostat. There will either be no flames on the burner or a very small flame.




10. Adjust the bypass screw counter clockwise to open the bypass valve and allow a small amount of gas to flow to the burner if no flame is seen. Flames should be no more than 1/8".
11. Ideal bypass flame will be a flame on the burner that is as small as it can be without the burner flame going away.
12. Reattach front faceplate and knobs to finish

## Gas Connection

**NOTE:** This commercial range is configured for areas with an altitude below 2,000 ft. Please contact your local authorized service agent or certified gas professional if you are installing at an elevation above 2,000 feet. Supplied regulator is required for use.


- 1A. Ensure gas supply and gas type, as shown on the unit serial plate agree. If they do not match see step 1B below. Unit installation must conform with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, the National Gas Installation Code, CSA-B149.1, or the Propane Installation Code, CSA-B149.2 as applicable and in accordance with local codes.



### 36" Gas Range with Oven

Intended for commercial use only

**ITEM:** 351S36N  
**GAS TYPE:** Natural  
**BTU:** 210,000  
**RANGE ORIFICE:** 36  
**OVEN ORIFICE:** 36  
**MANIFOLD PRESSURE:** 4"WC  
**MAX PRESSURE:** 7"WC  
**SERIAL #:**



Conforms to ANSI STD 283.11b-2009 (R2011)  
Certified to CSA STD 1.8b-2009 (R2011)  
NSF TESTED BY ETL  
MADE IN CHINA

Liquid Propane to Natural Gas		Natural Gas to Liquid Propane	
Conversion Kit	Compatible Item	Conversion Kit	Compatible Item
351RCK2	351S24L	351RCK7	351S36G12N
351RCK5	351S36L	351RCK20	351S36G36N
351RCK23	351S36SUL	351RCK22	351S36SUN
351RCK8	351S60L		
351RCK15	351S60GS24L		

- 1B. If your unit's gas type does not match your gas supply you will need to exchange your unit for a unit with the proper gas type. For select models, Cooking Performance Group offers gas conversion kits. See the above table for the conversion kit item number that corresponds with your equipment. Conversion kits are for areas with an altitude below 2,000 ft. Please note that gas conversion must be completed by a qualified and licensed technician and that gas conversion will void the warranty..
2. The gas inlet is located on the back of the unit for gas connection. The external regulator provided with the unit must be installed. A manual gas shut-off valve must be installed in the gas supply line ahead of the appliance and gas pressure regulator for safety and ease in servicing.
3. The gas pressure regulator supplied must be installed on the appliance prior to connecting the equipment to the gas line. There is an arrow on the bottom of the regulator. When installed correctly, the arrow will point toward the unit. Failure to properly install a regulator could be potentially hazardous and will void limited equipment warranty.
4. It is recommended to use pipe threading compound or thread tap to seal gas connections. Thread tape or compound must be gas rated.
5. All pipe joints and connections must be tested thoroughly for gas leaks. Use only soapy water for testing on all gases. Never use and open flame to check for gas leaks.

## Exhaust System

Proper ventilation is crucial to safe and optimum performance. Ensure that the oven is installed underneath a ventilation hood according to all applicable local and national codes. Keep adequate clearance for air openings into the combustion chamber.

## Operating Instructions

### LIGHTING INSTRUCTIONS

#### HOT TOP & GRIDDLE TOP BURNERS

1. Light pilot adjacent to each burner.
2. Push and turn burner valve 90 degrees counterclockwise, and burner will ignite.
3. Griddles and open burners have standing pilots which once lit, can be adjusted by turning the flat head screw on the pilot valve. Turn the screw clockwise to decrease the pilot flame size and counter clockwise to increase it.

**NOTE:** Please note that the pilot flame should only be large enough to light the pilot. Yellow tipping of the flame should be avoided as it is a sign of a dirty flame and can cause odor and soot build up on the burner. Maintain as blue of a flame as possible.

#### CAUTION:

Should burner ignition fail within 4 seconds, turn burner valve off and repeat steps 1 and 2.



#### STANDARD OVEN

1. Open kick plate under the oven door.
2. Press down temperature control knob and rotate counterclockwise to align the ★ mark with the notch on bezel. Hold knob down.

**NOTE:** On new installations, all air must be purged from the gas lines. Initial gas line purging of the oven pilot on new installs can take up to 3 minutes.

3. Ignite pilot flame with a lighter via ignition hole.
4. After pilot flame is ignited, continue holding knob for at least 20 seconds to heat thermocouple. If pilot light goes out, repeat steps 2–4 until remains lit.
5. Keep rotating temperature control knob counterclockwise to ignite main burner of oven. Select appropriate temperature according to food requirement.

6. Once the pilot is lit, it will stay lit indefinitely. If you turn the knob all the way to the OFF position it will turn off all gas to the pilot and it will go out. To avoid this, the knob should be turned to the pilot symbol when turning the oven OFF.

**TURNING PILOT OFF:** Rotate knob clockwise to align pointer on knob with notch on bezel.

## CONVECTION OVEN

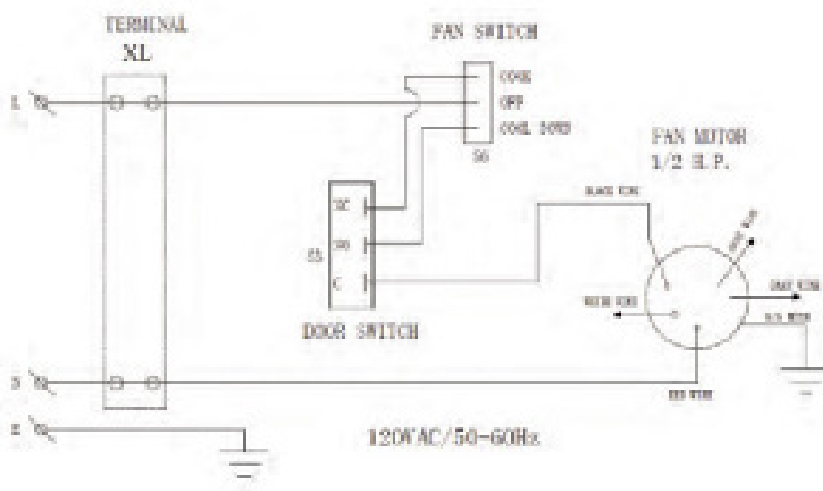
1. Open kick plate under the oven door.
2. Press down temperature control knob and rotate counterclockwise to align the mark with the notch on bezel. Hold knob down.

**NOTE:** On new installations, all air must be purged from the gas lines. Initial gas line purging of the oven pilot on new installs can take up to 3 minutes.

3. Ignite pilot flame with a lighter via ignition hole.
4. After pilot flame is ignited, continue holding knob for at least 20 seconds to heat thermocouple. If pilot light goes out, repeat steps 2–4 until remains lit.
5. Flip the power switch to the “cook” position. Keep rotating the temperature control knob counterclockwise to ignite the main burner of oven. Select appropriate temperature according to food requirement.
6. To use the “cool down” function, turn the temperature control knob to align the . Hold down the knob. Then turn the thermostat to the lowest setting. Open the oven door and flip the power switch to the “cool down” position. When the oven has cooled, then flip the power switch to the OFF position and close the door.
7. Once the pilot is lit, it will stay lit indefinitely. If you turn the knob all the way to the OFF position, it will turn off all gas to the pilot and it will go out. To avoid this, the knob should be turned to the pilot symbol when turning the oven OFF.

**TURNING PILOT OFF:** Rotate knob clockwise to align pointer on knob with notch on bezel. The power switch should be in the OFF position.

## CONVECTION OVEN WIRING DIAGRAM





## Warnings

1. Always ensure proper supervision while the equipment is in use.
2. Simple adjustments to knobs, leg height, etc. do not require assistance from specialized personnel.
3. Use only parts and accessories recommended by Cooking Performance Group.
4. It is normal for an unpleasant smell to be noticeable the first time the oven is used. This is caused by burn-off of grease or solvent left over from manufacturing process. Before cooking in the oven, turn oven on and set to maximum temperature until smell dissipates.
5. The equipment will remain hot for a short time after use (residual heat). Avoid all physical contact with the unit during this time to prevent injury.
6. This equipment is strictly for professional use and must be used by qualified personnel.
7. The installation, startup, and maintenance of this equipment must be carried out by a qualified technician.
8. All installation must be carried out according to the law. Cooking Performance Group is not responsible for damages due to an incorrect installation, improper maintenance, or incorrect use.
  - These are very important regulations; if they are neglected, the equipment may not perform properly or the user may be placed at risk and void manufacturer warranty.

## Cleaning & Maintenance

Regular cleaning and maintenance will maintain the appearance and performance of your range for years to come. Follow these tips to keep your range operating at its best.

### BURNERS & GRATES

#### CAUTION:

Before cleaning, turn off the unit and let it cool down.

- **DAILY:** Wipe spills as they occur.
- **DAILY:** Remove grids and trays to wash, rinse, and dry.
- **DAILY:** Use a wire brush to clean clogged burner ports or remove baked-on food material.
- **POST EACH CLEAN:** Lightly coat grates with vegetable oil to help prevent rust.

### GRIDDLE (IF APPLICABLE)

Keeping griddle surface free of carbonized grease for maximum heat transfer, even cooking, and satisfactory food taste and appearance.

- **AFTER EACH USE:** Use a grill scraper or spatula to wipe off any excess food particles leftover from cooking process.
- **DAILY:** Clean griddle surface using a grill brick and grill pad. Clean and empty grease pan.
- **WEEKLY:** Clean surface thoroughly. A mild detergent or degreaser may be used but ensure it is thoroughly removed. We recommend using Noble Chemical Griddle Kleen. Re-season grill surface to prevent rusting and maintain nonstick properties (See Startup for further seasoning instruction).

# User Manual



## OVEN

- **WEEKLY:** Oven racks and guides may be removed and cleaned with soap and water.
- **WEEKLY:** Clean oven interior with a suitable oven cleaner, we recommend using Noble Chemical Blast or Knockout.

### RECOMMENDED CLEANING AGENTS



**NOBLE**  
CHEMICAL  
#999SUNBRIGHT  
**Sunbright**  
Lemon Dish Soap



**NOBLE**  
CHEMICAL  
#999KNOCKOUT  
**Knockout**  
Heavy-duty Oven/Grill  
Degreaser & Carbon  
Remover



**NOBLE**  
CHEMICAL  
#147BLASTQT  
**Blast**  
Liquid Oven & Grill  
Cleaner



**NOBLE**  
CHEMICAL  
#147GRIDDLKLN  
**Griddle Klean**  
Liquid Grill/Griddle  
Cleaner

## Troubleshooting

SYMPTOM	CAUSES	SOLUTIONS
Pilot flame cannot be ignited	<ol style="list-style-type: none"> <li>1. Gas pressure is too low</li> <li>2. Nozzle is blocked</li> <li>3. Connection of the thermocouple is loose</li> <li>4. Thermocouple is defective</li> <li>5. Gas control valve is malfunctioning</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust release valve to get a proper pressure</li> <li>2. Unblock nozzle</li> <li>3. Tighten thermocouple</li> <li>4. Replace thermocouple</li> <li>5. Replace gas control valve</li> </ol>
Pilot flame is on, but the main burner cannot be ignited	<ol style="list-style-type: none"> <li>1. Gas pressure is too low</li> <li>2. Main burner nozzle is blocked</li> <li>3. Gas control valve is defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust relief valve to get the proper pressure</li> <li>2. Unblock nozzle</li> <li>3. Replace gas control valve</li> </ol>
Oven backfires	<ol style="list-style-type: none"> <li>1. Diameter of nozzle does not match with the gas supply</li> <li>2. Damper is too large</li> <li>3. Gas pressure is too low</li> <li>4. Flow of the connected pipe is insufficient</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust nozzle diameter</li> <li>2. Adjust damper</li> <li>3. Adjust relief valve</li> <li>4. Increase the permitted flow</li> </ol>
Flame is red and accompanied by black smoke	<ol style="list-style-type: none"> <li>1. The diameter of the nozzle does not match the gas supply</li> <li>2. Damper is too small</li> <li>3. Gas supply has run out</li> <li>4. Gas regulator reduces the gas flow in gas peak demand</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust nozzle diameter</li> <li>2. Adjust damper</li> <li>3. Replace gas</li> <li>4. Decrease gas flow and increase it after peak demand of the gas</li> </ol>

If any failure occurs, stop using, and consult a qualified service technician. All maintenance should be performed after the power supply and gas supply are shut down.

## Optional Casters

Identify the item number of your CPG range, which can be found on the serial plate located on the side of unit.

If you are unable to access the serial plate on your unit, use the following information to help identify which casters you should be using:

If CPG range features a metallic knob with red strip down the center, you need casters:

#351CASTER4 or #351CASTER6

## Accessories & Replacement Parts

#3511015096

Burner Grate for  
Ranges/Hot Plates



#35128051052

36" Range Mounting Kit for  
S-36-SB Salamander Broilers



#351302110503

Standard Oven Rack



#351302090155

Plate Caster w/ Brake  
Casters - 4



#351302090156

Plate Caster



#600GKM3448

48" Mobile Gas Connector Hose  
Kit w/ 2 Elbows, Full Port Valve,  
Restraining Device, & Quick  
Disconnect - 3/4"



#351302050051

Pilot Gas Valve



#351301140001

Replacement Temperature  
Control Knob



#3511068636

#36 Orifice



#351302150189

#50 Orifice



## Elevation Charts

MODEL	GAS TYPE	ORIFICE SIZE UNDER 2,000 FT ETL CERTIFICATE APPROVAL			ORIFICE SIZE UNDER 5,000 FT		
		STOVE	OVEN	GRIDDLE	STOVE	OVEN	GRIDDLE
351C36L/N	NG: 4" WC	#36	#35	N/A	#38	#38	N/A
	LP: 10" WC	#51	#50	N/A	#52	#52	N/A
351S60G36L/N	NG: 4" WC	#36	#36	#44	#38	#38	#46
	LP: 10" WC	#51	#50	#54	#52	#52	#56
351S60G48L/N	NG: 4" WC	#36	#36	#44	#38	#38	#46
	LP: 10" WC	#51	#50	#54	#52	#52	#56
351S36L/N	NG: 4" WC	#36	#36	N/A	#38	#38	N/A
	LP: 10" WC	#51	#50	N/A	#52	#52	N/A
351S36G12L/N	NG: 4" WC	#36	#36	#44	#38	#38	#46
	LP: 10" WC	#51	#50	#54	#52	#52	#56
351S36G24L/N	NG: 4" WC	#36	#36	#44	#38	#38	#46
	LP: 10" WC	#51	#50	#54	#52	#52	#56
351S60L/N	NG: 4" WC	#36	#36	N/A	#38	#38	N/A
	LP: 10" WC	#51	#50	N/A	#52	#52	N/A
351S60G24L/N	NG: 4" WC	#36	#36	#44	#38	#38	#46
	LP: 10" WC	#51	#50	#54	#52	#52	#56
351S60GS24L/N	NG: 4" WC	#36	#36	#51	#38	#38	#53
	LP: 10" WC	#51	#50	#59	#52	#52	#61
351S36SUL/N	NG: 4" WC	#36	#36	N/A	#38	#38	N/A
	LP: 10" WC	#51	#50	N/A	#52	#52	N/A
351S36G36L/N	NG: 4" WC	N/A	#36	#44	N/A	#38	#46
	LP: 10" WC	N/A	#50	#54	N/A	#52	#56
351S24L/N	NG: 4" WC	#36	#36	N/A	#38	#38	N/A
	LP: 10" WC	#51	#50	N/A	#52	#52	N/A

**NOTE: Nozzle elevations under 5,000, 8,000, and 10,000 ft. Do not have ETL certificate approval.**



# User Manual



MODEL	GAS TYPE	ORIFICE SIZE UNDER 8,000 FT			ORIFICE SIZE UNDER 10,000 FT		
		STOVE	OVEN	GRIDDLE	STOVE	OVEN	GRIDDLE
351C36L/N	NG: 4" WC	#40	#40	N/A	#42	#42	N/A
	LP: 10" WC	#54	#54	N/A	#56	#56	N/A
351S60G36L/N	NG: 4" WC	#40	#40	#48	#42	#42	#50
	LP: 10" WC	#54	#54	#58	#56	#56	#60
351S60G48L/N	NG: 4" WC	#40	#40	#48	#42	#42	#50
	LP: 10" WC	#54	#54	#58	#56	#56	#60
351S36L/N	NG: 4" WC	#40	#40	N/A	#42	#42	N/A
	LP: 10" WC	#54	#54	N/A	#56	#56	N/A
351S36G12L/N	NG: 4" WC	#40	#40	#48	#42	#42	#50
	LP: 10" WC	#54	#54	#58	#56	#56	#60
351S36G24L/N	NG: 4" WC	#40	#40	#48	#42	#42	#50
	LP: 10" WC	#54	#54	#58	#56	#56	#60
351S60L/N	NG: 4" WC	#40	#40	N/A	#42	#42	N/A
	LP: 10" WC	#54	#54	N/A	#56	#56	N/A
351S60G24L/N	NG: 4" WC	#40	#40	#48	#42	#42	#50
	LP: 10" WC	#54	#54	#58	#56	#56	#60
351S60GS24L/N	NG: 4" WC	#40	#40	#55	#42	#42	#57
	LP: 10" WC	#54	#54	#63	#56	#56	#65
351S36SUL/N	NG: 4" WC	#40	#40	N/A	#42	#42	N/A
	LP: 10" WC	#54	#54	N/A	#56	#56	N/A
351S36G36L/N	NG: 4" WC	N/A	#40	#48	N/A	#42	#50
	LP: 10" WC	N/A	#54	#58	N/A	#56	#60
351S24L/N	NG: 4" WC	#40	#40	N/A	#42	#42	N/A
	LP: 10" WC	#54	#54	N/A	#56	#56	N/A

**NOTE: Nozzle elevations under 5,000, 8,000, and 10,000 ft. Do not have ETL certificate approval.**