



---

Date:

Power Gas Burner Application  
Customer Information

Customer Name:

---

Customer Contact:

---

Phone No.:

---

Email:

---

Beckett Sales Account Manager:

---

Customer Shipping Address (For appliance disposition)

---

R. W. Beckett Combustion Test Information

**R. W. Beckett wants to provide our customers with the best applications to suit their needs. Please help us by providing us the requested information to determine if a standard Beckett product would be acceptable for your application. This information will also assist in the development of a potential new product to meet the needs of your system.**

## All Information Required Before Evaluation

### Our basic application program consists of the following:

#### **Burner Selection:**

We will select a Beckett Power Gas burner to match the recommended firing rate of the appliance using components which best meet the needs for a successful application.

#### **Burner Air Settings - Range of operation determination:**

Once a burner is selected, we determine the burner's range of operation on your appliance. We adjust and record the burner setting, which will obtain the Lowest O<sub>2</sub> when operating at no more than 50ppm CO. We then adjust and record the burner settings that result in the highest O<sub>2</sub> obtainable with CO levels below 50ppm. The burners are adjusted for varying gas pressures and rates. The burner application will be tested for delayed ignition.

#### **Suggested Factory Air Setting Determination:**

After obtaining the burner's window of operation, we determine for you the suggested Factory Air Setting, which is a nominal 3 to 4% O<sub>2</sub>. This air setting / O<sub>2</sub> is the Beckett suggested Factory Air Setting for the burner.

#### **Combustion Chamber Pressure Check:**

Your appliance and Beckett burner will also be tested under varying drafts and cycled to simulate the varying conditions experienced in the field. Burners are normally tested with a breech draft of +0.1 inches of water column for boilers unless otherwise noted on page 3.

#### **Cold Combustion Air Check:**

If applicable, the combustion air to the burner will be reduced to -30° F when operating at the Factory Air Setting.

#### **Head and Tube Temperature Check:**

If applicable, temperatures of the head and air tube will be tested with the burner adjusted to lowest O<sub>2</sub> with an acceptable CO level.

#### **Customer Responsibilities:**

1. Beckett works to assist our customer to get the most efficiency from their equipment but we are not appliance manufacturers.
2. The customer must confirm the Beckett Selection in light of appliance variations and expected.
3. The customer is responsible to identify and secure applicable appliance certifications for safety and efficiency. These requirements and codes vary by appliance type and controlling authorities.

The testing provided by RW Beckett is intended to optimize the combustion performance of the Beckett product in the appliance submitted for evaluation.

RW Beckett does not evaluate or certify the overall performance and efficiency of the appliance.

## Customer Recommended Test Requirements

Date of Request:	Requested Completion Date:
Type of Appliance <input type="checkbox"/> Furnace <input type="checkbox"/> Pressure Washer <input type="checkbox"/> Hot Water Heater <input type="checkbox"/> Boiler	
Is the equipment mobile or stationary? If mobile, describe application.	

Customer Appliance Information & Desired Application Target

Appliance Models	Targeted Firing Rate MBTU	Combustion Chamber Size Please provide drawings if available	Requested Burner Leave Blank If You Want Beckett To Determine	Requested Fuels NG/LP	Gas Inlet Pressure If Less than: 4.5" w.c. NG or 7.5" w.c. LP or Greater than 18" w.c.

Customer Target O<sub>2</sub> Operating Window: Minimum: \_\_\_\_\_ % O<sub>2</sub>, Maximum: \_\_\_\_\_ % O<sub>2</sub>

Customer Target Draft Settings (inches H<sub>2</sub>O): Over-fire \_\_\_\_\_ "w.c. Stack or Breech: \_\_\_\_\_ "w.c.

Customer Desired Ambient Temperature Test Condition: \_\_\_\_\_ °F

Overall Size and Weight of the Appliance: \_\_\_\_\_ Needed for lab set up

Can the following items be considered for the application?  Blankets  Target Wall

Baffles - Location(s) \_\_\_\_\_

Please attach Appliance Literature (or Draft) to this request:

Appliance Ratings:

System Operating Voltage: Voltage(s) / Frequency(s) \_\_\_\_\_

Ambient Temperature - Min/Max °F \_\_\_\_\_

Any special temperature considerations (Describe) \_\_\_\_\_

Humidity - Min/Max% \_\_\_\_\_ Water Protection Required? \_\_\_\_\_

Will the unit be exposed to outdoor conditions? \_\_\_\_\_

All Information Required Before Evaluation

If the appliance is used off grid what generator is used? Brand: \_\_\_\_\_ Model: \_\_\_\_\_

Chemical / Solvent Exposure: \_\_\_\_\_ Describe: \_\_\_\_\_

Expected Appliance Vibration: Minimal  (Home Heating Appliance) Excessive:  (Portable Equipment – Road Maintenance, Space Heater....)

Will burner be operating while in transit? \_\_\_\_\_ Vent Type – To prevent back drafting of combustion gases: \_\_\_\_\_

Burner/Boiler Control System: Water Temperature Control /Fan Controls Models: \_\_\_\_\_

Burner Sequencing CG15-CG50 – Hi Low: \_\_\_\_\_ On Off: \_\_\_\_\_ Modulation: \_\_\_\_\_

Chamber Entry ID": \_\_\_\_\_ " Burner Mounting Flange Bolt Circle: \_\_\_\_\_ " Stud/Bolt Size: \_\_\_\_\_ "

Dimension from burner mount flange on the exchanger to the chamber entry (Insertion Depth): \_\_\_\_\_ "

Desired Mounting Position (Horizontal/Vertical): \_\_\_\_\_

For Chimney Vent System

Flue Diameter Range: \_\_\_\_\_ "

Flue Vent Location: Top  Front  Rear

Power Venter Brand and Model: \_\_\_\_\_

For Direct Vent System

Vent System Brand and Model: \_\_\_\_\_

Length: \_\_\_\_\_ ' Diameter: \_\_\_\_\_ "

Intake / Exhaust Terminal Model Number(s): \_\_\_\_\_

Firing Rate Range of Terminal: \_\_\_\_\_

(Please provide complete direct vent system with appliance)

Equipment Shipping Address: R. W. Beckett, 38251 Center Ridge Road, North Ridgeville, Ohio 44039

Attention: Kurt Beiswenger

Disposition of appliance after test:  Return  Scrap

Return Completed Forms: Attn: Kurt Beiswenger - E-Mail: [kbeiswenger@beckettcorp.com](mailto:kbeiswenger@beckettcorp.com), Fax: 440-353-6050