

UNDERSTAND THE CORRECT SIZING of TOYOTOMI VENTED HEATERS

Applies to models: All Toyotomi Models

Important Update for Efficient Heating in Small Spaces

Our latest technical insights, provided by TOYOTOMI'S engineering team in Japan, highlight a crucial aspect of heater sizing, especially relevant for users in colder regions.

No Need for Upsizing: Despite extremely cold outdoor temperatures, the efficiency of TOYOTOMI Direct Vented Heaters remains largely unaffected. Our data indicates that even at temperatures as low as -40°F , the reduction in BTU output is minimal, less than 4%.

Consequences of Oversizing: Using a heater larger than necessary in small spaces leads to several issues:

- Frequent on-off cycling (short-cycling)
- Rapid accumulation of soot and carbon
- Metal fatigue due to repeated expansions and contractions
- Increased risk of heater failures, including damage to heat chambers and heat exchangers
- Reduced fuel efficiency and higher electricity consumption

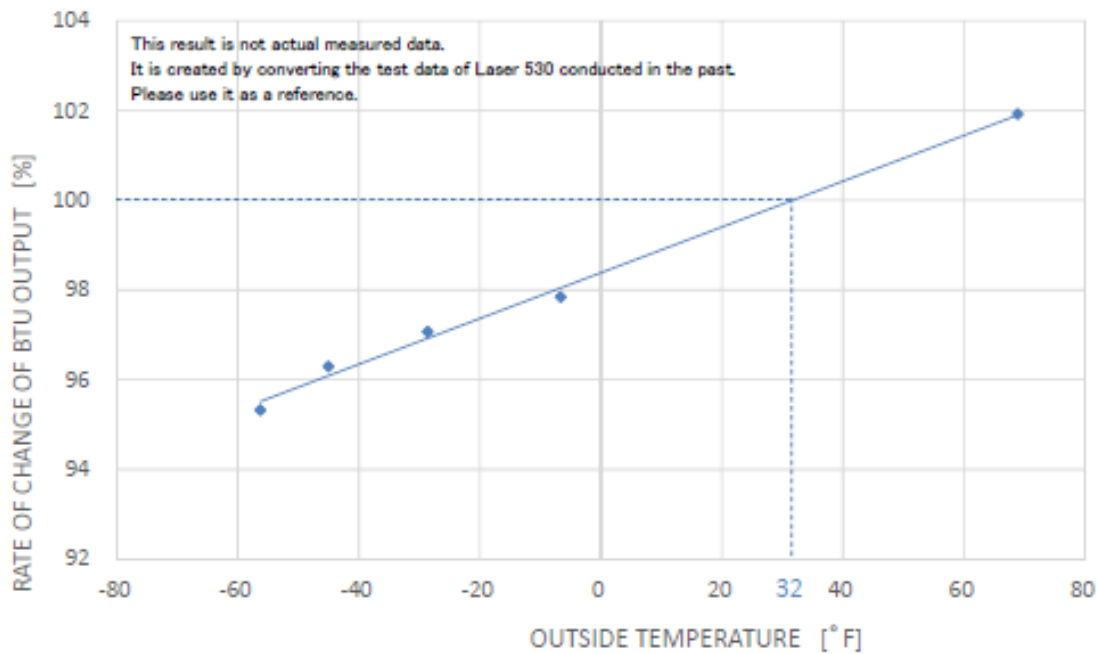
Recommended Heater Sizes:

- **Laser 730/731/732:** Suitable for spaces up to 2,000 square feet. This recommendation holds true even with a 4% efficiency reduction in extreme cold, effectively heating spaces as large as 1,920 square feet.
- **Laser 60AT:** Ideal for areas up to 1,500 square feet or 1,440 square feet with a 4% cold-weather adjustment.
- **Laser 530/531/532:** Designed for spaces up to 1,150 square feet, reducing to 1,104 square feet in extreme cold conditions.
- **Laser 300/301/302:** Efficient for heating areas up to 720 square feet and 691 square feet with a 4% efficiency decrease at -40°F .

WARNING

Rural Energy Enterprises, Inc. does not accept liability for the improper use of this information. Installation, service, and maintenance of heating equipment should be performed by a qualified technician. Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life.

RATE OF CHANGE OF BTU OUTPUT ACCORDING TO OUTSIDE TEMPERATURE



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