

Portable High-Efficiency Biomass Heating Core

150 mm CSA-Matched J-Tube Combustion System
Field-Tested | Outdoor R&D Phase | Ukraine

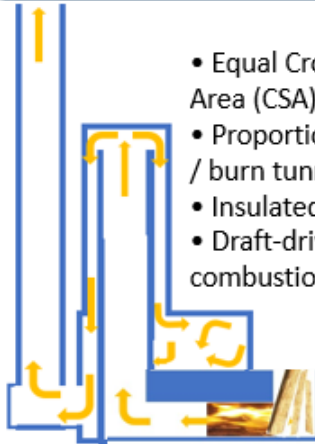
Thermal Performance



potentially greater than
> 1,100°C (2000F)

- Thermosiphon-driven gas circulation
- Heat extraction via manifold expansion chamber

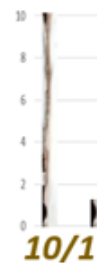
Combustion Geometry



- Equal Cross-Sectional Area (CSA) maintained
- Proportional feed tube / burn tunnel / riser
- Insulated heat riser
- Draft-driven combustion

Efficiency & Emissions

Firewood Comparison
Traditional Logs vs EkoPich sticks, trim



- Up to 90% less wood consumed*
- 3-4 hours burn may yield up to 48 hours of heat
- Normal operation no smoke, low heat signature
- Startup / shutdown smoke possible



* With full thermal storage bench compared to traditional direct-flue stoves

Development Status



- Outdoor & non-residential testing
- Pending formal engineering review
- Adaptation to Ukrainian standards
- Workforce training potential



ЕкоПіч!

Екологічне опалення

- **Безпечний**
- **Ефективний**
- **Проста конструкція**

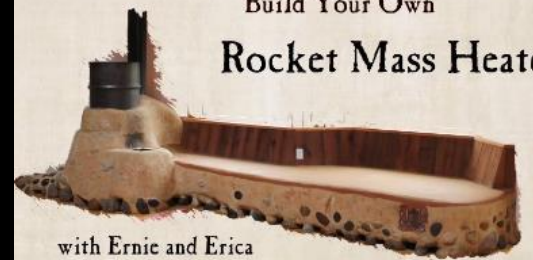
Ми будемо,
навчаємо,
Даруємо
портативні системи

Приєднуйтесь
до
команди!

WhatsApp

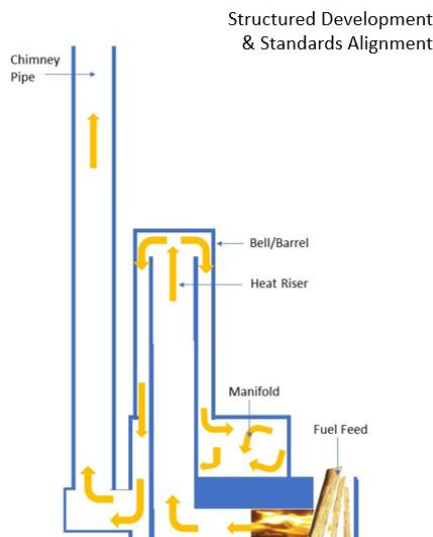


Build Your Own
Rocket Mass Heater



with Ernie and Erica

Decentralized Heating for Resilient Communities



Structured Development & Standards Alignment

Field Tested
Kharkiv
Ukraine
Winter
2025



HEAT for Ukraine

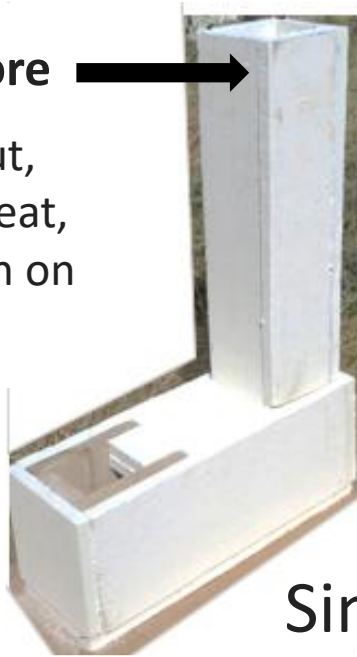
Can be built from war debris

Portable rocket heater — modern standard



Refractory Board Core

Lightweight, easy to cut, contains the intense heat, but is cool to the touch on the outside.



Portable EkoPich!

Including

Chimney Pipe

Can be transported in main segments and reassembled in about an hour.



Simple Construction of a Great Heating System



Outer Barrel

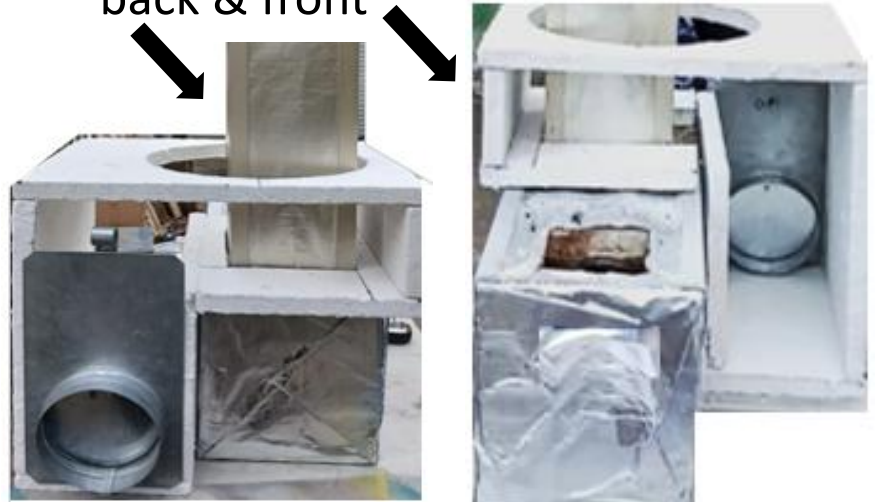
Loosely covers the heat riser. Hot gases hit the top of the barrel, then descend down the gap between. The **arrow** points to where the heat comes out – until a manifold is built to direct the gases.



Manifold

Can be shaped into many designs and made from many types of materials

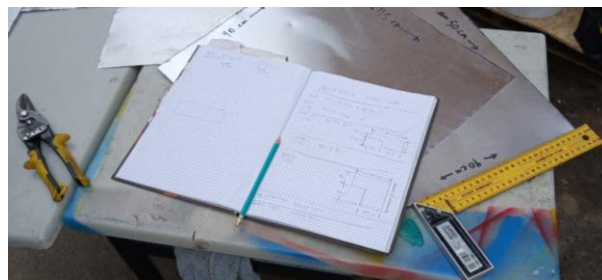
back & front



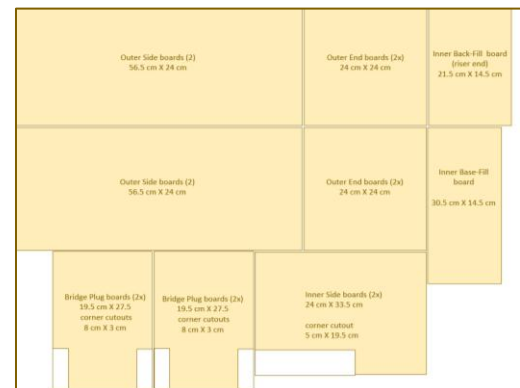


Our refractory board core is very simple to construct and forms the most important part of the structure: the combustion chamber, or heating core. Using these instead of bricks makes it extremely lightweight, easy to construct for portability or installing in most homes without the foundation reinforcement needed for standard brick and masonry structures.

This is a relatively simple task that can be completed in a few days, or hours once a construction worker is familiar with the task. We hope to see these mass produced and donated to forward areas where infrastructure is lacking and where many of the parts could actually be built out of war debris, serving a double purpose of cleaning up the area and very cheaply constructing the heating system.



Layout for Cutting Refractory Boards



Full instructions and free guidance available upon request

Building Modern Rocket Heating Systems

IN Ukraine

2026

Constructing
Donating
Teaching
Throughout
Northern
Ukraine

Learn more:

WhatsApp



EkoPich!
Eco-Friendly Heat



First
Portable
System!



Kharkiv
December 2025

Designed for and donated to
a nonprofit workshop in Kharkiv in
collaboration with one of their
talented workers

YouTube:

#ResilientVillageUkraine

- Safe
- Efficient
- Simple Construction
- Uses Very Little Firewood
- Low Cost Using Recyclables
- Advised by Global Experts
- Green Business Potential



Now seeking an R&D site!

Spread the Word

Будівництво сучасних систем ракетного опалення

в Україні

2026

« Сійке село
Україна »

Ми будемо,
навчаємо,
даруємо
портативні
системи

Приєднуйтеся
до
команди!

WhatsApp



ЕкоПіч!
Екологічне опалення



Харків,
грудень
2025 року

Перша портативна система!

Розроблено та подаровано
некомерційній майстерні у співпраці
з одним із її талановитих працівників.

#ResilientVillageUkraine

- Безпечний
- Ефективний
- Проста конструкція
- Дешевий!
- Використання вторинної сировини
- Використовує дуже мало дров
- Рекомендований світовими експертами
- Потенціал для екологічного бізнесу



зараз шукаємо місце для
досліджень і розробок!