



POST OF 06/09/2026

Flame pattern and burner control: Where the flame impinges

A furnace rarely wears where the heat is generated, but where the flame impinges. If it strikes the lining directly, it burns a wear pocket into an otherwise sound wall.

The burner block reveals the setting. That is why the burner axis and the opposite wall are inspected together — the damage is almost never at the burner itself.

Finding and possible cause

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| ☐ One-sided wear on the burner block | indicates a misaligned flame |
| ☐ Glazed surface | indicates burners running too hot |
| ☐ Wear pocket in a sound wall | flame strikes the lining directly — find the point of impingement |
| ☐ Opposite wall | always inspect it too, not just the burner side |
| ☐ After burner maintenance | check the axis and flame pattern before the furnace goes back into campaign |



Flame in the furnace chamber — what matters is where it impinges



Glowing lining in operation

Common mistakes

- Repairing the wear pocket without correcting the flame — it returns at the same spot.
- Inspecting only the burner block and overlooking the opposite wall.
- Responding to an incorrect burner setting with higher-grade material.

PRACTICAL NOTE

Setting the flame correctly extends the campaign life without additional material. Combine the burner setting and the inspection of the impingement zone in the same maintenance.

Questions about your furnace?

We assess lining, zones and condition — with a reply within 24 hours on working days.

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