



Installation Story #30 Foamfrax® Insulation

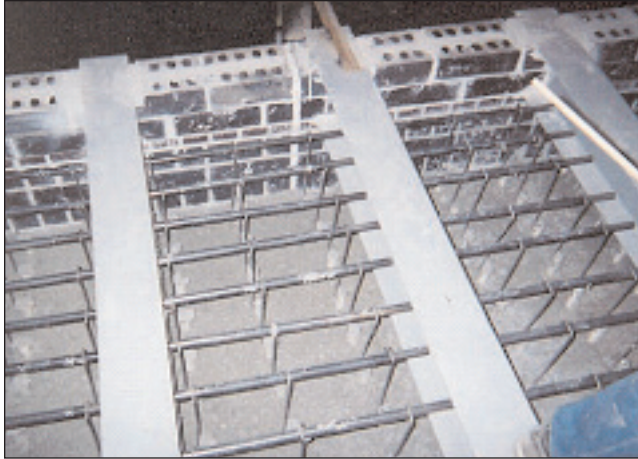
Industry:	Brick
Location:	Midwest United States
Installation Date:	July 2004
Type of Unit:	Tunnel Kiln
Operating Temperature:	2100°F (1150°C)
Scope of Job:	Foamfrax RG Insulation 4" Thick Backup Behind Refractory Tiles



A suspended brick tile design was specified as the roof for this tunnel kiln. A low-temperature board system was specified as backup insulation behind the refractory tile. Note that the tiles are suspended from structural "I" beams using a ceramic/alloy hanger system.



Installation of the board system as specified would have required cutting two layers of board to fit around all the anchors. Foamfrax RG was presented as a viable alternative which would provide a monolithic backup system and offer significant installation labor savings compared to the board system.



Foamfrax RG Insulation was easily installed around the ceramic/alloy hanger system. The installation of backup insulation will increase the interface temperature for the anchoring hardware. Therefore, when installing backup insulation, a thermal analysis must be completed and the anchor support system temperature use limit must be reviewed to ensure it will maintain its structural integrity at this higher interface temperature.

With the installation of Foamfrax Insulation, the following customer benefits were realized:

- **Turnkey Installation Service**

- A specially trained Unifrax distributor/contractor was able to supply materials, equipment, and installation as a complete package.

- **Monolithic System**

- The Foamfrax RG Insulation system provided a one-layer backup lining system without joints and heat leaks, increasing overall lining thermal efficiency.

- **Installation Speed**

- The Foamfrax RG Insulation system installed in 1/3 of the time that would have been required to install the board backup system.