



## Installation Story #21 Foamfrax® Insulation

Industry:	Pollution Control
Location:	Northeast United States
Installation Date:	July 2003
Operating Temperature:	1800°F (982°C)
Scope of Job:	Thermal Oxidizer 12" Foamfrax Grade I Full-Thickness Lining



The installation of this thermal oxidizer lining posed many challenges. Due to its configuration, penetrations, and internal structures, a module installation would have required considerable field cutting or numerous specially sized modules.



The anchoring systems used for this installation were "X" anchors on the upper 180° of the unit and "Y" anchors on the 75% of the lower 180°. The floor area was left unanchored. Open wire mesh (SS-304) was used 1" off the casing plate on the overhead areas. Note that the confined working area around the process piping restricted the space available for handling and installing lining materials.



The Foamfrax Insulation gunned easily around the numerous lining penetrations and conformed to the geometry of the unit. Because the Foamfrax fiber and binders are loaded into the Foamfrax machine, which can be up to 120' away from the work surface, just a single installer worked inside the unit.

With the installation of a Foamfrax Insulation Full-Thickness Lining System, the following customer benefits were realized:

- **Turnkey Installation**

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

- **Monolithic System**

- A Foamfrax Insulation Full-Thickness Lining System provided a ceramic fiber lining system without joints, but with all of the inherent ceramic fiber thermal properties such as low heat loss and low heat storage.

- **Installation Speed**

- The actual Foamfrax Installation took 40% of the time estimated to install modules. After the installation was completed, the incinerator was available for immediate service.