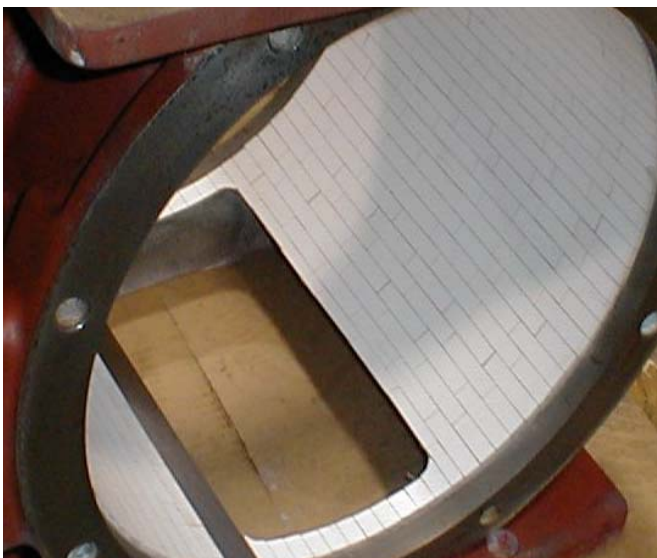
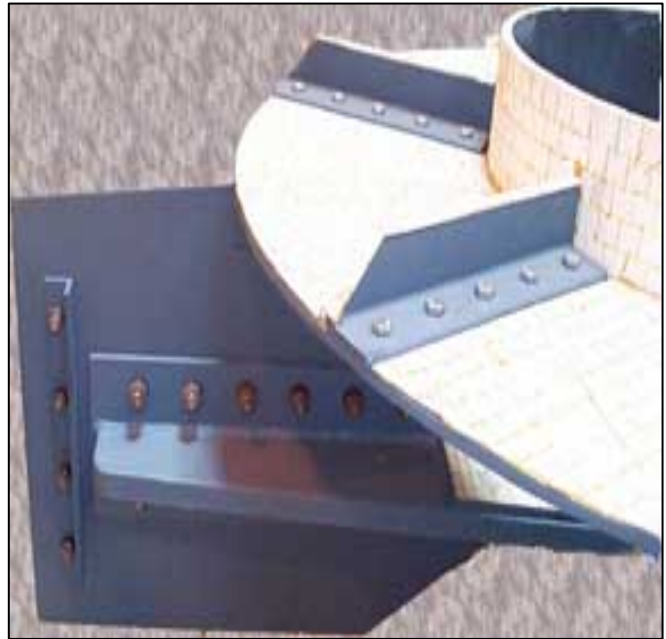


# AERO-TECH<sup>®</sup> BONDING

## Advanced Bonding Technology

Aero-Tech is an advanced thermal bonding technology that combines specialty structural adhesives, wear resistant materials and controlled processing. Applications requiring high reliability, impact resistance, and wear protection are ideal candidates for Aero-Tech bonding solutions. Valuable features of Aero-Tech bonded materials include:

- Increased effective impact resistance of Durafrax<sup>®</sup>2000 fine grain 90% ceramic tile
- Unparalleled performance in dynamic applications
- Tested high shear strength
- Proven performance in light weight designs
- Economical repair of worn components



### Easy Integration Into Your System

Durafrax tiles can be successfully Aero-Tech bonded to many substrates. Carbon Steel is the most common, but aluminum and fiberglass are the materials of choice for application requiring light weight or non ferrous systems.

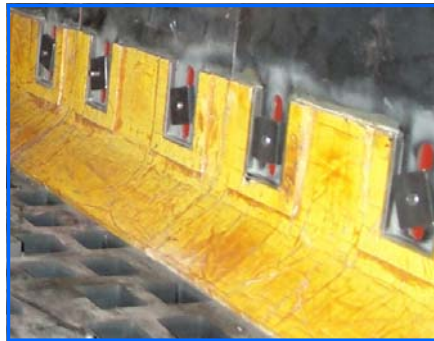
### Quality Through Installation

One of the key components of the Aero-Tech system is properly designed, specified, and installed Durafrax tiles. Our application experience is unmatched in the Industry.

Contact one of our Application Engineers to see if Aero-tech bonding can help your application perform at a high rate of return.

*(Continued)*

## Aero-Tech Performance



### We sell solutions

Analyzing a wear problem is a complex process. Wear is typically caused by a combination of temperature, raw material impingement, high velocity particles, abrasive slurries, and chemical attack. Our design engineers understand wear problems and specify materials to suit the operational environment. Material properties, engineering tolerances, attachment methods, and material costs are all considered in a Saint-Gobain wear solution.

### Applications

- Chutes/Hoppers
- Classifier Cones
- Cyclone Separator
- Elbows
- Fan Housing & Blades
- Lined Piping
- Nozzles
- Wear Panels

### Markets

- Coal-fired Power Generation
- Abrasive Material Handling
- Chemical Processing
- Food Processing
- Iron/Steel Manufacturing
- Mineral Processing
- Powder/Bulk Solids Conveying
- Pulp & paper Manufacturing
- Pulverizing & Grinding
- Grain Handling
- Cement
- Asphalt

## Properties & Test Conditions Cont.,

<b>Bonding Service Temperature:</b>	<b>200°F / 93°C – Dynamic</b> <b>250°F / 121°C – Static</b>
<b>Average Lap Sheer Strength:</b>	<b>5240 psi at 70°F / 36.13 MPa at 21.1°C</b> <b>3410 psi at 180°F / 23.53 MPa at 82°C</b> <b>1620 psi at 250°F / 11.17 MPa at 120°C</b>
<b>Average Bond Strength:</b> (ASTM D 4541-89)	<b>5540 psi at 70°F / 38.20 MPa at 21.1°C</b>
<b>Tensile Shear (Psi, MPa):</b> Fed Standard MMM-A132A	<b>-67°F / -55°C.....6770/ 46.7</b> <b>75°F / 24°C.....6840/ 47.2</b> <b>180°F / 82°C.....6770/ 46.7</b> <b>250°F / 120°C.....810/ 5.6</b>
<b>Blister Detection (Psi, MPa):</b> Fed Standard MMM-A132A	<b>-67°F / -55°C.....5290/ 36.5</b> <b>75°F / 24°C.....5050/ 34.8</b> <b>180°F / 82°C.....4120/ 28.4</b> <b>250°F / 120°C ....1240/ 8.6</b>
<b>Climbing Drum Metal-to-Metal Peel</b> (in. lbs/ in./Nm/m) ASTM D-1781-76	<b>-67°F / -55°C.....88/ 36.5</b> <b>75°F / 24°C.....150/ 650</b> <b>180°F / 82°C.....160/ 690</b> <b>250°F / 120°C ....70/ 310</b>
<b>Floating Roller Peel</b> (lbs/in, / KN/m)	<b>-67°F / -55°C.....52/ 9.1</b> <b>75°F / 24°C.....79/ 13.8</b> <b>180°F / 82°C.....110/ 20</b> <b>250°F / 120°C ....59/ 10.4</b>

All of the above statements, recommendations, suggestions and data concerning the subject material are based on laboratory and field results, and although we believe the same to be reliable, we expressly do not represent, warrant or guarantee the accuracy, completeness or reliability of same, of the material, or the result to be obtained from the use thereof. Nor do we warrant that any such use, either alone or in combination with other materials, shall be free of the rightful claim of any third party by way of **INFRINGEMENT** or the like, and **Saint-Gobain Ceramics DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**



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