Belden Chemical Resistant Floor Brick

No other kind of flooring offers such a wide range of protection from aggressive corrosives and solvents — even at elevated temperatures — as a chemical resistant brick/multiple component flooring system.

Monolithic floors can lose bond with the substrate, or split apart, when a crack develops in the substrate, resulting in extensive damage to the floor's chemical resistance. On the other hand, the three-way protection of chemical resistant brick, chemical resistant mortar, and a chemical resistant membrane provides the kind of protective redundancy important in sheltering an operation from work interruptions.

Chemical resistant Belden Brick floors successfully combine the qualities of low maintenance cost, long service life, resistance to impact and abrasion, cleanliness, and efficient appearance, all while providing exceptional chemical and abrasion resistance.

The importance of these characteristics is pointed out by the many destructive physical and chemical forces to which industrial floors are subjected on a continuing basis. Within a single area of operations the floor may be expected to withstand thermal shock, water, wheeled traffic, oils, acids and alkalis. Abrasion and impact from heavy materials represent additional destructive forces.

Floors requiring chemical resistant characteristics are divided into two broad classifications: General Industrial Floors — those found in plating processes, paper mills, pickling tank operations, chemical processing production areas, and Laboratory/ Food Plant floors — usually required in dairies, meat processing plants, bakeries, industrial laboratories and similar environments where an attractive appearance is desirable, along with ease of sanitary maintenance.

Quality...from the very beginning

Belden chemical resistant floor brick are carefully manufactured of the highest quality American shales and fire clays. These materials are specifically formulated and blended for density and strength before being fired at over 2000° F. The resultant floor brick is resistant not only to virtually all corrosive liquids with the exception of acid fluorides and strong hot caustics but to the heavy physical abuse of industrial applications.

FOR EXTRA IMPACT RESISTANCE: VERTICAL FIBRE BRICK

Belden Vertical Fibre Floor Brick are the logical choice for installations requiring surer footing and exceptional impact resistance. Typically, areas of oil or grease spillage or caustic soap exposure call for vertical fibre brick.

Belden vertical fibre chemical resistant brick offers slip resistance equal to that of abrasive-style flooring. Moreover, they retain their non-skid surface for a lifetime under all operating conditions.

For particularly critical applications, or those involving hard-to-remove resin-based mortars, Belden vertical fibre floor brick are available pre-waxed for an additional charge.

A PARTIAL LIST OF USERS

Continental Baking Company
I.B.P. Beef Products, Incorporated
Kraft General Foods
Michigan Milk Producers
Monfort
Oscar Mayer Food Corporation
Pilisbury
Stroh's Brewery
Taylor Packing Company
Welch Foods

TYPICAL APPLICATIONS

Typical industries confronted with corrosive conditions that use Belden Chemical Resistant Floor Brick.

Acid Processing Areas • Bakeries • Battery Plants
• Breweries • Chemical Plants • Dairies
• Electroplating Plants • Fertilizer Plants • Galvanizing
• Plants • Meat Packing Plants • Metal Fabricating
• Plants • Organic Chemicals • Petroleum
• Refineries • Pharmaceutical Plants • Pulp and Paper
• Mills • Rayon Fibre Plants • Smelting Plants • Steel
• Pickling Plants • Textile Dying Plants

THE BELDEN BRICK COMPANY

Mortar manufacturers should be consulted for their recommendations in connection with chemical resistant brick construction.

For names and addresses of mortar manufacturers, please contact The Belden Brick Company, P.O. Box 20910, Canton, OH 44701-0910.
All Belden chemical resistant brick are manufactured to conform to or exceed ASTM C-279 and generally are available in the Type II designation. Minimum requirements regarding the ASTM C-279 specification are shown in the following table:

### PROPERTIES

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MODULUS OF RUPTURE</th>
<th>WATER ABSORPTION</th>
<th>H₂SO₄ SOLUBILITY</th>
<th>SIZE VARIANCES</th>
<th>TOLERANCES ON WARPAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1250</td>
<td>6.0-7.0%</td>
<td>20</td>
<td>± 3%</td>
<td>TABLE 2</td>
</tr>
<tr>
<td>II</td>
<td>1250</td>
<td>4.0-5.0%</td>
<td>12</td>
<td>± 3%</td>
<td>TABLE 2</td>
</tr>
<tr>
<td>III</td>
<td>1250</td>
<td>1.0-1.5%</td>
<td>8</td>
<td>± 3%</td>
<td>TABLE 2</td>
</tr>
</tbody>
</table>

**METHOD OF TEST**

- ASTM Designation C67
- ASTM Designation C20
- ASTM Designation C279

The information provided above has been furnished as a general guide line for the design of chemical resistant construction. We cannot guarantee the data reported nor can we assume any liability in connection with its use. Please contact the Belden Brick Company for specific recommendations.

Belden chemical resistant floor brick is manufactured to conform to the specification requirements of both ASTM C-279 and ASTM C-410 (Industrial floor brick). Whenever close dimensional tolerances or minimal distortion is required, ASTM C-410, Tables II and III should be used for the dimensional standards of the specification.