Publications of the
DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS

WASHINGTON, D. C.

PUBLICATIONS BY THE BUREAU OF STANDARDS RELATING TO CERAMICS

(These publications may be consulted in the various Government depository libraries throughout the United States. Publications starred thus (*) are no longer available for distribution or sale. Copies of the other publications may be purchased from the office of the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices appended).

Scientific Papers

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Price</th>
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<tbody>
<tr>
<td>*S 212</td>
<td>Melting Points of Some Refractory Oxides</td>
<td></td>
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<tr>
<td>S 278</td>
<td>An Investigation of Laws of Plastic Flow</td>
<td>$0.10</td>
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<tr>
<td>S 358</td>
<td>Concerning the Annealing and Characteristics of Glass</td>
<td>.10</td>
</tr>
<tr>
<td>S 373</td>
<td>Characteristics of Striae in Optical Glass</td>
<td>.05</td>
</tr>
<tr>
<td>S 393</td>
<td>Measurements of Thermal Dilatation of Glass at High Temperatures</td>
<td>.10</td>
</tr>
<tr>
<td>S 465</td>
<td>Application of the Interferometer to Measurements of the Thermal Dilatation of Ceramic Materials</td>
<td>.05</td>
</tr>
<tr>
<td>S 524</td>
<td>Measurements on the Thermal Expansion of Fused Silica</td>
<td>.10</td>
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<tr>
<td>S 352</td>
<td>Thermal Expansion of Insulating Materials</td>
<td>.05</td>
</tr>
</tbody>
</table>

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Note: The appendix, page 16, lists all papers issued since March 15, 1927.
**Technologic Papers**

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Price</th>
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<tbody>
<tr>
<td>T 1</td>
<td>Effect of Preliminary Heat Treatment Upon the Drying of Clays</td>
<td>0.10</td>
</tr>
<tr>
<td>T 7</td>
<td>The Testing of Clay Refractories, with Special Reference to Their Load-Carrying Ability at Furnace Temperature</td>
<td></td>
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<tr>
<td>T 10</td>
<td>The Melting Point of Fire Brick</td>
<td>0.05</td>
</tr>
<tr>
<td>T 17</td>
<td>The Function of Time in the Vitrification of Clays</td>
<td></td>
</tr>
<tr>
<td>T 21</td>
<td>The Dehydration of Clays</td>
<td>0.35</td>
</tr>
<tr>
<td>T 22</td>
<td>The Effect of Overfiring Upon the Structure of Clays</td>
<td></td>
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<tr>
<td>T 23</td>
<td>The Technical Control of the Colloidal Matter of Clays</td>
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<td>T 30</td>
<td>Viscosity of Porcelain Bodies</td>
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<tr>
<td>T 31</td>
<td>Some Leadless Boro-Silicate Glazes Maturing at About 1100°C.</td>
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<tr>
<td>T 40</td>
<td>The Veritas Firing Rings</td>
<td>0.05</td>
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<tr>
<td>T 46</td>
<td>A Study of the Atterberg Plasticity Method</td>
<td></td>
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<tr>
<td>T 50</td>
<td>The Viscosity of Porcelain Bodies High in Feldspar</td>
<td>0.05</td>
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<tr>
<td>T 51</td>
<td>Use of Sodium Salts in the Purification of Clays and in the Casting Process</td>
<td></td>
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<tr>
<td>T 79</td>
<td>Properties of Some European Plastic Fire Clays</td>
<td>0.10</td>
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<tr>
<td>T 80</td>
<td>Constitution and Microstructure of Porcelain</td>
<td>0.25</td>
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<tr>
<td>T 85</td>
<td>Manufacture and Properties of Sand-Lime Brick</td>
<td>0.10</td>
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<tr>
<td>T 104</td>
<td>The Effect of Size of Grog in Fire Clay Bodies</td>
<td>0.10</td>
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<tr>
<td>T 105</td>
<td>Comparative Tests of Porcelain Laboratory Ware</td>
<td>05</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>T 107</td>
<td>Comparative Tests of Chemical Glassware</td>
<td>10</td>
</tr>
<tr>
<td>T 111</td>
<td>The Compressive Strength of Large Brick Piers</td>
<td>10</td>
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<tr>
<td>T 116</td>
<td>Silica Refractories - Factors Affecting Their Quality and Methods of Testing the Raw Materials and Finished Ware</td>
<td>20</td>
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<tr>
<td>T 120</td>
<td>Tests of Hollow Building Tile</td>
<td>06</td>
</tr>
<tr>
<td>T 124</td>
<td>Constitution and Microstructure of Silica Brick and Changes Involved Through Repeated Burnings at High Temperatures</td>
<td>10</td>
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<tr>
<td>T 142</td>
<td>Materials and Methods Used in the Manufacture of Enamelled Cast-Iron Wares</td>
<td>20</td>
</tr>
<tr>
<td>T 144</td>
<td>The Properties of American Bond Clays and Their Use in Graphite Crucibles and Glass Pots</td>
<td>10</td>
</tr>
<tr>
<td>T 155</td>
<td>Cements for Spark Plug Electrodes</td>
<td>05</td>
</tr>
<tr>
<td>T 159</td>
<td>Porosity and Volume Changes of Clay Fire Bricks at Furnace Temperatures</td>
<td>05</td>
</tr>
<tr>
<td>T 165</td>
<td>Enamels for Sheet Iron and Steel</td>
<td>15</td>
</tr>
<tr>
<td>T 196</td>
<td>High-Fire Porcelain Glazes</td>
<td>05</td>
</tr>
<tr>
<td>T 220</td>
<td>Test of Hollow Tile and Concrete Floor Slabs Reinforced in Two Directions</td>
<td>25</td>
</tr>
<tr>
<td>T 227</td>
<td>American and English Ball Clays</td>
<td>10</td>
</tr>
<tr>
<td>T 234</td>
<td>Methods of Measuring the Plasticity of Clays</td>
<td>10</td>
</tr>
<tr>
<td>T 236</td>
<td>Loading Test of Hollow Tile and Reinforced Concrete Floor of Arlington Building, Washington, D. C.</td>
<td>15</td>
</tr>
<tr>
<td>T 238</td>
<td>Some Compressive Tests of Hollow Tile Walls</td>
<td>05</td>
</tr>
<tr>
<td>T 246</td>
<td>Wet-Process Enamels for Cast Iron</td>
<td>10</td>
</tr>
<tr>
<td>T 262</td>
<td>Comparison of American and Foreign Clays as Paper Fillers</td>
<td>15</td>
</tr>
</tbody>
</table>
Letter Circular 131 - 4.

T 279 Testing of Fire-Clay Brick With Special Reference
to Their Use in Coal-Fired Boiler Settings ... 20

T 291 Tests of Hollow Tile and Concrete Slabs
Reinforced in One Direction ... 25

T 310 Properties of Potter's Plints and Their Effects
in White-Ware Bodies ... 15

T 311 Compressive and Transverse Strength of Hollow
Tile Walls ... 15

CIRCULARS

C 118 Recommended Specification for Limestone,
Quicklime and Hydrated Lime for Use in
the Manufacture of Glass ... 05

C 119 Specifications for Lime-Plint Glass Tumblers ... 05

C 132 Recommended Specification for Ceramic Whiting ... 05

C 133 Recommended Specification for Quicklime and
Hydrated Lime for the Manufacture of Silica Brick ... 05

C 164 Specification for 1st Class for Glazing Purposes ... 05

C 202 Specification for Vitrified Chinaware ... 05

C 282 Fire-clay Brick; Their Manufacture, Properties,
Uses and Specifications ... 25

C 297 Plastic Fire-Clay Refractories (2d ed.) ... 05

C 298 Fire-Clay (2d ed.) ... 05

C 299 Fire-Clay Brick (2d ed.) ... 05

C 314 Soda Ash ... 05

PUBLICATIONS OF THE BUREAU OF MINES

References to literature on ceramics, published by Bureau
of Mines, may be found in Bureau of Mines Serial No. 2645.
Letter Circular 131 - b.

SPECIFICATIONS ISSUED BY FEDERAL SPECIFICATIONS BOARD

Copies can be obtained free of charge from the Chairman, Federal Specifications Board, Bureau of Standards, Washington, D. C.

Specification 114a Glass Tableware
Specification 112 Glass Lantern Globes and Lamp Chimneys
Specification 242a Vitrified Chinaware
Specification 268 Fire-Clay Brick
Specification 334 Fire-Clay
Specification 33b Plastic Fire-Clay Refractories
Specification 268a Fire-Clay Brick
Specification 334a Fire-Clay
Specification 333a Plastic Fire-Clay Refractories

RECOMMENDATIONS ISSUED BY THE DIVISION OF SKILL-LED PRACTICE

R  1 Paving Bricks, 4th revision 0.06
R  5 Hotel Chinaware .06
R  7 Face Brick and Common Brick .06
R 10 Milk and Cream Bottles and Bottle Caps .06
R 12 Hollow Building Tile .06
R 33 Cafeteria and Restaurant Chinaware .06
R 38 Sand-Lime Brick .06
R 39 Dining Car Chinaware .06
R 40 Hospital Chinaware .06
R 45 Grinding Wheels .06
R 49 Sidewalk, Floor and Roof Lights .06
REPORTS OF BUILDING CODE COMMITTEE

Recommended Minimum Requirements for Small Dwelling Construction 0.15

Recommended Minimum Requirements for Masonry Wall Construction .15

PUBLICATIONS APPEARING IN THE TRANSACTIONS AND JOURNALS OF THE AMERICAN CERAMIC SOCIETY

(Copies of the Transactions and Journals may be consulted at leading libraries or may be obtained from the Secretary, American Ceramic Society, 2625 North High Street, Columbus, Ohio).

Porcelain, Whiteware and Allied Products


The Viscosity of Porcelain Bodies. Trans. 15:1913.

The Clark Viscosimeter. Trans. 16:1913.

The Veritas Firing Rings. Trans. 16:1914.


Some of the Properties of White Porcelain Cement. Trans. 16:1914.

The Viscosity of Porcelain Bodies. Trans. 17:1914.


Electrical Conductivity of a Porcelain Mixture and a Shale Upon Heating. Trans. 17:1915.


Some Types of Porcelain. Jour. 1, No. 9.

Note on Certain Characteristics of Porcelain. Jour. 1, No. 10.

Effect of Time and Temperature on the Microstructure of Porcelain. Jour. 2, No. 3.


Relation Between the Composition and the Thermal Expansivity of Porcelain. Jour. 2, No. 10.


The Solubility of Boric Acid Frits. Jour. 3, No. 2.

The Rate of Vitrification of Porcelain Molded Under Different Conditions. Jour. 3, No. 10.

Solubility and Fusibility of Some Feldspar Frits. Jour. 4, No. 6.

High-Fire Porcelain Glazes. Jour. 4, No. 9.

Note on the Hardness of Glazes. Jour. 4, No. 11.

Earthenware Bodies and Glazes. Jour. 4, No. 12.


Impact Tests on Tableware. Jour. 6, No. 2.

The Effect of Variation in Firing on the Physical Properties of Vitreous China Bodies. Jour. 6, No. 8.

The Bonding Effect of Ball Clays in Porcelain Bodies. Jour. 7, No. 2.

An Apparatus for Measuring the Abrasive Hardness of Glazes. Jour. 7, No. 5.

Interferometer Measurements of the Thermal Dilatation of Glazed Ware. Jour. 9, No. 6.


Characteristics of Pyrometric Cones. Jour. 9, No. 11.

The Effect of Calcined Cyanite in Porcelain Bodies. Jour. 10, No. 1.

1 Comparison of the Softening Points of Some Foreign and American Pyrometric Cones. Jour. 9, No. 11.

Refractories and Heavy Clay Products


The Relation Between the Crushing Strength and Porosity of Clay Products. Trans. 14:1912.


The Melting Points of Refractory Materials. Trans. 15:1913.

The Development of Special Refractory Bodies. Trans. 15:1913.


The Relative Thermal Conductivities of Silica and Clay Refractories. Trans. 16:1914.

Effect of Saturated Sodium Sulphate Solution Upon the Structure of Clay Burned to Different Temperatures. Trans. 17:1915.


The Effect of Size of Grog in Fire Clay Bodies. Trans. 19:1917.

Special Pots for the Melting of Optical Glass. Jour. 1, No. 1.


Silica Refractories. Jour. 1, No. 7.


The Transverse Strength of Fire-Clay Tiles at Furnace Temperatures. Jour. 4, No. 7.

Possibilities of Terra Cotta Castings. Jour. 4, No. 11.

Study of Some Bond Clay Mixtures. Jour. 4, No. 11.
Effectiveness of Different Methods of Making Absorption Determinations as Applied to Hollow Building Tile. Jour. 5, No. 11.

Cupping for Compression Specimens. Jour. 6 No. 5.


Further Studies on Cast Glass Pots. Jour. 6, No. 6.


An Electric Furnace for Softening Point Determinations. Jour. 8, No. 5.

The Laboratory Testing of Plastic Refractories. Jour. 8, No. 7.

Progress Report on Investigation of Sagger Clays. Jour. 9, No. 3.

A Study of Mullite Refractories Formed by Calcining Cynamite, Their Industrial Application. Jour. 9, No. 5.

Comparative Tests of Some American and German Fire-Clay Brick. Jour. 9, No. 6.

Progress Report on Investigation of Sagger Clays—Some Observations as to the Significance of their Thermal Expansions. II. Jour. 9, No. 9.

Some Observations of Surface Deposits Formed in Glass Furnace Regenerators. Jour. 9, No. 10.

Preparation and Application of Enamels for Cast Iron. Jour. 1, No. 3.

Control of Luster of Enamels. Jour. 1, No. 9.


The Cleaning of Sheet Steel for Enameling Purposes. Jour. 2, No. 11.


The Cause and Control of Fisch Scaling of Enamels for Sheet Iron and Steel. Jour. 4, No. 8.

Some Relations of Composition to Solubility of Enamels in Acids. Jour. 4, No. 9.

The production of Some White Enamels for Copper. Jour. 4, No. 10.


The Effect of Some Substitutes for Tin Oxide on the Opacity of White Enamels for Sheet Steel. Jour. 6, No. 5.

The Relations Between Composition and Properties of Enamels for Sheet Steel. Jour. 6, No. 10.

Factors Affecting the Passage of Sheet Iron and Steel in Enameling. Jour. 7, No. 5.


Effects of Composition on the Properties of Sheet Steel Enamels. Jour. 8, No. 11.

Letter Circular 131 - 12.

**Glass**

Variation in Soda, Lime, and Magnesia Content of Glass of the Type 20.3SiO₂. Trans. 17:1915.


Production of Selenium Red Glass. Jour. 2, No. 11.


Weathering of Glass Containers. Jour. 5, No. 8.

Tests on the Resilience Qualities of Soda-lime Glasses to Water. Jour. 6, No. 4.

A Study of the Origin and Cause of Stones in Glass. Jour. 6, No. 6.

The Mechanical Strength of Glazing Glass. Jour. 6, No. 9.


Variations in Glass Caused by Heat Treatment. Jour. 8, No. 1.

The Density and Index of Refraction of Glass Versus Its Composition. Jour. 8, No. 8.

The Failure of Thermocouple Protection Tubes in Glass Melting Furnaces. Jour. 8, No. 9, Part 1.

A Non-elastic Cobalt-Blue Glass. Jour. 9, No. 7.

Miscellaneous

Note on the Viscosity of Clays as determined by the Clark apparatus. Trans. 12:1914.


The dehydration of clays. Trans. 14:1912.


Function of time in the vitrification of clays. Trans. 15:1913.

The Electrical Conductivity of Clays and Clay Suspensions. Trans. 15:1913.

Study of Some Calcium and Magnesium Slags. Trans. 15:1913.

The Temperature Porosity Relations of a Clay prepared in the Plastic and in the Wet Condition. Trans. 15:1913.

A Note on the Reduction of Fe₂O₃. Trans. 16:1914.

The Compression, Tensile, and Transverse Strength of Some Clays in the Dried State. Trans. 16:1914.

The Effect of Clays Under Pressure. Trans. 16:1914.

A Laboratory Oven Provided with Recording Attachments for the Study of Drying Clays. Trans. 16:1914.


The Use of Neutralizing Agents in the Fishing of Clays and the Effect of the Process Upon the Color. Trans. 17:1915.


Deformation of Plastic Bodies Under Compression as a Measure of Plasticity. Trans. 17:1915.


On the Attainment of Reliable Temperature Measurements in the Ceramic Industries by Means of Thermocouples. Trans. 18:1916.


Test of a Producer Gas-Fired Periodic Kiln. Jour. 1, No. 1.

Tests of Clays and Limes by the Bureau of Standards Plasticimeter. Jour. 1, No. 3.

Applications of the Polarizing Microscope in Ceramics. Jour. 2, No. 9.


The Testing of Clays for Concrete Aggregate. Jour. 3, No. 3.


Absorption of Sodium Hydroxide by Kaolins. Jour. 4, No. 6.

Use of Special Oxides in Porcelain Bodies. Jour. 4, No. 10.


Comparative Tests of Foreign and Domestic Whiting. Jour. 5, No. 12.


Thermal Expansion of Fused Quartz. Jour. 7, No. 11.


A Machine for Transverse Tests of Clay and Glass Laboratory Specimens. Jour. 8, No. 11.

Several Gas Porosimeters. Jour. 9, No. 12.

Bureau of Standards,
March 15, 1927.
Letter Circular 131 - 16.

Appendix

Technologic Papers

<table>
<thead>
<tr>
<th>Number</th>
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<tr>
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Circul ars

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<tr>
<td>C 345</td>
<td>Ceramic Properties of Some White-Burning Clays of the Western United States</td>
<td>.20</td>
</tr>
<tr>
<td>C 342</td>
<td>Clay Hollow Load-Bearing Wall Tile</td>
<td>.05</td>
</tr>
<tr>
<td>C 343</td>
<td>Clay Hollow Fireproofing, Partition, and Furring Tile</td>
<td>.05</td>
</tr>
<tr>
<td>C 344</td>
<td>Clay Hollow Floor Tile</td>
<td>.05</td>
</tr>
<tr>
<td>C 345</td>
<td>Common Clay Brick</td>
<td>.05</td>
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SPECIFICATIONS ISSUED BY FEDERAL SPECIFICATIONS BOARD

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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<tbody>
<tr>
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<td>Brick, Clay, Common</td>
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<tr>
<td>506</td>
<td>Tile, Hollow, Clay, Floor</td>
</tr>
<tr>
<td>507</td>
<td>Tile, Hollow, Clay, Load-Bearing, Wall</td>
</tr>
<tr>
<td>508</td>
<td>Tile, Hollow, Clay, Fireproofing, Partition and Furring</td>
</tr>
</tbody>
</table>
Letter Circular 131 - 17.

Papers published in Journal of the American Ceramic Society.


Strength of Brick in Tension. Vol. 11, No. 2.


The Effect of Various Sodium Silicates and Other Electrolytes on Clay Slips. Vol. 10, No. 4.