



Design and Architectural Services

BRICK MANUFACTURING AND SPECIFICATIONS

PROVIDED BY GLEN-GERY CORPORATION

Brick has been used as a building material for centuries. As a result, brick are often thought to be a relatively easy material to manufacture. On the other hand, we expect much more of the brick manufactured today: a wider range of colors, tighter tolerances, and greater durability of both molded and extruded brick. Brick manufacturing is a science unto itself. This presentation focuses on how brick are made, including discussion regarding: appropriate raw material, forming of brick units, surface colors and textures, firing and testing of brick units to ensure a durable finished product. The focus then turns to specifications. Discussion will include: the purpose of ASTM Standards, differences between face brick, building brick, paving brick and hollow brick specifications, and various durability and appearance characteristics (including a detailed comparison between face brick and paving brick characteristics). We will discuss compressive strength, absorption characteristics, and dimensional tolerances, along with how these characteristics should be specified.

Other topics included in this presentation are --

Molded versus Extruded

How each is formed and how such formation affects appearance and durability.

Core Holes and Frogs

How do they affect final design and why they are included in manufacture?

Finished Faces

When are brick shapes needed to ensure that all exposed brick faces are finished?

Saturation Coefficient

What is a C/B ratio and how does it affect performance.

Initial Rate of Absorption vs. Absorption

How does each affect durability?

Pavers

Why the required minimum compressive strength varies between molded and extruded when specified according to ASTM C902