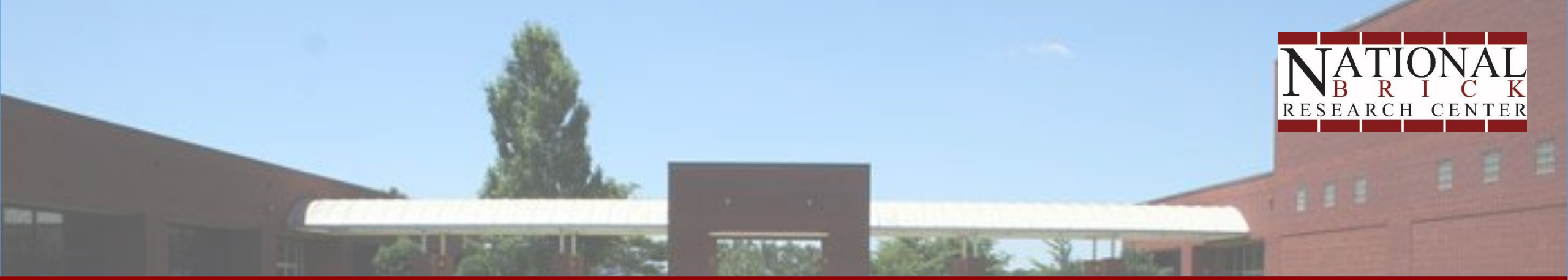

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PCI Specification for Embedded Clay Thin Brick

Testing That is Performed for PCI Standard

- Thin Brick – 30 Thin Brick
  - Dimensional Testing
  - Breaking Strength
  - Cold Water Absorption
  - Efflorescence
  - 50 Cycle Freeze Thaw
  - Chemical Resistance
- Precast Panels – 10 Panels
  - Panels are aged 28 days prior to testing
  - 5 panels are tested for pull out strength per ASTM E488 as received
  - 5 panels are freeze thaw tested per ASTM C666
  - The 5 panels that were tested for freeze thaw are tested for pull out strength

Precast Panels

Frequency Of Testing

- Dimensional tolerances are checked internally prior to shipping each run of brick supplied to a project
- Cold water absorption shall be conducted internally on every body/color supplied to a project
- All other testing shall be conducted for each clay body/color at an accredited lab at least every two years

Checking dimensional tolerances

What Hasn't Changed

- Dimensional Tolerances currently still have the tight tolerances
  - Dimensions up to 8 inches have tolerance of plus 0, minus 1/16 inch
  - Dimensions over 8 inches have tolerance of Plus 0, minus 3/32 inch
  - Warpage: not more then 1/16 inch either concave or convex
  - Out of square: Plus 0, minus 1/16 inch
  - Shape angle: Plus 0, minus 1 degree
- Cold water absorption is still a maximum of 6%
- Brick must pass efflorescence testing

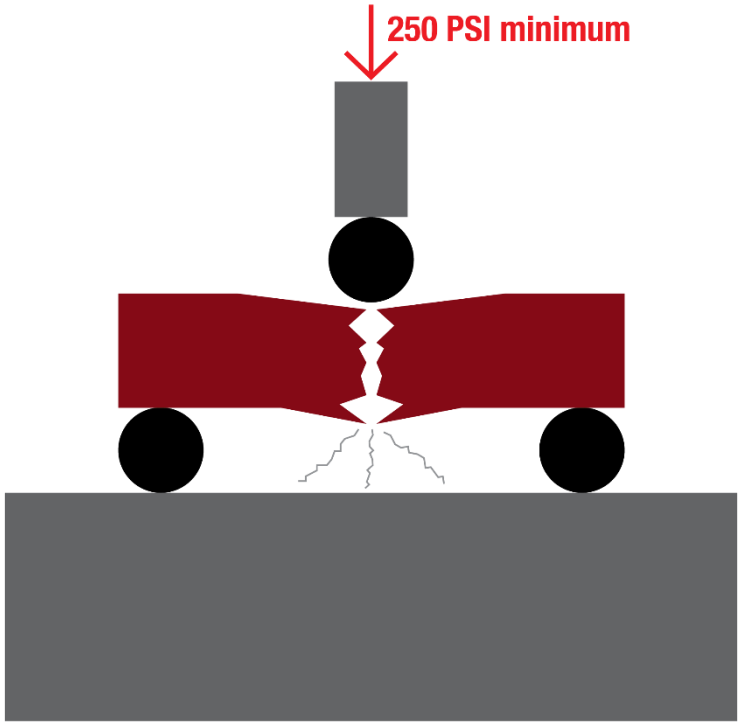
What Hasn't Changed

- The individual thin brick with surface coloring must pass ASTM C67 freeze thaw testing
- Precast panels must pass ASTM C666 freeze thaw testing
- Precast panels must have a pullout strength of at least 150 psi before and after freeze thaw testing using ASTM E488 test method

Pullout strength test

What Has Changed

- The prior versions of the PCI standard stated that the samples must be tested for MOR requirements. The new specification requires that the Breaking Strength be at least 250 psi.



Breaking Strength Testing

Changes to the PCI Standards

- Chemical resistance testing with ASTM C650 now only needs to be done with 10% HCl
- Letter of Certification from the manufacturer that the brick meet or exceed the specifications

Sample letter of certification

Project: Project Name and Location

The Thin Brick supplied is [clay body/color(s) and size(s)] manufactured by [Thin Brick Manufacturer including Plant Location]. The Thin Brick was manufactured to meet the requirements of 2016 version of the PCI Specification for Embedded Clay Thin Brick.

Thin Brick Manufacturer Employee Signature
Employee's Title
Thin Brick Manufacturer Name

Thank You

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- Questions?