

# Subject Index

**Technical Notes on Brick Construction** is a series of bulletins that contain design, detailing and construction information based on the latest technical developments in brick masonry. Drawings, photographs, tables and charts illustrate appropriate topics. They are available individually or as a set. Registered purchasers of a complete set will receive notification of new or revised editions via email.

*Technical Notes on Brick Construction* are recommendations on the use of fired clay brick. They are explicitly written for fired clay brick manufactured:

- 1) from clay, shale or similar naturally occurring earthy substances; and
- 2) with a firing process that creates a fired bond between the particles of the brick.

The properties of fired clay brick and the clay brick masonry made from them were used to establish the recommendations in these *Technical Notes*. Using these recommendations with other products that are not manufactured as outlined above may not result in the same performance associated with fired clay brick masonry. Further, use of these *Technical Notes* for the design, installation and maintenance of construction built with other products may in fact be detrimental to those products and the building on which they are installed. Thus, BIA does not advise the use of these recommendations with other products including but not limited to those claiming to be similar to fired clay brick products such as “fly ash” brick, concrete brick and other unfired or non-clay brick.

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# Numerical Index

Technical Notes on Brick Construction are recommendations explicitly written for the design, installation and maintenance of masonry using fired clay brick. BIA does not advise the use of these recommendations with other products, including but not limited to those claiming to be similar to fired clay brick products.

*Technical Notes* are rewritten to include new technical information. The issue date of a current *Technical Note* is shown between brackets [ ]. Current editions supersede earlier editions.

The designation **Reissued** indicates that the edition of the *Technical Note* shown in brackets [ ] has been thoroughly reviewed and found to be technically accurate. Other editions dated on or after the bracketed [ ] date are still valid; only minor editorial changes have been made. The reissued date appears in parentheses ( ).

Missing numbers have been discontinued.

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- 1 [June 2018] Hot and Cold Weather Construction
  - 2 **Rev** [Jan./Feb. 1975] (Reissued March 1999) Glossary of Terms Relating to Brick Masonry
  - 3 **Rev** [July 2002] Overview of Building Code Requirements for Masonry Structures ACI 530-02/ASCE 5-02/TMS 402-02 and Specifications for Masonry Structures ACI 530.1-02/ASCE 6-02/TMS 602-02
  - 3A [Dec. 1992] Brick Masonry Material Properties
  - 3B [May 1993] Brick Masonry Section Properties
  - 4 [Jan. 2016] Introduction to Energy Performance of Brick Masonry
  - 4A [June 2016] Residential Energy Code Compliance
  - 4B **Rev** [Feb. 2002] Energy Code Compliance of Brick Masonry Walls
  - 5A [June 1970] (Reissued Aug. 2000) Sound Insulation – Clay Masonry Walls
  - 6 **Rev** [May 1972] (Reissued Dec. 1985) Painting Brick Masonry
  - 6A [Aug. 2008] Colorless Coatings for Brick Masonry
  - 7 [Nov. 2017] Water Penetration Resistance – Design and Detailing
  - 7A [Nov. 2017] Water Penetration Resistance – Materials
  - 7B [Nov. 2017] Water Penetration Resistance – Construction and Workmanship
  - 8 [Mar. 2020] Mortars for Brickwork
  - 8B [Mar. 2020] Mortars for Brickwork – Selection and Quality Assurance
  - 9 [Dec. 2006] Manufacturing of Brick
  - 9A [Oct. 2007] Specifications for and Classification of Brick
  - 9B **Rev** [Dec. 2003] Manufacturing, Classification and Selection of Brick – Selection, Part III
  - 10 [Feb. 2009] Dimensioning and Estimating Brick Masonry
  - 11 **Rev** [Dec. 1971] (Reissued Aug. 2001) Guide Specifications for Brick Masonry, Part I
  - 11A **Rev** [June 1978] (Reissued Sept. 1988) Guide Specifications for Brick Masonry, Part II
  - 11B **Rev** [Feb. 1972] (Reissued Sept. 1988) Guide Specifications for Brick Masonry, Part III
  - 11C **Rev** [July 1972] (Reissued May 1998) Guide Specifications for Brick Masonry, Part IV
  - 11D [Aug. 1972] (Reissued Sept. 1988) Guide Specifications for Brick Masonry, Part IV Continued
  - 11E **Rev** [Sept. 1991] Guide Specifications for Brick Masonry, Part V, Mortar and Grout
  - 13 [June 2017] Ceramic Glazed Brick Exterior Walls
  - 14 [May 2017] Paving Systems Using Clay Pavers
  - 14A [May 2017] Paving Systems Using Clay Pavers on a Sand Setting Bed
  - 14B [June 2010] Paving Systems Using Clay Pavers on a Bituminous Setting Bed
  - 14C [July 2011] Paving Systems Using Clay Pavers in a Mortar Setting Bed
  - 14D [Feb. 2012] Permeable Clay Brick Pavements
  - 14E [July 2012] Accessible Clay Brick Pavements
  - 15 **Rev** [May 1988] Salvaged Brick
  - 16 [Mar. 2008] Fire Resistance of Brick Masonry
  - 17 **Rev** [Oct. 1996] Reinforced Brick Masonry, Introduction
  - 17A **Rev** [Aug. 1997] Reinforced Brick Masonry – Materials and Construction
  - 17B **Rev** [Mar. 1999] Reinforced Brick Masonry Beams
  - 17L **Rev** [Feb./Mar. 1973] (Reissued Sept. 1988) Four-inch RBM Curtain and Panel Walls
  - 17M [July 1968] (Reissued Sept. 1988) Reinforced Brick Masonry Girders – Examples
  - 18 [May 2019] Volume Changes – Analysis and Effects of Movement
  - 18A [May 2019] Accommodating Expansion of Brickwork
  - 19 **Rev** [Jan. 1993] Residential Fireplace Design
  - 19A **Rev** [May 1980] (Reissued Aug. 2000) Residential Fireplaces, Details and Construction
  - 19B **Rev** [June 1980] (Reissued Apr. 1998) Residential Chimneys – Design and Construction
  - 19C **Rev** [Oct. 2001] Contemporary Brick Masonry Fireplaces
  - 19D [Jan. 1983] (Reissued June 1987) Brick Masonry Fireplaces, Part I, Russian-Style Heaters
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  - 20 [Aug. 2018] Cleaning Brickwork
  - 23 [June 2019] Stains – Identification and Prevention
  - 23A [June 2019] Efflorescence – Causes and Prevention
  - 24 **Rev** [June 2002] Brick Masonry Bearing Walls – Introduction
  - 24C **Rev** [Sept./Oct. 1970] (Reissued May 1988) The Contemporary Bearing Wall – Introduction to Shear Wall Design
  - 24F **Rev** [Nov./Dec. 1974] (Reissued Sept. 1988) The Contemporary Bearing Wall – Construction
  - 24G [Dec. 1968] (Reissued Feb. 1987) The Contemporary Bearing Wall – Detailing
  - 26 **Rev** [Sept. 1994] Single Wythe Bearing Walls
  - 27 **Rev** [Aug. 1994] Brick Masonry Rain Screen Walls
  - 28 **Rev** [Nov. 2012] Anchored Brick Veneer/Wood Stud Walls
  - 28A [Mar. 2020] Adding Brick Veneer to Existing Construction
  - 28B [Dec. 2005] Brick Veneer / Steel Stud Walls
  - 28C [Apr. 2014] Thin Brick Veneer
  - 28D [June 2018] Brick Veneer/Concrete Masonry Walls
  - 29 **Rev** [July 1994] Brick in Landscape Architecture – Pedestrian Applications
  - 29A **Rev** [Nov. 1968] (Reissued Jan. 1999) Brick in Landscape Architecture – Garden Walls
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- 29B** [Apr. 1967] (Reissued May 1988) Brick in Landscape Architecture – Miscellaneous Applications
- 30 Rev** [Mar. 1999] Bonds and Patterns in Brickwork
- 31 Rev** [Jan. 1995] Brick Masonry Arches
- 31A** [Oct. 1967] (Reissued July 1986) Structural Design of Brick Masonry Arches
- 31B Rev** [Nov./Dec. 1981] (Reissued May 1987) Structural Steel Lintels
- 31C Rev** [Feb. 1971] (Reissued Aug. 1986) Structural Design of Semicircular Brick Masonry Arches
- 36 Rev** [July/Aug. 1981] (Reissued Jan. 1988) Brick Masonry Details, Sills and Soffit
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- 39 Rev** [Nov. 2001] Testing for Engineered Brick Masonry – Brick and Mortar
- 39A** [July/Aug. 1975] (Reissued Dec. 1987) Testing for Engineered Brick Masonry – Determination of Allowable Design Stresses
- 39B Rev** [Mar. 1988] Testing for Engineered Brick Masonry – Quality Control
- 40 Rev** [Aug. 2001] Prefabricated Brick Masonry – Introduction
- 41** [Jan. 2008] Hollow Brick Masonry
- 42 Rev** [Nov. 1991] Empirical Design of Brick Masonry
- 43 Rev** [May/June 1981] Passive Solar Heating with Brick Masonry – Part I Introduction
- 43C** [Mar. 1980] (Reissued Feb. 2001) Passive Solar Cooling with Brick Masonry, Part I – Introduction
- 43D** [Sept./Oct. 1980] (Reissued Sept. 1988) Brick Passive Solar Heating Systems, Part IV – Material Properties
- 43G** [Mar./Apr. 1981] (Reissued Sept. 1986) Brick Passive Solar Heating Systems, Part VII – Details and Construction
- 44** [Apr. 1986] Anchor Bolts for Brick Masonry
- 44A** [May 1986] (Reissued Aug. 1997) Fasteners for Brick Masonry
- 44B Rev** [May 2003] Wall Ties for Brick Masonry
- 45** [Feb. 1991] (Reissued July 2001) Brick Masonry Noise Barrier Walls – Introduction
- 45A** [Apr. 1992] Brick Masonry Noise Barrier Walls – Structural Design
- 46** [Dec. 2017] Maintenance of Brick Masonry
- 47** [June 2006] Condensation – Prevention and Control
- 48** [Nov. 2015] Sustainability and Brick

### Changes to *Technical Notes* (since December 2005)

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