SECTION 321416

BRICK UNIT PAVING

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\*\* NOTE TO SPECIFIER \*\* The Belden Brick Company; hand-laid flexible clay brick pavements. Base course materials and installation are not included in this specification, and the Design Professional/Specifier is responsible for using and applying this information.

This section is based on the products of The Belden Brick Company, which is located at:

700 Tuscarawas Street W, Canton, OH 44702, PH: 330-456-0031, FX: 330-456-2694

Email: [info@beldenbrick.com](about:blank) Web: <http://www.beldenbrick.com>

The Belden Brick Company, a long-standing pillar in the brick industry, is the largest family-owned brick manufacturer in the United States. Expanding brick's creative versatility while maintaining the material's traditional strengths is something in which we pride ourselves. We continue to meet the changing needs of the construction market by manufacturing over 20 different face brick and clay paver sizes, more than 500 colors, 13 different textures, and endless designs of special shapes. The superior quality of our raw materials leads to the structural integrity and outstanding appearance of our line of world-class architectural brick. Each brick becomes part of a legacy that has set The Standard of Comparison since 1885.

**PART 1 GENERAL**

* 1. **SECTION INCLUDES**
     1. Clay Brick Pavers
     2. Bedding and Jointing Sand
     3. Edge Restraints
     4. Geotextiles
     5. Bedding and Jointing Aggregate for Permeable Pavers
     6. Open-graded Base and Subbase Material
  2. **REFERENCED SECTIONS**
     1. Section 013000 – Administrative Requirements
     2. Section 017000 – Execution and Closeout Requirements
  3. **RELATED SECTIONS**
     1. Division 31 – Earthwork
     2. Section: 321200 – Flexible Paving
     3. Section: 321300 – Rigid Paving
     4. Section: 321600 – Curbs, Gutters, Sidewalks, and Driveways

Consult a qualified civil engineer for pavement designs subject to vehicular traffic. Pavement design shall follow established pavement design procedures, BIA's Flexible Vehicular Brick Paving and Flexible Brick Paving Design Guides, and Technical Note Series.

* 1. **REFERENCES**
     1. American Society of Testing Materials (ASTM):
        1. ASTM C902 – Standard Specification for Pedestrian and Light Traffic Paving Brick
        2. ASTM C1272 – Standard Specification for Heavy Vehicular Paving Brick
        3. ASTM C136 – Standard Test Method for Sieve Analysis of Fine and Coarse Aggregate
        4. ASTM C67 – Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile
        5. ASTM C33 – Standard Specification for Concrete Aggregates
        6. ASTM C144 – Standard Specification for Aggregate for Masonry Mortar
        7. ASTM D448 – Standard Classification for Sizes of Aggregate for Road and Bridge Construction
        8. ASTM D698 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3))
        9. ASTM D1557 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3))
        10. ASTM D2940 – Standard Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports
  2. **QUALITY ASSURANCE**
     1. Paving Installer Qualifications:
        1. Must have three years of experience (with at least 100,000 square feet of sand set brick pavers installed.)
        2. Must have three years of experience (with at least 25,000 square feet of segmental permeable pavers installed.)
        3. Successful completion of (three) brick paver installations similar in design, material, and extent indicated on this project.
        4. Installer must be experienced in installing clay pavers.
        5. Successful completion of an accredited paver installation course related to the type of paving system used on the project.

NOTE TO SPECIFIER \*\* Delete items below if there are no licensing, insurance, bonding, or regulatory agency requirements.

* + 1. Regulatory Requirements:
       1. Installer shall be able to provide bonds required for the work.

Use mock-ups or field samples to assess systems and review construction, work coordination of several sections, testing, or observation of operation. A mock-up or field sample may also be used for evaluating artistry quality. If the owner or owner's representative elects not to have a mock-up erected, the first 100 square feet of actual construction may serve as a field sample.

* + 1. Mock-Ups:
       1. Install a [10-foot by 10-foot] [6-foot by 6-foot] [4-foot by 4-foot] area of pavers on a prepared substrate, including the edge restraint, geotextile material, and drains to illustrate component application, including pattern and edge details.
       2. When required, provide a separate mock-up for each paver type and bonding pattern.
       3. Use mock-up to determine pre-compaction bedding sand level, joint sizes, lines, laying pattern(s), and color and texture range.
       4. Do not start work until [Architect] [Engineer] [Landscape Architect] [Owner] has approved the mock-up.
       5. Approved mock-up is the standard by which appearance, artistry, substrate preparation, and material application will be judged.
       6. Document approved mock-up with photographs or retain until completion of work.
       7. Approved field sample may be retained as part of finished work. Remove mock-up and dispose of materials when directed by [Architect] [Engineer] [Landscape Architect] [Owner].

NOTE TO SPECIFIER \*\* Delete items below if work of this section does not require a pre-installation meeting to coordinate materials and techniques and sequence related work.

* + 1. Pre-Installation Meeting(s):
       1. Conduct a pre-installation meeting two weeks before commencing work of this section to verify project requirements, substrate condition, coordination with other trades, and installation instructions.
       2. Confirm the status of the ordered material.
       3. Coordinate with Section 013100.
  1. **SUBMITTALS**
     1. In accordance with General Conditions of the Contract and Division 1 Submittal Procedures Section.
     2. Clay Brick Pavers:
        1. Submit manufacturer's product literature, installation instructions, and safety data sheets.

Typically, small samples are used for preliminary selection and may not precisely represent the full color and texture range encountered in production runs. Final selections should be made from a mock-up or field sample.

* + - 1. Submit sample units of each paver type representative of size, shape, color, and finish, indicating color variation and texture range expected in the finished installation. Color will be selected by [Architect] [Engineer] [Landscape Architect] [Owner] from the manufacturer’s available color palette.
      2. Submit test results from [qualified] [approved] independent testing laboratory indicating [ASTM C902] [ASTM C1272] compliance, as applicable.
      3. Submit manufacturer’s certification of conformance to ASTM standards.
    1. Submit shop drawings and details: Indicate [materials,] [thicknesses,] [sizes,] [finishes,] [shapes,] [edge restraints,] [perimeter conditions,] [expansion and control joints].
       1. Indicate layout [and pattern] describing materials, expansion joints, geotextile location, layout and drain locations, and installation details and methods.
       2. Indicate relationships of paving joints to adjoining materials, fixtures, and assemblies.
    2. Bedding and Jointing Sand:
       1. Submit sieve analysis results following [ASTM C136] for bedding and joint sand.
       2. Provide supplier name, source, and type of sand used for bedding and jointing.
    3. Bedding and Jointing Aggregate – For Permeable Paving:
       1. Submit washed stone meeting the gradation requirements of ASTM D448 for [No.9] or [No.8/9].
       2. Provide supplier name, source, and type.
    4. Base Material – for Permeable Paving:
       1. Submit washed stone meeting the gradation requirements of ASTM D448 for No.57.
       2. Provide supplier name, source, and type.
    5. Subbase Material – for Permeable Paving:
       1. Submit washed stone meeting the gradation requirements of ASTM D448 for No. 2.
       2. Provide supplier name, source, and type.
    6. Paving Installer: Job references from projects similar in size and design to this project. Provide [Owner] [Client] [General Contractor] names, postal address, phone, fax, and email address.
  1. **DELIVERY, STORAGE, AND HANDLING**

Comply with supplier’s ordering instructions and lead-time requirements to avoid construction delays. Coordinate delivery and paving schedule to minimize interference with the normal use of buildings adjacent to paving.

* + 1. General:
       1. Deliver, store, and handle following Section 013100.
       2. Deliver, store, and handle following [manufacturer’s] [supplier’s] recommendations.
    2. Delivery: Deliver materials in manufacturer’s original, unopened, undamaged packaging with identification labels intact.
       1. Unload pavers with proper equipment, so no damage occurs to pavers.
    3. Storage: Store materials, so they are protected from contamination by foreign substances and excessive moisture.
       1. Store pavers to prevent damage and staining.
       2. Do not store bedding sand and jointing sand on a compacted aggregate base course or in areas that channel water into the sand.
       3. Cover bedding sand and jointing sand with a waterproof covering. Secure the covering in place.
  1. **PROJECT/JOBSITE CONDITIONS**
     1. Environmental Requirements:
        1. Do not install sand or pavers during rain or snowfall.
        2. Do not install sand or pavers over the frozen base course.
        3. Do not install frozen materials.
        4. Do not install pavers on frozen or saturated sand.
  2. **MAINTENANCE**
     1. Extra Materials
        1. Furnish [Specify quantity] additional pavers for future maintenance/repair.
        2. Extra pavers shall be from the same production run as the installed pavers.

1. **PRODUCTS**
   1. **CLAY BRICK PAVERS**
      1. All clay paving brick specified or shown on drawings shall be manufactured by **The Belden Brick Company,** located at 700 Tuscarawas Street W, Canton, OH 44702; Phone: 330-456-0031; Fax: 330-456-2694; Email: [jim.piteo@beldenbrick.com](mailto:jim.piteo@beldenbrick.com); Web: [www.beldenbrick.com](http://www.beldenbrick.com).

\*\* NOTE TO SPECIFIER \*\* Select one. Delete types not required.

* + 1. Paver Manufacturing Method:
       1. Extruded Clay Pavers
       2. Molded Clay Pavers

\*\* NOTE TO SPECIFIER \*\* Select one. Delete types not required.

* + 1. Paver Style:
       1. Chamfered and Lug Standard
       2. Chamfered No Lug, Square Edge
       3. Dutch Chamfered
       4. Edge Set Linear
       5. ADA/Tactile Truncated Dome
       6. Permeable Paver
    2. Material Standard: In accordance with [ASTM C902] [ASTM C1272], as applicable.
       1. The pavers should be solid units without core holes or other perforations.

Clay pavers are classified according to the severity of weather exposure and traffic they will experience, as well as intended use and installation method. Consult ASTM C 902 or ASTM C 1272 as applicable for descriptions of paver classifications.

* + 1. Classification: Specify weathering, traffic, and application classifications for ASTM C902 Pavers.
       1. Specify Class: SX
       2. Specify Type: I

\*\* NOTE TO SPECIFIER \*\* Select one. Delete types not required.

* + - 1. Specify Application:
         1. PX
         2. PA
         3. PS

\*\* NOTE TO SPECIFIER \*\* Select one. Delete types not required.

* + 1. Classification: Specify Type and Application classifications for ASTM C1272 pavers.
       1. Specify Type:
          1. R
          2. F
       2. Specify Application:
          1. PX
          2. PA
          3. PS

\*\* NOTE TO SPECIFIER \*\* Select appropriately. Delete types not required.

* + 1. Dimensions:
       1. Standard Pavers: 2-1/4” x 4” x 8”
       2. Modular Pavers: 2-1/4” x 3-5/8” x 7-5/8” (Available in straight edge only)
       3. Heavy Vehicular Pavers: 2-3/4” x 4" x 8"
    2. Color/Color Blend: Select from the manufacturer’s complete product line.
    3. Provide special shapes as indicated on the drawings.
  1. **BEDDING AND JOINT SAND**
     1. Provide jointing sand and bedding sand as follows:
        1. Clean, well-graded, sand free from soluble salts and other harmful or foreign matter. Sand shall be natural silica sand or sand manufactured from crushed rock.
        2. Do not use screenings or stone dust for jointing sand or bedding sand.
     2. Joint Sand Material Requirements: Comply with ASTM C33 gradation.

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| **ASTM C33 Grading Requirements** | |
| **Sieve Size** | **Percent Passing** |
| 3/8" (9.5 mm) | 100 |
| No. 4 (4.75 mm) | 95 to 100 |
| No. 8 (2.36 mm) | 80 to 100 |
| No. 16 (1.18 mm) | 50 to 85 |
| No. 30 (0.600 mm) | 25 to 60 |
| No. 50 (0.300 mm) | 5 to 30 |
| No. 100 (0.150 mm) | 0 to 10 |
| No. 200 (0.075 mm) | 0 to 3 |

* + 1. Bedding Sand Material Requirements:
       1. Comply with ASTM C33 requirements for fine aggregate.
       2. Do not use mason sand or sand conforming to ASTM C144 for bedding sand.
    2. Bedding Sand Material Requirements (Pavements Subject to Heavy Channelized Traffic):
       1. Use only naturally occurring, washed silica sand with no silt content.
       2. Conform to grading requirements of the table below with less than 1% passing through the No. 200 sieve:

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| **Grading Requirements for Bedding Sand Subject to Channelized Traffic** | |
| **Sieve Size** | **Percent Passing** |
| 3/8" (9.5 mm) | 100 |
| No. 4 (4.75 mm) | 95 to 100 |
| No. 8 (2.36 mm) | 75 to 100 |
| No. 16 (1.18 mm) | 55 to 90 |
| No. 30 (0.600 mm) | 35 to 70 |
| No. 50 (0.300 mm) | 0 to 35 |
| No. 100 (0.150 mm) | 0 to 5 |
| No. 200 (0.075 mm) | Less than 0.3 |

* 1. **BEDDING, JOINT, and BASE AGGREGATE FOR PERMEABLE PAVING**
     1. Provide stone for bedding and jointing in permeable paving as follows:
        1. Washed, well-graded, free from soluble salts and other harmful or foreign matter.
        2. Stone conforming with ASTM D448 [No. 9] or [No. 8/9] with less than 1% passing through the No. 200 sieve.

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| **Grading Requirements for ASTM D488 No.9** | |
| **Sieve Size** | **Percent Passing** |
| 3/8" (9.5 mm) | 100 |
| No. 4 (4.75 mm) | 85 to 100 |
| No. 8 (2.36 mm) | 10 to 40 |
| No. 16 (1.18 mm) | 0 to 10 |
| No. 50 (0.300 mm) | 0 to 5 |

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| **Grading Requirements for ASTM D448 No.8/9** | |
| **Sieve Size** | **Percent Passing** |
| 1/2” (12.5 mm) | 100 |
| 3/8” (9.5mm) | 90 to 100 |
| No. 4 (4.75 mm) | 20 to 55 |
| No. 8 (2.36mm) | 5 to 10 |
| No. 16 (1.18mm) | 0 to 10 |
| No. 50 (0.300mm) | 0 to 5 |

* + 1. Base Aggregate
       1. Washed with less than 1% passing through the No. 200 Sieve.
       2. Stone conforming with the gradation requirements of ASTM D448, No. 57.

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| **Grading Requirements for ASTM D488 No.57** | |
| **Sieve Size** | **Percent Passing** |
| 1-1/2" (37.5 mm) | 100 |
| 1” (25 mm) | 95 to 100 |
| 1/2” (12.5 mm) | 25 to 60 |
| No. 4 (4.75mm) | 0 to 10 |
| No. 8 (2.36 mm) | 0 to 5 |

* + 1. Subbase Aggregate
       1. Washed with less than 1% passing through the No. 200 sieve.
       2. Stone conforming with the gradation requirements of ASTM D488 No. 2.

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| **Grading Requirements for ASTM D488 No.2** | |
| **Sieve Size** | **Percent Passing** |
| 3" (75 mm) | 100 |
| 2-1/2” (63 mm) | 90 to 100 |
| 2” (50 mm) | 35 to 70 |
|  |  |
| 3/4” (19mm) | 0 to 5 |

* 1. **EDGE RESTRAINTS**
     1. Furnish edge restraints as follows:
        1. Material type and description: [Specify the material type and description]
        2. Material standard: [Specify material standard]
        3. Manufacturer: [Specify manufacturer]
     2. Install edge restraints per manufacturer’s instructions.
  2. **ACCESSORIES**

Provide accessory materials as follows:

* + 1. Geotextile Fabric:
       1. Material Type and Description: [Specify the material type and description] Geotextile fabric shall have a minimum 0.2 mm (No. 70) apparent opening size and permit water passage without allowing sand or soil migration.
       2. Material Standard: [Specify material standard]
       3. Manufacturer: [Specify manufacturer]

\*\* NOTE TO SPECIFIER \*\* Delete the article below if cleaners, sealers, or joint sand stabilizers are not specified. Note: Joint sand stabilizers prevent sand loss and maintain interlock where sand loss could be a problem. Some situations typically requiring joint sand stabilizers are areas where rainwater runoff is not caught by gutters or crosswalks, at the bottom of a grade, Channeled pavement areas, and areas regularly cleaned by mechanical equipment or pressure washing. Joint sand stabilizers should be considered when a potential for excessive sand loss is identified – test joint sand stabilizers on a small inconspicuous area before applying to entire project.

* + 1. [Cleaners] [Sealers] [Joint Sand Stabilizers]:
       1. Material Type and Description: [Specify the material type and description]
       2. [Cleaner] [Sealer] [Joint Sand Stabilizer] shall not cause discoloration, noticeable sheen, or reduce pavement slip or skid resistance below the specified value.
       3. Material Standard: [Specify material standard]
       4. Manufacturer: [Specify manufacturer]

1. **EXECUTION**
   1. **EXAMINATION**
      1. Verification of Site Conditions:
         1. The General Contractor shall inspect and certify in writing to the Installer that site conditions meet the following before bedding sand and paver installation.
            1. Remove organic, unstable, or unconsolidated material from the site.
            2. Verify conformance of subgrade preparation, compacted density, and elevations to specified requirements.
            3. Verify geotextile placement per project drawings and specifications.

Base course materials conforming to local Department of Transportation requirements for highway pavements or ASTM D2940 are recommended. Verify that the **base course** is compacted to at least 98% maximum density. Compaction per ASTM D1557, modified Proctor density, is recommended for areas subject to heavy vehicular loads. Small compaction equipment such as tampers is necessary to achieve adequate compaction near curbs, pavement edges, protrusions, or other sites that are not accessible to large compaction equipment.

* + - * 1. Verify base course conformance to specified requirements. Do not use bedding sand to correct deficiencies in the base course surface.
        2. Verify written density test results for soil subgrade and base course.
        3. Verify type, location, and elevations of edge restraints, concrete collars around utility structures, and drainage inlets.
        4. Verify that base course [and geotextile fabric] is ready to support sand, edge restraints, pavers, and imposed loads.
      1. Do not proceed with bedding or paver installation until satisfactory subgrade soil and the Contractor verifies base course conditions.
      2. Verify that the base course is dry and certified by General Contractor as meeting material, installation, and grade specifications.
      3. Field Measurements:
         1. Determine actual paver dimensions (including tolerances) and coordinate with dimensions for pavement areas indicated on contract drawings before any pavement installation. Adjust pavement area dimensions to eliminate unnecessary paver cutting.
  1. **PREPARATION**
     1. Edge Restraint Preparation:
        1. Install edge features and penetrations, including curbs, planters, surrounds, and bases, before placing the bedding sand layer.
        2. Install edge restraints as indicated on project drawings and follow the manufacturer's recommendations.

Add the two following items when edge restraints are anchored into the base course by spikes

* + - 1. Mount directly on the finished base course. Do not install on bedding sand.
      2. Locate spikes not less than [6 inches (150 mm)] [a distance equal to the base course thickness] within the prepared base area.
    1. Geotextile: Install geotextile only where indicated on contract drawings. Lap ends and edges a minimum of 12 inches (300 mm).
  1. **INSTALLATION – NON-PERMEABLE PAVING**
     1. Spread bedding sand evenly over the base course and screed rails. Screed to 1 inch (25 mm) thickness.
        1. Do not spread bedding sand beyond the area to be covered by pavers the same day.
        2. Before recommencement of work, remove, replace, and re-screed bedding sand not covered with pavers the previous workday.
        3. Do not disturb screeded sand. Re-screed disturbed bedding sand.
     2. Lay pavers in pattern(s) shown on Project Drawings.
        1. Lay full pavers first.
        2. Mix pavers from at least three [cubes] [pallets] to produce uniform color blends. [Follow manufacturer’s recommendations for color blending.]
        3. Place units by hand without using hammers
        4. Provide 1/16 inch to 3/16 inch (2 to 5 mm) wide joints between pavers.
     3. Adjust pavers to form straight bond lines and appropriate joint widths. Maximum bond line variation shall be ± 1/2-inch (13 mm) over a 50-foot (15 m) string line.
     4. Fill gaps at paved area edges with cut pavers.
        1. Cut pavers at edges as indicated on contract drawings with a double blade paver splitter, wet cut masonry, or vacuum saw.
        2. Cut pavers shall be no smaller than one-third of a whole paver [except where the pattern is to be maintained, and smaller pieces are surrounded by a full paver and field paver border course.] Vehicular pavements shall have no paver less than the one-third size of the full paver.
     5. Do not permit traffic, including construction equipment, on pavers before initial compaction and joint filling. Disturbed areas of pavers should be taken up, the sand re-screeded, and pavers re-laid.
     6. Vibrate pavers into the sand using a high frequency/low-amplitude plate compactor capable of 3,000 lbf to 5,000 lbf (13 to 22 kN) at a 75 to 100 Hz frequency. Protect pavers from chipping during compaction using a plate compactor with a rubber matt, rubber rollers, or other approved materials placed over pavers. Do not compact within 6 feet (2 m) of unrestrained edges. Remove cracked or damaged pavers and replace them with new units.
     7. After pavers are fully settled and free from movement, simultaneously spread, sweep, and compact dry jointing sand into joints until they are filled, and sand no longer falls into joints.
     8. Protect areas not covered with cut and compacted pavers with waterproof covering overnight.
     9. Discontinue laying operations, align, and compact pavers before work suspension when weather conditions are such that pavement performance may be compromised.
     10. Verify acceptable setting bed condition before laying operations recommencement before other pavers are laid. If water has entered bedding sand, remove pavers and saturated bedding sand, install unsaturated sand replace and compact pavers.
     11. Sweep excess sand from the pavement when installation is complete.
     12. Allow excess joint sand to remain on the surface to help protect pavers from damage from other trades. Sweep excess sand from the pavement when directed by [Architect] [Engineer] [Landscape Architect].
     13. Return to the site for up to one year to add sand to fill joints as needed.
  2. **INSTALLATION – PERMEABLE PAVING**
     1. General:
        1. Keep the area where pavement is constructed free from sediment during the job. Contaminated subbase, base, or bedding material shall be removed and replaced with clean material.
        2. Do not damage drainpipes, overflow pipes, observation wells, or any inlets and other drainage elements during installation. Report damage to project engineer.
     2. Geotextiles (If Applicable):
        1. May be required if CBR is less than 5%.
        2. Place on the bottom and sides of the soil subgrade. Secure in place to prevent wrinkling from vehicle tires and tracks.
        3. Overlap a minimum of [12 inches] [24 inches] in drainage direction.
     3. Subbase Aggregate:
        1. Spread and compact moistened No. 2 subbase in 4 to 6-inch lifts.
        2. Typical subbase thickness is 6 to 18 inches.
        3. Reduce the depth of each lift by using a plate tamper for compaction.
        4. Make at least two passes in the vibratory mode, then at least two in the static mode for each lift. A minimum 10-ton vibratory roller should be used. Compact until there is no visible movement of the No. 2 stone.
        5. A plate tamper with 13,500 lbf may be used for smaller installations.
        6. The surface tolerance of No. 2 subbase shale should be +/-3/4 inches over a 10-foot straightedge.
     4. Base Aggregate:
        1. Spread and compact moistened No. 57 base in one 4-inch lift.
           1. Spread in multiple reduced-depth lifts if plate tamper is used for compaction.
        2. Make at least two passes in the vibratory mode, then at least two in the static mode for each list. A minimum 10-ton vibratory roller should be used. Compact until there is no visible movement of the No. 57 stone.
           1. A plate tamper with 13,500 lbf may be used for smaller installations.
        3. The surface tolerance of No. 57 base shale should be +/-1/2 inch over a 10-foot straightedge.
     5. Bedding Coarse Aggregate:
        1. Spread and screed moistened No. [9] [89] stone bedding material.
        2. Fill voids left by removing screed rails with No. [9] [89] stone.
        3. Surface tolerance of No. [9] [89] bedding course shall be +/-1/8 inch over a 10-foot straightedge.
        4. Do not compact bedding course.
        5. Keep pedestrian and vehicular traffic off screeded bedding course until paver installation begins.
     6. Permeable Clay Pavers:
        1. Install paving units in pattern(s) indicated on drawings. Maintain straight pattern lines using string or chalk lines.
           1. Maximum bond line variation shall be +/-3/8 inch over a 50-foot string line.
        2. Fill gaps at the edges of the paved area with cut units. Cut pavers subject to vehicular traffic shall be no smaller than 1/3 of a whole unit.
     7. Joint Material:
        1. Fill openings and joints between paver units with No. [9] [89] stone.
        2. Sweep excess joint material from the paved area.
        3. Compact pavers into bedding course using low-amplitude plate compactor capable of at least 5,000 lbs. centrifugal compaction force. Make at least two passes with the plate compactor.
           1. Protect paver surface with mat attached to tamper or other approved method.
        4. Do not compact within 6 feet of an unrestrained edge.
        5. Apply additional No. [9] [89] stone to joints as required to fill them.
        6. Pavers within 6 feet of the lying face shall be left fully compacted after each day.
        7. Surface tolerance of the finished pavement shall be not more than +/-3/8 inch over a 10-foot straight edge.
        8. Surface elevation of the finished pavement shall be 1/8 to 1/4 inch above adjacent drainage inlets.
  3. **JOINT SAND AND STABILIZER APPLICATION (IF APPLICABLE)**
     1. The surface shall be made clean and free from oil, dust from cutting, and any loose material before applying an epoxy joint sand stabilizer. (Any sand or dirt left on the pavers during sealing WILL BE SEALED TO THE PAVER. It is challenging to correct this mistake!) The surface and joint sand shall be dry for its entire depth before commencing work.
     2. The treated area shall be protected from rain or moisture and shall not be trafficked for 24 hours after the completion of the stabilizer application.
  4. **FIELD QUALITY CONTROL**
     1. Finished pavement surface shall not deviate more than ± 3/8 inch (10 mm) from specified elevations.
     2. Check the final surface profile for conformance to Project Drawings.
     3. Pavement surface elevation shall be flush with adjacent structures (1/8 inch to 1/4 inch) above adjacent construction, drainage inlets, concrete collars, or channels.
     4. Maximum variation from a specified surface profile shall be ± 3/16 inch (5 mm) in 10 feet.
     5. Height difference between adjacent pavers shall not exceed 1/8 inch.
  5. **[CLEANING] [SEALING] [JOINT SAND STABILIZATION]**
     1. [Clean] [Seal] [Apply joint sand stabilization materials between] brick pavers following the manufacturer’s written recommendations.
     2. Sealers and treatments must be compatible with sealer applied during manufacturing. Test all products before use.
  6. **PROTECTION**
     1. After complete work in this section, the General Contractor shall protect work from damage due to subsequent construction activity.

END OF SECTION

**NOTES:**

* This specification is designed to be a helpful guide. You may modify the wording to fit specific job requirements.
* This specification is a general brick paver unit, not an assemblage specification. Certain assemblage information may have been omitted due to the limited space available.
* For additional information regarding both flexible and rigid brick paving systems, refer to beldenbrick.com, where the BIA Technical Note Series No. 14–14E and the BIA Brick Paver Installation Videos are listed.