

Turlington Brick

Harvey Cement Products, Inc.
16030 Park Ave.
Harvey, IL 60426

Division 04 – Masonry / Cement Brick

The following specification has been written for Turlington Brick, which is a Portland cement based cement brick manufactured by Harvey Cement Products, Inc. The methods and standards shown below are strictly adhered to and ultimately represent a product free of bug holes, natural in appearance, with virtually limitless coloring potentials. Every unit is manufactured with an integral water repellent [Rainbloc®] which results in a water absorption rate of less than 13 lbs. per cubic foot on average when combined with the other aggregates and additives within our proprietary mix design.

PART 1: GENERAL

Submittal:

Submit full size color samples of each color specified from the manufacturer's color selection. Submit product literature, test reports, and letter of certification.

Quality Assurance:

All pre-finished concrete masonry units shall be "Turlington Brick" masonry units manufactured by Harvey Cement Products, Inc. All units shall conform to ASTM C-90 Load bearing Concrete Masonry Units and shall have a smooth finish as shown on the drawings.

Sample Panels:

Construct a separate sample panel (not part of the actual building) no less than 4' x 4' of units of each color and size to be used in the project. The cleaning agent and method should be performed at the time the sample panel is constructed. Walls built without approved field mock-ups constitute acceptance.

Delivery, Storage, and Handling:

Turlington Brick units shall be delivered to the job site on skids. Store in single-stacks on level ground and cover with waterproof covering to protect the units from weather. Units must be handled carefully to avoid breakage and chipping to the finished surfaces. Cover tops of walls each day after installation to keep open walls dry.

Part 2: Products

Product: **Turlington Brick**
Manufacturer: **Harvey Cement Products, Inc.**
16030 Park Avenue
Harvey, IL 60426

Part 3: Execution

Laying Masonry Walls:

Lay units using good concrete masonry practices. Install only quality units, reject all defective units. Use uniform, carefully-tooled 3/8" wide joints on each finished side of the wall. Type N mortars are recommended, unless specifications are requiring type M or S mortars.

Installation:

Sills, copings, and caps of solid masonry units, or cast stone, are to be used. To be most effective, masonry, cast stone, and sills, copings and chimney caps should project beyond the face of the wall. They should have drips that are at least 1 inch (25mm) from the face of the wall, and have functional flashing and weep holes. In addition, all sills, copings and caps should be sloped a minimum ratio of 1:4 and be mechanically anchored to the wall. They should have properly sized, located, and sealed control joints when necessary.

Control Joints:

Control joints are recommended approximately every eighteen (18) feet, at inside corners, 4 ft. from one of the exterior corners, at jambs of windows or at change of heights. Application of Dow Corning sealant #495 is recommended at vertical joints. Listed below are some instances when control joints are necessary.

- When wall height changes.
- When wall thickness changes.
- Above movement joints in foundations and floors.
- Below movement joints in roofs and floors.
- Near one or both sides of door and window openings. A control joint is usually placed at one side of an opening less than 6 ft wide and at both jambs of openings over 6 ft wide. Control joints can be away from the opening if adequate tensile reinforcement is placed above, below, and beside wall openings.

Grouting Procedures:

High lift grout is not to be used under any circumstance with this product. High lift grouting is considered any grouting over 5'. Low lift grouting is required to prevent blowouts due to hydrostatic/lateral pressure. Furthermore, masonry standards require that the contractor never grout through a bondbeam. It is proper procedure to grout below the bondbeam course then separately above.

Horizontal Joint Reinforcement:

Continuous horizontal ladder joint reinforcement is required in the exterior wythe every 16 inches. **This is in addition to the adjustable joint reinforcement.**

Weep Holes and Vents:

Install weep holes and vents at proper intervals (32" O.C. and 2" high) at flashing, as well as at flashing over windows, doors, beams, and bond beams.

Veneer Anchors:

Use anchors that allow for vertical and horizontal movement.

Flashing:

Install flashing at locations shown in the plans and in strict accordance with the details and the best masonry flashing practices. Functional, non-punctured flashing and weep holes are to be used in the following circumstances: base of wall above grade, above openings in wall, shelf angles, lintels, wall-roofing intersections, chimneys, bay windows, and below window sills and copings. The flashing should be extended beyond the exterior face of the wall. The flashing should have end dams at its discontinuous ends, and properly sealed splices and laps at its joints.

Lighting:

Provide necessary lighting for masonry installation by placing all lighting a reasonable distance from the wall for even illumination. Do not use trough permanent lighting.

Cutting:

Make all unit cuts, including those for bonding, holes, boxes, etc., with motor-driven masonry saws, using either an abrasive or diamond blade. Cut neatly for best end results.

Mortar Joints:

All mortar joints should be tooled, concave, or v- joints.

Mortar Admixtures:

An integral liquid polymeric admixture designed specifically for use in a mortar mix, which becomes an integral part of the cement matrix being locked into the mortar to provide resistance to water penetration, should be added to the mortar to achieve a Class E rating when tested in a wall section in accordance with ASTM 514. The same brand of water repellent should be used in the mortar as is used in the cement brick to ensure compatibility. See manufacturer for further details.

Cleaning:

Clean cement brick components as the work progresses. Perform final cleaning as soon as possible after mortar has set and been tooled. Clean faces of brick at pointed joints immediately. Remove soiled areas, streaks and stains from prefinished panels using clean water and soft bristle brush, followed by clear water rinse. Protect units and surrounding masonry prior to cleaning. "Thoroughly pre-wet the area to be cleaned prior to applying an approved masonry cleaner. Consult with manufacturer of cleaner prior to using any harsh chemical cleaners in order insure that it will not damage the brick. Pre-wet any masonry below. Do not allow the masonry to dry before applying the diluted cleaning solution.

Inadequate pre-wetting of masonry has been proven to cause efflorescence and can also result in discoloring the units due to the removal of the cement/pigment paste.” **Always** test the cleaner on a sample that is not part of the actual wall prior to using on the building for final cleaning. Do not use wire brushes, cleaning compounds with caustic chemicals, or other materials or methods which could damage, discolor, or etch the surface. Remove cleaner promptly by rinsing thoroughly with water.

Inspection:

The finished facing should be free from chips, cracks, crazing, and any imperfections that would take away from the overall appearance of the finished wall when viewed from a distance of twenty (20) feet at right angles to the wall with normal lighting.

Maintenance:

Turlington Brick units, once properly installed and cleaned need almost no maintenance other than routine cleaning with standard commercial grade cleaning agents. Graffiti, paint or dye stains may need special cleaning methods and products. Contact manufacturer for specific cleaning recommendations.

Turlington Brick Report of Tests:

Absorption	7.34 lbs./cu.ft.
Compressive Strength	2970 PSI
Density	126.26 lbs./cu.ft.

Turlington Brick units conform to ASTM C-90-02, Standard Specification for Load-Bearing Concrete Masonry Units.