

Nettleton

CONCRETE, INC

CONCRETE MASONRY UNITS • READY MIX



Unique Concrete Brick Customized for Any Design

Nettbrick

The Creative Concrete.

Custom Concrete Brick Veneer

Nettbrick is the smart concrete masonry alternative to conventional clay brick in cost, appeal, and design. Unlike clay brick, Nettbrick can be *customized with different facial textures* to achieve smooth, split-face, and tumbled appearances.

Nettbrick is manufactured under strict standards while quality control procedures ensure a *consistent product of the highest quality*. Nettbrick is available in a number of single color or two-tone variegated color combinations enabling the designer to select expressive appearances that enhance the project's style. Nettbrick's customized color is not only on the surface, but integrated throughout the entirety of the block.

Nettleton's Nettbrick provides stylish exterior *veneer and load-bearing applications* as well as the practical and engineering advantages of modular units. When compared to smaller veneers, Nettbrick's larger size allows for lower or comparable overall masonry costs due to net savings in labor and mortar.



Split Nettbrick | Malibu



Tumbled Nettbrick | Cocoa



Split Nettbrick | Custom Color-Sienna

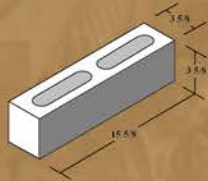


Integral water repellent is added to each unit to help avoid efflorescence and slow the aging process by preventing water penetration. A jobsite-applied coat of sealer not only enriches the color and appearance of the block, but provides added moisture protection for the block and mortar joints in the finished wall. When a water repellent mortar is used, the entire wall is capable of repelling water and *providing lasting beauty*.

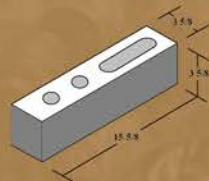
Nettleton Concrete Masonry Veneers are designed to be installed using the proven conventional masonry method. This method provides a void between the veneer and structure, allowing any moisture that penetrates or condenses to dissipate before causing any damage. Additionally, this void allows the veneer to *react to temperature fluctuations with independent movement between it and the main structure*. In contrast, other veneers that are directly adhered may detach when temperature differences force the veneer and structure to move at different rates and directions.

Size/Shape Selections

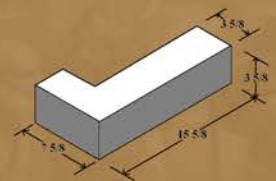
4"



4" x 16" Nettbrick

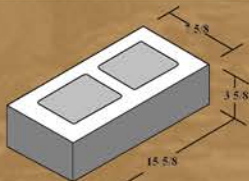


4" x 16" Nettbrick Corner

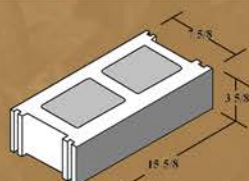


4" x 16" L-Corner

8"

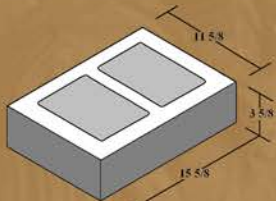


8" x 16" Corner

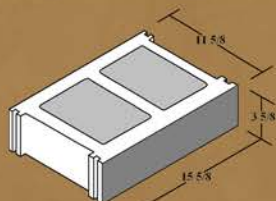


8" x 16" Stretcher

12"



12" x 16" Pilaster



12" x 16" Stretcher



Color Selections



Antique White



Bisque



Black Chip



*Camel



Charcoal



Caramel



Cherry



Cream



Dark Red



Espresso



*Gray Stone



*Latte



Malibu



Mohawk



*Olive Stone



*Pewter



*Rocky Road



*Saddle



*Sandbox



*Sandy Buff



Terra Cotta



*Warm Stone



*Western Red

Due to the nature of natural aggregates, some variation is to be expected. We recommend erecting a jobsite sample panel.



Deep Red Espresso Blend



Pecan Buff Blend



Rocky Road Bisque Blend



*Slate Natural Blend

*Standard Colors feature a simplified mix design, providing a more economical solution.



Smooth Face



Split Face



Tumbled Face



QUALITY PRACTICES

A. DELIVERY, STORAGE, AND HANDLING OF CUSTOM CONCRETE MASONRY UNITS (CCMU)

1. Palletized CCMU should not be stacked on top of each other.
2. CCMU should be laid in wall ASAP to minimize the introduction of moisture into the units.
3. Keep CCMU covered at all times to prevent rain penetration that will cause efflorescence to be visible. Efflorescence is primarily calcium that is released when concrete cures. Moisture enables the calcium to leach to the surface when moisture is present.
4. Nettleton Concrete recommends the erection of sample panels that are representative of materials and workmanship. The size of the panel should be of sufficient size to demonstrate the architectural style/design of the project.

B. INSTALLATION

1. Keep walls covered at the end of each day and/or during rain to prevent efflorescence and color variation caused by moisture entering the wall cavity.
2. Lay units from more than one pallet a time during installation and using the best concrete masonry practices.
3. A water repellent mortar admixture should be used in mortar to ensure the highest level of water repellency of CCMU masonry wall.
4. Nettleton Concrete uses water repellent in the manufacturing of all CCMU. Use proper flashing to prevent moisture penetration.
5. Flashing must be located properly, wherever moisture vapor or water can potentially move into CCMU.
6. Exterior Insulation Finishing Systems (EIFS) must be flashed.
7. Weep holes must be located 18" on center.
8. All head joints and bed joints must be full to restrict water penetration into the CCMU.
9. Use only concave or (V) configuration of mortar jointing. Raked joints are not recommended because they collect moisture.
10. It is generally recommended that joints be tooled when the mortar reaches "thumbprint hardness". Tooling the mortar too soon lightens the color and shrinkage cracks may occur. Tooling it too late may cause the mortar not to seal properly against the masonry units and the color will be darker.
11. Concrete grout used in the CCMU should be low slump. Concrete should not contain excessive water that can "bleed through" the interior and exterior of the masonry wall causing efflorescence. If a higher slump, more flow-able mix is required, Nettleton Concrete recommends the use of a super plasticizer admixture.
12. Precautions must be taken when sawing CCMU. Please consult our SDS sheets on the materials and use the appropriate Personal Protection Equipment, (PPE). CCMU may be stained by masonry dust and pigments from sawing. CCMU should be properly cleaned before installing.
13. Brush walls down daily with stiff bristled non metallic brush to prevent mortar from drying on the face.

C. CLEANING

1. CCMU must be cleaned properly including mortar droppings, mortar splatters and efflorescence. Improper cleaning materials and/or methods will also harm water repellency.
2. DO NOT USE WATER PRESSURES HIGHER THAN MUNICIPAL WATER PRESSURE – Using high pressure will most likely cause efflorescence, streaking, and color variation. USE OF PRESSURE HIGHER THAN MUNICIPAL WATER PRESSURE RELIEVES NETTLETON CONCRETE OF ANY LIABILITY.
3. Nettleton Concrete recommends that you use masonry cleaner to clean CCMU. Your Nettleton Concrete representative can help supply you with a cleaning agent and it can ship with your CCMU to your jobsite.
4. Consistent application of water and cleaner on the wall system will ensure consistent color after completion of cleaning. Inconsistent application will cause color variation.

D. EFFLORESCENCE STAINING

1. Keep all sprinklers from causing water to contact CCMU.
2. Wet mud or bark will cause efflorescence staining of CCMU – Nettleton Concrete recommends hay or straw placed at foundation to help prevent this.
3. Staining below window sills, metal brackets, and vents that attach to the walls, etc., can be avoided by having projections carried out at least one inch from the face of the wall with a drip notch or groove on the underside in order to keep water from running back under sill and down the face of the wall and onto metal devices or other stain producing items attached to wall. These items should be insulated from the visible portion of the wall by a non-staining gasket material having a drip to divert potential staining material away from the wall.

E. COLOR VARIATION

1. Nettleton Concrete uses the most economical high-quality consistent aggregates available for manufacturing. These are all natural mined materials and are subject to variation.
2. Solid units, due to moisture, may appear darker than cored units.
3. Large segments of smooth face units will accent color and texture variation of the natural materials more than split-face units.
4. Special care should be taken to lay CCMU in the same direction/orientation to maintain proper shade and texture appearance.
5. Due to changes in mined material, color variation should be expected in CCMU produced at different times. Ex: additions, change order, etc.
6. Nettleton Concrete does not manufacture each order at the same time, but will generally produce the order during a 1 week period, depending on size, weather permitting.

F. WATER REPELLENCY

1. Water Repellency should not be confused with water proofing. Nettleton Concrete CCMU have integral water repellent added at the time of production. Generally West and Southwest facing walls are more subject to extra moisture because of the natural flow of the JET stream. Therefore, Nettleton Concrete recommends that all exterior walls be treated with a sealer to provide the highest level of water repellency.

G. SEALER

1. The use of any sealer on block surface should be carefully considered. If the sealer is applied to a wall that still contains the basic ingredients for efflorescence (moisture) the resulting problems could be severe. As the salt solution attempts to migrate toward the surface, most of the salts become trapped in the concrete pores just inside the sealer. The result is an interior crystalline buildup called subflorescence which can exert considerable pressure and spall the unit face. If required the following should be considered:
 - i. Block sealer shall not be applied until the wall has dried out a minimum of 72 hours without rain and there is no visible sign of efflorescence on the wall.
 - ii. Make sure to apply materials in accordance with manufacturers printed instructions.
 - iii. Sealers should be applied evenly without overlapping. Uneven application of sealers can discolor CCMU.
 - iv. Apply a second coat of sealer to masonry surfaces that are porous.
 - v. All windows must be covered and all cars removed before spraying as glass and finished metal can be damaged. Sealers are extremely hard if not impossible to remove from glass.

SPECIFICATIONS

Nettbrick

Part 1 - General

SUBMITTAL

In accordance with Section 01350 submittal procedures, submit color samples for selection from manufacturer's series. Submit product literature, certifications, test reports and full size sample(s) of each color specified. Provide current integral water repellent CCMU producer qualification.

QUALITY ASSURANCE

Certifications (Smooth, Split-Face, Tumbled Finishes): Nettbrick 4" units are hollow and solid non-load bearing concrete masonry units with faces that are either smooth, split utilizing blades exerting pressure from all four sides of product, or Tumbled using a drum roller after product has been split. For load bearing units see our 8" and 12" units. Units are manufactured by means of moisture controlled curing for 24 hours minimum. Concrete blocks for finishing shall conform to ASTM C90 for Normal Weight. All units contain an integral water repellent CCMU admixture at the time of manufacture. Units shall conform to ASTM C744 with respect to abrasion, crazing resistance, and color change.

Fire Resistance: Define hourly ratings required as 1, 2, 3, or 4 hours.

Field Constructed Mock-Ups: Construct a sample panel no less than 4' x 6' containing each color and size units to be used in the project illustrating color, clear sealer finish, texture, and mortar joints to establish a standard of quality for completed work. Mock-Up shall also illustrate Nettbrick and mortar combination, coursing, bond, and pattern. Retain mock-up during construction as a quality standard. Completely remove when work is accepted.

DELIVERY, STORAGE AND HANDLING

Nettbrick units shall be delivered on covered wood pallets in such a way as to protect faces. Store in protected area and covered to ensure units remain dry and clean. Do not allow units to sit in standing water. Handle masonry units in manner to avoid chipping, breaking, contact with contaminating materials, and marring of faces.

Part 2 - Products

PRODUCT NAME

Nettbrick

MANUFACTURER

Nettleton Concrete, Inc. (800) 382-2462
2318 Moore Road, Jonesboro, Arkansas 72401

RELATED MATERIALS

Colored matching or contrasting mortar is available from the manufacturer. For all exterior mortar, use matching manufacturer approved water-repellent mortar additive, following manufacturer's instructions.

FINISHES

Smooth Face, Split Face, and Tumbled Nettbrick are available.

SIZES AND SHAPES

Nominal 4", 8", 12" standard block thicknesses are available.

WATER REPELLENCY

Nettbrick Units are manufactured with RainBloc® integral water repellent, or approved equal to assist in controlling efflorescence. Use of RainBloc® mortar admixture is required for a water repellent wall.

MASONRY CLEANER

Use masonry cleaners such as Vanatrol for Smooth, or Custom Masonry Cleaner for Split Face and Tumbled manufactured by Prosoco, or approved equal for all finishes. Do not apply cleaner with a pressure sprayer above 50psi.

Part 3 - Execution

INSTALLATION

Install Nettbrick as part of unit masonry work specified in Section 04850 - Unit Masonry Assemblies. Always lay blocks from more than one pallet at a time during installation. Complete masonry construction using procedures and workmanship consistent with quality masonry practices.

Cutting: Field cut Nettbrick with motor-driven masonry saws using an abrasive or diamond blade to provide straight true edges and avoid damage to face. Field split Nettbrick corners with suitable tools to insure uniform texture and consistency of face. Do not install chipped or broken units.

Mortar Bedding and Jointing: All mortar joints should be tuckpointed for the appropriate appearance. For external applications, tuckpoint joints to control water penetration. Raked joints are not recommended for any application.

Protection: During erection, cover top of walls with waterproof sheeting at end of each day. Cover partially completed walls when work is not in progress. Extend cover 24 inches minimum down both sides and hold securely in place. Protect face of walls, sills, and other projections from roof run-off, splashed water, mud, grout, and mortar. Spread sand or straw at base of walls to minimize dirt and clay splashing onto Nettbrick faces. Without damaging completed work, it is recommended to provide protective boards at exposed external corners which may be damaged by construction activities.

INSPECTION

Faces of units exposed in finished work shall be of uniform color and texture and free of chips, cracks, or other imperfections detracting from appearance of the finished wall when viewed from a distance of fifteen (15) feet at right angles to the wall under normal lighting conditions.

FLASHING OF MASONRY WORK

Install flashing at locations shown in the plans and in strict accordance with the details and quality masonry flashing practices.

WEEP HOLES AND VENTS

Install weep holes and vents at proper intervals at courses above grade, above flashing, and at any water stops over windows, doors and beams.

CLEANING

Exercise care that wet mortar is not splashed onto Nettbrick during installation. Excess or splashed mortar shall be cleaned from face with dry burlap wipe or masonry brush. Remove after mortar becomes hard enough not to smear but prior to mortar setting.

FINAL CLEANDOWN

Clean completed wall surfaces using masonry cleaners created for the specific finish on the face of the Nettbrick, such as Custom Masonry Cleaner for Split Face and Tumbled or Vanatrol for Smooth, manufactured by Prosoco, Inc. Dilute cleaning solution as recommended by manufacturer. Strictly follow manufacturers cleaning instructions. Do not use acid or abrasives on finished surfaces. Do not powerwash. High pressure powerwashing may interfere with performance of the integral water repellent causing efflorescence.

MAINTENANCE

Nettbrick, properly installed, cleaned, and sealed, need virtually no maintenance other than routine cleaning with standard commercial grade cleaning agents. Contact manufacturer for specific cleaning recommendations.

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