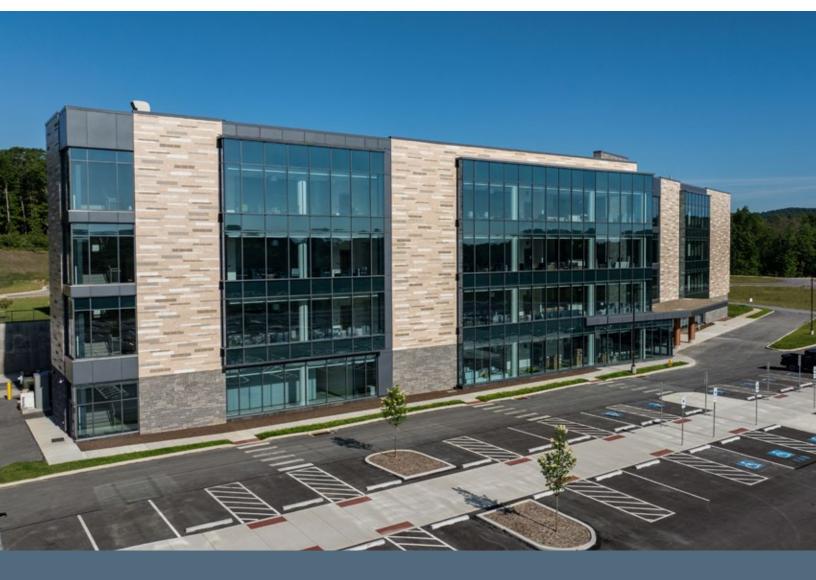
# ARCHITECTURAL MASONRY Design Guide



### COLORS | FINISHES | SHAPES | MORTARS | SPECS



### York Building Products

### **Our Products**

The beauty of carefully selected aggregates combined with precision manufacturing gives York Building Products' architectural masonry units an edge over the competition. Architects and designers can choose from many different finishes—from polished to coarse and everything in between—in a range of vibrant colors. Our masonry units are available in various shapes and sizes from brick to 32"-long units.

### **Our Design Philosophy**

We have created a palette of distinctive architectural units to provide architects, designers, and contractors a full range of design flexibility. Our colors, shapes, and finishes follow trends in the market that reflect current, innovative thought in modern architecture. We regularly expand our offerings and keep pace with innovations in engineering and design.

### **Our Distribution**

We distribute our masonry products through authorized dealer showrooms primarily east of the Mississippi. To find your nearest dealer, please visit our website and click "Where to Buy."

We look forward to serving your project needs. We will deliver product samples, binders, and brochures and consult with you at your convenience.

Contact us at sales@yorkbuilding.com or 800.673.2408. You can also visit yorkbuilding.com to download valuable specification information, view colors and finishes, and preview all of our products.

### Inside...

#### INSPIRATION

Retail	8
Education	10
Office	12
Municipal	14
Residential	16

#### ARCHITECTURAL CMU TEXTURES & COLORS

Premium Series	22
Standard Series	24
Neutrals Series	26
Temple Stone <sup>®</sup>	28
Stock Split Face	29

#### **BRICK & OVERSIZE MASONRY UNITS**

Master-Brik <sup>®</sup>			
Titan Series®		33	

### SPECIAL APPLICATION UNITS

Concrete Lintels	
Thirty-Two <sup>™</sup> Units	
Cleanroom Units	
Insulated Units	
Sound Control Units	40

#### COLORED CEMENTS FOR MASONRY

#### **PROTECTIVE COATINGS FOR MASONRY**

### SPECIFICATION GUIDES

Construction Details	50
CMU Specifications	51
4-Step CMU Specification Guide	
Selecting Colors	52
Selecting Base Code	53
Selecting Edge Codes	56
Selecting Attribute Codes	57
Design Assistance	58



### **Commitment** to Sustainability

York Building Products is committed to designing and producing products that contribute to sustainable design and reduce life-cycle building costs.

In addition, we employ energy reduction and waste recycling efforts throughout our company to reduce environmental impact.

#### **PRODUCTION FACILITY CONSUMPTION:**

Our New Holland, PA production facility utilizes a solar array and methane gas from a nearby landfill to provide alternative energy sources to run our operations.

#### **PRODUCTION WASTE & REUSE:**

We remain committed to making production waste a reusable, recyclable resource. Rejected block from our production line is provided to local contracting firms for reuse in roadbed work, driveways, and other needs where virgin material may have been used.

#### **OFFICE RECYCLING:**

York Building Products currently recycles most paper and metal waste, and printer/copier toner cartridges throughout all office campuses.

#### **DESIGN FOR THE ENVIRONMENT:**

Our ongoing manufacturing approach is to select materials for our product design that provide as minimal an impact as possible on our environment.

#### WORKPLACE HEALTH & SAFETY:

Recognizing our duty to provide safe workplaces for all our employees, we work closely with OSHA (the Occupational Safety and Health Administration). In addition, regular safety training is part of our ongoing company-wide safety awareness program.

#### **COMMUNITY ENGAGEMENT:**

We are committed to being a good neighbor in our local communities. Our company and employees have undertaken many efforts to aid communities where they live through donations of time, money, and talent.

These efforts are just the beginning of our long-term commitment to sustainability. We encourage our partners and fellow manufacturers to join us in working toward a more sustainable future.



### Masonry Construction Advantages

#### **AESTHETIC FLEXIBILITY**

Choose from a wide range of colors, surface textures, block sizes and shapes. Having this myriad of options at hand, your creative design options are nearly endless.

You can even mix and match colors, textures and shapes as seen above.

#### **MOISTURE PENETRATION**

During the manufacturing process we use Integral Water Repellent (IWR) admixtures that are blended throughout the concrete. The IWR increases resistance to wind-driven rain and moisture penetration. An added benefit

from the reduction of moisture penetration is also the reduction in the appearance of efflorescence.



For additional moisture protection, you should specify an IWR for the mortar used on the project. This will help insure the full exterior wall system is protected.

#### THERMAL PERFORMANCE

Masonry walls have the ability to store significant amounts of heat during warm periods or when subjected to direct solar gain. Due to their greater weight, compared to stud wall construction, masonry walls tend to release this heat slowly which reduces the peak energy demand for heating. A similar effect can be observed in climates where energy is primarily used for cooling. The effect of this heat storage is the evening-out of building energy requirements.

#### RESILIENCY

As our planet experiences climate change, the frequency of severe weather events and natural disasters is rising. Buildings designed with resilient materials can recover from such disasters more quickly.

By its very nature, concrete masonry construction is more durable, has a longer lifespan, and offers superior fire and blast resistance compared to many other building materials.

Not only do these factors contribute to the resilience of the built environment, but they also enhance the health and performance of a building's occupants.



# **Project Inspiration...**

retail

education

office

municipal

residential

# STAND-OUT FROM THE STREE





### TSCAPE

### RETAIL





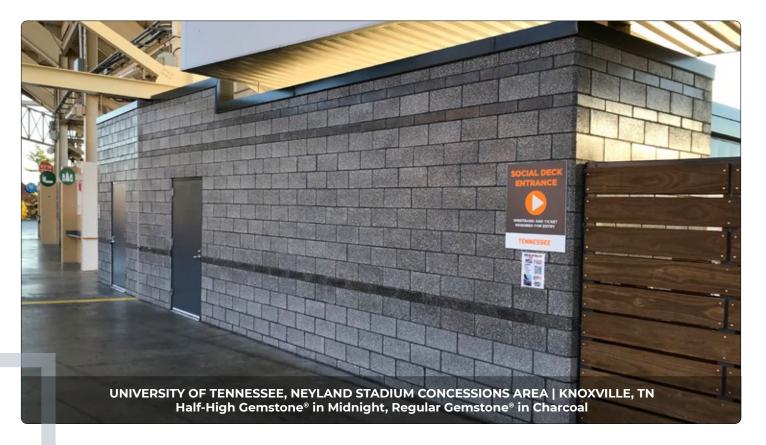
## PROVIDE SAFE HAVENS TO LE





### ARN

## EDUCATION





### MAKE A STATEMENT THAT REFL





# ECTS YOUR BRAND OFFICE





# BLEND DURABILITY WITH DES





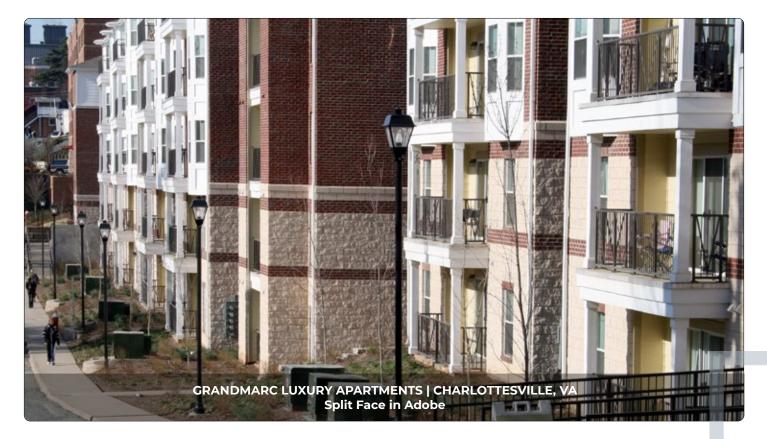
### SIGN

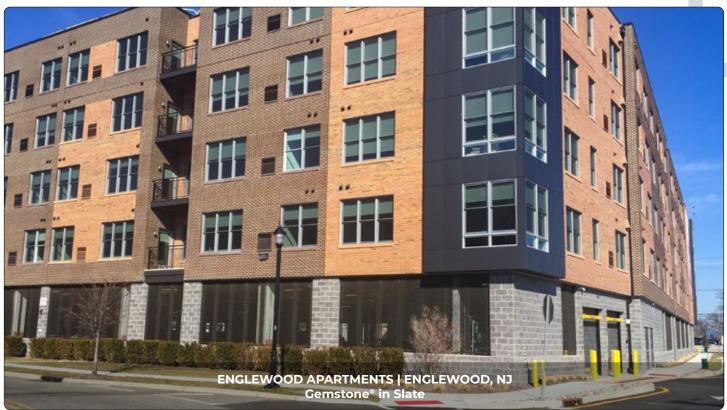
## MUNICIPAL





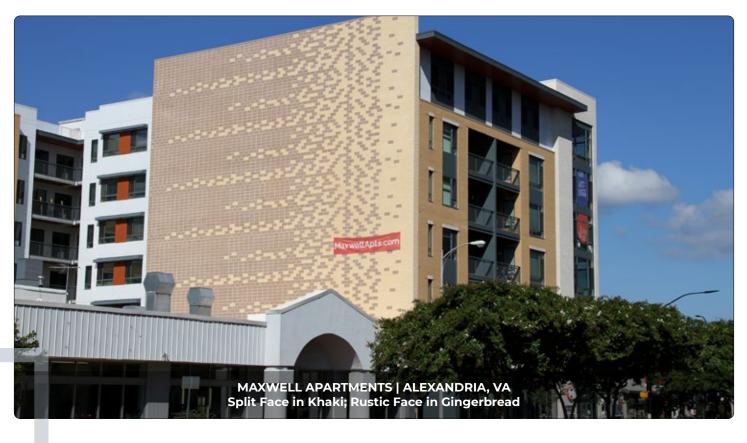
## PROVIDE WARMTH FOR HEAR





### TH & HOME

## RESIDENTIAL









# Architectural CMU Textures and Colors

Gemstone Plus®

Gemstone®

Matte Face

Rustic Face

Split Face

Temple Stone®

### Architectural CMU Textures



### **GEMSTONE PLUS®**

These filled-and-polished units provide the dramatic appearance and finish of terrazzo, conveying a glossy finish to the wall. Gemstone Plus units are designed to meet the specifications for Prefaced CMU (ASTM C744).



### **GEMSTONE®**

Ground face units that feature a milled finish, exposing the beauty of the natural aggregates within the block.

In addition to full wall coverage applications, consider using Gemstone as a banding course with other finishes to add visual appeal.



### MATTE FACE

Perfect for projects where budgets are constrained, Matte face units are a standard CMU with color and moisture repellent added to the block mix. No decorative face treatment is used.

Please note that natural color variation in the block is more noticeable in Matte Face units, especially when used across large wall envelopes.

### Architectural CMU Textures

### RUSTIC FACE

These shotblasted units feature a textured face that delivers a rustic, weather-worn appearance.

These units work especially well in interior applications, providing a softer touch than a coarser split face finish.



### SPLIT FACE

Split face offers a uniquely textured face that through the manufacturing process, no two units are exactly alike—delivering aesthetic depth to the building design.



### TEMPLE STONE®

Provides a modern interpretation of Jerusalem Limestone, articulating a well-aged appearance.

This highly-unique finish is excellent for educational institutions, museums, lobbies, theme parks, and municipal and recreational facilities. (See color palette on page 28.)





### Architectural CMU Colors - Premium Series -

	GEMSTONE PLUS	GEMSTONE	MATTE FACE	RUSTIC FACE	SPLIT FACE
Arctic White	_				
Bermuda	-				
Camel					
Chamois					
Crimson					

www.yorkbuilding.com

	GEMSTONE PLUS	GEMSTONE	MATTE FACE	RUSTIC FACE	SPLIT FACE
Gingerbread					
Graphite					
Kodiak					
Parchment					
Port					
Putty					
Saddle					
Sahara					
Silver					
Terracotta					



Our WORKRITE® Cements For Masonry Division provides color formulations in Type-N or S for all CMU colors. For more information, please visit workrite-cements.com. Due to the nature of natural aggregates, some variation is to be expected in color and texture. We recommend erecting a jobsite sample panel to accurately show color and texture.



### Architectural CMU Colors - Standard Series -



www.yorkbuilding.com





Our WORKRITE® Cements For Masonry Division provides color formulations in Type-N or S for all CMU colors. For more information, please visit workrite-cements.com. Due to the nature of natural aggregates, some variation is to be expected in color and texture. We recommend erecting a jobsite sample panel to accurately show color and texture.



### Architectural CMU Colors - Neutrals Series -

	GEMSTONE PLUS	GEMSTONE	MATTE FACE	RUSTIC FACE	SPLIT FACE
Ash					
Charcoal					
Flint					
Fossil					
Glacier					

www.yorkbuilding.com

	GEMSTONE PLUS	GEMSTONE	MATTE FACE	RUSTIC FACE	SPLIT FACE
Gunmetal					
Midnight					
Mineral					
Mink					
Mist					
Oyster					
Peppercorn					
Shadow					
Slate					
Tundra					



Our WORKRITE® Cements For Masonry Division provides color formulations in Type-N or S for all CMU colors. For more information, please visit workrite-cements.com. Due to the nature of natural aggregates, some variation is to be expected in color and texture. We recommend erecting a jobsite sample panel to accurately show color and texture.



### Architectural CMU Colors - Temple Stone<sup>®</sup> Series -

TEMPLE STONE® units provide a modern interpretation of Jerusalem Limestone that articulates an aged appearance, while delivering the precision of modern manufacturing.

The unique finish is excellent for educational institutions, museums, lobbies, theme parks, and municipal and recreational facilities.

Find all masonry unit shapes and sizes on pages 53-55.





Cornsilk

Cream







Hershey Red









Sunset



Our WORKRITE® Cements For Masonry Division provides color formulations in Type-N or S for all CMU colors. For more information, please visit workrite-cements.com.

Due to the nature of natural aggregates, some variation is to be expected in color and texture. We recommend erecting a jobsite sample panel to accurately show color and texture.



### Architectural CMU Colors - Stocked Split Face Series -

SPLIT FACE STOCKING PROGRAM To assist with fast-track projects, we selected our most popular sizes and colors of split face CMU and stocked them for immediate delivery. This means no special order delays and set-up charges (min qtys apply). Our WORKRITE® Colored Masonry Cement is also stocked in Type S matching colors to make it a complete turnkey solution for your masonry needs.



Cream

Sandstone

Slate



4x8x16 Stretcher



8x8x16 Stretcher

8x8x16 Bond Beam

# Parison.

#### 12x8x16 Stretcher



STOCKED SHAPES

12x8x16 Bond Beam



8x8x16 Universal Corner (Use for any depth corners.)



6x4x16 Solid Sill







# Concrete Brick and Oversized Masonry Units

Master-Brik<sup>®</sup> Structural Brick

Titan Series® Oversized CMU



### Master-Brik<sup>®</sup> - Structural & Veneer Concrete Brick -

Master-Brik single-wythe brick units provide the beauty of clay brick with the strength, durability, and design versatility of modern concrete masonry units.

Single-wythe construction allows for faster installation, keeping construction and trade labor costs to a minimum.

All units feature a matte face texture and the appearance of kiln flashing.

We also feature a 4x4x16 solid veneer unit for projects where a flashed finish is desired, but veneer construction is being implemented.

Find all masonry unit shapes and sizes on pages 53-55.

### COLORS





Chestnut Blend

### Colonial Blend





Mocha Blend

Port Blend

Due to the nature of natural aggregates, some variation is to be expected in color and texture. We recommend erecting a jobsite sample panel to accurately show color and texture.



Our WORKRITE® Cements For Masonry Division provides color formulations in Type-N or S for all CMU colors. For more information, please visit workrite-cements.com.



### Titan Series<sup>®</sup> - Oversized Masonry Units -

For projects where a larger-scale masonry unit is needed, we offer oversized TITAN SERIES® veneer units. Designed specifically to meet those large-scale needs, these units are useful for constructing columns and piers and providing a stout accent detail.

Titan Series units are available in Matte, Gemstone® Gemstone Plus® and Rustic Face finishes and colors. All units can be manufactured with chamfers for an additional cost.

Find all masonry unit shapes and sizes on pages 53-55.



Standard 8x16 CMU

16x24 Titan Series Unit



Our WORKRITE® Cements For Masonry Division provides color formulations in Type-N or S for all CMU colors. For more information, please visit workrite-cements.com.

# Special Application Units, Mortar, and Protective Coatings

Concrete Lintels

32" Double-Length Units

Cleanroom Units

Insulated Units

Sound Control Masonry Units

Cements For Masonry

**Protective Coatings** 



### Concrete Lintels

With more than 60 years of manufacturing experience, we've developed a reputation for tight lintel tolerances. Our lintels are used by mason contractors throughout the eastern USA.

Available in a full range of sizes, our solid lintels are stocked in 4x8, 6x8, and 8x8 sizes, and in lengths from 2 feet to 12 feet.

Our U-shaped lintels have pre-molded notches to allow for vertical rebar, and are available in 6x8, 8x8, 10x8, and 12x8 up to 12-foot lengths.



U-SHAPED LINTELS



SOLID LINTELS

### **U-LINTEL BENEFITS**

**LABOR SAVINGS** – Simply set the U-Lintel in place, rebar, and grout, and continue laying the next course. No need to square up multiple wythes of bond beams.

**TIME SAVINGS** – Since one U-Lintel is placed in lieu of multiple bond beams, significant time can be saved.

**FLEXIBILITY** – Provides many variations in reinforcing within the U-Lintel, allowing for differently-sized rebar, depending on the project needs.

**ELIMINATE STEEL LINTELS** – Typical problems associated with structural steel lintels, such as lengthy fabrication lead times, corrosion, lack of fire resiliency, and differential movement at the supports, are eliminated by using concrete U-Lintels.



# Thirty-Two™ - Double-Length Units -

For large projects where scheduling is tight, our Thirty-Two<sup>™</sup> unit is the perfect block for the job.

Essentially, it is a 32"-long block unit with a center score, providing the appearance of two 16"-long units. However, in laying the equivalent of two units at once, it significantly reduces production time on the wall. The larger the project, the more blocklaying time savings.

The units are palletized with a mix of "double pier end" units, and "one sash/ one pier end" units. All units have a 3/8" score centered on both faces.



### TECHNICAL SPECIFICATIONS

UNIT SIZES:	8" x 8" x 32"	Ι	10" x 8" x 32"	Ι	12" x 8" x 32"
UNIT WEIGHT:	80 lbs	Ι	84 lbs	Ι	85 lbs
UNITS/PALLET:	36	Ι	30	Ι	24
WGT./PALLET:	2880 lbs	Ι	2520 lbs	Ι	2,040 lbs
SF/PALLET:	64	Ι	54	Ι	43



# Clean-Coat<sup>™</sup> - Cleanroom Masonry Units -

Manufactured with a special mix design to deliver a tighter face matrix, these units are ideal in cleanroom environments (for specialized industrial production or scientific research), where a less porous face texture is required.

It's also great for food processing plants, food preparation areas like commercial kitchens, as well as research labs, veterinary facilities and hospitals.

Units meet ASTM C 90 specifications and are available in common masonry shapes and sizes.



SEE THE FINISH DIFFERENCE:





TRADITIONAL Masonry Unit CLEAN-COAT<sup>™</sup> Masonry Unit



# Insulated Units - Pre-Installed Block Insulation -

For projects where a higher R-value is desired, pre-insulated CMU deliver effective solutions for energy efficiency.

CMU WITH KORFIL® INSERTS We insert insulation into the cores of CMU,

so the units are delivered ready to lay. Available in 8", 10", and 12" bed depths.

### HI-R<sup>®</sup> INSULATED BLOCK

A specially-designed CMU with smaller webs to reduce thermal bridging. It contains individually molded insulation inserts.

Available in 8" and 12" bed depths.

Note: All units are available in standard concrete or architectural colors.



CMU With Korfil® Inserts (Standard and U-Shaped Available)





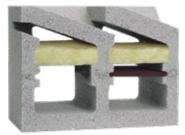
# Sound Control Masonry Units

Many projects require additional sound absorption considerations as part of the building structure, whether it is movie theaters, auditoriums, gymnasiums, fire stations, apartment buildings or condominimums. Various acoustical materials attempt to dampen sound annoyances, but thin, add-on, acoustical treatments typically do not have the depth of absorption required to capture noise at the low-end of the audible frequency bandwidth. Enter sound-control masonry units, specially designed to capture, absorb, and diffuse unwanted sound.

We provide the several sound-control solutions for structural and load-bearing masonry units. Our units can be supplied as standard paintable gray units, or can be painted on-site.



SOUNDBLOX<sup>®</sup> Unit



SOUNDCELL® Unit



ACOUSTADE® Unit

# Sound Control Units



SOUNDBLOX® Units in Gymnasium Walls

**SOUNDBLOX**<sup>®</sup> delivers excellent sound absorption from a unique cavity-slot resonator construction. The funnelshaped slots provide superior acoustical performance. Using a metal septum and fibrous filler in the cavity, this CMU provides higher sound absorption levels across a wider range of frequencies. (Units are available in Matte Face or Gemstone<sup>®</sup> finishes only.)



SOUNDCELL<sup>®</sup> Units in Auditorium Walls



ACOUSTADE<sup>®</sup> Units in Animal Hospital

**SOUNDCELL®** and **ACOUSTADE®** units feature a deeply-beveled face that captures and retains sound waves while adding visual texture to walls.

The primary distinction between Soundcell and Acoustade lies in the design: Acoustade masonry units lack a horizontal baseline, whereas Soundcell units include one. This design allows Acoustade units to have continuous vertical lines and a reversible skew, giving architects the flexibility to choose the direction of the slanted surface.

These units enhance sound quality and characteristics by offering effective diffusion through their innovative grid and impressed form. (Units are available exclusively with a Matte Face finish.)



# Cements for Masonry

Our WORKRITE<sup>®</sup> colored cements are blended using cement, limestone, synthetic iron oxides, and other materials to produce a vast spectrum of colors in various cement types– depending upon your specific project needs.

Our colored cements are blended with the utmost care to ensure colorfastness while continuing to exceed ASTM requirements. Our cements are packaged in multi-layered bags for added security.

We produce our 60-color palette in Masonry Cement, Mortar Cement, and Type O Tuckpoint, and Portland Cement & Lime blend.



# WORKRITE® FAMILY OF PRODUCTS

	Masonry Cements	Mortar Cements	Tuckpoint Cements	PCL Blend Cements	Portland Type 1 Cement
PIGMENTED	WORKRITE GROOM WORKRITE WORKRITE WORKRITE WORKRITE WORKRITE WORKRITE S WORKRITE S S S S S S S S S S S S S			WORKRITE Baddod Baddod Britania Britania Britan	
NON- PIGMENTED					

### FORMULATIONS

- **TYPE M\*:** Our strongest mix, used where additional compressive strengths are required.
- **TYPE S:** A common mix, can be used above or below grade.
- **TYPE N:** For above-grade construction only, suitable for exterior brick or block veneers.
- **TYPE O:** A special mix design formulated for tuckpoint needs such as historic restorations.

### PACKAGING

Cement Product	Type M*	Type S	Type N	Туре О	Typel
Colored Masonry Cement	80 lbs. 36 kg	75 lbs. 34 kg	70 lbs. 32 kg		
Gray / Colored Mortar Cement	70 lbs. 32 kg	65 lbs. 29.5 kg	60 lbs. 27.2 kg		
Gray / Colored Tuckpoint Mort	ar			72 lbs. 32.7 kg	
Gray / Colored PCL 72 lk	os. 72 lk 32.7 kg	os. 72   32.7 kg	bs. 32.7 kg		
Colored Portland Cement Type	e 1				94 lbs. 42.6 kg

\* Type M cements are available by custom-order only.



Gray and colored Mortar Cements are formulated with Easy-Spred admixture as a code-recognized lime replacement.

# WORKRITE® COLORS

Chestnut	Blush	Bisque	Pebble
Raw Umber	Salzburg	Curry	Suede
Espresso	Terracotta	Patagonia	Mushroom
Appalachian	Amber	Sawgrass	Birch
Timber	Fallow	Sage	Riverstone
Сосоа	Taupe	Wheat	Sand
Port	Cinder	Olive	Champagne
Redwood	Marble	Buckskin	Almond
Mahogany	Prairie	Olde Colony	Arctic White
Mediterranean	Sawdust	Malt	Slate
Canyon	Driftwood	Ridge	Glacier
Autumn	Shell	Merino	Gravel
Burnt Sienna	Thistle	Grain	Pewter
Sunset	Morning Mist	Clay	Smoke
Mauve	Acorn	Canvas	Graphite



### SAMPLES & CERTIFICATION

Sample bags for pre-construction test panels can be obtained by contacting your local masonry supply dealer or a WORKRITE<sup>®</sup> sales representative. To find your local WORKRITE<sup>®</sup> dealer or to download Mill Test Reports and Certification Letters, visit workrite-cements.com. Our free 60-color sample kit can be ordered via email at sales@workrite-cements.com or by calling 800.673.2408.

	THE MERINE CERTIFICATION	MILL TEST REPORT
A CONTRACT OF CONTRACTOR OF CO		DECIDINGUISTICATION   MORE NOME MORE   MORE NOME MORE NOME
colored mortar kit		



### Protective Coatings - For Concrete Masonry Units -

Constructing a masonry building is a significant and expensive undertaking. Safeguard your investment and preserve the building's aesthetic appeal for years to come with our specialized protective coatings.

These coatings were developed in collaboration with a USbased chemical company to meet specific customer needs while maintaining the original color and finish of our masonry units. They are designed with environmental and human safety in mind, being ecofriendly and low in VOCs.

When specifying our masonry products, please be sure to specify the correct coatings by name to help ensure the longevity, integrity, and beauty of your structure.

### **GRAFFITI REMOVAL**





Treated

Untreated

www.yorkbuilding.com

# PROTECTIVE COATING PRODUCTS



### GEMCOAT™

GEMCOAT<sup>™</sup> is a liquid membrane water-resistant sealer made of a 100% acrylic polymer formulation which creates a full-gloss finish that protects and improves the appearance of architectural block. It enhances and deepens the beauty and color of the aggregates within the masonry unit. It is resistant to liquids, yet is vapor/air permeable. Without losing the gloss finish, it provides excellent protection from elements, such as water, alkalis, acids, airborne pollutants and ultraviolet light.



### GEMCOAT-WB<sup>™</sup>

A water-resistant sealer similar to our standard GEMCOAT<sup>™</sup> sealer, but uses a water-based formula versus solvent-based.

Due to its water-based formulation, there is virtually no odor, making it the perfect application for sensitive environments like schools, hospitals, and office buildings that may already be occupied.



### GRAFFITI-CLEAN<sup>™</sup>

Whether your building is "tagged" by a graffiti artist or treated to innocent "artwork" by a student wielding crayons, you need fast results and a clean removal. GRAFFITI-CLEAN<sup>™</sup> is an environmentally friendly cleaner that removes most paint, crayon, oil, permanent marker, varnish, glue, etc., from most CMU wall surfaces.



### WATER-SHIELD<sup>™</sup>

WATER-SHIELD<sup>™</sup> provides a long-term beading effect over a masonry surface, keeping moisture out of even the smallest pinholes. Apply WATER-SHIELD post-construction to give building envelopes (including mortar joints) additional moisture protection.



### GEMCOAT MOLD-RESISTANT COATING ADDITIVE™

A coating additive for use with our GEMCOAT<sup>™</sup> concrete sealers. When applied to concrete masonry units, this coating creates an antimicrobial film that will help inhibit the growth of bacteria, mold, and mildew on the coating. Solvent-and water-based versions are available.

> Product Data Sheets and test reports for all coating products are available for download at yorkbuilding.com.





# **Specification Guides**

Construction Details

Masonry Specifications

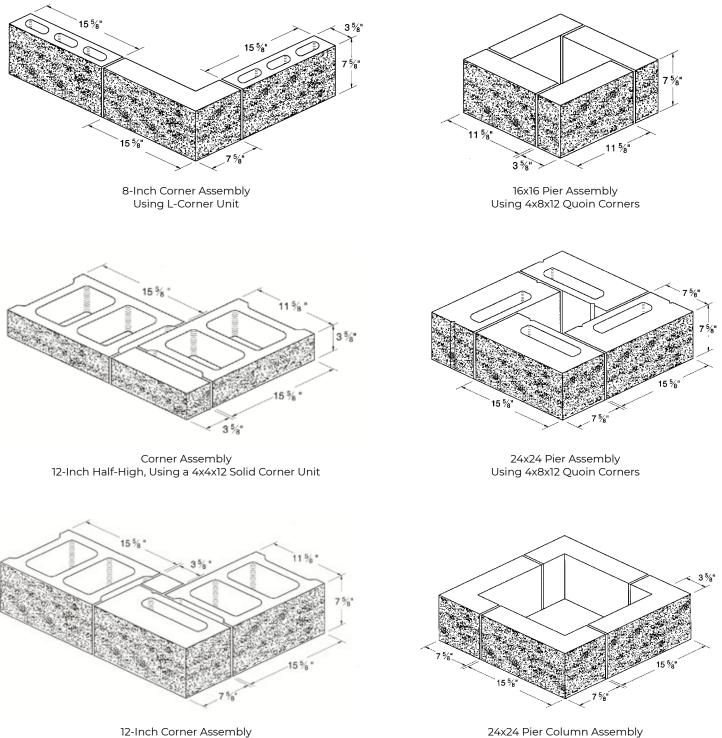
Four-Step Specification Guide

Design Assistance

### CONSTRUCTION DETAILS

# CORNER ASSEMBLY

# PIER/COLUMN ASSEMBLY



12-Inch Corner Assembly Using 8x8x16 Universal Corner Unit

Using 8-Inch L-Corner units

### MASONRY SPECIFICATIONS

### PART 1—GENERAL

#### SUBMITTAL

Submit color samples for selection from the manufacturer's series. Submit product literature, certifications, test reports, and full-size sample(s) of each color specified.

#### QUALITY ASSURANCE

<u>Certifications (Split Face, Rustic Face, Matte Face)</u>: Concrete blocks for finishing shall conform to ASTM C90. The provisions of ASTM C90 apply with regard to appearance. All units contain an integral water repellent and CMU admixture at the time of manufacture.

<u>Certifications (Ground Face Products: Gemstone®, Gemstone</u> <u>Plus®, Temple Stone</u>®): Concrete blocks for finishing shall conform to ASTM C90. The provisions of ASTM C90 apply with regard to appearance.

All units contain an integral water repellent and CMU admixture at the time of manufacture. Field-applied Gemcoat™ sealer is recommended for all ground face projects.

<u>Fire Resistance</u>: Define hourly ratings required as 1, 2, 3, or 4 hours. <u>Field-Constructed Mock-Ups</u>: Construct a sample panel, no less than 4' x 4', of units of each color & size to be used in the project.

#### **DELIVERY, STORAGE AND HANDLING**

Masonry units shall be delivered to the jobsite on covered banded pallets. Store pallets in single stacks on level ground and cover them with waterproof covering (e.g., tarpaulins) to protect the blocks from inclement weather. Handle blocks carefully to avoid breakage and damage to the finished surfaces.

#### **PROJECT/SITE CONDITIONS**

<u>Protection of Work</u>: Cover the tops of walls each day after installation to keep open walls protected and dry. After units are installed, they should be protected from staining or other damage by covering the bottom of the walls with plastic.

#### PART 2-PRODUCTS

#### PRODUCT NAME

Architectural Concrete Masonry Units (Note each finish spec'd)

#### MANUFACTURER

York Building Products | 950 Smile Way, York, PA 17404 | 800.673.2408

#### **RELATED MATERIALS**

Colored matching or contrasting mortar is available from WORKRITE<sup>®</sup>. Refer to Division 4 Masonry Section for mortar type and specifications. In all exterior mortar, use water-repellent mortar additive available from York Building Products and follow the manufacturer's instructions.

#### SIZES AND SHAPES

Nominal 2", 4", 6", 8", 10", and 12" standard block thicknesses are available, as well as all standard block shapes. High-strength units for special structural requirements are also available.

#### MASONRY CLEANERS

Use appropriate masonry cleaners for all finishes. Follow the manufacturer's instructions for proper mixing and application. Do not apply the cleaner with a pressure spray above 50 psi. **CAUTION! Never use muriatic acid solution on units.** 

### PART 3—EXECUTION

#### INSTALLATION

Lay blocks from more than one pallet at a time during installation. Lay units using the best concrete masonry practices. Lay blocks with the faces level, plumb and true to the line strung horizontally at the face. Complete masonry construction using procedures and workmanship consistent with the best masonry practices.

<u>Cutting</u>: Make all unit cuts, including those for bonding, holes, boxes, etc., with motor-driven masonry saws using an abrasive blade. Cut neatly and locate for the best appearance.

#### Mortar Bedding and Jointing:

- Lay units with full mortar coverage on head and bed joints, taking care not to block cores to be grouted or filled with masonry insulation.
- Tool all mortar joints when thumbprint hard into a concave or v-joint.
- Care should be taken to remove mortar from the face of masonry units before it sets.

#### INSTALLATION RECOMMENDATIONS

- A complementary or matching mortar color is recommended when using colored architectural units.
- Always test a small, inconspicuous area before using cleaners. Do not use acids or abrasives on finished surfaces.

#### FLASHING OF MASONRY WORK

Install flashing at locations shown in the plans and in strict accordance with the details and the best masonry flashing practices. See CMHA Tek 19-5A.

#### WEEPS AND VENTS

Install weep holes and vents at proper intervals (32" O.C. above bed joints, typical) at courses above grade, above flashing, and at any water stops over windows, doors, and beams. See CMHA Tek 19-5.

#### INSPECTION

The textured or ground faces shall be free from chips, cracks, or any other imperfection that would detract 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.

#### CLEANING

Keep walls clean daily during installation using brushes. Do not allow excess mortar lumps or smears to harden on the finished surfaces. Harsh cleaning methods after walls have been erected may mar the block surface. To ensure proper appearance for your projects, please add the following comment to your documents where Gemstone®, Gemstone Plus® and Temple Stone® products have been specified: "Gemcoat™ ground face masonry sealer must be applied after final wash down of masonry walls."

#### **FINAL CLEANDOWN**

Clean the completed walls with masonry cleaner APPROPRIATE FOR THE FINISH, strictly following the manufacturer's instructions, including thorough rinsing. Do not use acid or abrasives on the finished surfaces. Failure to strictly follow manufacturer's instructions can permanently damage finished faces.

#### MAINTENANCE

Properly installed and cleaned architectural masonry units need virtually no maintenance other than routine cleaning with standard commercial-grade cleaning agents.

# FOUR-STEP SPECIFICATION GUIDE

Use our simple "Product Specification Codes" when specifying our masonry products. By using these codes, performing take-offs and product ordering by masons is more accurate.

Our **Product Specification Code** system is based upon four elements:

- 1. Product Color
- 2. Base Code (the basic unit designation, incorporating the unit size and shape)
- 3. Edge Code (for bullnose or chamfer edges, if desired)
- 4. Attribute Code (for details like insulation, scores, finished ends, etc.)

By adding these elements together, you produce the final Product Specification Code to use in your specification documents. Following is an example Product Specification Code with all digits complete for an 8x8x16 Gemstone Plus<sup>®</sup> unit in Chamois with finished face and right end, Korfil insulation, and chamfered edge:



### STEP 1: CHOOSE PRODUCT COLOR



# Chamois – 8816H – GSP – C1 – FE– R– X– 2– X

Select the Product Color for the finishes you desire. Choose any product color(s) to start your Product Specification Code.

Color swatches are available on each product finish page in the front of this catalog. In addition, you can request a sample kit to see actual color samples.







Sahara

Silver

# STEP 2: ADD THE UNIT "BASE CODE"

Chamois -

PRODUCT COLOR

Each CMU is assigned a simple Base Code. Use this code directly after the Product Color (separated with a dash).

	Base Codes By Finish							
Hollow Stretcher	Nom. Size	Gemstone Plus	Gemstone	Matte Face	Temple Stone	Rustic Face	Split Face	
THE ME AND A	4x8x16	4816H-GSP	4816H-GMS	4816H-SMF	4816H-TPS	4816H-RSF	4816H-SPF	
TAN TRACK	6x8x16	6816H-GSP	6816H-GMS	6816H-SMF	6816H-TPS	6816H-RSF	6816H-SPF	
	8x8x16	8816H-GSP	8816H-GMS	8816H-SMS	8816H-TPS	8816H-RSF	8816H-SPF	
	10x8x16	10816H-GSP	10816H-GMS	10816H-SMF	10816H-TPS	10816H-RSF	10816H-SPF	
	12x8x16	12816H-GSP	12816H-GMS	12816H-GMS	12816H-TPS	12816H-RSF	12816H-SPF	

### Solid Stretcher



Nom. Size	Gemstone Plus	Gemstone	Matte Face	Temple Stone	Rustic Face	Split Face
2x8x16	2816S-GSP	2816S-GMS	2816S-SMF	2816S-TPS	2816S-RSF	2816S-SPF
4x8x16	4816S-GSP	4816S-GMS	4816S-SMF	4816S-TPS	4816S-RSF	4816S-SPF
6x8x16	6816S-GSP	6816S-GMS	6816S-SMF	6816S-TPS	6816S-RSF	6816S-SPF
8x8x16	8816S-GSP	8816S-GMS	8816S-SMF	8816S-TPS	8816S-RSF	8816S-SPF
10x8x16	10816S-GSP	10816S-GMS	10816S-SMF	10816S-TPS	10816S-RSF	1016S-SPF
12x8x16	12816S-GSP	12816S-GMS	12816S-SMF	12816S-TPS	12816S-RSF	N/A

### L-Corner



Nom.	Gemstone	Gemstone	Matte	Temple	Rustic	Split
Size	Plus		Face	Stone	Face	Face
4x8x16				4816L-TPS		4816L-SPF

### Universal Corner



Nom.	Gemstone	Gemstone	Matte	Temple	Rustic	Split
Size	Plus		Face	Stone	Face	Face
8x8x16	8816H-GSP	8816H-GMS	8816H-SMF	8816H-TPS	8816H-RSF	8816H-SPF-FE

Note: Use this single unit for **any** bed depth split face corners. Can be easily converted into a 4x8x16 L-Corner on the job site.

# FOUR-STEP SPECIFICATION GUIDE

### Half Block



<u> </u>							
	Nom. Size	Gemstone Plus	Gemstone	Matte Face	Temple Stone	Rustic Face	Split Face
42	x8x8	488S-GSP	488S-GMS	488S-SMF	488S-TPS	488S-RSF	488S-SPF
6	x8x8	688H-GSP	688H-GMS	688H-SMF	688H-TPS	688H-RSF	688H-SPF
82	x8x8	888H-GSP	888H-GMS	888H-SMF	888H-TPS	888H-RSF	888H-SPF
10	)x8x8	1088H-GSP	1088H-GMS	1088H-SMF	1088H-TPS	1088H-RSF	1088H-SPF
12	2x8x8	1288H-GSP	1288H-GMS	1288H-SMF	1288H-TPS	1288H-RSF	1288H-SPF

Base Codes By Finish

### Half-High



Closed-Bottom
Bond Beam



### Open-Bottom Bond Beam



Nom. Size	Gemstone Plus	Gemstone	Matte Face	Temple Stone	Rustic Face	Split Face
4x4x16	4416S-GSP	4416S-GMS	4416S-SMF	N/A	4416S-RSF	4416S-SPF
6x4x16	6416S-GSP	6416S-GMS	6416S-SMF	N/A	6416S-RSF	6416S-SPF
8x4x16	8416S-GSP	8416S-GMS	8416S-SMF	N/A	8416S-RSF	8416S-SPF
12x4x16	12416S-GSP	12416S-GMS	12416S-SMF	N/A	12416S-RSF	12416S-SPF

Nom.	Gemstone	Gemstone	Matte	Temple	Rustic	Split
Size	Plus		Face	Stone	Face	Face
6x8x16	6816CB-GSP	6816CB-GMS	6816CB- SMF	6816CB- TPS	6816CB- RSF	6816CB- SPF
8x8x16	8816CB-GSP	8816CB-GMS	8816CB- SMF	8816CB- TPS	8816CB- RSF	8816CB- SPF
10x8x16	10816CB-	10816CB-	10816CB-	10816CB-	10816CB-	10816CB-
	GSP	GMS	SMF	TPS	RSF	SPF
12x8x16	12816CB-	12816CB-	12816CB-	12816CB-	12816CB-	12816CB-
	GSP	GMS	SMF	TPS	RSF	SPF

Nom.	Gemstone	Gemstone	Matte	Temple	Rustic	Split
Size	Plus		Face	Stone	Face	Face
6x8x16	68160B-GSP	68160B-GMS	68160B- SMF	68160B- TPS	68160B- RSF	68160B- SPF
8x8x16	88160B-GSP	88160B-GMS	88160B- SMF	88160B- TPS	88160B- RSF	88160B- SPF
10x8x16	108160B-	108160B-	108160B-	108160B-	108160B-	108160B-
	GSP	GMS	SMF	TPS	RSF	SPF
12x8x16	128160B-	128160B-	128160B-	128160B-	128160B-	128160B-
	GSP	GMS	SMF	TPS	RSF	SPF

Note: The charts in this specification guide show our most commonly-used shapes and sizes. Please consult your York Building Products representative with any additional shape or size needs.

# FOUR-STEP SPECIFICATION GUIDE

### Hi-R<sup>®</sup> Insulated Unit



Nom.	Gemstone	Gemstone	Matte	Temple	Rustic	Split
Size	Plus		Face	Stone	Face	Face
8x8x16	88DCH-	88DCH-	88DCH-	88DCH-	88DCH-	88DCH-
	KHR-GSP	KHR-GMS	KHR-SMF	KHR-TPS	KHR-RSF	KHR-SPF
12x8x16	B8DCH-	B8DCH-	B8DCH-	B8DCH-	B8DCH-	B8DCH-
	KHR-GSP	KHR-GMS	KHR-SMF	KHR-TPS	KHR-RSF	KHR-SPF

Base Codes By Finish

### Master-Brik<sup>®</sup>



Nom. Size	Matte Face	
4x4x16 (solid)	MB4 (color)	
6x4x16 (hollow)	MB6 (color)	
8x4x16 (hollow)	MB8 (color)	
8" Corner (hollow)	MB8C (color)	
12x4x16 (hollow)	MBB (color)	

### Titan Series®



### Sound Control Units

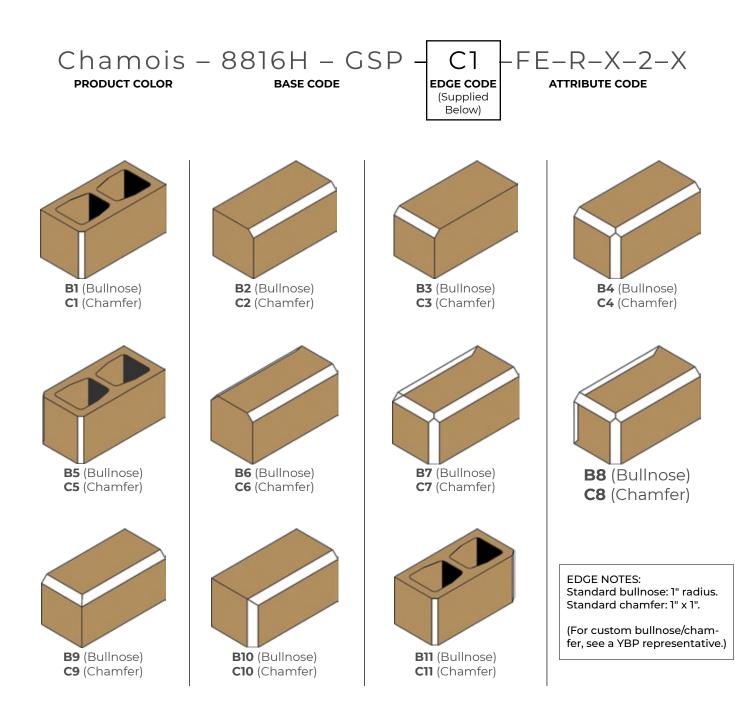


Nom. Size	Gemstone Plus	Gemstone	Matte Face	Rustic Face
4x4x24	4424TS-GSP	4424TS-GMS	4424TS-SMF	4424TS-RSF
4x8x24	4824TS-GSP	4824TS-GMS	4824TS-SMF	4824TS-RSF
4x12x12	41212TS-GSP	41212TS-GMS	41212TS-SMF	41212TS-RSF
4x12x24	41224TS-GSP	41224TS-GMS	41224TS-SMF	41224TS-RSF
4x16x16	41616TS-GSP	41616TS-GMS	41616TS-SMF	41616TS-RSF
4x16x24	41624TS-GSP	41624TS-GMS	41624TS-SMF	41624TS-RSF

To specify sound control units, please contact a York Building Products representative to determine which type of unit best suits your project requirements, as each style is designed to adress specific noise abatement needs. 800.673.2408

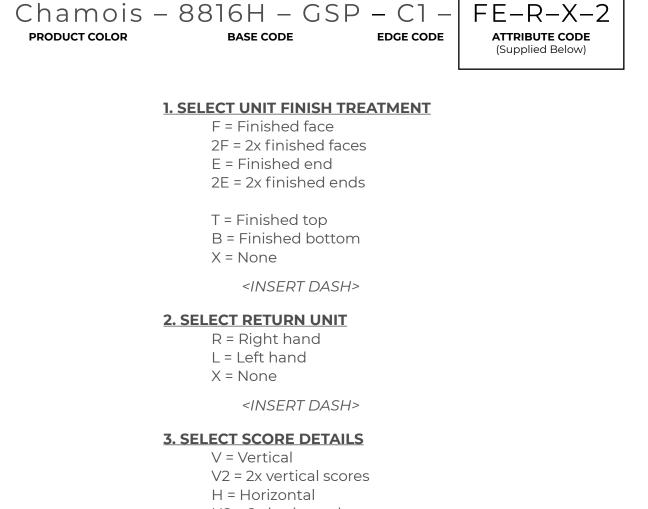
# STEP 3: ADD THE UNIT "EDGE CODE"

Select a code for various bullnose or chamfered edges. Use this code directly after the Base Code (separated with a dash). **If you are not choosing an edge for your units, simply mark an "X" in this code area.** 



### STEP 4: ADD THE "ATTRIBUTE CODE" DIGITS

Complete your Product Specification Code by adding the following Attribute Codes. **If you don't need any of these additional elements, simply place an "X" in its place** to complete the final Product Specification Code (see below).



- H2 = 2x horizontal scores
- X = None

<INSERT DASH>

#### **4. SELECT INSULATION ATTRIBUTES**

1 = ICON 2 = Korfil U 3 = Hi-R X = None

Note: All units manufactured to normal weight density. Contact your YBP representative to specify another density classification.



# Design Assistance - Lean On Us -

From the planning phase to final acceptance, we can help. We have experienced consultants ready to assist you in properly detailing and specifying our concrete masonry products.

Remember, the earlier you contact us, the more help we can offer. Involve us at the beginning of your project so you can achieve a more efficient specifying process and a higher-quality result.

# DESIGN ASSISTANCE

# SAMPLE COLOR KITS

To assist with your color and finish specification. Please contact our architectural sales representatives at 800.673.2408 or email sales@yorkbuilding.com.



# AIA CONTINUING EDUCATION



York Building Products offers a variety of educational opportunities for designers. There is no program charge, and with your input on menu selection, York Building Products will provide the meal. To schedule a presentation, please contact us today. **We also provide courses online.** 

The following AIA/CES courses are available. For more course detail, please visit our website.

- Architectural Enhancements: Aesthetic Options for Concrete Masonry
- Concrete Masonry Overview: Products, Applications, Design and Construction Considerations
- BIM-Model-Driven Construction and Design for Masonry
- Acoustical Masonry Systems
- Crack Control in Concrete Masonry Walls
- Fire Safety With Concrete Masonry Products
- Moisture Penetration Resistance of Concrete Masonry
- Sound Abatement and Noise Control Using Concrete Masonry
- Thermal Performance of Concrete Masonry Systems
- Understanding Masonry Mortars

# TECHNICAL INFORMATION

### Visit Our Website:

The "Resources" tab on our website contains a wealth of documentation to aid in your design efforts:

- Product Specifications
- Brochures and Cutsheets
- CAD Details and Revit Files
- Product Data Sheets
- Project Case Studies and Image Galleries

### BIM Objects – Revit® Design Files:

We provide Autodesk Revit<sup>®</sup> design files for our common unit shapes and sizes, including the family of finishes and colors by shape. They are free to download from our website or through BIMobject.com.

### MasonrylQ

Masonry iQ is a Revit plug-in module that enables the design of the wall elevation, choosing from manufacturers' palettes of colors, textures, and sizes. Our masonry colors and textures are fully-loaded into this plug-in, ready for quick specification.

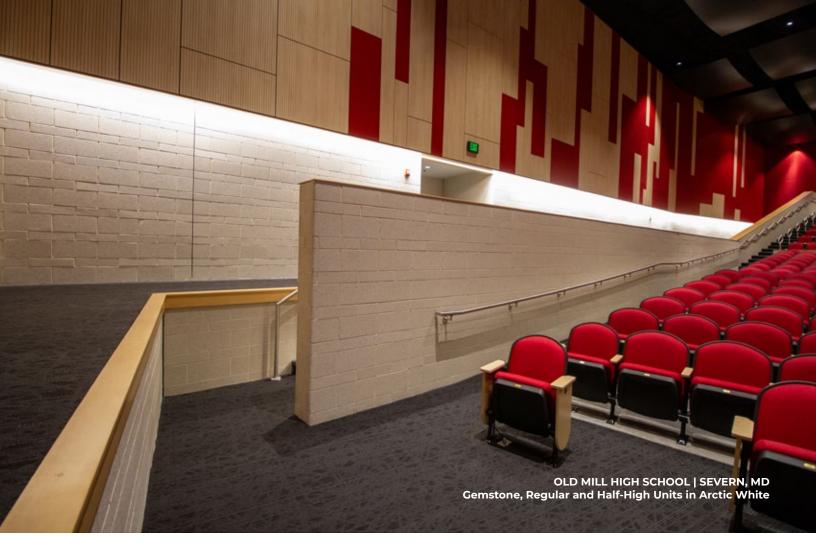
### CMHA e-TEK:

The Concrete Masonry & Hardscapes Association (CMHA) publishes a series of technical bulletins related to current topics on masonry construction, design, materials, and evaluations.

### CMHA e-Details:

CMHA publishes over 220 technical details covering concrete masonry construction using Annotated Design and Construction Details for Concrete Masonry. This can help reduce design/detailing time on your CMU projects. Both e-TEK and e-Details programs are accessible for free via our website.

www.yorkbuilding.com



Our Partners In Masonry Design & Construction:





950 Smile Way, York, PA 17404 800.673.2408 | yorkbuilding.com

