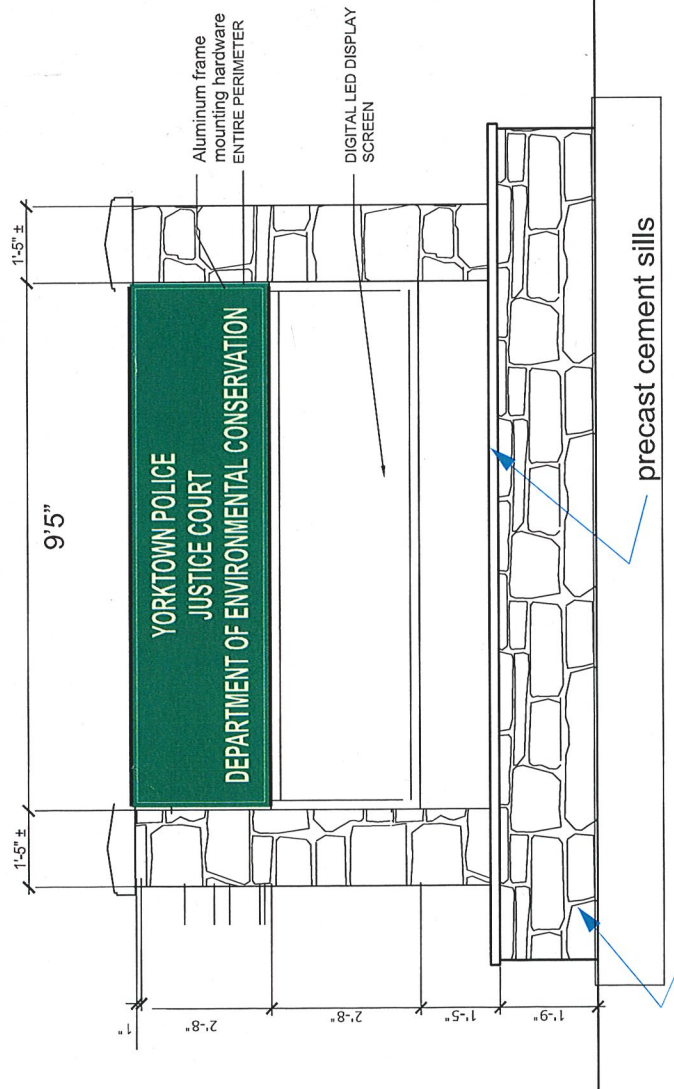
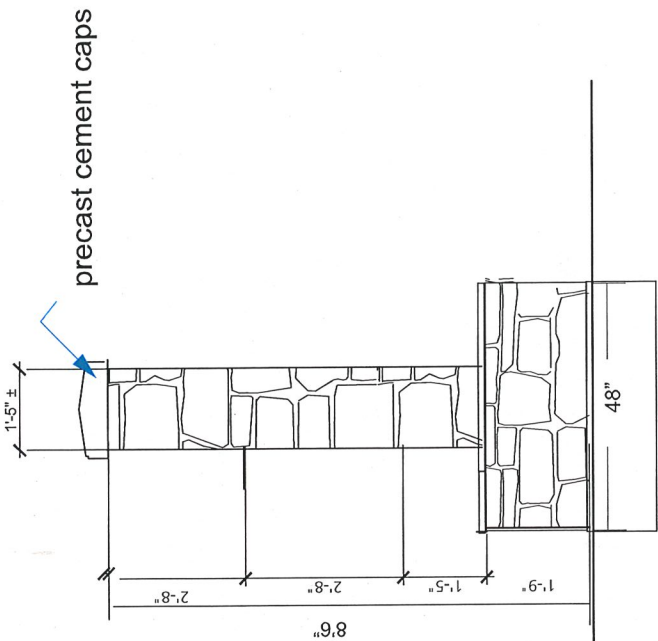


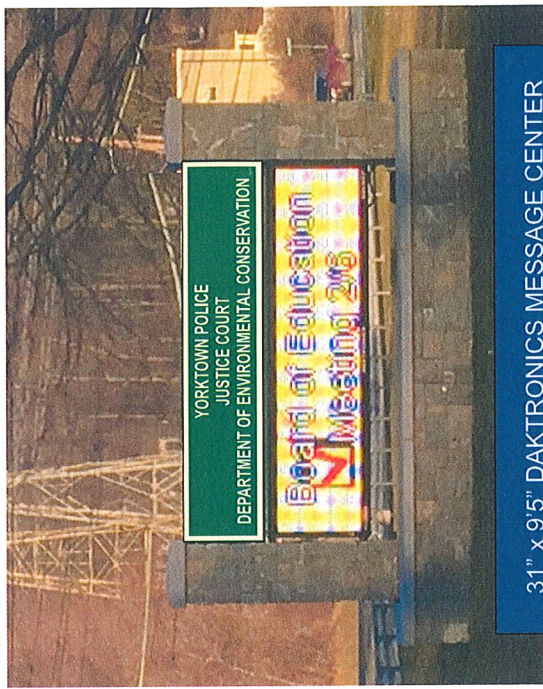
YORKTOWN POLICE  
JUSTICE COURT  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION



YORKTOWN POLICE  
JUSTICE COURT

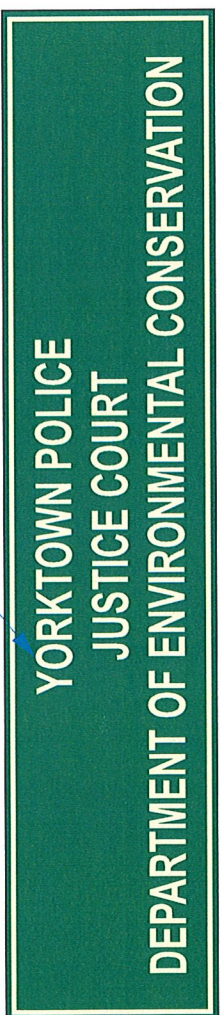


stoneyard manor stone veneer



32" x 9.5" Carved Painted 1.50" HDU

Double Sided V Carved



31" x 9.5" DAKTRONICS MESSAGE CENTER  
MODEL: GS6-32X140-19.8-RGB-2V



3255 CROMPOND ROAD, YORKTOWN, N.Y. 10598  
PHONE: 914-739-9059 / FAX: 914-739-9728

CUSTOMER:	YORKTOWN POLICE DEPT	SALES:	STEVE CHESTER	DESIGNER:	DUSTIN MILLER	DATE:	9/1/2017
ADDRESS:		FILE NAME:	S:\CUSTOMER FILES\YORKTOWN SCHOOLS\MILDRED E STRANGWOOD SIGN.CDR				
SIGN TYPE:		APPROVED BY CUSTOMER:					
		DATE:					

YORKTOWN CENTRAL SCHOOL DISTRICT  
DISTRICT-WIDE IMPROVEMENTS 2016  
KSQ ARCHITECTS PROJECT No. 1510404.00

**SUBMITTAL COVERSHEET**

**No:** \_\_\_\_\_

**Yorktown CSD – District Wide Improvements - 2016**

**Architect:**  
KSQ Architects

**Construction Manager:**  
Arris Contracting Company, Inc.

**Owner:**  
YCSD

**Contractor:** Renu Contracting & Restoration  
**Address:** 99 Fulton Street 2nd Floor

**Contract:** \_\_\_\_\_  
**Telephone:** 914.684.1970

White Plains, NY 10606

**Fax:** 914.684.1971

**School Name:** \_\_\_\_\_

**Type of Submittal:**

- Shop Drawings
- Product Data
- Schedule
- Test Report
- Certificate
- Color Sample

**Re-submittal:**  No  Yes

- Sample
- Warranty

**Submittal Description:**

**Product Name:** Ext. Signage

**Manufacturer:** \_\_\_\_\_

**Subcontractor/Supplier:** Signs Ink

**References:**

**Spec. Section No:** 101400  
**Paragraph:** \_\_\_\_\_

**Drawing No(s):** \_\_\_\_\_  
**Rm. or Detail No(s):** \_\_\_\_\_

Architect's Review Stamp

Contractor Review Stamp

\*\*\*\*\*

**RENU** CONTRACTING • RESTORATION  
CONSTRUCTION MANAGEMENT

Date: 6/22/2016

Signature:



YORKTOWN CENTRAL SCHOOL DISTRICT  
DISTRICT-WIDE IMPROVEMENTS 2016  
KSQ ARCHITECTS PROJECT No. 1510404.00

---

Remarks:

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# DAKTRONICS QUOTE # 586954-1-0

Signs Ink  
 Steve Chester  
 3255 Crompond Road  
 Yorktown Heights, NY USA 10598  
 Phone: (914)739-9059  
 Fax:  
 Email: steve@signsink.com

25/May/2016  
 Quote valid for: 90 days  
 Terms: 50% with the order, 50% Payment  
 before shipment  
 Subject to Credit Review  
 FOB: DAKTRONICS  
 Anticipated mfg time: 4-6 weeks

Ship date shall be established at time  
 of order acceptance

Reference: YORKTOWN HIGH SCHOOL - EMC

Model	Description	Qty
<b>GS6-32X140-19.8-RGB-2V</b>	<b>Galaxy® Outdoor Electronic Message Center - GS6 Series - 19.8mm RGB; 2V Interconnect Cable Length Is 20 Feet</b>	<b>1</b>
Line Spacing: 19.8mm Matrix: 32 lines by 140 columns LED Color: RGB- 281 Trillion Colors Display Configuration: 2V - two one sided displays - same content Cabinet Design: Single Section per face Paint: Semi-Black All Around Active Area: 2' 1" H X 9' 2" W (Approx. Dimensions) Cabinet Dimensions: 2' 7" H X 9' 5" W X 0' 5" D (Approx. Dimensions) Max Power: 860 watts/display	Ventilation: Front Service Access: Front Only Signal Connections: Quick Connects External to Display Frames per Second: 60 Dimming: Automatic, Scheduled, or Manual Readable Viewing Angle: 160 degrees horizontal x 90 degrees vertical Optimal Viewing Angle: 140 degrees Horizontal x 70 degrees Vertical Weight: Unpackaged 175 lbs per display; Packaged 280 lbs per display Compliance Info: UL, cUL, UL -Energy Verified, FCC	
Galaxy® Wireless Ethernet Bridge Outdoor Communication Kit	Communication Method: Wireless Ethernet Bridge Radio Set Includes: 1 Server (Sending) and 1 Client (Receiving). *Wireless communication devices may be affected by site specific conditions. Daktronics makes no guarantees that the communication device is suitable for every location.	1
Galaxy® External Temperature Sensor	External Temperature Sensor with 25 ft. Quick Connect Cable	1
Venus® Control Suite - Prime Playlist Package, Cloud Based	Secure, web-based software that enables display management anytime, anywhere via internet connection. ADMINISTRATORS OF ACCOUNT REQUIRED AT TIME OF ORDER. Terms of Use: <a href="http://www.daktronics.com/TermsConditions/DD2698225">http://www.daktronics.com/TermsConditions/DD2698225</a>	1
<b>FREIGHT Services</b>	<b>Shipping to NY</b>	<b>1</b>
<b>G5G5 - Parts Assurance</b>	<b>Five (5) Year Parts Only Warranty</b>	<b>1</b>
Installation Assurance Plus	Advanced onsite support of equipment installation. Adds 90 days onsite labor service to the Product Assurance and includes one web seminar for product user	1

Financing  
 Show customers how to preserve cash AND increase sales by financing their new Daktronics display. Call your Daktronics representative or click <http://www.daktronics.com/financing>

# GALAXY® GS6 19.8 MM PRODUCT SPECIFICATIONS

The Galaxy GS6 is the best full-feature, high-quality Galaxy series yet. This product provides users a display that runs outstanding graphics and animations using the best contrast in the industry. The 19.8 mm pixel pitch provides a great-looking image and is a popular request among customers.

## 19.8 MM TECHNICAL SPECIFICATIONS

### Character Height:

5.5" (7 pixel font)

### Line Spacing:

19.8 mm (0.78")

### Pixel Configuration:

Monochrome: 1 red or 1 amber

RGB: 1 red, 1 green, 1 blue

### Maximum Brightness:

Monochrome red: 4,500 nits

Monochrome amber: 6,000 nits

RGB: 11,000 nits

### Monochrome Color Capability:

4,096 shades of red or amber

### Full Color Capability:

RGB: 281 trillion colors

### Optimal Viewing Angle:

140 degrees horizontal x 70 degrees vertical

### Readability Angle:

160 degrees horizontal x 90 degrees vertical

### Min Viewing Distance:

45'

## PRODUCT FEATURES

- All sealed components
- Quick connects
- Mounting clips
- High-contrast louvers
- Redundant module signal
- Large sections for fast installation
- Front ventilation on displays less than seven feet tall
- No spreader beam required for displays greater than seven feet tall
- Same module size and cabinet size for all pixel pitches
- Single-step module removal
- Shallow cabinet depth
- Narrow cabinet borders

## MODEL NUMBER GUIDE

GS6	-	80	x	200	-	19.8	-	RGB	-	SF
Series		Lines High		Columns Wide		Line Spacing		LED Color Red, Amber, or RGB		Single Face or Two View

## GS6 SERIES SPECIFICATIONS

### Estimated LED Lifetime:

100,000+ hours

### Contrast Enhancement:

Non-reflective black louvers and module face grooves disperse light

### Message Capability:

Text, graphics, logos, basic animation, video clips, multiple font styles, and sizes

### Control Software:

Venus® Control Suite

### Power:

120, 120/240 VAC Single Phase

### Display Dimming:

64 levels (Automatic, scheduled or manual control)

### Communication Options:

Ethernet Fiber Optic, Ethernet Bridge Radio, Remote Cellular, Ethernet CAT5

### Operating Temperature:

-40°F to 120°F with 99% RH non-condensing

### Compliance Information:

UL and cUL Listed, UL-Energy Verified, FCC compliance

### Warranty Coverage:

5 years

### Galaxy Product Support:

Parts support for 10 years

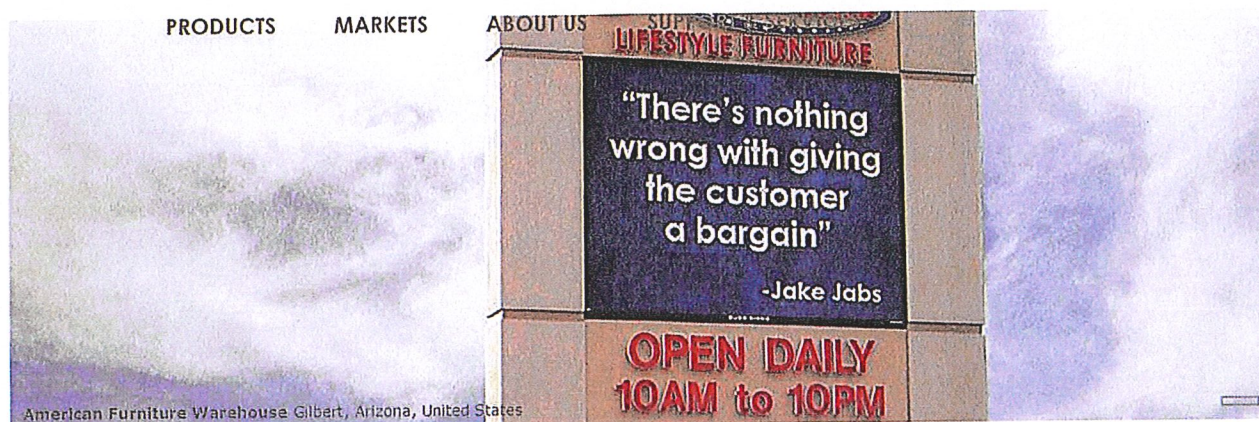
## DISPLAY CONFIGURATIONS



**Single-face (SF)**  
Available in all sizes



**Two-view (2V)**  
Available in all sizes



## GS6 Series 19.8 mm Full-Color Message Displays

### Outdoor Full-Color Galaxy® LED Signs

Looking for detailed graphics and highly-readable text? This model's tight pixel spacing and high-contrast design delivers the full-color content you want. The cloud-based control software provides the most effortless user experience to date.

#### Specifications

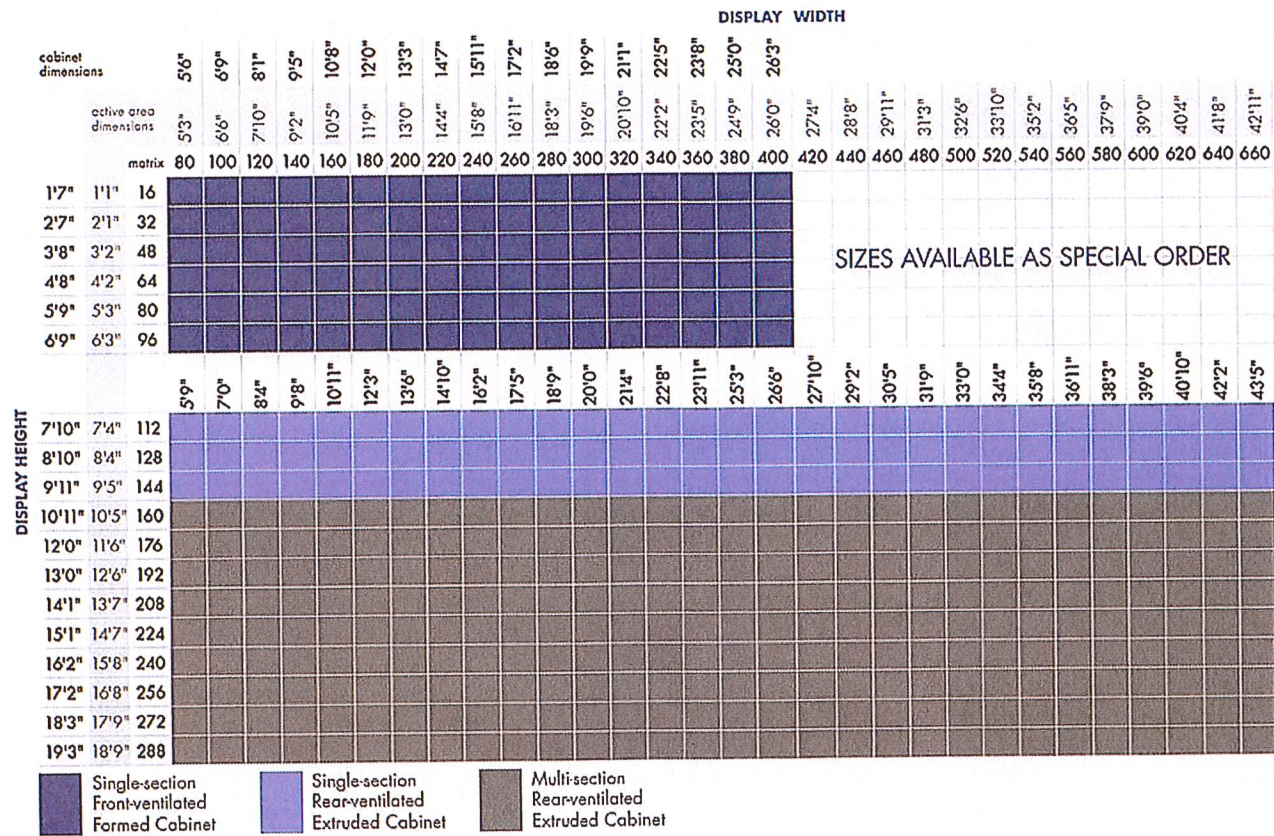
<b>Line-and-Column Spacing:</b>	19.8mm
<b>Character Height:</b>	5.5" (7 pixel font)
<b>Pixel Configuration:</b>	1 red, 1 green, 1 blue
<b>Maximum Brightness:</b>	11,000 nits
<b>Lifetime (.5 brightness):</b>	100,000+ hours
<b>Color Capability:</b>	281 trillion colors
<b>Horizontal Viewing Angle:</b>	140 degrees
<b>Vertical Viewing Angle:</b>	70 degrees
<b>Horizontal Readability Angle:</b>	160 degrees
<b>Vertical Readability Angle:</b>	90 degrees
<b>Minimum Viewing Distance:</b>	45'
<b>Contrast Enhancement:</b>	Non-reflective black louvers and module face grooves disperse light
<b>Graphic Capability:</b>	Text, graphics, logos, basic animation, video clips, multiple font styles, and sizes
<b>Control Software:</b>	Venus Control Suite
<b>Power:</b>	120/240 VAC single phase
<b>Display Dimming:</b>	64 levels (automatic, scheduled or manual control)
<b>Operating Temperature:</b>	-40°F to 120°F with 99% RH non-condensing

### Specifications

Compliance Information: UL and cUL Listed, UL-Energy Verified, FCC compliance  
 PRODUCTS MARKETS ABOUT US SUPPORT & SERVICES  
 Warranty Coverage: 5 Years

### What display size will fit your physical space?

After calculating the physical space you want to fill, use this chart to determine the corresponding display size. Additional sizes are available as a special order. For square footage, refer to the spec sheet.



### Display Configuration

#### Single-Face (SF)

A single, one-sided display. Use two, single-face displays to show unique content on each side.

#### Two-View (2V)

Two, one-sided displays typically installed back-to-back and show same content on both sides.



[PRODUCTS](#)

[MARKETS](#)

[ABOUT US](#)

[SUPPORT & SERVICES](#)

Related Documents

[Manuals and Guides](#)

 [Galaxy GS6 Display Brochure \(741 KB\)](#)

[Specifications](#)

 [Galaxy GS6 19.8 mm Product Specifications \(317 KB\)](#)

Related Products



[GS6 Series 19.8 mm Red LED Sign](#)



[GS6 Series 15.85 mm Full-color LED Sign](#)

Want to learn more? We're here to help.

[CONTACT US](#)

Let our experts answer questions about the benefits of products customized for your business.

[Daktronics \(US\)](#) > [Products](#) > [Message Displays](#)

**NEED HELP?**

- Contact Support
- Knowledge Base
- Product Manuals
- Support Video Gallery
- Training
- Sign Company Resources
- Field Service Portal
- Photos & Videos

**POPULAR PRODUCTS**

- Digital Billboards
- Digit & Price Displays
- Message Displays
- ITS Signs
- Scoreboards
- Video Displays

**CUSTOM SOLUTIONS**

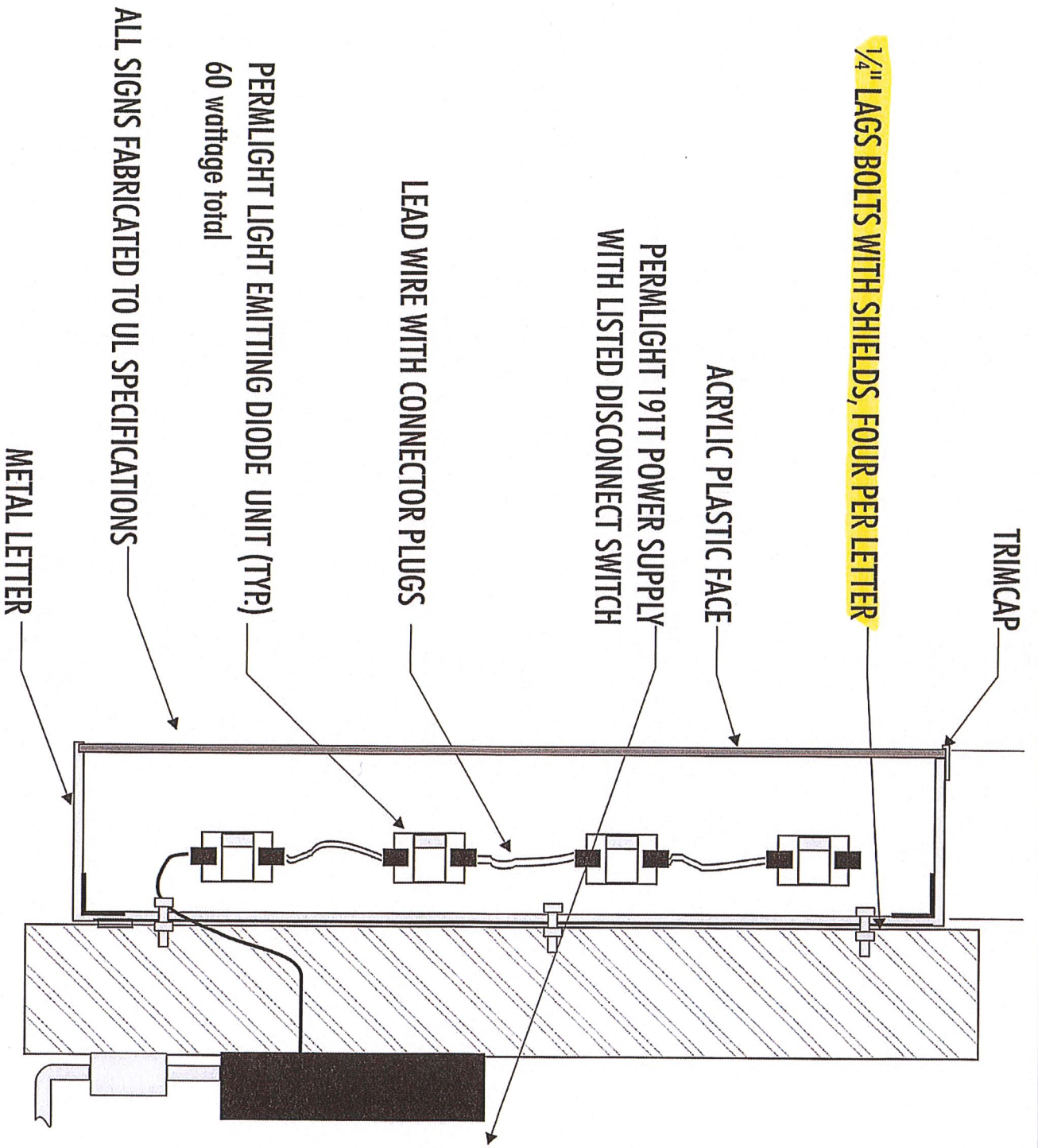
- Architectural & Creative
- Commercial
- Creative Services
- Out of Home Advertising
- Sports
- Transportation
- Worship

**SOFTWARE**

- DakStats & WebSync
- All Sport
- Show Control
- Vanguard v4
- Venus 1500
- Visiconn

**COMPANY INFO**

- Employment
- Employee Login
- Investors
- News



**1/4" LAGS BOLTS WITH SHIELDS, FOUR PER LETTER**

TRIMCAP

ACRYLIC PLASTIC FACE

PERMLIGHT 191T POWER SUPPLY WITH LISTED DISCONNECT SWITCH

LEAD WIRE WITH CONNECTOR PLUGS

PERMLIGHT LIGHT EMITTING DIODE UNIT (TYP.)  
60 wattage total

ALL SIGNS FABRICATED TO UL SPECIFICATIONS

METAL LETTER



1 DNV 120V/AC DIMA DV

KSQ #: 047200-002-01

RECEIVED

06/22/2016

KSQ SUBMITTAL #: 047200-002-01

BID ISSUE

YORKTOWN CENTRAL SCHOOL DISTRICT  
DISTRICT-WIDE IMPROVEMENTS 2016  
KSQ ARCHITECTS PROJECT No. 1510404.00

**SUBMITTAL COVERSHEET**

**No:**

**Yorktown CSD – District Wide Improvements - 2016**

**Architect:**  
KSQ Architects

**Construction Manager:**  
Arris Contracting Company, Inc.

**Owner:**  
YCSD

**Contractor:** Renu Contracting & Restoration  
**Address:** 99 Fulton Street 2nd Floor

**Contract:** \_\_\_\_\_  
**Telephone:** 914.684.1970

White Plains, NY 10606

**Fax:** 914.684.1971

**School Name:** \_\_\_\_\_

**Type of Submittal:**

Shop Drawings  
 Test Report

Product Data  
 Certificate

Schedule  
 Color Sample

**Re-submittal:**  No  Yes

Sample  
 Warranty

**Submittal Description:**

**Product Name:** Cast Stone

**Manufacturer:** Precast Concrete Sales

**Subcontractor/** \_\_\_\_\_

**Supplier:** \_\_\_\_\_

**References:**

**Spec. Section No:** 04 72 00

**Paragraph:** \_\_\_\_\_

**Drawing No(s):** \_\_\_\_\_

**Rm. or Detail No(s):** \_\_\_\_\_

**Architect's Review Stamp**

KSQ Architects, PC  
235 Main Street Suite 410  
White Plains, NY 10601

- No Exceptions Taken
- Make Corrections Noted
- Submit Specified Item
- Revise and Resubmit
- Rejected

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work of all trades; and for performing all work in a safe and satisfactory manner.

**Contractor Review Stamp**

C O N T R A C T O R S T A M P

**IRENU** CONTRACTING • RESTORATION  
CONSTRUCTION MANAGEMENT

Date: \_\_\_\_\_

Signature: \_\_\_\_\_



By MZL Date 06-30-16

**NOTES:**

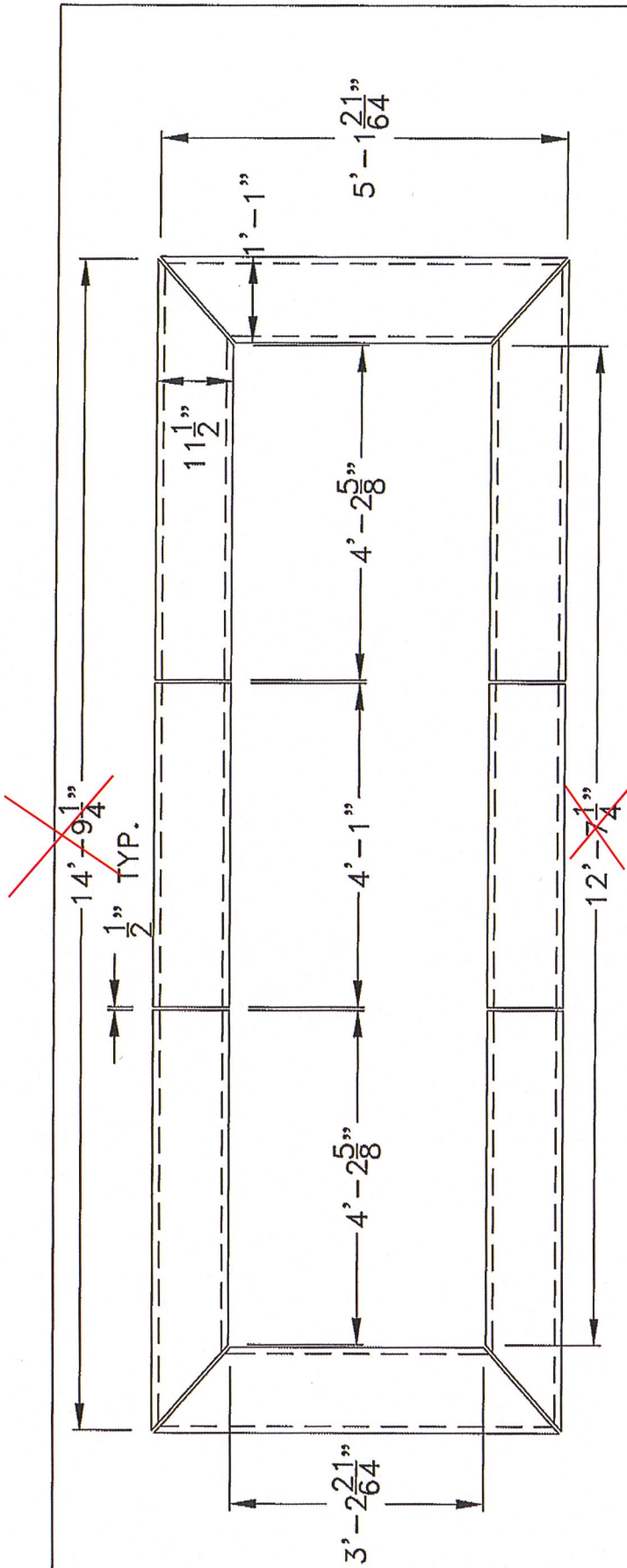
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- COLOR: "WW2G1B"

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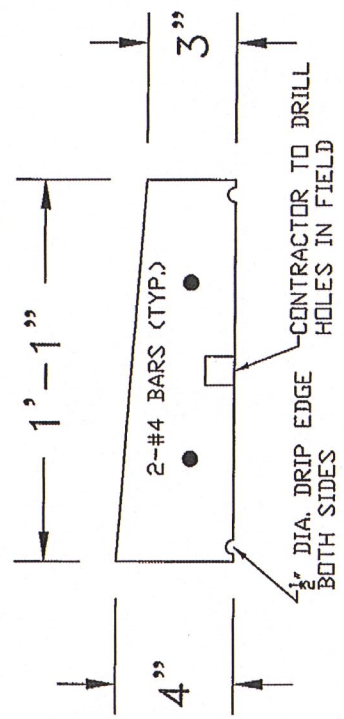
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**PLAN**

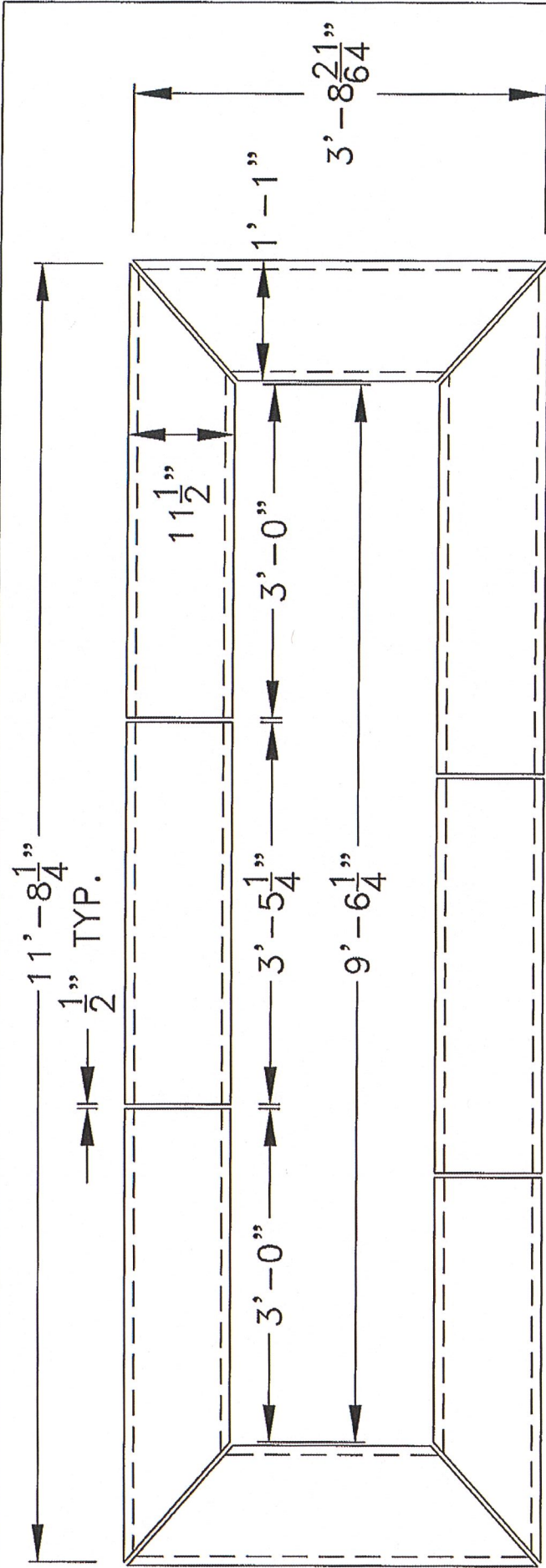


**ELEVATION**

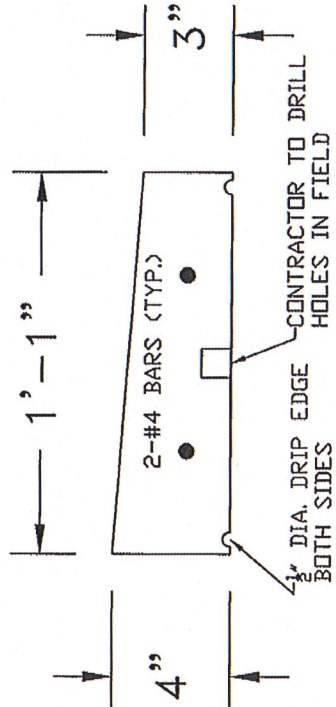
**NOTE:**  
 COORDINATE  
 OVERALL  
 DIMENSIONS W/  
 REVISED REBAR  
 SHOP DRAWING

- NOTES:**
1. REINFORCING GRADE 60.  
 LAP = MIN. 24"  
 MIN. COVER = 1" UNLESS OTHERWISE NOTED
  2. CONCRETE TO TEST MIN. 5000 PSI @ 28 DAYS.
  3. COLOR TO BE DETERMINED BY ARCHITECT

Precast Concrete Sales Co. 123 Route 303 Valley Cottage, N.Y. 10989 Tel. (845) 268-4949 - Fax (845) 268-4376	
CONTR:	RENU CONTRACTING
JOB:	YORKTOWN CENTRAL SCHOOL DISTRICT
ENTRANCE SIGN	
Spec. #	Job #
Date:	Drawn By:
06/10/2016	C.L.
	Saleman:
	Dwg #
	Rev #
	100-01
	B.V.



**PLAN**

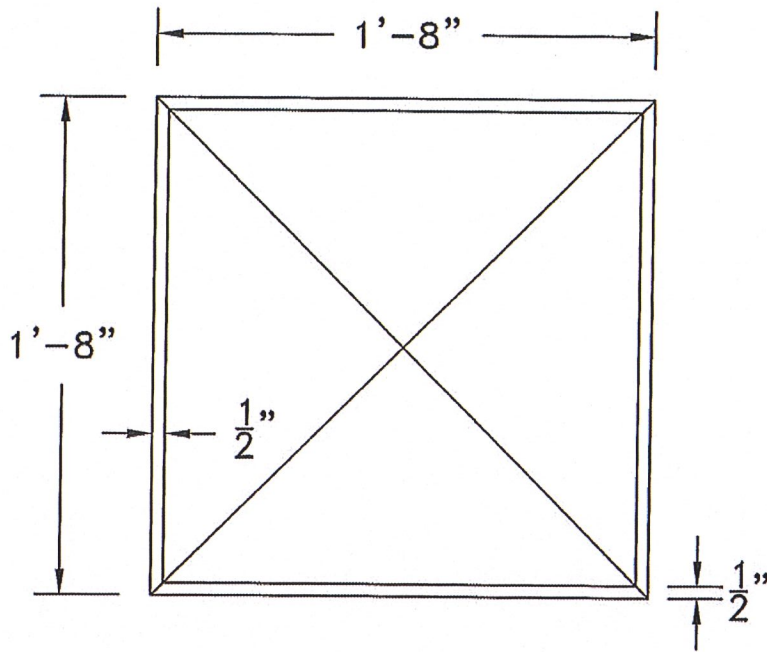


**ELEVATION**

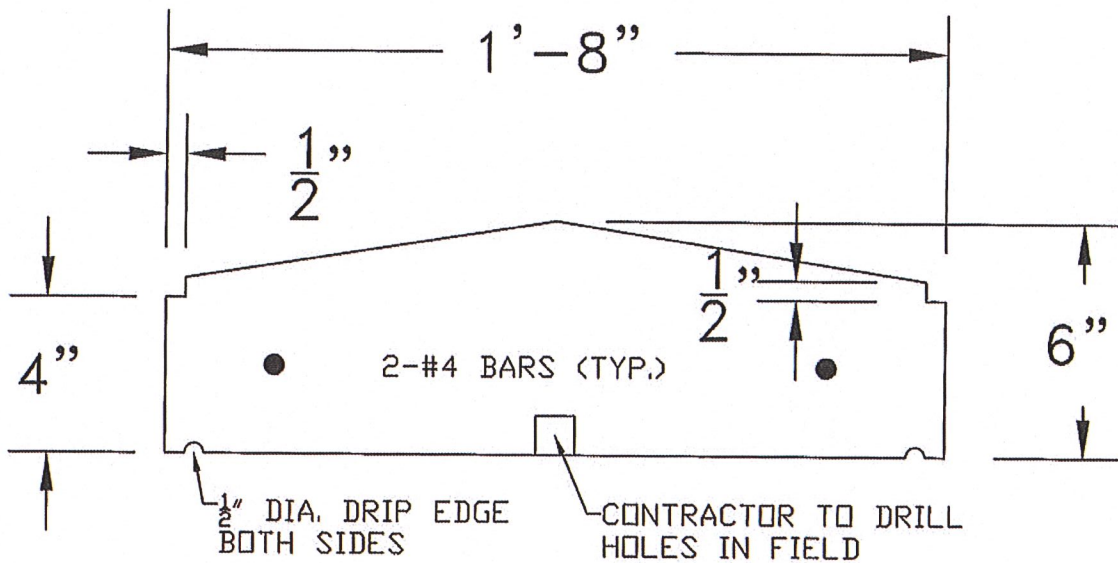
**NOTES:**

1. REINFORCING GRADE 60.  
LAP = MIN. 21"
- MIN. COVER = 1" UNLESS OTHERWISE NOTED
2. CONCRETE TO TEST MIN. 5000 PSI @ 28 DAYS.
3. COLOR TO BE DETERMINED BY ARCHITECT

<b>Precast Concrete Sales Co.</b>			
123 Route 303 Valley Cottage, N.Y. 10989			
Tel. (845) 268-4949 - Fax (845) 268-4376			
CONTR:	RENU CONTRACTING		
JOB:	YORKTOWN CENTRAL SCHOOL DISTRICT		
Struct. #	Job #	Dwg #	Rev #
		100-01	
Date:	Drawn By:	Salesman:	
06/10/2016	C.L.	B.V.	
Mildred E Strang Middle School			



## PLAN



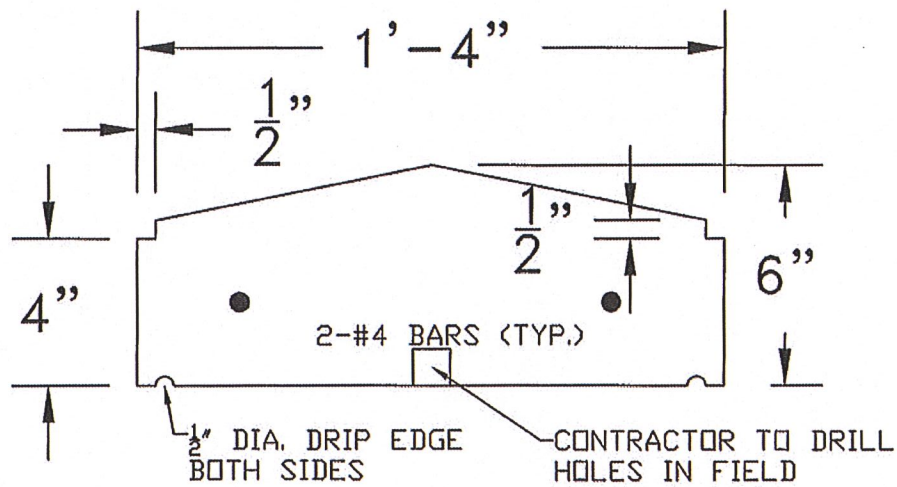
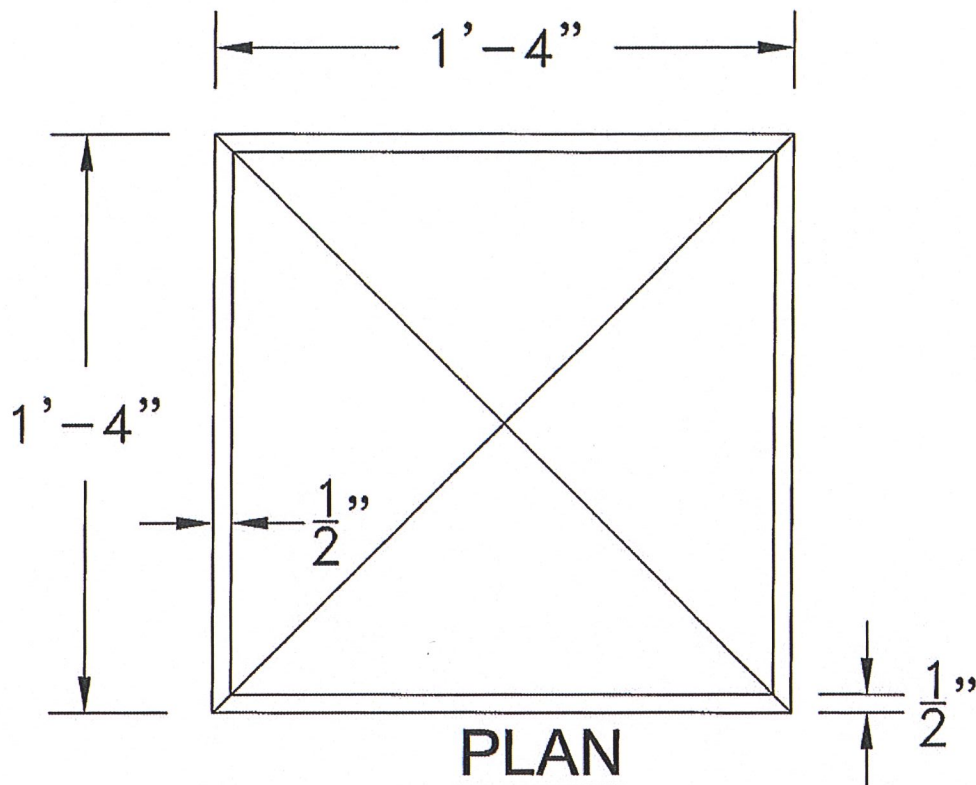
## ELEVATION

### NOTES:

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LAP = MIN. 21",  
MIN. COVER = 1" UNLESS OTHERWISE NOTED
2. CONCRETE TO TEST MIN. 5000 PSI @ 28 DAYS.
3. COLOR TO BE DETERMINED BY ARCHITECT.

<b>Precast Concrete Sales Co.</b>			
123 Route 303 Valley Cottage, N.Y. 10989			
Tel. (845) 268-4949 - Fax (845) 268-4376			
CONTR:	<b>RENU CONTRACTING</b>		
JOB:	ENTRANCE SIGN		
<b>PIER CAP</b>			
Struc. #	Job #	Dwg # 100-01	
Date: 06/10/2016	Drawn By: C.L.	Salesman: B.V.	Rev #

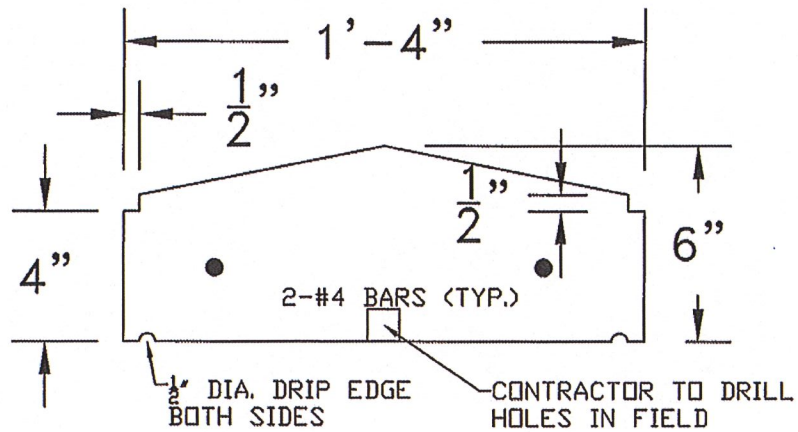
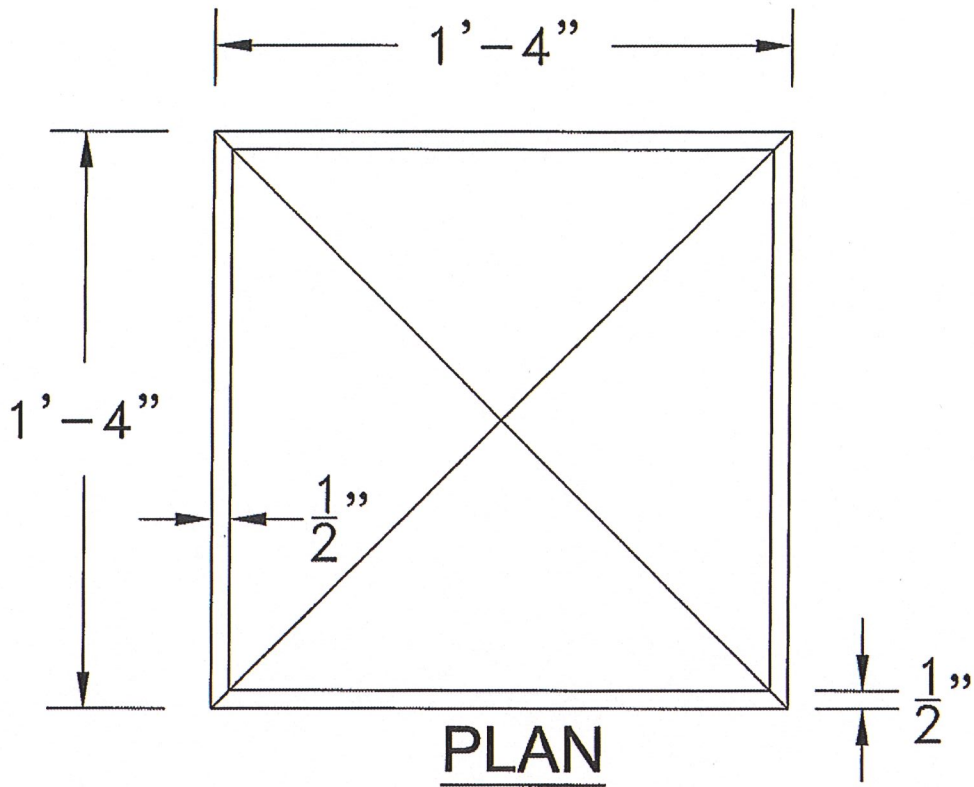




**NOTES:**

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LAP = MIN. 21",  
MIN. COVER = 1" UNLESS OTHERWISE NOTED
2. CONCRETE TO TEST MIN. 5000 PSI @ 28 DAYS.
3. COLOR TO BE DETERMINED BY ARCHITECT.

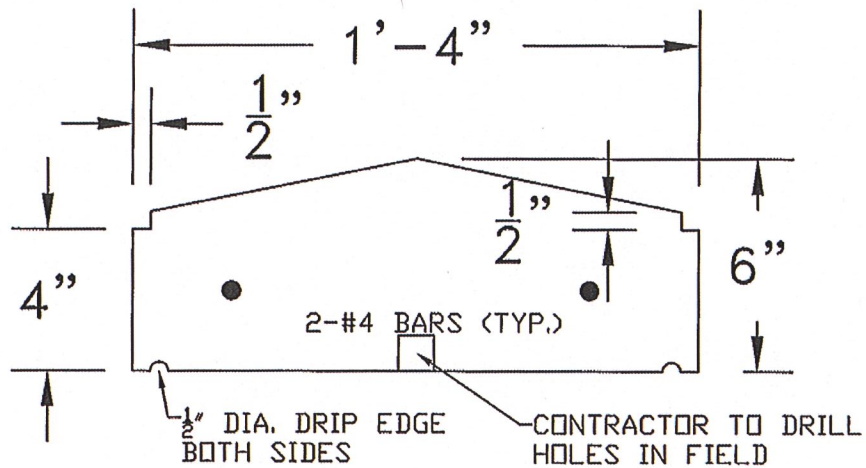
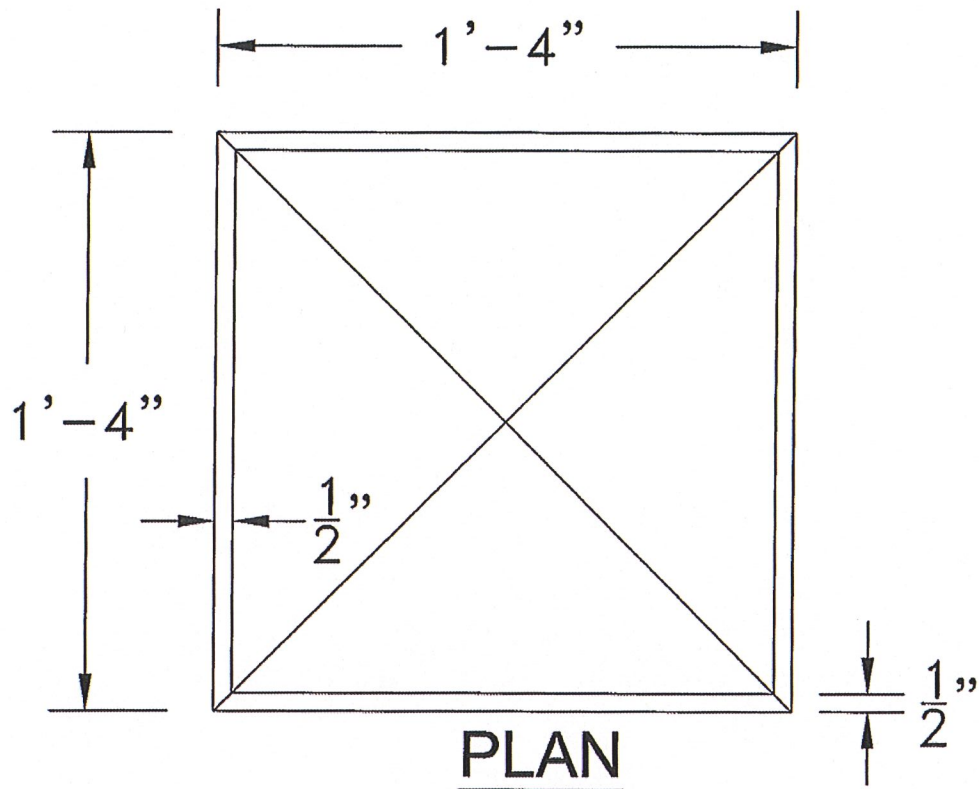
<b>Precast Concrete Sales Co.</b>			
123 Route 303 Valley Cottage, N.Y. 10989			
Tel. (845) 268-4949 - Fax (845) 268-4376			
CONTR:	<b>RENU CONTRACTING</b>		
JOB:	<b>SUPPORT SERVICES</b>		
<b>PIER CAP</b>			
Struc. #	Job #	Dwg # <b>100-01</b>	
Date: <b>06/10/2016</b>	Drwn By: <b>C.L.</b>	Salesman: <b>B.V.</b>	Rev #



**NOTES:**

1. REINFORCING GRADE 60,  
LAP = MIN. 21",  
MIN. COVER = 1" UNLESS OTHERWISE NOTED
2. CONCRETE TO TEST MIN. 5000 PSI @ 28 DAYS.
3. COLOR TO BE DETERMINED BY ARCHITECT.

<b>Precast Concrete Sales Co.</b>			
123 Route 303 Valley Cottage, N.Y. 10989 Tel. (845) 268-4949 - Fax (845) 268-4376			
CONTR:	<b>RENU CONTRACTING</b>		
JOB:	<b>GENERAL ADMINISTRATION</b>		
<b>PIER CAP</b>			
Struc. #	Job #	Dwg #	<b>100-01</b>
Date: <b>06/10/2016</b>	Drwn By: <b>C.L.</b>	Salesman: <b>B.V.</b>	Rev #



**NOTES:**

1. REINFORCING GRADE 60,  
LAP = MIN. 21",  
MIN. COVER = 1" UNLESS OTHERWISE NOTED
2. CONCRETE TO TEST MIN. 5000 PSI @ 28 DAYS.
3. COLOR TO BE DETERMINED BY ARCHITECT.

<b>Precast Concrete Sales Co.</b>			
123 Route 303 Valley Cottage, N.Y. 10989			
Tel. (845) 268-4949 - Fax (845) 268-4376			
CONTR:	<b>RENU CONTRACTING</b>		
JOB:	<b>ATHLETIC FIELDS</b>		
<b>PIER CAP</b>			
Struc. #	Job #	Dwg # <b>100-01</b>	
Date: <b>06/10/2016</b>	Drwn By: <b>C.L.</b>	Salesman: <b>B.V.</b>	Rev #

BID ISSUE

YORKTOWN CENTRAL SCHOOL DISTRICT  
DISTRICT-WIDE IMPROVEMENTS 2016  
KSQ ARCHITECTS PROJECT NO. 1510404.00



**SUBMITTAL COVERSHEET**

**No:**

**Yorktown CSD – District Wide Improvements - 2016**

**Architect:**  
KSQ Architects

**Construction Manager:**  
Arris Contracting Company, Inc.

**Owner:**  
YCSD

**Contractor:** Renu Contracting & Restoration  
**Address:** 99 Fulton Street 2nd Floor

**Contract:** \_\_\_\_\_  
**Telephone:** 914.684.1970

White Plains, NY 10606

**Fax:** 914.684.1971

**School Name:** \_\_\_\_\_

**Type of Submittal:**

**Re-submittal:**  No  Yes

- Shop Drawings
- Product Data
- Schedule
- Test Report
- Certificate
- Color Sample

- Sample
- Warranty

**Submittal Description:**

**Product Name:** Stone Veneer Portsmouth, MVIS Premium Mortar, Hi Bond Veneer Mortar, Pointing Mortar, Latapoxy

**Manufacturer:** \_\_\_\_\_

**Subcontractor/** \_\_\_\_\_

**Supplier:** \_\_\_\_\_

**References:**

**Spec. Section No:** 044100-GC-001  
**Paragraph:** \_\_\_\_\_

**Drawing No(s):** \_\_\_\_\_  
**Rm. or Detail No(s):** \_\_\_\_\_

**Architect's Review Stamp**  
**KSQ Architects, PC**  
 235 Main Street Suite 410  
 White Plains, NY 10601

No Exceptions Taken     Revise and Resubmit  
 Make Corrections Noted     Rejected  
 Submit Specified Item

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work of all trades; and for performing all work in a safe and satisfactory manner.

By **MZL**                      Date **06-30-16**

**Contractor Review Stamp**

\*\*\*\*\*

**RENU** CONTRACTING • RESTORATION  
CONSTRUCTION MANAGEMENT

Date: 6/16/2016

Signature:

**NOTE: POINTING MORTAR COLOR - "24 NATURAL GRAY"**

---

Remarks:

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# Portsmouth Granite™ Square & Rectangular

## PRODUCT SPECIFICATION & DATA SHEET



### DESCRIPTION

Portsmouth Granite™ Square & Rectangular Thin Veneer is a natural granite stone from New England. It has been sorted, split, and cut into roughly square and rectangular pieces. Sold as individual stones not stone panels.

### DIMENSIONS

Facing Area: 0.25–1.25 SF  
 Size Range: (4.5 inches x 8 inches) to (11 inches x 16 inches)  
 Thickness: 1 inch +/- ¼ inch  
 Weight: Less than 14 lbs per SF

### PACKAGING

Flat Crate: 168 SF (SKU# VTRTFW)  
 Flat Box: 5 SF (SKU# VTRTFS)  
 Corner Crate: 150 LF (SKU# VTRTCW)  
 Corner ½ Crate: 75 LF (SKU# VTRTCH)  
 Corner Box: 5 LF (SKU# VTRTCS)

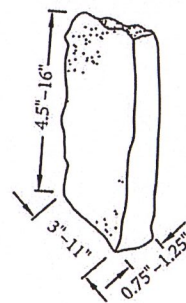
### PROFILE

Colors: Light gray, black, white, beige, tan, and blue  
 Finish: Natural, aged face

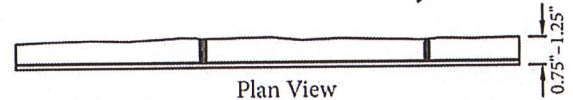
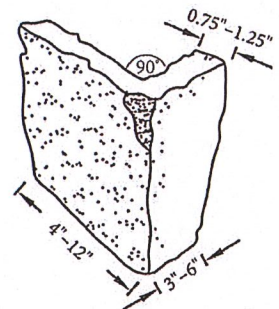
### APPLICATIONS

This product is HCA (Harsh Climate Approved). It has been subjected to numerous freeze-thaw cycles and can withstand the harshest hot, cold, or wet climates. Perfect for interior and exterior use in all regions including applications below grade. Suitable for use near salt water, water features, and in areas where blowing sand is a concern. [www.stoneyard.com/hca](http://www.stoneyard.com/hca)

FLAT DETAIL



CORNER DETAIL



### INSTALLATION

Thin Veneer installation information is available on our website [www.stoneyard.com/install](http://www.stoneyard.com/install). A mock-up is recommended to help in all design decisions including grout color, joint size (dry-laid, standard, or wide), and desired finish. [www.stoneyard.com/mortar](http://www.stoneyard.com/mortar)

### LEED® CERTIFICATION & ENERGY EFFICIENCY

Whether it's for a commercial building or historical restoration, this natural building material can assist with the LEED certification. Functionally, stone will retain heat in the winter and cold in the summer, enhancing energy efficiency. [www.stoneyard.com/architect](http://www.stoneyard.com/architect)

### CORNERS

Matching 90° corners are available in all colors and shapes. When other angles are needed, the installation options are weaving (alternating flats) or miter cutting flat pieces to wrap the corner. [www.stoneyard.com/corner](http://www.stoneyard.com/corner)

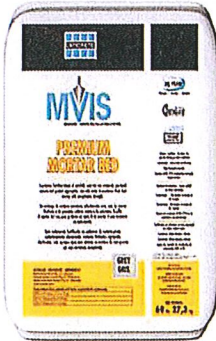
Natural stone varies in color, veining, and pattern from piece to piece. STONEYARD® is not responsible for photos used in color literature, on websites, or in emails to accurately reflect actual material. Photos are used to create a general idea or feel for the material and cannot be used for color matching.



# MVIS™ Premium Mortar Bed

DS-263.0-0514

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

MVIS™ Premium Mortar Bed

## 2. MANUFACTURER

LATICRETE International, Inc.

1 LATICRETE Park North

Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 235

Toll Free: 1.800.243.4788, ext. 235

Fax: +1.203.393.1684

Internet: [www.laticrete.com](http://www.laticrete.com)

## 3. PRODUCT DESCRIPTION

MVIS Premium Mortar Bed is a polymer fortified blend of carefully selected polymers, portland cement and graded aggregates. MVIS Premium Mortar Bed does not require the use of latex admix, you only need to add water to produce thick bed mortar with exceptional strength.

### Uses

- Interior and exterior applications
- Wet and dry applications
- Conventional thick bed mortar applications
- Concrete repairs

### Advantages

- For use as a scratch or finish coat in place of Type S or Type N mortar
- Polymer fortified – no need for latex additives
- Premixed – no job site blending of powders required
- Economical – saves time and money
- High strength formula
- Pumpable for large scale veneer projects
- Exceeds ASTM C270 compressive strength requirements for masonry veneer installations.

### Substrates

- Concrete
- Stone
- Ceramic Tile
- Concrete Masonry
- Brick Masonry
- Exterior Glue Plywood\*
- Cement Mortar Beds
- Cement Backer Board\*\*
- Cement Plaster
- Cement Terrazzo

\* For interior only, over cleavage membrane with wire reinforcing min. 2" (50 mm) thick

\*\* Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use

### Packaging

60 lb (27.3 kg) bag; 56 bags per pallet

### Approximate Coverage

12 ft <sup>2</sup> at 1/2" (1.1 m <sup>2</sup> at 12 mm)
6 ft <sup>2</sup> at 1" thickness (0.56 m <sup>2</sup> at 25 mm)
3 ft <sup>2</sup> at 2" (0.3 m <sup>2</sup> at 50 mm)

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and <110°F (43°C).

### Limitations

- Mastics, adhesive mortars and pointing mortars for masonry veneer, stone, tile, pavers and thin brick are not replacements for waterproofing membranes or air and water barrier. When a waterproofing membrane or air and water barrier is required, use an Air & Water Barrier (see Section 10 FILING SYSTEMS).
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Use LATAPOXY® 300 Adhesive for installing green marble, resin backed on water sensitive tile, stone and agglomerates (refer to DS 633.0 for more information)

*Note: Surfaces must be structurally sound, stable and rigid enough to support manufactured masonry veneer, tile, thin brick and similar finishes. For exterior vertical installations over framed construction, the substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length (except where local building codes specify more stringent deflection requirements).*

## Cautions

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- Contains portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- For white and light-colored stones, conduct test area to ensure no shadowing or staining is observed.
- Keep out of reach of children.

## 4. TECHNICAL DATA

### Applicable Standards

ASTM C109, ASTM C270, ASTM C157, C270, EN13813 and ASTM C627

### Physical Properties

Test Method	Requirement	Results
28 Day Compressive Strength ASTM C109	2500 psi (17.2 MPa)	4000–5000 psi (27.6–34.5 MPa)
Flexural Strength ANSI A118.7.3.7	1000 psi (6.9 MPa)	1100–1200 psi (7.6–8.3 MPa)
Shrinkage 7 Day Cure ASTM C157	S/o	0.05%

Test Method	EN13813 Specification	Results
28 day cure flexural strength EN 13892-2	7 MPa (1015 psi)	7 – 8.5 MPa (1015-1232 psi)
28 day cure compressive strength EN 13892-2	30 MPa (4350 psi)	30–36 MPa (4350–5220 psi)

MVIS™ Premium Mortar Bed is an EN13813 C30F7 mortar.

### Working Properties

Pot Life	2 hours
Time to Foot Traffic	16 hours
Time to Heavy Traffic	72 hours

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

## 5. INSTALLATION

### Surface Preparation

All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, laitance, paint, concrete sealers or curing compounds. Dry dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. Expansion joints shall be provided through the masonry from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7: Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement joints-Vertical & Horizontal". Do not cover expansion joints with mortar.

## Application

### Wall Renders

#### Mixing Wall Renders

Mix a 60 lb bag (27 kg) of MVIS™ Premium Mortar Bed to 0.8 – 0.9 (3 – 3.4L) of water. Mix to a plastic consistency.

#### Wall Renders—Installation

No slurry bond coat is required prior to placing wall renders. Apply wall render with a steel trowel pressing mortar into good contact with the substrate. Apply "scratch coat" first – not to exceed 1/2" (12 mm) thickness. Scratch mortar before it hardens. After "scratch coat" hardens, apply the "brown or float coat" working the mortar into good contact with the scratch coat. Do not exceed 5/8" (15 mm) thickness per lift. Scratch all lifts that will receive additional float coats. Float wall with steel trowel and straight edges to form a plumb and true mortar surface. Allow the completed render coats to cure for 24 hours at 70°F (21° C) prior to the installation of masonry

#### As a Pumped Mortar for Renders and Plaster

7 – 60 lb. (27.3 kg) bags of MVIS Premium Mortar Bed utilizing liquid plasticizer/pump aid. Confirm with manufacturer of pump aid for compatibility with polymer fortified mortar mixes. Approximate coverage for 7 – 60 lb. (27.3 kg) bags of mortar will be 45 ft<sup>2</sup> (4.2 m<sup>2</sup>) at 1" (25 mm) thick. Coverage will vary according to mixing, pumping, placement, job site conditions and rebound. Do not exceed 5/8" (15 mm) thickness per lift/application of pumped render. Scratch up previous lift prior to placing subsequent lifts.

**Cold Weather Note:** The setting of portland cement mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather.

**Hot Weather Note:** The evaporation of moisture in portland cement mortars is accelerated by hot, dry conditions. Apply mortar to dampened surfaces and protect freshly spread mortar and finished work when installing in temperatures over 90°F (32°C).

### Cleaning

Clean tools and masonry with water while the mortar is fresh.

## 6. AVAILABILITY AND COST

### Availability

LATICRETE® and LATAPOXY® materials are available worldwide.

### For Distributor Information:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at [www.laticrete.com](http://www.laticrete.com).

### Cost

Contact a LATICRETE Distributor in your area.



## 7. WARRANTY

See 10. FILING SYSTEM:

- DS 230.13: LATICRETE® Product Warranty
- A component of:
  - DS 230.15: LATICRETE 15 Year System  
Warranty –For Steel or Wood Framed  
Exterior Facades (United States and Canada)
  - DS 025.0: LATICRETE 25 Year System  
Warranty (United States and Canada)

## 8. MAINTENANCE

LATICRETE and LATAPOXY® grouts and pointing mortars require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

## 9. TECHNICAL SERVICES

### Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

- Toll Free: 1.800.243.4788, ext. 235
- Telephone: +1.203.393.0010, ext. 235
- Fax: +1.203.393.1948

### Technical and Safety Literature

To acquire technical and safety literature, please visit our website at [www.laticrete.com](http://www.laticrete.com).

## 10. FILING SYSTEM

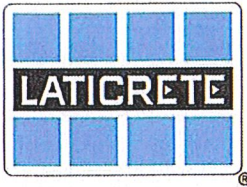
Additional product information is available on our website at [www.laticrete.com](http://www.laticrete.com). The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 230.15: LATICRETE 15 Year System  
Warranty – For Steel or Wood Framed  
Exterior Facades (United States and Canada)
- DS 025.0: LATICRETE 25 Year System  
Warranty – (United States and Canada)
- DS 247.0: MVIS™ Hi-Bond Veneer Mortar
- DS 633.0: LATAPOXY 300 Adhesive
- DS 661.0: Air & Water Barrier

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LATICRETE International, Inc.  
One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • [www.laticrete.com](http://www.laticrete.com)

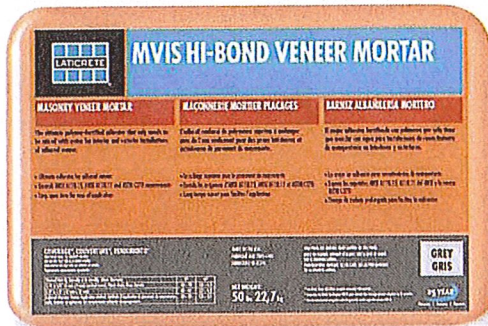
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# MVIS™ Hi-Bond Veneer Mortar

DS-246.0-0316

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

MVIS™ Hi-Bond Veneer Mortar

## 2. MANUFACTURER

LATICRETE International, Inc.

1 LATICRETE Park North

Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 235

Toll Free: 1.800.243.4788, ext. 235

Fax: +1.203.393.1684

Internet: [www.laticrete.com](http://www.laticrete.com)

## 3. PRODUCT DESCRIPTION

The ultimate, polymer fortified, thin-set mortar for interior and exterior installation of masonry veneer, stone, ceramic tile, quarry tile, pavers and thin brick. MVIS Hi-Bond Veneer Mortar, designed to mix just with water, has a long open time with unsurpassed adhesion and workability.

### Uses

Excellent for interior, exterior and submerged applications as well as providing superior bond to exterior glue plywood (interior only) and concrete. The ultimate thin-set for masonry veneer.

### Advantages

- Ultimate adhesion for masonry veneer
- Incredible bond to exterior glue plywood\* and concrete
- Excellent shear bond strength
- High performing, smooth and creamy formula
- Contains Microban® antimicrobial protection to inhibit the growth of stain causing mold and mildew in the substrate
- Exceeds ANSI A118.4, ANSI A118.11 and ANSI A118.15
- Exceeds ASTM C270 compressive strength requirements for masonry veneer installations
- Passes IBC and IRC shear bond strength code requirements for adhered masonry veneer when tested in accordance with ASTM C482

- Conforms to ISO 13007-1 with a classification of C2TES1P1
- LATICRETE® 25 Year System Warranty (United States and Canada) for masonry veneer installations over concrete and masonry substrates\*\*

\* Interior Only.

\*\* When used as a component of the LATICRETE® 25 Year System Warranty (United States and Canada) (DS 025.0)

### Suitable Substrates

- Exterior Glue Plywood\*
- Cement Terrazzo
- Concrete
- Cement Backer Boards<sup>AA</sup>
- Gypsum Wallboard\*
- Concrete Block
- CMU
- Cement Mortar
- Existing Ceramic Tile And Stone
- Gypsum Plaster<sup>A</sup>

\* Interior use only.

<sup>AA</sup> Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

### Packaging

50 lb bag (22.7 kg); 54 bags per pallet

### Color

Grey

### Approximate Coverage

Vertical Applications	Ft <sup>2</sup>	M <sup>2</sup>
1/4" x 3/8" (6 mm x 9 mm) Notched Trowel	60-70	5.6-6.5
1/2" x 1/2" (12 mm x 12 mm) Notched Trowel	40-45	3.7-4.2
Adhered Masonry Veneer Application Method	30-33	2.8-3.1

Coverage will vary depending on trowel notch size, type and size of tile/stone and substrate.

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year\*\*\* if stored off the ground in a dry area.

\*\*\* High humidity will reduce the shelf life of bagged product.

### Limitations

- Mastics, adhesive mortars and pointing mortars for masonry veneer, stone, ceramic tile, pavers and thin brick are not replacements for waterproofing membranes or air and water barriers. When a waterproofing membrane or air and water barrier is required, use Air & Water Barrier (see Section 10 FILING SYSTEMS).
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.

- Not for use directly over particle board, luan, Masonite® or hardwood floors.
- Use LATAPOXY® 300 Adhesive for installing green marble, resin backed, or water sensitive tile, stone and agglomerates (refer to DS 633.0 for more information).

*Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. For exterior vertical installations over framed construction, the substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length (except where local building codes specify more stringent deflection requirements).*

#### Cautions

Consult SDS for more safety information.

- Some stone have low flexural strength and may not be suitable for all installations.
- Protect finished work from traffic until fully cured.
- Contains portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- DO NOT take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- For white and light-colored stones, conduct test area to ensure no shadowing or staining is observed.
- Keep out of reach of children.

#### 4. TECHNICAL DATA

##### VOC/LEED Product Information



This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program For Chemical Emissions For Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

Total VOC Content pounds/gallon (grams/liter) of product in unused form is 0.00 lb/gal (0.00 g/L).

##### Applicable Standards

ASTM C270, ASTM C482. ANSI A118.4, ANSI 118.11, ANSI A118.15, ISO 13007-1

#### Physical Properties

Test	Test Method	Specification	Results
28 Day Cure Vitreous Tile Shear Strength	ANSI A118.15 7.2.5	>400 psi (2.76 MPa)	475–520 psi (3.2–3.6 MPa)
Shear Bond Vitreous Tile Water Immersion	ANSI A118.15 7.2.4	>200 psi (1.38 MPa)	275–300 psi (2.0–3.6 MPa)
28 Day Cure Quarry Tile To Plywood Shear Bond	ANSI A118.11 4.1.2	>150 psi (1.0 MPa)	240–270 psi (1.7–1.9 MPa)
28 Day Cure Bond Strength To Calcium Silicate	ASTM C482	N/A	350–370 psi (2.4–2.6 MPa)
28 Day Cure 20 Cycle Freeze/Thaw Bond Strength To Calcium Silicate	ASTM C482	N/A	230–260 psi (1.6–1.8 MPa)
28 Day Compressive Strength	ASTM C270	2000 psi (13.8 MPa)	2400–2450 psi (16.5–16.9 MPa)

Test	Test Method	ISO 13007-1 C2 Specification	Results
28 Day Cure Tensile Adhesive Strength	ISO 13007 2 4.4.2	1 MPa (145 psi)	2.3 – 2.6 MPa (333–377 psi)
7 Day Cure 21 Day Water Immersion Tensile Adhesive Strength	ISO 13007 2 4.4.3	1 MPa (145 psi)	1.3–1.5 MPa (188 – 218 psi)
14 Day Cure 14 Day Heat Age Tensile Adhesive Strength	ISO 13007 2 4.4.4	1 MPa (145 psi)	2.4–3.0 MPa (348 – 435 psi)
7 Day Cure 21 Day Water Immersion 25 Cycle Freeze/Thaw Tensile Adhesive Strength	ISO 13007 2 4.4.5	1 MPa (145 psi)	1.2–1.4 MPa (174 – 200 psi)
Open Time After 30 Minutes	ISO 13007 2 4.1	0.5 MPa (73 psi)	1.7–1.9 MPa (246 – 276 psi)
Slip	ISO 13007 2 4.2	Less than or equal to 0.5 mm (0.02 inches)	0.5 mm (0.02 inches)
Transverse Deformation	ISO 13007 2 4.5	Greater than or equal to 2.5 mm (0.1 in.) and less than 5 mm (0.2 in.)	3.2–3.6 mm (0.13–0.14 in.)

MVIS™ Hi-Bond Veneer Mortar is ISO 13007-1 C2TES1

#### Working Properties

Open Time	40 minutes
Pot Life	2 hours
Time to Heavy Traffic	24 hours
Wet Density	13.8 lb/gal (1.65 g/cc)

Specifications are subject to change without notification. Technical data shown in product data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions.

## 5. INSTALLATION

### Surface Preparation

All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with MVIS™ Premium Mortar Bed. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. Concrete slabs must be plumb and true to within 1/4"(6 mm) in 10 ft (3 mm).

1. Installer must verify that deflection under all live, dead and impact loads of substrates does not exceed industry standards of L/600 for AMSMV units or stone installations where L=span length. For exterior vertical installations over framed construction, the substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length.

*Note: MVIS Hi-Bond Veneer Mortar does not require a minimum cure time for concrete walls or slabs. Expansion joints shall be provided through the veneer from all construction or expansion joints in the substrate. For natural stone installations on floors follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.*

### Mixing

Place clean, potable water into a clean pail. Add MVIS Hi-Bond Veneer Mortar. Use approximately 5.5 qts (5.2 L) of water for 50 lbs (22.7 kg) of powder. Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 5–10 minutes. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water.

*Note: For use as a slurry bond coat; mix 7 quarts (6.6 ℓ) water to a 50 lb (22.7 kg) bag of MVIS Hi-Bond Veneer Mortar.*

### Application

See applicable LATICRETE details in Masonry Veneer Installation System Brochure (DS 002.8).

*Note: If installing on sheathed wood or steel frame construction with wire lath, use MVIS Premium Mortar Bed for the wall render prior to installing applicable MVIS Air & Water Barrier or MVIS Hi-Bond Veneer Mortar.*

If waterproofing is required, install MVIS Air & Water Barrier per instructions (see DS 663.0 and DS 663.5) to the substrate prior to installation of MVIS Hi-Bond Veneer Mortar.

For adhered stone, thin brick and manufactured stone masonry veneers installations, use a gauging trowel to key a thin coat of MVIS Hi-Bond Veneer Mortar to cover entire back of the veneer units. Spread additional mortar onto the back of the skim coated veneer sufficient to completely fill the space between the veneer and the substrate when compressed against the substrate. Press the mortar covered back of the veneer against the substrate at the desired final position. Slide the unit roughly 1 -1.5" (25-38mm) diagonally from the desired final position and back into the desired position while maintaining even pressure. This should be done in such a manner as to squeeze the mortar to fill the entire space between the veneer unit

and the substrate, allowing excess mortar to extrude on all sides around the veneer unit. Clean excess extruded mortar with trowel and spread onto the next veneer unit to be installed.

*Note: Prior to installation, ensure back of veneer units are clean of dust, laitance, loose concrete crumbs and any excess film that could impede bond.*

Alternate method for thin brick, tile, calcium silicate unit and stone installations: key MVIS Hi-Bond Veneer Mortar into the substrate thoroughly. Then, comb on additional mortar with the notched side, use 1/4" x 3/8" (6 mm x 9 mm), 1/2" x 1/2" (12 mm x 12 mm) loop or notch trowel. Back butter all thin brick, veneer units 8" x 8" (200 mm x 200 mm), 3/4" (19mm) loop trowel or larger to provide full bedding of the veneer. Place veneer into the mortar and adjust to desired position. Clean any excess mortar on sides of stone or tile veneer.

*Note: Use proper sized notched trowel to ensure full bedding of the stone veneer. Spread only enough mortar for maximum coverage with tile within 15–20 minutes. Trowel notch size determined by contractor, size of veneer and job-site coverage. Adjust as necessary. Check mortar for complete coverage by periodically removing veneer unit and inspecting the transfer onto substrate and back of the stone veneer. The size and weight of the veneer will vary.. Due to job site conditions and differences in finish material types; ledger boards, shims, wedges or spacers may be required to maintain finish levels and heights.*

### Grouting/Pointing (if required)

When required, point installation after a minimum of 24 hours curing time at 70°F (21°C). Point with MVIS Epoxy Pointing Mortar (conduct test area to determine suitability and acceptability with veneer) MVIS Premium Pointing Mortar mixed with water or MVIS Pointing Mortar mixed with water.

### Cleaning

Clean tools and stone work with water while mortar is fresh.

## 6. AVAILABILITY AND COST

### Availability

LATICRETE® and LATAPOXY® materials are available worldwide.

### For Distributor information:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distribution information, visit LATICRETE at

[www.laticrete.com](http://www.laticrete.com).

### Cost

Contact a LATICRETE/LATAPOXY Distributor in your area.

## 7. WARRANTY

### See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty

A component of:

DS 230.15: LATICRETE 15 Year System  
Warranty – For Steel or Wood Framed  
Exterior Facades (United States and Canada)

DS 025.0: LATICRETE 25 Year System  
Warranty (United States and Canada)\*\*

\*\* When used as a component of the LATICRETE® 25 Year System Warranty (United States and Canada) (DS 025.0)

## 8. MAINTENANCE

Non-finish LATICRETE® and LATAPOXY® installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

## 9. TECHNICAL SERVICES

### Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235  
Telephone: +1.203.393.0010, ext. 235  
Fax: +1.203.393.1948

### Technical and Safety Literature

To acquire technical and safety literature, please visit our website at [www.laticrete.com](http://www.laticrete.com).

## 10. FILING SYSTEM

Additional product information is available on our website at [www.laticrete.com](http://www.laticrete.com). The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 230.15: LATICRETE 15 Year System  
Warranty – For Steel or Wood Framed Exterior  
Facades (United States and Canada)
- DS 025.0: LATICRETE 25 Year System  
Warranty (United States and Canada)\*\*
- DS 228.0: MVIS Pointing Mortar
- DS 273.0: MVIS Epoxy Pointing Mortar
- DS 274.0: MVIS Premium Pointing Mortar
- DS 633.0: LATAPOXY 300 Adhesive
- DS 661.0: Air & Water Barrier

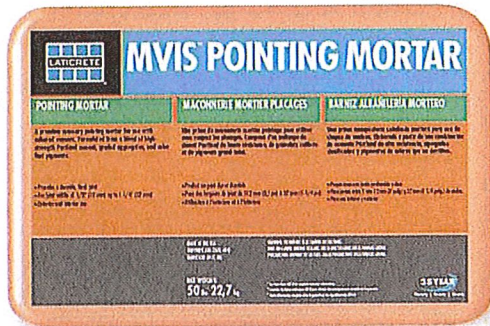
\*\* When used as a component of the LATICRETE® 25 Year System Warranty (United States and Canada) (DS 025.0)



# MVIS™ Pointing Mortar

DS-228.0-1215

Globally Proven  
Construction Solutions



\* LATICRETE makes no guarantee on color match to our grout color card and color tools. This process/method can be used to create a colored adhesive mortar to facilitate the installation of stacked stone or other finishes to create a colored adhesive mortar when pointing/grouting mortar is not utilized. Do not use colored adhesive mortar as a substitute for pointing/grouting mortar. Always conduct a test area to validate performance and results.

### Available in the following grout colors:

- 46 Quarry Red
- 24 Natural Grey
- 44 Bright White
- 45 Raven
- 66 Chestnut Brown
- 38 River Rock
- 40 Latte
- 39 Mushroom
- 58 Terra Cotta

### Packaging

50 lb (22.7 kg) bag

### Coverage

Due to varying stone dimensions and mortar joint width, it is difficult to accurately calculate coverage. Approximate coverage of 700–750 linear ft (213–229 linear m) with 3/8 in (9 mm) wide by 1/4 in (6 mm) deep joint.

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year\* if stored off the ground in a dry area.

\* High humidity will reduce the shelf life of bagged product.

### Limitations

- Adhesives/mastics, mortars and pointing mortar for stone, manufactured masonry veneer, pavers, brick and concrete tiles are not replacements for waterproof membranes or air and water barrier. When a waterproofing membrane or an air and water barriers is required, use MVIS Air & Water Barrier (see Section 10 FILING SYSTEMS).
- Do not use acid to clean finished mortar joints.
- Job site conditions may affect the final color of pointing mortar. Try a small test area to determine your results before pointing entire installation.
- Certain types of finishes are more absorbent than others and may trap color pigment during pointing.
- Prior to pointing, test for absorption of color pigment. Porous stone or tiles will need to be sealed prior to pointing.

## 1. PRODUCT NAME

MVIS™ Pointing Mortar

## 2. MANUFACTURER

LATICRETE International, Inc.  
 1 LATICRETE Park North  
 Bethany, CT 06524-3423 USA  
 Telephone: +1.203.393.0010, ext. 235  
 Toll Free: 1.800.243.4788, ext. 235  
 Fax: +1.203.393.1684  
 Internet: [www.laticrete.com](http://www.laticrete.com)

## 3. PRODUCT DESCRIPTION

MVIS Pointing Mortar is for adhered stone, thin brick and manufactured masonry veneers. Factory prepared and designed to be mixed with water. Formulated from a blend of high strength portland cement, graded aggregates, and color-fast pigments. Provides a joint that is dense, hard and durable.

### Uses

- For mortar joint widths of 3/16" (5 mm) up to 1-1/4" (32 mm)

### Advantages

- Designed for exterior and interior use—ideal for both heavy duty use and for long lasting beauty
- Colors are specially blended to be uniform in color
- Part of a complete LATICRETE® system that includes materials for every aspect of a stone thin brick, manufactured stone, or tile installation to ensure quality and long lasting performance

LATICRETE PERMACOLOR® Select Color Kits can be mixed with MVIS Pointing Mortar. We recommend using #44 Bright White color only to obtain a similar color match. Use 1 Color Kit (2 packets) per 25 lb (11.3 kg) bag or 2 Color Kits (4 packets) per 50 lb (22.7 kg) bag.

- Unique color options are now available in all LATICRETE® colors when mixed with LATICRETE PERMACOLOR Select Color Kits.\*

## Cautions

Consult SDS for more safety information

- During cold weather, protect finished work from traffic until fully cured.
- Protect fresh pointing from rain. Allow mortar to cure for a minimum of 72 hours at 70°F (21°C) before exposing to rain.
- Contains portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

## 4. TECHNICAL DATA

### Applicable Standard

ASTM C 91 Standard Specification for Masonry Cement.

### Physical Properties

ASTM C91 Compressive Strength	3000–3500 psi (20.7–24.1 MPa)
-------------------------------	-------------------------------

### Working Properties

MVIS™ Pointing Mortar mixed with Water at 70°F (21°C)

Pot Life	90 Minutes
Density	16.7 lb/gal (2.01 g/cc)

Specifications are subject to change without notification. Technical data shown in product data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to critical job site factors. All recommendations, statements and technical data contained in this data sheet are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind. Satisfactory results depend upon many factors beyond the control of LATICRETE International, Inc. User shall rely on their own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from their direct use, indirect use or consequential to their use of the product. LATICRETE shall not be liable to the buyer or any third party for any injury, loss or damage directly or indirectly resulting from use or inability to use the product.

## 5. INSTALLATION

### Surface Preparation

Before starting to point, remove spacers and debris in joints and remove dust and dirt using a damp sponge. Do not leave water standing in joints. Substrate temperature must be between 40°F (4°C) and 90°F (32°C). Apply grout release or sealer if necessary.

### Mixing

Use approximately 4–5 qts (3.8–4.7 L) of clean potable water for 50 lbs (22.7 kg) of MVIS Masonry Pointing Mortar. Place water in a clean mixing container and add mortar slowly. Mix by hand or with a slow speed mixer to a smooth flowable consistency. Allow mortar to slake for 5 minutes. Remix mortar.

### Mixing with LATICRETE® PERMACOLOR® Select Color Kits

Dependent upon weight of MVIS mortar, use 1 PERMACOLOR Select Color Kit (2 packets) per 25 lb (11.3 kg) bag or 2 PERMACOLOR Select Color Kits (4 packets) per 50 lb (22.7 kg) bag.

Place water in a clean mixing container. Remove color packets from the cardboard container as well as the protective plastic sleeve. The internal bag is a water dispersible pack, drop all color packets directly in to water in clean mixing container. Mix with a drill mixer until all

pigment is dispersed evenly in container and the dispersible packets are no longer visible.

Add MVIS Pointing Mortar and mix as directed above. Please note that additional water may be necessary when using PERMACOLOR Select Color Kits.

### Application

Dampen surface with water. Use either a trowel and tuck pointing tool or a mortar bag to place mortar. Once applied allow to firm to "thumbprint" hardness, trowel, rake and/or brush to the desired finish.

### SELECTING OTHER GROUT MATERIALS

For joints up to 1/2" (12 mm) you may also use MVIS Premium Pointing Mortar.

## 6. AVAILABILITY AND COST

### Availability

LATICRETE® and LATAPOXY® materials are available worldwide.

### For Distributor Information, Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at [www.laticrete.com](http://www.laticrete.com).

### Cost

Contact a LATICRETE/LATAPOXY Distributor in your area.

## 7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty (United States and Canada)

A component of:

DS 230.15SPD: LATICRETE 15 Year Tile & Stone System Warranty – MVIS - For Steel or Wood Framed Exterior Facades (United States and Canada)

DS 025.0SPD: LATICRETE 25 Year Tile & Stone System Warranty – MVIS (United States and Canada)

## 8. MAINTENANCE

MVIS Pointing Mortar requires routine cleaning with a neutral pH soap and water.

## 9. TECHNICAL SERVICES

### Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.293.1948

### Technical and Safety Literature

To acquire technical and safety literature, please visit our website at [www.laticrete.com](http://www.laticrete.com).

## 10. FILING SYSTEM

Additional product information is available on our website at [www.laticrete.com](http://www.laticrete.com). The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty (United States and Canada)
- DS 230.15SPD: LATICRETE 15 Year System Warranty - For Steel or Wood Framed Exterior Facades (United States and Canada)
- DS 025.0SPD: LATICRETE 25 Year System Warranty (United States and Canada)
- DS 273.0: MVIS Epoxy Pointing Mortar
- DS 274.0: MVIS Premium Pointing Mortar
- DS 661.0: MVIS Air & Water Barrier

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LATICRETE International, Inc.  
One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • [www.laticrete.com](http://www.laticrete.com)

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# LATAPOXY® 310 Stone Adhesive

DS-679.0-0314

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

LATAPOXY® 310 Stone Adhesive

## 2. MANUFACTURER

LATICRETE International, Inc.

1 LATICRETE Park North

Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 235

Toll Free: 1.800.243.4788, ext. 235

Fax: +1.203.393.1684

Internet: [www.laticrete.com](http://www.laticrete.com)

## 3. PRODUCT DESCRIPTION

LATAPOXY 310 Stone Adhesive is a two component, high strength epoxy adhesive, which is formulated for the spot bonding method of tile and stone installations on vertical surfaces. LATAPOXY 310 Stone Adhesive maintains its non-sag consistency at high temperatures up to 95°F (35°C).

### Uses

- Spot bonding marble, granite, adhered masonry veneer and large format ceramic tile on walls and overhangs, interior or exterior applications
- Ideal for fireplace surrounds, elevators and stair risers
- Adhesive for bedding and fastening marble, granite and other stone slabs on walls and wainscoting
- Adhesive for fabricating granite, marble and other stone
- Approved by TCNA for Interior applications method W215 and W260

### Advantages

- Fast Permanent Bond—45 minutes to 1 hour set time
- Easy to Use—1:1 mixing ratio by volume
- Non-Staining—ideal for white and light colored marbles, other stones and tiles
- Withstands shock and vibration

- Durable permanent bond, will not deteriorate over time
- Safe—no solvents
- Non-Sag—when applied up to 1" (25 mm) thick
- Rapid version is available; 5–8 minute set up
- Approved by the following building code bodies for exterior installations: ICC, IBC
- Conforms to EN 12004 and ISO 13007 with a classification of R2T

### Acceptable Substrates

Please contact LATICRETE Technical Services at 1.800.243.4788, ext. 235 for specific installation details.

### Interior Substrates

- Concrete
- Concrete masonry units (CMU)
- Brick/masonry
- Exterior glue plywood
- Cement backer board\*
- Steel\*\*

\* Consult cement backer board manufacturer for specific installation recommendations.

\*\*Steel surface must be cleaned to remove oil, dust oxidation and other bond inhibiting materials.

### Exterior Substrates

Please consult LATICRETE Technical Services at 1.800.243.4788, ext. 235 for approval prior to use for all exterior applications. There is a maximum height restriction of 30 ft (9.1 m). For exterior installations outside of North America, contact the LATICRETE International, Inc. International Department at 1.800.243.4788, ext. 230.

- Concrete
  - Must be minimum 6" (150 mm) thick reinforced
  - Must be minimum 3500 psi (24 MPa)
  - Must be minimum 28 days old prior to installation
- CMU
  - Double wythe walls only

### Packaging

- Mini unit 2 gal (8 ℓ) kit containing the following:
  - 8 mini jars of Part A .13 gal (.5 ℓ)
  - 8 mini jars of Part B .13 gal (.5 ℓ)
- Full unit 2.6 gal (10 ℓ) kit containing the following:
  - 1.3 gal (5 ℓ) Part A pail
  - 1.3 gal (5 ℓ) Part B pail
- Cartridge packs—2.3 gal (9 ℓ) containing the following:
  - 15 cartridge packs of Part A and Part B(For use in LATAPOXY 310 Cordless Mixer)

- Commercial unit 5.2 gal (20 ℓ) containing the following:
  - 2.6 gal (10 ℓ) Part A pail
  - 2.6 gal (10 ℓ) Part B pail

#### Cartridge Pack Coverage

One carton (15 cartridges) will yield approximately 150 ft<sup>2</sup> (14 m<sup>2</sup>) with 1/4" (6 mm) thick dabs, or 300 ft<sup>2</sup> (27 m<sup>2</sup>) with 1/8" (3 mm) thick dabs when covering 10% of the veneer surface.

#### Coverage

The coverage for LATAPOXY® 310 Stone Adhesive will vary depending upon the amount of product required to plumb the wall. The chart below is based on 10% coverage of the area of each tile or stone piece.

Average Inches (or millimeters) Out of Plumb	LATAPOXY® 310 Thickness	Approx. Coverage/ 10 Liter Unit
Plumb Wall	1/8" Thick (3 mm)	300–325 ft <sup>2</sup> (27–30 m <sup>2</sup> )
1/4" (6 mm)	1/4" Thick (6 mm)	150–170 ft <sup>2</sup> (14–16 m <sup>2</sup> )
1/2" (12 mm)	1/2" Thick (12 mm)	75–80 ft <sup>2</sup> (7–7.5 m <sup>2</sup> )

#### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at >32°F (>0°C) to <110°F (<43°C).

#### Limitations

- Surface temperature for application: 50°F (10°C)—95°F (35°C). For exterior applications, contact Technical Services at 1.800.243.4788, ext. 235 or support@laticrete.com for approval prior to use.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Sandstone, slate and fissile stones are not recommended veneers and should not be used with LATAPOXY 310 Rapid Stone Adhesive. These stones and other porous stones may delaminate or break apart due to the nature of their porous and layered composition.
- DO NOT bond to particle board fire-retardant plywood, marine grade plywood, luan, Masonite® any chemically treated plywood, or hardwood surfaces.

*Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or, L/480 for thin bed stone installations or L/600 for exterior veneers where L=span length (except where local building codes specify more stringent deflection requirements)*

#### Cautions

Consult MSDS for more safety information.

- Keep out of reach of children.
- LATAPOXY 310 Stone Adhesive has a slight, non-hazardous odor.
- During cold weather, protect finished work from traffic until fully cured.
- LATAPOXY 310 Stone Adhesive Part A is corrosive to eyes and skin before curing. Avoid contact with eyes and or prolonged

contact with skin. In case of contact, flush thoroughly with water.

- Consult local building code for requirements.

## 4. TECHNICAL DATA

### Applicable Standards

ANSI A118.3, EN 12004 and ISO 13007

### Physical Properties

#### LATAPOXY 310 Stone Adhesive

Test	Test Method	Results
Consistency	LATICRETE in house	No sag in thickness to 1 inch (25 mm)
Pot Life at 72°F (20°C)	LATICRETE in house	30–45 minutes
Set Time at 72°F (20°C)	LATICRETE in house	5–6 hours
Shear Bond Strength Marble to Concrete	ANSI A118.3–5.5 <sup>A</sup>	730–920 psi (5–6.3 MPa)
Compressive Strength	ANSI A118.3–5.6	8300–8450 psi (57–58 MPa)
Tensile Strength	ANSI A118.3–5.7	1500–2100 psi (10.3–14.5 MPa)
Thermal Shock	ANSI A118.3–5.8 <sup>AA</sup>	1030–1600 psi (7–11 MPa)

<sup>A</sup> modified test method

<sup>AA</sup> tile modified to porcelain tile

Test	Test Method	ISO 13007-1 R2 Specification	Results
7 day cure shear adhesive strength	ISO 13007-2 4.3.4	2 MPa (290 psi)	18 – 33 MPa (2610–4785 psi)
7 day cure 21 day water immersion shear adhesive strength	ISO 13007-2 4.3.5	2 MPa (290 psi)	14–34 MPa (2030–4930 psi)
7 day cure 4 100°C boiling water cycles shear adhesive strength	ISO 13007-2 4.3.8	2 MPa (290 psi)	22–36 MPa (3190–5220 psi)
Open time after 20 minutes	ISO 13007-2 4.1	0.5 MPa (73 psi)	2.8–3.8 MPa (406–551 psi)
Slip	ISO 13007-2 4.2	Less than or equal to 0.5 mm (0.02 in)	0.1–0.3 mm (0.0039–0.012 in)
Transverse deformation	ISO 13007-2 4.5	Greater than or equal to 2.5 mm (0.1 in) and less than 5 mm (0.2 in)	3.2–3.6 mm (0.13–0.14 in.)

LATAPOXY® 310 Stone Adhesive is ISO 13007-1 R2T

## Working Properties

### LATAPOXY® 310 Stone Adhesive

Consistency	No Sag in Thickness to 1" (25 mm)
Pot Life @ 72°F (20°C)	30-45 minutes
Set Time @ 72°F (20°C)	5-6 hours

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

## Temperature Effects

### LATAPOXY 310 Stone Adhesive

Temperature	Pot Life	Set Time
40°F (4°C)	100 minutes	10 hours
70°F (21°C)	45 minutes	5-6 hours
90°F (32°C)	25 minutes	2.5-3 hours

## 5. INSTALLATION

### Preparation

Store resins at room temperature (>70°F [>21°C]) for 24 hours before using. All surfaces must be sound, clean, and free of oil, waxes, frost, curing agents, form release agents or other bond inhibiting contaminants. All substrates must be clean and dry when application of LATAPOXY 310 Stone Adhesive is made. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

Finished veneers equipped with any type of resin, mesh, epoxy or fiberglass backing must be ground down to the bare stone in those areas to receive LATAPOXY 310 Stone Adhesive.

Clean and grind back of stone at areas to receive the LATAPOXY 310 Stone Adhesive spots using a mechanical wheel grinder with a diamond wheel/blade. Remove dust with a stiff brush and wipe entire surface. Using a damp sponge (not wet), wipe the tile or stone to remove any particles or remaining dust to ensure a clean direct bond and that all ground material is removed. Wipe dry with a clean cloth, then apply LATAPOXY 310 Stone Adhesive.

### Recommended Guidelines for Spot Bonding Stone:

(Please consult your Local Code for actual code compliance)

- Stone or Interior Tile Applications
  - Thickness – units shall not exceed 2" (50mm).
  - Facial Dimensions – maximum of 720 in<sup>2</sup> (0.46m<sup>2</sup>) and no greater than 36" (915mm) along any edge or dimension.
  - Module Weight – 15 lb/ft<sup>2</sup> (73 kg/m<sup>2</sup>) unless otherwise approved by project engineer.
- Porcelain Tile (exterior)
  - Thickness – units shall not exceed 5/8" (16mm).
  - Facial Dimensions – maximum of 432 in<sup>2</sup> (0.28m<sup>2</sup>) and no greater than 24" (610mm) along any edge or dimension.
  - Module Weight – 9 lb/ft<sup>2</sup> (44.2 kg/m<sup>2</sup>) unless otherwise approved by project engineer.

*Note: Always check with the tile or stone manufacturer to make sure the tile or stone is suitable for vertical and exterior (if applicable) installations.*

### Mixing

Combine equal volumes of LATAPOXY 310 Stone Adhesive Part A and Part B (1:1 mix ratio by volume). Mix until uniform in color; no swirls. Small quantities can be mixed with a putty knife or margin trowel. Larger quantities can be mixed with an electric drill mixer (low speed). Cartridge packs are designed for use only with the LATAPOXY 310 Cordless Mixer.

### Application

Apply dabs evenly distributed on back of the stone or tile; 5 dabs minimum, 1 in each corner and 1 in center. Cover at least 10% of the area of each piece. Finished dab thickness must be a minimum of 1/8" (3 mm), maximum of 1" (25 mm).

### Approximate Dab Diameter Required to Achieve 10% Coverage With 5 Dabs:

Tile Size	Dab Diameter
12" x 12" (300 mm X 300 mm)	2" (50 mm)
24" x 24" (600 mm X 600 mm)	4" (100 mm)
36" x 36" (900 mm X 900 mm)	6" (150 mm)

After installation of LATAPOXY 310 Stone Adhesive onto the veneer, install onto substrate and adjust for plumb and level.

### Joint Treatment

#### Exterior Applications:

Use LATASIL™ to treat all joints. Refer to Data Sheet 6200.1 for further instructions.

#### Interior Applications:

The following products may be used:

- SPECTRALOCK® PRO Premium Grout
- SPECTRALOCK PRO Grout<sup>†</sup>, 1500 Sanded Grout or 1600 Unsanded Grout mixed with 1776 Grout Enhancer
- LATASIL
- PERMACOLOR® Grout<sup>†</sup>

Test area to ensure proper filling as narrow veneers and wider gaps behind the veneer may not allow for joint filling with an epoxy or cement grout.

*Note: Control, expansion or other movement of joints must be treated with a flexible sealant.*

### Cleaning

Clean tools and work while epoxy is fresh, using warm water. Detergent or soap can be added to the water for easier cleaning.

## 6. AVAILABILITY AND COST

### Availability

LATICRETE® and LATAPOXY materials are available worldwide.

### For Distributor Information, call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at [www.laticrete.com](http://www.laticrete.com).

### Cost

Contact a LATICRETE Distributor in your area.

## 7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE® Product Warranty (United States and Canada)

A component of:

DS 025.0APD: LATICRETE 25 Year Tile & Stone System Warranty (United States and Canada)

DS 025.0SPD: LATICRETE 25 Year Tile & Stone System Warranty (United States and Canada)

## 8. MAINTENANCE

LATICRETE and LATAPOXY® grouts require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

## 9. TECHNICAL SERVICES

### Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.393.1948

### Technical and Safety Literature

To acquire technical and safety literature, please visit our website at [www.laticrete.com](http://www.laticrete.com).

## 10. FILING SYSTEM

Additional product information is available on our website at [www.laticrete.com](http://www.laticrete.com). The following is a list of related documents:

DS 230.13: LATICRETE Product Warranty (United States and Canada)

DS 025.0APD: LATICRETE 25 Year Tile & Stone System Warranty (United States and Canada)

DS 025.0SPD: LATICRETE 25 Year Tile & Stone System Warranty (United States and Canada)

DS 250.0: PERMACOLOR® Grout<sup>†</sup>

DS 256.0: 1500 Sanded Grout

DS 258.0: 1600 Unsanded Grout

DS 265.0: 1776 Grout Enhancer

DS 679.3: LATAPOXY 310 Rapid Stone Adhesive

DS 681.0: SPECTRALOCK® PRO Premium Grout<sup>†</sup>

DS 683.0: LATAPOXY 310 Cordless Mixer

DS 685.0: SPECTRALOCK PRO Grout<sup>†</sup>

DS 6200.1: LATASIL™

<sup>†</sup> United States Invention Patent No.: 6881768 (and other Patents).

<sup>^</sup> United States Invention Patent No.: 6784229 (and other Patents)

LATICRETE International, Inc.  
One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • [www.laticrete.com](http://www.laticrete.com)

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**RECEIVED**

By Marsha Leed at 4:23 pm, Jul 07, 2016

**KSQ SUBMITTAL #033000-002-02**

BID ISSUE

YORKTOWN CENTRAL SCHOOL DISTRICT  
DISTRICT-WIDE IMPROVEMENTS 2016  
KSQ ARCHITECTS PROJECT NO. 1510404.00

**SUBMITTAL COVERSHEET**

**No:** \_\_\_\_\_

**Yorktown CSD – District Wide Improvements - 2016**

**Architect:**  
KSQ Architects

**Construction Manager:**  
Arris Contracting Company, Inc.

**Owner:**  
YCSO

**Contractor:** Renu Contracting & Restoration  
**Address:** 99 Fulton Street 2nd Floor  
White Plains, NY 10606

**Contract:** \_\_\_\_\_  
**Telephone:** 914.684.1970  
**Fax:** 914.684.1971

**School Name:** \_\_\_\_\_

**Type of Submittal:**

- Shop Drawings
- Product Data
- Schedule
- Test Report
- Certificate
- Color Sample

**Re-submittal:**  No  Yes

- Sample
- Warranty

**Submittal Description:**

**Product Name:** Rebar Reinforcement Drawings

**Manufacturer:** \_\_\_\_\_

**Subcontractor/Supplier:** \_\_\_\_\_

**References:**

**Spec. Section No:** 033000

**Drawing No(s):** \_\_\_\_\_

**Paragraph:** \_\_\_\_\_

**Rm. or Detail No(s):** \_\_\_\_\_

**Architect's Review Stamp**

**SPRING LINE DESIGN  
ARCHITECTURE & ENGINEERING**

Approved       Approved as Corrected  
 Rejected       Revise and Resubmit  
 Submit Record Copy       Submit Indicated Item

This review is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of the item as a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work of all trades; and for performing all work in a safe and satisfactory manner.

Date 2016-07-08 By David Abramo

Sheet C04 Approved as Corrected. All other sheets not reviewed by SLD.

**Contractor Review Stamp**

CONTRACTOR REVIEW STAMP

**RENU** CONTRACTING • RESTORATION  
CONSTRUCTION MANAGEMENT

KSQ Architects, PC 7/7/2016  
235 Main Street Suite 410  
White Plains, NY 10601

No Exceptions Taken       Revise and Resubmit  
 Make Corrections Noted       Rejected  
 Submit Specified Item

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work of all trades; and for performing all work in a safe and satisfactory manner.

**SEE CORRECTIONS TO  
DRAWING C-01**

---

Remarks:

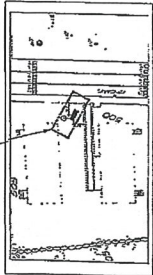
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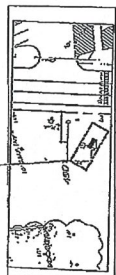
**BILL OF MATERIALS**

ITEM	QTY	SIZE	DESCRIPTION	LEG - A	LEG - B
C2-A	4	#5	STRAIGHT BAR	5'-6"	
C2-B	4	#5	L BAR	2'-8"	0'-7"

SUPPORT SERVICES  
SIGN FOOTING PLAN - 2A



CENTRAL ADMINISTRATION  
SIGN FOOTING PLAN - 2B



**ENLARGED SITE PLANS**  
(REF. YH-C102)



REV	DATE	BY	DESCRIPTION
0			
A			

Project Name: **Yorktown High School**  
212 Glenwood Rd., Yorktown Heights, NY 10598

ARCHIT: ISSO ARCHITECTS, PC New York, NY 10001

OWNER: Spring Line Design, East Greenbush, NY 12061

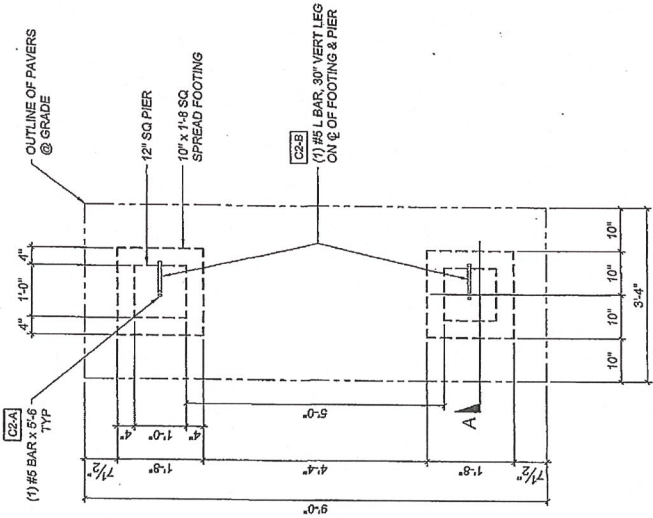
Contractor: **ARRIS Contracting Co.**

Drawn By: [Blank]

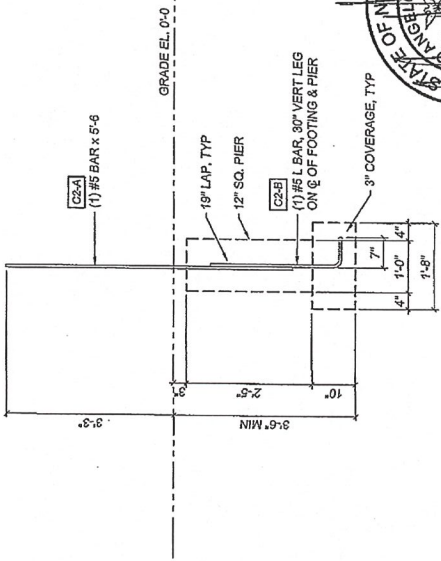
Checked By: [Blank]

Scale: [Blank]

PKN	DSS	DATE	REV.
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**SIGN FOOTING PLANS - 2A & 2B**  
(SUPPORT SERVICES & CENTRAL ADMINISTRATION SIGNS)



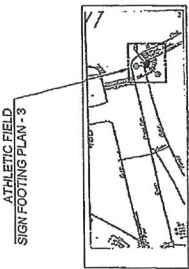
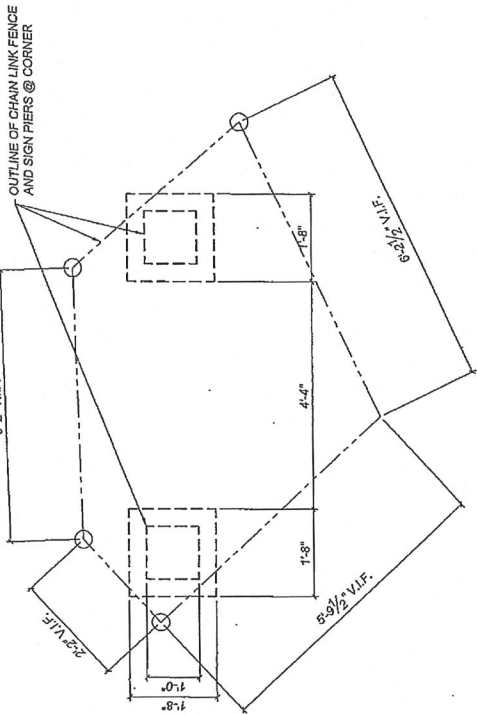
**FOOTING SECTION - A**



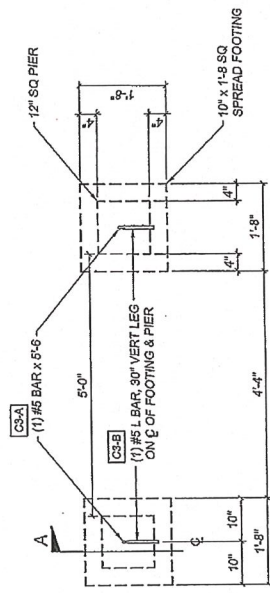
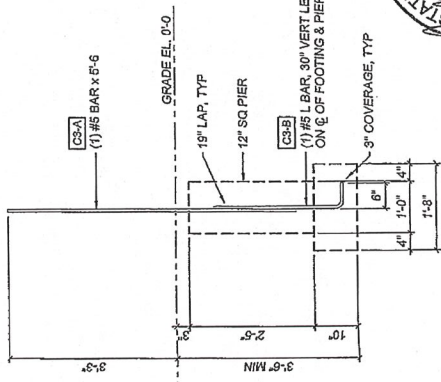


**BILL OF MATERIALS**

ITEM	QTY	SIZE	DESCRIPTION	LEG - A	LEG - B
CS-A	2	#5	STRAIGHT BAR	5'-6"	0'-6"
CS-B	2	#5	L BAR	2'-6"	0'-6"



**ENLARGED SITE PLAN**  
(REF. YH-C103)



**ATHLETIC FIELD SIGN FOOTING PLAN - 3**

REV	DATE	BY	DESCRIPTION
0			
A			

PROJECT NAME: **Mildred E. Strang Middle School**  
 2701 Conquest Rd., Yonkers Heights, NY 10588  
 ARCHT: **KSQ ARCHITECTS, P.C.** New York, NY 10801  
 ENGINEER: **Spring Line Design, East Greenbush, NY 12061**  
 CONTRACTOR: **ARRIS Contracting Co.**  
 DRAWN BY: **PCN**  
 CHECKED BY: **DSS**  
 89 Fallon St., Unit #2  
 White Plains, NY 10606  
 (914) 684-1970  
 STATE OF NEW YORK  
 PROFESSIONAL ENGINEER  
 No. 16192  
 Exp. 03/31/10  
 No. C03  
 No. 0

