

9/20/22

**NOTICE OF DENIAL**

Tanya Yono  
6557 Twindale Ct.  
Shelby Township, MI 48316

**RE: Application Number 22-8010; 4700 Third Ave.; Warren-Prentis Historic District**

Dear Applicant,

At the Regular Meeting that was held on August 10, 2022, the Detroit Historic District Commission (“DHDC”) reviewed the above-referenced application. Pursuant to Section 5(1) and 9(1) of the Michigan Local Historic District Act, as amended, being MCL 399.205 (1), MCL 399.209 (9) and Sections 21-2-78 and 21-2-80 of the 2019 Detroit City Code; the DHDC hereby issues a Denial for the following work, effective on August 16, 2022, as it will be inappropriate according to the Secretary of Interior’s Standards for Rehabilitation and the district’s Elements of Design:

- *The replacement of limestone pilasters with rough-cut limestone pilasters*

The reasons for the denial are a failure to meet the following specific Standards or Elements:

- 2) *The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.*
- 5) *Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.*
- 6) *Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.*

The application may be resubmitted for the Historic District Commission's review when suggested changes have been made that address the cited reasons for denial, if applicable.

Please be advised that, in accordance with MCL 399. 211 and Section 21-2-81 of the 2019 Detroit City Code, an applicant aggrieved by a decision of the DHDC may file an appeal with the State Historic Preservation Review Board. Within sixty (60) days of your receipt of this notice, an appeal may be filed with:

Jon Stuckey, Michigan Department of Attorney General  
2<sup>nd</sup> Floor, G. Mennen Williams Building  
525 West Ottawa Street  
P.O. Box 30754  
Lansing, MI 48909  
Phone: 517-335-0665  
E-mail: stuckeyj@michigan.gov

If you have any questions regarding the foregoing, please contact staff at 313-224-1762 or hdc@detroitmi.gov.  
For the Commission:



Daniel Rieden  
Detroit Historic District Commission

# DHDC 22-8010

## APPROVAL DOCUMENT – POST AT WORK LOCATION

CITY OF DETROIT  
HISTORIC DISTRICT COMMISSION

2 WOODWARD, SUITE 808  
DETROIT, MICHIGAN 48226

9/20/22

### CERTIFICATE OF APPROPRIATENESS

Tanya Yono  
6557 Twindale Ct.  
Shelby Township, MI 48316

**RE: Application Number 22-8010; 4700 Third Ave.; Warren-Prentis Historic District**

Dear Applicant,

At the Regular Meeting that was held on September 14, 2022, the Detroit Historic District Commission (“DHDC”) reviewed the above-referenced application. Pursuant to Section 5(1) of the Michigan Local Historic District Act, as amended, being MCL 399.205 (1) and Sections 21-2-73/21-2-78 of the 2019 Detroit City Code; the DHDC hereby issues a Certificate of Appropriateness (“COA”) for the following work, effective on September 20, 2022, as it meets the Secretary of Interior’s Standards for Rehabilitation and the district’s Elements of Design:

- *Install brick walls per the attached drawings and detail descriptions*
- *Remove existing peeling paint on Forest Ave. wall and repaint reddish, brown to match*
- *Replacement of entry doors and the installation of security shutters per the attached drawings and detail descriptions*

Please retain this COA for your files and post it at the subject property until work is complete. It is important to note that approval by the DHDC does not waive the applicant's responsibility to comply with any other applicable ordinances or statutes. If you have any questions regarding the foregoing, please contact staff at 313-224-1762 or [hdc@detroitmi.gov](mailto:hdc@detroitmi.gov).

For the Commission:



Daniel Rieden  
Detroit Historic District Commission

- Remove two non-historic entry doors at storefront & replace with two non-historic entry doors
- Remove three failing security shutters & replace with three security rolling shutters above door entry & window
- Remove failing Limestone pilasters along 3<sup>rd</sup> Street wall & Forest Ave wall with Limestone – Indiana Split Limestone
- Remove peeling paint along Forest Ave wall & repaint reddish brown to match
- Rebuild 2 collapsed walls on Forest Ave with Brick/Limestone and Herring Bone Pattern Brick to match existing.

#### Description of existing conditions:

In the beginning of June 2022, we had significant storm damage, and it lifted our overhang and pulled away from the building. Pieces of the building had fallen, and we needed to remove it. There was panel brick attached to plywood that was not secure. For safety measures, we secured the sidewalk area. The pilasters on Forest side were buckled as was the brick above. Two of the walls on Forest side were face/panel brick that were crumbling, cracked, buckled, and leaning. I had rotten fascia & rotten wood siding. These photos show pilasters popping out of the wall, the TOPS of the pilasters were removed & never put back by previous mason and I have no idea what he did with them. There was an opening at the top as shown in some pics attached. The pilasters coming out of the walls were happening on third street wall as well as forest Ave. wall.

The pilasters posed a dangerous and hazardous environment as you can see from the pictures.

As the mason I hired for this job in July 2022 removed them from Third Street wall, one broke, one fell and broke, one was cracked already, and we were not able to restore them. We were not able to re-store because the materials were not available due to the Pandemic and Supply Chain Management shortage. The composition of them was limestone. In addition, the pilasters on Forest Ave, you can see was buckling, and was damaged. There were two more on the Forest side that we matched with the same material. We would have repaired to previous conditions but the material was not available nor was distribution taking place in this material industry area.

On Forest side, I had paint peeling, crackling, graffiti, and discoloration. By the non-historic entry doors which were already in place, I had 2 heavy steel security shutters that were detaching from the building as was the steel shutter above the window (forest side), The wood where the shutters were located, was not able to handle the weight of the shutters and you could see that it had cracked and pulled away where the screws attached holding them to the building.

The non-historic window had fog/condensation between the tempered glass. The face/panel brick and frame wood by the non-historic entry doors were under rotten plywood and face/panel brick.

I had a correction order from the City of Detroit. I have attached it. The Correction Order requires repairs, corrections and other items needed to pass inspection and be able to operate legally.

Our entire focus has been to secure the safety of the environment, residents and customers. We even shut down our business for 1 month in order to secure the safety, health and well being of our residents, customers and neighbors.

**From:** [Tanya Yono](#)  
**To:** [Dan Rieden](#)  
**Subject:** [EXTERNAL] Re: 4700 Third - September 14th Historic District Commission Meeting  
**Date:** Wednesday, August 31, 2022 1:34:02 PM  
**Attachments:** [Security shutter proposed color.png](#)

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**This Message Is From an External Sender**

ATTENTION: This email was sent from an external source. Please be extra cautious when opening attachments or clicking links.

Hi Dan,

Yes, I remember. Thank you for assisting me with the application.

I am going to respond to the questions below.

Some of the limestone band is inconsistent with its materiality. I believe the part you are asking about is on the Third ave street. The band at the top section under the herringbone. I don't know why it's different, that was untouched by my mason.

There are some photos in the application that show a wood frame with a wood siding. What is this photo of? I had wood frame where the overhang was and then also the section of wall east of that going east down Forest. We do not have labels provided for these photos, so we do not know the contents of some of these photos. Please provide labels for the photos that are not obvious (close-up images). Ok, I have attached it here with a label.

Please provide the color and selected style/design for the proposed security shutters. The brochure you provided doesn't identify which choice you're proposing. The shutter style we propose is a solid shutter and the color is dark bronze. I attached a sample of it.

**From:** [Tanya Yono](#)  
**To:** [Dan Rieden](#)  
**Subject:** [EXTERNAL] Re: 4700 Third - September 14th Historic District Commission Meeting  
**Date:** Wednesday, August 31, 2022 1:43:16 PM  
**Attachments:** [Security shutter proposed color.png](#)

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**This Message Is From an External Sender**

ATTENTION: This email was sent from an external source. Please be extra cautious when opening attachments or clicking links.

I meant to write this in my description when answering question #3

Here is a better description of the security shutters we propose

The color is bronze. (Made to go with commercial door bronze)

The style is AL-7 commercial extruded aluminum. Small box design

On Tuesday, August 30, 2022, 05:38:59 PM EDT, Dan Rieden <riedenda@detroitmi.gov> wrote:

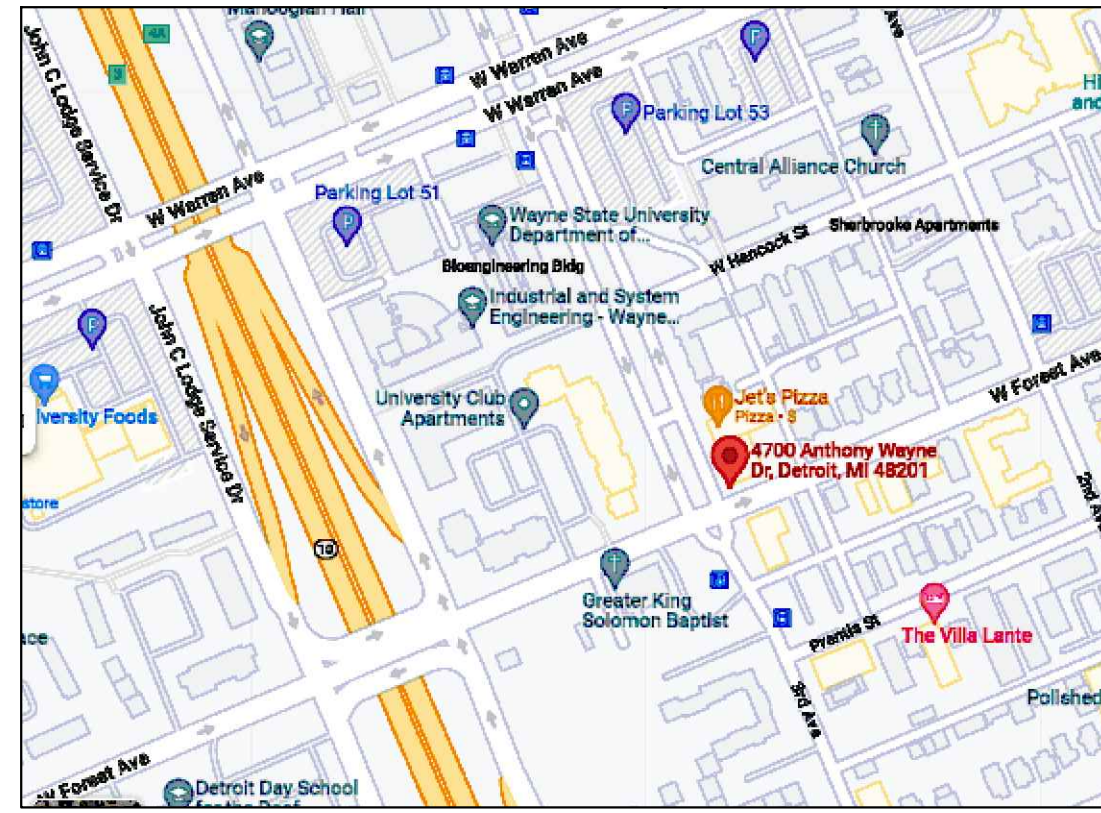
Dear Ms. Yono,

I would like to introduce myself, so you have my information available. You may recall we met on site earlier this summer in person. I will be working with you to help bring your application to full completion before the HDC meeting. Please note that staff is working partially from home, so please reach me by this email.

Upon initial review of your application, I have the following questions. It would be very helpful to have the answer to the first question by end of Friday, September 2<sup>nd</sup>:

1. Some of the limestone band is inconsistent with its materiality. Can you explain why?
2. There are some photos in the application that show a wood frame with a wood siding. What is this photo of? We do not have labels provided for these photos, so we do not know the contents of some of these photos. Please provide labels for the photos that are not obvious (close-up images).
3. Please provide the color and selected style/design for the proposed security shutters. The brochure you provided doesn't identify which choice you're proposing.

Thank you,



**- LOCATION MAP -**  
SCALE: NONE



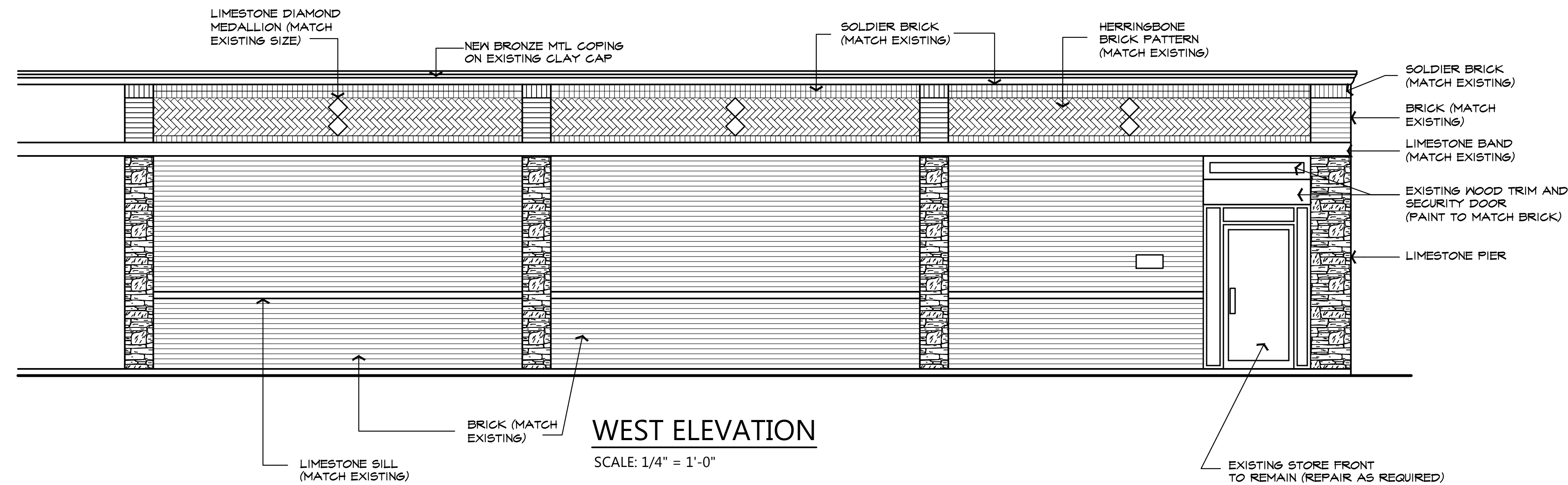
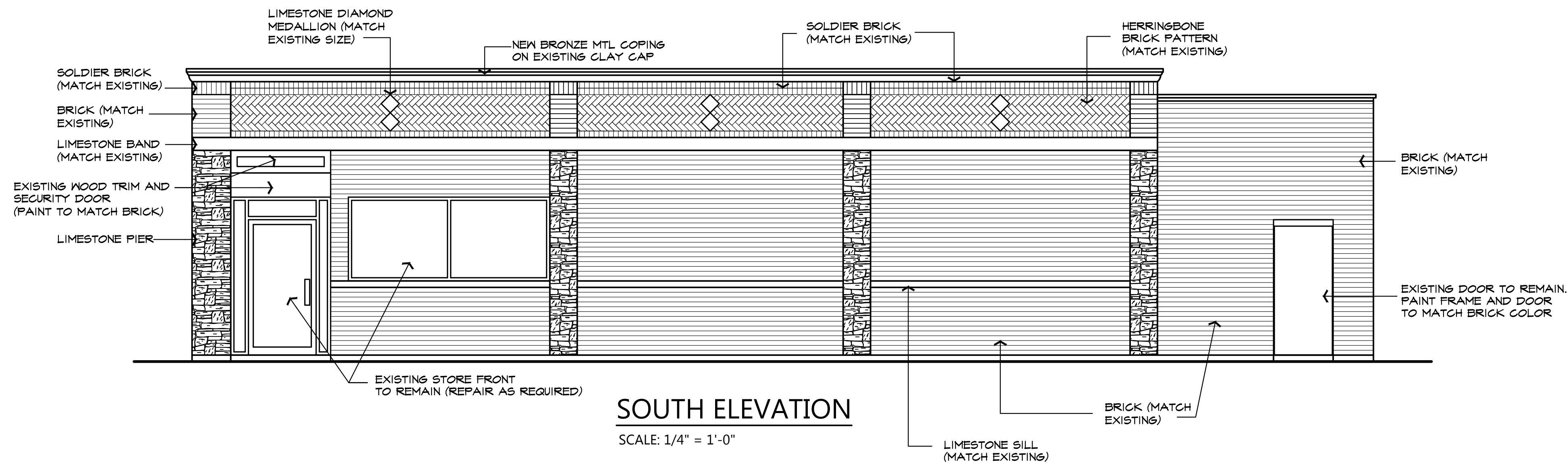
**GENERAL PROJECT NOTES:**

1. THE CONTRACT DOCUMENTS ARE PREPARED FOR THE CONTRACTOR TO BECOME FAMILIAR WITH THE SCOPE OF WORK AND PROPOSED DESIGN CONCEPT.
2. DO NOT SCALE THE CONTRACT DOCUMENTS. DIMENSIONS AS INDICATED SHALL GOVERN.
3. CONTRACTORS SHALL WARRANT THEIR RESPECTIVE CONSTRUCTION AND WORK TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS IF ALL LOCAL, STATE, AND FEDERAL LAWS, AUTHORITIES HAVING JURISDICTION, AND MANUFACTURER'S INSTALLATION AND WARRANTY REQUIREMENTS.
4. CONTRACTORS SHALL PROVIDE ALL REQUIRED LABOR AND MATERIALS TO ACHIEVE INDUSTRY STANDARD OF MEANS AND METHODS TO ACHIEVE THE DESIGN INTENT OF THE CONTRACT DOCUMENTS REGARDLESS WHETHER OR NOT DOCUMENTED HEREIN. CONSIDERATIONS FOR ADDITIONAL LABOR OR MATERIAL COSTS ON THE BASIS OF OMISSIONS SHALL NOT BE GRANTED.
5. INTERPRETATIONS, CLARIFICATIONS, CHANGES, DELETIONS, AND RELATED MODIFICATIONS TO THE CONTRACT DOCUMENTS SHALL BE SOLELY BY THE ARCHITECT EITHER BY ISSUANCE OF A CONSTRUCTION CHANGE DIRECTIVE OR ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO VERIFY ALL FIELD CONDITIONS PRIOR TO SUBMITTING PROJECT BIDS, ORDERING MATERIALS, GENERATING SHOP DRAWINGS AND SUBMITTALS, AND START OF WORK. THE ARCHITECT SHALL NOT BE HELD LIABLE FOR UN-VERIFIED FIELD CONDITIONS.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES, DIFFERENCES, OR ABNORMALITIES WITH THE FIELD CONDITIONS AGAINST THOSE AS DOCUMENTED IN THE CONSTRUCTION DOCUMENTS. IN A TIMELY FASHION, THE CONTRACTOR SHALL BE HELD LIABLE FOR FAILURE TO REPORT ITEMS TO THE ARCHITECT AND RESPONSIBLE FOR CONSTRUCTION COSTS AND APPLICABLE FEES TO REMEDY CONFLICTS.
8. NO SUBSTITUTIONS, CHANGES, OR OMISSIONS FROM THE CONTRACT DOCUMENTS ARE PERMITTED. CONTRACTOR MAY REQUEST SUBSTITUTIONS, CHANGES, AND/OR OMISSIONS IN WRITING BY THE ARCHITECT.
9. CLARIFICATIONS TO THE DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT FOR REVIEW AND RESPONSE.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE REVIEW AND COORDINATION OF WORK AS ENTAILED WITHIN THE CONTRACT DOCUMENTS, INCLUDING THOSE OF THE ARCHITECT'S CONSULTANTS. COORDINATION OF RELATED TRADE WORK SHALL INCLUDE BUT NOT BE LIMITED TO: SEQUENCING, PHASING, FIELD COORDINATION, CUTS AND OPENINGS, INSPECTIONS, AND APPROVALS.
11. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO ORDERING MATERIALS. THE ARCHITECT SHALL NOT BE HELD LIABLE FOR QUANTITIES AS NOTED ON CONTRACT DOCUMENTS.

**MASONRY WORK:**

1. ALL MASONRY WORK IS TO BE IN ACCORDANCE WITH THE LATEST BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (AI 530/ASCE5) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530/ASCE 6) AND N.C.M.A. SPECIFICATIONS.
2. THE REFERENCE MATERIAL STANDARD FOR EACH MASONRY CONSTRUCTION MATERIAL USED ON THIS PROJECT INCLUDING MASONRY UNITS, MORTAR AND METAL ACCESSORIES: MASONRY:
  - 2.1. CONCRETE BLOCK: ASTM C90-01a
  - 2.2. BRICK: ASTM C62-01
  - 2.3. MORTAR: ASTM C270-01a
  - 2.4. REINFORCEMENT: ASTM A82-01
3. BLOCK - GRADE A, LOAD BEARING UNITS ASTM C90-01a, IN ACCORD WITH CONCRETE MASONRY ASSOCIATION SPECIFICATIONS.
4. ALL MASONRY BEARING STEEL BEAMS AND LINTELS TO BEAR 2" MINIMUM ON THREE COURSES SOLID MASONRY, WITH 2 - 3/4" BOLTS EACH END, UNLESS OTHERWISE NOTED.
5. UNLESS OTHERWISE NOTED, PROVIDE 4" x 4" x 5/16" ANGLE (LLV) LINTEL FOR EACH 4" OF MASONRY FOR SPANS UP TO 5'-0" MAXIMUM.
6. ALL DOUBLE ANGLE LINTELS SHALL BE WELDED BACK TO BACK WITH A 3/16" FILLER WELD WITH MINIMUM 2 INCH STITCH WELD EVERY 8 INCHES.
7. PROVIDE INSULATION FOR ALL CMU WALLS.
8. MASONRY COMPRESSIVE STRENGTH  $f_m = 1500$  PSI MINIMUM.
9. ALL BLOCK SHALL CONFORM TO ASTM C90, TYPE I, WITH A MINIMUM UNIT NET AREA COMPRESSIVE STRENGTH OF 1900 PSI.
10. MORTAR SHALL BE TYPE "S" (1900 PSI) CONFORMING TO ASTM C-270. USE MORTAR CEMENT WHERE EXTERIOR WALLS ARE UNREINFORCED.
11. ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID.
12. MASONRY GROUT SHALL CONFORM TO ASTM C-416, WITH FEA GRAVEL AGGREGATE AND A MINIMUM STRENGTH OF 2000 PSI, BUT NOT LESS THAN SPECIFIED  $f_m$ .
13. PROVIDE HORIZONTAL WIRE TYPE REINFORCING WITH 3 GAUGE SIDE AND CROSS MEMBERS IN EVERY SECOND COURSE (16" O.C.) IN ALL MASONRY WALLS. WALLS WITH VERTICAL REINFORCING SHALL HAVE "LADDER" TYPE REINFORCING. WHERE VENEER MASONRY IS PRESENT, PROVIDE SAME WITH ADJUSTABLE VENEER TIES AT 16" O.C. STAGGERED.

**NOTE:**  
MATCH ALL NEW BRICK WITH EXISTING



www.GUMMAGROUP.net

7419 Middlebelt Road, Suite 4  
West Bloomfield, MI 48322  
(248) 865-5555 Fax (248) 865-5015

**Project:**  
**UNIVERSITY VILLAGE MARKET**

**4700 ANTHONY WAYNE DR., DETROIT, MI**

Designed R. K.

Drawn R. K.

Approved S. S. P.E.

Scale AS NOTED

**Notes**

All drawings and written material appearing herein constitute original and unpublished work of Gumma Group and may not be duplicated, used or disclosed without the written consent of Gumma Group.

Do not scale drawings. Use given dimensions only. If not shown, verify correct dimensions with Gumma Group. Contractor shall check and verify all dimensions and conditions at job site.

Project No. \_\_\_\_\_ JOB# 22-##

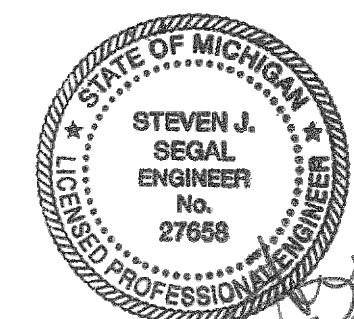
**Issued**

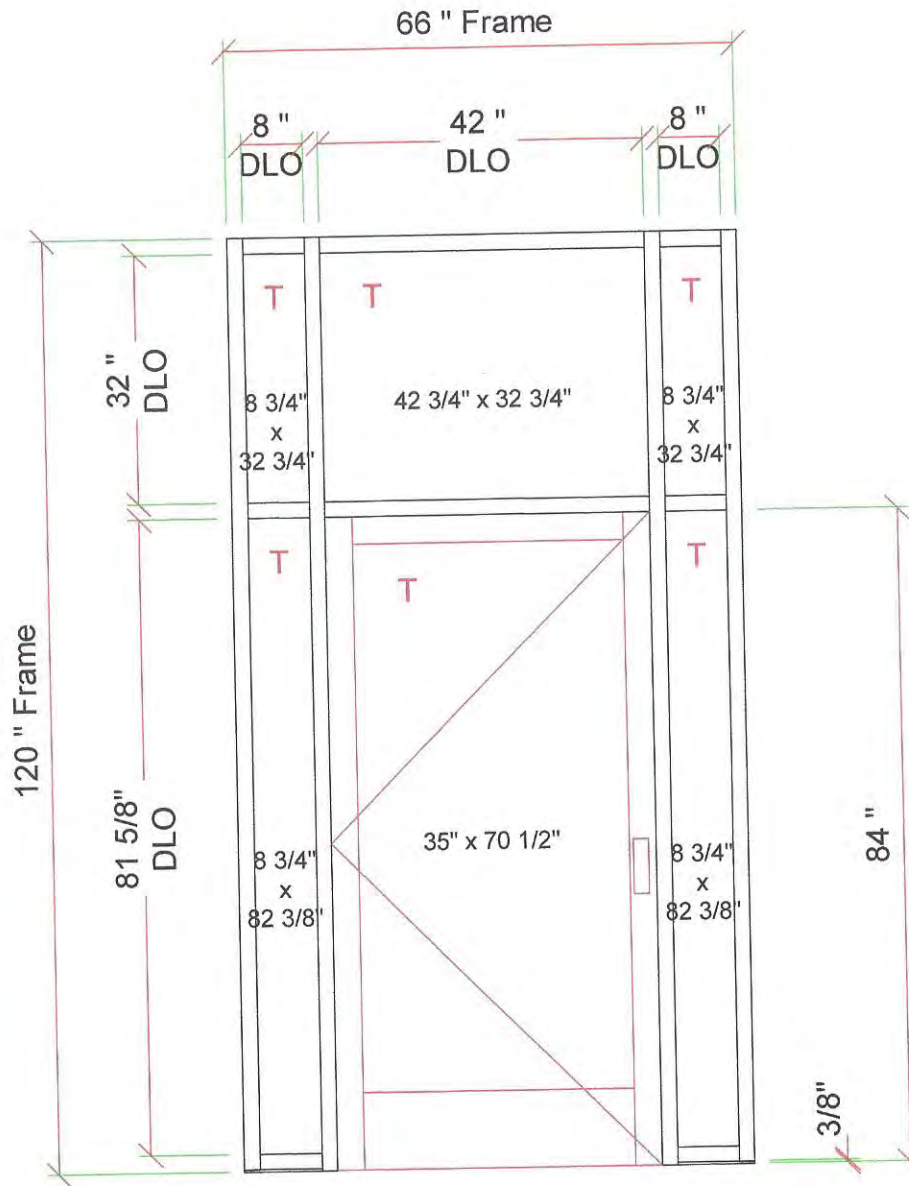
BUILDING APPROVAL 01/22/2022

Sheet Title and Number

**ELEVATIONS**

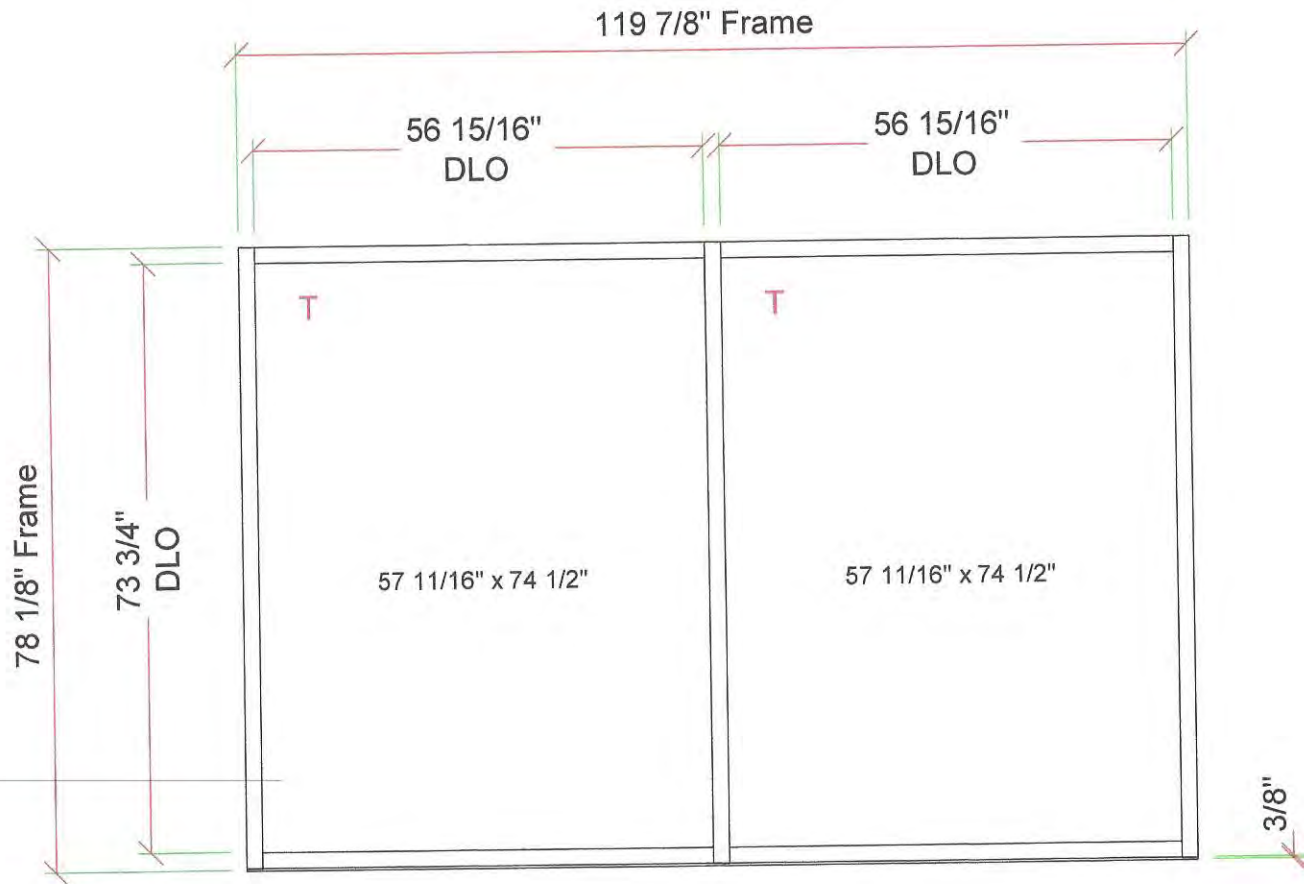
**A-100**





UNIVERSITY VILLAGE MARKET - SAL - 1 - 001 -  
 EXTERIOR ENTRANCE (2 Thus)  
 Frame: (C2-Clear) E14000 : Storefront : 2 x 4-1/2 : Flush  
 Glaze : E45159 subsill





UNIVERSITY VILLAGE MARKET - SAL - 2 - 002 - EXTERIOR UPPER WINDOW (1  
Thus)

Frame: (C2-Clear) E14000 : Storefront : 2 x 4-1/2 : Flush Glaze : E45159 subsill

## **SPECIFICATIONS: STANDARD ENTRANCE DOORS**

### **GENERAL DESCRIPTION**

Work includes furnishing all necessary materials, labor and equipment for the installation of the aluminum entrance doors, door frame and hardware as specified herein.

**NOT** included: Structural support of the framing system.

### **PRODUCTS/MATERIALS**

Aluminum entrance shall be model (s): Narrow stile 2", Medium Stile 3 11/16" and Wide Stile 5" (Nominal) as manufactured by Ramco (Reliable Architectural Metals Company), Detroit, Michigan. Door and frame sections shall be extruded aluminum AA-6063-T5 alloy with a nominal wall thickness of .125". Glazing and door moldings a minimum of .062". Weather-stripping to be silicone treated plastic pile and glazing gaskets shall be EPDM elastomeric extrusions or vinyl with a fiberglass reinforcement cord to prevent stretching. Weather-stripped insert in top and bottom rail is (optional). .375" high tension, zinc plated steel tie rods run the full width of the top and bottom rails joined together with .250" aluminum reinforcing plates and .375" serrated lock nuts. Narrow Stile doors shall have an adjustable setting block in the top rail.

### **FINISH HARDWARE**

Ramco doors shall be supplied with standard hardware unless otherwise specified. Refer to the finish hardware section of Division 8 for requirements for finish hardware items not specified herein. Glass and glazing shall conform to the requirements specified in section "Glass and Glazing." The architect must specify special hardware for custom doors and entrances. Hardware furnished by others shall be sent to Ramco for application.

### **FABRICATION**

Doors shall be mortised to provide positive interlocking of door rails to door stiles. Assembled with .375" diameter high tension steel plated rod, with .250" reinforced corner plate. Welding is (optional) in corner construction.

### **FINISHES**

All exposed framing surfaces shall be free of scratches and other serious blemishes. Aluminum extrusions shall be given an acid etch, followed by an anodic oxide treatment conforming to the American Architectural Metal Association to obtain a color anodized finish AA-M12C2XA31 class II (clear anodized) or AA-M12C2XA44 class I (dark bronze anodized). Wood grain, black anodize, powder coat, and Kynar finishes are available upon request.

### **EXECUTION**

Entrance doors and framing system shall be installed, glazed, and adjusted by experienced workers in accordance with Ramco's installation instructions and the approved shop drawings.

### **CLEANING AND PROTECTION**

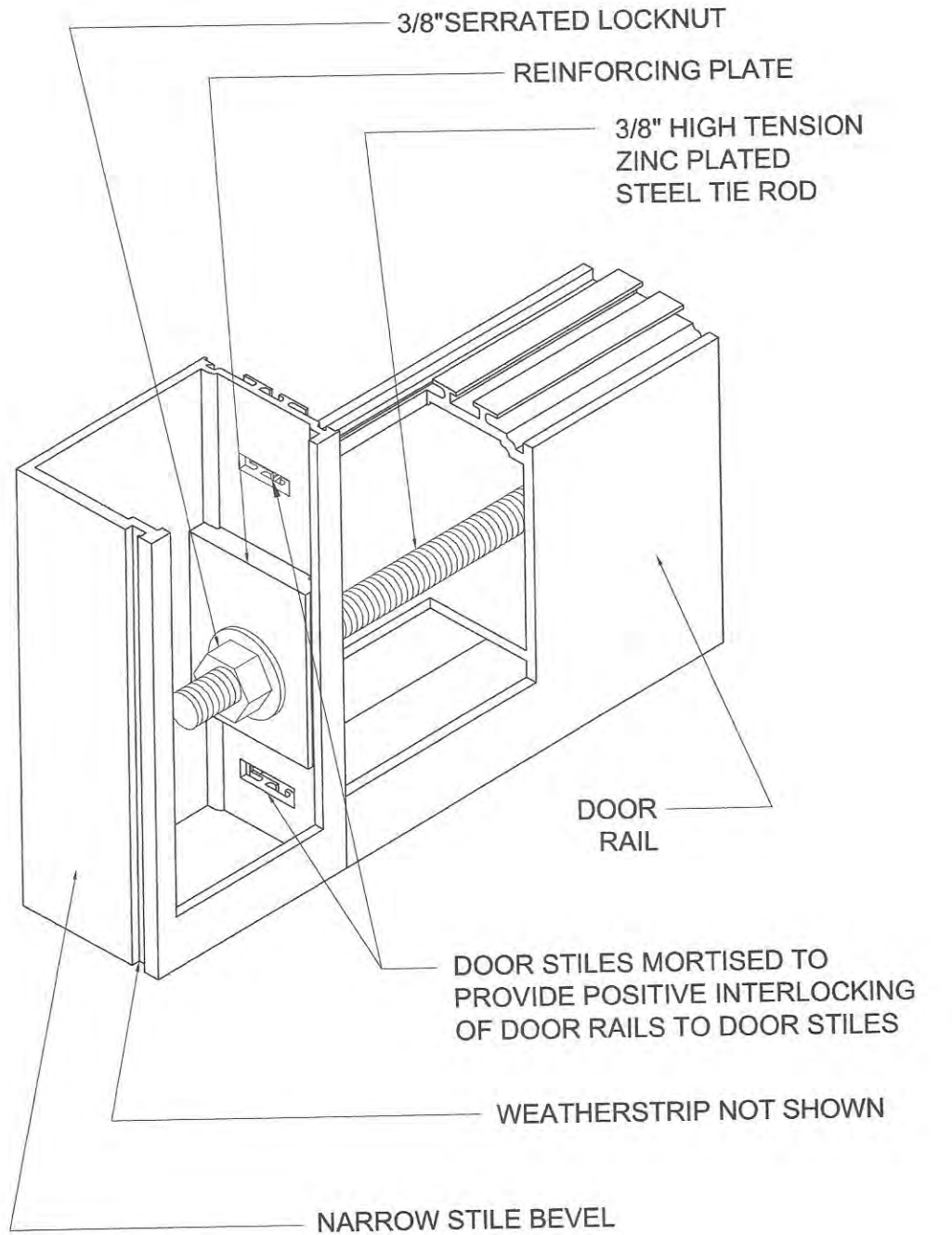
The installer shall prevent the aluminum entrance materials and finish from damage during the installation of the materials. After installation it is the responsibility of the general contractor or owner to prevent damage to the aluminum entrance materials and finish. Ramco assumes no responsibility after pick up or delivery.

**NOTE:** "Always Service All Ways" is our trade mark and to keep up with today's innovations Ramco reserves the right to change specifications without written notice.

# Ramco

RELIABLE ARCHITECTURAL METALS COMPANY

9751 ERWIN STREET  
DETROIT, MI 48213  
PH: 800.445.0263 FAX: 313.924.8877



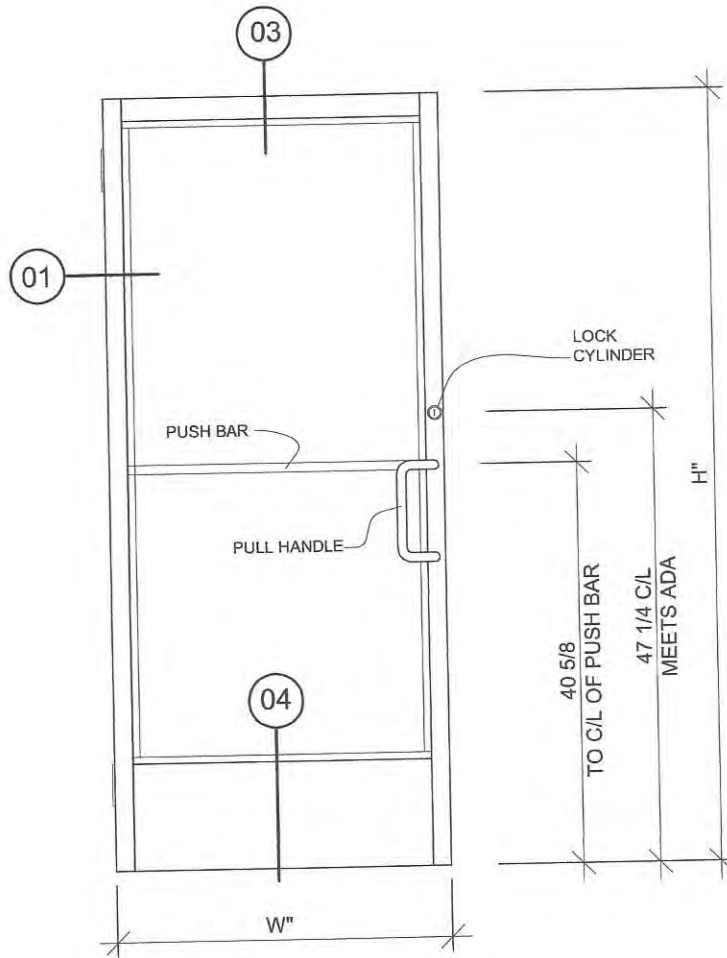
DOOR ASSEMBLY



RELIABLE ARCHITECTURAL METALS COMPANY

9751 ERWIN STREET  
 DETROIT, MI 48213  
 PH: 800.445.0263 FAX: 313.924.8877

# STANDARD ENTRANCES



## SINGLE DOOR STANDARD SIZES

STILE	HANDING	SWING	WIDTH (W)	HEIGHT (H)
NARROW	(LH) OR (RH)	SINGLE OR DOUBLE	36"	84"
NARROW	(LH) OR (RH)	SINGLE OR DOUBLE	42"	84"
MEDIUM	(LH) OR (RH)	SINGLE OR DOUBLE	36"	84"
MEDIUM	(LH) OR (RH)	SINGLE OR DOUBLE	42"	84"
WIDE	(LH) OR (RH)	SINGLE OR DOUBLE	36"	84"
WIDE	(LH) OR (RH)	SINGLE OR DOUBLE	42"	84"

## **SPECIFICATIONS: RTF 1850 SERIES 2" x 4 1/2"**

### **GENERAL DESCRIPTION**

Work includes furnishing all necessary materials, labor and equipment for the installation of the aluminum framing system as specified herein.

**NOT** included: Structural support of the framing system.

### **PERFORMANCE REQUIREMENTS**

Structural Performance-Deflection shall be tested in accordance with the ASTM E330. Maximum deflection of a member shall not exceed L/175 of its span, and when the load is removed there shall be no evidence of permanent deformation or damage when tested under a load of (SPECIFY) PSF. Thermal Performance when tested in accordance with AAMA 1503.1-88 and ASTM C 236-89 Condensation Resistance Factor (CRF) will be a minimum of 63, and Thermal Transmittance (U Value) will be 0.46 BTU/HR/FT<sup>2</sup>/°F or less.

### **PRODUCTS/MATERIALS**

Extrusions shall be AA-6063-T5 alloy and temper (ASTM B221 alloy G.S.10A-T5) with a nominal wall thickness of .090". RTF 1850 Series is a thermally broken framing system with a pour and debridge process that combines a mechanical and adhesive bond between the urethane and the aluminum. Fasteners shall be aluminum; stainless steel or zinc plated steel in accordance with ASTM A 164. Glazing gaskets shall be EPDM elastomeric extrusions or vinyl with a fiberglass reinforcement cord to prevent stretching.

### **FABRICATION**

The framing system shall provide for flush glazing on all sides with no projecting stops. Vertical and horizontal framing members shall have a nominal face dimension of 2" with an overall depth of 4 1/2".

### **FINISHES**

All exposed framing surfaces shall be free of scratches and other serious blemishes. Aluminum extrusions shall be given an acid etch, followed by an anodic oxide treatment conforming to the American Architectural Metal Association to obtain a color anodized finish AA-M12C2XA31 class II (clear anodized) or AA-M12C2XA44 class I (dark bronze anodized). Black anodize, powder coat and Kynar finishes are available upon request.

### **EXECUTION**

The framing system shall be installed, glazed, and adjusted by experienced workers in accordance with Ramco's installation instructions and the approved shop drawings.

### **CLEANING AND PROTECTION**

After installation all metal surfaces shall be cleaned to remove contaminants. All work shall be protected against damage until approved by the general contractor. Thereafter, it shall be the responsibility of the general contractor to provide protection and final cleaning.

**NOTE:** "Always Service All Ways" is our trade mark and to keep up with today's innovations Ramco reserves the right to change specifications without written notice.



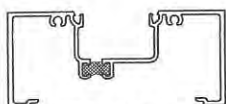
RELIABLE ARCHITECTURAL METALS COMPANY

9751 ERWIN STREET  
DETROIT, MI 48213  
PH: 800.445.0263 FAX: 313.924.8877

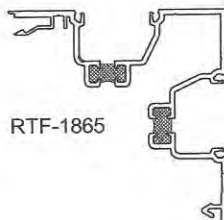
# 1850 SERIES

INDIVIDUAL EXTRUSIONS

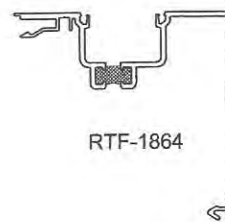
1/4 SCALE



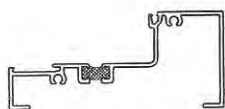
RTF-1857



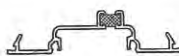
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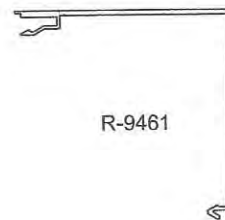
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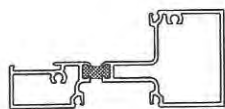
RTF-1850



RTF-1854



R-9461



RTF-1851



RTF-1800



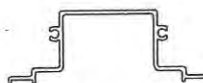
R-1853



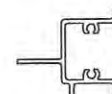
R-1876



TR-5114 VINYL



RTF-1848



RTF-1866

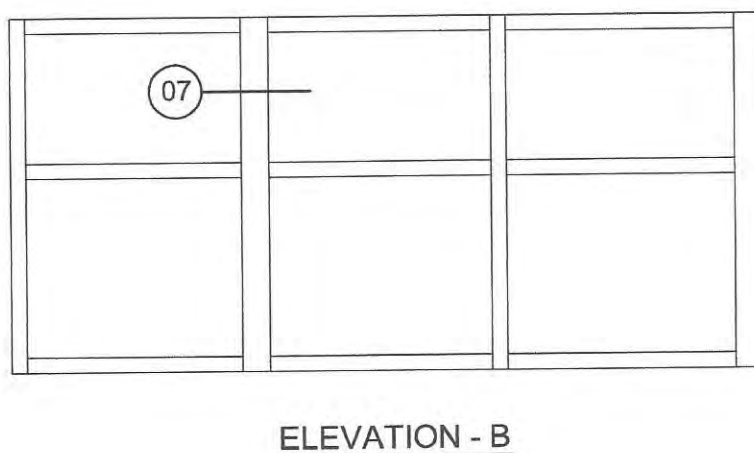
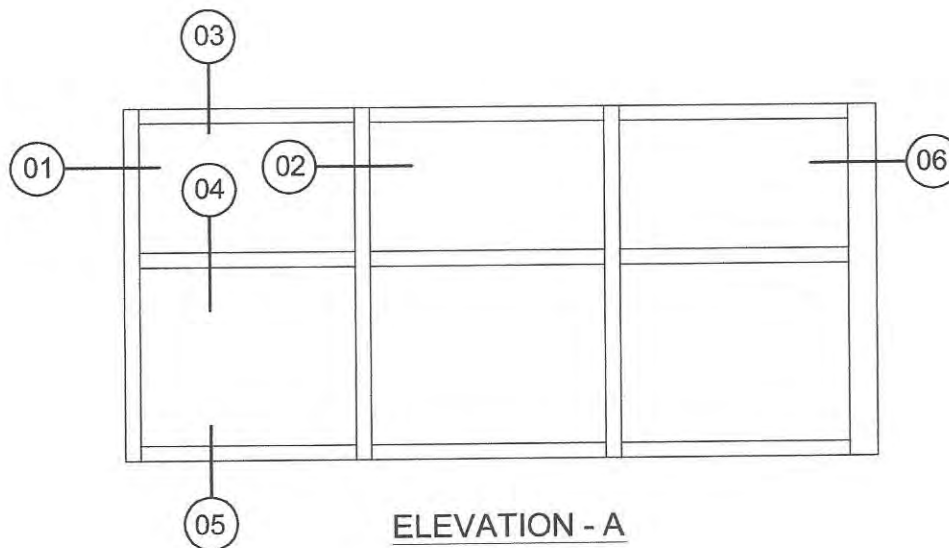


RELIABLE ARCHITECTURAL METALS COMPANY

9751 ERWIN STREET  
DETROIT, MI 48213  
PH: 800.445.0263 FAX: 313.924.8877

# 1850 SERIES

STOREFRONT TYPICAL ELEVATIONS  
(1" GLAZING)





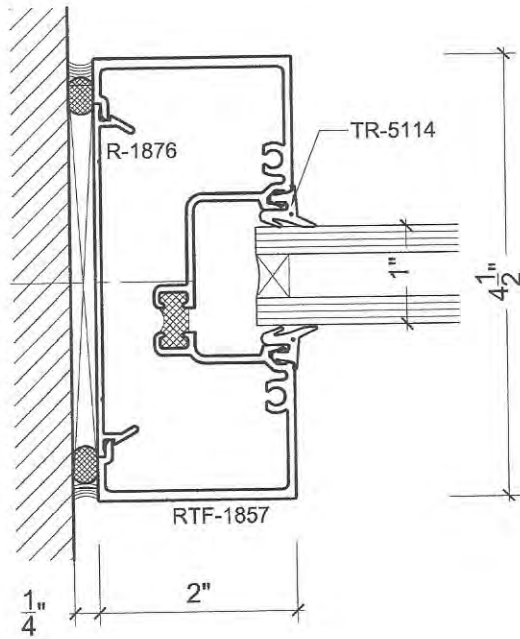
RELIABLE ARCHITECTURAL METALS COMPANY

9751 ERWIN STREET  
DETROIT, MI 48213  
PH: 800.445.0263 FAX: 313.924.8877

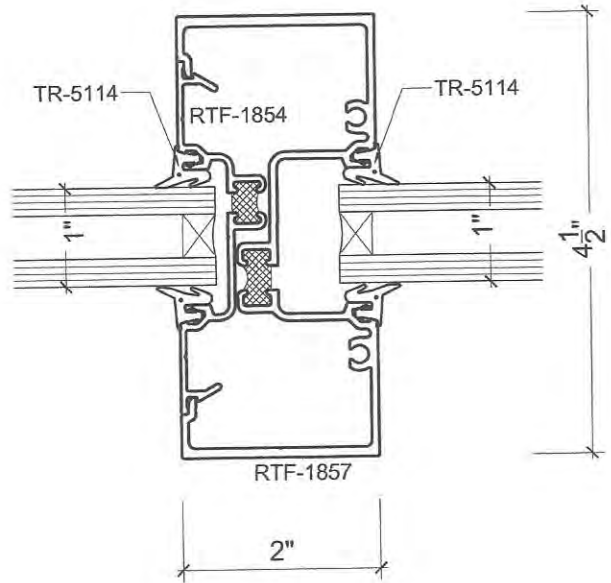
# 1850 SERIES

DETAILS

1/2 SCALE



SECTION 1



SECTION 2





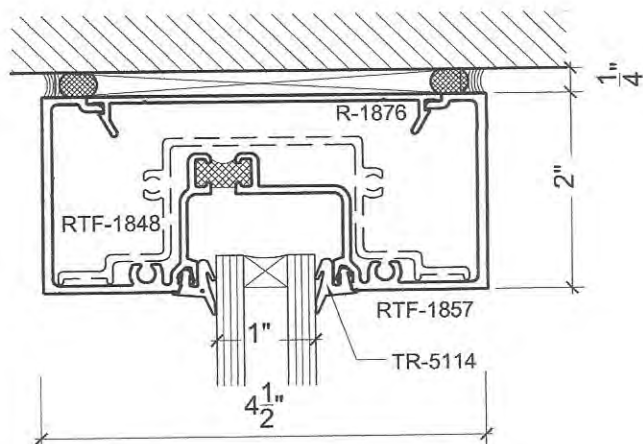
RELIABLE ARCHITECTURAL METALS COMPANY

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DETROIT, MI 48213

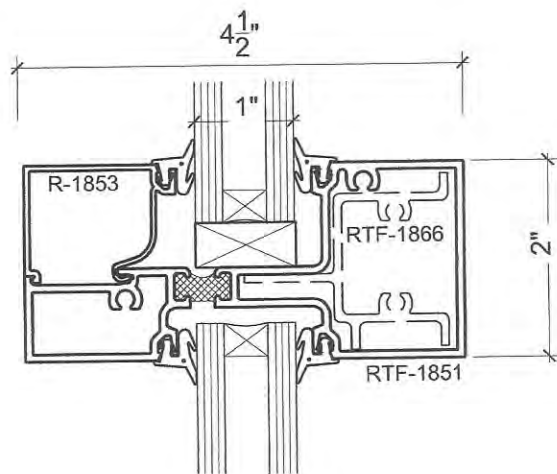
# 1850 SERIES

DETAILS

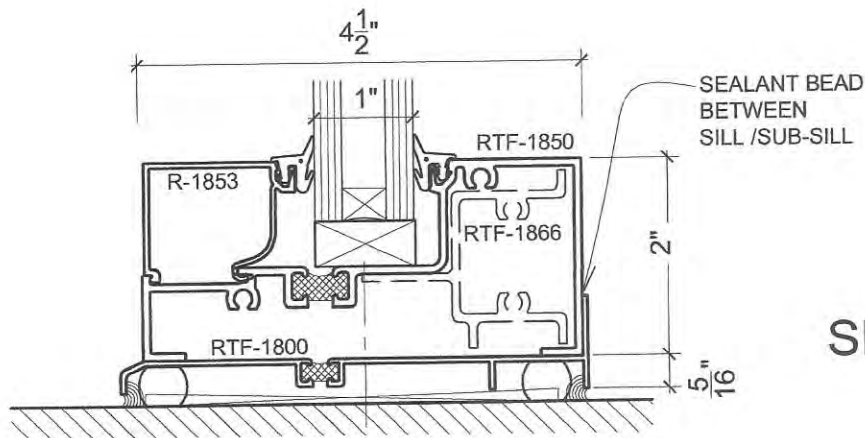
1/2 SCALE



SECTION 3

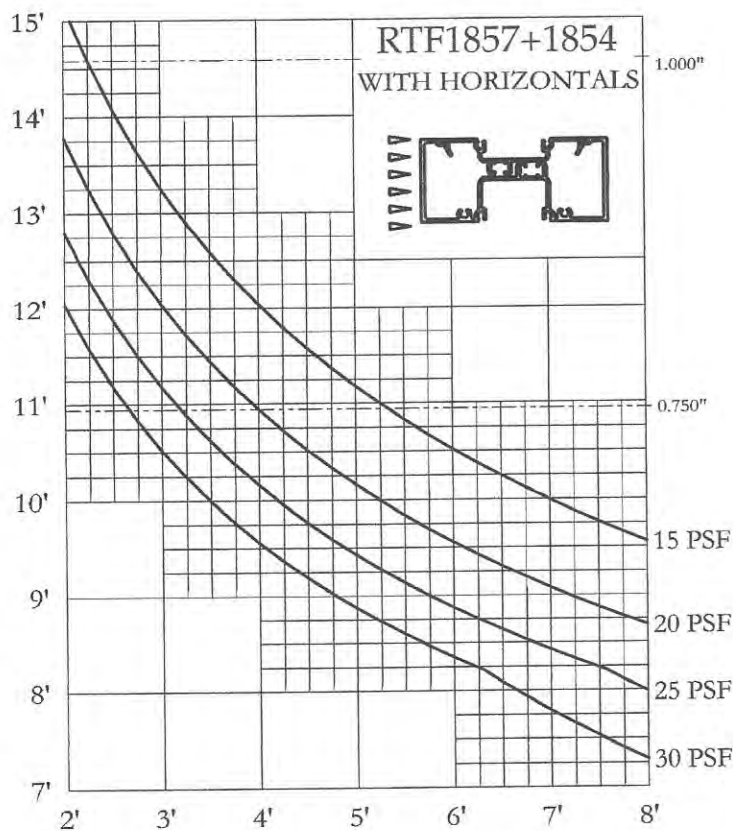


SECTION 4



SECTION 5

WINDLOAD CHARTS  
 2" x 4 1/2" FLUSH GLAZED  
 RTF-1850 SERIES



#1 THESE WINDLOAD CHARTS ARE BASED UPON THE LESSER OF DEFLECTION RATIO ( $L/175$ ) OR STRESS (12667)

#2 THESE STRUCTURAL CURVES ARE ESTIMATES AND ARE PRESENTED TO THE BEST KNOWLEDGE OF THE WILLIAM L BONNELL CO. IT IS, HOWEVER, THE RESPONSIBILITY OF THE CUSTOMER TO BE SATISFIED THAT THE CURVES ARE CORRECT. THE WILLIAM L BONNELL CO. MAY NOT BE HELD RESPONSIBLE IN ANY WAY FOR THE FAILURE OF PERFORMANCE RESULTING FROM THE USE OF THESE CURVES.



# Shutter Controls & Options

## **Torsion Spring Assist Control Systems**

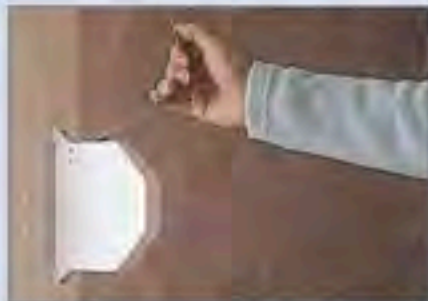
QMI shutters have a non-slip hinge, which allows for the use of a torsion spring inside the tube opposite the control mechanism.

The spring assist has many advantages to standard shutter controls.



## **Manual Strap**

A manual pull strap can be used on larger shutter sizes since the weight of the shutter is neutralized. The spring provides a counterbalance resulting in the shutter locking in the down position.



## **Manual Gear / Crank**

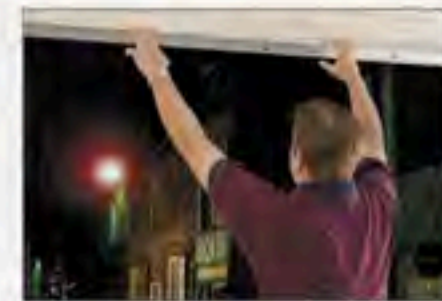
The spring assist neutralizes the weight and enables gear operation for larger shutters and requires less effort to rotate the hand crank.

- up to 65 sq ft (6.5 sq meters)



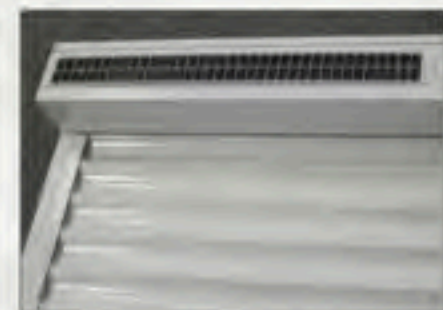
## **Manual Push-up / Pull-down**

Where most shutters require motors, the QMI spring-operated shutter allows for push up/pull down operation. This saves on both shutter and electrical costs. Large spring-operated shutters are useful for entry doors, as egress (life safety) issues are not a concern. Simple base-slat locks enable security, but allow for escape during fire or power failures. Spring operation is available up to 130 sq ft (13 sq meters) without motors or gears.



## **Solar Powered Operation**

Enjoy energy savings from a roller shutter that does not add to your energy cost. Because of its spring-loaded tube, QMI shutters require less power for operation. This makes it possible to operate with a solar-powered battery.



## Safe Selling All Night Long



Punched slats allow protected nighttime store views, but disappear into the shutter's box housing during the day.

### "Security with Vision."

- The ultimate in security
- High visibility
- Reduces energy costs
- Prevents break-ins
- Smallest roll up coil available
- No hand-holds

## Available Options



**punched**



**solid**



**Solid**



