Docket Items #5 & #6 BAR CASE # 2016-00188 & 00189

BAR Meeting July 20, 2016

**ISSUE:** Partial Demolition/Capsulation and Certificate of Appropriateness for

Addition and Alterations

**APPLICANT:** Renee and Jim Novakoff

**LOCATION:** 106 Quay Street

**ZONE:** RM / Residential

### **STAFF RECOMMENDATION:**

Staff recommends approval with the following conditions:

1. Doors and windows must be in accordance with the BAR's approved policies.

2. Either rear elevation design may be used at the applicant's discretion, with final approval as part of the building permit review process.

### **GENERAL NOTES TO THE APPLICANT**

- 1. ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH: Applicants must obtain a stamped copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.
- 2. APPEAL OF DECISION: In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
- 3. COMPLIANCE WITH BAR POLICIES: All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
- 4. BUILDING PERMITS: Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Building and Fire Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-838-4360 for further information.
- 5. EXPIRATION OF APPROVALS NOTE: In accordance with Sections 10-106(B) and 10-206(B) of the Zoning Ordinance, any official Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
- 6. HISTORIC PROPERTY TAX CREDITS: Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the <u>Virginia Department of Historic Resources (VDHR)</u> prior to initiating any work to determine whether the proposed project may qualify for such credits.



BAR2016-00188 & BAR2016-00189



<u>Note</u>: Staff coupled the applications for a Permit to Demolish (BAR #2016-0188) and Certificate for Appropriate (BAR #2016-0189) for clarity and brevity.

### I. <u>ISSUE</u>

The applicant is requesting a number of alterations and minor additions, in addition to partial demolition, to redesign this late  $20^{th}$ -century townhouse in a more contemporary design.

The Permit to Demolish includes the following:

- Demolition of the second floor brick wall on the front elevation, including the existing balcony
- Demolition of a portion of brick wall below center window at third floor on the front elevation
- Demolition of portions of the rear elevation to enlarge existing openings
- Demolition of existing roof structure

The Certificate of Appropriateness for alterations and an addition includes the following:

- Replacement of garage door and front door
- Replacement of all windows
- Cantilevered second story with picture window on front elevation to match projection of demolished balcony
- New balcony with horizontal railing and conversion of window to door at third story
- New roof in similar design to existing approximately nine inches higher.
- Enlargement of first floor patio doors, transoms and sidelights on rear elevation
- Addition of either a projecting bay window or replacement of existing windows at second floor rear elevation
- Addition of shed dormer with picture window at rear elevation

The new and replacement windows will be aluminum-clad wood windows. The front door will be a contemporary painted wood door with horizontal glass panels. The garage door will be painted wood. The cantilevered second story will be clad in horizontal copper siding. The picture window will have metal shutters. The railing will be painted metal cable. The trim will be a solid composite material. The roof will be standing seam metal.

The applicant also requests a waiver of the rooftop HVAC screening requirement.

### II. HISTORY

The three-story, interior townhouse at 108 Quay Street is one of a group of 86 three-story brick townhouses bounded by North Union, North Lee, Queen and Oronoco Streets which were constructed in 1971. This area was not included in the Old and Historic Alexandria District until June of 1984.

Staff was unable to locate any prior approvals for this property.

### III. ANALYSIS

The BAR's adopted *Design Guidelines* note that the "guidelines should not be viewed as a device that dictates a specific design response nor should the guidelines be viewed as prohibiting a particular design approach." Additionally, the *Guidelines* state that "new and untried approaches to common design problems should not be rejected out of hand simply because they appear to be outside the common practices outlined in the guidelines." This particular townhouse is part of a larger development of non-historic townhouses where the BAR has approved substantial alterations and redesigns in recent years. It has been noted that although these townhouses have a vaguely Colonial Revival character to them, that they do not adhere to one style and that the comprehensive redesign of a building's architectural style and character can be acceptable and appropriate. The BAR has been clear that a hodge-podge approach that mixes styles and incongruous elements is not considered compatible. However, a thoughtful redesign and change in architectural style that views the townhouse or elevation as an arranged composition can be appropriate and compatible. The BAR has approved such changes at both 100 and 101 Quay Street in recent years.

Staff supports the current proposal which represents a comprehensive redesign of the front and rear elevations in a contemporary fashion using natural and durable materials. Each elevation also maintains proportions and a solid-to-void ratio in harmony with the adjacent townhouses, which will allow this contemporary townhouse to co-exist with the more traditional townhouses on either side. The additions—such as the cantilevered second floor on the front and the shed dormer on the rear—are modest expansions of space that have been well incorporated into the overall design. Regarding the two options for the rear elevation, one with a projecting bay at the second story and one with only replacement of the existing single windows, staff finds both to be appropriate and minimally visible. Therefore, staff supports either choice and recommends allowing the applicant to have both options as construction drawings are developed. The proposed materials are appropriate and high-quality and will enhance this contemporary design approach. Staff recommends approval as noted with the conditions above.

Staff recommends approval of the waiver of the rooftop HVAC screening finding that it will be located so as to be minimally visible.

### **STAFF**

Catherine K. Miliaras, Historic Preservation Planner, Planning & Zoning Al Cox, FAIA, Historic Preservation Manager, Planning & Zoning

### IV. CITY DEPARTMENT COMMENTS

Legend: C- code requirement R- recommendation S- suggestion F- finding

### **Zoning Comments**

- C-1 Applicant must request waiver of HVAC screening for new unit to be located on flat roof. If waiver is not granted, Zoning will require screening on all four sides.
- C-2 Interior alterations comply with zoning based revised FAR submitted by applicant on July 8, 2016; this includes converting attic space on third floor into partially habitable area.
- C-3 All window and door replacement complies with zoning.
- C-4 New height from average finished grade must be 35 feet or less. Current plans show approximately 33 feet in height from AFG.
- C-5 Additions to replace existing balconies and convert to bay windows comply with zoning for setbacks and FAR.
- C-6 Open space complies with zoning. Original BZA approved 300 square feet of open space per lot.
- F-1 Applicant cannot use area in "walkway easement" towards the total lot area for purposes of calculating FAR.
- F-2 Zoning compliance based on current day zoning ordinance RM regulations, except those regulations approved under original BZA for this development (BZA#1084).

### **Code Administration**

C-1 A building permit, plan review and inspections are required for this alteration.

### **Transportation and Environmental Services**

- R1. The building permit must be approved and issued prior to the issuance of any permit for demolition. (T&ES)
- R2. Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)
- R3. No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)
- F1. After review of the information provided, an approved grading plan is not required at this time. Please note that if any changes are made to the plan it is suggested that T&ES be included in the review. (T&ES)

- C1. The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)
- C2. The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C3.Roof, surface and sub-surface drains be connected to the public storm sewer system, if available, by continuous underground pipe. Where storm sewer is not available applicant must provide a design to mitigate impact of stormwater drainage onto adjacent properties and to the satisfaction of the Director of Transportation & Environmental Services. (Sec.5-6-224) (T&ES)
- C4. All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)
- C5. Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-2) (T&ES)
- C6. All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (Sec. 5-2-1) (T&ES)
- C7. The owner shall obtain and maintain a policy of general liability insurance in the amount of \$1,000,000 which will indemnify the owner (and all successors in interest); and the City as an Additional Insured, against claims, demands, suits and related costs, including attorneys' fees, arising from any bodily injury or property damage which may occur as a result of the encroachment. (Sec. 5-29 (h)(1)) (T&ES)

Please submit Insurance Certificate: City of Alexandria T&ES / Permit Section Attn: Kimberly Merritt 301 King Street, Room 4130 Alexandria, VA 22314

### Alexandria Archaeology

No comment.

### V. ATTACHMENTS

1 – Supplemental Materials

2 – Application for BAR 2016-0188 & 2016-0189: 106 Quay Street

ADDRESS OF PROJECT: 106 Quay Street, Alexandria, VA 22314

TAX MAP AND PARCEL: 065.03-05-39

APPLICATION FOR: (Please check all that apply)

CERTIFICATE OF APPROPRIATENESS

PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH (Required if more than 25 square feet of a structure is to be demolished/impacted)

WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)

(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)

Applicant: 

Property Owner Business (Please provide business name & contact person)

Name: Renee and Jim Novakoff

Address: 106 Quay Street

City: Alexandria State: VA Zip: 22314

Phone: 561-703-7939 E-mail: jim@novakoff.net

Authorized Agent (if applicable): Attorney Architect

Name: Karen Conkey Phone: 703-589-4550

E-mail: kconkey@conkeyarchitects.com

### **Legal Property Owner:**

Name: Renee and Jim Novakoff

Address: 106 Quay Street

X WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT

City: Alexandria State: VA Zip: 22314

Phone: 561-703-7939 E-mail: jim@novakoff.net

Yes ☒ No Is there an historic preservation easement on this property?
 Yes ☐ No If yes, has the easement holder agreed to the proposed alterations?
 Yes ☒ No Is there a homeowner's association for this property?
 Yes ☐ No If yes, has the homeowner's association approved the proposed alterations?

If you answered yes to any of the above, please attach a copy of the letter approving the project.

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#### NATURE OF PROPOSED WORK: Please check all that apply

	NEW CONSTRUCTION	N ION: <i>Please check all that ap</i>	nlv	
<u> </u>	awning	fence, gate or garden wall		x shutters
	⊠ doors			shed
	🔀 lighting	pergola/trellis	painting unpainted masonry	/
	other			
	ADDITION			
X	DEMOLITION/ENCAP	SULATION		
Π	SIGNAGE			

DESCRIPTION OF PROPOSED WORK: Please describe the proposed work in detail (Additional pages may be attached). The applicant proposes the following exterior alterations to the 1970's era brick townhome located at 106 Quay Street. Replace all exterior windows and terrace doors on all facades with aluminum clad wood windows and doors. Replace existing painted wood entry door with new painted wood and glass door and storm door. Add a one story projecting bay window to the Quay façade enclosing the existing 1st floor balcony, and create a balcony with a painted metal cable rail on the 2nd floor above. Add a pair of terrace doors onto the proposed new 2nd floor balcony. On the rear façade, add a partial story projecting bay window and enlarge the rear terrace door opening. Lastly, raise the existing roof line slightly to allow for code compliant occupancy of the 3rd floor, and add a shed dormer at the rear façade and relocate / add HVAC units to flat roof.

### SUBMITTAL REQUIREMENTS:

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

Electronic copies of submission materials should be submitted whenever possible.

**Demolition/Encapsulation :** All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.

	N/A	
	X	Survey plat showing the extent of the proposed demolition/encapsulation.
X		Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.
Χ		Clear and labeled photographs of all elevations of the building if the entire structure is proposed
		to be demolished.
Χ		Description of the reason for demolition/encapsulation.
X		Description of the alternatives to demolition/encapsulation and why such alternatives are not
		considered feasible

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requested by staff for large-scale development projects or projects fronting Washington Street. Check N/A if an item in this section does not apply to your project. XScaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment. FAR & Open Space calculation form. Clear and labeled photographs of the site, surrounding properties and existing structures, if Existing elevations must be scaled and include dimensions. Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations. Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required. Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls. X For development site plan projects, a model showing mass relationships to adjacent properties and structures. Signs & Awnings: One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project. Square feet of existing signs to remain: Photograph of building showing existing conditions. Dimensioned drawings of proposed sign identifying materials, color, lettering style and text. Location of sign (show exact location on building including the height above sidewalk). Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable). Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade. Alterations: Check N/A if an item in this section does not apply to your project. Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details. Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls. Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale. An official survey plat showing the proposed locations of HVAC units, fences, and sheds.

**Additions & New Construction:** Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. All plans must be folded and collated into 3 complete 8 1/2" x 11" sets. Additional copies may be

Historic elevations or photographs should accompany any request to return a structure to an

earlier appearance.

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#### ALL APPLICATIONS: Please read and check that you have read and understand the following items:

- I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)
- I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
- [X] I, the applicant, or an authorized representative will be present at the public hearing.
- I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and 3 sets of revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

### **APPLICANT OR AUTHORIZED AGENT:**

Signature:	ten	
-		_

Printed Name: Karen Conkey

Date: 6/6/2016

### OWNERSHIP AND DISCLOSURE STATEMENT Use additional sheets if necessary

Name	Address	Percent of Ownership
1. Renee Novakoff	106 Quay Street	100%
Jim Novakoff		
2.		
	·	İ
3.		

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at 106 Quay Street (address), unless the entity is a corporation or partnership, in which case identify each owner of more than ten percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Address	Percent of Ownership		
106 Quay Street	100%		

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose **any** business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. Renee Novakoff		N/A
Jim_Novakoff		N/A
2.		
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

6/6/2016	Karen Conkey	an
Date	Printed Name	Signature



## DEPARTMENT OF PLANNING AND ZONING FLOOR AREA RATIO AND OPEN SPACE CALCULATIONS

A1. Street Address	106 Quay Street, Alexandria	, VA 22314		Zone RM
A2. 1,265 SF (Reduced	by Easment)	X 1.48 (Reduced by Variance)		= 1,872 SF
Total Lot Area		Floor Area Ratio All	lowed by Zone	Maximum Allowable Floor Area
<b>Existing Gross</b>	Floor Area			
Existing Gr	oss Area*	Allowable Ex	clusions	D4 Friedlan Conne Flora Area t
Basement	665 SF	Basement**	234 SF	B1. Existing Gross Floor Area *  2,691 Sq. Ft.
First Floor	665 SF	Stairways**	184 SF	B2. Allowable Floor Exclusions**  1,186 Sq. Ft.
Second Floor	665 SF	Mechanical**	72 SF	B3. Existing Floor Area minus Exclusions
Third Floor	665 SF	Other**	696 SF	1,505 Sq. Ft. (subtract B2 from B1)
Porches/ Other	31 SF	Total Exclusions	1,186 S	F
Total Gross *	2,691 SF			
	Gross Area*	does not include example.  Allowable E	Exclusions	
Basement	31 SF	Basement**	0 SF	C1. Proposed Gross Floor Area *
First Floor	47 SF	Stairways**	67 SF	759 Sq. Ft. C2. Allowable Floor Exclusions**
Second Floor	16 SF	Mechanical**	0 SF	420 Sq. Ft. C3. Proposed Floor Area minus
Third Floor	665 SF	Other** < 7 ' - 6 '	' 353 SF	Exclusions 339 Sq. Ft.
Porches/ Other	0 SF	Total Exclusions	420 SF	(subtract C2 from C1)
Total Gross *	759 SF			<del></del>
D1. Total Floor Area	posed Floor Ard (add B3 and C3) Allowed by Zone (A	1,844 Sq. F	area ft. extent ft. shed acce ** Ro	oss floor area is the sum of all gross horizontal is under roof, measured from the face of rior walls, including basements, garages, is, gazebos, guest buildings and other essory buildings.  efer to the zoning ordinance (Section2-145(B))
Open Space C Existing Open Space Required Open Sp	ce 455 SF		rega If ta plan revie	consult with zoning staff for information arding allowable exclusions.  king exclusions other than basements, floor is with excluded areas must be submitted for some ew. Sections may also be required for some usions.

The undersigned hereby certifies and attests that, to the best of his/her knowledge, the above computations are true and

correct.

Signature:

Date: 7/8/2016



# 106 Quay Street, Alexandria, VA 22314 PHOTO OF EXISTING QUAY STREET ELEVATION

CLIENT:

Renee and Jim Novakoff 106 Quay Street Alexandria, VA 22314 ARCHITECT:

6 JUNE 2016

325 north patrick street alexandria, va 22314 703 . 589 . 4550 info@conkeyarchitects.com

Conkey | architects

ASK 1.1A



# 106 Quay Street, Alexandria, VA 22314 PHOTO OF EXISTING REAR ELEVATION

CLIENT: Renee and Jim Novakoff 106 Quay Street Alexandria, VA 22314

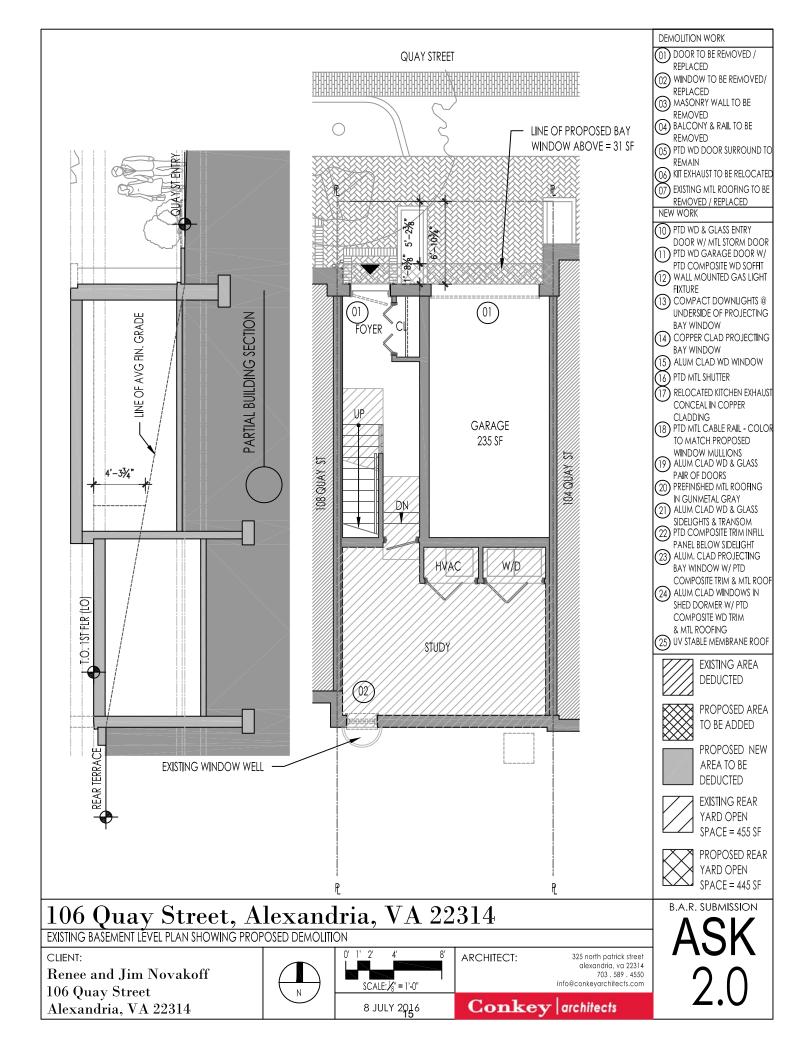
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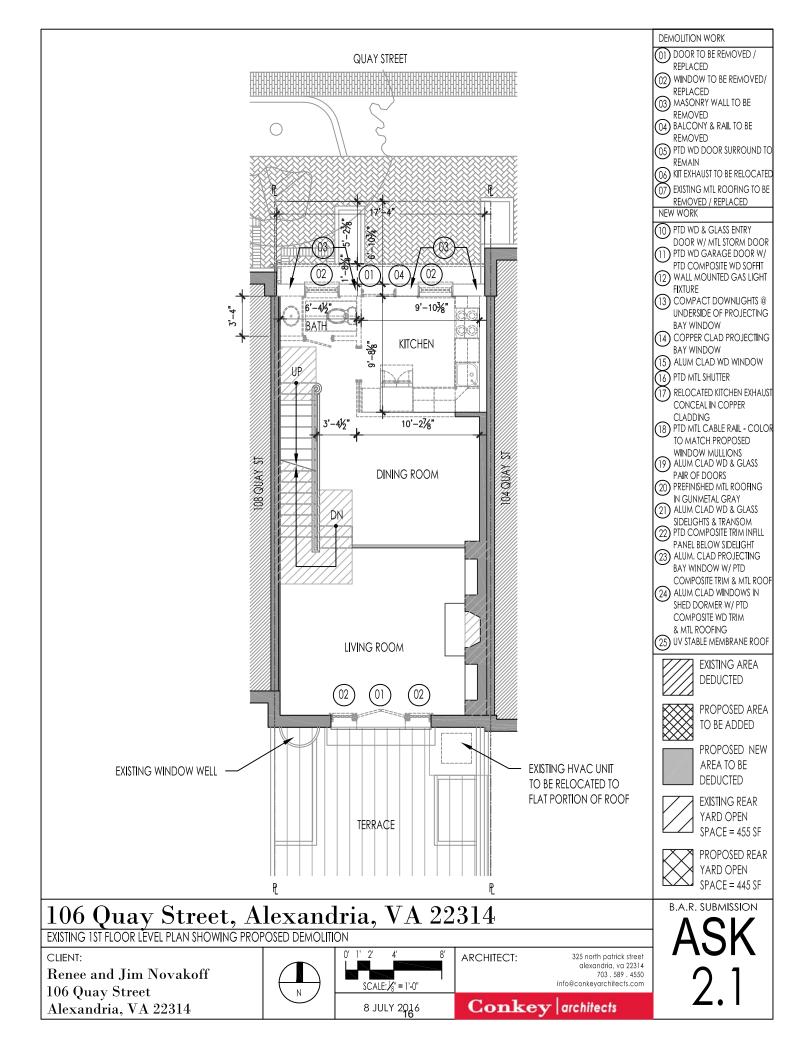
6 JUNE 2016

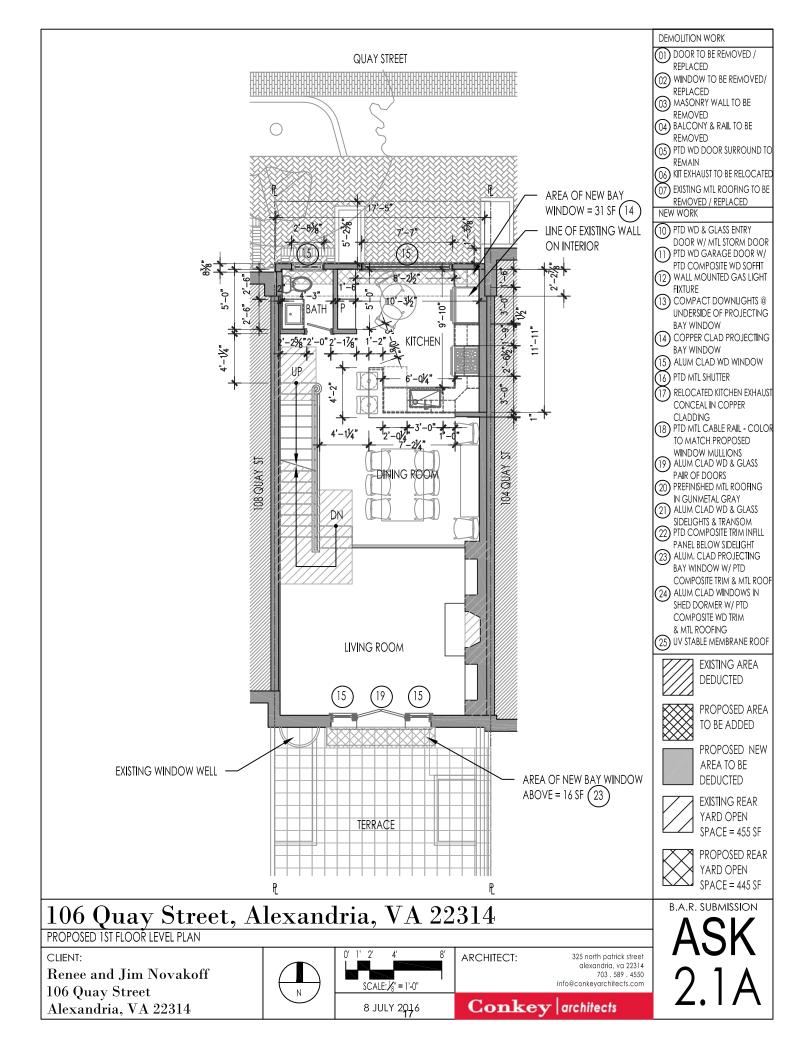
325 north patrick street alexandria, va 22314 703 . 589 . 4550 info@conkeyarchitects.com

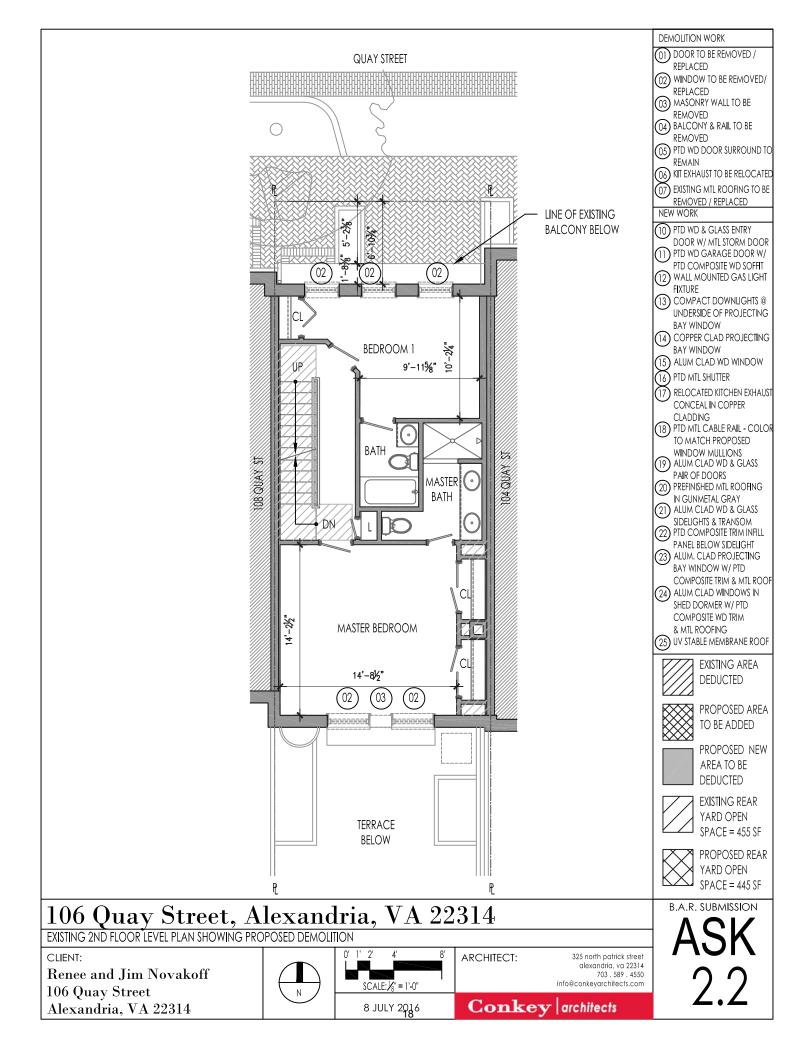
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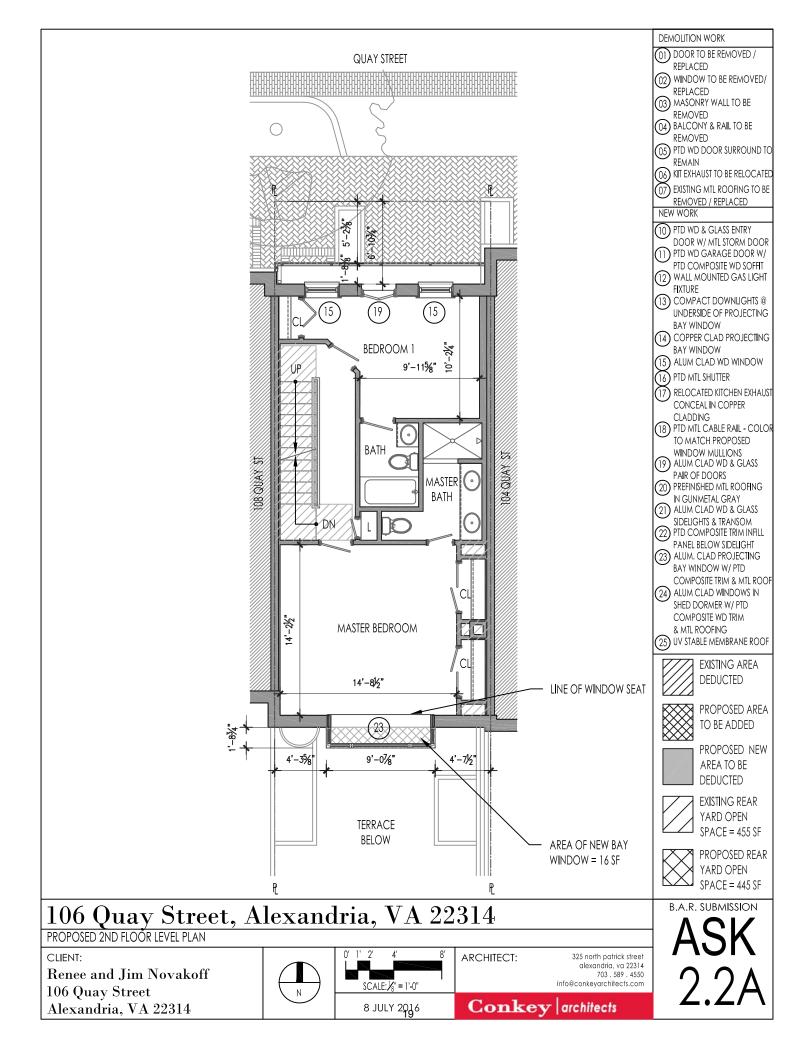
B.A.R. SUBMISSION

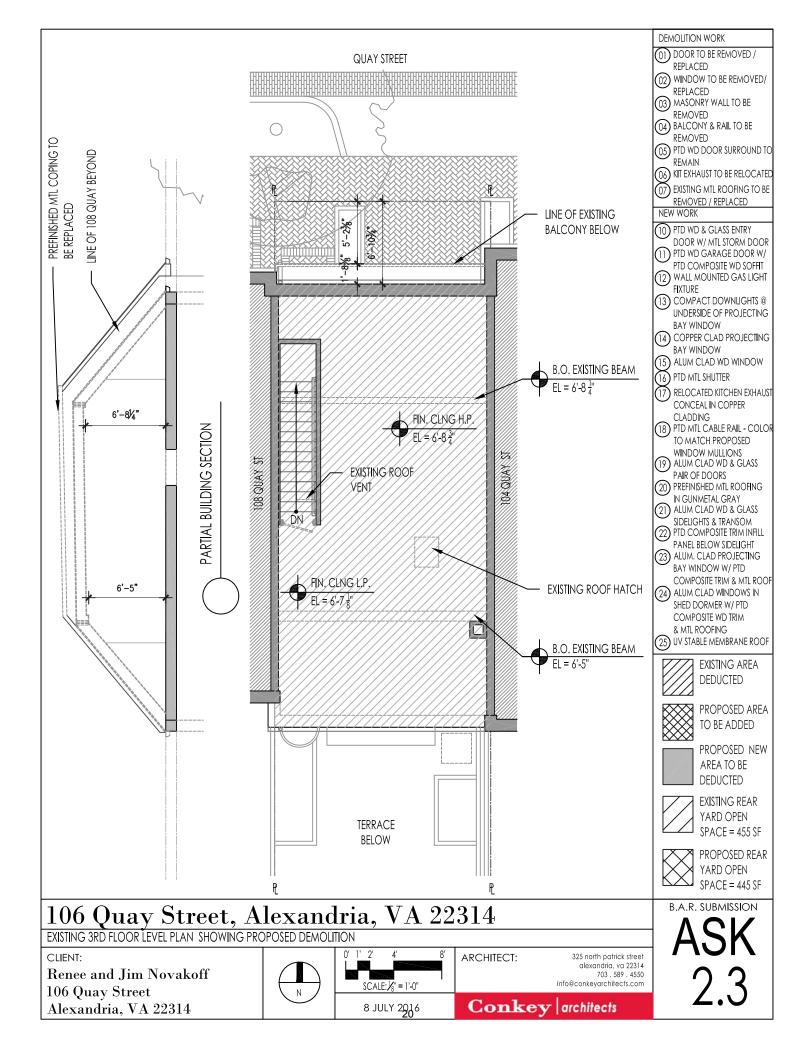


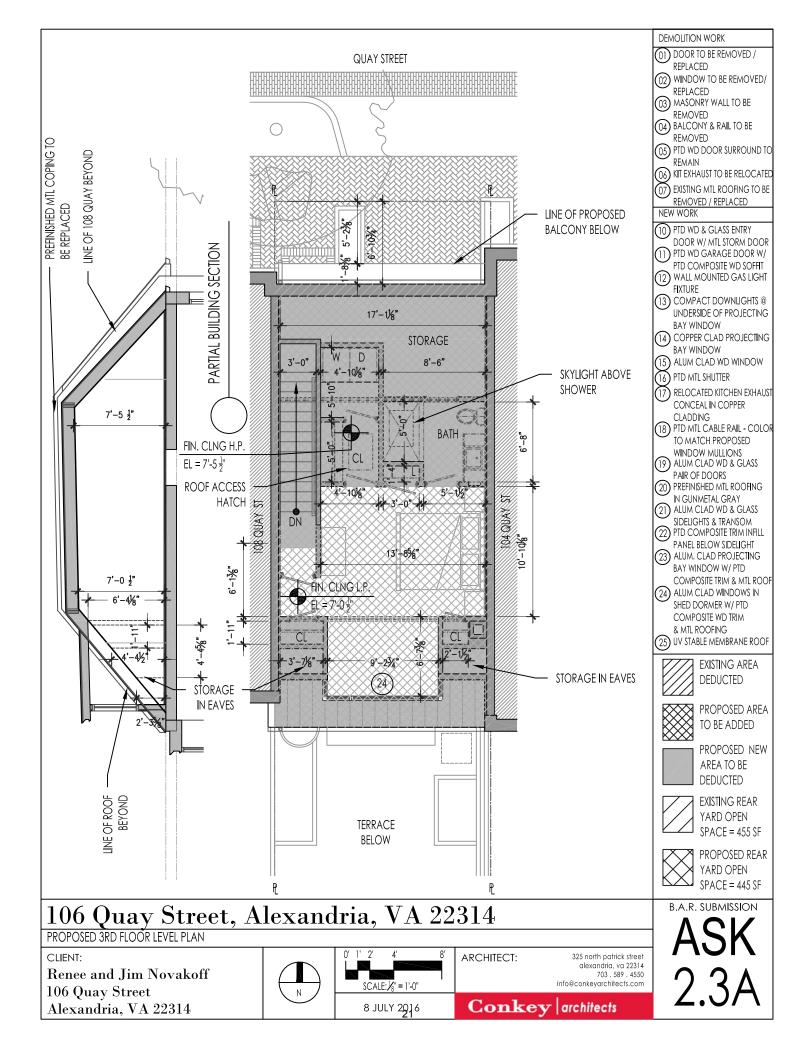


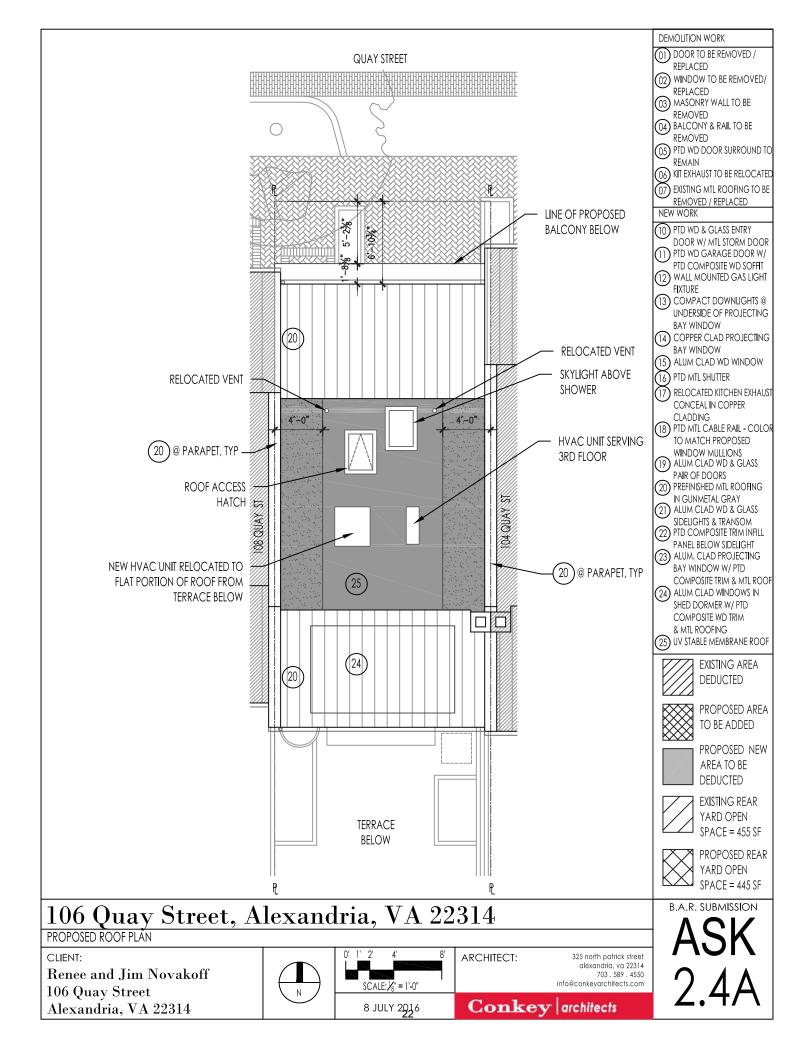


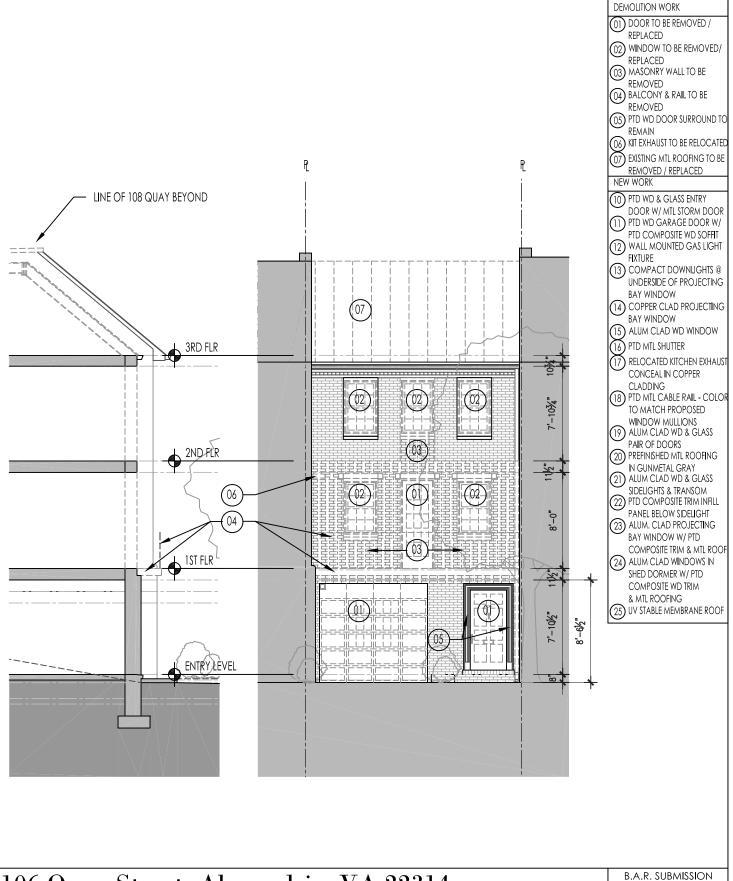






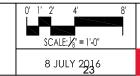






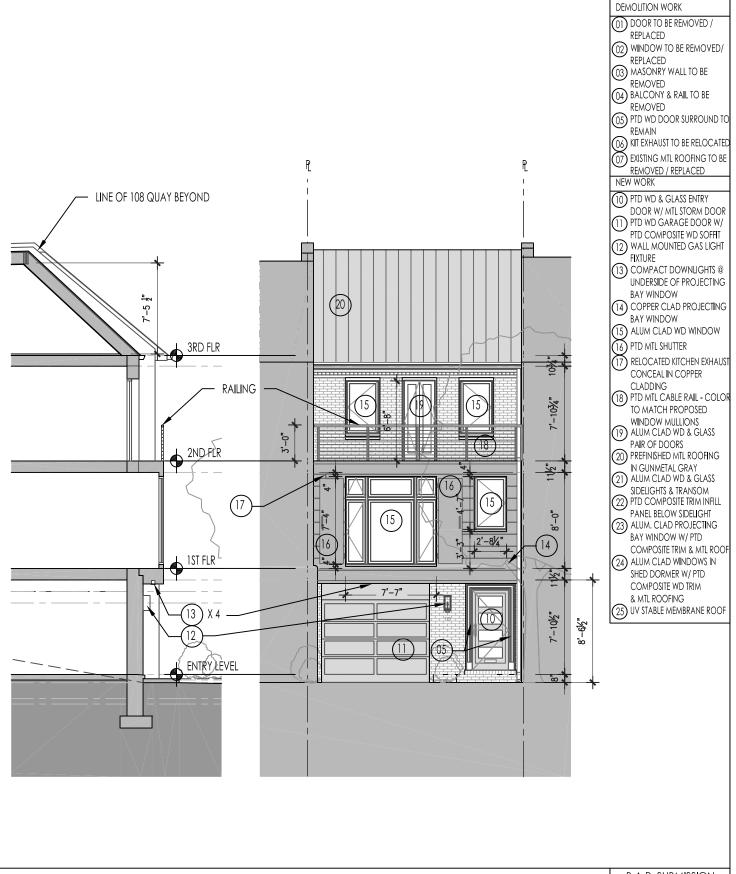
### 106 Quay Street, Alexandria, VA 22314 EXISTING QUAY STREET FACADE & BUILDING SECTION SHOWING PROPOSED DEMOLITION

CLIENT: Renee and Jim Novakoff 106 Quay Street Alexandria, VA 22314



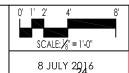
ARCHITECT:

325 north patrick street alexandria, va 22314 703 . 589 . 4550 info@conkeyarchitects.com Conkey architects



### 106 Quay Street, Alexandria, VA 22314 PROPOSED QUAY STREET FACADE & BUILDING SECTION W/ CABLE RAILING

CLIENT:
Renee and Jim Novakoff
106 Quay Street
Alexandria, VA 22314

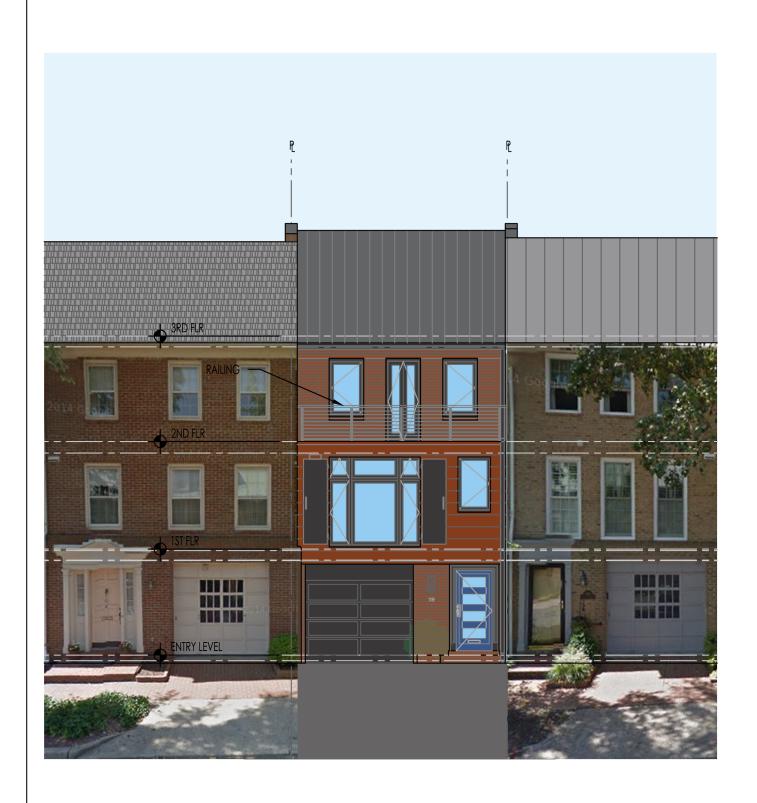


ARCHITECT:

703.589.4550 info@conkeyarchitects.com

325 north patrick street alexandria, va 22314

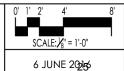
ASK 3.1A



## 106 Quay Street, Alexandria, VA 22314 PROPOSED QUAY STREET FACADE - COLOR RENDERING

CLIENT:

Renee and Jim Novakoff 106 Quay Street Alexandria, VA 22314

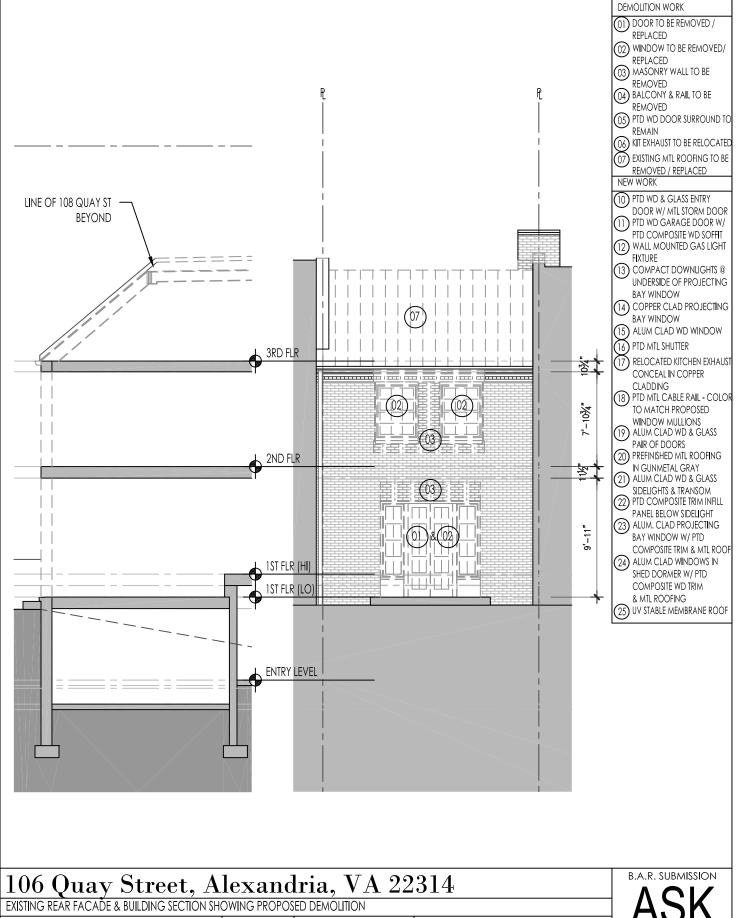


ARCHITECT:

325 north patrick street alexandria, va 22314 703 . 589 . 4550 info@conkeyarchitects.com

Conkey | architects

B.A.R. SUBMISSION



106 Quay Street, Alexandria, VA 22314

EXISTING REAR FACADE & BUILDING SECTION SHOWING PROPOSED DEMOLITION

CLIENT:
Renee and Jim Novakoff
106 Quay Street
Alexandria, VA 22314

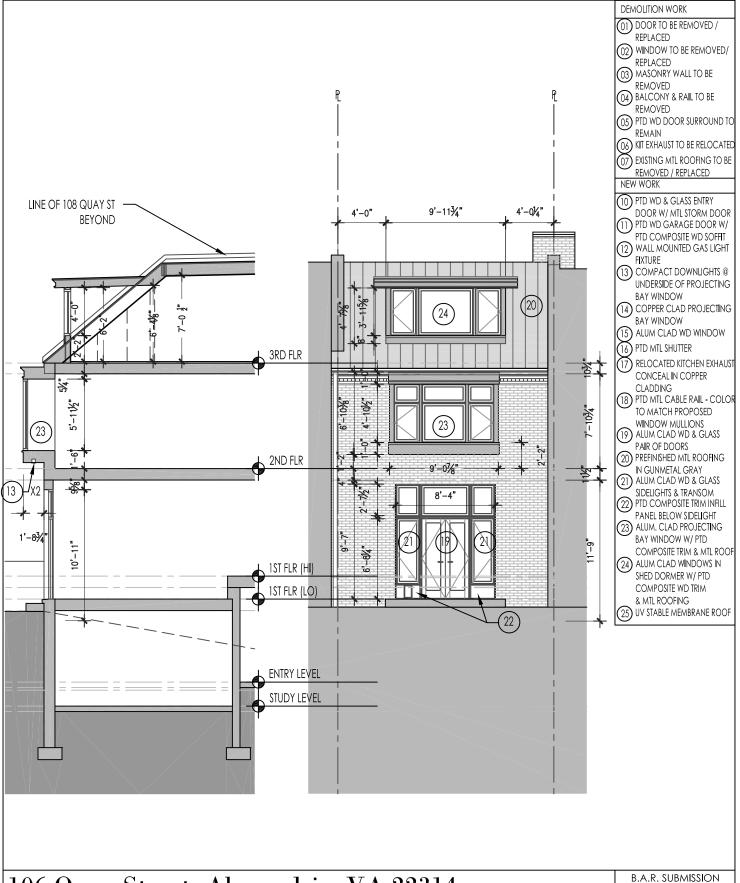
8 JULY 2016

Conkey architects

B.A.R. SUBMISSION
ARCHITECT:
325 north patrick street clevandria, va 22314
703. 589 . 4550
info@conkeyarchitects.com

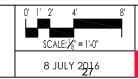
3.2

Conkey architects



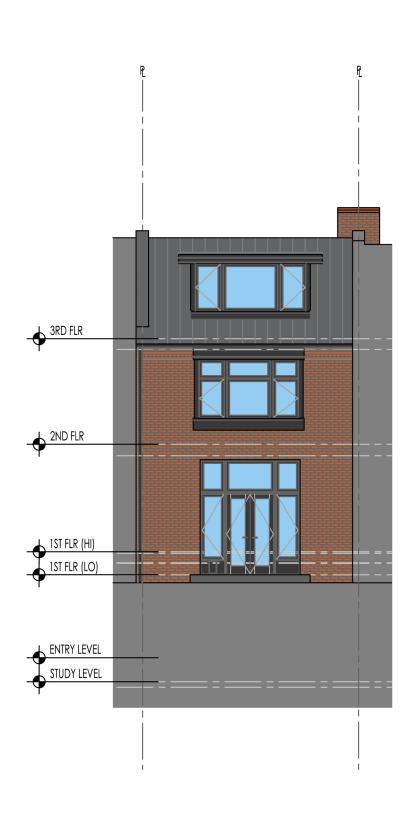
### 106 Quay Street, Alexandria, VA 22314 PROPOSED REAR FACADE & BUILDING SECTION - OPTION A WITH BAY WINDOW AT 2ND FLOOR

CLIENT:
Renee and Jim Novakoff
106 Quay Street
Alexandria, VA 22314



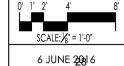
ARCHITECT: 325 north patrick street alexandria, va 22314 703 . 589 . 4550 info@conkeyarchitects.com

ASK 3.2A



# 106 Quay Street, Alexandria, VA 22314 PROPOSED REAR FACADE - OPTION A WITH BAY WINDOW AT 2ND FLOOR - COLOR RENDERING

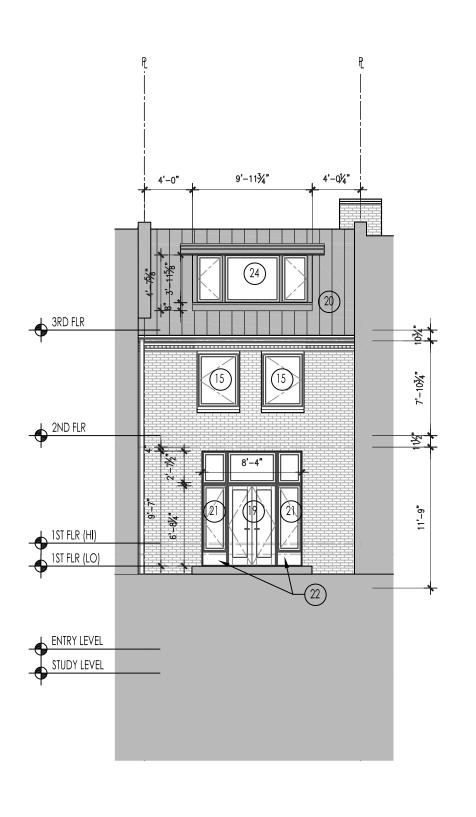
CLIENT: Renee and Jim Novakoff 106 Quay Street Alexandria, VA 22314



ARCHITECT: 325 north patrick street alexandria, va 22314 703 . 589 . 4550 info@conkeyarchitects.com

Conkey | architects

ASK 3.2B



DEMOLITION WORK

01) DOOR TO BE REMOVED /

(02) WINDOW TO BE REMOVED/ REPLACED

MASONRY WALL TO BE REMOVED

04) BALCONY & RAIL TO BE REMOVED

(05) PTD WD DOOR SURROUND TO REMAIN
(06) KIT EXHAUST TO BE RELOCATED

(07) EXISTING MTL ROOFING TO BE REMOVED / REPLACED

NEW WORK

10) PTD WD & GLASS ENTRY DOOR W/ MTL STORM DOOR

PTD WD GARAGE DOOR W/ PTD COMPOSITE WD SOFFIT

(12) WALL MOUNTED GAS LIGHT

(3) COMPACT DOWNLIGHTS @ UNDERSIDE OF PROJECTING BAY WINDOW

(14) COPPER CLAD PROJECTING BAY WINDOW

(15) ALUM CLAD WD WINDOW

(16) PTD MTL SHUTTER

77 RELOCATED KITCHEN EXHAUST CONCEAL IN COPPER CLADDING

(18) PTD MTL CABLE RAIL - COLOR TO MATCH PROPOSED WINDOW MULLIONS

19 ALUM CLAD WD & GLASS
PAIR OF DOORS

20 PREFINISHED MTL ROOFING IN GUNMETAL GRAY

21) ALUM CLAD WD & GLASS SIDELIGHTS & TRANSOM 22) PTD COMPOSITE TRIM INFILL

PANEL BELOW SIDELIGHT

(23) ALUM. CLAD PROJECTING
BAY WINDOW W/ PTD

COMPOSITE TRIM & MTL ROOF

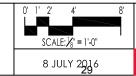
24) ALUM CLAD WINDOWS IN SHED DORMER W/ PTD COMPOSITE WD TRIM & MTL ROOFING

25) UV STABLE MEMBRANE ROOF

### 106 Quay Street, Alexandria, VA 22314

PROPOSED REAR FACADE & BUILDING SECTION - OPTION B WITH CASEMENT WINDOWS AT 2ND FLOOR

CLIENT: Renee and Jim Novakoff 106 Quay Street Alexandria, VA 22314

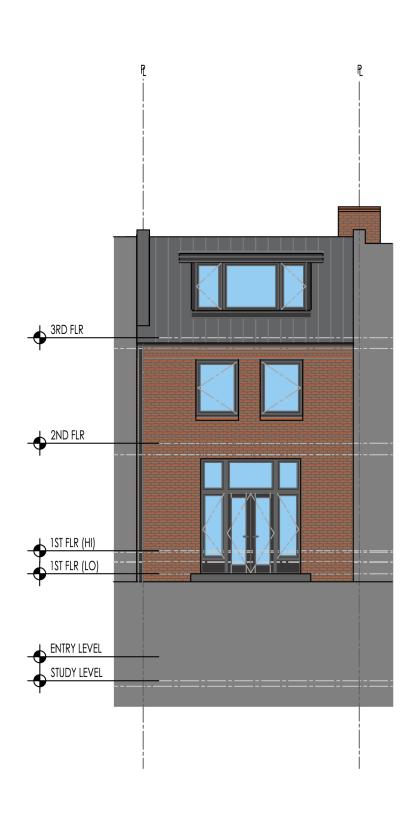


ARCHITECT:

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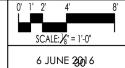
ASK 3.2C



### 106 Quay Street, Alexandria, VA 22314 PROPOSED REAR FACADE - OPTION B WITH CASEMENT WINDOWS AT 2ND FLOOR - COLOR RENDERING

CLIENT:

Renee and Jim Novakoff 106 Quay Street Alexandria, VA 22314

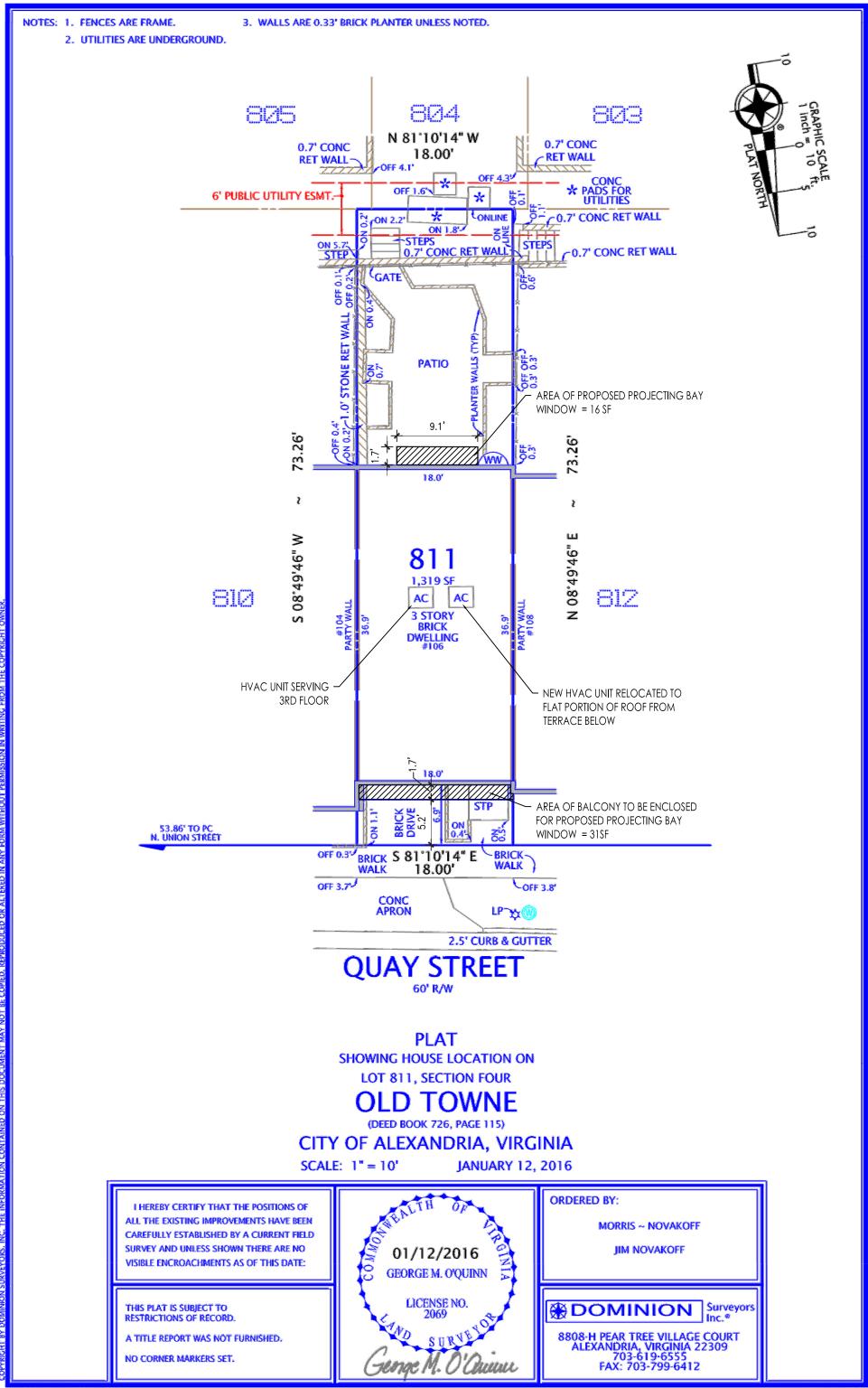


ARCHITECT:

325 north patrick street alexandria, va 22314 703 . 589 . 4550 info@conkeyarchitects.com

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B.A.R. SUBMISSION



### **Product Features**

### **Benefits**

### 802 All View and 803 Full View Storm Doors

Large "Slim Line" glass vision lites

Provide excellent vision area. Shows off prime

door.

Interchangeable glass and screen inserts (803)

Allows maximum ventilation in the warm months.

Adjustable doors sweep

Adjust to fit snugly at the threshold to seal out air

leakage.

Heavy duty stainless steel hinges

Wear well for longer life. Will not sag like conventional aluminum door hinges.

Heavy duty closer and door hardware

Protects the door from winds. Provide a long service life. Allow the door to latch every time.

### **804 Self Storing Storm Door**

Self-storing storm door

Eliminates seasonal changing of storms and screens. Provides ventilation when your desire. Sash is easily removable to the inside for cleaning.

Mon-Ray high performance storm windows are built into all self-storing doors

Easy operation, stainless steel pin locks, interlocking meeting rail and ratchet action jamb liner.

Adjustable door sweep

Adjust to fit snugly at the threshold to seal out air leakage.

Heavy duty stainless steel hinges

Wear well for longer life. Will not sag like conventional aluminum door hinges.

### 805 Patio Storm Door

1 1/2" adjustable wheels that roll on an extruded track rail

Provides smooth operation. Gives the ability to adjust the door for easy operation and tightness.

Extruded T-6 interlocking meeting rail

Positive interlock reduces air leakage between sashes. Extruded permanent design for lasting strength.

805-PSD air leakage is less than .25 CFM

Tighter design acts as a barrier to outside noise. Meets new state and federal standards.

Large air space between the patio storm door and prime patio door.

Keeps interior door warmer, reduces potential for condensation. Blocks outside noise and weather.



### Mon-Ray Storm Doors

"Quietly Making a Difference"

Home | About Us | Products | Gallery | Contact Us

#### Mon-Ray 800 Series Storm Doors

The Mon-Ray 800 Series storm doors are available as both hinged (swinging) storm doors and as sliding (patio) storm doors. They can be made to fit just about any door opening, including ones with special and custom radius shapes and miter angles.

Mon-Ray storm doors are used on projects that focus on Energy Conservation, Environmental Protection, Historical Restoration and Sound Abatement. In addition to being installed on tens of thousands of homes throughout the United States, Mon-Ray storm doors have been installed in schools, college and university buildings, hospitals and other public and private commercial buildings.

Some of the unique features of Mon-Ray storm doors include:

- Constructed of T6 tubular aluminum frames, which is far superior to T5 aluminum and vinyl used by other manufacturers and will not swell from water penetration like wood core storm doors.
- Available in a variety of standard paint and anodized finishes.
   Custom paint and anodized finishes are also available.
- Exclusive stainless steel hinges are self-lubricating and far superior in strength compared to other storm door hinges.
- Each sash of the Mon-Ray sliding doors glide on two heavy-duty, steel tandem rollers.
- Covered by the Mon-Ray Ten (10) Year Limited Product Warranty that is non-prorated and fully transferable.

Mon-Ray storm doors are available as four different models:

- + Model 802 fixed glass panel hinged door
- + Model 803 removable glass/screen panel hinged door
- + Model 804 self-storing glass/screen hinged door
- + Model 805 sliding patio storm door

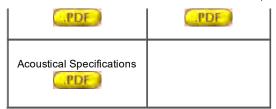
The Mon-Ray hinged storm doors are also available with a variety of different kick panel designs and optional accessories, including window grids and other decorative hardware.

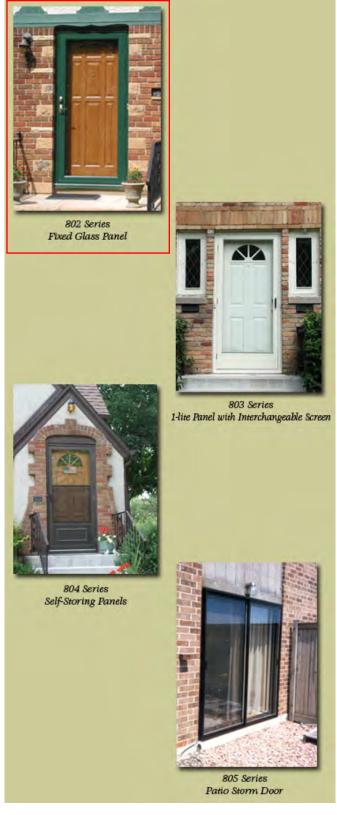
Simply click on the yellow links to access more information, including specifications, drawings and installation instructions. Make sure to visit our Mon-Ray 800 Series Gallery to see more photos. You can also Contact Us by email or by calling 1-800-544-3646, for site inspections, request price quotations, and to find the Mon-Ray Authorized Dealer nearest you.

You can also visit our Contact Us page or call 1-800-544-3646, for site inspections, request price quotations, and to find the Mon-Ray Authorized Dealer nearest you.

Scroll down the page for files on individual models.

Product Features	All Detail Drawings
Product Specifications	Product Performance





**Product Description** 

Mon-Ray Model 802 All view Door

Detail Drawing

Parts Drawing

Installation Instructions

Operating Instructions



PDF

PDF



Mon-Ray Model 803 Full view Door













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Home / Entry Doors & Exterior Doors / Wood Doors / Modern and Contemporary Doors / C4-1

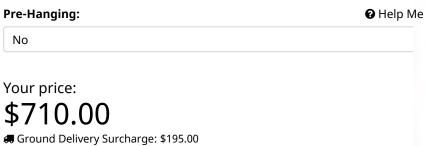
### 4-Lite Contemporary 80" Tall Mahogany Entry Door with Insulated Glass



Copyright © 2016 MAI Doors



MAI Doors
Model: C4-1
CUSTOMIZE & BUY
<b>1</b> Door Slab vs. Pre-hanging
Door Sing (MyU).
Door Size (WxH):
30"x80" (2'-6"x6'-8")



Delivery surcharge for each additional door \$35. Orders over \$5000 Ship FREE!

Add to Cart

**Glass Option:** 

Clear Low-E

 Help Me Choose → PPING only \$195 for first door and \$35 for each additional door, sidelite or transom We ship direct to your job site FREE SHIPPING ON ORDERS OVER \$5000

Save 3

Description Pre-Hanging **Factory Finish** Shipping Warranty & Care Stiles and rail construction have mortise and tenon joints

The Mahogany wood specie used is light red in color and can be stained any color or painted if desired

Glass bead is square for clean and modern look

Two glass options: satin and clear - both with energy efficient Low-E coating

Door is covered by five year limited warranty

Door is sold as slab unless selecting the pre-hanging option. Picture shown is of a pre-hung door.

#### Door is sold unfinished. Factory finish is available with our pre-hanging option.

Door Type:	Exterior	
Door Style: Contemporary		
Wood Species:	Red Maranti Mahogany	
Core:	Red Maranti Mahogany	
Construction:	Engineered Stiles and Rails	
Door Thickness:	1-3/4"	
Glass Type:	Tempered, Dual Insulated, Low-E	
Glass Style:	Clear or Satin	
Glass Thickness:	1/2"	
Finished:	Optional, available with prehanging option	
Paintable/Stainable:	Yes/Yes	
Hurricane Rated:	No	
Warranty:	5 Year Limited Manufacturer Warranty	



**SERVICE** 

### RECENTLY VIEWED

### ADDITIONAL INFO

### CONTACT US

Doors4Home

5446 W US HWY 290 # 102

Austin, TX 78735

**└** Toll Free: 1-877-929-3667

**L**ocal: 1-512-294-2747

Fax: 1-512-597-8394

store located in Austin, TX. For over customers premium hardwood interior doors, exterior doors and Fiberglass doors. Today general

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> Return Policy

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10 years we work hard to offer our contractors, builders, architects,

Doors4Home is a specialty door

ABOUT US

## Model 10 Finished Door Designs continued

NOTE: The seven foot high doors are illustrated below. Design may appear different dependent upon the height and number of sections of the door. Please contact your dealer for illustrations providing dimensions and line drawings for each design.

### Long Panel







Plain Short

Plain Long



Sunset



Sunset (16' Wide)



Cathedral Short



# ULTIMATE PUSH OUT CASEMENT & ULTIMATE PUSH OUT REPLACEMENT CASEMENT



# The Ultimate Casement, pushed in the right direction.

For classic operation and timeless feel, nothing is as simple and clean as the Push Out Casement. Marvin® makes this classic tradition more contemporary with an adjustable sash limiter, concealed multi-point locking system, and easy one handle operation. It's easy style with modern functionality.



ULTIMATE PUSH OUT CASEMENT



ULTIMATE PUSH OUT REPLACEMENT CASEMENT



#### SASH LIMITER

The Sash Limiter allows you to safely open your window on windy days. Flip a lever to lock the sash securely in place at multiple pre-set angles.

#### WINDOW OPENING CONTROL DEVICE -

Marvin's window opening control device option limits the casement sash opening to 4" or less when engaged. The release mechanism allows for operation beyond 4". This option is compliant with the ASTM F2090-10 standard specification for window fall prevention.



#### ULTIMATE SWINGING FRENCH DOORS



# Makes any entrance grander.

Our elegant Ultimate Swinging French Door opens wide to embrace the morning. Available in Inswing, Outswing or Arch Top, and  $2^{1}/4^{"}$  panel, the Ultimate Swinging French Door is unmatched in fit, finish, sizes and configuration. The sill is made of tough Ultrex® that will not warp, rot, corrode or fade over the years. So when the weather comes knocking, our performance-tested energy-efficient doors keep the weather outside. And the concealed multi-point locking system means it stays out.







#### **DESIGN POSSIBILITIES**

There are many more designs for divided lites. Visit Marvin.com for more possibilities.





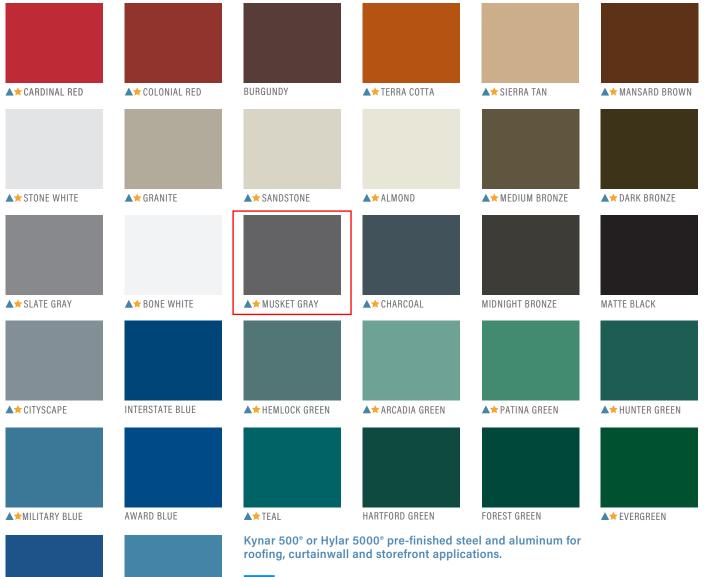


**ARCH TOP** 

Evergreen	ı
Hampton Sage	2
Cascade Blue	2
Gunmeta	l
Cadet Gray	/
Bright Silver (Pearlescent,	r )
Stone White	2
Sierra White	?
Coconut Cream	1
Cashmere	2
Clay	1
Pebble Gray	/
Suede	2
Copper (Pearlescent,	r )
Wineberry	/
Вгонга	2
Liberty Bronze (Pearlescent,	e )
Bahama Brown	1
Ebony	1



## Color Chart



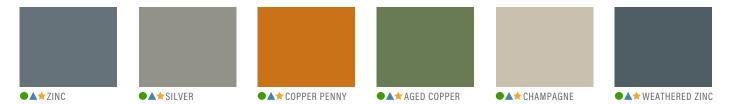


Denotes PAC-CLAD Metallic Colors
 Denotes ENERGY STAR Colors

▲ Denotes PAC-CLAD Cool Colors

Due to the limitations of the on-screen viewing, this color chart is not an accurate representation of our actual colors. Please request free color charts and sample chips to approve the true color before placing an order..

#### PAC-CLAD® Metallic Colors



#### PETERSEN ALUMINUM CORPORATION

**▲★**SLATE BLUE

#### PAC-CLAD.COM

**★**BERKSHIRE BLUE

# PAC-CLAD® Color Availability

DAC-CLAD			2 VEAR		CTE	-		0.1.1186	INITIM		FNEDOV
PAC-CLAD STANDARD COLORS	REFLECTIVITY	EMISSIVITY	3 YEAR EXPOSURE	SRI	STE 24 GA.	22 GA.	.032	ALUM .040	.050	.063	ENERGY Star*
ALMOND	0.53	0.87	0.52	62	~	~	~	<b>~</b>	~		*
ARCADIA GREEN	0.31	0.88	0.32	32	<b>~</b>		<b>~</b>				*
BONE WHITE	0.67	0.86	0.64	81	~	~	<b>~</b>	~	~	~	*
CARDINAL RED	0.37	0.86	0.36	39	✓		<b>~</b>		~		*
CHARCOAL	0.27	0.87	0.27	27	~		~		~		*
CITYSCAPE	0.44	0.86	0.43	49	✓	✓	<b>~</b>	✓	<b>~</b>		*
COLONIAL RED	0.32	0.88	0.32	34	~		~	~	~		*
DARK BRONZE	0.26	0.85	0.24	24	✓	✓	<b>*</b>	✓	<b>*</b>	~	*
EVERGREEN	0.27	0.86	0.25	26	~		~				*
GRANITE*	0.32	0.87	0.33	33	✓	✓	<b>~</b>	<b>~</b>	<b>*</b>		*
HEMLOCK GREEN	0.29	0.86	0.30	29	~		*		~		*
HUNTER GREEN	0.27	0.86	0.26	26	✓		<b>~</b>				*
MANSARD BROWN	0.29	0.86	0.27	29	~	~	~	~	~		*
MEDIUM BRONZE	0.26	0.88	0.25	26	~	<b>~</b>	<b>*</b>	<b>~</b>	<b>*</b>	~	*
MILITARY BLUE	0.29	0.87	0.28	29	~		~				*
MUSKET GRAY	0.31	0.87	0.30	32	✓	<b>~</b>	<b>*</b>		~		*
PATINA GREEN	0.33	0.86	0.32	34	~		~				*
SANDSTONE	0.49	0.87	0.49	56	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	~	*
SIERRA TAN	0.36	0.87	0.36	39	~	~	~	~	~		*
SLATE BLUE	0.25	0.87	0.24	24	<b>~</b>		<b>*</b>				*
SLATE GRAY	0.37	0.88	0.36	40	•	<b>*</b>	•	<b>Y</b>	•		*
STONE WHITE	0.64	0.87	0.61	77	<b>~</b>	<b>~</b>	<b>*</b>	<b>~</b>	<b>~</b>	<b>~</b>	*
TEAL TERRA COTTA	0.26	0.87	0.26 0.35	25	<b>~</b>		<b>*</b>				*
PAC-CLAD METALLIC CO	0.36	0.00	0.35	39	<b>~</b>		<b>~</b>		<b>~</b>		*
AGED COPPER		0.07	0.25	25							_
	0.26	0.87	0.25	25	<b>*</b>		•		<b>~</b>		*
CHAMPAGNE	0.40	0.82	0.36	42	<b>~</b>		<b>~</b>	<b>~</b>	~		*
COPPER PENNY	0.47	0.87	0.44	53	~		~	~	~		*
SILVER	0.49	0.81	0.46	54	<b>~</b>	<b>~</b>	<b>~</b>	<b>*</b>	<b>*</b>		*
WEATHERED ZINC	0.26	0.82	0.23	23	~	~	~		~		*
ZINC	0.33	0.88	0.32	35	~		<b>~</b>	<b>~</b>	~		*
PAC-CLAD STANDARD C	OLORS (DO NOT MEET	COOL ROOF REC	(UIREMENTS)								
AWARD BLUE					~		~		~		
BERKSHIRE BLUE*	0.26	0.87	0.25	25	~						*
BURGUNDY					~		~		~		
FOREST GREEN					~	~	~	<b>~</b>	~		
HARTFORD GREEN					<b>~</b>		<b>*</b>	•	~		
INTERSTATE BLUE					·		· •		· •		
MATTE BLACK											
					•		~	•	~	~	
MIDNIGHT BRONZE	INICII (NON KANAD)				~			~			
CLEAR-COAT ACRYLIC F		0.11	0.55								
GALVALUME PLUS	0.68	0.14	0.55	57	✓	✓					*

PAC-CLAD® Metallic finishes are available from stock at a moderate extra cost. PAC-CLAD® Copper Penny is a Non-Weathering finish. Solar Reflectance Index calculated according to ASTM E-1980. \*Low Gloss/Low Sheen,full Kynar 500® or Hylar 5000® finish

#### **Energy Star® Performance Criteria:**

Emissivity uses ASTM C1371. Reflectivity uses ASTM C1549.

#### Technical Data for Kynar 500°/Hylar 5000° Coating:

- > South Florida Exposure: Color (ASTM D 2244) No more than 5∆E Hunter units at 20 years; Chalk (ASTM D 4214) Rating no less than 8 at 20 years; Film integrity 20 years.
- Accelerated Weathering (ASTM D 4587, ASTM G 154): 5000 Hours, QUV-A, 340 NM Bulb - Chalk, per ASTM D 4214, rating of 6 or better; Color, per ASTM D 2244, < 5ΔE (Hunter Units) color change.
- Humidity Resistance (ASTM D 2247): Galvalume or HDG, 100% RH, 2000 hours - No field blisters; Aluminum, 100% RH, 3000 hours - No field blisters
- > Salt Spray Resistance (ASTM B 117): Aluminum, 3000 hours, Galvalume or HDG, 1000 hours - Creep from scribe no more than 1/16", no field blisters
- > Chemical/Acid Pollution Resistance (ASTM D 1308): Pass
- > T-Bend (ASTM D 4145): 1T 3T with no loss of adhesion
- > Pencil hardness (ASTM D 3363): HB 2B
- > Specular Gloss (ASTM D 523) @ 60 degrees: Typical 20 35
- Abrasion Resistance (ASTM D 968): 65 +/- 10 liters
   Cross Hatch Adhesion (ASTM D 3359): No loss of adhesion
- Reverse Impact (ASTM D 2794): Galvalume or HDG, 2x metal thickness inch-pounds, no loss of adhesion; Aluminum, 1.5x metal thickness inch-pounds, no loss of adhesion
- > Flame Test (ASTM E 84): Class A Coating

> Water Immersion (ASTM D 870): 500 hours, 100 degrees, no loss of adhesion

#### Samples:

These color reproductions are as accurate as modern printing technology will permit. Free material samples are available on request.

#### **Recycled Content:**

For information on recycled content, contact your PAC representative or visit www.pacgreeninfo.com



Print Product Sheet »

#### Modernist on Shelf Bracket



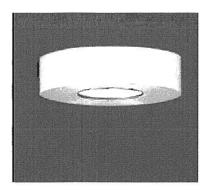
Standard Lantern Sizes

Heig	ght \	Vidth	Depth
15	II	7"	7"
19	"	8.75"	8.75"
23	"	10.5"	10.5"
27	"	12.75"	12.75"

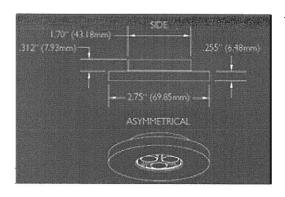
Lucifer Lighting Page 1 of 1

# PukLED with Concealed Fasteners for Wet Location - New

LPK-ALED-WET



This compact downlight with concealed fasteners is used in under-cabinet, under-shelf and display lighting applications. Its 3w warm white (3300°K standard, optional 4700°Kcool white) light emitting diode source is cool and bright, having the equivalent output of a 10w halogen lamp. This fixture, which may be recess or surface mounted, has a 50,000 hour rated lamp life, making it virtually maintenance free. May be accessorized with one 35mm effects device in addition to the use of theatrical grade colored gels. Lenses sealed.

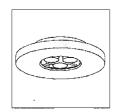


#### Select a Finish:

US Domestic Spec Sheet

#### PUKLED ™

#### LPK-ALED WITH HIDDEN FASTENERS



# PROVISIONAL PRODUCT SPECIFICATION

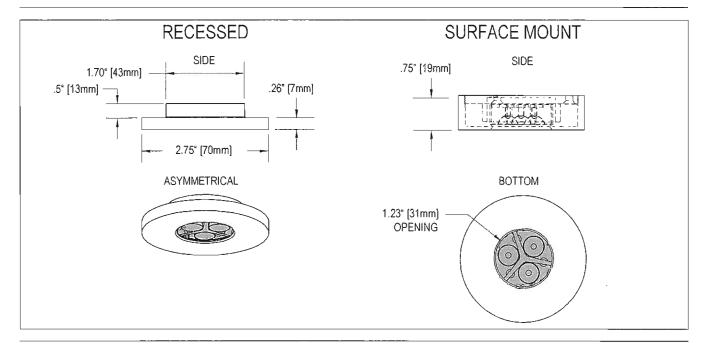
Cat. No. Description

LPK-ALED-\* 12VAC PukLED with hidden fasteners.

LPK-ALED-SM-\* 12VAC PukLED with hidden fasteners for surface mount.

LPK-ALED-WET-\* 12VAC PukLED with hidden fasteners for wet focation.

\* - Specify A (Clear Anodized Aluminum); B (Black Anodized Aluminum); W (Matte White)



#### GENERAL DESCRIPTION

Low voltage, small scale, white light LED luminaire without visible fasteners for concealed mounting suitable for interior and exterior dry and damp locations. 3300°K standard color temperature, optional cool white 4700°K available. Will accept one effects element in addition to a color gel with a soft focus lens standard.

\*Lens is sealed on wet location fixtures.

#### MOUNTING

May be recessed into a 1.750" (44.45mm) diameter hole in a .75" (19mm) thick panel. #4 Phillips flathead wood screws provided Surface Mount version available for non-recess applications.

#### MATERIAL

Fixture body in machined from aluminum alloy.

FINISH
Matte White Clear Anodized, or Black Anodized.

LABEL ETL Listed.

#### ELECTRICAL

350ma, 3.2w fixture is prewired with 18 AWG 10' (3m) lead. Maximum recommended run length is 30 feet with 18 AWG wire (consult factory for custom lengths).

To be powered by RSA-60-12H Hardwire (Dimmable) or PSA-60-12P Plug-In (Dimmable) or any class II 12VAC power supply. (\*Power supply must be ordered separately\*). Up to 18 fixtures may be powered by PSA-60-12H, PSA-60-12P in conjuction with optional PSA-DB distribution box, or any 60w Class II 12VAC power supply in conjunction with optional PSA-DB distribution box.

#### **ACCESSORIES**

Trim may be accessorized with one effects device: Clear Glass Lens (CGL-5), Soft Focus Lens (SFL-5). Warm Tone Lens (WTL-5), Spread Glass Lens (SGL-5) and Honeycomb Louvre (HCL-5). Optional color dels can be used in combination with other effects devices.

#### WARRANTY

Manufacturer's one year warranty of product is conditioned on use of manufacturer supplied power supply.



3750 IH35 North San Antonio, TX 78219 Phone: 210 227-7329 Fax: 210 227-4967 Juciferlighting.com

©2008 Lucifer Lighting Company

As part of its policy of continuous research and product development, the Company reserves the right to change or withdraw specifications without prior notice.

021908

#### **Indoor Units**







#### MSZ-FH09, 12, 15NA

New sleek design offers many new features including new multi-functional wireless remote controller.

- Triple-action filtration including anti-allergen enzyme filter.
- Double-vane air delivery for enhanced circulation.
- i-see Sensor™ 3D senses human heat signatures.



#### MFZ-KA09, 12, 18NA

Floor-mounted indoor units are perfect for difficult areas that may be smaller or don't have usable wall space.

- Top and bottom discharge vanes.
- Wireless remote control with smart set feature.
- Front panel filter access for ease of cleaning.



#### **SLZ-KA09, 12, 15NA**

Ceiling-recessed indoor units offer a wide airflow pattern for better air distribution in a less obtrusive style.

- Ventilation air knockouts available.
- Offers a 2, 3, or 4 way airflow pattern.
- Built-in condensate lift mechanism (up to 20").



#### MSZ-GE09, 12, 15, 18, 24NA

Slim, wall-mounted units provide individual room control in a variety of applications.

- Offers wide angle of airflow, 150 degrees from left to right.
- Quiet operation as low as 19 dB(A).
- Provides cooling and heating in a wide range of capacities.



#### SEZ-KD09, 12, 15, 18NA

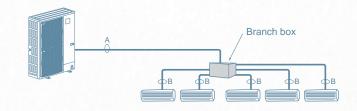
Horizontal-ducted indoor units provide comfort and efficiency while staying hidden in ceiling or beneath the floor.

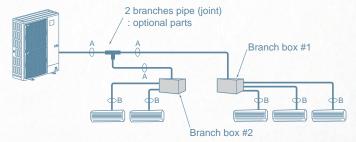
- Build-in condensate lift mechanism (up to 22").
- Static capability up to 0.20" WG.
- Optional filter box with MERV-8 filters.

#### **BRANCH BOX CONNECTIONS**

#### When Using One Branch Box

Flare Connection - Max. 5 indoor units





#### When Using Two Branch Boxes

- Max. 8 indoor units



			一					
Model Name				MXZ-2C20NAHZ		MXZ-3C24NAHZ	MXZ-3C30NAHZ	MXZ-4C36NAHZ
	Rated Capacity	Btu/h		18,000 / 20,000		22,000 / 23,600	28,400 / 27,400	36,000 / 36,000
Cooling * Non-Ducted/	Capacity Range	Btu/h		6,000-20,000		6,000-23,600	6,000-28,400	6,000-36,000
Ducted	Rated Total Input	W		1,334 / 1,819		1,630 / 2,360	2,272 / 2,661	2,570 / 3,180
	Rated Capacity	Btu/h		22,000 / 22,000		25,000 / 24,600	28,600 / 27,600	45,000 / 45,000
Heating at 47F* (Non-Ducted/	Capacity Range	Btu/h		7,400-25,500		7,200-30,600	7,200-36,000	7,200-45,000
Ducted)	Rated Total Input	W	П	1,612 / 1,748		1,725 / 1,871	2,096 / 2,187	3,340 / 4,250
	Rated Capacity	Btu/h		13,700 / 13,700		14,000 / 14,000	18,000 / 16,500	34,000 / 36,000
Heating at 17F* (Non-Ducted/	Maximum Capacity	Btu/h		22,000 / 22,000		25,000 / 24,600	28,600 / 27,600	45,000 / 45,000
Ducted)	Rated Total Input	W		1,450 / 1,588		1,622 / 1,635	1,991 / 1,993	3,500 / 4,590
Heating at 5F*	Maximum Capacity	Btu/h		22,000		25,000	28,600	45,000
Efficiency	SEER (Non-Ducted/Ducted	)		17.0 / 15.0		19.0 / 15.5	18.0 / 16.0	19.1 / 15.8
	EER (Non-Ducted/Ducted)		П	13.5 / 11.0		13.5 / 10.0	12.5 / 10.3	14.0 / 11.3
	HSPF (Non-Ducted/Ducted	)		9.8 / 9.5		10.0 / 9.0	11.0 / 9.8	11.3 / 10.1
	Power Supply	V, Ph, Hz			á,	208 / 230V,1-	Phase, 60 Hz	
Electrical Requirements	Recommended Fuse/Breaker Size	А		40		40	40	50
riequirements	MCA	А		29		30	30	42
	Indoor - Outdoor S1-S2	V				AC 20	8 / 230	
Voltage	Indoor - Outdoor S2-S3	V			DC ± 24			
Compressor	mpressor			DC INVERTER - driven Twin Rotary				
Fan Motor (ECM	)	FLA		1.9		1.9	1.9	0.4 + 0.4
Sound Pressure	Cooling	dB(A)		54		54	54	49
Level	Heating			58		58	58	53
External Dimens	ions (H x W x D)	In / mm		41-9 <mark>/</mark> 32 x 37-13/32 x 13			52-11/16 x 41-11/32 > 13(+1)	
Net Weight		Lbs / kg		187 / 85		189 / 86	189 / 86	276 / 125
External Finish						Munsell No	o. 3Y 7.8/11	
Refrigerant Pipe	Liquid (High Pressure)	In / mm				1/4 / 6.35		3/8 / 9.52
Size O.D.	Gas (Low Pressure)	,		A,B: 3/8 / 9.52		A: 1/2 / 12.7	; B,C: 3/8 / 9.52	5/8 / 15.88
Max. Piping Len	gth for Each Indoor Unit	Ft / m		164 / 50		230	)/70	492 / 150
Max. Refrigerant	line Length			82 / 25		82	/ 25	262 / 80
	If IDU is Above ODU	Ft / m		49 / 15		49	/ 15	164 / 50
Pipe Height Difference	If IDU is Below ODU	Ft / m		49 / 15		49	/ 15	131 / 40
Connection Meth	hod					Flared	/ Flared	
Refrigerant				49		R41	10A	

#### H2I® TECHNOLOGY FROM MITSUBISHI ELECTRIC IS BECOMING THE NEW NORMAL, PROVIDING EXCEPTIONAL YEAR-ROUND COMFORT EVEN IN EXTREME CLIMATES.



#### MITSUBISHI ELECTRIC H21® PRODUCTS PROVIDE:

- Superior heating performance.
  - Simultaneous heating and cooling down to -4° F outdoor ambient (R2-Series, two-pipe design).
  - 100% heating capacity at between 0° F and 5° F outdoor ambient.
  - Up to 85% heating capacity heating performance down to -13° F outdoor ambient.
- Most complete family of hyper-heating, cold climate products from single-zone (9KBtu/h) to VRF multi-zone systems (up to 16 tons).
- Built-in base pan heater (Select models only).
- FH wall-mounted ductless units offer i-see Sensor™ 3D.

For more information, visit www.mehvac.com,

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Electric Corporation. See complete warranty for terms, conditions and limitations













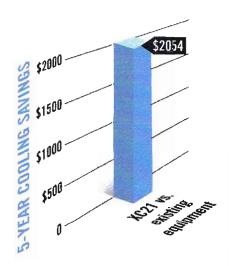
cool

#### Virtually silent

Exclusive SilentComfort<sup>™</sup> technology makes the XC21 **up to 20% quieter than a standard air conditioner.\*\*** An industry-exclusive composite fan design, two-stage operation and an insulated compressor compartment also help reduce sound levels.

#### SEERiously efficient

With industry-leading efficiencies of up to 21.00 SEER, the XC21 can save you hundreds of dollars each year on your utility bills.



SEER stands for "Seasonal Energy Efficiency Ratio" and is a measure of a central air conditioner's efficiency and performance. The higher the SEER, the greater your energy savings. Typical SEER ratings range from 13 to 18, but the XC21 carries ratings as high as 21.00.

Savings chart shows the 5-year savings you can expect from a 21.00 SEER air conditioner vs. existing equipment with a 10.00 SEER rating. The regions used to calculate household fuel and utility costs reflect a cross-section of cities in the U.S. In addition to geography, cooling costs are based on 3-ton capacity specifications, with 1,800 cooling hours per year and 12.29 cents per KWh (Source: EIA National average electric rate, August 2014 YTD). Your actual costs will vary depending on the weather, local fuel rates, systems settings and your personal lifestyle.

## signature collection



XC21

The quietest and most efficient twostage central air conditioner you can buy\*

<sup>\*\*</sup>Sound Rating Number according to ANSI/AHRI Standard 270-2008. "SRN" is the overall A-weighted Sound Power Level, (LWA), dB (100 Hz to 10,000 Hz). Sound information based on 3-ton models. Standard system is a 13ACX with a 76dB sound rating.

# We're obsessed with the pursuit of creating perfect air, and doing so with absolute efficiency.



Since 1895, Lennox has been on a continuous quest to reinvent home comfort. Perfect air is our purpose and our obsession. Today, that pursuit takes shape in many innovative ways: precise and energy-efficient air conditioners, the quietest high-efficiency furnaces, heat pumps, thermostats, air handlers, air cleaners, small-space comfort systems, boilers and more.

#### Peace-of-mind protection

The XC21 comes with a 10-year limited warranty on the compressor and all remaining covered components.\*





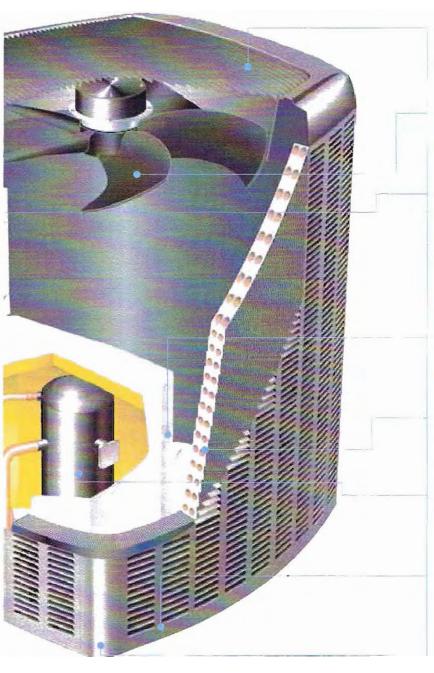
#### Dealers you can count on

You can trust Lennox Dealers to design the right system for your home, install it properly and help keep it running. Because Lennox has more than 6,000 dealers throughout North America, you can rest assured there's a dealer near you.





The XC21 is Lennox' first residential air conditioner rated up to 21.00 SEER. Compared to conventional cooling systems, it can help save you hundreds of dollars on your utility bills each year (see chart on page 3). As one of Lennox' most efficient and advanced energy innovations, it carries a green Signature badge and has earned the ENERGY STAR®. Beyond cost savings, this badge gives you peace of mind in knowing the XC21 is a better choice for the environment.



SilentComfort™ Fan Grille - Uses patent-pending, vortex-suppression technology to reduce sound of airflow exiting unit, providing a quieter environment outside your home.

SilentComfort Outdoor Fan Motor with Composite Fan Blades - Provides extremely reliable starting and running performance, even under harsh outdoor conditions.

iComfort®-Enabled Technology - Allows the XC21 to exchange information with other home comfort system components and make adjustments as needed to optimize performance and efficiency.

Humiditrol® Compatible - Manages the moisture in your home's air for greater comfort and improved indoor air quality.

Insulated Compressor Compartment - Uses industry-leading, vibration-isolating mounts and other innovative materials to minimize operating sounds.

#### High-Efficiency Outdoor Coil -

Provides exceptional heat transfer and low air resistance for high-efficiency operation that can lower your cooling bills.

Two-Stage Scroll Compressor - Operates at low stage most of the time for quieter, more energy-efficient performance. Plus, it uses the U.S. EPA-approved R-410A refrigerant.

PermaGuard™ Cabinet - Heavy-gauge, galvanized steel construction, louver coil guard, baked-on powder finish and durable zinc-coated steel base help provide protection against rust and corrosion.

#### SmartHinge" Louver Design -Allows quick, easy access to interior

components from all sides, so the unit can be serviced quickly.



#### Dave Lennox Signature Collection XC2 Specifications

Model	024	036	048	060
SEER	Up to 21.00	Up to 19.70	Up to 18.50	Up to 16.50
Sound Rating - dB	69	71	73	73
A RECORD OF THE PROPERTY OF TH	47×35-1/2×39-1/2 1194×902×1003	47×35-1/2×39-1/2 1194 × 902 × 1003	47×35-1/2×39-1/2 1194×902×1003	47×35-1/2×39-1/2 1194×902×1003

Note: Due to Lennox' ongoing commitment to quality, all specifications, ratings and dimensions are subject to change without notice. Always verify actual system efficiencies through AHRI or by visiting the AHRI ratings database at www.ahridirectory.org. \*Applies to residential applications only. See actual warranty certificate for details.



Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your Lennox Dealer for details, or visit www.energystar.gov.



