

EXPEDITED
MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address:	25 Grafton St., Chevy Chase	Meeting Date:	6/28/2017
Resource:	Contributing Resource (Chevy Chase Village Historic District)	Report Date:	6/21/2017
Applicant:	Carol and Michael Kelleher	Public Notice:	6/14/2017
		Tax Credit:	Yes
Review:	HAWP	Staff:	Michael Kyne
Case Number:	35/13-17L		
PROPOSAL:	Storm window replacement		

STAFF RECOMMENDATION:

- ☒ Approve
☐ Approve with conditions

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Contributing Resource within the Chevy Chase Village Historic District
DATE: c. 1892 - 1916
STYLE: Craftsman

PROPOSAL:

The applicants propose to replace the existing aluminum storm windows at the subject property with new aluminum storm windows. The proposed storm windows will be double hung with screen and will be white to match the wood window trim.

APPLICABLE GUIDELINES:

Policy On Use of Expedited Staff Reports for Simple HAWP Cases

IV. The Expedited Staff Report format may be used on the following type of cases:

9. Installation of storm windows or doors that are compatible with the historic site or district in terms of material or design.

Montgomery County Code; Chapter 24A-8

- (a) The commission shall instruct the director to deny a permit if it finds, based on the evidence and information presented to or before the commission that the alteration for which the permit is sought would be inappropriate, inconsistent with or detrimental to the preservation, enhancement or ultimate protection of the historic site or historic resource within an historic district, and to the purposes of this chapter.

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:
- (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
 - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
 - (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or
 - (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or
 - (5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; or
 - (6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.
- (c) It is not the intent of this chapter to limit new construction, alteration or repairs to any 1 period or architectural style.
- (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

STAFF RECOMMENDATION:

Staff recommends that the Commission **approve** the HAWP application under the Criteria for Issuance in Chapter 24A-8(b), (1), (2) & (d) having found that the proposal is consistent with the *Chevy Chase Village Historic District Guidelines*, and therefore will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the *Secretary of the Interior's Standards for Rehabilitation*;

and with the general condition that the applicant shall present the **3 permit sets of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping** prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion.

Once the work is completed the applicant will contact the staff person assigned to this application at 301-563-3400 or michael.kyne@montgomeryplanning.org to schedule a follow-up site visit.



HISTORIC PRESERVATION COMMISSION
301/563-3400

DPS - #8

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Email: CarolhKelleher@gmail.com Contact Person: Carol Kelleher
Tax Account No.: 454903 Daytime Phone No.: 301 656-4299
Name of Property Owner: Carol & Michael Kelleher Daytime Phone No.: 301 656-4299
Address: 25 Grafton Street Chevy Chase MD 20815
Contractor: The Window Man Phone No.: 703 978-9888
Contractor Registration No.: 131819
Agent for Owner: _____ Daytime Phone No.: _____

LOCATION OF BUILDING/PREMISE

House Number: 25 Street: Grafton Street
Town/City: Chevy Chase Nearest Cross Street: Cedar Pkwy
Lot: 8 Block: 24 Subdivision: Section Two Chevy Chase
Liber: B Folio: 48 Parcel: 7-9-454903
also B736 303-304

PART ONE: TYPE OF CONSTRUCTION AND USE

1A. CHECK ALL APPLICABLE:

- ☐ Construct ☐ Extend ☐ Alter/Renovate
☐ Move ☒ Install ☐ Wreck/Raze
☐ Revision ☐ Repair ☐ Revocable

CHECK ALL APPLICABLE:

- ☐ A/C ☐ Stair ☐ Room Addition ☐ Porch ☐ Deck ☐ Shed
☐ Solar ☐ Fireplace ☐ Woodburning Stove ☐ Single Family
☐ Fence/Wall (complete Section 4) ☒ Other: Storm windows

1B. Construction cost estimate: \$ 16,000

1C. If this is a revision of a previously approved active permit, see Permit # _____

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTENSION/ADDITIONS

2A. Type of sewage disposal: 01 ☐ WSSC 02 ☐ Septic 03 ☐ Other: _____
2B. Type of water supply: 01 ☐ WSSC 02 ☐ Well 03 ☐ Other: _____

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height _____ feet _____ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

- ☒ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Carol H. Kelleher
Signature of owner or authorized agent

10 May 2017
Date

Approved: _____ For Chairperson, Historic Preservation Commission

Disapproved: _____ Signature: _____ Date: _____

Application/Permit No.: _____ Date Filed: _____ Date Issued: _____

**THE FOLLOWING ITEMS MUST BE COMPLETED AND THE
REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION.**

1. WRITTEN DESCRIPTION OF PROJECT

- a. Description of existing structure(s) and environmental setting, including their historical features and significance:

25 Grafton Street
Chevy Chase MD 20815

This is a 1908 Colonial Revival home, pebble-dash stucco with all wood trim in Chevy Chase Village. It is a Contributing Structure with front and rear open porches, third floor dormers and a center hall.

We are repairing and refurbishing our original 109-year-old double-hung windows and wish to replace the existing 35-year-old aluminum triple-track storm windows with a more modern version that will be more weatherproof, easier to operate, and lower profile to provide a better view of the original windows, thus enhancing the architecture of the house. Metal will be white, matching the trim color of the house. Product is Mon-Ray Custom-Fit #504 Series double-hung with two glass half panels and one half screen.

Site and environmental setting, drawn to scale. You may use your plot. Your site plan must include:

- a. the scale, north arrow, and date;
- b. dimensions of all existing and proposed structures; and
- c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. PLANS AND ELEVATIONS

You must submit 2 copies of plans and elevations in a format no larger than 11" x 17". Plans on 8 1/2" x 11" paper are preferred.

- a. *Schematic construction plans*, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.
- b. *Elevations (facades)*, with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. An existing and a proposed elevation drawing of each facade affected by the proposed work is required.

4. MATERIALS SPECIFICATIONS

General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings.

5. PHOTOGRAPHS

- a. Clearly labeled photographic prints of each facade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.
- b. Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. TREE SURVEY

If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

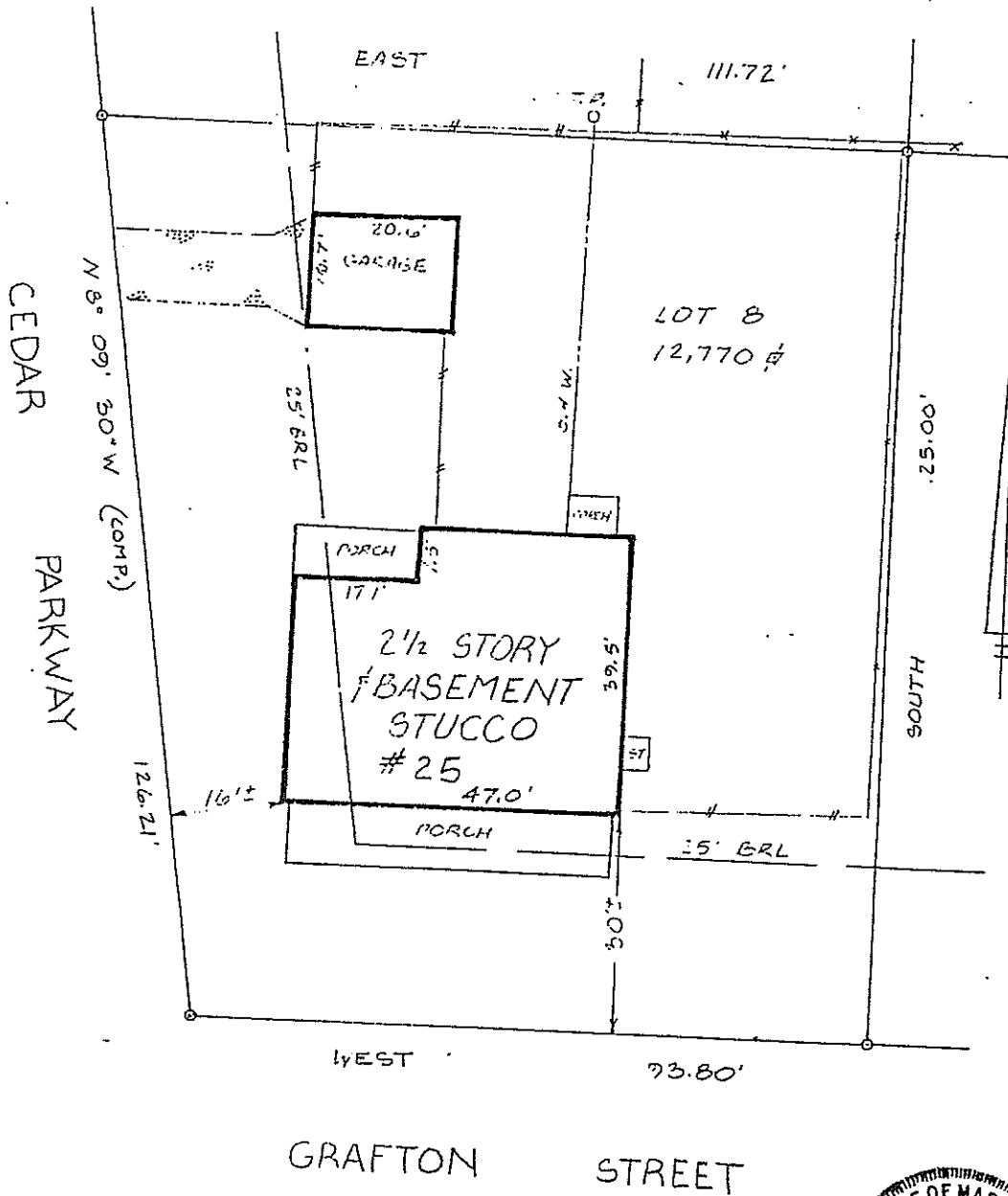
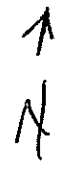
7. ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS

For ALL projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question.

PLEASE PRINT (IN BLUE OR BLACK INK) OR TYPE THIS INFORMATION ON THE FOLLOWING PAGE.
PLEASE STAY WITHIN THE GUIDES OF THE TEMPLATE, AS THIS WILL BE PHOTOCOPIED DIRECTLY ONTO MAILING LABELS.

LANDTECH ASSOCIATES INC.

4205 EDMONSTON ROAD BLADENSBURG, MARYLAND 20710



NO TITLE REPORT FURNISHED

LOCATION SURVEY OF
#25 GRAFTON STREET
MONTGOMERY COUNTY, MD.
SUBDIVISION SECTION TWO
"CHEVY CHASE"

LOT: 8
PLAT BOOK: 2
DATE: 4.30.84
CASE NO: DTD-1567

BLOCK: 24
PLAT NO: 106
SCALE: 1"=20'
FILE NO: DD-84131

CERTIFICATION:

I HEREBY CERTIFY THAT THE POSITION OF ALL THE EXISTING IMPROVEMENTS ON THE ABOVE DESCRIBED PROPERTY HAS BEEN CAREFULLY ESTABLISHED BY A TRANSIT TAPE SURVEY AND THAT UNLESS OTHERWISE SHOWN THERE ARE NO ENCROACHMENTS. THIS IS NOT A PROPERTY LINE SURVEY AND SHOULD NOT BE USED AS SUCH.

David C. [Signature]

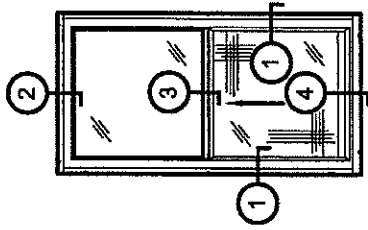
BRADEN A. ROBERTS, PROP. L.S. MD. LIC. NO. 118

(5)

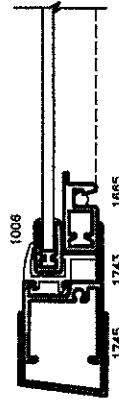


Storm Windows & Doors

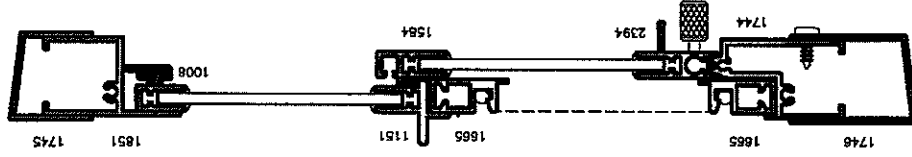
Mon-Ray, Inc.
Phone: (800) 544-3646
Fax: (763) 546-8977
www.monray.com



2-LITE DH



①
JAMB



②
HEAD

③
MEETING
RAIL

④
SILL

FULL SCALE (11 x 17)

HALF SCALE (8-1/2 x 11)

MON-RAY MODEL 504 - DOUBLE HUNG
FLUSH MOUNT WITH ADJUSTABLE FRAME U-CHANNEL EXPANDERS

STANDARD WITH 1/8" CLEAR ANNEALED GLASS

DRAWING
MR-504-001

ARCHITECTURAL SPECIFICATIONS

Section 08580 or 08593
2004 Master Format Section 08 51 69 or 08 56 73

Mon-Ray 500 & 600 Series High Performance Aluminum Storm Windows

PART 1 GENERAL

1.00 SCOPE

- A. This is a high performance acoustical storm window Specification. The Specification provides the Bidders with rigid standards for product materials, workmanship and performance that must be complied with in every respect.
- B. It is the intent of this Specification to provide the Owner with proper product materials, workmanship, design, application, performance, installation and warranty coverage. The Specification describes specific test requirements, system performance, quality assurance tests, and product material requirements required to meet the Owner's desired acoustical performance level.

1.01 WORK INCLUDED

- A. Furnish and install high performance acoustical aluminum storm windows, complete with hardware, and related components as shown in drawings and specified in this Section.
- B. All storm windows are to be Mon-Ray Series 500 or 600 as manufactured by Mon-Ray, Inc. Other manufacturers requesting approval to bid their product will be viewed as alternate bids and must submit a request for approval 10 days prior to bid for consideration.

1.02 REFERENCES

- A. ANSI/AAMA 1002.10-93 "Voluntary Specifications for Insulating Storm Products for Windows and Sliding Glass Doors"
- B. ASTM E 283 "Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors"
- C. ASTM E 330 "Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference"
- D. ASTM E 331 "Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Air Pressure Difference"
- E. AAMA 502 "Voluntary Specification for Field Testing of Windows and Sliding Glass Doors"
- F. ASTM E 90 "Laboratory Measurement of Airborne Sound Transmission of Building Partitions"
- G. ASTM E 413 "Determination of Sound Transmission Class (STC)"

1.03 SYSTEM PERFORMANCE

- A. Test Unit Size: Test units shall be the sizes listed below. Sill of the test buck shall have a 13 degree slope to the exterior. (See Appendix "A" for test buck details)
 - 1. Fixed panel and removable panel storm windows: 4'0" wide x 4'0" high
 - 2. Horizontal sliding storm windows: 6'0" wide x 4'0" high
 - 3. Vertical sliding storm windows: 3' 8" wide x 5' 2" high
- B. Air Leakage Test: The storm window shall be subjected to an air leakage test in accordance with ASTM-E 283. Window units tested by an Independent Laboratory shall be glazed with 1/8" clear annealed glass. Air leakage shall meet the following performance requirements.

Revised 2/2/07

1. Air leakage for fixed panel storm windows shall not exceed 0.15 CFM per square foot of window area at both a positive (infiltration) and negative (exfiltration) static pressure of 1.56 PSF at 25 mph wind. Weep holes shall not be sealed during the air leakage test.
 2. With the storm sash in the closed position, air leakage in removable panel, horizontal and vertical sliding windows shall not exceed 0.50 CFM per lineal foot of sash crack at both positive and negative static pressure 1.56 PSF at 25 mph wind . Weep holes shall not be sealed during the air leakage test.
- C. Uniform Structural Load Test: With storm sash closed position, the window shall be tested in accordance with ASTM E 330. Apply a minimum exterior positive and negative load of:

30.0 PSF at 108 mph wind = Class 20
 37.5 PSF at 121 mph wind = Class 25
 45.0 PSF at 132 mph wind = Class 30
 52.5 PSF at 143 mph wind = Class 35

for fixed panel, removable panel, horizontal and vertical sliding storm windows. Each load shall be maintained for 10 seconds. At the conclusion of the test, there shall be no glass breakage, damage to fasteners, hardware or any other damage causing the storm window to be inoperable.

- D. Water Resistance Test: With storm sash in the closed position, the window shall be subjected to a water resistance test in accordance with ASTM E 331. When a positive static pressure of:

2.0 PSF at 28 mph wind = Class 20
 2.5 PSF at 31 mph wind = Class 25
 3.0 PSF at 34 mph wind = Class 30
 3.5 PSF at 37 mph wind = Class 35

has been stabilized, 5 gallons of water per hour per square foot of window area shall be applied to the exterior face of the window, for a continuous period of 3 minutes. No water shall run over the interior edge of the sloped test buck sill.

- E. Concentrated Load and Glass Adherence Tests: A concentrated load equal to the weight of the sash, but not less than 15 pounds, acting parallel to the plane of the glass in a direction tending to pull the sash rails off the glass and applied alternately for three minutes at the center of all sash rails of the glazed sash shall not cause the sash rails to deflect more than 1/8" each.
- F. Safety Drop Test: When the glazed lower sash of a vertical sliding storm window is allowed to "free fall" the maximum distance provided for by the latch positions, it shall automatically stop every two inches in the next lower latch position.
- G. Glass and Screen Insert Squareness Test: Take a measurement of the distance between diagonally opposite pairs of corners of an insert with a steel rule. The difference between these measurements shall not be more than 1/4".
- H. Acoustical Performance: An acoustical test report shall state that the secondary glazing window to be furnished has been tested by it self in accordance with ASTM E90-90. The STC rating of the storm window shall tested as either "solo", the storm window alone or "tandem", with a prime window and a storm window.

1.04 SUBMITTALS

- A. Shop Drawings: Submit drawings under provisions of Section 01300. Include dimensions, relationships to construction of adjacent work, component anchorage, type of caulking, window locations, installation methods and installation materials. Dimensions of all windows and components will be the responsibility of the successful Bidder.
- B. Samples: Submit appropriate color Samples for Architects review and approval.
- C. Test Reports: Submit Independent Laboratory Test Reports verifying windows meet the specified requirements for sound transmission, air leakage, water resistance, uniform structural load, and deglazing.

- D. Certificates: Furnish an affidavit in triplicate from the Window Manufacturer, certifying that materials used on this Project conform to these Specifications and are identical in all appropriate respects to the storm windows identified in the Independent Laboratory Test Reports.

1.05 QUALITY ASSURANCE

- A. Qualifications: Fabrication shall be by a Window Manufacturer who can furnish evidence to the Owner that it is, and has been for not less than five (5) consecutive years, regularly engaged in the manufacturing of aluminum window units similar in design and performance to those specified for this Project.

B. Pre-award Installation:

1. Provide a complete installation of one (1) window as specified and selected by the Owner. Window mock-up to be completed within seven (7) days of the bid opening date. This window and installation shall be for the review of the product and installation. The Owner at his discretion may have the window tested by an Independent Test laboratory to verify compliance of the product with these Specifications.

The cost for pre-award testing, by the Independent Laboratory shall be paid by Owner. Any deficiencies discovered on the window by the testing and the Bidder at no cost to the Owner will correct deficiencies in any similar models used in the project.

C. Post Installation Field Testing:

1. Window field-testing will be in accordance with AAMA 502-90 using Test Method B. After installation and before final payment, up to two percent (2%), but not less than two (2) window units may be randomly selected by the Owner and subjected to an air leakage and water resistance tests. Air leakage and water resistance test results shall meet the specified requirements per AAMA 502-90. If any randomly tested window fails, the Successful Bidder shall make necessary corrections until satisfactory results are achieved and make corrections to all other window units installed as part of this Project.

All costs associated with the Post Installation Field Testing and required repairs or replacements shall be borne by the Successful Bidder. These tests may be performed by either the Window Manufacturer's technical service personnel using accurately calibrated and approved air leakage testing equipment, or by an approved Independent Test Laboratory. All tests shall be conducted in the presence of the Owner, or the Owner's Representative.

D. Reference List:

1. The Bidder shall furnish with its bid a Reference List from the Window Manufacturer containing not less than ten (10) completed projects with window units of similar to the window units specified for this Project. At least five (5) of the referenced projects shall be at least three (3) years old. As part of the bid evaluation to determine life cycle cost and best value for the Owner, consideration will be given as to age, longevity, performance and extended product life of these installations. The Reference List shall include the name, address and phone number of the project, and the date the project was completed.
2. If an installation sub-contractor is used, the subcontractor must furnish a list of at least five (5) projects similar in scope to this project with the base bid.
3. The Owner or Owners Representative has the right to deem the bidder as "non-responsible" or "non-qualified", based upon inspection of any projects performed by the bidder as a contractor, sub-contractor or manufacturer, if the products or workmanship is determined to be unacceptable by the Owner or Owners Representative.

1.06 WARRANTY

- A. Product Warranty: The successful Bidder shall furnish a positively written, non-prorated and fully transferable warranty from the Window Manufacturer against defects in materials and workmanship of the storm window units, under normal use, for a period of ten (10) years from the date of acceptance of the installed storm window units by the Owner. The warranty shall state that the Window Manufacturer shall provide all materials required to repair or replace defective materials or workmanship. The warranty shall further state that parts used to manufacture the storm window units, or suitable replacements, shall be available throughout the warranty period.
- B. Installation Warranty: The Successful Bidder shall furnish a written warranty against defects in the installation workmanship and materials for a period of three (3) years from the date of acceptance by the Owner. Installation warranty work will be performed at no cost to the Owner.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Mon-Ray, Inc. (Manufacturer of Mon-Ray 500 or 600 Series Acoustical Storm Windows)
801 Boone Ave. No
Minneapolis, MN 55427-4432
Phone: (800) 544-3646 Fax: (763)-546-8977 Website: www.monray.com
- B. Alternates: Under provisions of Section 01030.

2.02 MATERIALS

- A. Aluminum: All frame, sash and screen members shall be accurately extruded aluminum prime alloy 6063-T6. The minimum nominal wall thickness of all frame, sash, expanders and panning members shall not be less than 0.050".
- B. Glazing: Standard glazing for fixed panel, removable panel, horizontal and vertical sliding storm windows shall be 1/8" clear annealed float glass. The area per lite of glass shall not exceed 20 Square feet for 1/8" glass. Safety glazing shall be used as required by code and correctly labeled on glass. The glass shall be glazed into the sash with a one-piece wrap-around, flexible vinyl glazing channel. All corners shall be secured and neatly tucked. All glass shall be factory washed.
- C. Weather-Strip: All weather-strip shall be silicone treated, UV stabilized polypropylene pile with an integral polypropylene fin running through the center. Weather-stripping shall be bonded to a non-shrinking backing, which shall slide into extruded ports in the aluminum storm frame.
- D. Vinyl Track: All operating windows shall incorporate a vinyl track to eliminate metal to metal contact and reduce operating force. All horizontal sliding sashes shall operate smoothly in a weather tight vinyl track. All vertical sliding sashes shall operate in a vinyl track with predetermined processed ventilating positions. The vinyl tracks will be secured into the storm frame through the use of extruded ports.
- E. Screens: All horizontal and vertical sliding storm window shall have a half screen mounted in the sash track of the storm frame. The screen shall be pre-bowed, extruded 6063-T6 tubular aluminum with a nominal wall thickness of 0.055". Mitered corners shall be joined neatly by means of solid T6 tempered aluminum corner gussets, securely peened within the screen frame extrusion. The screen cloth shall be fiberglass 18 x 14 mesh in a charcoal color and secured into screen frame with a vinyl spline. The screen inserts if removed will not affect the operation, efficiency or performance requirements of the storm window. NOTE: Fiberglass 18 x 16 mesh shall not be acceptable.

2.03 WINDOW TYPE AND OPERATION

- A. Type: All windows shall be fixed panel, removable panel, horizontal sliding or vertical sliding aluminum acoustical storm windows with a frame depth of 7/8" for standard Mon-Ray products.
 - 1. The 500 Series window shall have an frame expander design and mount cleanly into the existing storm window pocket against the blind stop or on the interior of the prime sash using a F channel frame expander.
 - 2. The 600 Series window shall have a blind stop frame design to mount on the blind stop or casing.

All glass sash and screen inserts shall be easily removable to the interior for cleaning. The entire storm window shall be designed and constructed in a manner that allows for easy replacement of all parts, hardware and weather-stripping.

- B. Non-operating Sash: All removable panels shall be held in place by an extruded aluminum turn button. Non-operating sash of horizontal and vertical sliding storm windows shall slide into an extruded weather-stripped sash pocket. Vertical non-operating sash shall be securely supported by two high impact nylon support blocks anchored into the storm window frame by non-magnetic stainless steel screws.
- C. Operation: Operating sash and frame shall have a two-track, self storing sash and screen design. Operating surfaces to be completely separated from metal-to-metal contact. All horizontal sliding sash shall operate smoothly in a weather tight vinyl track. All vertical sliding sash shall operate in a vinyl track with predetermined processed ventilating positions. The vinyl tracks will be secured into the storm frame through the use of extruded ports. The vinyl track and spring loaded pin-locks shall provide a "ratchet action" design with automatic ventilation settings every two (2) inches. In the closed and fully open positions the operating sash shall lock in non-ratcheted, secure holes. The pin-locks shall engage automatically into predetermined ventilating positions processed into each of the side storm frames.

2.04 HARDWARE

- A. All assembly and installation fasteners and screws incorporated in the storm window units and exterior panning shall be non-magnetic, stainless steel. All hardware parts shall be of aluminum, stainless steel, nylon, or other non-corrosive materials compatible with aluminum. NOTE: Wrought metal or plastic parts will not be acceptable.
- B. All removable panel storm sash shall incorporate an extruded aluminum turn button installed with non magnetic stainless steel screws.
- C. All horizontal sliding windows shall slide in extruded vinyl tracks, which shall be set in extruded ports in the master frame.
- D. All vertical sliding sashes shall be equipped with two spring loaded stainless steel pin-lock assemblies. The pin-lock assemblies shall be located at the lower corners of the operating sash and automatically engage at each ventilation setting. Each pin-lock assembly shall consist of: One stainless steel plunger with a diameter of 3/16". One stainless steel knurl knob threaded into the plunger and extending 1/2" to the interior of the sash rail to allow for a firm and easy finger grip. One stainless steel compression spring. The spring and the plunger shall be concealed in an extruded channel within the sash rails to prevent moisture, dirt and debris from affecting the operation of the pin-lock assembly.

2.05 FABRICATION

- A. Frame and Sash Construction:
 - 1. Frame: All aluminum head, jamb and sill members for the master frame and all frame expanders shall have a minimum wall thickness of 0.050 ". All members to be extruded 6063-T6 aluminum assembled in a secure and workman like manner to assure lasting weather resistant construction. Frame joints shall be butt-type, neatly joined and secured by means of non-magnetic stainless steel screws anchored into integral screw ports. Vinyl weather-stripping and tracks shall be shaded from direct sunlight by the frame and sash members. The storm window shall be mounted by using four adjustable expanders, which securely slide over the master frame. All installation holes shall be pre-drilled the manufacturer.

2. Sash: All sash members shall be extruded 6063-T6 aluminum with a minimum wall thickness of 0.055 ". Mitered corners shall be joined by non-magnetic stainless steel corner keys, securely peened on the inside of the sash insert. All sharp corners of the sash shall be deburred and smoothed. Sash meeting rails shall interlock in the closed position. All removable panels and operating sash shall have a full-length extruded lift handle as part of the sash rail. The lift handle shall project 7/16" to the interior to allow adequate area to maintain a sure finger grip. Note: Weather-stripping applied to or installed on the operating sash will not be permitted.
- B. Weep System: The sill expander shall have a minimum of two weep holes, uniformly positioned to allow for water to weep to the exterior of the storm window unit.

2.06 FINISHES

A. Organic (Painted Finish)

1. Finish all exposed areas of aluminum storm windows and components with a factory applied spray coating in accordance with Aluminum Association Designation:

<u>*Description</u>	<u>AA Designation</u>	<u>AAMA Guide Specification</u>
Siliconized polyester baked enamel	AA-M12-C41-RX1	AAMA 2603

2. Standard colors shall be one of the manufacturer's three standard Poly-Cron III painted finished: White, Bronze or Tan. The head of all assembly and installation screws shall be painted the same color as the master frame of the storm window.
3. Optional colors: Available in polyester enamel or Kynar paints to conform to AAMA 2603 or 2605. Computer matching capability. Color samples available upon request.

B. Anodic (Anodized Finish)

1. Finish all areas of aluminum storm windows and components with electrolytically deposited color in accordance with the following Aluminum Association Designation:

<u>*AA Designations</u>	<u>Architectural Class</u>	<u>Description</u>	<u>AAMA Guide Specification</u>
AA-M10-C22-A31/41	II/I	Clear Anodized	AAMA 607.1-77

2. Standard anodized color is 202 R1. Optional anodized finishes conform to AAMA 608.1, in the following colors: Clear 204 R1 and 215 R1, Champagne, Gold, Light Bronze, Medium Bronze, Dark Bronze, Deep Bronze and Black. Other custom anodized colors available upon request at an additional charge.

2.07 ACCESSORIES

- A. Exterior panning: (Optional) - 500 Series Only All existing exterior wood brick-molding around the window openings as shown in the Project drawings shall be covered with 6063-T6 extruded panning. Head and jamb panning shall interlock into the storm window frame and be pre-assembled by the manufacturer. A sill expander panning shall be provided to accommodate sill variations. The panning corners shall be butt-joined, secured with stainless steel alignment clips and be back-sealed by the window manufacturer.
- B. F-channel Expanders: (Optional) - 500 Series Only - Where project conditions warrant or thermal separation is desired, an F-channel expander is available. This expander installs on the same fashion as the U-channel expander, but has a 1/2" leg for anchorage.
- C. H-mulls: (Optional) - 500 Series Only - This accessory allows two or more storm windows or panels to be installed either horizontally or vertically in a single opening.
- D. Mullions and Transoms: (Optional) - 500 Series Only - Where two or more storm window frames adjoin each other horizontally or vertically, mullion or transom panning covers shall be used. Mull and transom covers shall incorporate a port for weather-sealing at the exterior.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Bidders are expected to visit the job-site and make a complete survey of the Project prior to bid. All storm window openings will be measured by the Bidder for proper sizing of the new storm windows. Failure to do so will not relieve the Successful Bidder from the need to furnish any and all materials, which may be required, in accordance with the Specifications, without any additional cost to the Owner.
- B. Inspect openings before installation to assure surfaces are clean and dry. Verify that Storm opening and masonry openings are correct and the sill is level.

3.02 PREPARATION

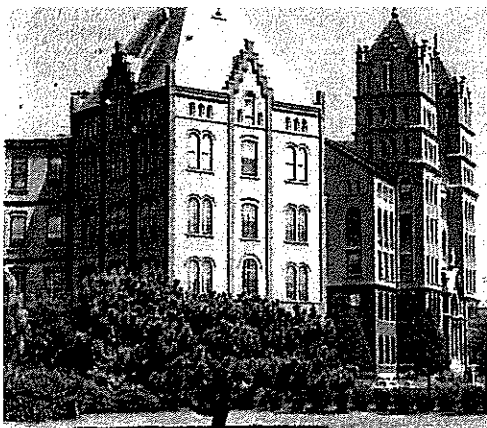
- A. Remove new storm window units from crating and packaging material. Verify that all parts and accessories are included. All storm window units and accessories shall be securely stored, upright and protected from the weather.
- B. Remove old storm windows and accessories from the window opening. Scrape and remove existing sealant from the opening, which will interfere with the installation of new storm windows.
- C. Install only aluminum tubing or preservative treated lumber, as required, for all blocking. All blocking shall be the full length of the head, jambs and sill.

3.03 INSTALLATION

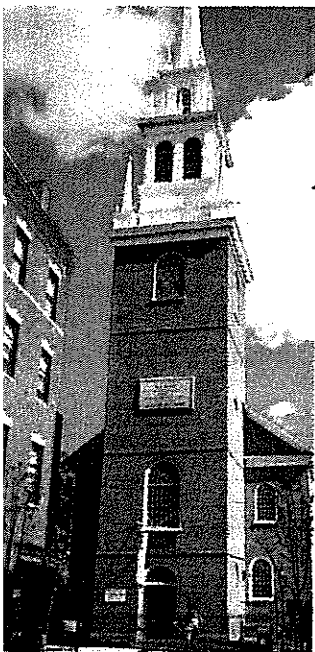
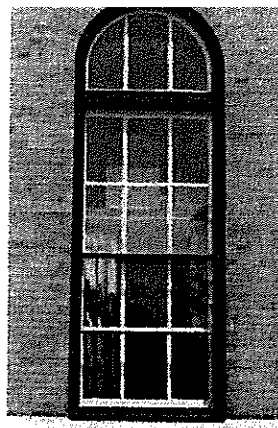
- A. Storm windows shall be installed in strict accordance with the Manufacturer's instructions and Shop Drawings.
- B. Plumb and align storm window faces in a single plane with the existing window. Erect storm windows and accessories square and true, using blocking and anchors to maintain a permanent position.
- C. Anchors should be not less than #8 non-magnetic, stainless steel screws. The length of the installation screws shall allow a minimum of one half (1/2) inch to penetrate into the window frame or blocking. Anchors must be adequate to handle thermal and building movement, and specified uniform load requirements.
- D. Provide single-component or multi-component, low-modulus, non-sag sealant; comply with ASTM C920, Type S or M, Grade NS, Class 25

3.04 ADJUST AND CLEAN

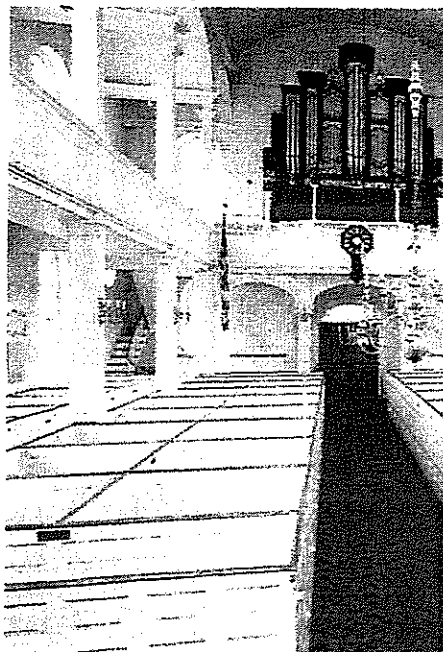
- A. Operate installed storm windows to assure a proper installation has occurred. Make any appropriate adjustments.
- B. Remove excess sealant, dirt, window labels and wipe dust off frame and glass.



▲ Divine Word International, Chicago, IL



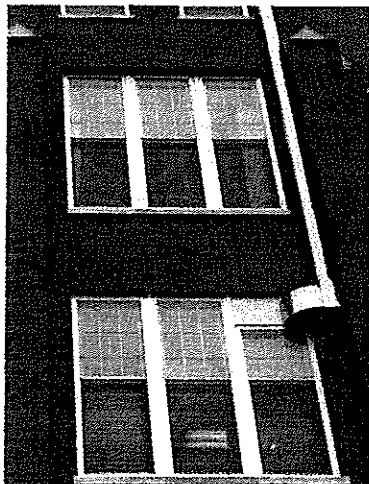
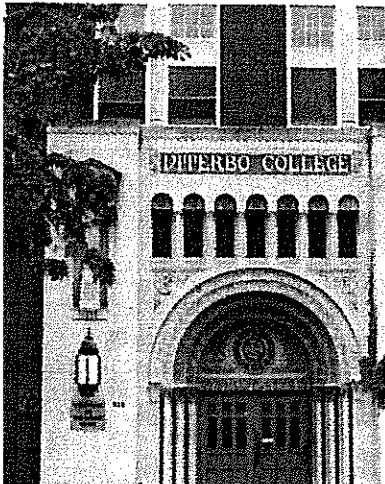
▲ Old North Church, Boston, MA



▲ St. Mary's Hospital, Rochester, MN

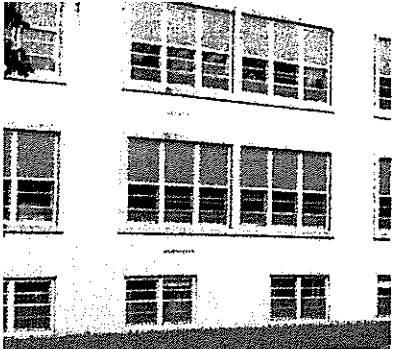


▼ Viterbo College, LaCrosse, WI

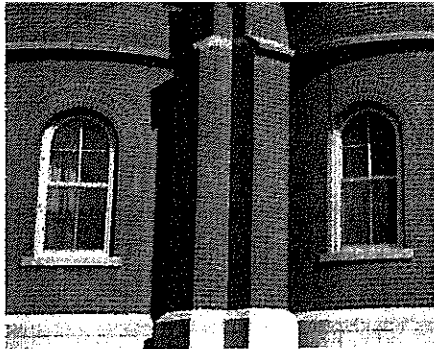


Custom Fit Secondary Glazing Window Systems.

- ☐ *Conserves Energy*
- ☐ *Abates Outside Noise*
- ☐ *Reduces Maintenance*
- ☐ *Retains Original Appearance*



▲ St. Francis Xavier School, Benson, MN



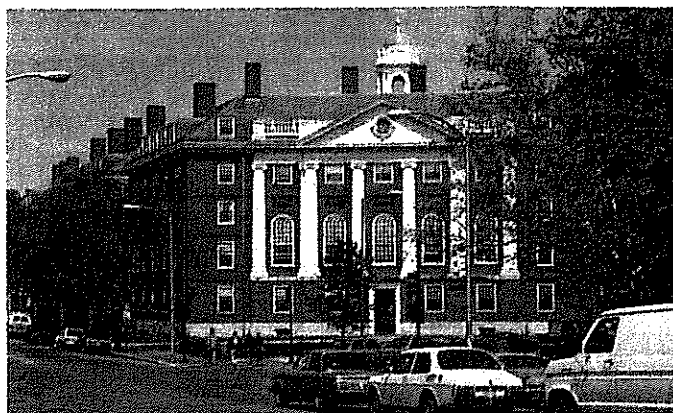
▲ St. Rose Convent, LaCrosse, WI



▲ Georgetown Medical Center, Washington D.C.



▲ Lac Qui Parle County Court House, Madison, MN



▲ Harvard University, Cambridge, MA



Maintain existing architecture and achieve maximum energy savings with long-lasting beauty, quality and high performance.

Mon-Ray, Inc., has been manufacturing quality, high-performing windows for both commercial buildings and residential homes for over 45 years.

The unique design and applications of Mon-Ray secondary glazing windows far exceeds the performance standards of other storm windows.

Rising energy costs and the growing problems of outside noise infiltration have made it necessary to consider upgrading existing window units. Mon-Ray provides an additional insulating blanket of air space and dramatically reduces costly air leakage.

Mon-Ray secondary glazing windows can be adapted to any existing window opening.

Mon-Ray secondary glazing window systems have proven to be a practical and affordable alternative as compared to more costly total replacement windows.

A Mon-Ray secondary unit can cut air leakage through an existing window to a minimum. This not only reflects energy savings, it also minimizes the penetration of excessive levels of outside noise.

Applications may be designed for exterior or interior installation. Mon-Ray secondary glazing units are custom made to retain the integrity and original appearance of the existing windows.

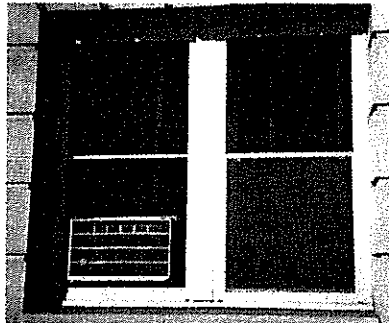
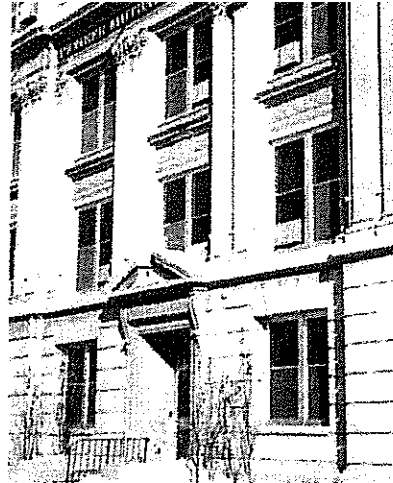
Energy conservation benefits, improved comfort level (reducing annoying drafts and outside noise), and minimal maintenance benefits (reducing painting, general repairs and cleaning)... all pluses with Mon-Ray.

Mon-Ray secondary glazing window products have been installed at colleges/universities, hospitals, hotels, apartments, public and private schools, office buildings, governmental housing, and other commercial and light-commercial projects throughout the United States. In addition, Mon-Ray high performance residential storm windows have been installed on tens of thousands of homes in all types of climates across the country.

The Mon-Ray philosophy is to offer products at the lowest possible initial cost while not compromising its high performance standards and exceptionally long service life. All Mon-Ray products are supported by a total service program and by a written 10-year limited product warranty.



▲ Hotel Fort Des Moines, Des Moines, IA

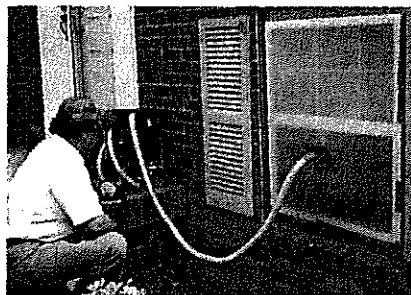


▲ Pioneer Life Insurance Building, Fargo, ND

From Design through Installation... ...Mon-Ray Delivers Lasting Satisfaction



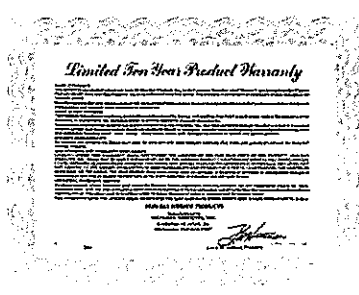
Custom Results... Every Mon-Ray unit is custom manufactured to match existing architectural design and sight lines. Whether the application is exterior or interior, units can be made to fit arched openings, maintaining original character.



Evaluation... Mon-Ray tests its high performance standards not only during fabrication, but also following installation. Laboratory and field tests are used to verify the demanding Mon-Ray requirements of air infiltration and exfiltration.

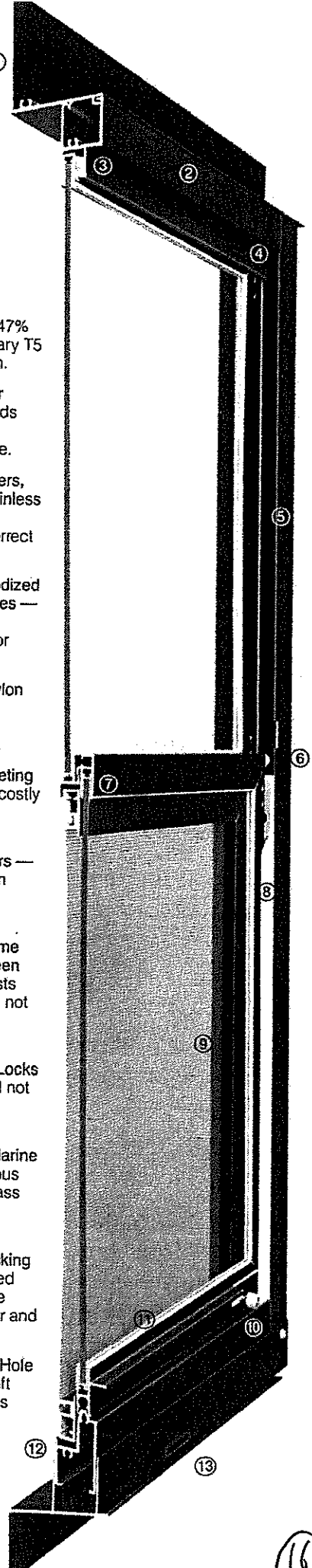


Installation... Least disruptive to the operation of your building and activities within, Mon-Ray Secondary Glazing installations are generally done from the exterior using scaffolding and/or other aerial devices.



Workmanship and Materials Warrant: The Mon-Ray 10 Year Limited Product Warranty is fully transferrable, non-prorated coverage for original product price. Added assurance for maintenance protection for your buildings.

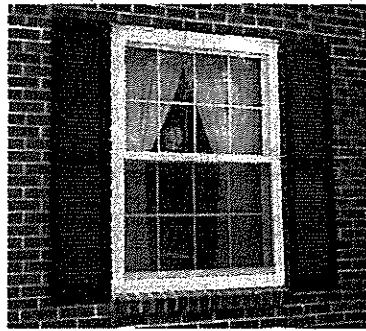
- ① Variety of Adjustable Head, Jamb and Sill Expanders and Panning Trims — Custom made for neat and proper fit.
- ② Prime 6063-T6 Aluminum Alloy — 47% stronger than ordinary T5 tempered aluminum.
- ③ Extruded Upper Sash Pocket — Holds sash firmly in place reducing air leakage.
- ④ Butt-Joint Corners, Reinforced with Stainless Screws — Prevents pivoting to retain correct squareness.
- ⑤ Permanent Anodized or Duranodic Finishes — Will not oxidize, pit, corrode, peel, rust or fade.
- ⑥ Non-Binding Nylon Glide Buttons — Reduces friction for smoother operation.
- ⑦ Interlocking Meeting Rails — Eliminates costly air leakage.
- ⑧ Weathertight 'Ratchet' Jamb Liners — Automatic ventilation settings every two inches.
- ⑨ Durable T6 Frame and Fiberglass Screen Cloth — Frame resists bending, screen will not rot or sag.
- ⑩ Stainless Steel, Spring Loaded Pin-Locks — Sure grip that will not easily break as will plastic.
- ⑪ Wrap-Around Marine Glazing — Continuous cushion protects glass from accidental breakage.
- ⑫ Positive Interlocking Sash to Sill — Closed sash remains secure against both high air and water pressure.
- ⑬ Effective Weep Hole System — If sash left opened, water drains back outside.



MON-RAY ACOUSTICAL SECONDARY GLAZING PROVEN AS AN EFFECTIVE SOUND BARRIER

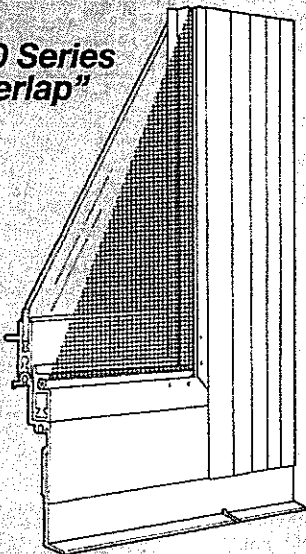
Noise can shatter the peace and tranquility of a residential neighborhood. When intrusive noise from jet aircraft or adjacent freeway traffic affects the quality of living, it is time to turn to Mon-Ray acoustical secondary glazing windows and doors to help solve the problem. Independent tests have proven that Mon-Ray acoustical secondary glazing windows and doors installed over existing primary windows and doors dramatically lower the penetration of outside noise to a "livable" level. For over 45 years Mon-Ray quality design, fabrication and installation service have been directed toward window systems with the lowest possible air leakage.

Living near an airport or a busy street can be more than merely irritating. It can affect lifestyle, property value and even health. Tight, secure Mon-Ray acoustical secondary glazing windows and doors go a long way toward solving these sound related problems.

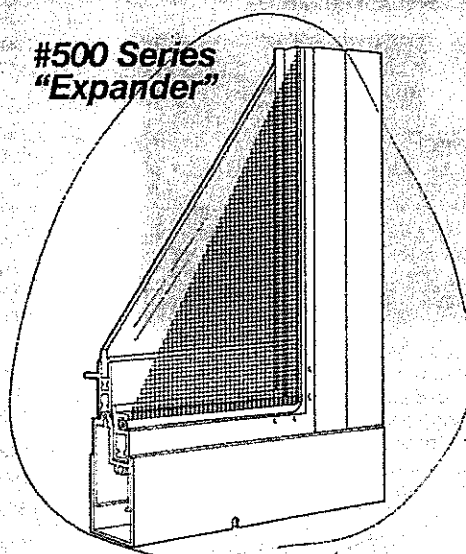


VARIETY OF ATTRACTIVE FRAME APPLICATIONS

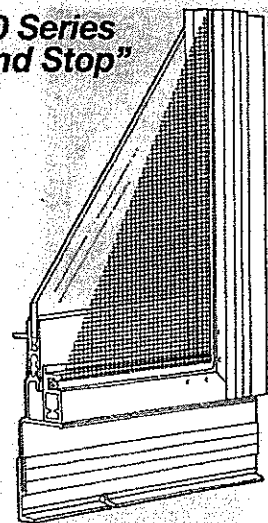
**#400 Series
"Overlap"**



**#500 Series
"Expander"**



**#600 Series
"Blind Stop"**



Mon-Ray offers three distinctive frame designs to appropriately match the architectural appearance of any commercial building or residential home. Each is custom made to fit perfectly into the existing window opening, no matter the size or shape. All are available in double-hung, slider and fixed panel units.

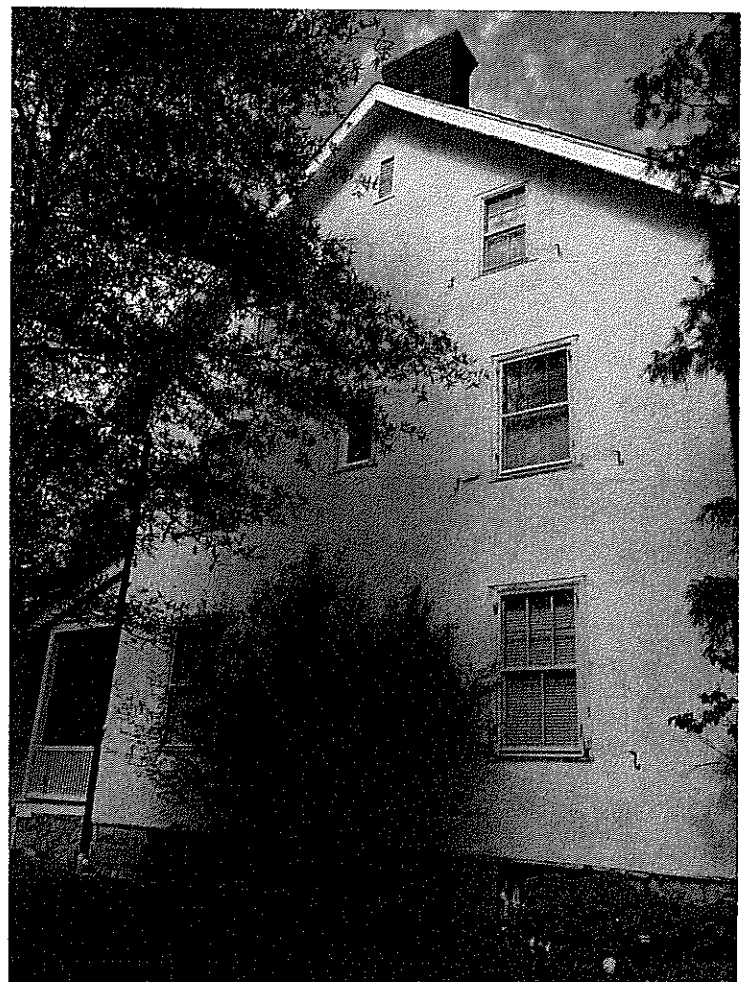
COMPLETE SPECIFICATIONS ON ALL MON-RAY PRODUCTS AVAILABLE ON REQUEST. CONTACT MON-RAY FOR NEAREST REGIONAL OFFICE OR AUTHORIZED DEALER IN YOUR AREA.



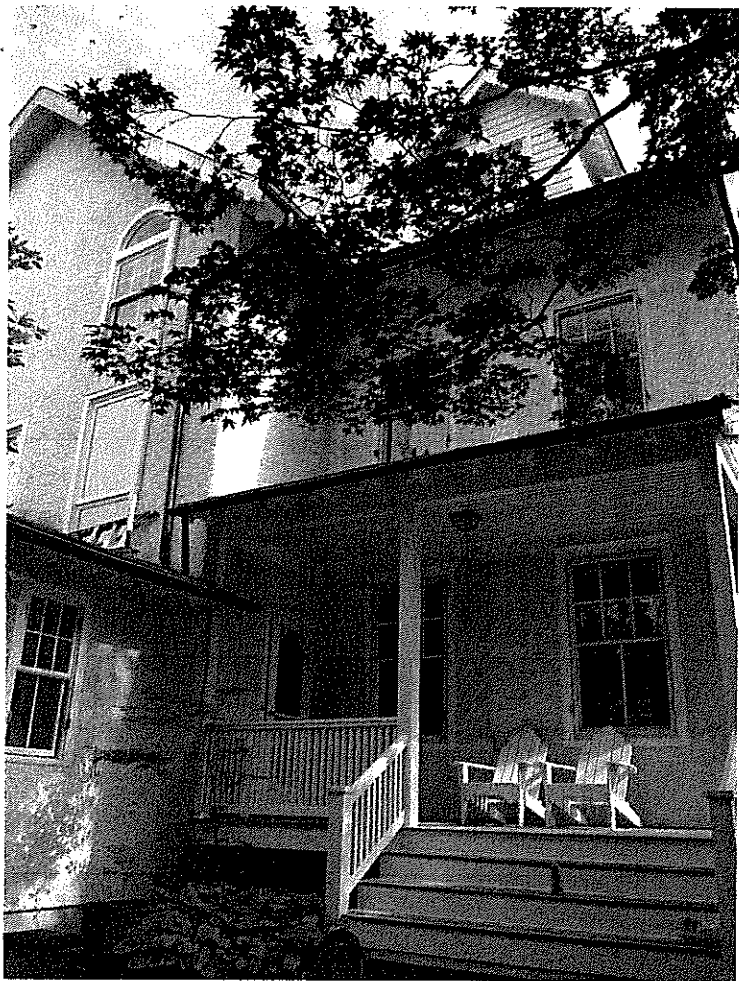


Front facade of home - south-facing

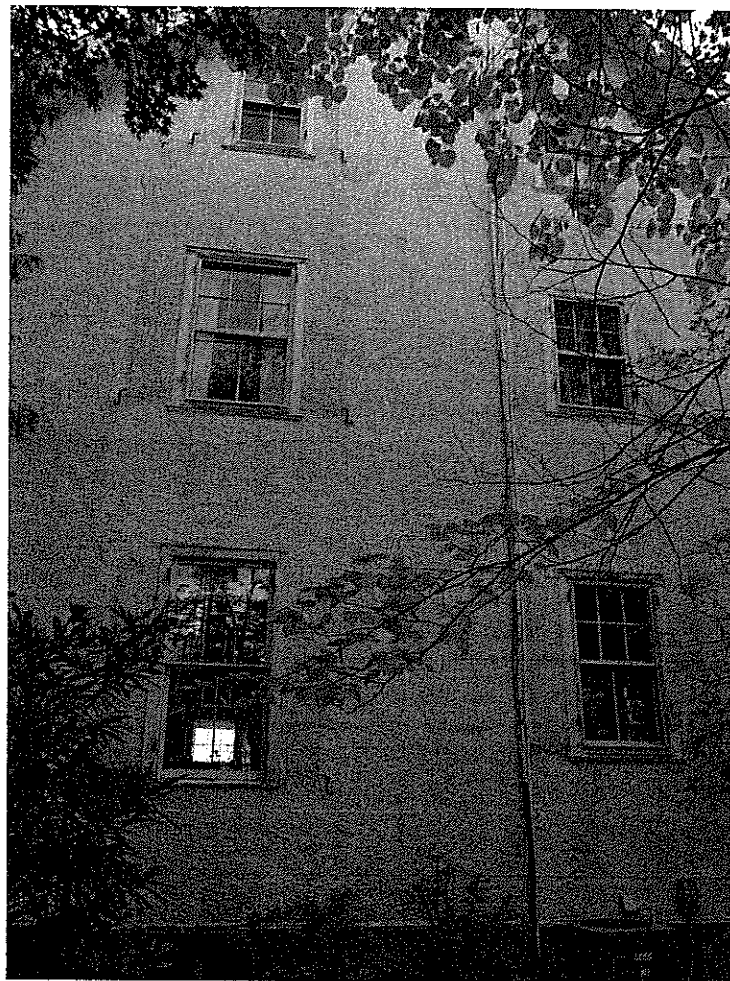
West side of house



CAROL H. KELLEHER
MICHAEL F. KELLEHER
 25 GRAFTON ST.
 CHEVY CHASE, MD 20815



Rear - north side



East side

Carol and Michael Kelleher
25 Grafton Street
Chevy Chase MD 20815



Original window requiring painting and glazing



Existing triple-track storm window

CAROL H. KELLEHER
MICHAEL F. KELLEHER
25 GRAFTON ST.
CHEVY CHASE, MD 20815



Existing triple-track
storm window



View of original window
needing conservation,
with existing storm
window in place

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFYING
 [Owner, Owner's Agent, Adjacent and Confronting Property Owners]

Owners: Carol and Michael Kelleher 25 Grafton Street Chevy Chase MD 20815	mailing address
Adjacent and confronting Property Owners mailing addresses	
Richard and Amy Zantzinger 23 Grafton Street Chevy Chase MD 20815	Robert Axelrod & Doris Kafka 44 Grafton Street Chevy Chase MD 20815
Douglas and Marybeth McDaniel 46 Grafton Street Chevy Chase MD 20815	Thomas and Suzanne Egan 101 Grafton Street Chevy Chase MD 20815
Jonathan Hacker & Kristen Donoghue 30 Hesketh Street Chevy Chase MD 20815	Christopher Erckert & Christopher Sperl 28 Grafton Street Chevy Chase MD 20815