

HISTORIC LANDMARK COMMISSION
AUGUST 22, 2011
APPLICATION FOR A CERTIFICATE OF APPROPRIATENESS
C14H-1978-0033
Littlefield Building
106 E. 6th Street

PROPOSAL

Replace all windows in the Littlefield Building with fixed sash windows.

PROJECT SPECIFICATIONS

The original wood windows in the Littlefield Building have suffered a great deal of deterioration over the years, and many of the windows have already been replaced. The applicant is seeking to replace all the windows in the building with fixed-sash metal architectural windows with the same profile as the double-hung windows now in place.

STANDARDS FOR REVIEW

The Commission's Standards for Review of applications for Certificates of Appropriateness include:

- Do not destroy the distinguishing original qualities or character of a building, structure, or site and its environment. Avoid the removal or alteration of any historic material or distinctive architectural features.
- Treat with sensitivity distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site.
- Repair, rather than replace deteriorated architectural features wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Base the repair or replacement of missing architectural features on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
- Contemporary design for alterations and additions to existing properties are appropriate when such alterations and additions do not destroy significant historic, architectural, or cultural material and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.

COMMITTEE RECOMMENDATIONS

This proposal was not reviewed by the Committee.

STAFF RECOMMENDATION

Staff recommends retention, rehabilitation, and retrofit of the original windows to the greatest extent possible, and replacement of those windows which are too deteriorated to make restoration feasible and prudent. The replacement windows will match the original windows in terms of profile and configuration, and are similar to the replacement windows installed in the Stephen F. Austin Hotel several years ago, giving the appearance of a double-hung window from the exterior, while providing greater energy efficiency and reducing maintenance requirements. The product chosen by the applicants for this project is manufactured by Traco, which is a division of Kawneer. These windows have been used

in several high-profile restoration projects, including the Flatiron Building in New York City.



Littlefield Building
Window Replacement

106 East Sixth Street
Austin, TX



Restoration



WALKER
RESTORATION CONSULTANTS



- Deterioration of existing wood framing members, glazing stops, and trim.
- Poor energy efficiency of existing, single-pane, operable windows
- Maintenance costs of wood windows
- Improved safety

Reasons for Replacement



- Approximately 30% of wood mullions exhibit deterioration at the base of the mullion.
- Approximately 25% of window sashes exhibit significant deterioration.
- Approximately 25% of wood windows exhibited deteriorated or missing glazing stops.
 - Deterioration of the sash framing members reduces fastener capacity for glazing stops.
- All of the wood window sills have been retrofitted with metal covers to address wood member deterioration.

Wood Deterioration



- Approximately 25% of windows have flat glass in bent wood frame openings.
 - Replacement glass is custom, not readily available and costly to have fabricated.
 - Flat glass in bent frames result in unsupported glass edges.
 - Flat glass in bent frames can allow water entry paths as the glass is not fully engaged in the frame.
- 1st floor bent glass windows have previously been replaced with flat aluminum storefronts

Bent Glass Windows



REPRESENTATIVE PHOTOS

Photos



This slide features a light green background with a faint world map and a white grid. The text "REPRESENTATIVE PHOTOS" is centered in bold black font. A green bar at the bottom left contains the word "Photos" in white. A logo consisting of stylized green and black lines is positioned in the bottom right corner.



Framing Deterioration



This slide displays two photographs of wood framing deterioration. The top-left photo shows a close-up of a window frame with peeling paint and rotting wood. The bottom-right photo shows a corner of a room with significant wood rot and structural damage. The text "Framing Deterioration" is centered in white on a green bar at the bottom. A logo consisting of stylized green and black lines is positioned in the bottom right corner.



Framing Deterioration



Framing Deterioration





Framing Deterioration



Frame Joinery Deterioration





Frame Joinery Deterioration



Deformed Members





- Operable windows disadvantages :
 - Weather stripping
 - Deteriorated and not effective in resisting air infiltration
 - Uncontrolled air infiltration/exfiltration due to tenants opening windows
 - Single pane glazing
 - Not thermally effective versus insulated glass units
 - Existing windows cannot be retrofitted with insulated glass.

Poor Energy Efficiency



- Maintenance costs account for approximately 2/3 of building life cycle costs.
- Wood requires repetitive maintenance (IE: painting, wood repair) and is costly due to:
 - Access costs
 - Labor costs

Maintenance Costs



- Disadvantages of Repair of Existing Windows
 - Existing windows exhibit varying levels of deterioration.
 - Accelerated deterioration effects structural integrity
 - Existing windows lead to energy inefficiency
 - Tenants open windows
 - Window leak air
 - Single pane glazing not thermal efficient
 - Maintenance is costly
 - Existing deterioration results in ongoing repairs
 - Painting required on a regular basis

Summary



- Advantages of Replacement Windows
 - Improved energy efficiency
 - Fixed windows = better climate control
 - Improved glazing systems = reduced solar gain/lower cooling loads
 - Improved aesthetics
 - High performance finishes maintain aesthetics for the long term with minimal maintenance
 - Reduced Maintenance
 - Replacement materials require less maintenance
 - Improved safety
 - Reduced potential for materials disengaging from facade

Summary



1. General

- a. The Ownership respects the historic significance of the Littlefield building in Austin's history and intends to maintain the historic building façade to the extent feasible.

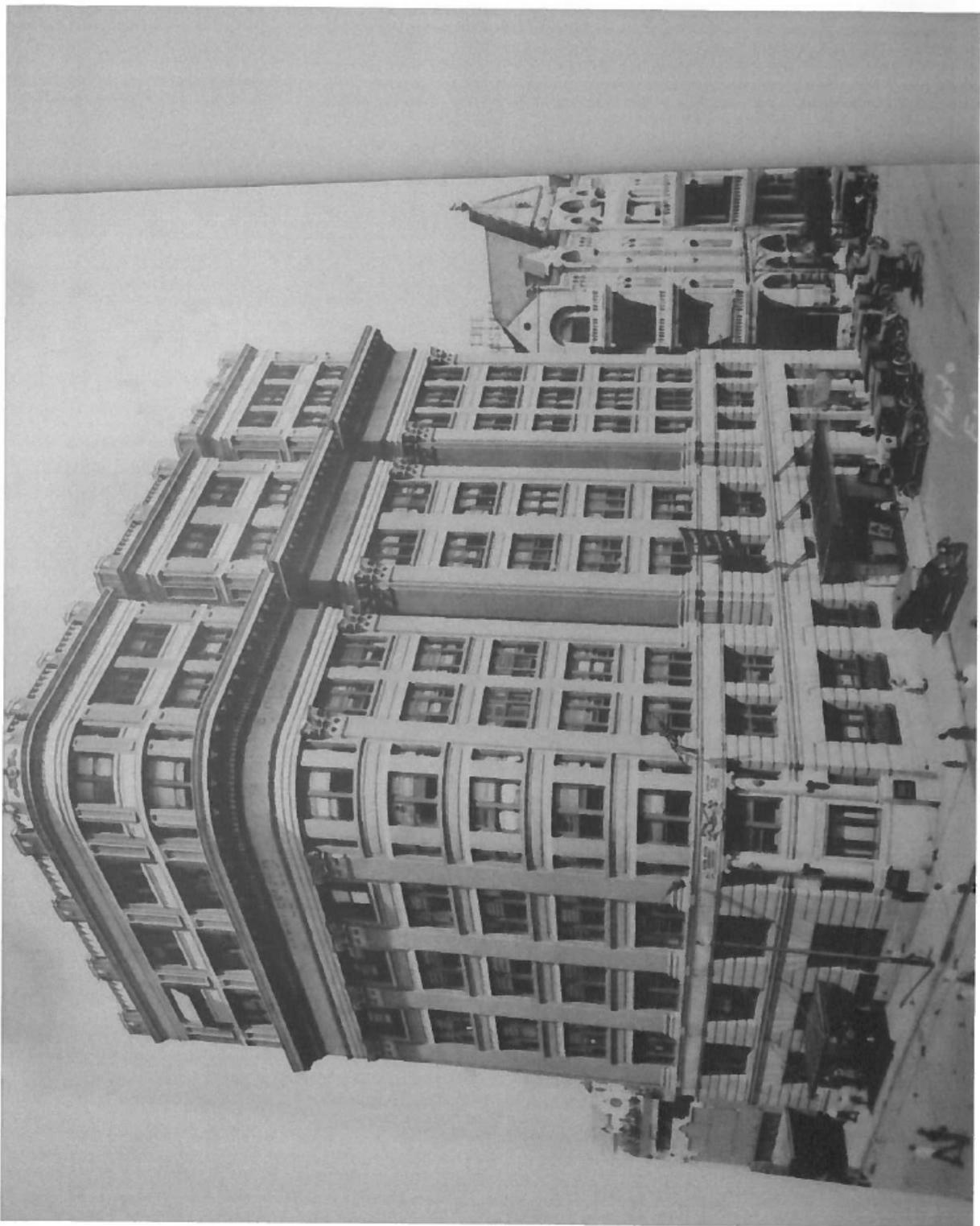
2. Proposed window replacement program intent:

- a. Maintain the aesthetics of the façade;
- b. Select replacement windows which match the color and configuration of the existing windows as closely as possible.
- c. Provide improved energy efficiency of the building through selection of window and glazing systems
 1. Metal, thermally broken framing with high-performance finish and insulated glass with Low-E coating.

Conclusion

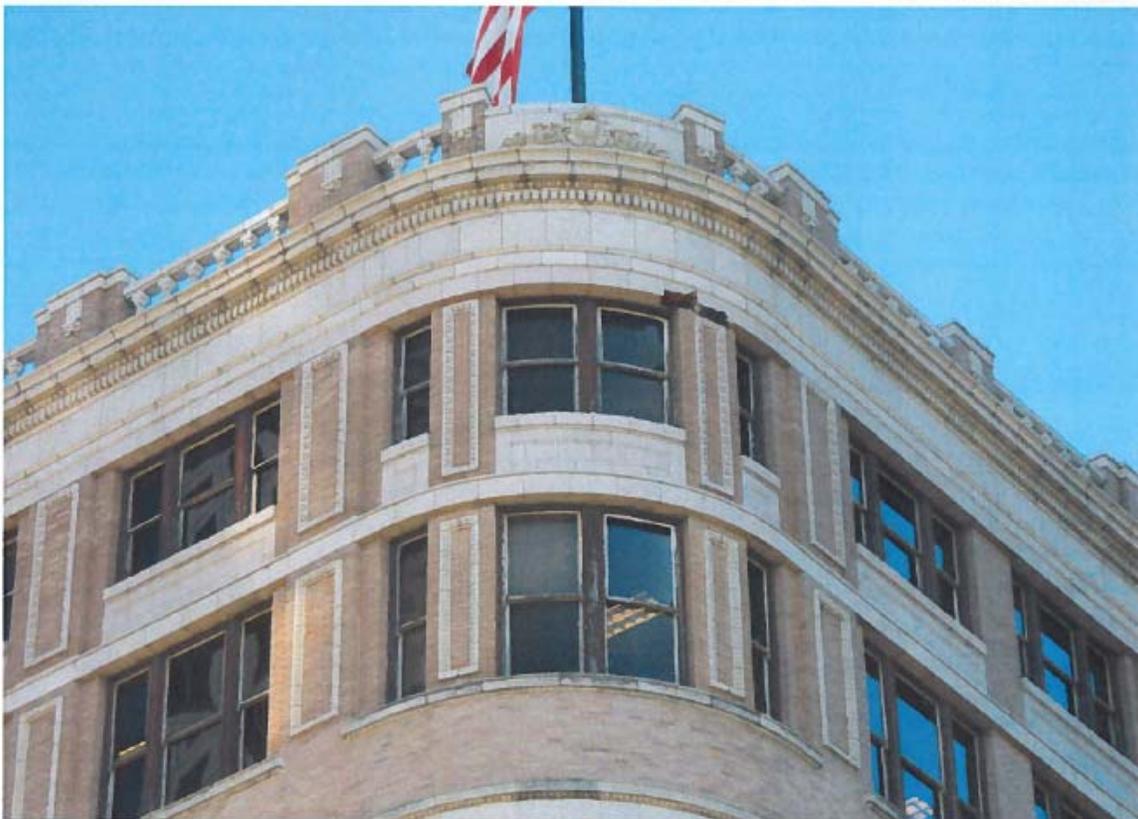


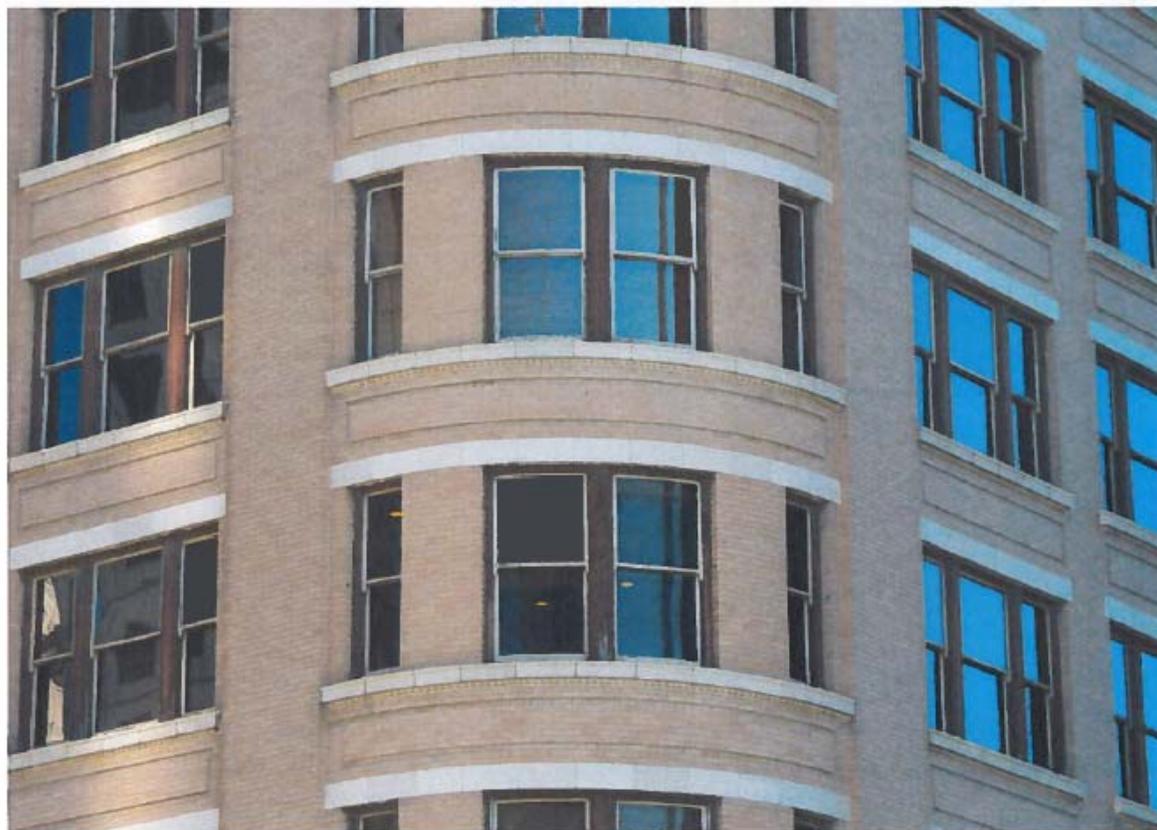
LITTLEFIELD BUILDING
EXTERIOR FAÇADE REPAIRS & WINDOW
REPLACEMENT
106 East Sixth Street
Austin Texas

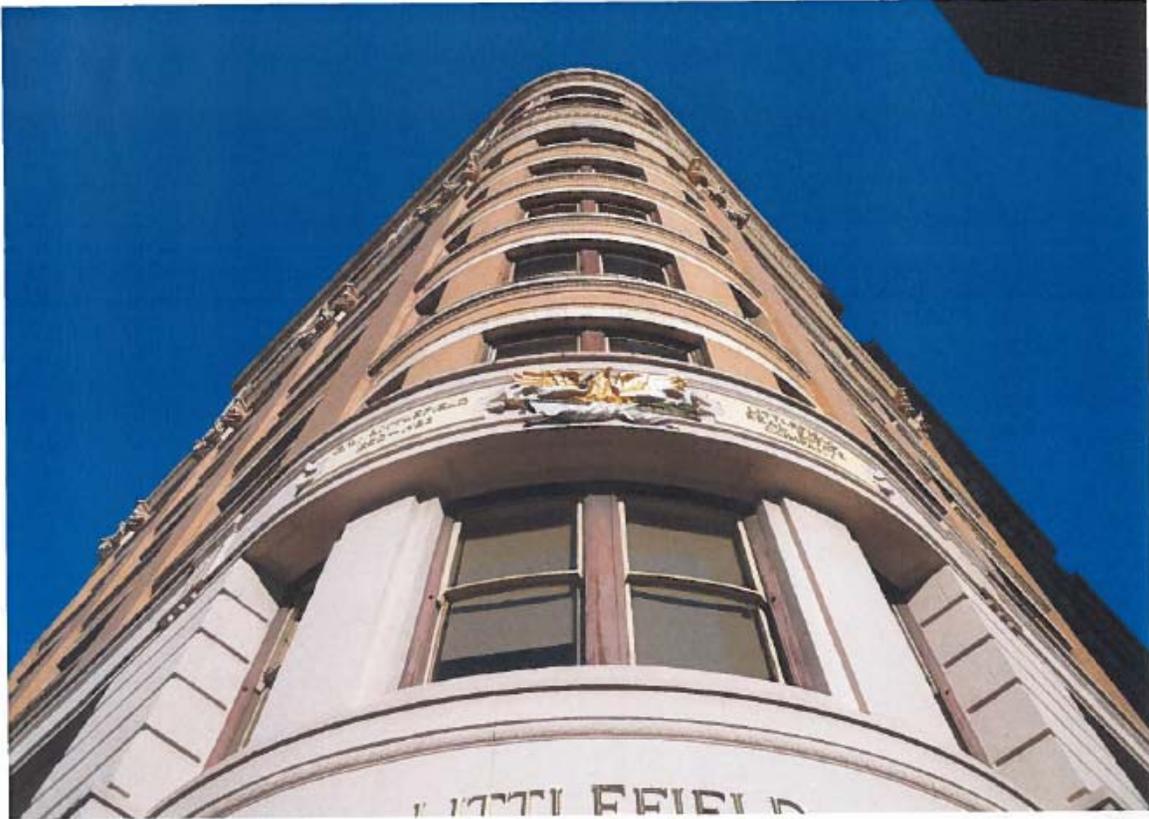






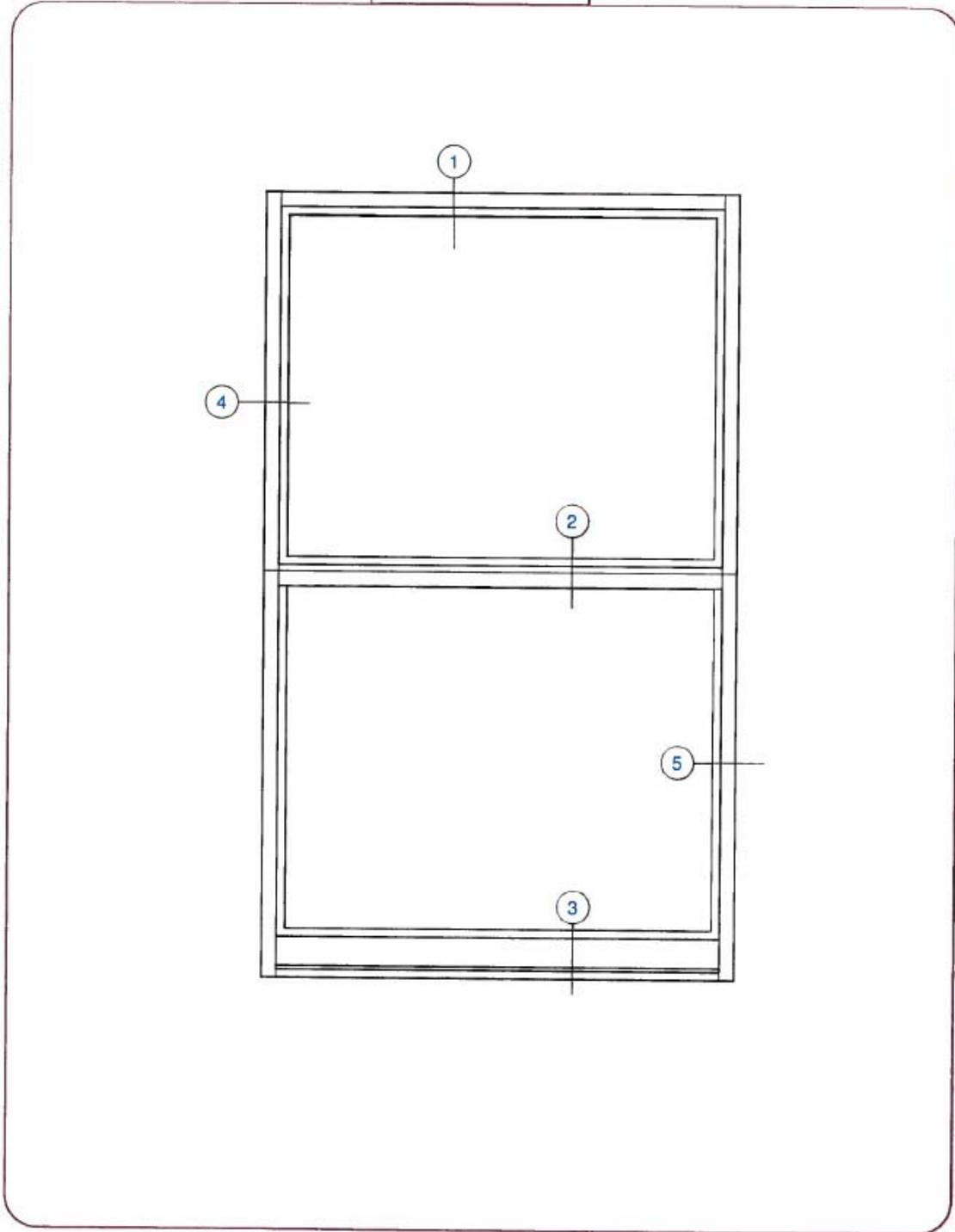


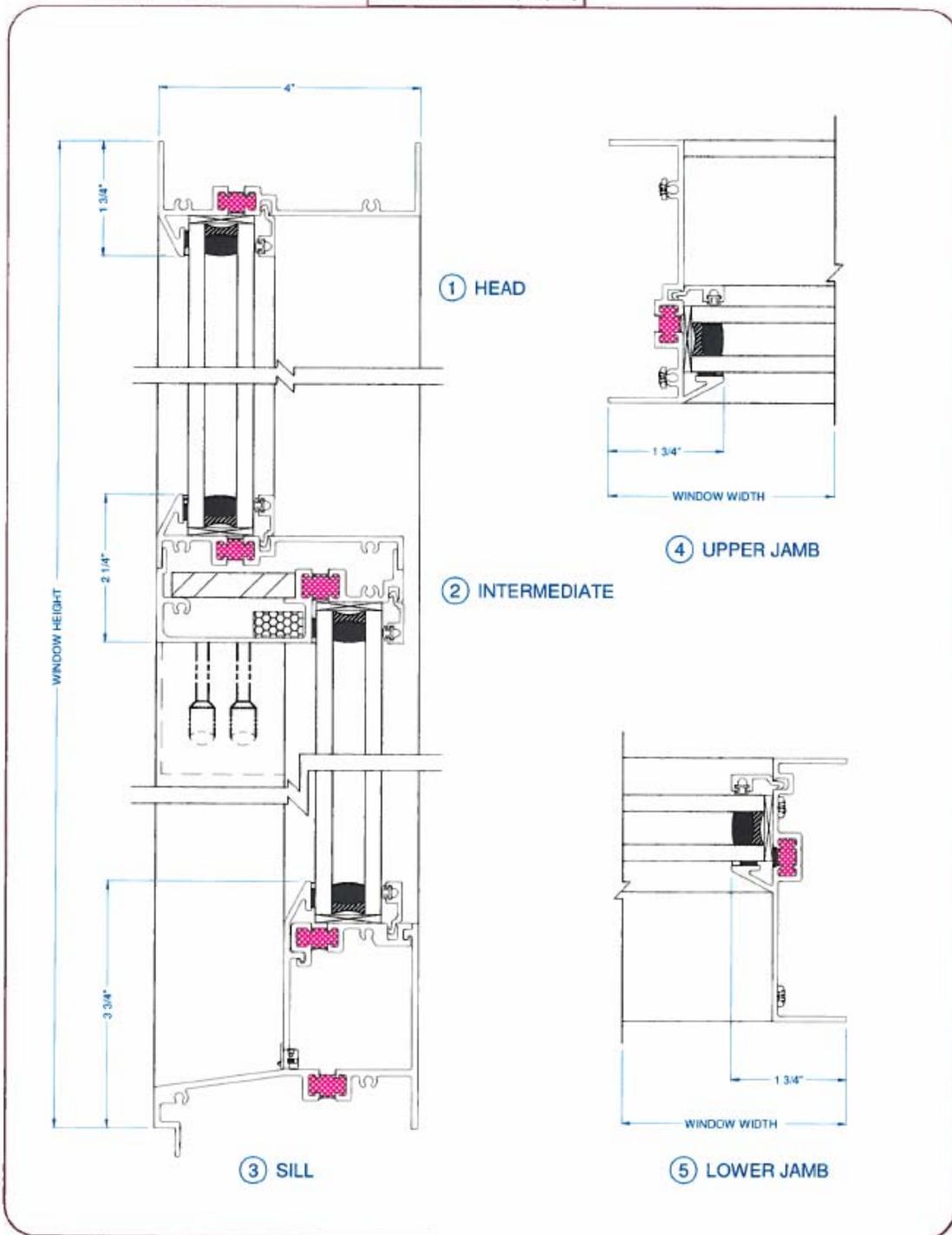






ELEVATIONS





A. TR-9460 - 4" Fixed over Fixed Architectural Thermal Aluminum Window

Product Specifications

Fixed over fixed window with offset to give appearance of double hung window.

Product Characteristics

- WINDOW TYPE: FIXED over FIXED
- MODEL : TR-9460
- FRAME DEPTH: 4"