STAFF REPORT 5-12-2021 REGULAR MEETING **PREPARED BY:** A. PHILLIPS
APPLICATION NUMBERS: 21-7214, 21-7248, 21-7249
ADDRESSES: 1468, 1480, 1496 RANDOLPH STREET
HISTORIC DISTRICT: MADISON – HARMONIE
APPLICANT: ROSS HOEKSTRA, MCINTOSH PORIS ASSOCIATES
PROPERTY OWNER: HIRAM JACKSON, HASTINGS PLACE, LLC
DATE OF PROVISIONALLY COMPLETE APPLICATION: 4-19-2021
DATE OF STAFF SITE VISIT: 4-23-2021

SCOPE: ERECT NEW 8-STORY MIXED-USE BUILDING WITH RESIDENTIAL UNITS AND STRUCTURED PARKING ABOVE GROUND FLOOR RETAIL

EXISTING CONDITIONS

The project site encompasses parcels addressed at 1468, 1480, and 1496 Randolph Street and is situated approximately mid-block on the east side of Randolph Street between Gratiot Avenue and Madison Street. The site is flanked by historic three-story commercial structures at the north and south property lines and a public alley at the east (rear) property line. The triangular Harmonie Park is located across Randolph Street to the west of the site. Currently serving as a surface parking lot, the site accessed via a driveway off Randolph or via the public alley at the rear of the site. Street lights and a few street trees exist along Randolph Street.

1468, 1480, 1496 Randolph. View from Randolph Street looking northeast. Photo taken by HDC staff, April 23, 2021

PROPOSAL

With the current proposal, the applicant is seeking the Commission's approval **to erect a new 8-story mixed-use building with residential units and structured parking above ground floor retail per the attached drawings and application**. Included in the proposal are the following scope items:

- **New Construction**
  Construct a new 8-story, mixed-use building spanning the width of the three lots located at 1468, 1480, and 1496 Randolph with 2,700 square feet of ground floor retail, 3 levels of parking (127 spaces), and 5 upper floors of residential units (89 units total). The project is described by the applicant as such:

  > *Hastings Place is a proposed mixed-use multifamily building in the Madison-Harmonie Historic District that will fill in an existing gap facing Harmonie Park – completing the street edge along Randolph St.,*

enhancing the pedestrian oriented urban fabric and adding new residents to the neighborhood. The development will provide space for new residents, businesses, and visitors in the heart of Paradise Valley. Housing, parking, and retail contained in the program support continuing investment in the cultural and creative assets already in the community.

The ground floor street frontage maximizes pedestrian oriented space – 80% of the frontage contains the residential lobby and retail space. This frontage is a continuous storefront, maximizing transparency for flexibility, visibility, and safety. A parking entrance off Randolph has also been provided for parking spaces that are hidden behind the retail storefront at grade.

Above this ground floor are two additional floors of parking for residents of the building and visitors and workers in the district. The garage is disguised from view by using openings which match the size of the windows above. The final 5 floors of the building are residential units with the majority being studios and 1 bedrooms, ranging from 420 sf to 1020 sf. At the fourth floor, a large outdoor terrace is planned for use by all residential tenants.

The exterior massing steps back at the upper floors as a gesture to the adjacent buildings along Randolph, making the overall proposed height seem smaller than it is, as well as providing space for private balconies for the units. The façade also switches materials as it goes up, breaking the overall massing into parts which are closer in size to the adjacent buildings and fit in with the context of Harmonie Park.

- Proposed building materials and products include:
  - Glass Fiber Reinforced Concrete (GFRC) wall panels applied vertically
    - **Color:** Chrome (dark gray)
      Location: Main massing of levels 4 – 6; retail storefront and parking entrance door surrounds at ground floor
    - **Color:** Ivory
      Location: Main massing of levels 6 – 8
    - **Color:** Larch (light brown/tan)
      Location: Residential unit balcony alcoves at levels 4 – 8
  - Modular commercial brick veneer at the main massing of levels 1 – 5 (color: Black Opal)
  - Concrete masonry units (CMU)
    - **Finish/Color:** Unpainted
      Location: Main massing of levels 1 – 3 on north (side) facade; levels 1 – 4 on south (side) façade
    - **Finish/Color:** Painted/Iron Ore
      Location: Main massing of levels 4 – 6 on north (side) facade; levels 5 – 6 on south (side) façade
    - **Finish/Color:** Painted/Gossamer Veil
      Location: Main massing of levels 4 – 6 on north (side) facade; levels 5 – 6 on south (side) façade
  - Metal coping at parapet
  - Dark gray aluminum canopy at ground floor retail
  - All retail storefront systems and doors proposed to be black aluminum
  - Garage doors to be glazed, roll-up style doors located at the west (front) and east (rear) facades
  - All windows and exterior doors at the residential units (levels 4 – 8) are proposed to be uPVC – color: black. Operation of proposed windows included fixed, awning, and casement. Sizes of windows vary – see attached elevation drawings for more details.
  - Railings at residential balconies (levels 4 – 8) are proposed to be constructed of galvanized steel (color: black)
  - The treatment of openings at the parking locations (levels 1 – 3) vary. At the ground floor of the east (rear) façade, the openings are the parking are infilled with brick to match the adjacent but the finished face of the brick at the openings will be slightly recessed from the main massing. All openings at the parking on levels 2 – 3 are to remain completely open.

- **Sitework**
  - Five (5) new Pyramidal European Hornbeam street trees along Randolph Street – see locations on attached site plan
  - Replace five (5) existing streetlights with new streetlights to match existing in design and location

STAFF OBSERVATIONS & RESEARCH

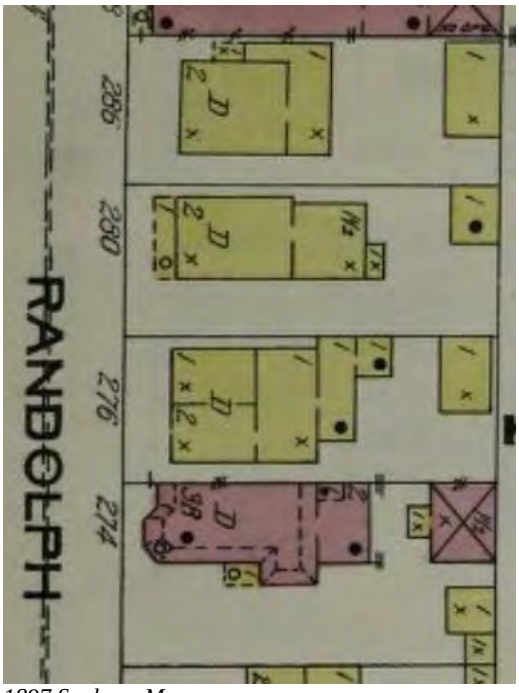
- Madison – Harmonie Historic District was designated in 1988.
- The applicant met with HDC and PDD design staff multiple times prior to the submission of this application. The project design was approved by PDD Design Review team. HDC staff communicated to the applicant that the approval of the proposed uPVC (vinyl) windows was unlikely.
- As a guide to new construction of mixed-use buildings, the Elements of Design for this district does offer the following (excerpted) relevant points. Additional staff comment is added where appropriate.
  - ***Element 1, Height:*** *Buildings in the district range from three stories tall to nine stories tall. Taller buildings are located in the northern half of the district, primarily around Madison and the E. Grand River/North Center Area. The majority of the buildings in the southern part of the district, facing Harmonie Park, are three stories tall.*
  - ***Element 2, Proportion of buildings' front facades:*** *Most of the individual commercial buildings facing Harmonie Park appear taller than wide or as tall as wide, but, when taken as a continuous commercial row, the total effect is as a commercial block wider than tall.*
    - Since the proposed building will fill the width of three (3) existing lots, the proportion of the west (front) façade appears much wider than it is tall, however, as mentioned above, when considered as a continuous commercial row (rather than as an individual building), it is typical in the district that the total effect is as a commercial block wider than tall.
  - ***Element 3, Proportion of openings within the facades:*** *In general, commercial structures around Harmonie Park have large areas of display window openings on their first stories and large window openings above. The areas of voids ranges from approximately 15 percent to 80 percent; most fall into the 35 percent to 50 percent range.*
    - The areas of voids in the proposed building appears to be near 80 percent which is at the high end of the range for the district. Staff suggests incorporating screening at the openings at the parking garage (levels 2 – 3) to minimize the amount of perceived openings while still allowing for proper ventilation in the parking structure.
  - ***Element 4, Rhythm of solids to voids in front facades:*** *Openings within the facades are generally regularly arranged…*
  - ***Element 5, Rhythm of spacing of buildings on streets:*** *All buildings in the district are situated on their front lot lines and many abut the neighboring buildings. When this occurs, a continuous flow of wall occurs.*
  - ***Element 6, Rhythm of entrance and/or porch projections:*** *Entrances to the commercial buildings facing Harmonie Park are either centered or on either side of the front façade; some contain more than one entrance due to multiple storefronts, and these frequently have one step leading to the entrance.*
  - ***Element 7, Relationship of materials:*** *Brick predominates as a building material of the majority of buildings in the district. Window frames are either metal or wood.*
  - ***Element 8, Relationship of textures:*** *The most common textural relationship is that of the low relief pattern of mortar joints in brick juxtaposed with smooth masonry trim. In general, the district is rich in textural relationships.*
  - ***Element 9, Relationship of colors:*** *The buildings facing Harmonie Park are predominately red or brown brick. Green, gray, black, and brown are common colors for window frames elsewhere in the district.*
    - While dark gray/black is not a common color for the main massing of buildings in the district, staff finds that the proposed dark gray/black brick proposed at the base of the building does not detract from the historic character of the district.
  - ***Element 10, Relationship of architectural details:*** *Architectural details generally relate to architectural styles.*
  - ***Element 11, Relationship of roof shapes:*** *Few of the roofs in the district can be seen from the street…*
  - ***Element 12, Walls of continuity:*** *The major wall of continuity is created by the facades of the buildings themselves. Uniform setbacks within blocks exist throughout the district. Where buildings abut, a continuous wall exists. Where rows of trees are planted in front of buildings, a secondary wall of continuity is created.*
  - ***Element 13, Relationship of significant landscape features and surface treatments:*** *The major significant landscape features in the district are the island on Madison between John R and Randolph and the triangular*

Harmonie Park, bounded by Randolph, East Grand River and Center Streets. Harmonie Park consists of a sunken area paved with pink aggregate surrounded by a stone wall. It is planted with trees and bushes. Street furniture consists of upright light standards and wood benches.

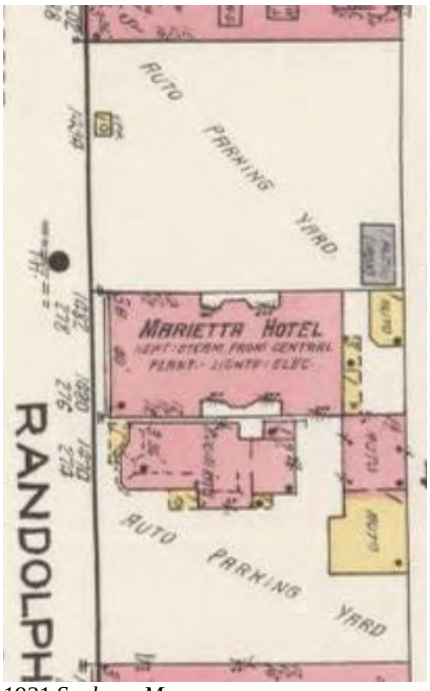
- ***Element 14, Relationship of open space to structures:*** *Most vacant land in the district is comprised of parking lot usage…The buildings on Harmonie Park act as the enclosure of the open space…*
- ***Element 15, Scale of facades and façade elements:*** *The brick commercial buildings facing Harmonie Park are small to moderate in scale; elements and detail within generally small in scale. The Harmonie Club, Hemmeter Building, and the Milner Hotel are large in scale.*
  - While the proposed building is larger in scale in than many of the commercial buildings facing Harmonie Park, staff feels that the proposed building's proximity to the taller buildings in the district, along with the general urban and mixed-use character of the district, make the scale appropriate.
- ***Element 16, Directional expression of front elevations:*** *Most of the commercial buildings facing Harmonie Park are vertical in directional expression when taken individually; however, when seen as a forming a commercial row, they are horizontal.*
  - See staff comment at Element 2.
- ***Element 17, Rhythm of building setbacks:*** *A consistency to the building setbacks is created due to the siting of all buildings on the front building lines throughout the district.*
- ***Element 18, Relationship of lot coverage:*** *Most buildings occupy their entire lot…*
- ***Element 19, Degree of complexity within the façade:*** *The degree of complexity ranges from very simple to moderately complex. While there is sometimes diversity within individual facades from story to story, all buildings are straightforward in their arrangement of architectural elements and details.*
- ***Element 20, Orientation, vistas, overviews:*** *Buildings are generally oriented towards the streets they face.*
- ***Element 21, Symmetric or asymmetric appearance:*** *Most buildings are symmetrical in appearance.*
- ***Element 22, General environmental character:*** *The Madison – Harmonie Historic District has an urban mixed-use character due to the organizational, entertainment, and multi-unit residential buildings on Madison and the dense and enclosed nature of the mostly commercial Harmonie Park area. Two major public spaces, the island in the center of Madison and the triangular Harmonie Park bounded by Center, Randolph, and East Grand River, define the area and contribute substantially to its character; Madison is a grand thoroughfare while Harmonie Park is an isolated pocket off major thoroughfares. A cohesiveness is achieved through the use of unified landscaping and uniform setbacks.*

- It is staff's opinion that the proposed mixed-use building is reasonably scaled and sited in a manner similar to historic structures in the vicinity. The design and materials proposed are of our own time and contribute to the diverse physical appearance of the district's buildings.
- It is staff's opinion that the proposed new construction retains the historic character of the property and district, generally conforms with the district's Elements of Design, and protects and preserves the integrity of the property and the surrounding district.

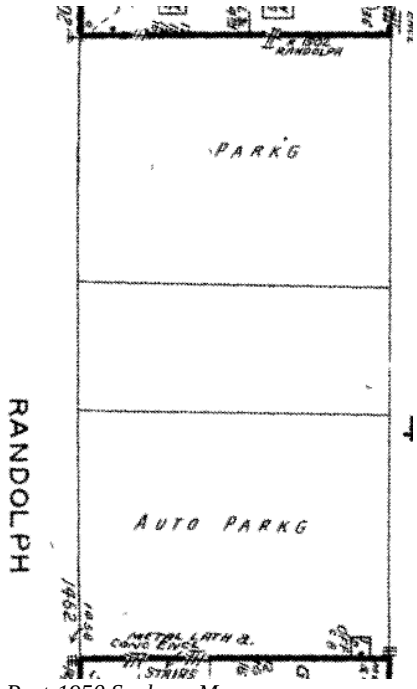
- See Sanborn Maps and historic photos below of the property below for a history of the site development:



1897 Sanborn Map



1921 Sanborn Map



Post-1950 Sanborn Map

ISSUES

- Regarding the proposed uPVC windows and exterior doors (color: black) at the residential units – uPVC is simply the technical name for the material used to manufacture what are more commonly called "vinyl" windows, which is an inappropriate material within this historic district due to its appearance and durability over time. It is staff's opinion that the windows should not be vinyl, which would be consistent with the Commission's previous decisions on this matter.
- See staff comment at Element 3 above. It is staff's opinion that the openings at the parking structure (levels 2 – 3) should incorporate screens to minimize the percentage of openings perceived while allowing for proper ventilation at the parking structure.

RECOMMENDATION

Section 21-2-78, Determination of Historic District Commission

It is staff's opinion that the proposal should qualify for a Certificate of Appropriateness. Staff recommends that the Commission approve a COA for the proposed application, as it meets the Secretary of the Interior's Standards and the Madison – Harmonie Historic District's Elements of Design, with the conditions that:

- The uPVC windows and doors proposed at the residential units are to be a material other than uPVC/vinyl.
- Screening is to be incorporated at all openings located at the parking structure on levels 2 & 3.
- Applicant to submit revised cut sheets for the items listed above to HDC staff for review and approval prior to pulling the permit.

1894 SANBORN MAP

1468 - 1496 RANDOLPH

45

44

40

39

39

BRUSH STREET

BRUSH ST.

HARRIET ST.

AVE.

CRATIOT

STREET

CENTRE PARK

GRAND RIVER

STREET

AVENUE

CENTER

AVENUE

JOHN R.

STREET

MIAMI

BARCLAY PLACE

SCHOOL

JOHN HOPKIN & CO.
WAGON & CARRIAGE W'KS

TURKISH BATHS

MATHERS BL'K

1468 - 1496 RANDOLPH

1897 SANBORN MAP

MADISON AV.

MADISON AV.

MECHANIC

BEAUBIEN

ST. ANTOINE

CATHERINE ST.

MULLETT ST.

RAYNOR ST.

BRUSH

RANDOLPH

CENTER ST.

CLINTON ST.

GRATIOT AV.

E. GRAND RIVER AV.

McGREGOR INSTITUTE
HOME FOR THE UNEMPLOYED
1863 - BRUSH ST.

1468 - 1496 RANDOLPH

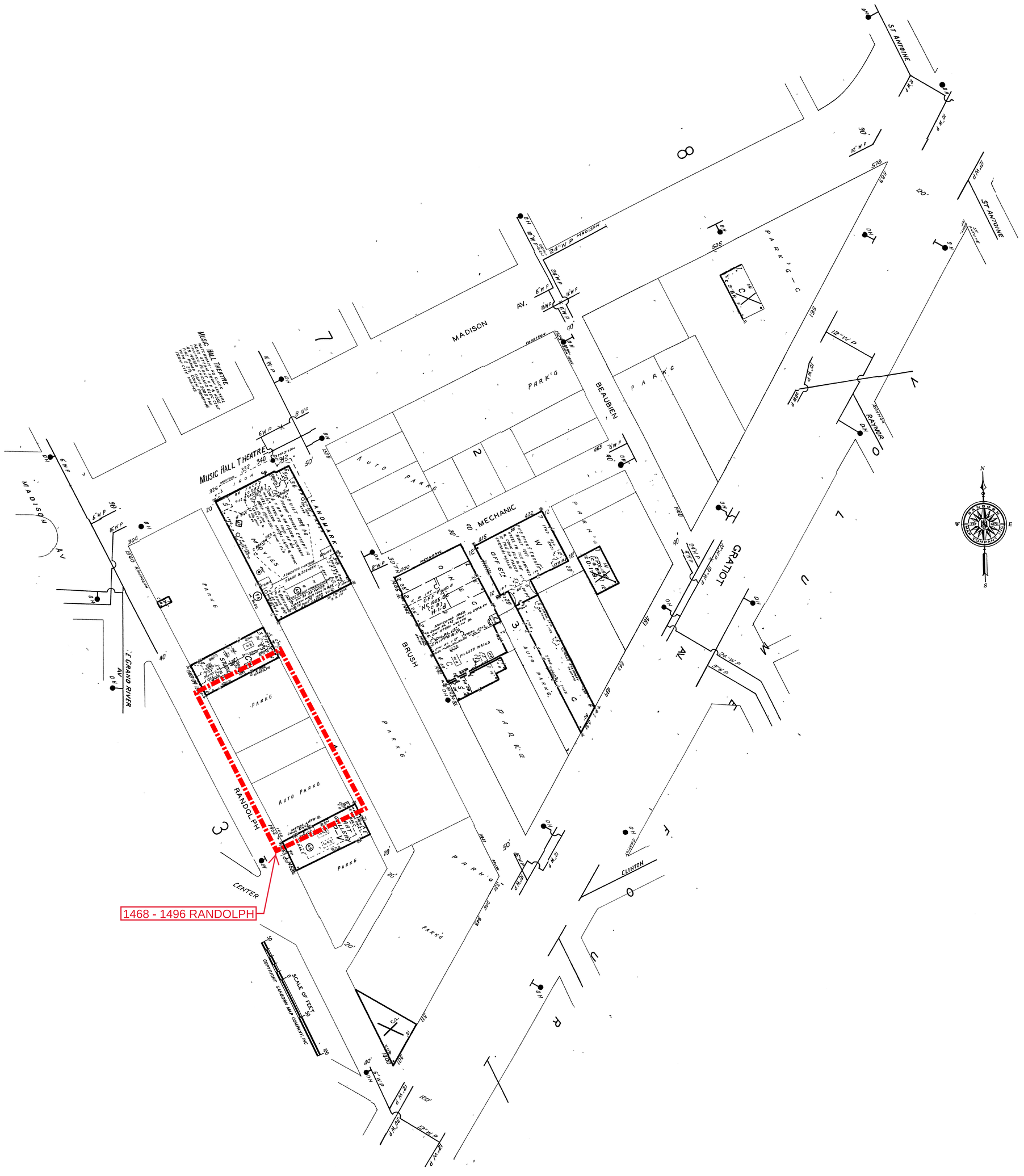
Scale of Feet.

DETROIT, MICH.
4
(5)

1921 SANBORN MAP

1468 - 1496 RANDOLPH

1921-1950 SANBORN MAP



POST-1950 SANBORN MAP

STAFF SITE VISIT 4/23/2021


CIGARS
La Casa
La Casa
PARKS
STAFF SITE VISIT 4/23/2021


STOP
STAFF SITE VISIT 4/23/2021

STAFF SITE VISIT 4/23/2021


ONE WAY
STAFF SITE VISIT 4/23/2021


35,026 SF
OFFICE FOR LEASE
Jasper Hanifi
Brendan George
248 353 5400
www.cbre.com
CBRE
STOP
ALL WAY
STAFF SITE VISIT 4/23/2021

STAFF SITE VISIT 4/23/2021

STAFF SITE VISIT 4/23/2021

STAFF SITE VISIT 4/23/2021

STAFF SITE VISIT 4/23/2021


ENTER HERE
Harmonie Park
Parking
PLEASE ENTER HERE
LECTURE
PAY
STAFF SITE VISIT 4/23/2021


GREEKTOWN CASINO • HOTEL
SELF STORAGE
ZONE 106
Park Detroit
PAY HERE
Harbor House
Hilton Garden Inn
PARKING
PARK RITE
The Leader In Parking
ENTER HERE
Harmonie Park Parking
PLEASE ENTER HERE
TAHOE
STAFF SITE VISIT 4/23/2021


Hilton
Garden Inn
CIGARS
La Casa
LOUNGE
La Casa
CIGAR-INSPIRED MUSIC LOUNGE
DETROIT • LAS VEGAS
ACCESSORIES
ZONE 106
Park Detroit
PARKING
PARK RITE
The Leader in Parking
STAFF SITE VISIT 4/23/2021

THIS IS A **3-PAGE FORM - ALL INFORMATION IS REQUIRED FOR PROJECT REVIEW**

HISTORIC DISTRICT COMMISSION
PROJECT REVIEW REQUEST

City of Detroit - Planning & Development Department
2 Woodward Avenue, Suite 808
Detroit, Michigan 48226

Date: 04/19/21

PROPERTY INFORMATION

ADDRESS: 1468/1480/1495 RANDOLPH ST **AKA:** HASTINGS PLACE

HISTORIC DISTRICT: MADISON-HARMONIE

SCOPE OF WORK: (Check ALL that apply)

- ☐ Windows/ Doors
- ☐ Roof/Gutters/ Chimney
- ☐ Porch/ Deck
- ☐ Landscape/Fence/ Tree/Park
- ☐ General Rehab
- ☑ New Construction
- ☐ Demolition
- ☐ Addition
- ☐ Other:

APPLICANT IDENTIFICATION

- ☐ Property Owner/ Homeowner
- ☐ Contractor
- ☐ Tenant or Business Occupant
- ☑ Architect/Engineer/ Consultant

NAME: ROSS HOEKSTRA **COMPANY NAME:** MCINTOSH PORIS ASSOCIATES

ADDRESS: 36801 WOODWARD AVE STE **CITY:** BIRMINGHAM **STATE:** MI **ZIP:** 48009

PHONE: 248-258-9346 **MOBILE:** 616-550-8097 **EMAIL:** RHOEKSTRA@MCINTOSH

PROJECT REVIEW REQUEST CHECKLIST

Please attach the following documentation to your request:

PLEASE KEEP FILE SIZE OF ENTIRE SUBMISSION UNDER 30MB

- ☐ **Completed Building Permit Application** (highlighted portions only)
- ☑ **ePLANS Permit Number** (only applicable if you've already applied for permits through ePLANS)
- ☐ **Photographs** of ALL sides of existing building or site
- ☑ **Detailed photographs** of location of proposed work (photographs to show existing condition(s), design, color, & material)
- ☑ **Description of existing conditions** (including materials and design)
- ☑ **Description of project** (if replacing any existing material(s), include an explanation as to why replacement--rather than repair--of existing and/or construction of new is required)
- ☑ **Detailed scope of work** (formatted as bulleted list)
- ☑ **Brochure/cut sheets** for proposed replacement material(s) and/or product(s), as applicable

NOTE:
Based on the scope of work, additional documentation may be required.

See www.detroitmi.gov/hdc for scope-specific requirements.

Upon receipt of this documentation, staff will review and inform you of the next steps toward obtaining your building permit from the Buildings, Safety Engineering and Environmental Department (BSEED) to perform the work.

SUBMIT COMPLETED REQUESTS TO HDC@DETROITMI.GOV

P2 - BUILDING PERMIT APPLICATION

Date: 04/19/21

PROPERTY INFORMATION

Address: 1468/1480/1495 RANDOLPH ST Floor: _____ Suite#: ____ Stories: _____

AKA: _____ Lot(s): _____ Subdivision: _____

Parcel ID#(s): _____ Total Acres: _____ Lot Width: _____ Lot Depth: _____

Current Legal Use of Property: _____ Proposed Use: _____

Are there any existing buildings or structures on this parcel? ☐ Yes ☐ No

PROJECT INFORMATION

Permit Type: ■ New ☐ Alteration ☐ Addition ☐ Demolition ☐ Correct Violations

☐ Foundation Only ☐ Change of Use ☐ Temporary Use ☐ Other: _____

☐ Revision to Original Permit #: _____ (Original permit has been issued and is active)

Description of Work (Describe in detail proposed work and use of property, attach work list)

A NEW 8 STORY MIXED USE BUILDING WITH 2,600 SF OF GROUND FLOOR RETAIL, 3 LEVELS OF PARKING (127 SPACES)

AND 5 UPPER FLOORS OF RESIDENTIAL UNITS (89 UNITS TOTAL).

☐ MBC use change ☐ No MBC use change

Included Improvements (Check all applicable; these trade areas require separate permit applications)

☐ HVAC/Mechanical ☐ Electrical ☐ Plumbing ☐ Fire Sprinkler System ☐ Fire Alarm

Structure Type

☐ New Building ☐ Existing Structure ☐ Tenant Space ☐ Garage/Accessory Building

☐ Other: _____ Size of Structure to be Demolished (LxWxH) _____ cubic ft.

Construction involves changes to the floor plan? ☐ Yes ☐ No

(e.g. interior demolition or construction to new walls)

Use Group: _____ Type of Construction (per current MI Bldg Code Table 601) _____

Estimated Cost of Construction $ _____ (By Contractor) $ _____ (By Department)

Structure Use

☐ Residential-Number of Units: _____ ☐ Office-Gross Floor Area _____ ☐ Industrial-Gross Floor Area _____

☐ Commercial-Gross Floor Area: _____ ☐ Institutional-Gross Floor Area _____ ☐ Other-Gross Floor Area _____

Proposed No. of Employees: _____ List materials to be stored in the building: _____

PLOT PLAN SHALL BE submitted on separate sheets and shall show all easements and measurements (must be correct and in detail). SHOW ALL streets abutting lot, indicate front of lot, show all buildings, existing and proposed distances to lot lines. (Building Permit Application Continues on Next Page)

For Building Department Use Only

Intake By: _____ Date: _____ Fees Due: _____ DngBld? ☐ No

Permit Description:

Current Legal Land Use: _____ Proposed Use: _____

Permit#: _____ Date Permit Issued: _____ Permit Cost: $ _____

Zoning District: _____ Zoning Grant(s): _____

Lots Combined? ☐ Yes ☐ No (attach zoning clearance)

Revised Cost (revised permit applications only) Old $ _____ New $ _____

Structural: _____ Date: _____ Notes: _____

Zoning: _____ Date: _____ Notes: _____

Other: _____ Date: _____ Notes: _____

Permit #:

HASTINGS PLACE

PROJECT ADDRESS:

1468/1480/1496 Randolph St
Detroit, MI 48226

PROJECT TEAM:

Owner / Developer:
Hastings Place, LLC.
1452 Randolph Street
Suite #400
Detroit, MI 48226

Architect:
McIntosh Poris Associates
36801 Woodward Avenue, Suite 200
Birmingham, MI 48009

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PROJECT NARRATIVE

Hastings Place is a proposed mixed-use multifamily building in the Madison-Harmonie Historic District that will fill in an existing gap facing Harmonie Park – completing the street edge along Randolph St., enhancing the pedestrian-oriented urban fabric and adding new residents to the neighborhood. The development will provide space for new residents, businesses, and visitors in the heart of Paradise Valley. Housing, parking, and retail contained in the program support continuing investment in the cultural and creative assets already in the community.

PROGRAM

Apartments	89 units
Retail	2,700 sf
Parking	127 cars

The ground floor street frontage maximizes pedestrian oriented space – 80% of the frontage contains the residential lobby and retail space. This frontage is a continuous storefront, maximizing transparency for flexibility, visibility, and safety. A parking entrance off Randolph has also been provided for parking spaces that are hidden behind the retail storefront at grade.

Above this ground floor are two additional floors of parking for residents of the building and visitors and workers in the district. The garage is disguised from view by using openings which match the size of the windows above. The final 5 floors of the building are residential units with the majority being studios and 1 bedrooms, ranging from 420 sf to 1020 sf. At the fourth floor, a large outdoor terrace is planned for use by all residential tenants.

The exterior massing steps back at the upper floors as a gesture to the adjacent buildings along Randolph, making the overall proposed height seem smaller than it is, as well as providing space for private balconies for the units. The façade also switches materials as it goes up, breaking the overall massing into parts which are closer in size to the adjacent buildings and fit in with the context of Harmonie Park.

ZONING & CODE INFORMATION

Zoning District: B4 current / B5 rezoning in progress

Overlay/ Historic Districts: Harmonie Park Historic District / Central Business District

Parking Requirements:

Residential parking required:	0 required in CBD (61-14-7)
Retail parking required:	0 required in CBD (61-14-7)
Total parking required:	0 parking spaces
Total parking provided:	127 parking spaces

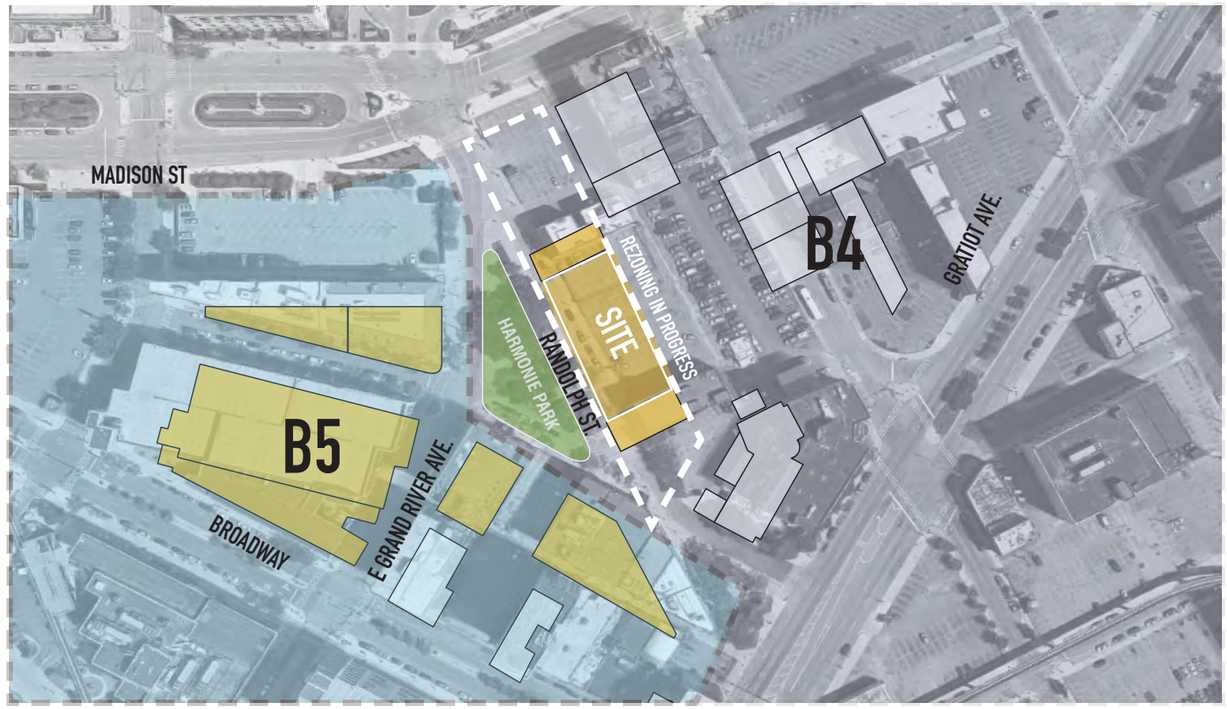
Gross Area & Height:

Parking Structure:	52,695 gsf 3 stories
Residential:	75,046 gsf 5 stories
Total Retail:	2,615 sf 1 story

Residential Program:

Studios	22 units
One Bedrooms	57 units
Two Bedrooms	10 units
Total	89 units

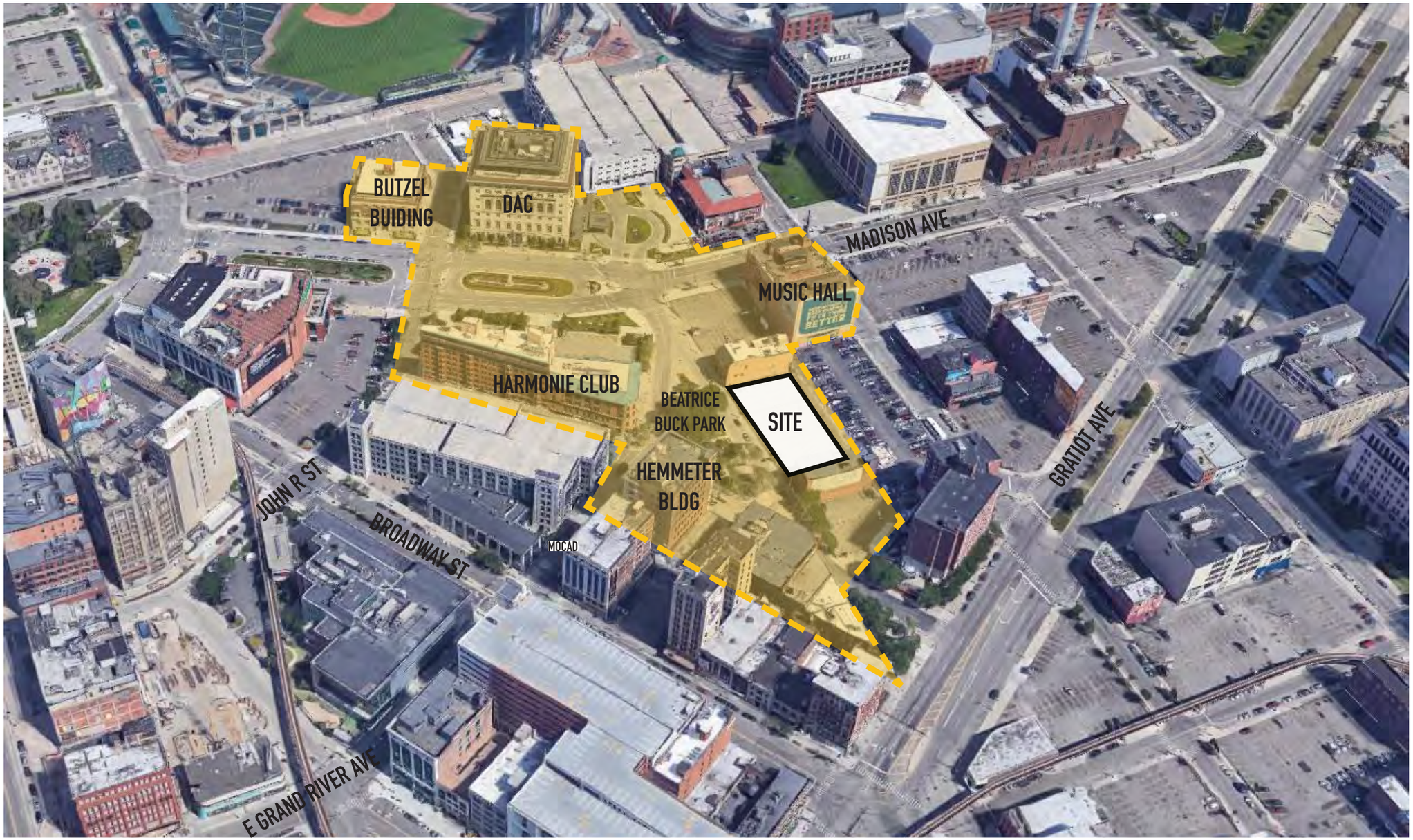
ZONING MAP

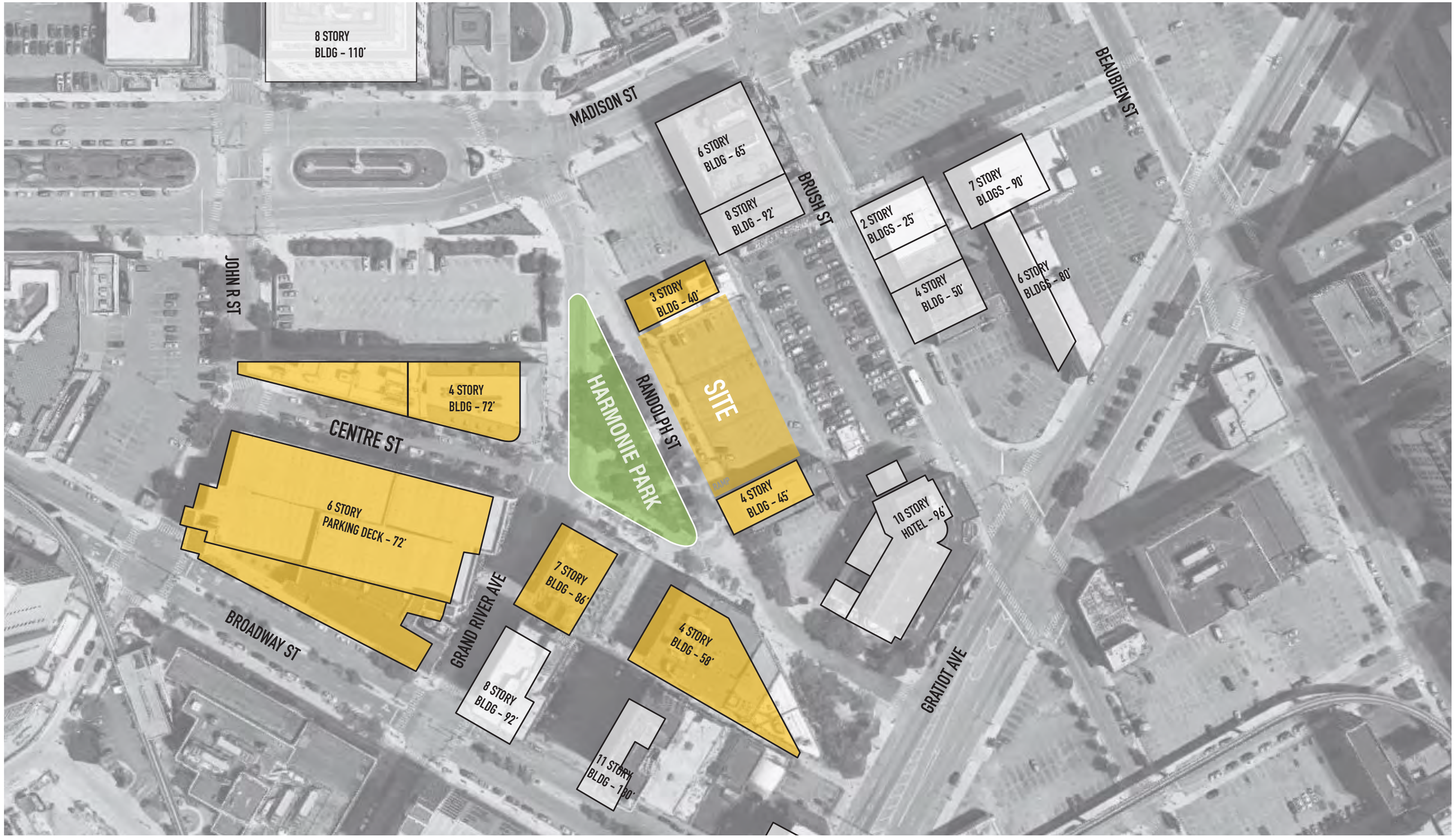


MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

MADISON-HARMONIE HISTORIC DISTRICT

The Madison-Harmonie Historic District is located in the northeastern section of the Central Business District around the intersection of Madison Avenue and Randolph. It is a mixed use area composed of moderate-to-large scale apartment buildings, two substantial clubs and a charitable organization, a major cultural institution, two parking garages, and small-to-moderate scale commercial buildigns facing Harmonie Park, for a total of 16 buildings in all.





HISTORIC DISTRICT + CONTEXT

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

263 E GRAND RIVER AVE - HARMONIE CLUB
COMMERCIAL + CULTURAL

1502 RANDOLPH
COMMERCIAL + RESIDENTIAL (ADJACENT TO SITE)

1452 RANDOLPH
COMMERCIAL + OFFICE (ADJACENT TO SITE)

230 E GRAND RIVER AVE - HEMMETER BUILDING
COMMERCIAL + OFFICE

1435 CENTRE ST
COMMERCIAL + OFFICE

DETROIT ATHLETIC CLUB - 241 MADISON STREET
HOSPITALITY

163 MADISON ST - BUTZEL BUILDING
EDUCATIONAL

HISTORIC DISTRICT + CONTEXT

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

SITE PHOTOS

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

MADISON-HARMONIE HISTORIC DISTRICT - ELEMENTS OF DESIGN

(1) Height.
Buildings in the district range from three (3) stories tall to nine (9) stories tall. A two-story structure connects the Madison and Lenox Apartment Hotels. Talle buildings are located in the northern half of the district, primarily around Madison and the E. Grand River/ North Center Area. The majority of buildings in the southern part of the district, facing Harmonie Park, are three (3) stories tall.
The proposed Hastings Place is 8 stories tall and the building steps back at the 4th and 6th floor to reduce the height at the street wall immediately adjacent to Randolph St.

(2) Proportion of building's front facades.
Proportion varies in the district, depending on the style and size and height of the buildings. Most of the individual commercial buildings facing Harmonie Park appear taller than wide or as tall as wide, but when taken as a continuous commercial row, the total effect is as a commercial block wider than tall. In general, where buildings abut, the effect is wider than tall. Although it is the tallest building in the district, the Milner Hotel on Center is wider than tall. The Madison and the Lenox Apartment Hotels on Madison are individually taller than wide. The D.A.C. and the Butzel Building on Madison are slightly wider than tall. However, when buildings are on corner lots, their secondary facades may be wider than tall. The Randolph front of the Roy Court Apartment Building appears as two (2) separate sections that are taller than wide because of the open space between the north and south wings, but when taken as a whole the building is wider than tall.
The proposed building is wider than it is tall, which is similar to the D.A.C and Butzel Building, but the facade steps back from Randolph Street to create multiple volumes to more closely align with the proportions that exist facing Harmonie Park.

(3) Proportion of openings within the façade.
Areas of solids to voids vary greatly from building to building, depending on style, size, and function of the structure. In general, commercial structures around Harmonie Park have large areas of display window openings on their first stories and large window openings above. Windows are frequently arranged in groupings of several window units within one opening. The monumentally scaled buildings on Madison have very large window openings as well. The areas of voids ranges from approximately fifteen (15) percent to eighty (80) percent; most fall into the thirty-five (35) percent to fifty (50) percent range.
Like many of the existing commercial buildings there are larger openings on the ground floor for retail use. The openings above are large with groupings of several window units which is consistent with the existing buildings in the district. The windows/voids make up between 40 and 50 percent of the overall facade.

(4) Rhythm of solids to voids in the front facades.
Openings within the facades are generally regularly arranged, due to the classical stylistic derivation of most of the buildings. Many different types of windows exist within individual buildings and throughout the district; bay windows, arched openings, and double hung sashes are some of the types. **Windows are arranged in a regular pattern with alternating window types to create an overall pattern of alternating wide and thin windows.**

(5) Rhythm of spacing of buildings on streets.
All buildings in the district are situated on their front lot lines and many abut their neighbors. When this occurs, a continuous flow of wall occurs. **The proposed building is set at the front lot line and abuts the neighboring buildings on both sides.**

(6) Rhythm of entrance and/or porch projections.
The entrances of the buildings fronting on Madison are centrally located on their front facades and are entered on axis. The steps project outward from the facades while the entrance openings recede. Entrances into the Roy Court Apartments on Randolph are located off the central open space. Entrances to the commercial buildings facing Harmonie Park are either centered or on either side of the front facade; some contain more than one entrance due to multiple storefronts, and these frequently have one step leading to the entrance. The Harmonie Club's arched entrance is located centrally and has several steps leading to the entrance opening. The Music hall Lobby is entered through openings that are flush with the front facade. **The retail space in the proposed building is centrally located on the facade with recessed entrance openings. The residential lobby opening is located to one side of the building with a recessed opening.**

(7) Relationship of materials.
Brick predominates as a building material of the majority of buildings in the district. Bedford limestone is the major material of the D.A.C. Mosaic, marble, mankato stone and brick are combined on the facade of the Music Hall. Foundations, keystones, window sills and decorative trim of brick buildings are frequently stone or cast stone. Glazed tile, terra cotta and enamelled brick are also found in the district. Window frames are either metal or wood. The decorative roof of 1502 Randolph is mediterranean tile. **The major material of the proposed building is also brick, which is the base mass of the building. As the building steps back, fiber cement is used for contrast. The proposed window frames are uPVC polymer.**

(8) Relationship of textures.
The most common textural relationship is that of the low-relief pattern of mortar joints in brick juxtaposed with smooth masonry trim. Basements of larger buildings are frequently rusticated stone; the D.A.C. walls are of smooth stone. Enamelled brick and terra cotta are smooth in texture; mankato stone has its own textural interest. Brick details and carved stone are commonly used to provide textural interest on many buildings. In general, the district is rich in textural relationships. **The proposed building also has low-relief masonry at its base. Additional textural richness is achieved through deep recessed balcony openings and the patterning of the fiber cement panelling that changes in color between the upper two volumes.**

(9) Relationship of colors.
The buildings facing Harmonie Park are predominately red or brown brick. White enameled brick, colored tiles, green and tan mosaics, buff colored brick, tan mankato stone, and light gray masonry also exist in the district. Window frames on Madison are usually painted green; the window frames of the Roy Court Apartments are cream colored to match the buff brick. Green, gray, black, and brown are common colors for window frames elsewhere in the district. **The proposed building uses gray masonry at its base, with lighter gray fiber cement above. The colors are compatible with the district without trying to imitate the existing red or brown. The window frames are black.**

(10) Relationship or architectural details.
Architectural details generally relate to architectural styles. In general, most small-scaled buildings centered around harmonie Park are less ornate than those north of Harmonie Park. Some are utilitarian in appearance and reflect the modernistic tendencies popular in the early 20th century. Quoins, rusticated basements, carved stone, arched openings, pedimental window hoods, bracket, columns, modillion cornices and classical moldings are seen on those large buildings of classical precedents. The Music Hall has early art deco detail; its vertical sign is centered on the front of the rooftop and a marquee rests above the entrances. Where buildings are situated on corner lots, their secondary facades are often articulated and detailed in ways similar to their front facade. **The architectural detailing of the facade of the proposed building is simpler than the existing older buildings in the district and is consistent with modern architectural style of today. It is distinct from the historic context and does not attempt to replicate historic buildings in the district.**

(11) Relationship of roof shapes.
Few of the roofs in the district can be seen from the street, with the exception of the tiled front slope of the building at 1502 Randolph and the very shallow sloped roof of the Harmonie Club which is visible from longer distances. **The proposed roof will be flat and not visible from the street due to the height of the parapet wall.**

(12) Walls of continuity.
The major wall of continuity is created by the facades of the buildings themselves. Uniform setbacks within blocks exist throughout the district. Where buildings abut, a continuous wall exists. Where rows of trees are planted in front of buildings, a secondary wall of continuity is created. **The front facade of the proposed building is continuous with the facades of the adjacent buildings. The new streetscape will incorporate trees that bridge between the existing buildings.**

MADISON-HARMONIE HISTORIC DISTRICT - ELEMENTS OF DESIGN

(13) Relationship of significant landscape features and surface treatments.
The major significant landscape features in the district are the island on Madison between John R. and Randolph and the triangular Harmonie Park, bounded by Randolph, Grand River and Center Streets. The Madison Avenue island, in the center of the two-hundred-foot right-of-way, has rectangular brown, light orange, and cream pavers around its perimeters and grassy turf within. A semi-circular planter clad in buff-colored pavers is located at each end of the island. Evergreen bushes and flowers are planted behind the planters. Two (2) rows of trees—eight (8) crab apples on the western half and six (6) larger trees on the eastern half—are planted on the grassy turf. Light standards of a period design with gaslight fixtures, stamped "Patented Dec. 28, 1915," and parking meters are also situated on the grassy island. Modern steel light poles are located elsewhere in the district; fluted metal poles generally carry street signals. Other landscaping on the north side of Madison consists of a graded, very shallow planted grassy turf area in front of the buildings, separated from the public sidewalk by concrete curbs. Where shallow side yards exist, the landscaping continues around to the sides. Hedges exist at the foundations of the Madison-Lenox Apartment Hotel, separated from the public sidewalk by a curb. Large trees are located in brick sidewalk planters on the south side of Madison and the north side in front of the Butzel Building. Harmonie Park consists of a sunken area paved with pink aggregate surrounded by a stone wall. It is planted with trees and bushes. Street furniture consists of upright light standards and wood benches. The stone fountain wall is the main feature of Harmonie Park at its southern end. Parts of the Center Street and East Grand River public sidewalks are blacktopped with locust trees planted in squares circumvented with brick pavers; some are paved with pink aggregate. **The proposed building will have street trees and paving consistent with existing sidewalk, light standards, and other street furniture along Randolph St.**

(14) Relationship of open space to structures.
Most vacant land in the district is used in parking lot usage, with the exception of the lot north of the Roy Court Apartment, which is planted with grass. Most of the vacant space is on the east side of the south half of Randolph. Only very shallow front yards and side yards exist on Madison. The buildings on Harmonie Park act as the enclosure of the open space, whereas Madison has a more open feeling due primarily to the width of the street and the space between buildings.
The proposed building will fill in vacant parcels, currently being used as parking lots and help to create a complete street wall facing Harmonie Park and further defining the open space.

(15) Scale of facades and facade elements
The scale of buildings on Madison is monumental. Elements within range from medium to large, with detail of a small to medium scale. The brick commercial buildings facing Harmonie Park are small to moderate in scale; elements and detail within are generally small in scale. The Harmonie Club, Hemmeter Building, and the Milner Hotel are large in scale. The Roy Court Apartment Building is moderate in scale for a building of its type.
The proposed building is large in scale, but steps back at various moments to bring it closer to the small and medium scale of existing buildings facing Harmonie Park.

(16) Directional expression of front elevations.
The Roy Court Apartment Building appears taller than wide from the street of its central courtyard, although in actuality it is wider than tall. The D.A.C. and the Butzel Memorial Building are neutral in directional expression; the Madison-Lenox Apartment Hotel is vertical in expression along Madison. Most of the commercial buildings facing Harmonie Park are vertical in directional expression when taken individually; however, when seen as forming a commercial row, they are horizontal. The Milner Hotel on Center would be horizontal in directional expression if viewed on the axis of its facade, but is vertical in expression when viewed at the sharp angles permitted by the street pattern.
The proposed building creates a horizontal commercial row like those along Center St using the height of the adjacent buildings as a guide. The masses above create vertical elements to make the overall composition less horizontal.

(17) Rhythm of building setbacks.
A consistency to the building setbacks is created due to the siting of all buildings on the front building lines throughout the district.
The building is set directly on its front property lines, similar to most buildings in the district, with a recess for the retail entrance.

(18) Relationship of lot coverage.
Most buildings occupy their entire lot, with the exception of the D.A.C. and the Butzel Memorial Building, which both have narrow side yards.
The building will occupy its entire lot and abut the adjacent existing buildings.

(19) Degree of complexity within the facades.
The degree of complexity ranges from very simple to moderately complex. While there is sometimes diversity within individual facades from story to story, all buildings are straightforward in their arrangement of architectural elements and details.
The complexity of the proposed building is simple with straightforward repeating elements in each story, but introduces some complexity with the three different masses with unique materials.

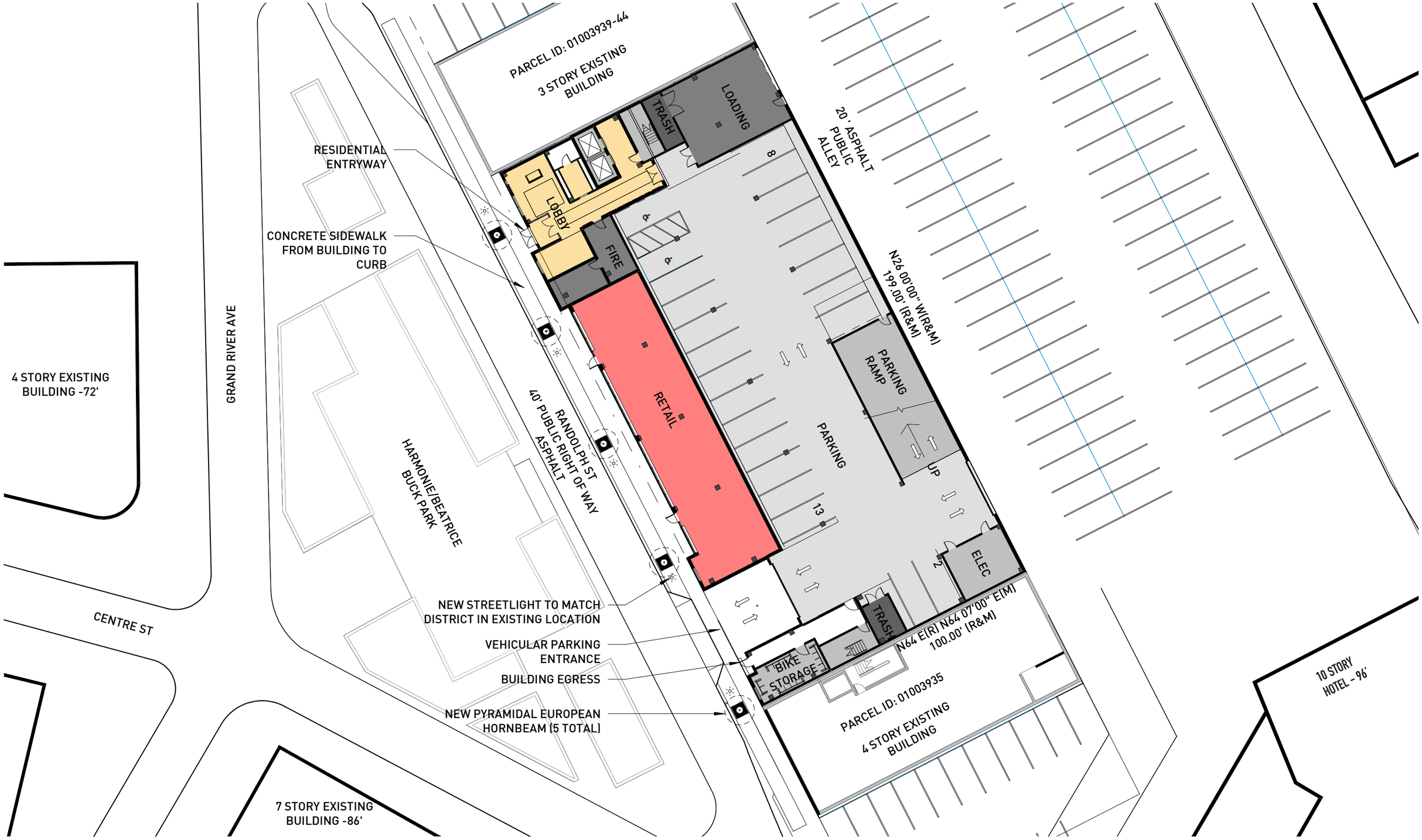
(20) Orientation, vistas, overviews.
Buildings are generally oriented towards the streets they face. The Madison Hotel Building has equally important facades facing Madison and Harmonie Park. Some buildings on corner lots have secondary entrances oriented towards the side streets. Interesting vistas are created by the irregular street plan.
Because the building abuts the adjacent existing buildings - it is oriented towards the street.

(21) Symmetric or asymmetric appearance.
Most buildings are symmetrical in appearance.
The building is symmetrical, but not perfectly so. The bottom mass is steps back on both the left and right side of the front facade to create vertical expression that matches the scale of the adjacent buildings.

(22) General Environmental character.
The Madison-Harmonie Historic District has an urban mixed-use character due to the organizational, entertainment and multiunit residential buildings on Madison and the dense and enclosed nature of the mostly commercial Harmonie Park area. Two (2) major public spaces, the island in the center of Madison and the triangular Harmonie Park bounded by Center, Randolph, and East Grand River, define the area and contribute substantially to its character; Madison is a grand thoroughfare while Harmonie Park is an isolated pocket off major thoroughfares. Signage, primarily the Music Hall and Madison-Lenox Signs, identify significant buildings and act as beacons to the area. A cohesiveness is achieved through the use of unified landscaping and uniform setbacks. Where building demolition has occurred, primarily on the east side of Randolph between Gratiot and madison, the area is less cohesive.
Housing, parking, and retail strategies contained in the program support continuing investment in the arts, culture, and entertainment assets of the community, while implementing proven strategies of inclusion and equity to help the neighborhood remain attainable and welcoming to all Detroiters.

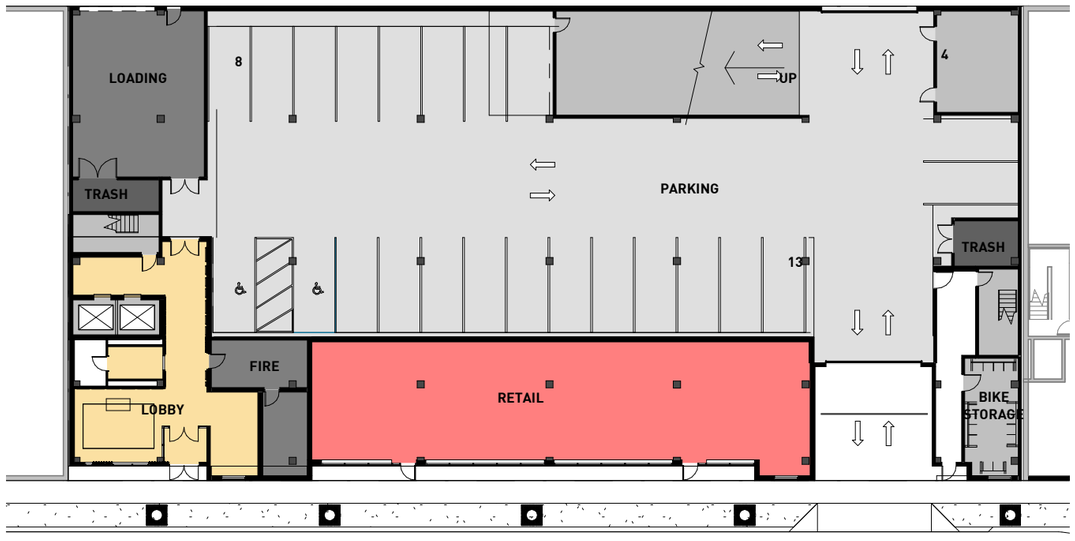
BUILDING + CONTEXT - AERIAL VIEW FROM NORTH WEST

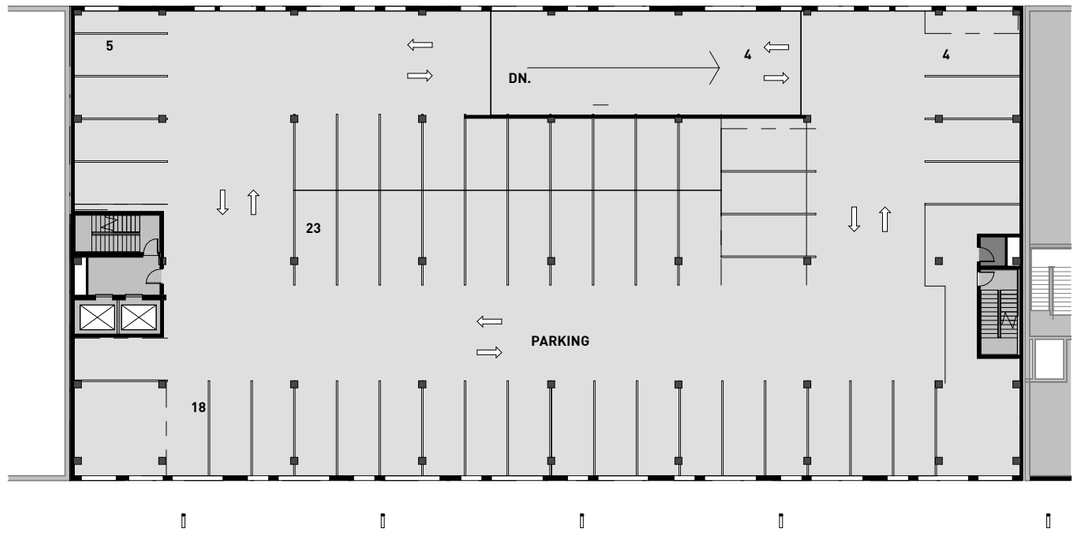
MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

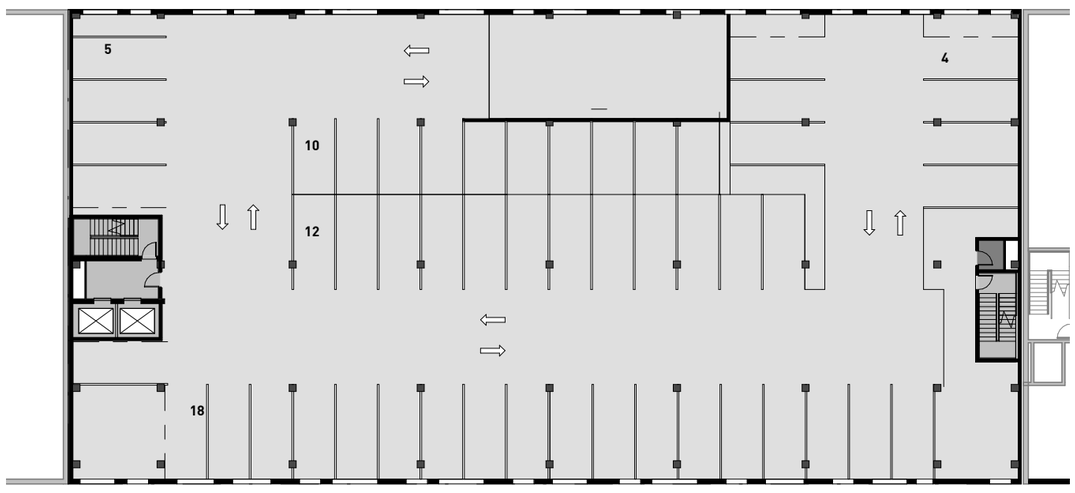


SITE PLAN

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES







FLOOR PLAN - FLOORS 1-4

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

FLOOR PLAN - FLOORS 5-8

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

RENDERING – LOOKING SOUTH

MCINTOSH ARCHITECTURE
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RENDERING – FRONT ELEVATION

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RENDERING – FACING NORTH FROM BEATRICE BUCK PARK

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

WINDOW SCHEDULE				
TYPE	**DESCRIPTION**	**OPERATION**	**FRAME COLOR**	**OVERALL SIZE**
W1	**INTUS SUPERA - MULLED WINDOWS & DOOR**	**FIXED, AWNING, SWING**	**BLACK**	**7'-10" x 9'-0"**
W2	**INTUS SUPERA - MULLED WINDOWS**	**FIXED, CASEMENT**	**BLACK**	**7'-4" x 8'-0"**
W3	**INTUS SUPERA - MULLED WINDOWS**	**FIXED, AWNING**	**BLACK**	**4'-6" x 8'-0"**

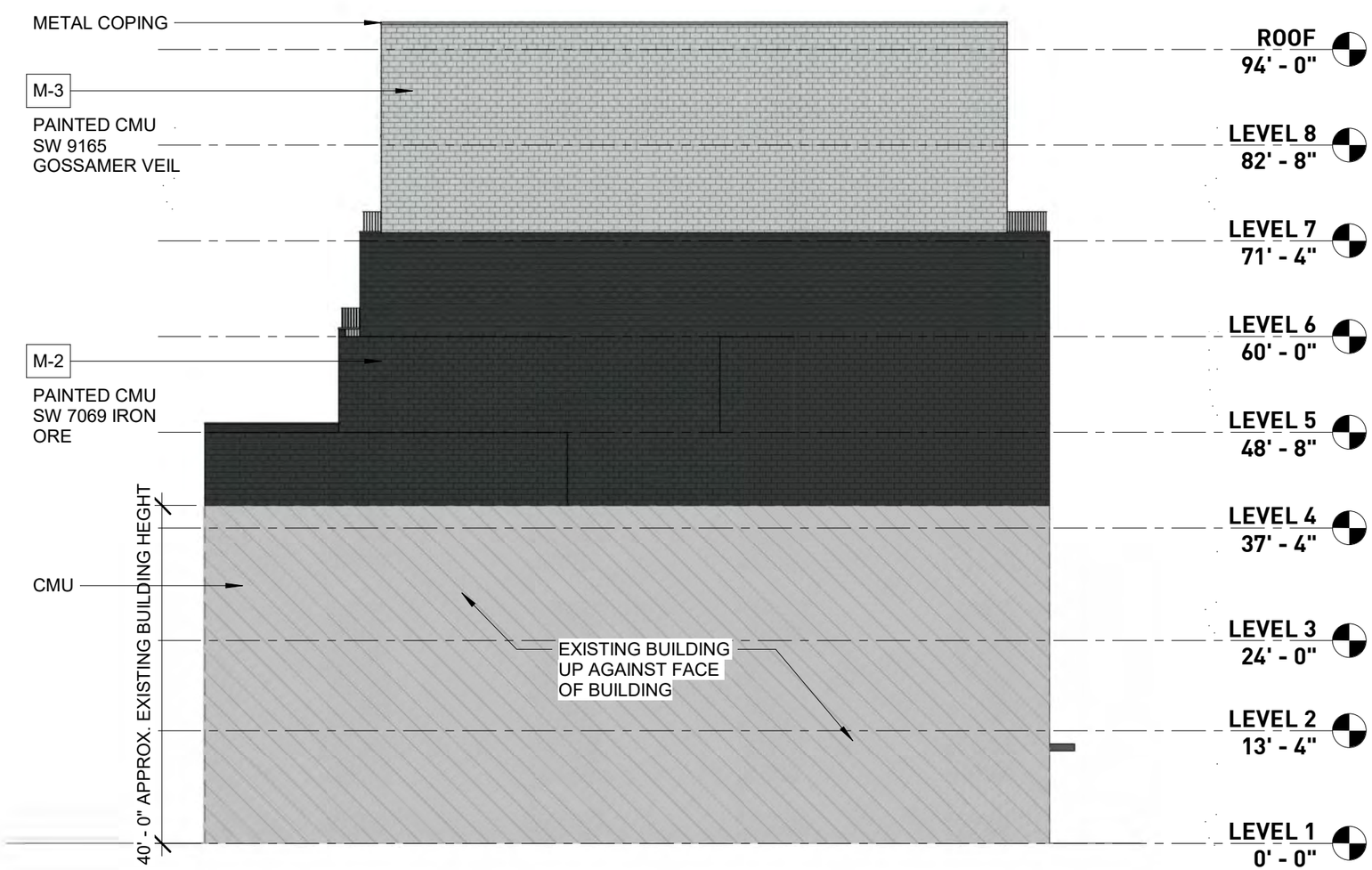
FRONT ELEVATION

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

WINDOW SCHEDULE				
TYPE	DESCRIPTION	OPERATION	FRAME COLOR	OVERALL SIZE
W1	INTUS SUPERA - MULLED WINDOWS & DOOR	FIXED, AWNING, SWING	BLACK	7'-10" x 9'-0"
W2	INTUS SUPERA - MULLED WINDOWS	FIXED, CASEMENT	BLACK	7'-4" x 8'-0"
W3	INTUS SUPERA - MULLED WINDOWS	FIXED, AWNING	BLACK	4'-6" x 8'-0"

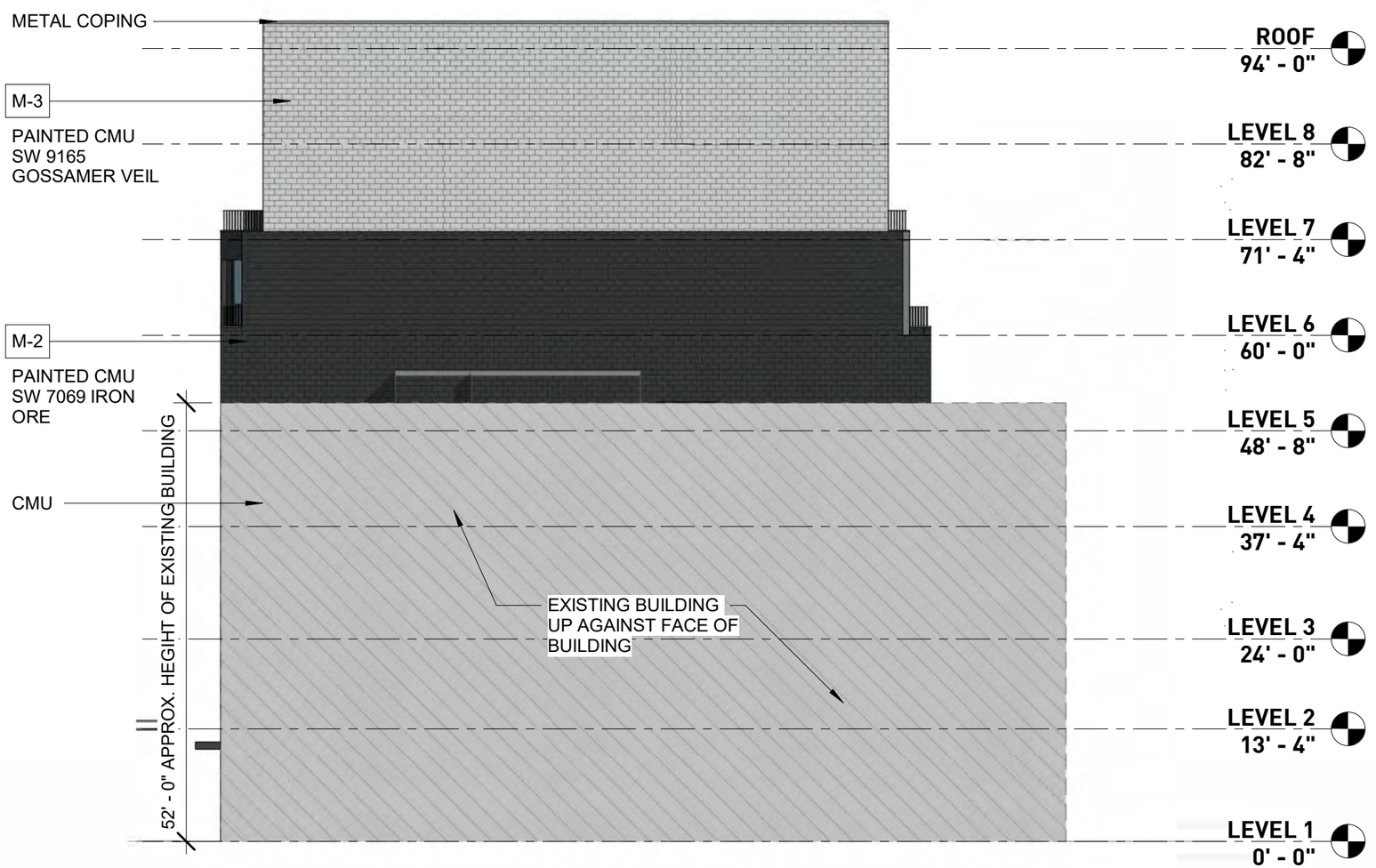
REAR ELEVATION

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES



NORTH ELEVATION

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

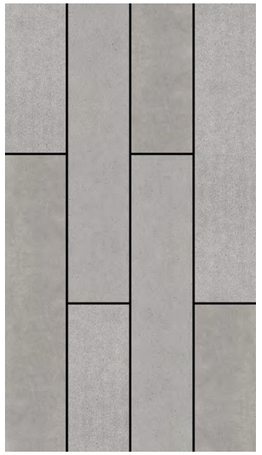


SOUTH ELEVATION

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

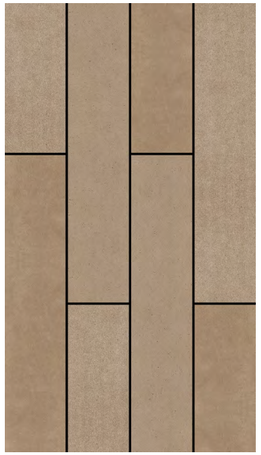
FC-2

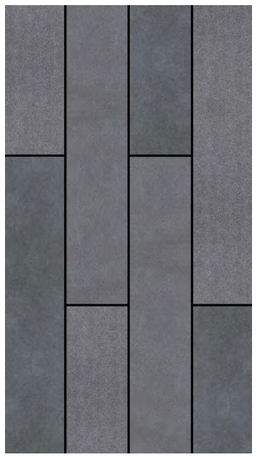
GRFC OKO SKIN - IVORY



FC-3

GRFC OKO SKIN - LARCH





FC-1

GRFC OKO SKIN - CHROME

INTERSTATE BLACK OPAL VELOUR

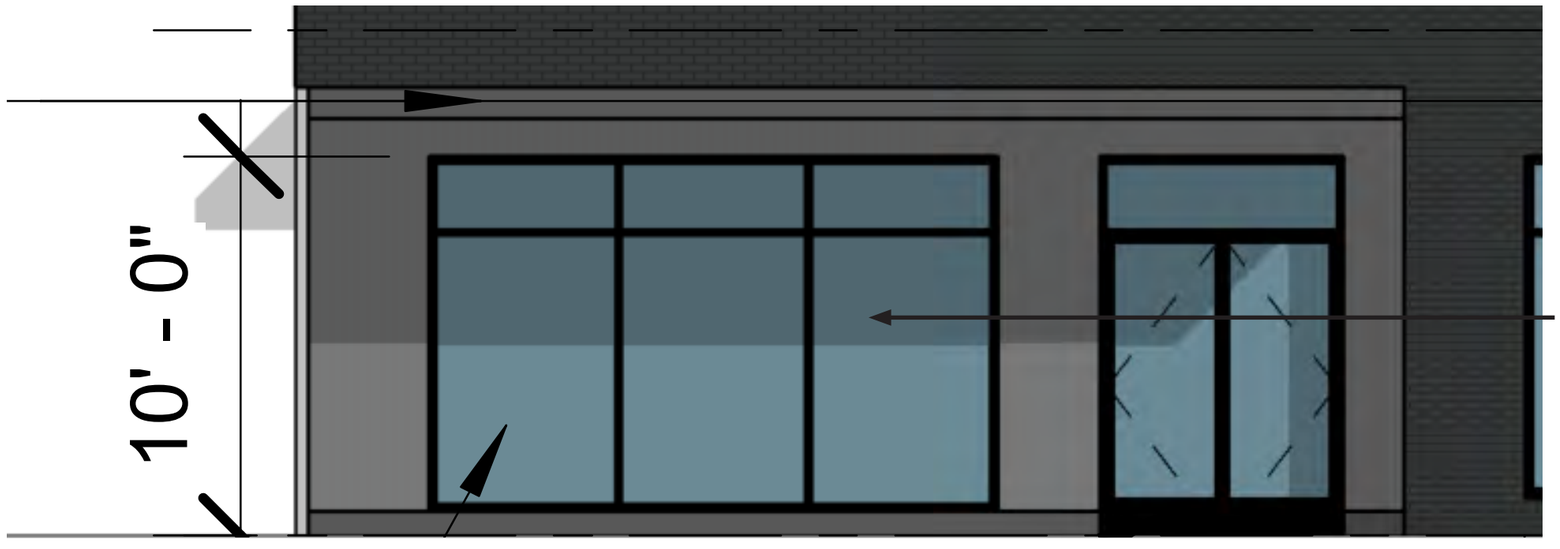
M-1

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

MATERIALS

UPVC WINDOWS

HORIZONTAL METAL RAILING



BLACK THERMALLY BROKEN ALUMINUM STOREFRONT

MATERIALS

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

SPEC SHEETS

GRFC OKO SKIN

BRICK

RAILING

WINDOWS

STOREFRONT SYSTEM

EXTERIOR DOORS

MCINTOSH ARCHITECTURE
PORIS ASSOCIATES

öko skin
slat wall panels made of
glassfibre reinforced concrete

Beton lebt.

RIEDER

As beautiful as wood, as sustainable as concrete!

Concrete lives. | Glassfibre reinforced concrete is a natural material. The raw materials used for the production of öko skin create a specific surface appearance which is typical for concrete.

Flexible applications | öko skin can be used for large-scale facades as well as for small projects such as porches, conservatories, patios, garden sheds, garages, fences and many more.

Durability | Facades cladded with öko skin slat wall panels require minimum maintenance. Unlike wooden claddings, glassfibre reinforced concrete doesn‘t require sealing or painting.

Easy to install | The slat wall panels have a very convenient size and can be mounted and processed on site - both by professionals and skilled do-it-yourselfers.

Fire resistance | öko skin is totally fire resistant thanks to fire protection class A1 (incombustible according to DIN 4102) and therefore a safe alternative to traditional wood panelling.

Sustainability | Rieder sets itself high standards in the protection of the environment (ISO 9001 and ISO 14001 standard). The Environmental Product Declaration EPD provides detailed figures of its eco-balance.

o with two dots | ö is a character used in several Latin alphabets. The pronunciation of ö is like „i“ in „Sir“. ö can be transcriped as „oe“ and is a typical character of Austria. The ö of öko skin stands for Österreich (Austria), ökologisch (ecological) and ökonomisch (economical).

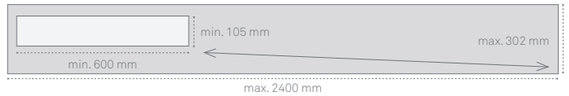
Sizes

öko skin standard

Format 1800 x 147 x 13 mm | Dead load 7.9 kg/slat

öko skin flex

Other formats within a width of 105 to 302 mm and within a length from 600 to 2400 mm are available on request. | Dead load 26 kg/m²

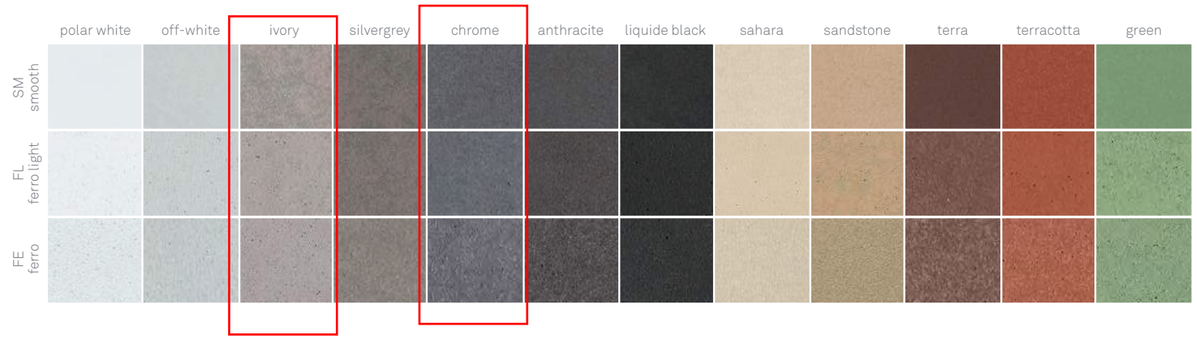


Please refer to “öko skin characteristics“ on www.rieder.cc for more details. | The slats can be cut to size and holes can be drilled by the craftsmen directly on site. Edges don't require sealing after cutting the slats.

Colours

öko skin is through colour including iron oxide and natural additives. The natural, authentic colours of öko skin fit well in landscapes and blend with nature and the environment. Each palette includes the three surfaces ferro, ferro light and smooth which create a naturally varied and vivid surface. The extended colour palette includes 12 colours, two additional grey shades create a smooth transition from polar white to liquide black, and is compatible with fibreC panels.

This play of colours within a certain colour shade is intentional and enhances the vivid character of concrete.



Installation

öko skin slat wall panels are used as facade cladding and mounted on a substructure. They can be installed both horizontally and vertically. öko skin slats can be fastened with screws to a wooden substructure or with rivets or adhesive to an aluminium substructure. Screws and rivets are available in colour matched finish. öko skin flex can be also installed as lap siding.

NEW | Concealed fastening

For further details on the processing and mounting of öko skin slat wall panels please refer to the "öko skin installation instructions" on www.rieder.cc. Please refer to country-specific regulations regarding mounting and installation!

Assembly principle: screws on wooden substructure

1 wall / brickwall
2 counter battening, opt. insulation
3 main battening
4 sheets for waterproofing
5 waterstop / joint tape
6 öko skin slat wall panels
7 screw
8 open joint

Layout examples

öko skin flex 125 mm, various colours, vertical installation, screwed on wooden substructure

öko skin 147 mm, silvergrey, vertical installation (1/3 shifted), screwed on wooden substructure

öko skin flex 147 mm, various colours, vertical installation, rivets on aluminum substructure

Coming soon!
öko skin 147 mm, anthracite vintage, horizontal installation (1/2 shifted), glued on aluminum substructure

Rieder Smart Elements GmbH
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T +43 6542 690 844 | F +43 6542 690 855
oekoskin@rieder.cc | www.rieder.cc

Office & production building | Spießberger Bau
concrete skin in polar white with ferro

cs

concrete skin

authentic

Large-format panels

The stable panels, only 13 mm thick, open up a wide scope for the realisation of ideas. Literally like a skin, concrete skin stretches smoothly over buildings and, in combination with formparts, over corners and edges. This creates a unique flow of material.

Colours > all
Surfaces > all
Textures > all
Fastening > visible & concealed

fp

formparts

monolithic

formparts.fab

formparts.fab are sharp-edged elements and are assembled from several parts. The large unwinding width means that several different formed parts can be combined with each other. Various surfaces and textures are available, which can be individually combined with each other.

Colours > all
Surfaces > all
Textures > all (excl. glossy)
Fastening > visible & concealed

Lichtfabrik | Bollinger+Fehlig Architects, Stoeckert Architects
formparts.fab in ivory with ferro

formparts.mono

formparts.mono are manufactured from one panel using folding moulds. The curved elements are custom-made and are available with L- or U-cross section, as round arches and special shapes.

Colours > all
Surfaces > ferro light & ferro
Textures > standard
Fastening > visible & concealed

ös

öko skin

vivid

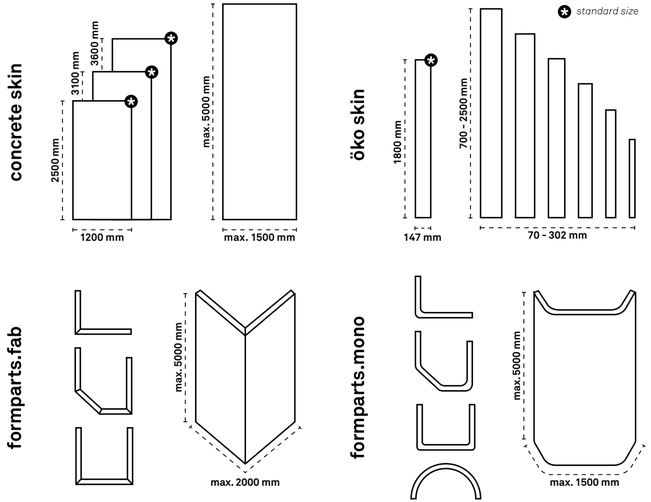
Facade slats

With öko skin, Rieder offers slatted concrete facades. The various surface design options create a vibrant play of colours. The slats can be installed with little effort and unlike wood, never need to be painted or sanded.

Colours > all
Surfaces > all
Textures > standard & vintage
Fastening > visible & concealed

Living in Eelderwolde | Been Boon Architects
öko skin in silvergrey with ferro light | ferro

Technical details



Colour collections

greyscale	pietra	bricky	timber
polar white	cotton	coralline	larch
off-white	vanilla	terracotta	oak
ivory	sahara	oxide red	walnut
silvergrey	sandstone	burgundy	ebony
chrome	almond	merlot	terra
anthracite			
liquid black			

Surfaces

matt
matt or brushed surface

ferro light
lightly blasted surface

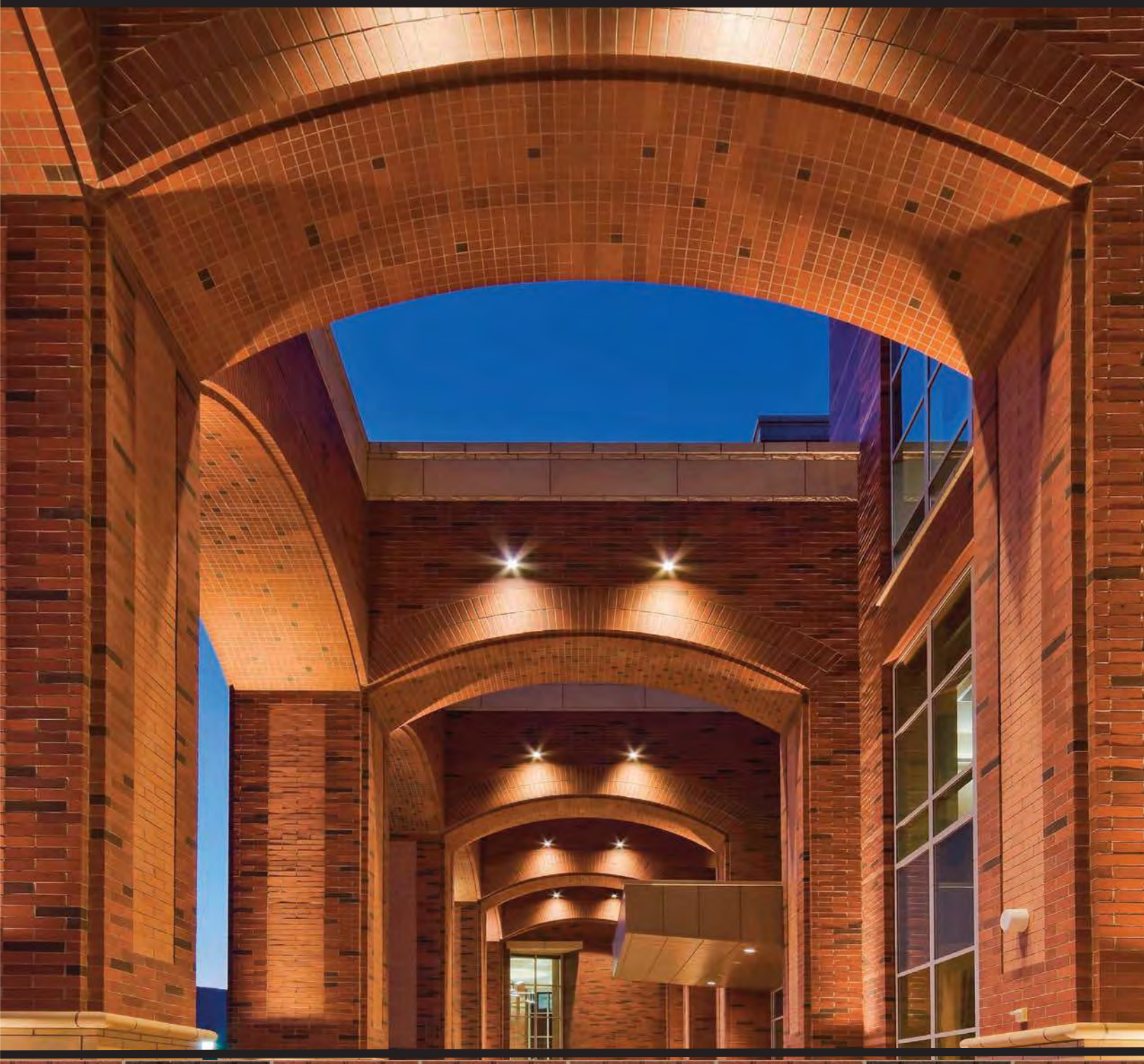
ferro
blasted surface

Textures

slate

All textures are on www.rieder.cc/textures

INTERSTATE® BRICK



Architectural Series

Interstate Brick: Beautiful, Durable, Sustainable!

The founders of Interstate Brick established one simple goal in 1891: To be the best brick manufacturer in North America. Today, that goal has been transformed into thousands of notable buildings from coast to coast.

We provide brick veneer, paving brick, and thin brick for a wide range of projects from single family residential to 20-story sky scrapers. What sets Interstate Brick's products apart is our 16 inch Emperor™ face brick and our 16" Atlas™ structural brick in sizes from modular to 8x8x16 and 10x4x16. What sets Interstate Brick's service apart is our experienced sales team with technical leadership.

Our focus is on systems analysis and design. We assist architects and engineers with design ideas and details for a variety of build-ing envelope solutions. We understand codes and specification guidelines. Our brick can be utilized to meet design parameters for any climate zone and natural disaster potential in North America, even bomb blast and ballistics considerations. Interstate Brick is the industry benchmark!

Fired clay brick have low embodied energy, one of the lowest life cycle costs, and the durability of stone. Interstate's brick are made from blends of natural clays, post industrial, and post consumer recycled brick. For these properties and thermal performance Interstate's bricks have contributed to many LEED certified projects across the country.

Our production process has set the industry EPA MACT standard for clean air, and our waste water is reclaimed on site to tertiary standards.

Interstate Brick is your sustainable solution!

INTERSTATE® BRICK

2-1/4" Modular Commercial

2 1/4 Modular – This brick size is the industry standard. It was designed to fit to a mason's hand grip. The unit is designed to turn corners and start a wall in running bond (this is where the mortar joints in the brick below are centered on the brick above). 3 brick courses equals one brick laid in a soldier course (stacked vertically). This brick is the easiest to use when creating patterns in the wall There are 6.85 brick per square foot.

3-5/8" x 2-1/4" x 7-5/8"

Click here (/sites/default/files/library/face-brick-dimension-and-details.pdf)for brick specifications.

Available Colors

Click on any of the colors below to see details and project photos:

*We cannot guarantee that your monitor's display of any color will be accurate. Please contact us to request a sample.

er

Platinum

Midnight Black

Black Opal

Black Ice

De

ut

Canyon Rose

Park Rose

Golden Buff

Ochre Buff

Te

Black Opal Image Gallery

There are no Black Opal projects in the gallery at this time.

Shapes

Click on any of the sizes below to see more details

2 1/4" Modular Lip Soldier 5/8" X 5/8"

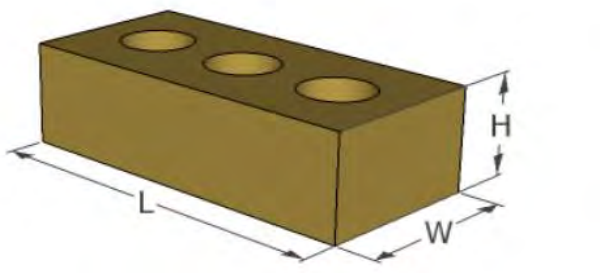
2 1/4" Modular Lip Stretcher 5/8" X 5/8"

2 1/4" Modular 135 Degree Dogleg Internal

2 1/4" Modular 45 Degree 5 1/8" Sill

(https://www.interstatebrick.com/wp-content/uploads/2016/10/Modular-Lip-Soldier-5-8-X-5-8.jpg) (https://www.interstatebrick.com/wp-content/uploads/2016/10/Modular-Lip-Stretcher-5-8-X-5-8.jpg) (https://www.interstatebrick.com/wp-content/uploads/2016/10/Modular-135-Degree-Dogleg-Internal.jpg) (https://www.interstatebrick.com/wp-content/uploads/2016/10/Modular-45-Degree-5-1-8-Sill.jpg)

Face Brick Specifications



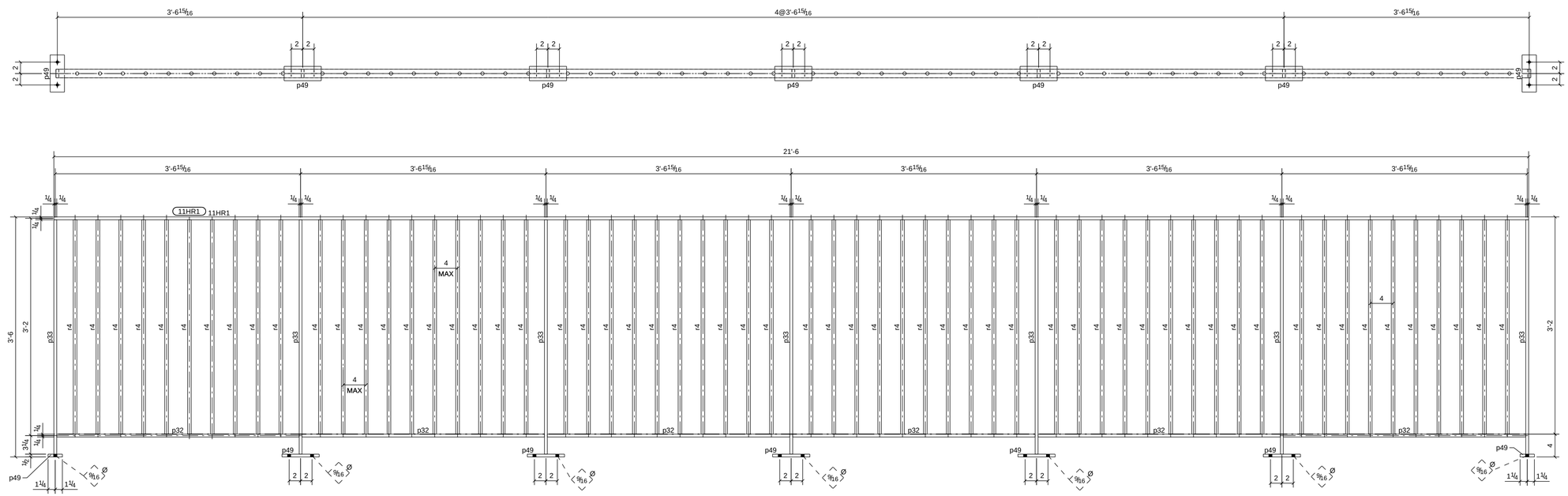
Commercial / Residential Brick - Dimensions, Weights, and Coverage

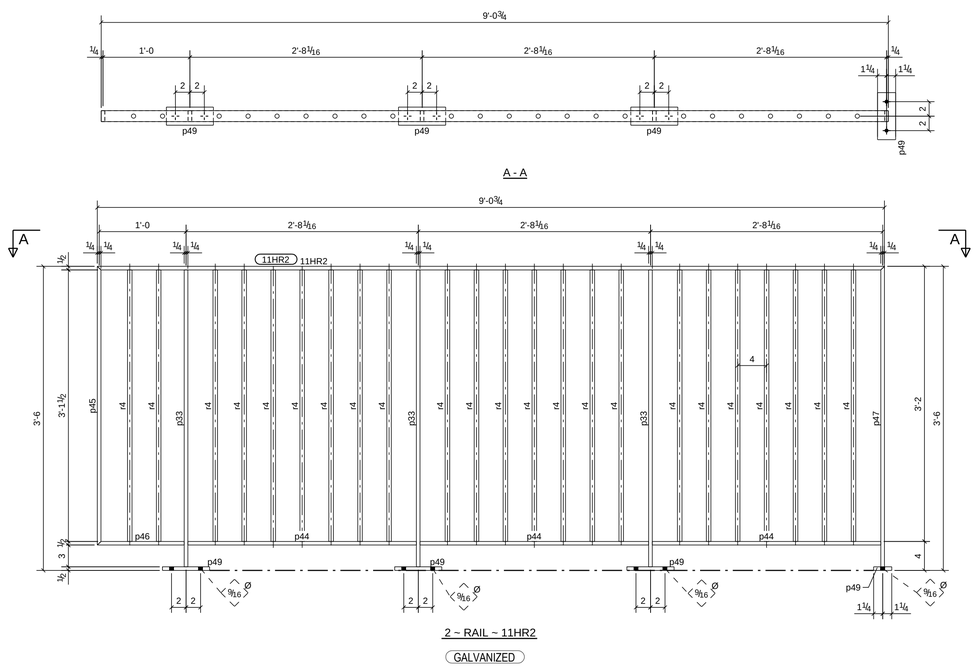
	Width (W)		Height (H)		Length (L)		Weights		Unts/ft2		Packaging	
Description	in	mm	in	mm	in	mm	lbs	kg	Unts/ft^2	Units/M^2	Type	Qty
King	3	76	2 5/8	67	9 5/8	244	4.7	2.1	4.80	51.7	Cube	424
2 1/4" Modular	3 5/8	92	2 1/4	57	7 5/8	194	3.8	1.7	6.86	73.8	Cube	500
2 3/4" Modular	3 5/8	92	2 3/4	70	7 5/8	194	5.1	2.3	5.60	60.3	Cube	380
4" Modular	3 5/8	92	3 9/16	90	7 5/8	194	6.1	2.8	4.50	48.4	Cube	305
8" Modular	3 5/8	92	7 9/16	192	7 5/8	194	12.5	5.7	2.25	24.2	Pallet	128
2 1/4" Norman	3 5/8	92	2 1/4	57	11 5/8	295	5.5	2.5	4.47	48.1	Cube	300
4" Norman	3 5/8	92	3 9/16	90	11 5/8	295	8.7	4.0	3.00	32.3	Cube	183
2 1/4" Emperor	3 5/8	92	2 1/4	57	15 5/8	397	8.9	4.0	2.76	29.7	Pallet	240
4" Emperor	3 5/8	92	3 9/16	90	15 5/8	397	11.5	5.2	2.25	24.2	Pallet	160
8" Emperor	3 5/8	92	7 9/16	192	15 5/8	397	23.0	10.5	1.13	12.1	Pallet	64

The above brick manufactured by Interstate Brick Company comply with the following specifications:

ASTM C216: Grade SW; Type FBA, FBS or FBX as specified in Purchase Order

CSA A82: Grade EG; Type FBA, FBS or FBX as specified in Purchase Order





BILL OF MATERIAL

SHIP	MARK	NO PCS	DESCRIPTION	LENGTH	PIECE MARK	REMARKS
2	11HR1	2	PL1/2"X1 1/2"	21'-6"		A36
		12	PL1/2"X1 1/2"	3'-6 7/16"	p32	A36
		14	PL1/2"X1 1/2"	3'-5"	p33	A36
		14	PL1/2"X2 1/2"	0'-6 1/2"	p49	A36
		120	RB5/8"	3'-1 1/2"	r4	A36
2	11HR2	2	PL1/2"X1 1/2"	9'-0 11/16"		A36
		6	PL1/2"X1 1/2"	3'-5"	p33	A36
		6	PL1/2"X1 1/2"	2'-7 9/16"	p44	A36
		2	PL1/2"X1 1/2"	3'-2 1/2"	p45	A36
		2	PL1/2"X1 1/2"	1'-0"	p46	A36
		2	PL1/2"X1 1/2"	3'-5 1/2"	p47	A36
		8	PL1/2"X2 1/2"	0'-6 1/2"	p49	A36
		46	RB5/8"	3'-1 1/2"	r4	A36

CUSTOM VERTICAL RAILING - SHOP FABRICATED.

ALL STEEL ON THIS SHEET
GALVANIZED

INTUS
WINDOWS

PRODUCT CATALOG

INTUS WINDOWS

BUILT TO BE THE MOST ENERGY EFFICIENT

INTUS creates high performing windows and doors that conserve energy, increase thermal performance, and reduce noise. By balancing superb energy efficiency, affordability, and versatility, INTUS is making sustainable building attainable for any type of commercial project in the U.S.

The source of nearly 48% of the world's greenhouse gas emissions is from buildings, with conventional windows and doors responsible for 25-40% of lost heating and cooling energy. Fenestrations are key to dramatically increasing the energy efficiency of buildings and decreasing wasted energy. Whether you're building a modern multi-family building beside the NYC subway, luxury hotel in Tennessee, or a school in Maine, INTUS has customizable solutions that balance costs, long-term performance, and secure savings on the ever-rising cost of energy.

1875 ATLANTIC AVENUE - **Brooklyn, NY**

» **Sound: STC 45/OITC 38**

Architect: **Studios C Architect & Design**

Installer: **Windows of NYC**

Project Type: **Multi-family residential**

NEW

WHY SUPERA 83 PASSIVE?

+ Passive House Institute (PHI) Certified
+ Thermally efficient profile
+ High performance triple glazing
+ Affordably achieves PHI Certification for any climate zone in the U.S. & areas of Canada

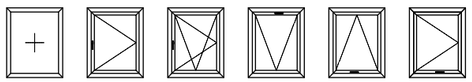
warm, temperate climate

phC

CERTIFIED COMPONENT

Passive House Institute

Available in 6 window styles:



Air Infiltration
<0.1 cfm/ft²

Water Penetration
Up to 12.11 psf

Design Pressure (DP) - Fixed
±40.10 psf | ±60.16 psf

Design Pressure (DP) - Casement
±40.10 psf | ±70.18 psf

PRODUCTS

Profile available in both double and triple pane options.

NFRC Values	
U-value (BTU/hr.ft².°F)	0.14–0.28
SHGC (Solar Heat Gain Coefficient)	0.17–0.51
VT (Visual Transmittance)	0.34–0.66

Air Infiltration
0.06–0.1 cfm/ft²

CW Water Penetration
Up to 10.65 psf

AW Water Penetration
Up to 12.11 psf

Design Pressure (DP)
±40.10 psf | ±70.18 psf

EMBLEM AT BARRACKS ROW - Washington, DC

» **LEED Gold Certified**

Architect: Fillat+ Architecture

Developer: Bozzuto Group

GC: Northfield Construction & Development

Project Type: Multi-family residential/Mixed-use

ADA Compliant Operational Force Under 5 lbs.*

Title	Result Summary
Vent Operational Force (Initiate motion)	16 N (3.5 lbf)
Vent Operational Force (Maintain motion)	2 N (0.5 lbf)
Lock Operational Force	18 N (4.0 lbf)

*For casement windows only

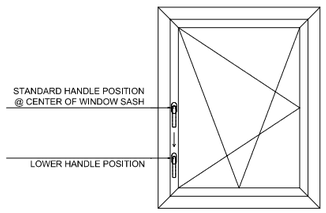
Profile available in both double and triple pane options.

NFRC Values	
U-value (BTU/hr.ft².°F)	0.17–0.28
SHGC (Solar Heat Gain Coefficient)	0.12–0.43
VT (Visual Transmittance)	0.22–0.56

Air Infiltration
<0.1 cfm/ft²

Water Penetration (CW)
Up to 10.65 psf (AW: 12.11)

Design Pressure (DP)
±40.10 psf | ±70.18 psf



695 GRAND STREET - Brooklyn, NY

Architect: Magnusson Architecture & Planning PC

Developer: St. Nicks Alliance

GC: Galaxy GC Group, LLC

Project Type: Multi-family residential

POINT 262 CONDOMINIUMS - Cambridge, MA

» **LEED Certified**

Architect: Khalsa Design, Inc.

GC: Nauset Construction

Installer: OnTime Construction

Project Type: Multi-family residential

THE EDWIN HOTEL - Chattanooga, TN

» **Chattanooga's 1st luxury boutique hotel**
» **Gold Key Awards Finalist**

Architect: Tinker Ma Architecture & Design

Developer: Vision Hospitality Group

GC: Acumen Development Partners

Project Type: Hospitality

NFRC Values	
U-value (BTU/hr.ft^2.°F)	0.21–0.28
SHGC (Solar Heat Gain Coefficient)	0.10–0.28
VT (Visual Transmittance)	0.18–0.36

Air Infiltration
<0.1 cfm/ft^2

Water Penetration
8.15 psf | 12.11 psf

Design Pressure (DP)
±40.10 psf | ±70.18 psf

Create an array of entry looks with a wide offering of designs and colors, while balancing energy efficiency, affordability, and style with Supera balcony doors.

1875 ATLANTIC AVENUE - Brooklyn, NY

» **Sound: STC 45/OITC 38**

Architect: Studios C Architect & Design

Installer: Windows of NYC

Project Type: Multi-family residential

ADA Compliant Pemko Threshold

900 KIPLING HOUSE - Washington, DC

» **Sound: Fixed: STC 31/OITC 25, Operable: STC 33/OITC 27**

Architect: PGN Architects

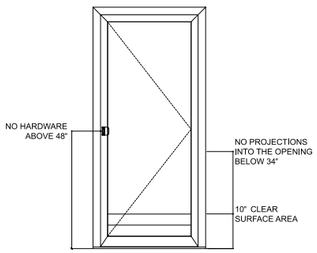
Developer: Madison Investments

GC: Sigal Construction

Project Type: Multi-family residential

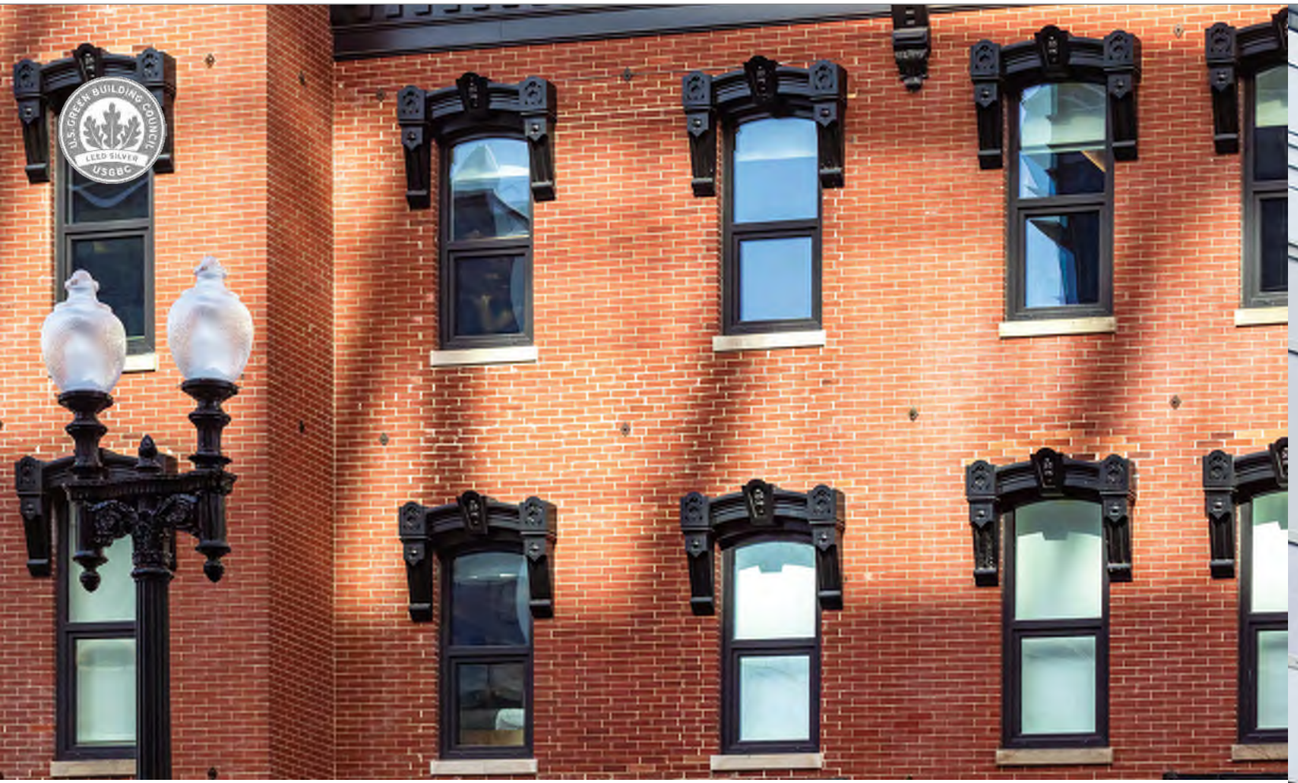
EQUAL HOUSING OPPORTUNITY

Americans with Disabilities Act



- 50+ year service life
- Phthalate & lead-free unplasticized-polyvinyl chloride (uPVC)
- BPA-free & no off-gassing
- Environmentally friendly stabilizers
- Non-conductive & #1 material in thermal insulation
- Rot-proof frames
- Corrosion & salt erosion resistant frames
- Self-extinguishing
- Very minimal maintenance
- 100% recyclable up to 7 times

ADVANTAGES



MOXY HOTEL DC - Washington, DC

- **Sound: STC 45/OITC 38**
- **LEED Silver Certified**
- **Gold Key Awards Finalist**

Architect: Fillat+ Architecture

Developer: Douglas Development

GC: CBG Building Company

Project Type: Hospitality

900 KIPLING HOUSE - Washington, DC

- **Sound: Fixed: STC 31/OITC 25, Operable: STC 33/OITC 27**

Architect: PGN Architects

Developer: Madison Investments

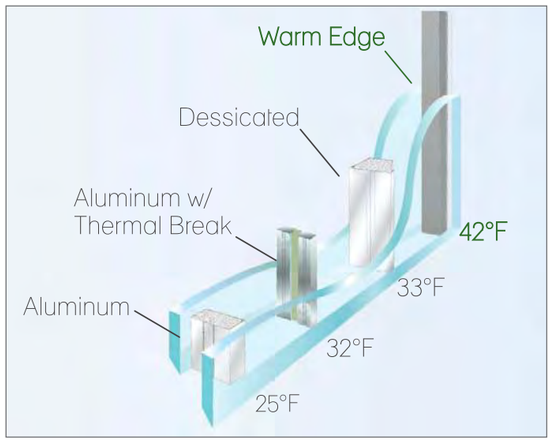
GC: Sigal Construction

Project Type: Multi-family residential

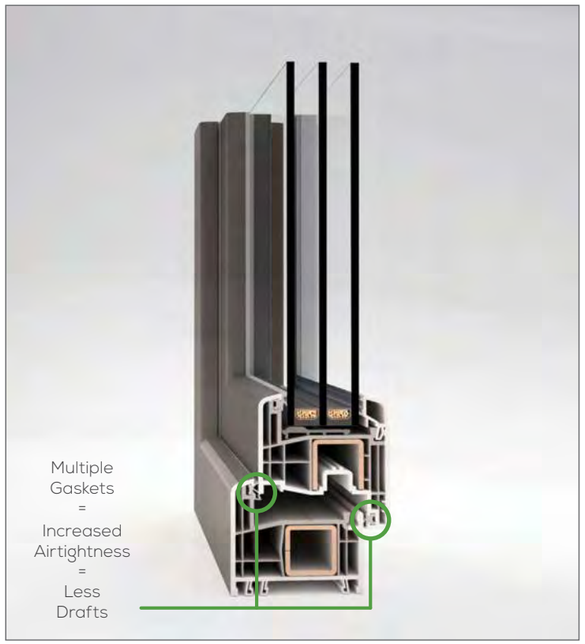
Increased Interior Pane Glass Surface Temperature

Warm Edge Spacers

- Improved interior surface temperatures
- Reduced condensation on the edge of the glass
- Greatly improved energy efficiency



Compressed Seal Technology

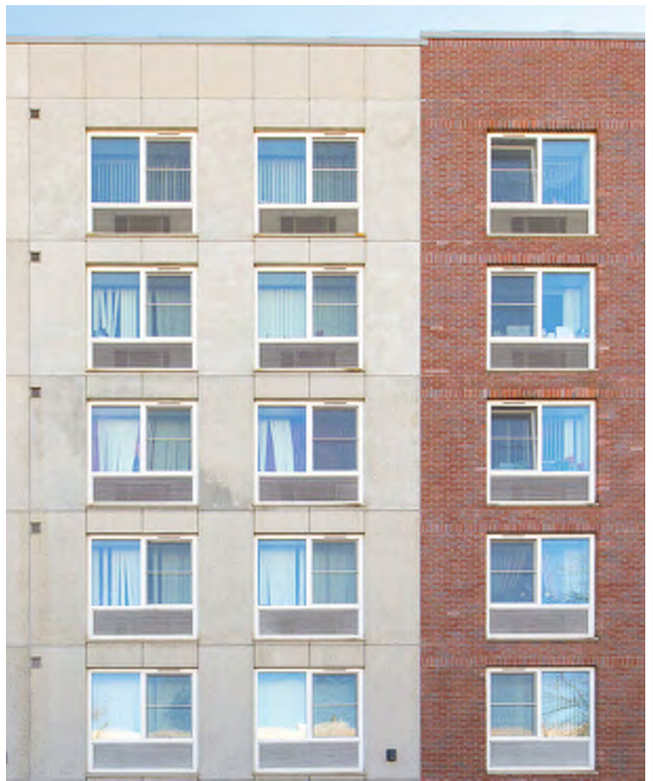


PROSPECT PLAZA - Brooklyn, NY

- **LEED Platinum Certified (Phase I)**
- **LEED Gold Certified (Phase II)**
- **Project participating in NYSERDA Multi-Family Version 5 Performance for New Construction program**
- **LEED for Homes Multi-Family Midrise V2010, & NGBS Certification (National Green Building Standard)**

Architect: Dattner Architects

Project Type: Multi-family residential



"Passive House" Certified Buildings

Passive House certified buildings meet a set of design principles used to attain a rigorous level of energy efficiency within a specific quantifiable comfort level — or in other words, maximizing gains and minimizing losses.

Passive House Principles	
Windows	Optimized double or triple pane windows to let heat in when desired
Insulation	Thick & continuous insulation to interrupt thermal bridges
Airtight	Airtight construction to stop heat and moisture
Ventilation	Balanced ventilation to ensure fresh air and control moisture
Mechanical	Smaller cooling and heating systems are required

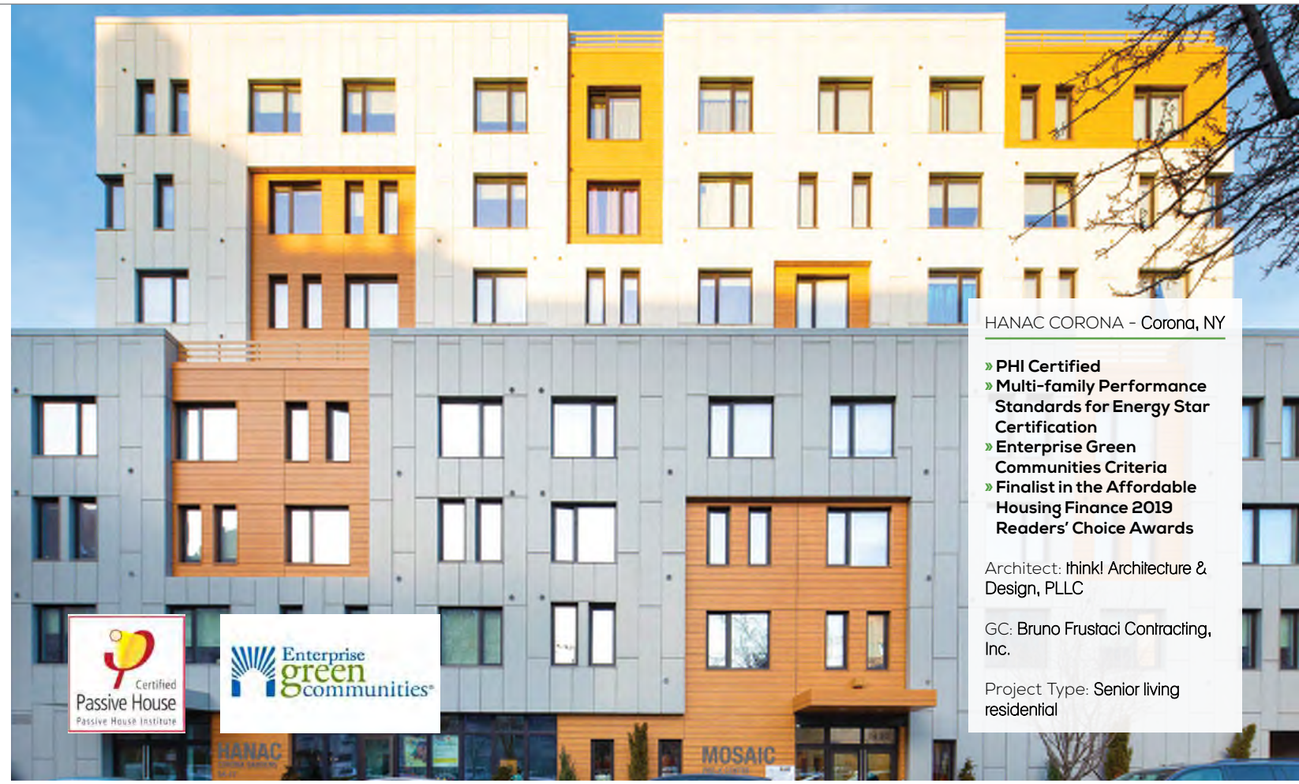
PHIUS Passive House Institute US

Passive House Institute

NYPH NEW YORK PASSIVE HOUSE

PHIUS projects must also earn the DOE ZERH (Department of Energy – Zero Energy Ready Home) label. This automatically qualifiies specific LEED v4 Homes credits and prerequisites.

ZERO ENERGY READY HOME U.S. DEPARTMENT OF ENERGY



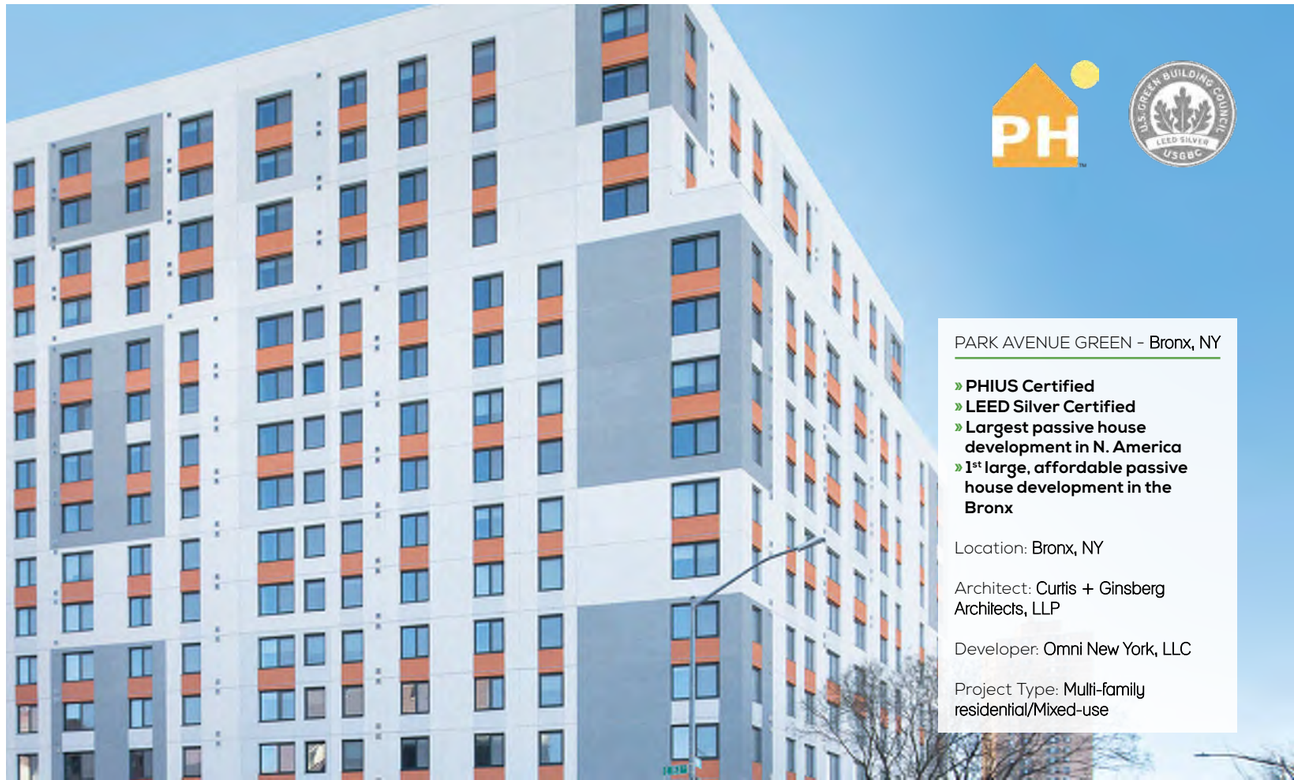
HANAC CORONA - Corona, NY

- **PHI Certified**
- **Multi-family Performance Standards for Energy Star Certification**
- **Enterprise Green Communities Criteria**
- **Finalist in the Affordable Housing Finance 2019 Readers' Choice Awards**

Architect: think! Architecture & Design, PLLC

GC: Bruno Frustaci Contracting, Inc.

Project Type: Senior living residential



PARK AVENUE GREEN - Bronx, NY

- **PHIUS Certified**
- **LEED Silver Certified**
- **Largest passive house development in N. America**
- **1st large, affordable passive house development in the Bronx**

Location: Bronx, NY

Architect: Curtis + Ginsberg Architects, LLP

Developer: Omni New York, LLC

Project Type: Multi-family residential/Mixed-use

Standard Exterior/Interior Colors*

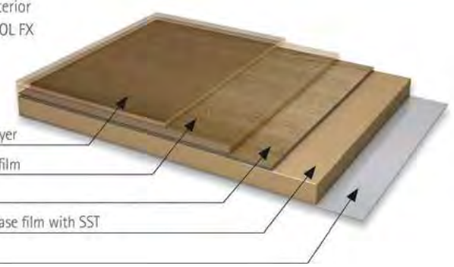
- Anodized Silver
- Warm Stone
- Anthracite Grey
- Dark Bronze
- Black Smooth
- White*

*Profile color

RENOLIT EXOFOL FX Laminate Finishes

INTUS exclusively uses RENOLIT EXOFOL FX finishes designed specifically for North American climate zones. They perform at AAMA 2605 quality guidelines or better.

Diagram showing the structure of the exterior film **RENOLIT** EXOFOL FX



US Irraditation Map
W.hr/sq. in. per day (1.0 = 1,000)

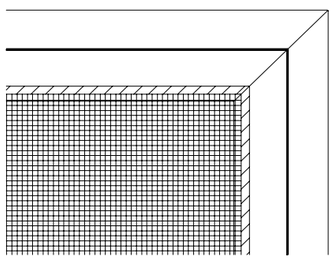
6.5 - 7.0	4.5 - 5.0	2.5 - 3.0
6.0 - 6.5	4.0 - 4.5	2.0 - 2.5
5.5 - 6.0	3.5 - 4.0	1.5 - 2.0
5.0 - 5.5	3.0 - 3.5	1.0 - 1.5

* Additional colors and split finishes available upon request. Finish color availability is subject to change; please consult a team representative for availability status.

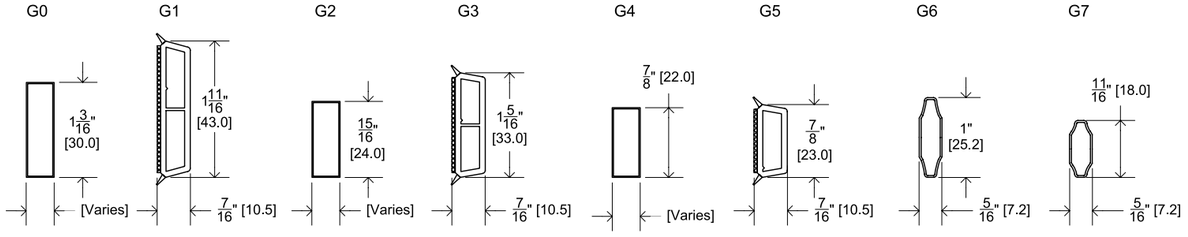
ACCESSORIES

Handles

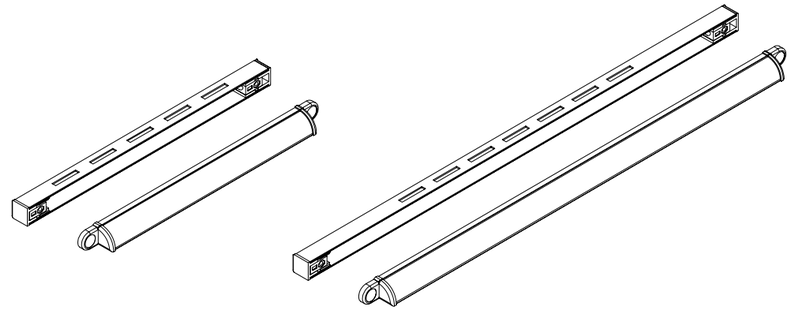
Screens



Decorative Grids

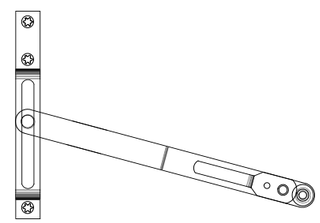


Trickle Vents

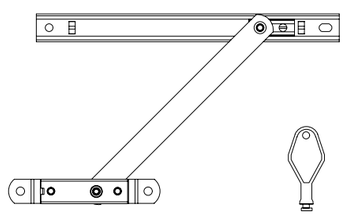


Limiters

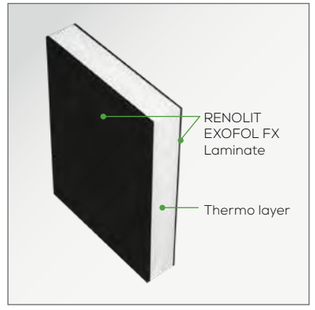
- 4" Limiter with Friction (Standard)
- 4" Limiter without Friction (Standard)



- 4" Limiter with Friction (Approved by NYC DOH)

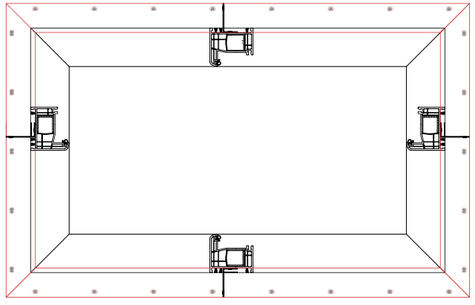


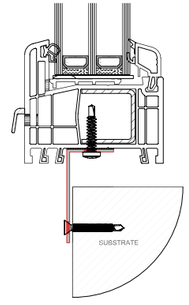
Insulated Filler Panels

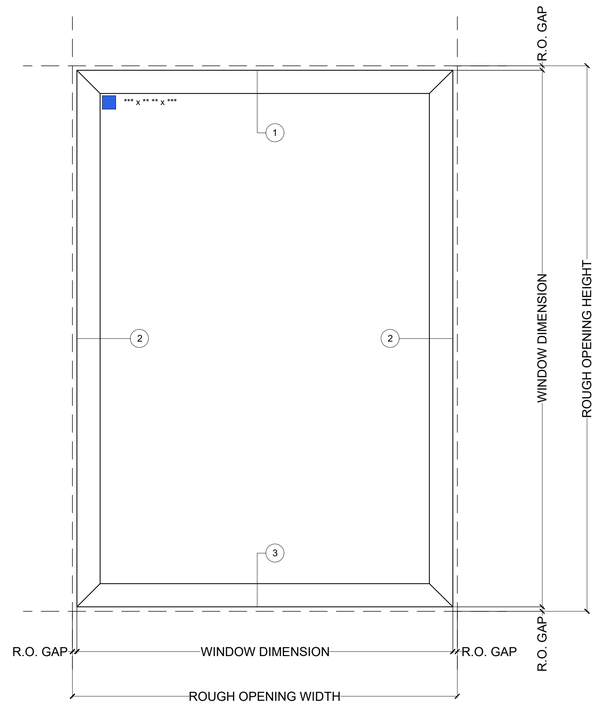


- Able to be matched to all INTUS interior/exterior finish colors
- PVC-hardened layer:
  - Impact resistant
  - UV resistant
  - Moisture resistant
- Thermo layer (extruded polystyrene foam):
  - Long-lasting
  - Homogenous
  - Moisture resistant

Aluminum Flanges

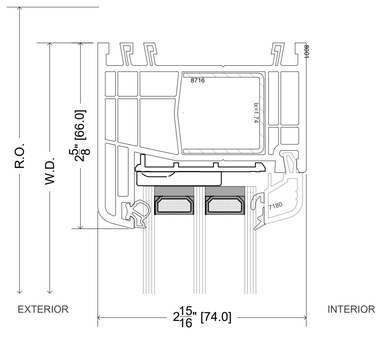






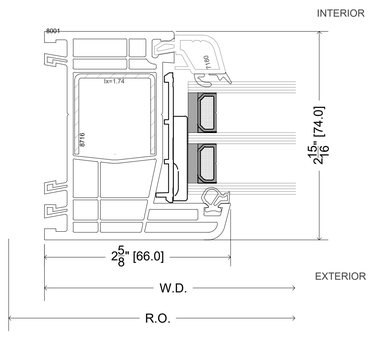
CW FIXED WINDOW

SCALE 1 $\frac{1}{2}$" = 1'-0"



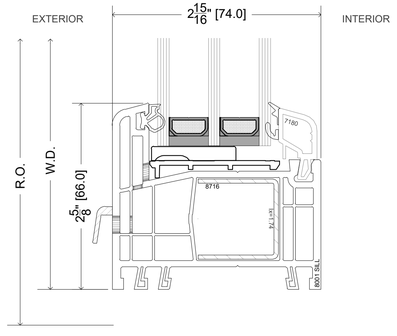
1 FIXED WINDOW SECTION PROFILE @ HEAD

SCALE 1'-0" = 1'-0"



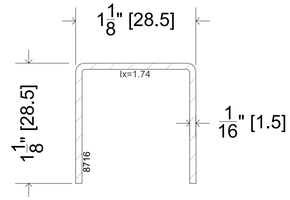
2 FIXED WINDOW SECTION PROFILE @ JAMB

SCALE 1'-0" = 1'-0"



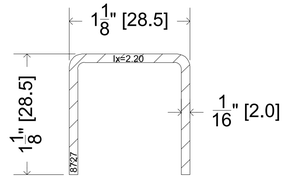
3 FIXED WINDOW SECTION PROFILE @ SILL

SCALE 1'-0" = 1'-0"



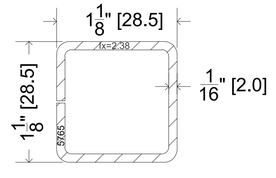
STD. STEEL REINFORCEMENT 8716 @ FRAME

SCALE 1'-6" = 1'-0"



STEEL REINFORCEMENT 8727 @ FRAME

SCALE 1'-6" = 1'-0"



STEEL REINFORCEMENT 5765 @ FRAME

SCALE 1'-6" = 1'-0"

INTUS WINDOWS

SUPERA WINDOWS 8001

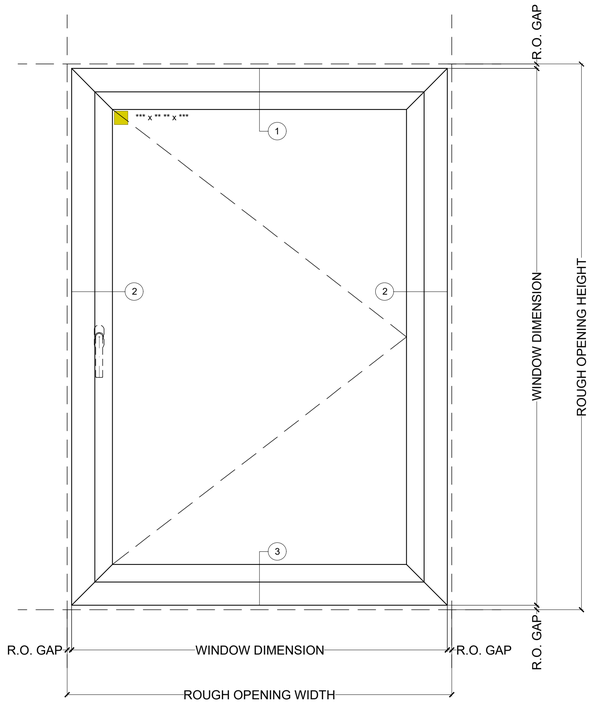
DRAWING TOPIC

CW - FIXED WINDOW

NOTES

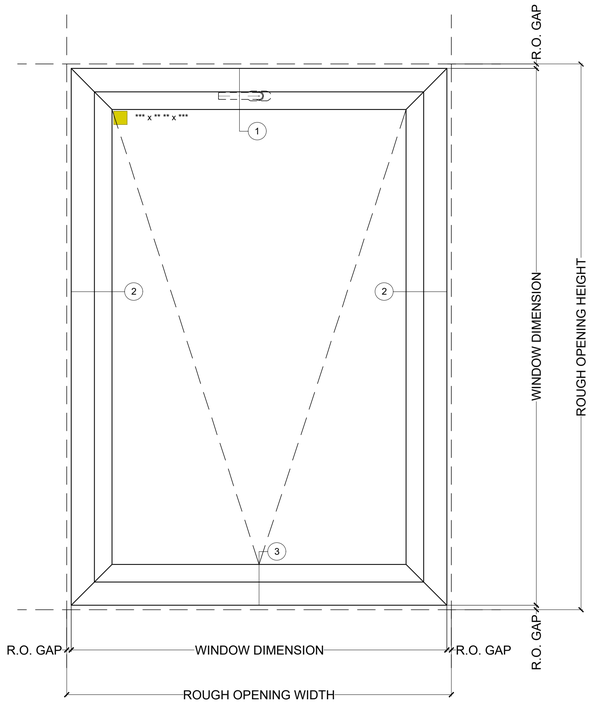
- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION

2020 ISSUE OCTOBER



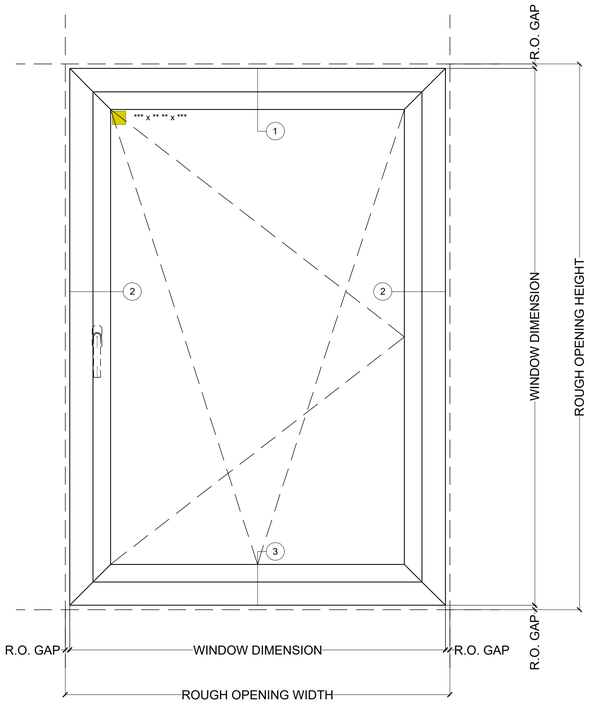
CW CASEMENT WINDOW

SCALE 1 $\frac{1}{2}$" = 1'-0"



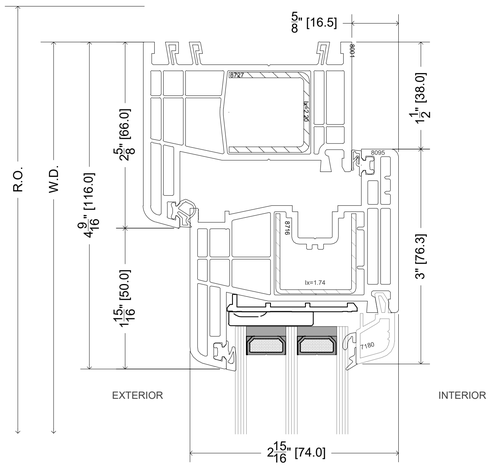
CW HOPPER WINDOW

SCALE 1 $\frac{1}{2}$" = 1'-0"



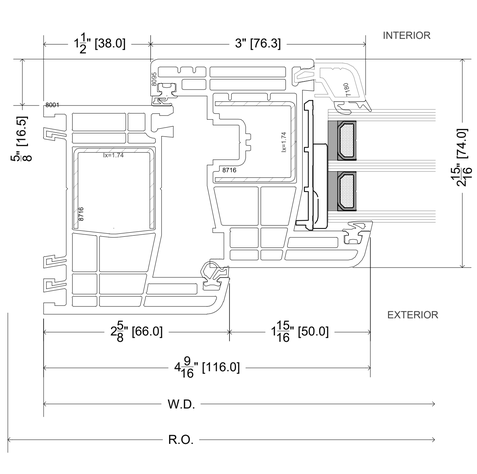
CW DUAL ACTION WINDOW

SCALE 1 $\frac{1}{2}$" = 1'-0"



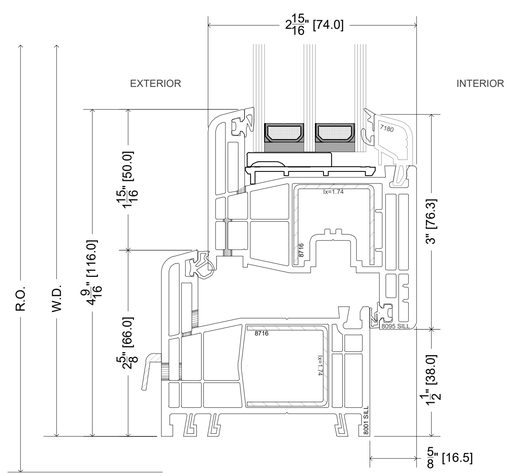
1 OPERABLE WINDOW SECTION PROFILE @ HEAD

SCALE 1'-0" = 1'-0"



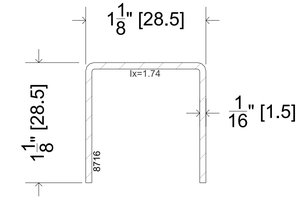
2 OPERABLE WINDOW SECTION PROFILE @ JAMB

SCALE 1'-0" = 1'-0"



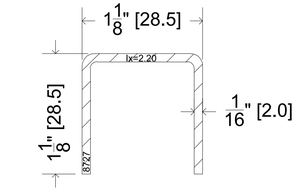
3 OPERABLE WINDOW SECTION PROFILE @ SILL

SCALE 1'-0" = 1'-0"



STD. STEEL REINFORCEMENT 8716 @ SASH

SCALE 1'-6" = 1'-0"



STEEL REINFORCEMENT 8727 @ SASH

SCALE 1'-6" = 1'-0"

INTUS WINDOWS

SUPERA WINDOWS 8001

DRAWING TOPIC

CW - OPERABLE WINDOW

NOTES

- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION

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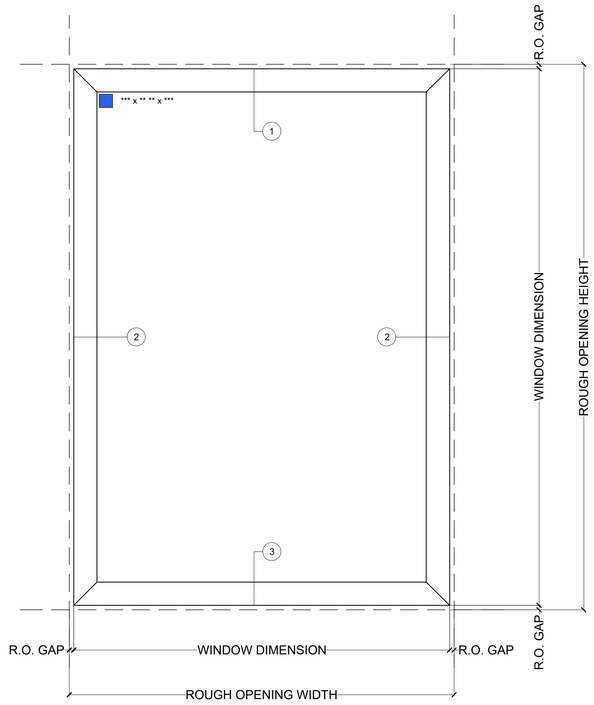
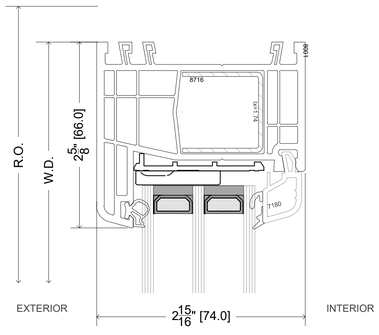
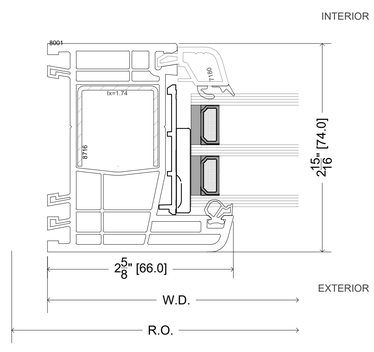
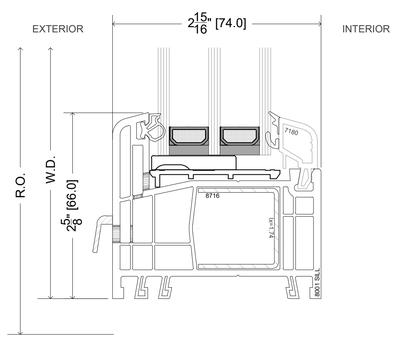


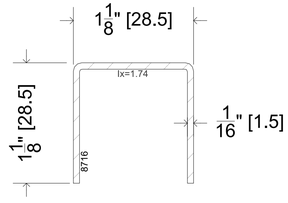
AW FIXED WINDOW

SCALE 1 1/2" = 1'-0"



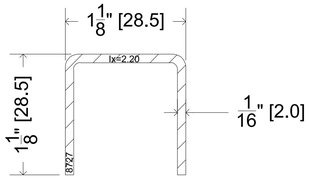


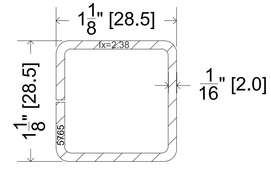




STD. STEEL REINFORCEMENT 8716 @ FRAME

SCALE 1'-6" = 1'-0"





1 FIXED WINDOW SECTION PROFILE @ HEAD

SCALE 1'-0" = 1'-0"

2 FIXED WINDOW SECTION PROFILE @ JAMB

SCALE 1'-0" = 1'-0"

3 FIXED WINDOW SECTION PROFILE @ SILL

SCALE 1'-0" = 1'-0"

STEEL REINFORCEMENT 8727 @ FRAME

SCALE 1'-6" = 1'-0"

STEEL REINFORCEMENT 5765 @ FRAME

SCALE 1'-6" = 1'-0"

INTUS WINDOWS

SUPERA WINDOWS 8001

DRAWING TOPIC

AW - FIXED WINDOW

NOTES

- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION

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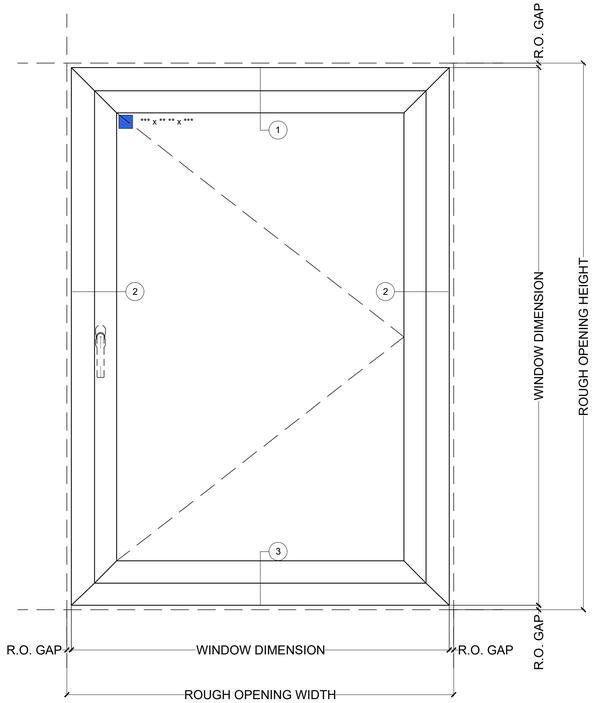
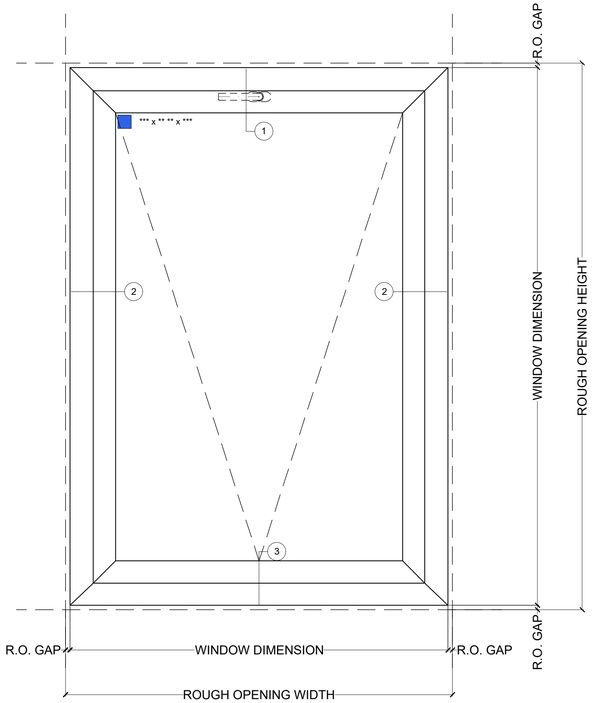


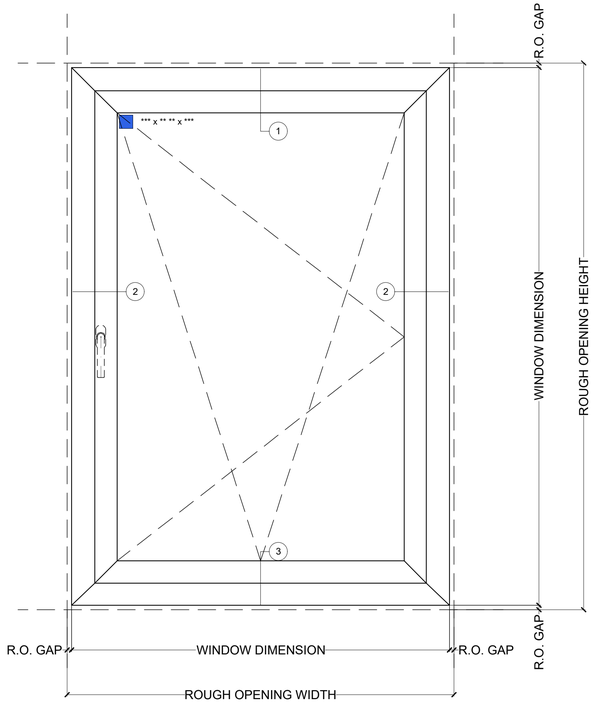
AW CASEMENT WINDOW

SCALE 1 1/2" = 1'-0"



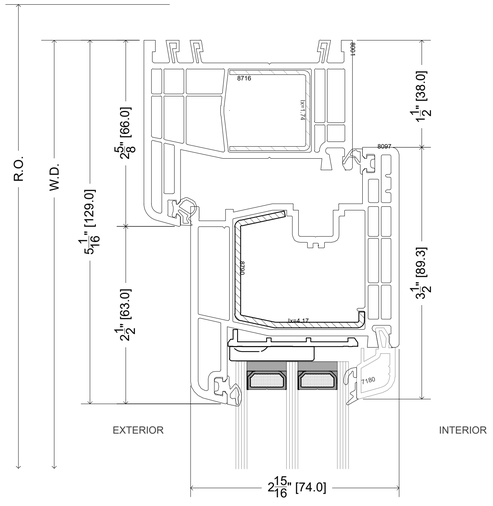
AW HOPPER WINDOW

SCALE 1 1/2" = 1'-0"



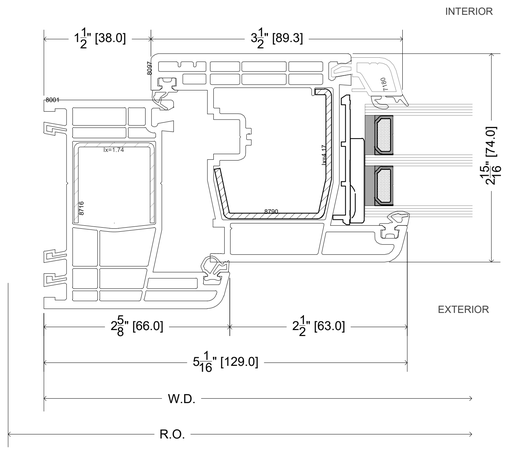
AW DUAL ACTION WINDOW

SCALE 1 1/2" = 1'-0"



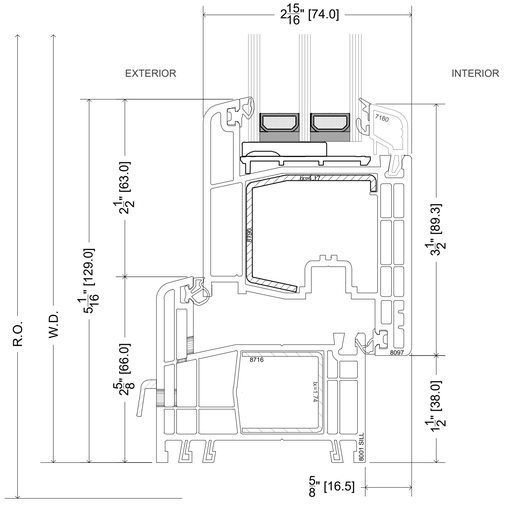
1 OPERABLE WINDOW SECTION PROFILE @ HEAD

SCALE 1'-0" = 1'-0"



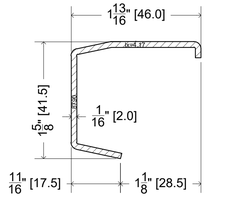
2 OPERABLE WINDOW SECTION PROFILE @ JAMB

SCALE 1'-0" = 1'-0"



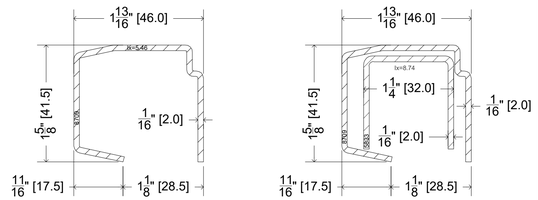
3 OPERABLE WINDOW SECTION PROFILE @ SILL

SCALE 1'-0" = 1'-0"



STANDARD STEEL REINFORCEMENT 8790 @ SASH

SCALE 1'-0" = 1'-0"



OPT. STEEL REINFORCEMENTS 8709 & 8709+5833 @ SASH

SCALE 1'-0" = 1'-0"

INTUS WINDOWS

SUPERA WINDOWS 8001

DRAWING TOPIC

AW - OPERABLE WINDOW

NOTES

- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION

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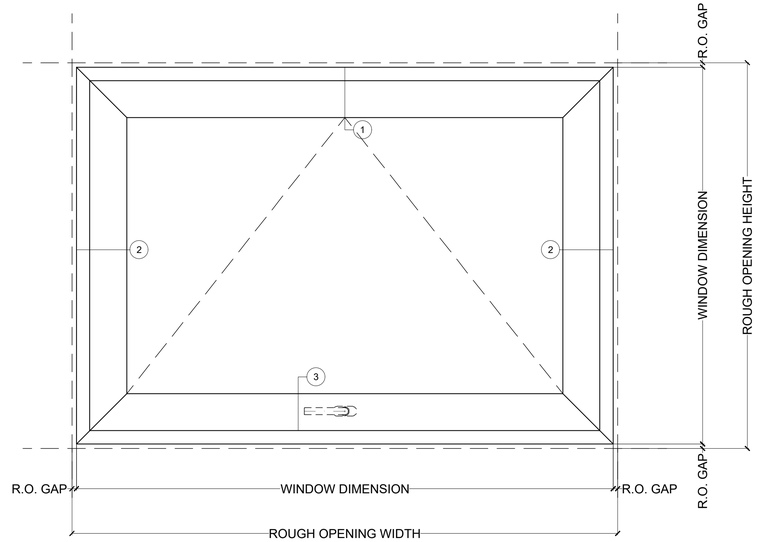
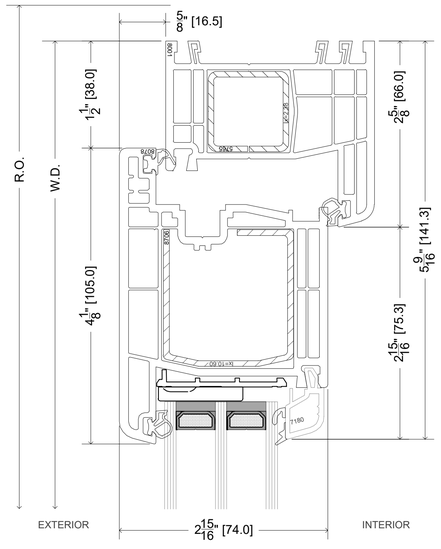


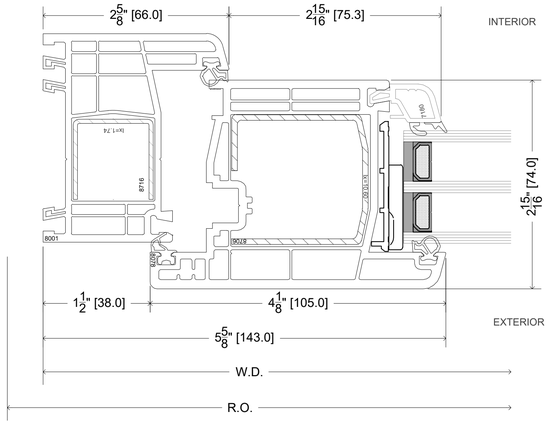
AW AWNING WINDOW

SCALE 1 1/2" = 1'-0"



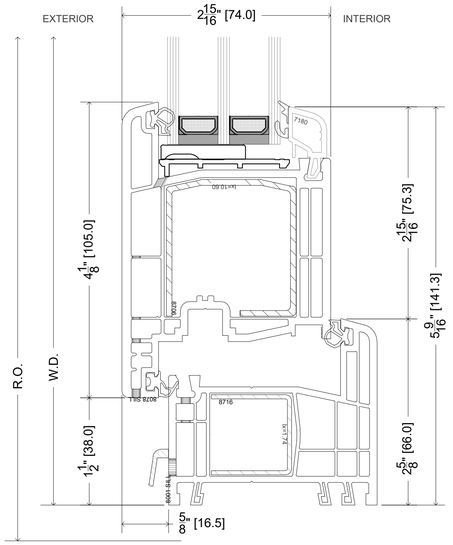
1 AWNING WINDOW SECTION PROFILE @ HEAD

SCALE 1'-0" = 1'-0"



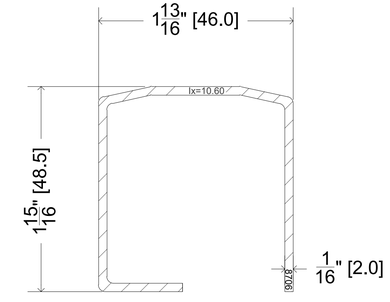
2 AWNING WINDOW SECTION PROFILE @ JAMB

SCALE 1'-0" = 1'-0"



3 AWNING WINDOW SECTION PROFILE @ SILL

SCALE 1'-0" = 1'-0"



STEEL REINFORCEMENT 8706 @ SASH

SCALE 1'-6" = 1'-0"

INTUS WINDOWS

SUPERA WINDOWS 8001

DRAWING TOPIC

AW - AWNING WINDOW

NOTES

- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION
- FOR AWNING WINDOW FRAME @ HEAD, STEEL REINFORCEMENT 5675 ONLY
- FOR AWNING WINDOW FRAME @ JAMB AND SILL, ALL AW FRAME STEEL REINFORCEMENT OPTIONS (5675, 8716, 8727) ARE AVAILABLE DEPENDING ON THE WINDOW SIZE.

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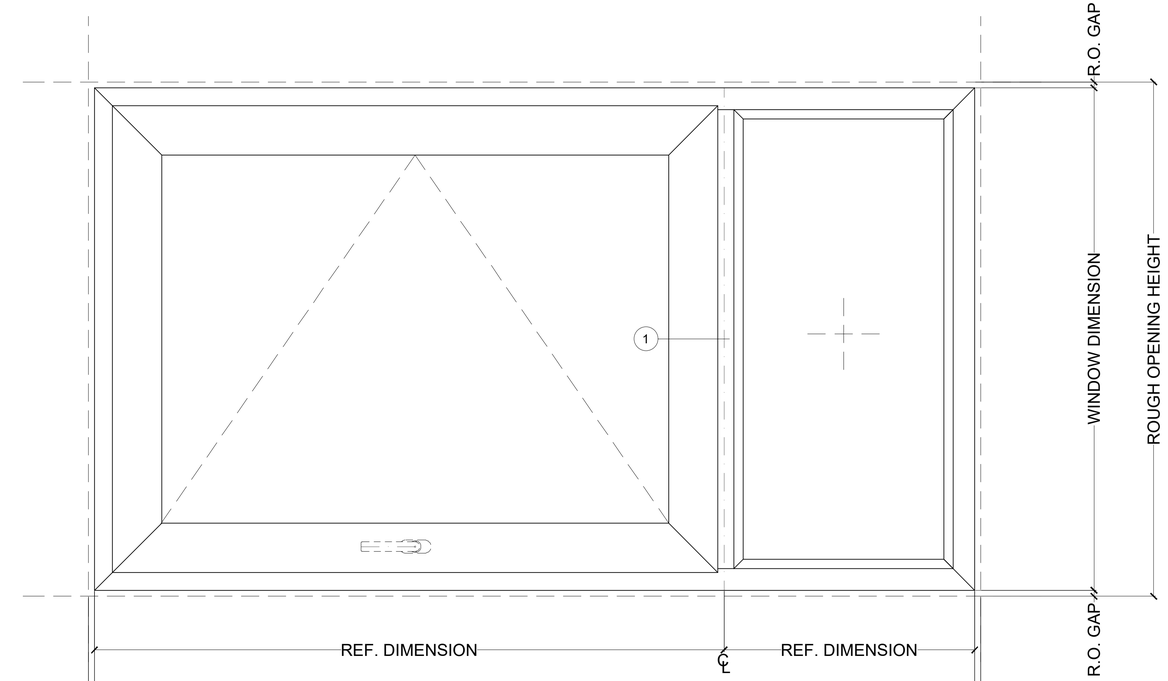
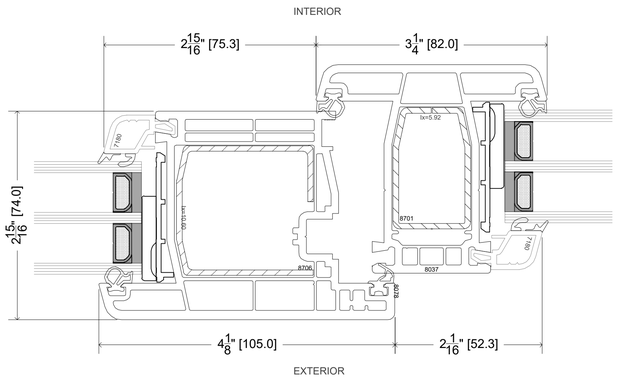


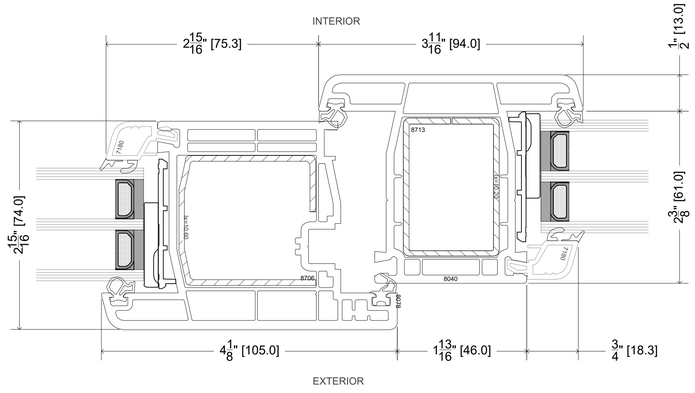
AW AWNING WINDOW WITH INTEGRAL MULLION

SCALE 2" = 1'-0"



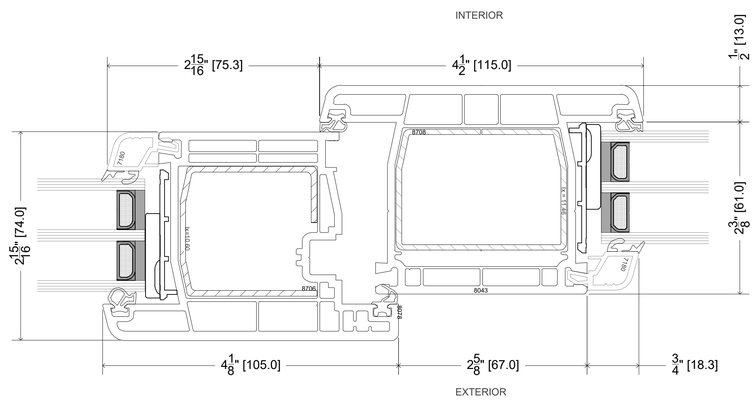
1 AWNING WINDOW WITH SMALL INTEGRAL MULLION

SCALE 1'-0" = 1'-0"



1 AWNING WINDOW WITH MEDIUM INTEGRAL MULLION

SCALE 1'-0" = 1'-0"



1 AWNING WINDOW WITH LARGE INTEGRAL MULLION

SCALE 1'-0" = 1'-0"

INTUS WINDOWS

SUPERA WINDOWS 8001

DRAWING TOPIC

AW - INTEGRAL MULLION FOR AWNING WINDOWS

NOTES

- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION
- FOR STEEL REINFORCEMENTS OPTIONS, PLEASE SEE AW INTEGRAL MULLIONS PAGE
- FOR FIXED WINDOWS CONNECTED WITH AWNING WINDOWS, GLAZING BEADS ARE LOCATED ON THE EXTERIOR

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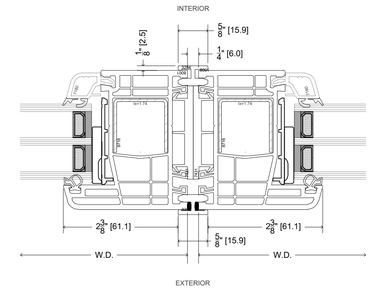
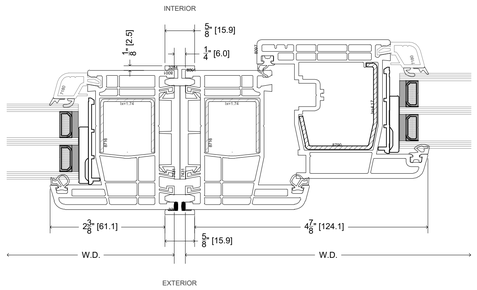
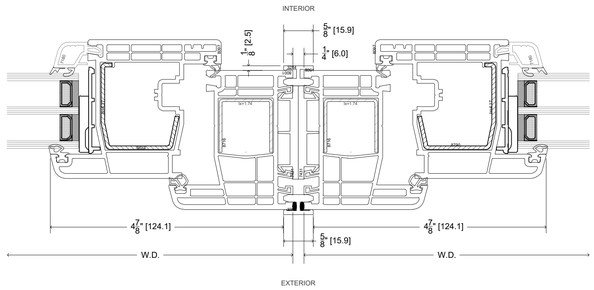


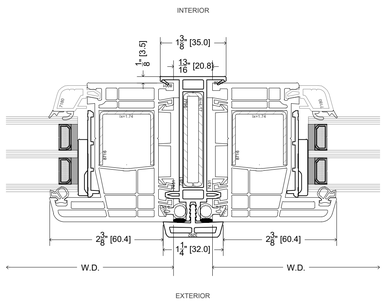
1 CONNECTION MULLION 3284 / 3284 SECTION PROFILE
FIXED TO FIXED WINDOW SCALE 8" = 1'-0"



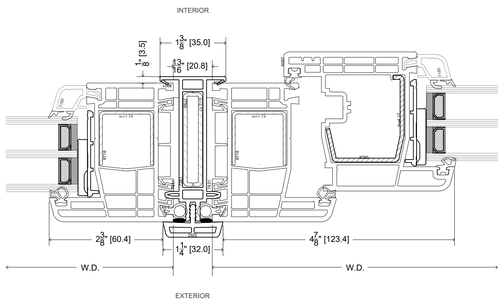
2 CONNECTION MULLION 3284 / 3284 SECTION PROFILE
FIXED TO OPERABLE WINDOW SCALE 8" = 1'-0"



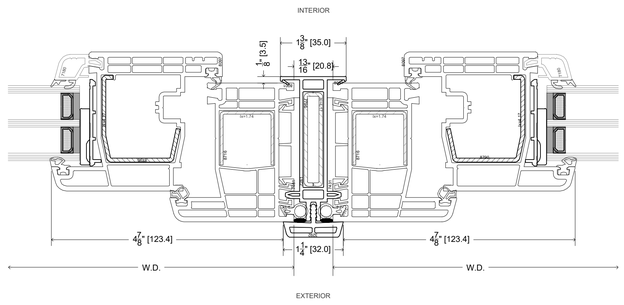
3 CONNECTION MULLION 3284 / 3284 SECTION PROFILE
OPERABLE TO OPERABLE WINDOW SCALE 8" = 1'-0"



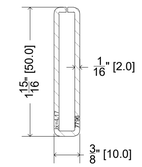
1 CONNECTION MULLION 7281 / 3292 SECTION PROFILE
FIXED TO FIXED WINDOW SCALE 8" = 1'-0"



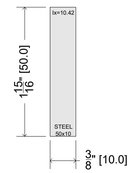
2 CONNECTION MULLION 7281 / 3292 SECTION PROFILE
FIXED TO OPERABLE WINDOW SCALE 8" = 1'-0"



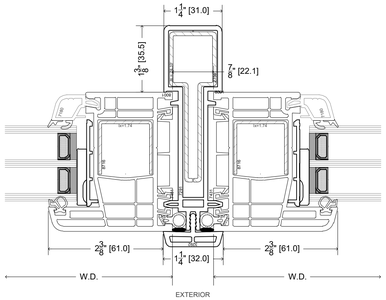
3 CONNECTION MULLION 7281 / 3292 SECTION PROFILE
OPERABLE TO OPERABLE WINDOW SCALE 8" = 1'-0"



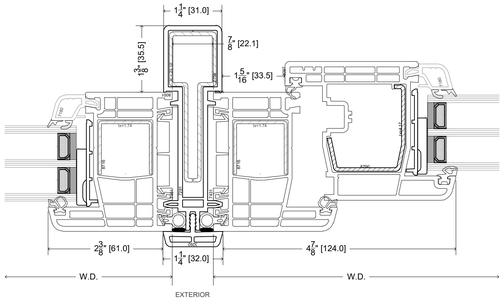
STANDARD STEEL REINFORCEMENT
FOR MULLION 7281



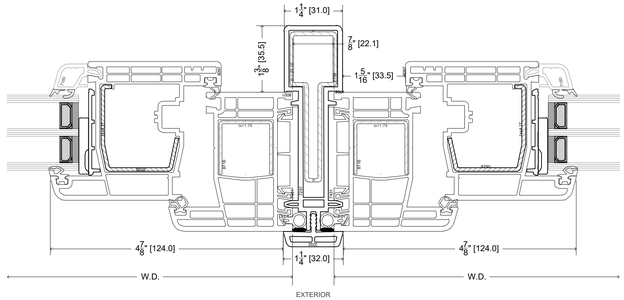
OPTIONAL STEEL REINFORCEMENT
FOR MULLION 7281



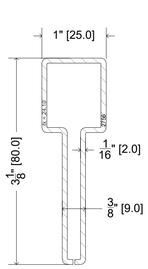
1 CONNECTION MULLION 7291 / 3292 SECTION PROFILE
FIXED TO FIXED WINDOW SCALE 8" = 1'-0"



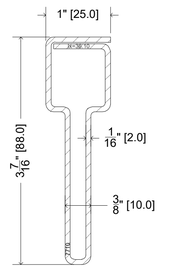
2 CONNECTION MULLION 7291 / 3292 SECTION PROFILE
FIXED TO OPERABLE WINDOW SCALE 8" = 1'-0"



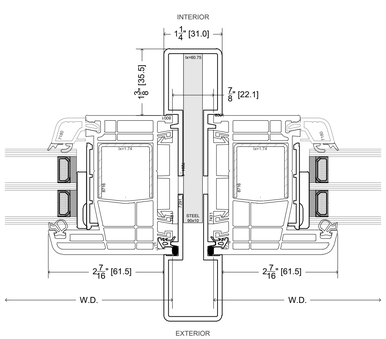
3 CONNECTION MULLION 7291 / 3292 SECTION PROFILE
OPERABLE TO OPERABLE WINDOW SCALE 8" = 1'-0"



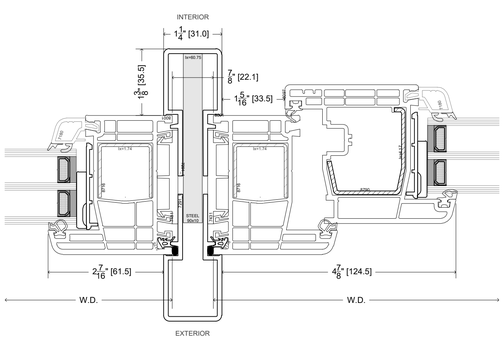
STANDARD STEEL REINFORCEMENT
FOR MULLION 7291



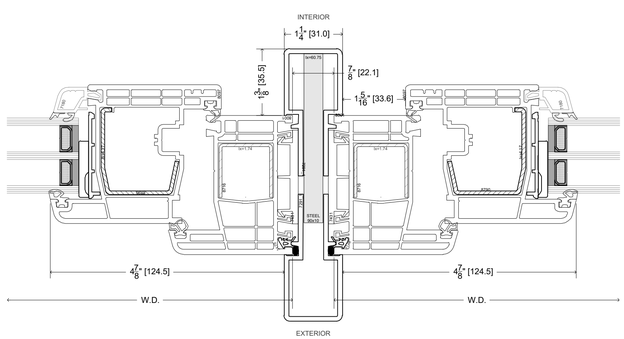
OPTIONAL STEEL REINFORCEMENT
FOR MULLION 7291



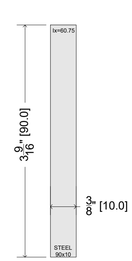
1 CONNECTION MULLION 7291 / 7291 SECTION PROFILE
FIXED TO FIXED WINDOW SCALE 8" = 1'-0"



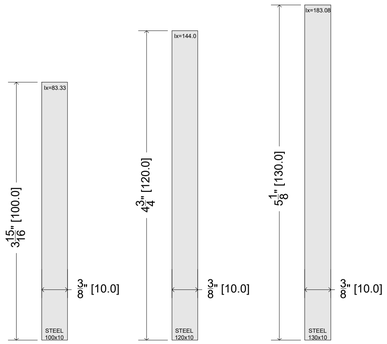
2 CONNECTION MULLION 7291 / 7291SECTION PROFILE
FIXED TO OPERABLE WINDOW SCALE 8" = 1'-0"



3 CONNECTION MULLION 7291 / 7291 SECTION PROFILE
OPERABLE TO OPERABLE WINDOW SCALE 8" = 1'-0"



STANDARD STEEL REINFORCEMENT
FOR MULLION 7291/7291



OPTIONAL STEEL REINFORCEMENT
FOR MULLION 7291/7291

SCALE 11" = 1'-0"

INTUS WINDOWS

SUPERA WINDOWS 8001

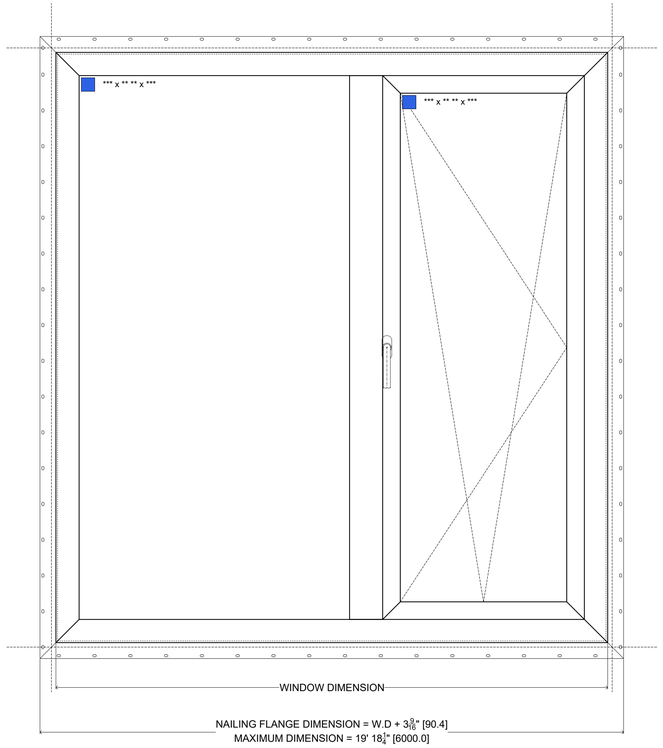
DRAWING TOPIC

AW - CONNECTION MULLIONS

NOTES

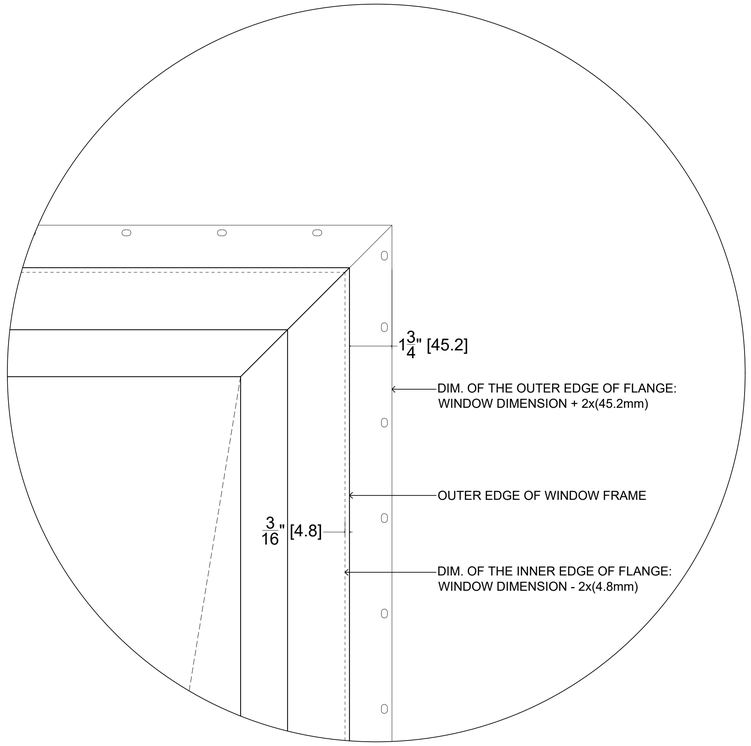
- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION

2020 ISSUE OCTOBER



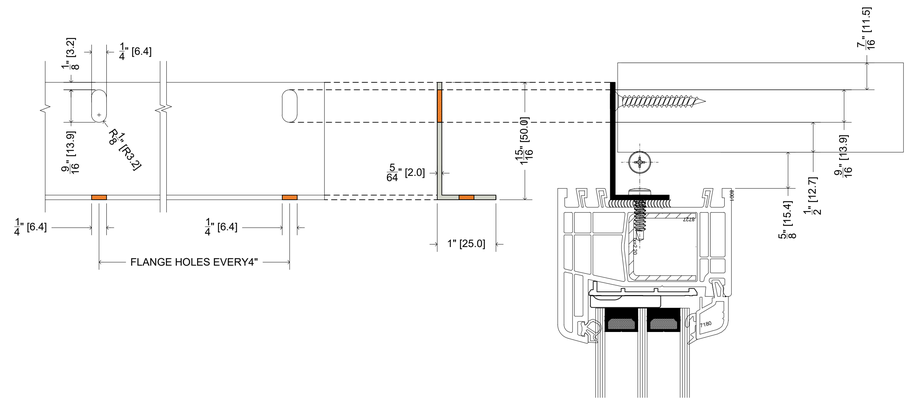
SAMPLE WINDOW ELEVATION WITH NAILING FLANGE

SCALE: 1-1/2" = 1'-0"



ALUMINUM FLANGE CORNER TRIMMING - SIZE REFERENCE

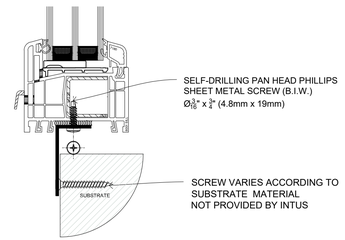
SCALE: 4" = 1'-0"

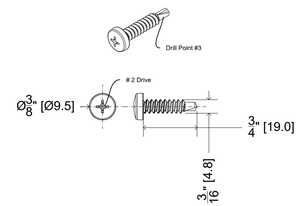


NAILING FLANGE

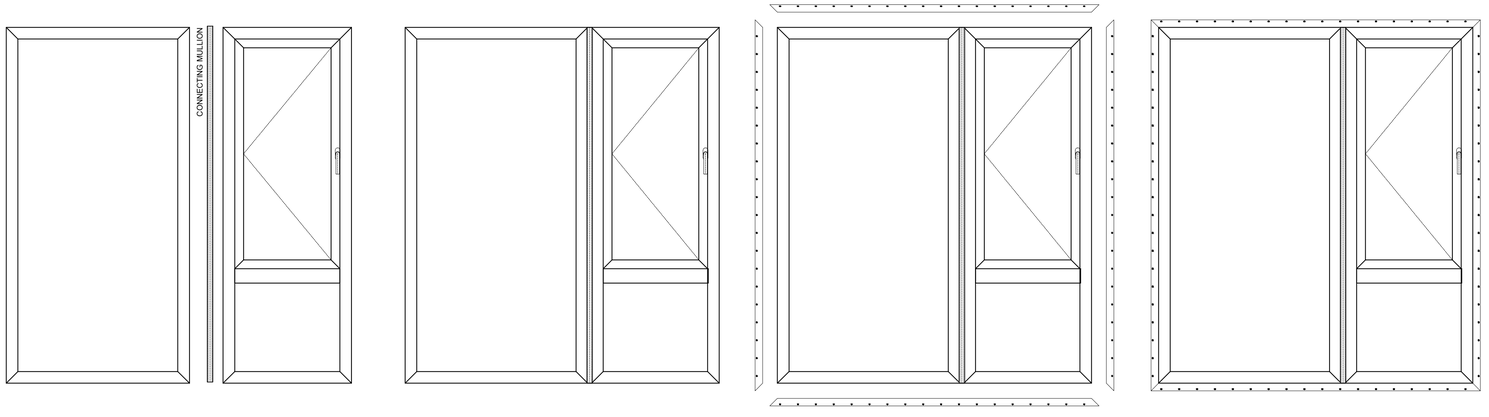
GAUGE 16

SCALE: 10" = 1'-0"





MULLED WINDOWS ALUMINUM FLANGE INSTALLATION SEQUENCE

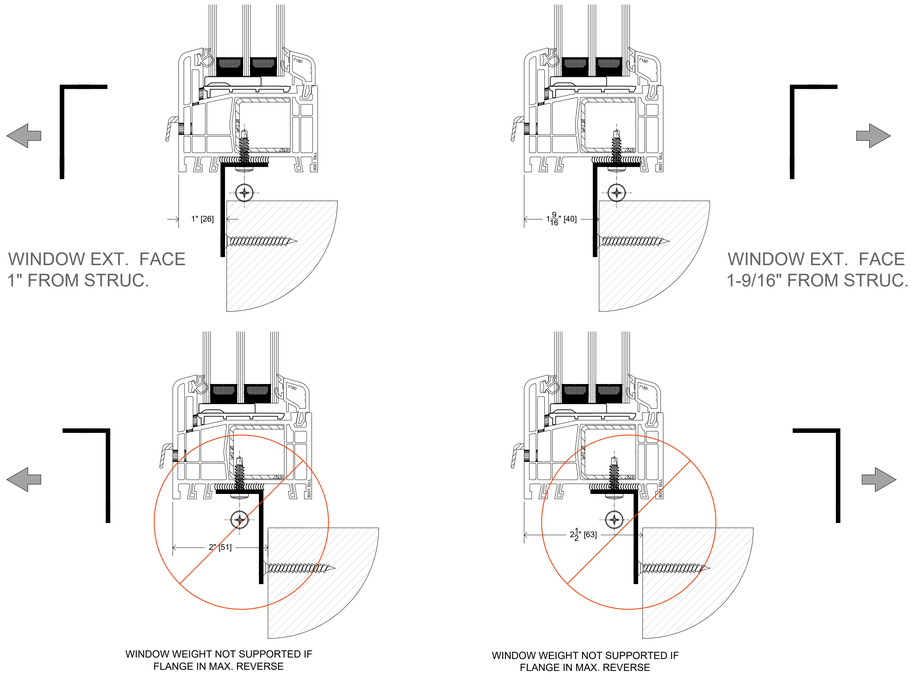


1 LOCATE WINDOWS & CONNECTING MULLION

2 CONNECT WINDOWS TOGETHER

3 LOCATE PRE-CUT FULL LENGHT ALUMINUM FLANGE

4 FASTEN ALUMINUM FLANGE TO WINDOW. 6" FROM CORNERS & EVERY 12" O.C.



DO NOT INSTALL FLANGE IN REVERSE

INTUS WINDOWS

SUPERA WINDOWS 8001

DRAWING TOPIC

ALUMINUM FLANGE

NOTES

- ALL ELEVATIONS REPRESENT OUTSIDE VIEW.
- SECTION DETAILS SHOWING TRIPLE GLAZING OPTION. DOUBLE GLAZING ALSO AVAILABLE. PLEASE REFER TO GLAZING SECTION
- ALL FLANGES MUST BE SEALED BEFORE INSTALLED ON THE WINDOW FRAME
- ALL FLANGES CONNECTIONS MUST BE SEALED OR/AND TAPED WITH WATER PROOF TAPE AFTER BEING INSTALLED ON THE FRAME
- ONLY ONE CONNECTION ALLOWED PER FRAME SIDE
- MIN. FLANGE SIZE: 1' 1¾" (400mm); MAX. FLANGE SIZE: 19' 18¼" (6000mm)

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B STOREFRONTS

Round Rock Premium Outlets
Round Rock, TX

U.S. Aluminum knows that fabrication and installation labor costs have always been a decisive factor in selecting framing systems for storefront projects. We offer cost efficient and versatile systems with clean lines and superb performance characteristics. All series may be glazed from the interior or exterior using a top load E.P.D.M. glazing gasket, and all series are compatible with most U.S. Aluminum Entrance Doors.

U.S. Aluminum Storefront Systems can be custom modified to the specific requirements of your project. Our product specialists will work with you to ensure the storefront system you order from us will meet your needs and the approval of your clients.

SYSTEM	PAGES
• Series 400/450 Center Glaze	01-B1 thru 29-B1
• Series 451/IT451 Center Glaze	30-B1 thru 56-B1
• Flush Front™	01-B2 thru 44-B2
• Accessory Hardware	01-B3 thru 04-B3

For information or other assistance, use our toll free phone or fax service numbers from anywhere in the U.S. or Canada

Toll Free Phone (800) 262-5151 Toll Free Fax (866) 262-3299

Contact us through our web site at usalum.com

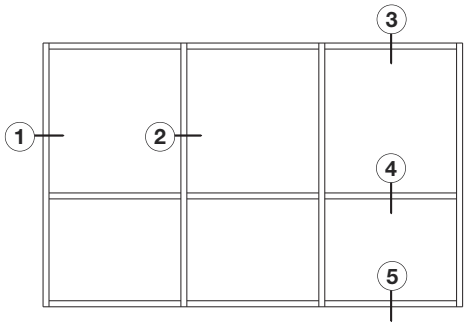
STOREFRONTS

Typical Details

Center Glazed • Series 451

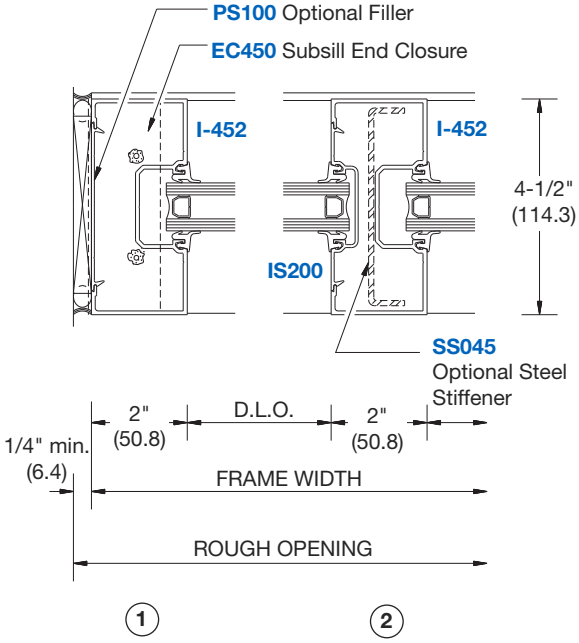
SCREW RACE JOINERY FOR 1" (25) GLAZING

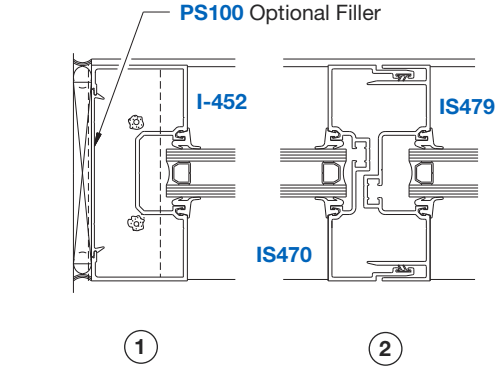
NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths. Visit **usalum.com** for more information.

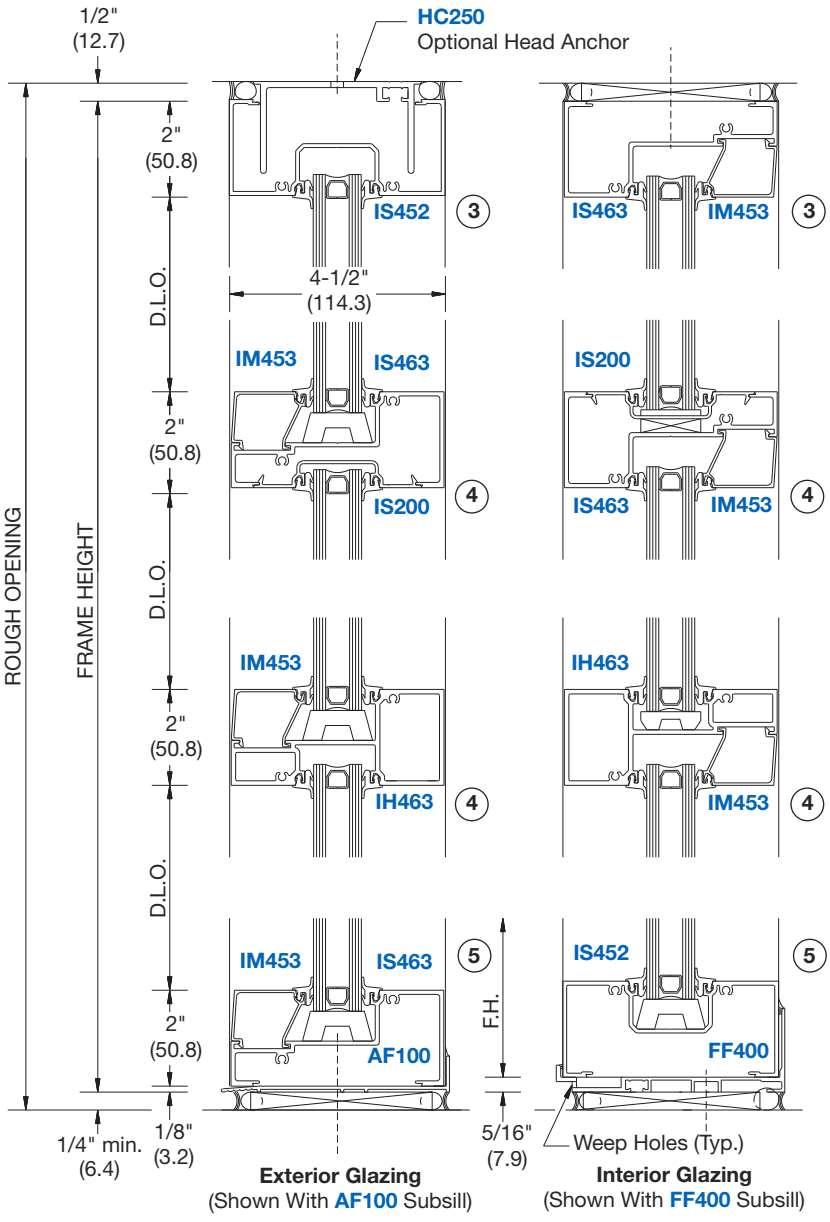


TYPICAL ELEVATION

NOTE: **NP225** Glazing Gaskets are used on both sides of 1" (25) glazing. (Typical)







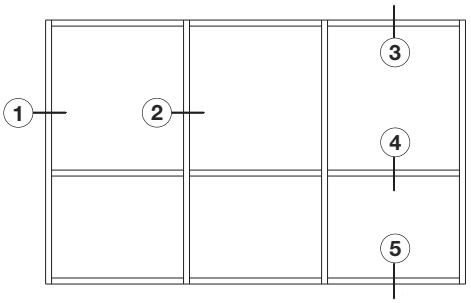
NOT TO SCALE

Typical Details

Center Glazed • Series 451

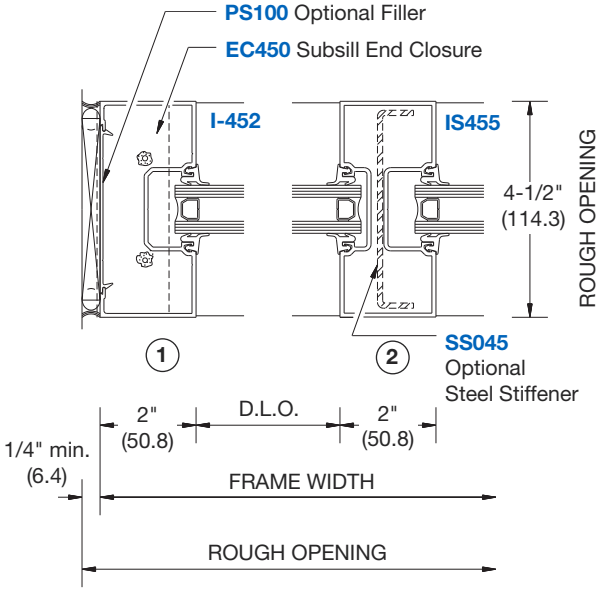
ANCHOR CLIP JOINERY FOR 1" (25) GLAZING

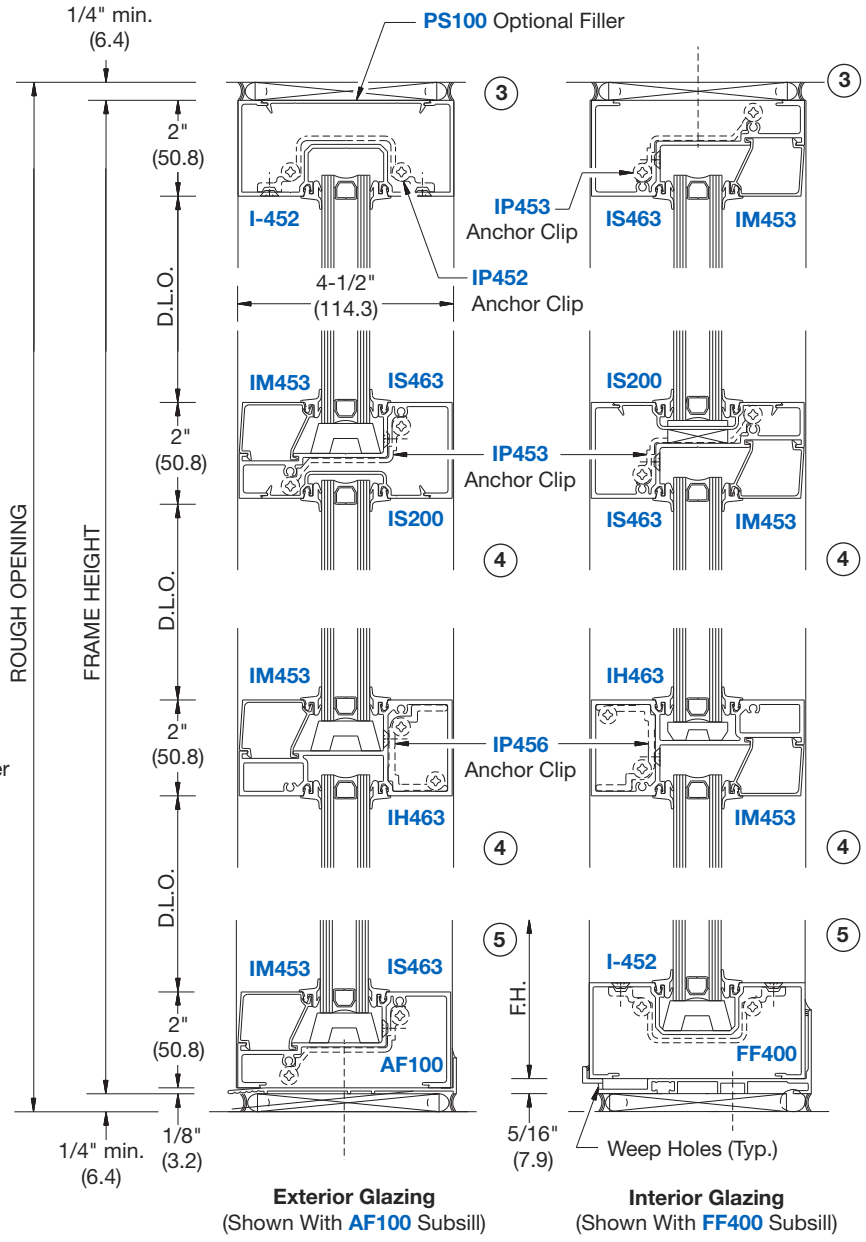
NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths. Visit **usalum.com** for more information.



TYPICAL ELEVATION

NOTE: **NP225** Glazing Gaskets are used on both sides of 1" (25) glazing. (Typical)





Exterior Glazing
(Shown With **AF100** Subsill)

Interior Glazing
(Shown With **FF400** Subsill)

NOT TO SCALE

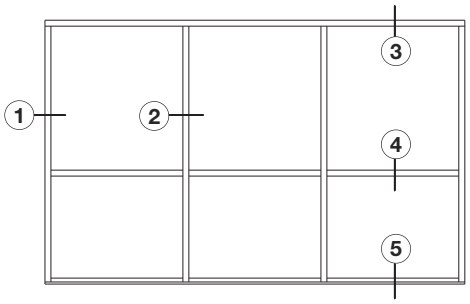
STOREFRONTS

Typical Details

Center Glazed • Series 451-S

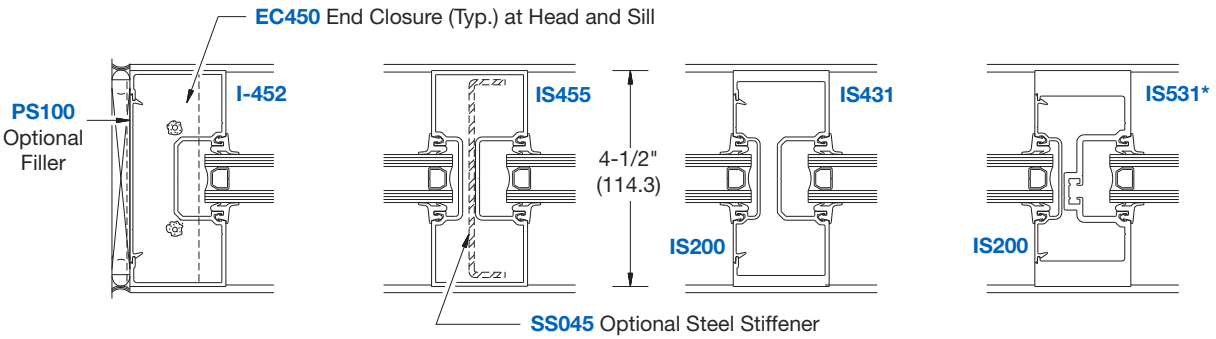
STACKING INSTALLATION FOR 1" (25) GLAZING

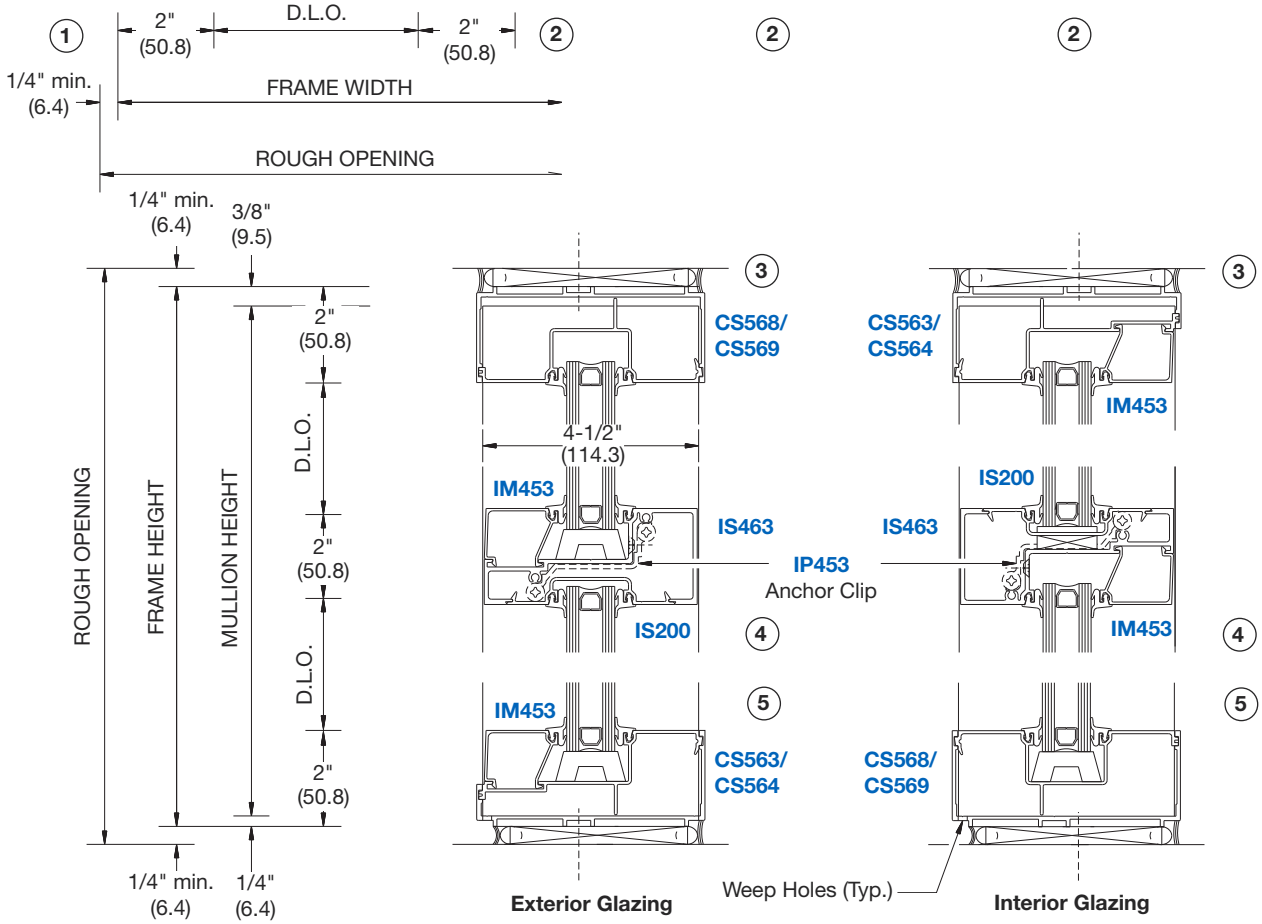
NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths.
*IS531 Available in 12' (3.6 m) only.
Visit **usalum.com** for more information.



TYPICAL ELEVATION

NOTE: **NP225** Glazing Gaskets are used on both sides of 1" (25) glazing. (Typical)





NOT TO SCALE

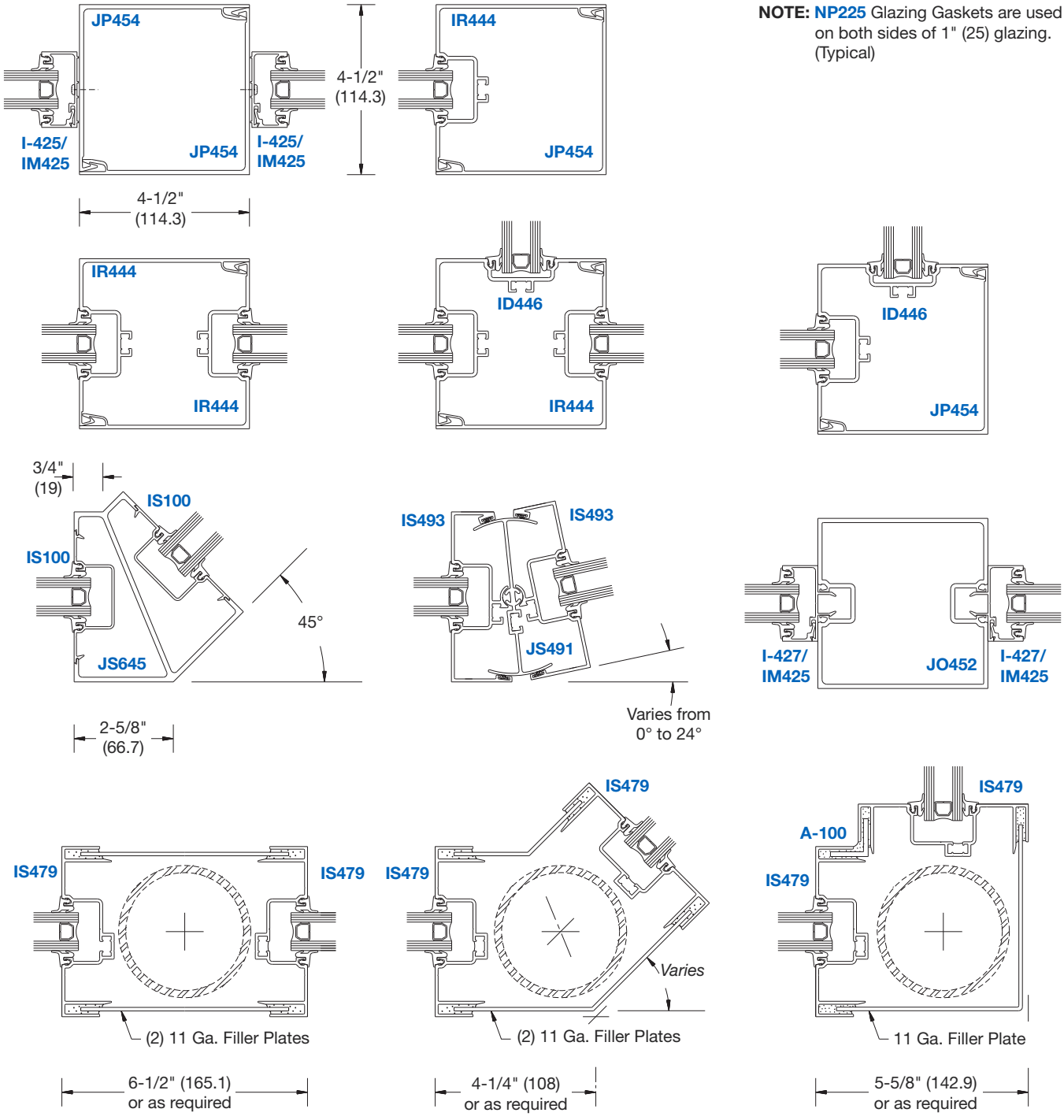
Typical Details

Center Glazed
- Series 451
- Series 451-S

VERTICAL CORNER CONDITIONS AND POST COVERS FOR 1" (25) GLAZING

NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths. Visit **usalum.com** for more information.

NOTE: NP225 Glazing Gaskets are used on both sides of 1" (25) glazing. (Typical)



NOT TO SCALE

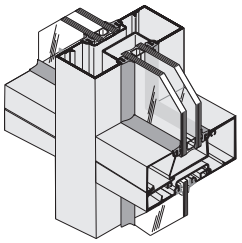
STOREFRONTS

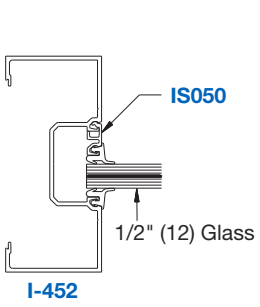
Typical Details

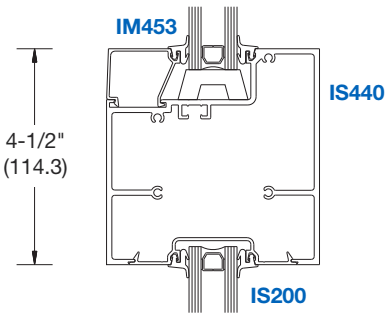
Center Glazed
- Series 451
- Series 451-S

SPECIAL GLASS ADAPTORS AND TRANSITION GLAZING USING 1/4" (6), 1/2" (12), AND 1" (25) GLAZING

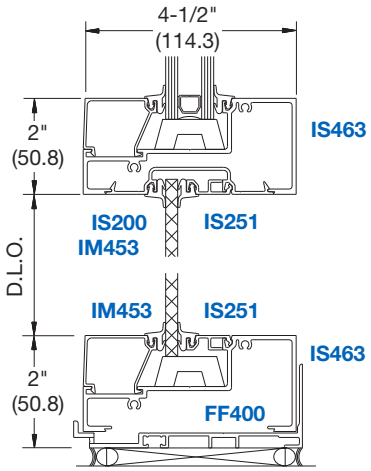
NOTE: Part numbers shown are available in 24' (7.3 m) stock lengths. Visit **usalum.com** for more information.





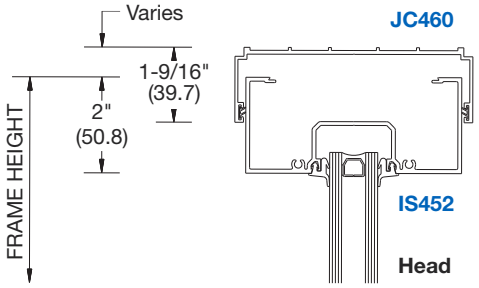


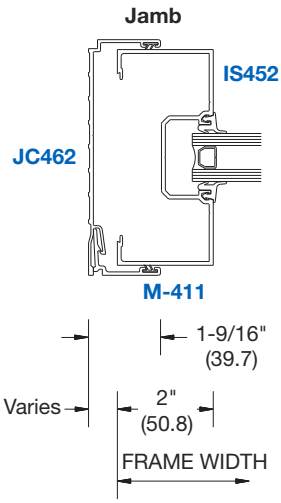
4-1/2" (114.3) high intermediate horizontal



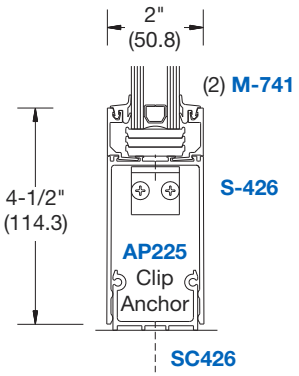
Exterior face of 1/4" (6) glazing aligns with exterior face of 1" (25) glazing

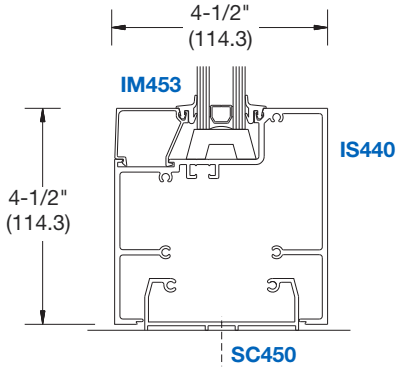
COMPENSATING CHANNELS (FOR HEAD AND JAMBS)





BULKHEADS (IN LIEU OF STANDARD SILLS)



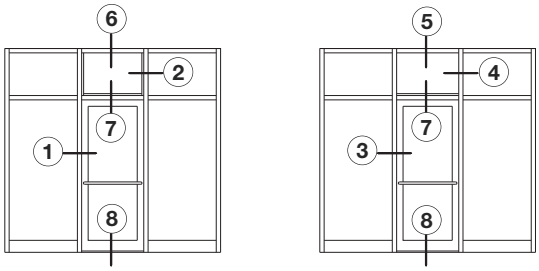


NOT TO SCALE

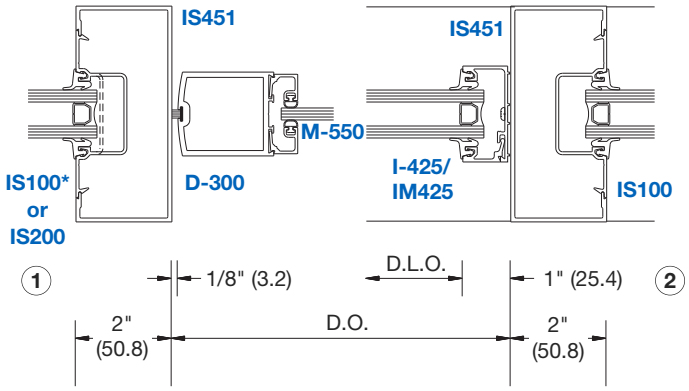
Typical Details

DOOR FRAMING

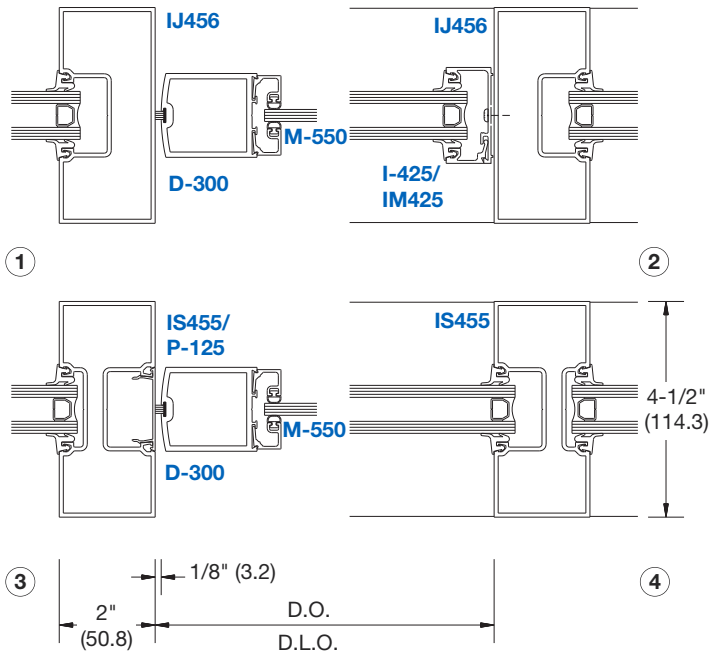
NOTE: Door Frames are available in stock to accommodate 36" x 84" (914 x 2134) and 72" x 84" (1829 x 2134) door openings.
Visit **usalum.com** for more information.



CENTER HUNG DOOR

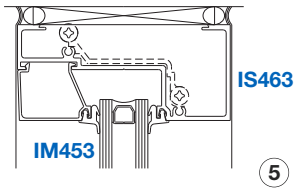


***NOTE:** **IS100** Insert is required to install glass between doors

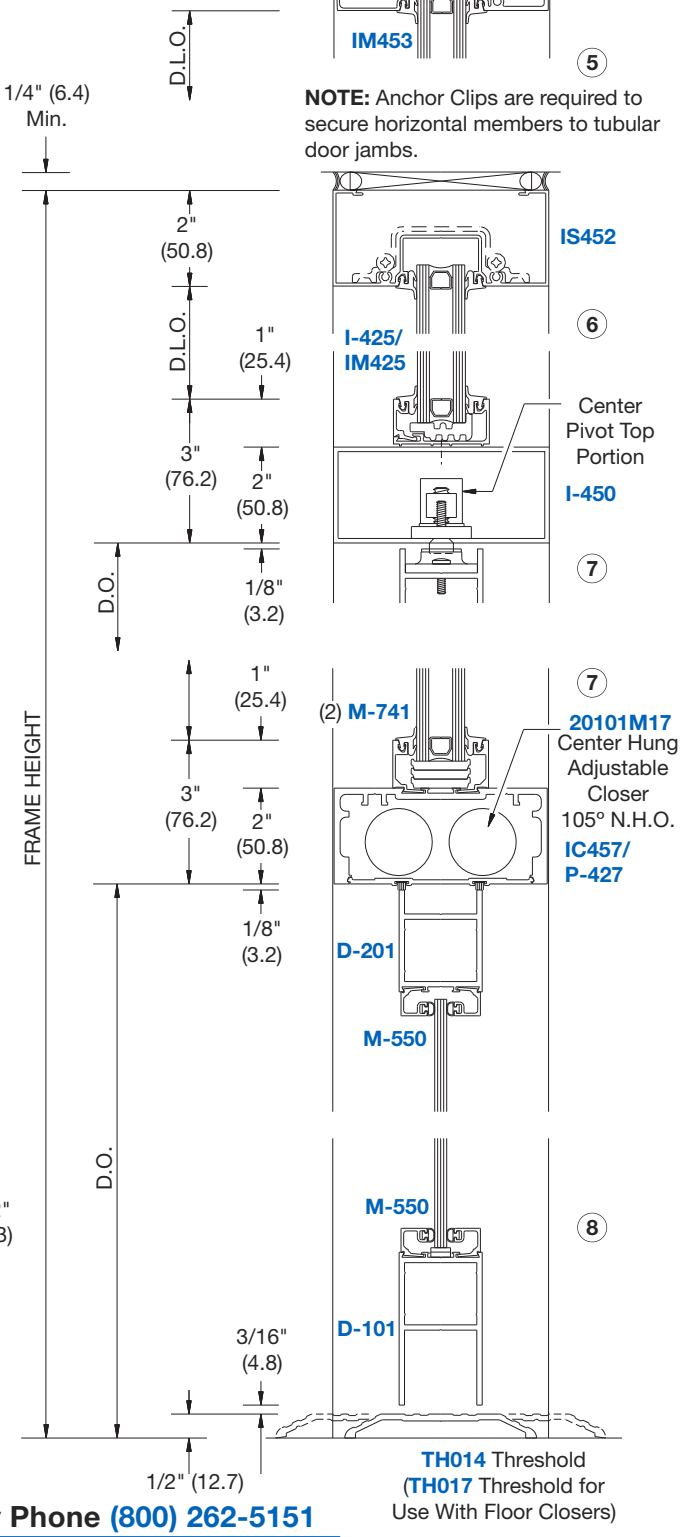


Center Glazed

- **Series 451**
- **Series 451-S**



NOTE: Anchor Clips are required to secure horizontal members to tubular door jambs.



NOT TO SCALE

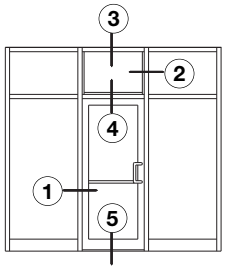
STOREFRONTS

B

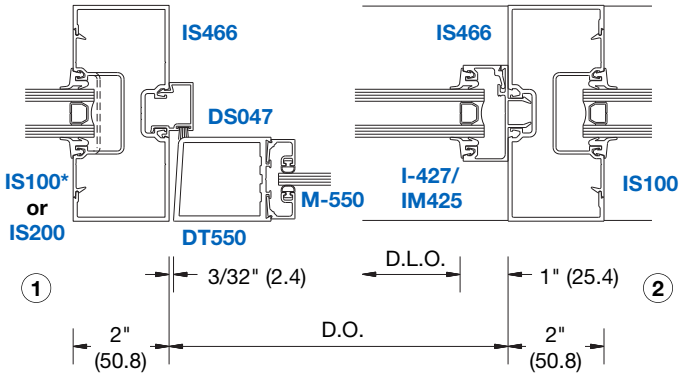
Typical Details

DOOR FRAMING

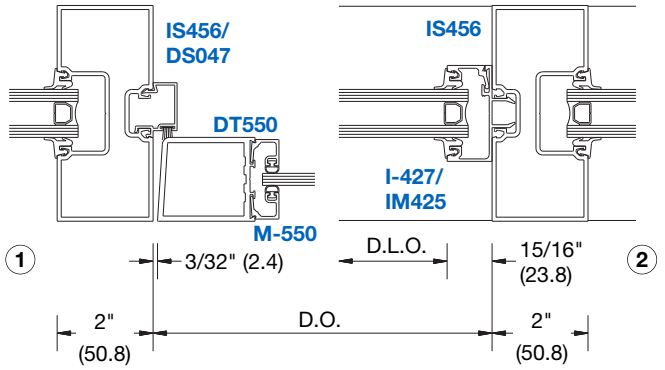
NOTE: Door Frames are available in stock to accommodate 36" x 84" (914 x 2134) and 72" x 84" (1829 x 2134) door openings. Visit usalum.com for more information.



OFFSET HUNG DOORS



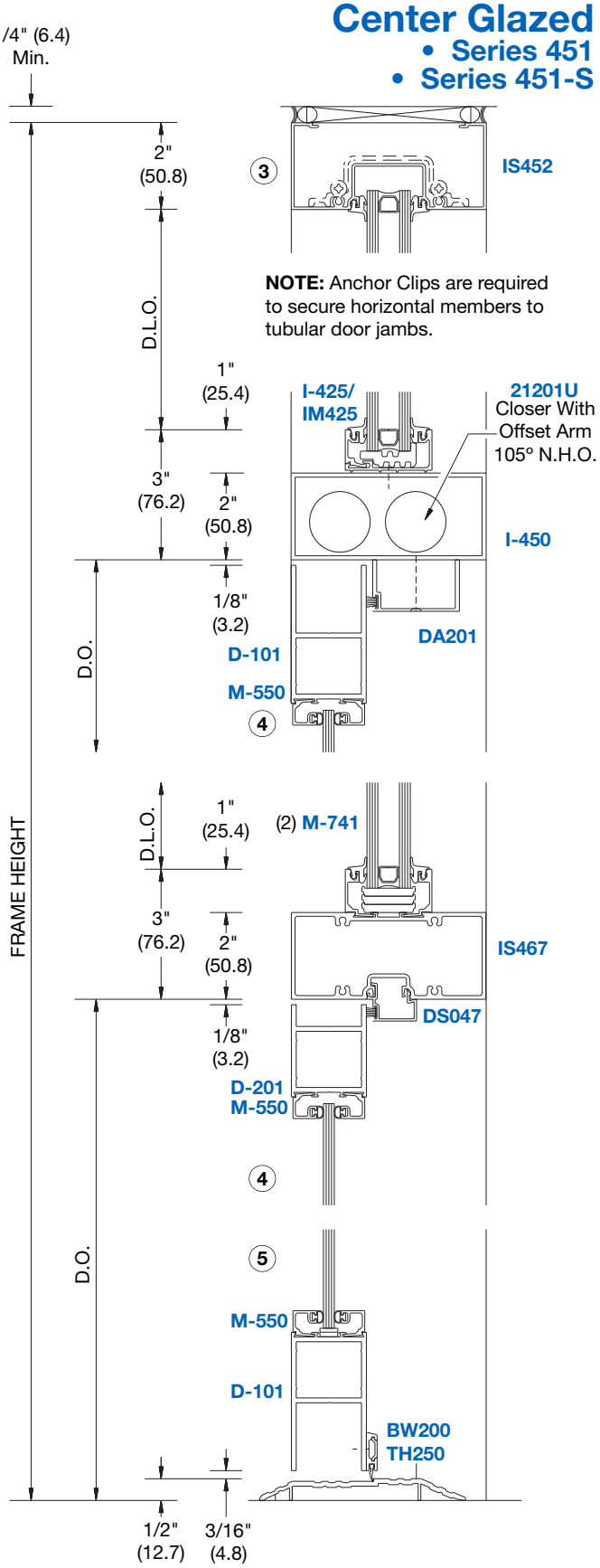
***NOTE:** IS100 Insert is required to install glass between doors



NOT TO SCALE

Center Glazed

- Series 451
- Series 451-S



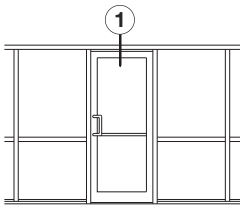
NOTE: Anchor Clips are required to secure horizontal members to tubular door jambs.

Typical Details

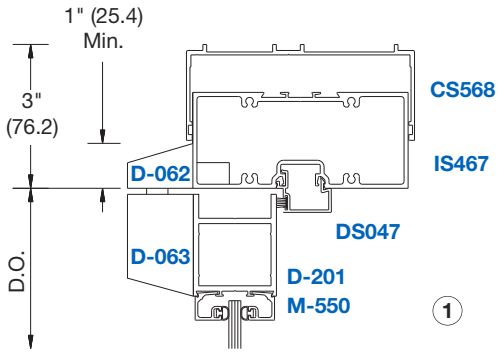
Center Glazed
- Series 451
- Series 451-S

DOOR FRAMING SPECIAL CONDITIONS

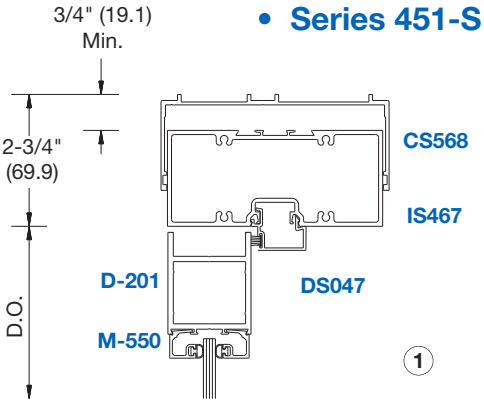
NOTE: Door Frames are available in stock to accommodate 36" x 84" (914 x 2134) and 72" x 84" (1829 x 2134) door openings. Visit usalum.com for more information.



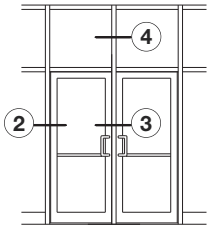
Series 451-S Door Header



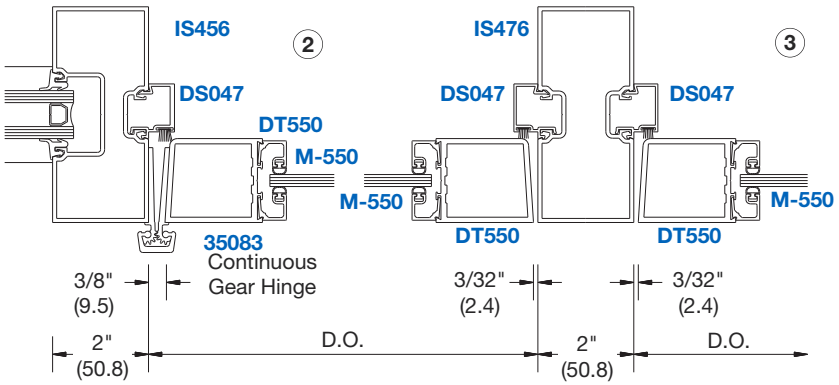
Offset Pivoted Door

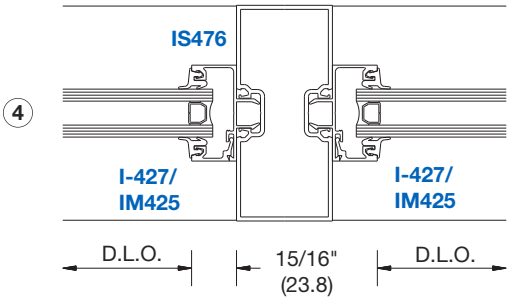


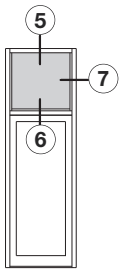
Butt Hung Door



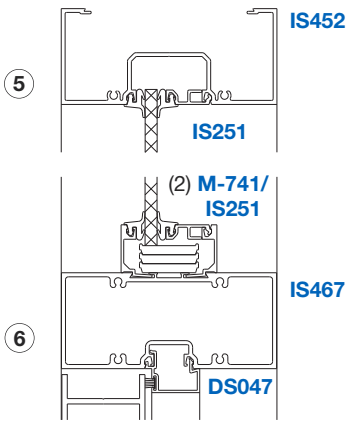
Optional Hinge and Intermediate Door Jamb

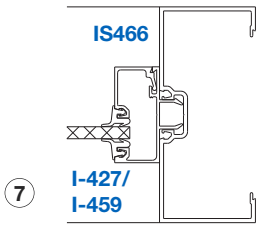






Spandrel Transom





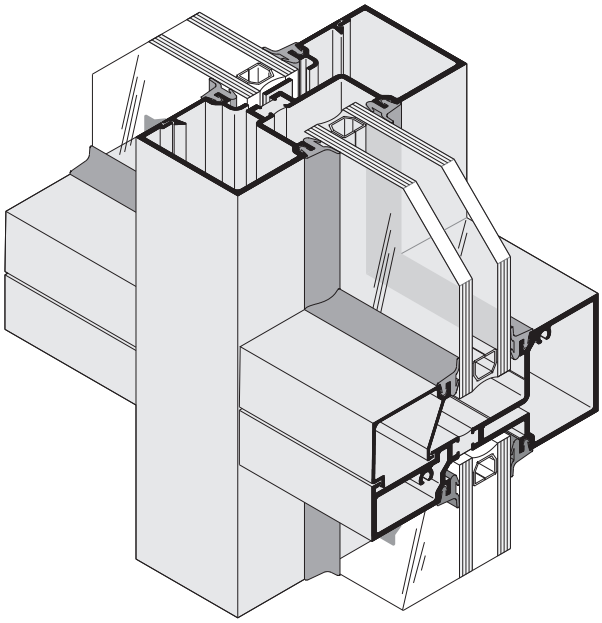
NOT TO SCALE

STOREFRONTS

Technical Data

Thermal Center Glazed
- Series IT451
- Series IT451-S

Series IT451 and IT451-S Thermal Center Glazed Systems offer an outstanding value by combining increased thermal performance with low-cost conventional flush glazing. These systems feature the Poly-Aluminizer™ and Lancer™ Thermal Break Technologies with a Two Year Warranty as described in the Warranty for Thermally Broken Framing Systems. They were especially engineered to satisfy the increasing demands for energy conservation. Both series may be glazed from the interior or exterior, and are well suited for storefront applications requiring increased thermal performance. See page 01-B3 for E.P.D.M. gasket options.



SERIES	WIDTH	DEPTH	GLAZING INFILLS	APPLICATION
IT451 IT451-S	2" (50.8)	4-1/2" (114.3)	1" (25)	Storefronts in Geographic Areas Requiring Thermal Performance

GLASS SIZES*	
Glass Width and Glass Height	= Daylight Opening + 7/8" (22.2).

* These formulae do not take into account glass tolerances. Consult glass manufacturer before ordering glass.

U.S. Aluminum
Color Selection Guide

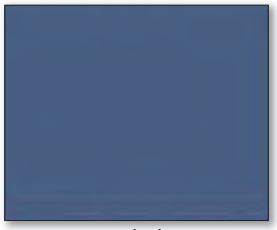
PPG Coatings Protected

DURANAR® Coatings

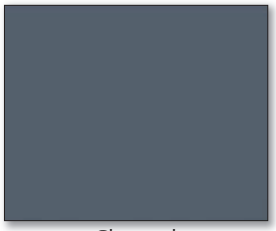

Black
UC70570


Sandstone
UC74745


Redwood
UC74955

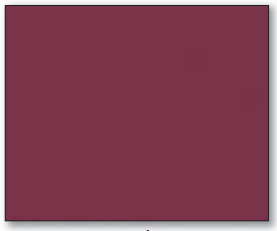

Regal Blue
UC70566


Bone White
UC43350


Charcoal
UC74712


Aged Copper
UC74956

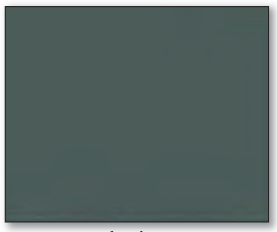

Stone Gray
UC74945


Boysenberry
UC70571


Military Blue
UC70533


Classic Bronze
UC74957


Teal
UC70567


Hartford Green
UC70572


Pueblo Tan
UC74756

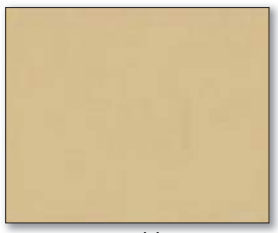

Ivy
UC70569


Stone White
UC74946

DURANAR® SUNSTORM™ Coatings


Asti
UC70390F


Sea Spray
UC115881F


Gold
UC70542F


Warm Silver
UC70093F


Medium Bronze
UC106692F


Light Bronze
UC106690F

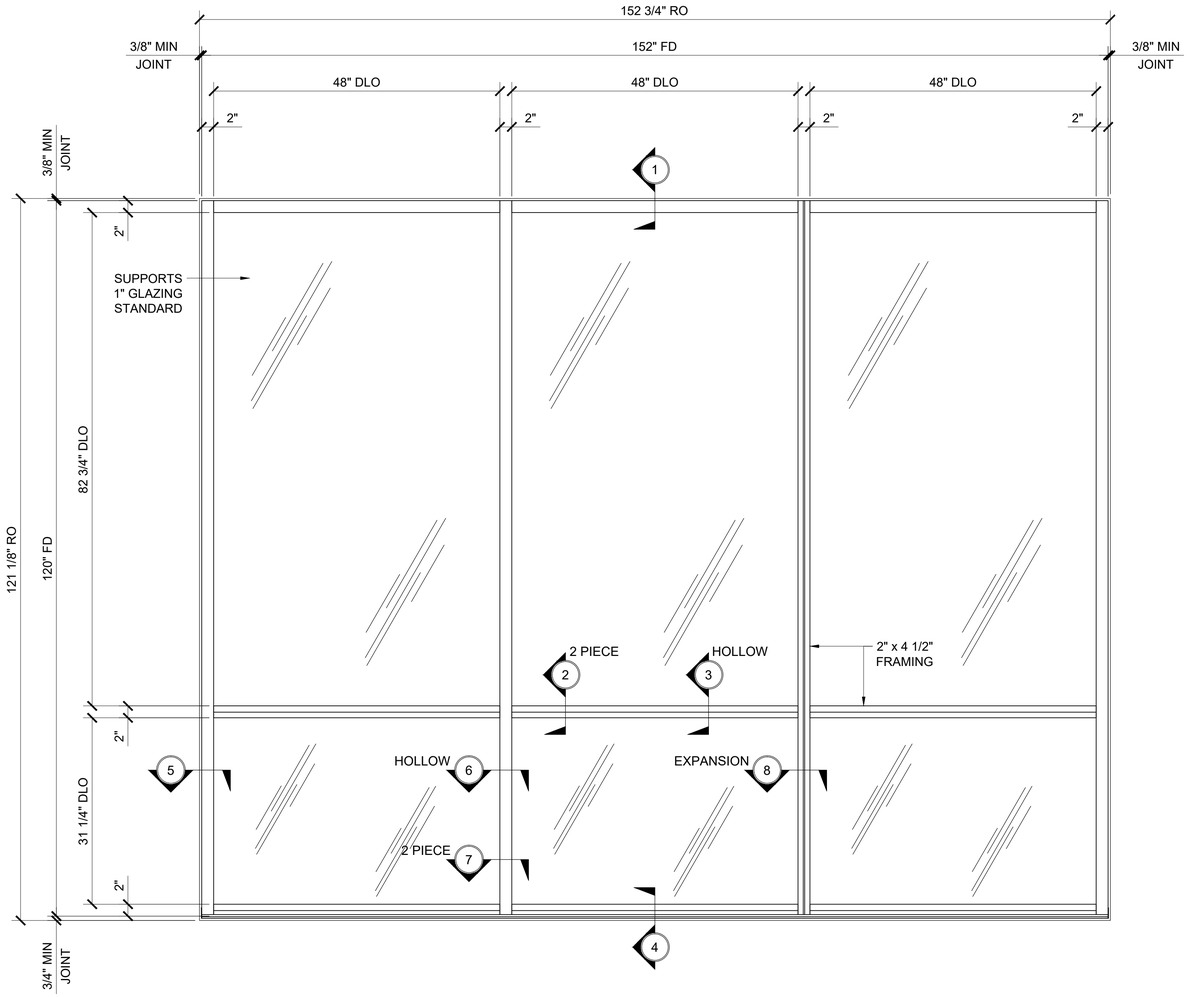

Champagne
UC70202F

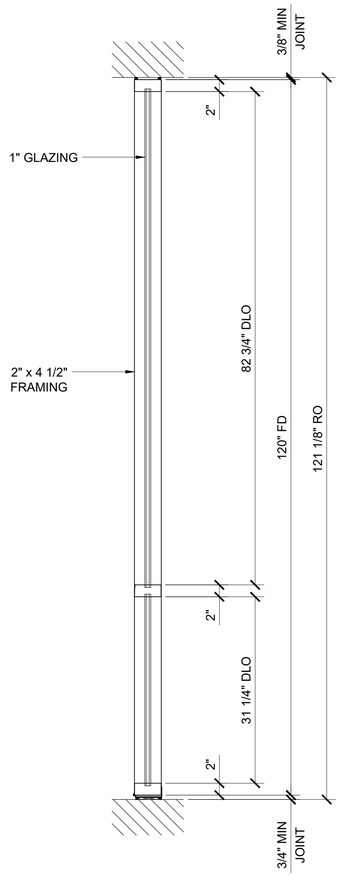
These color samples are as close as possible to the actual colors offered within the limitations of color chip reproduction.

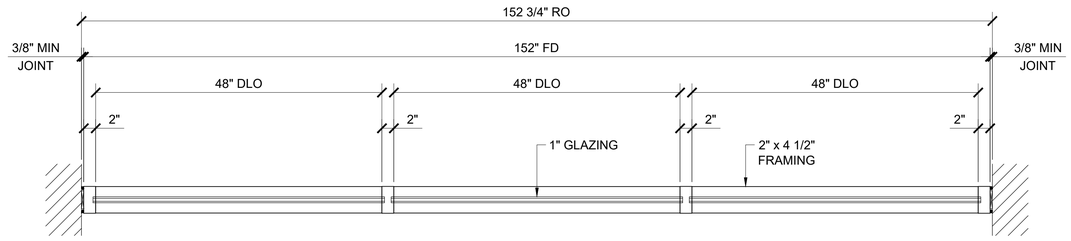
STOREFRONTS

SERIES IT451 CENTER / EXTERIOR GLAZED SHEAR BLOCK STOREFRONT SYSTEM

GLASS SIZING NOTE:
REFERENCE U.S. ALUMINUM CATALOGS AND WEBSITE'S LOAD CHARTS FOR SIZING GUIDELINES.







IT451 SERIES SPECIFICATIONS

Series IT451 offers improved thermal performance using the Poly-Aluminizer™. United States Aluminum offers cost efficient versatile Center Glazed Systems with clean lines and superb performance. Series IT451 may be interior or exterior glazed. A top load EPDM gasket is used to position and weatherseal the glass in the aluminum pocket. Center Glazed Systems are compatible with most Unites States Aluminum entrance doors.

2" x 4 1/2" frame
1" Glazing infill (SHOWN) Optional snap-in reducers for 1/4" or 1/2" glass are available
Struct-Link™ thermal break
Full range of accessory components
Available in an array of architectural coatings and anodized finishes
Screw spline assembly
Shear block assembly (SHOWN)
Stacking installation option
Interior or Exterior Glazed (EXTERIOR GLAZED OPTION SHOWN)

STANDARD ABBREVIATIONS

RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLITE OPENING
DO	DOOR OPENING
DD	DOOR DIMENSION
SMC	SURFACE MOUNTED CLOSER
OHCC	OVERHEAD CONCEALED CLOSER

Revisions By:

C.R.LAURENCE CO. ARCHITECTURAL PRODUCTS
2503 E. Vernon Avenue Los Angeles, CA 90058-1897
PH (800)-421-6144 FX: 800-587-7501 www. crlaurence.com

Discription:
U.S. ALUMINUM
SERIES IT451 CENTER GLAZED
STOREFRONT SYSTEM

Drawn By: AAD
Date: 4/5/13
Scale: AS NOTED
File Name: SERIES IT451 CENTER GLAZED STOREFRONT SYSTEM.dwg

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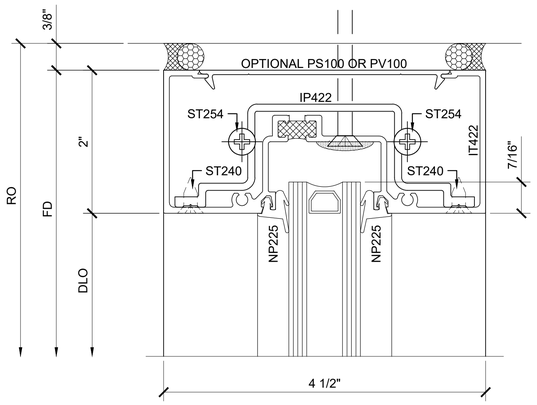
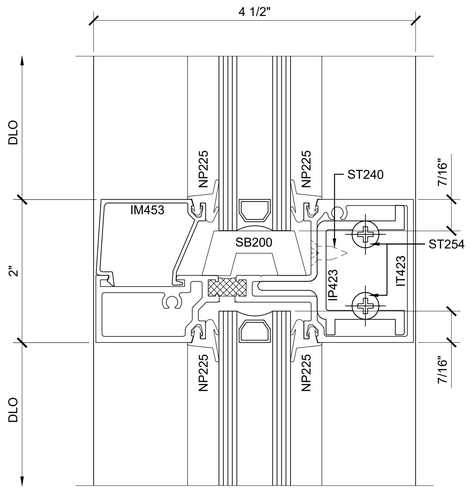
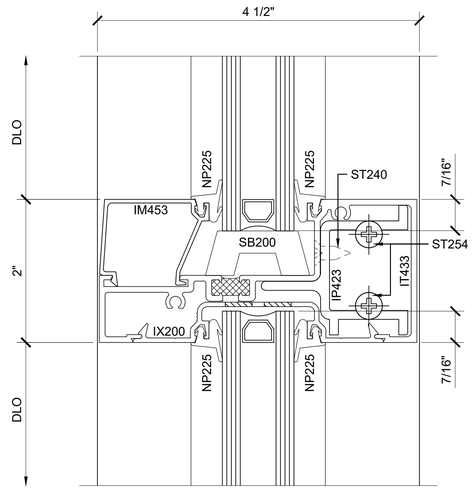


SECTION DETAIL AT HEAD 1



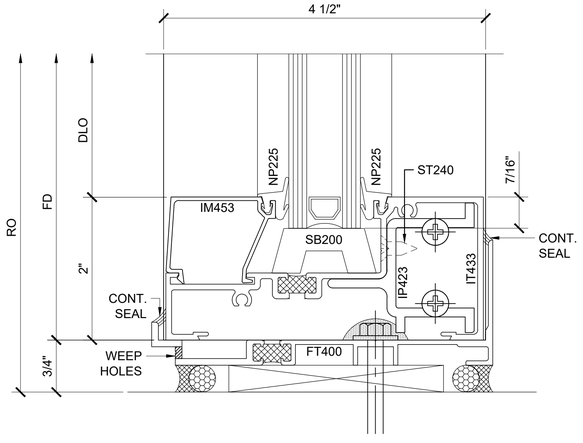
SECTION DETAIL AT INTERMEDIATE HORIZONTAL 2

TYPICAL FOR SHEAR LUG ASSEMBLY

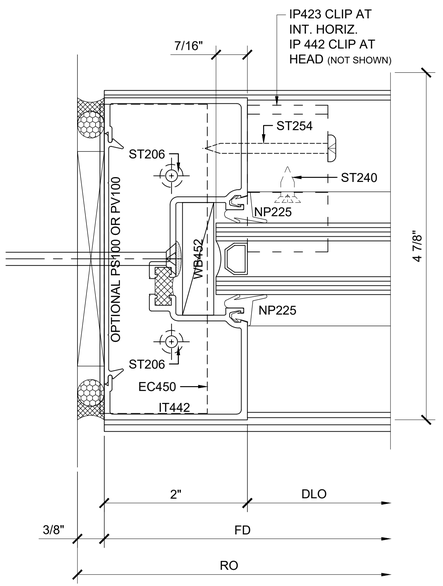


SECTION DETAIL AT INTERMEDIATE HORIZONTAL 3

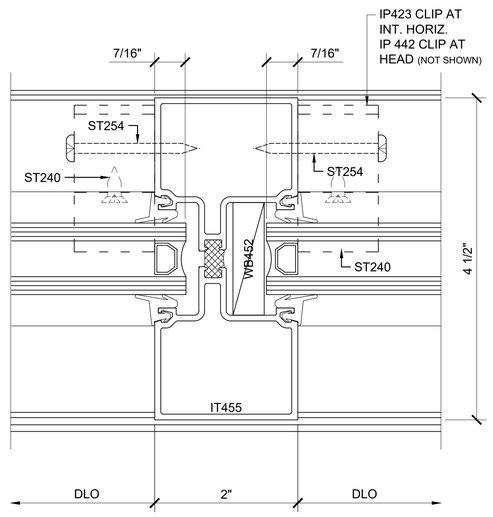
TYPICAL FOR SCREW RACE ASSEMBLY - (SHEAR BLOCK FOR LOAD DISTRIBUTION)



SECTION DETAIL AT SILL 4

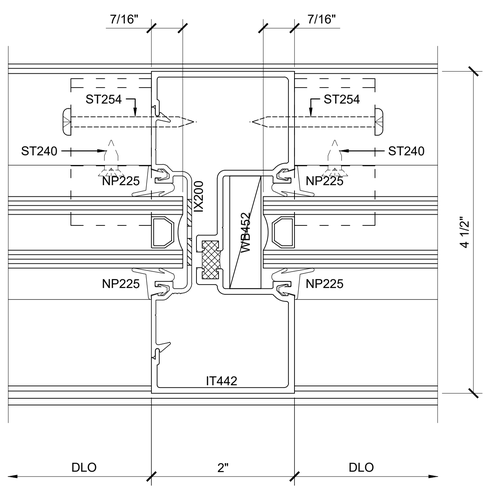


SECTION DETAIL AT JAMB 5

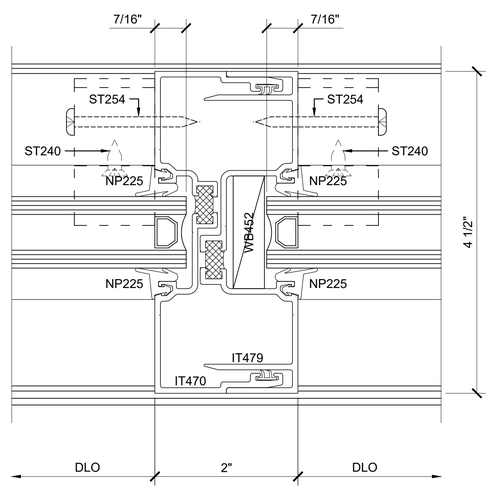


SECTION DETAIL AT HOLLOW INTERMEDIATE VERTICAL 6

TYPICAL SHEAR BLOCK ASSEMBLY MULLION



SECTION DETAIL AT 2 PIECE INTERMEDIATE VERTICAL 7



SECTION DETAIL AT EXPANSION MULLION 8

TYPICAL SCREW RACE ASSEMBLY MULLION

SERIES ITIT451 CENTER / EXTERIOR GLAZED SHEAR BLOCK STOREFRONT SYSTEM

Revisions By:

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Discription:
U.S. ALUMINUM
SERIES IT451 CENTER GLAZED
STOREFRONT SYSTEM

Drawn By:	AAD
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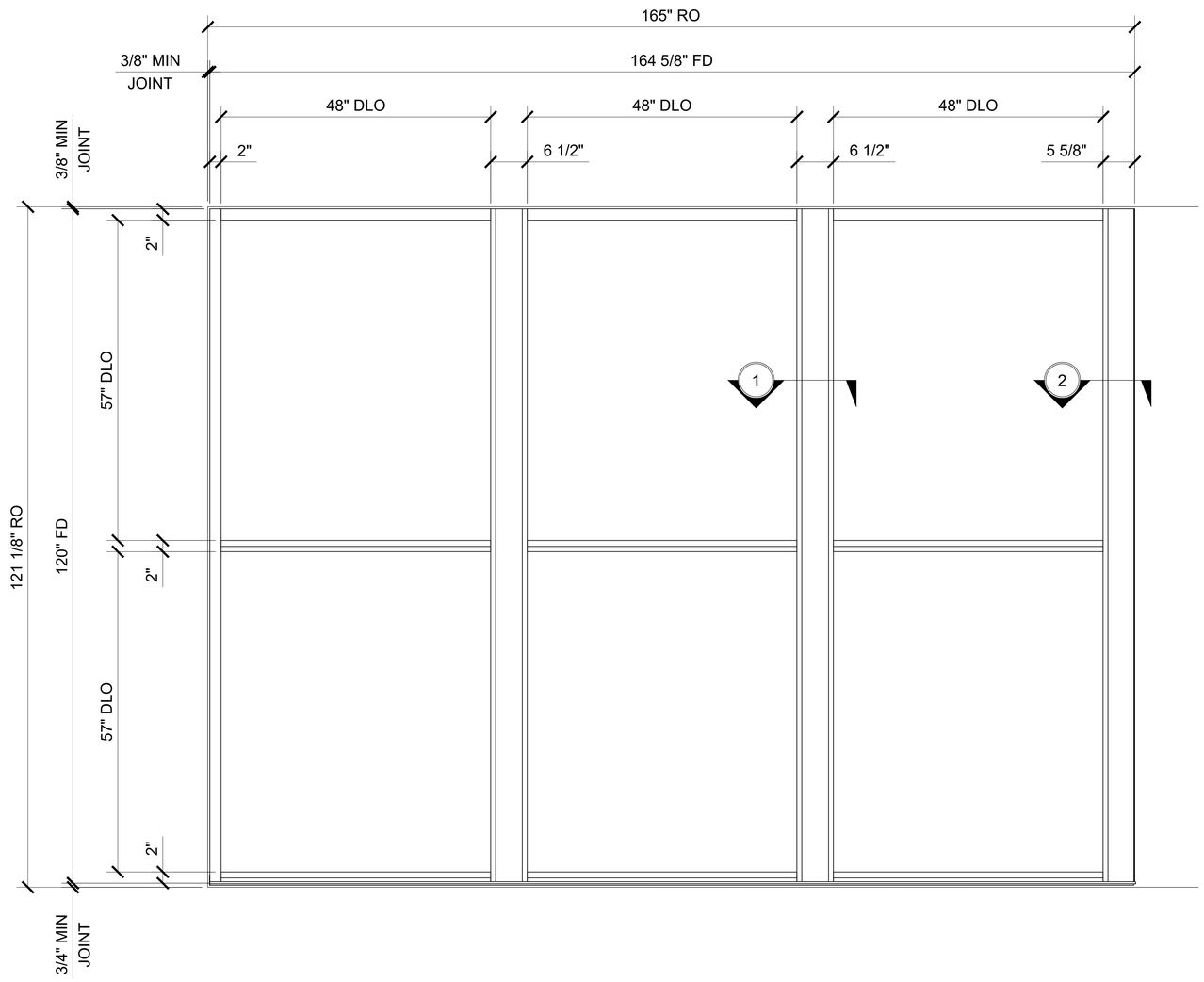
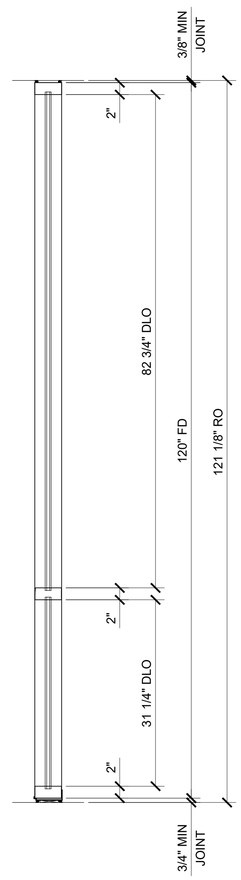
1.2

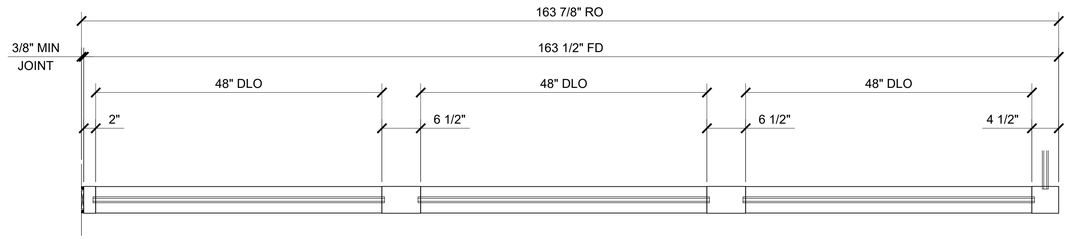
STOREFRONTS

SERIES IT451 CENTER GLAZED STOREFRONT SYSTEM POST COVERS

GLASS SIZING NOTE:
REFERENCE U.S. ALUMINUM CATALOGS AND WEBSITE'S LOAD CHARTS FOR SIZING GUIDELINES.







IT451 SERIES SPECIFICATIONS

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2" x 4 1/2" frame
1" Glazing infill (SHOWN) Optional snap-in reducers for 1/4" or 1/2" glass are available
Struct-Link™ thermal break
Full range of accessory components
Available in an array of architectural coatings and anodized finishes
Screw spline assembly
Shear block assembly
Stacking installation option
Interior or Exterior Glazed

STANDARD ABBREVIATIONS

RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLITE OPENING
DO	DOOR OPENING
DD	DOOR DIMENSION
SMC	SURFACE MOUNTED CLOSER
OHCC	OVERHEAD CONCEALED CLOSER

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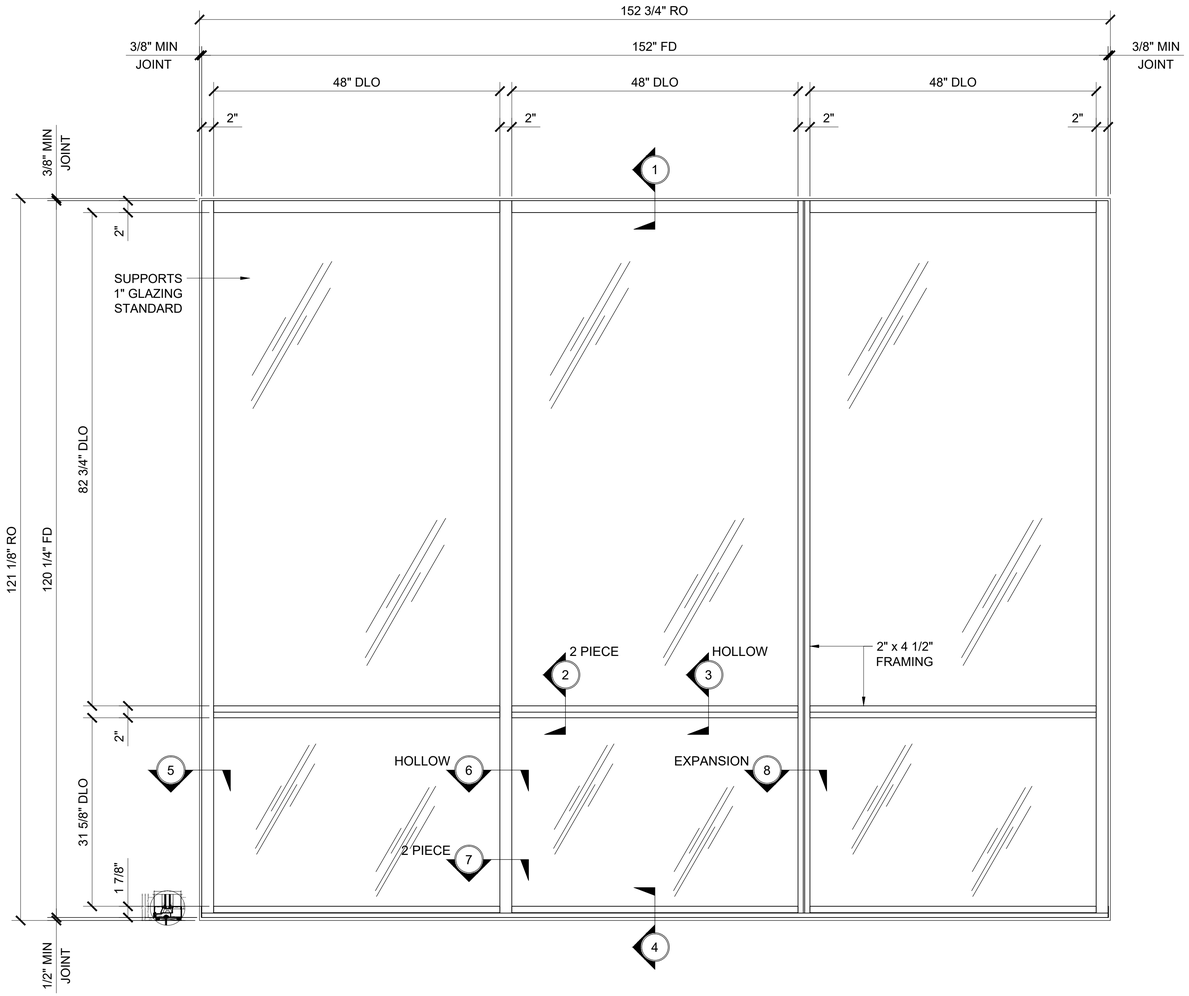
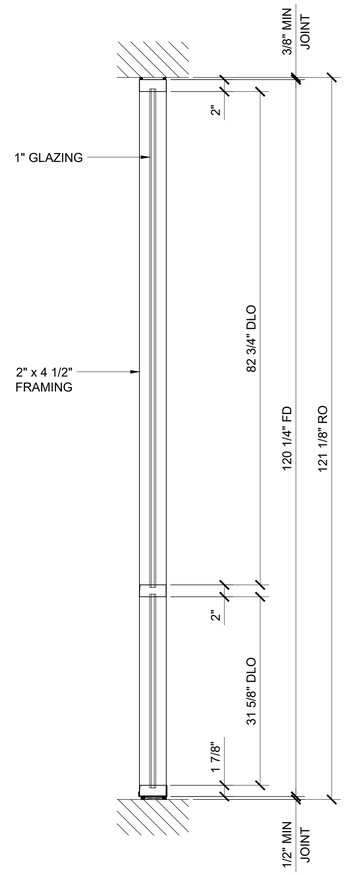
6.1

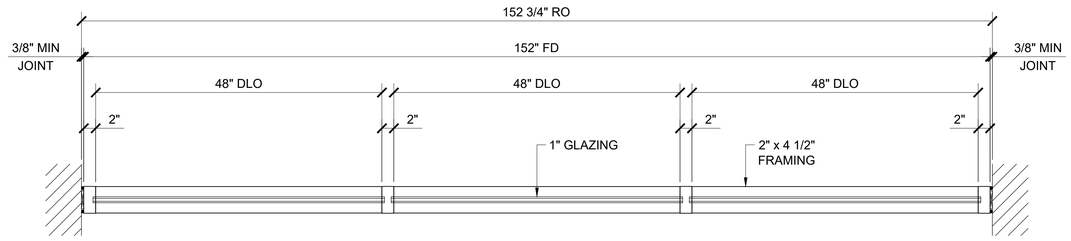
STOREFRONTS

SERIES IT451 CENTER / EXTERIOR GLAZED STACKED STOREFRONT SYSTEM

GLASS SIZING NOTE:
REFERENCE U.S. ALUMINUM CATALOGS AND WEBSITE'S LOAD CHARTS FOR SIZING GUIDELINES.







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Struct-Link™ thermal break
Full range of accessory components
Available in an array of architectural coatings and anodized finishes
Screw spline assembly
Shear block assembly
Stacking installation option (SHOWN)
Interior or Exterior Glazed (EXTERIOR GLAZED OPTION SHOWN)

STANDARD ABBREVIATIONS

RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLITE OPENING
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SMC	SURFACE MOUNTED CLOSER
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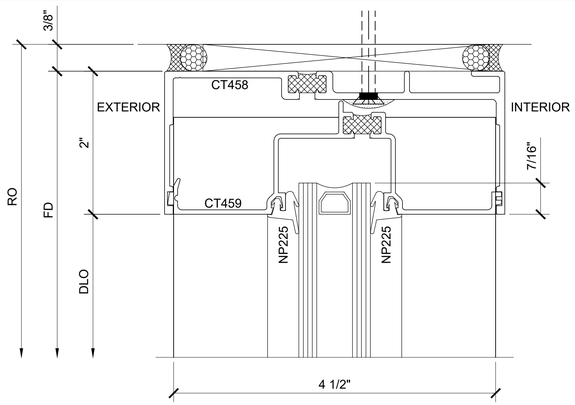

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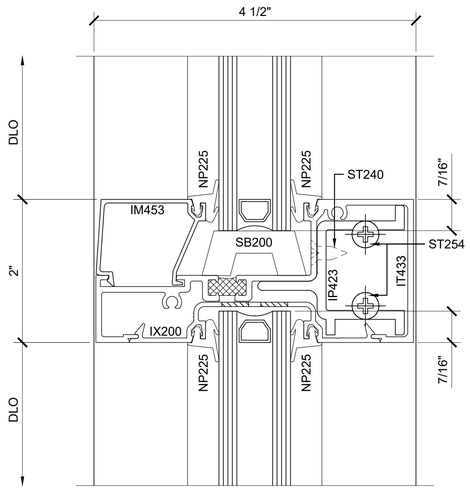
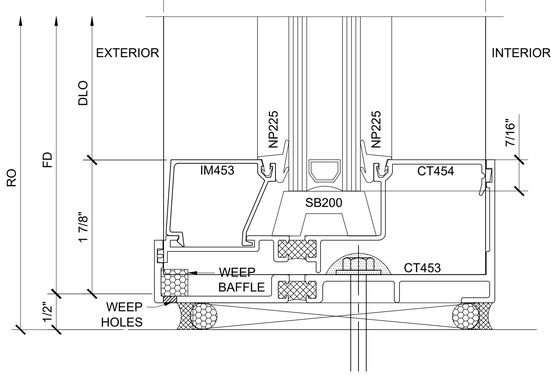
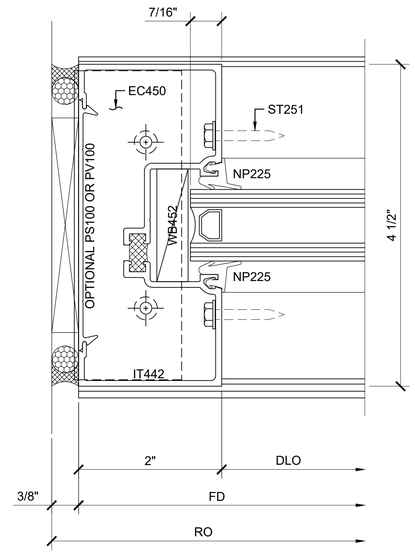


SECTION DETAIL AT INTERMEDIATE HORIZONTAL (3)

TYPICAL FOR SCREW RACE ASSEMBLY - (SHEAR BLOCK FOR LOAD DISTRIBUTION)



SECTION DETAIL AT SILL (4)



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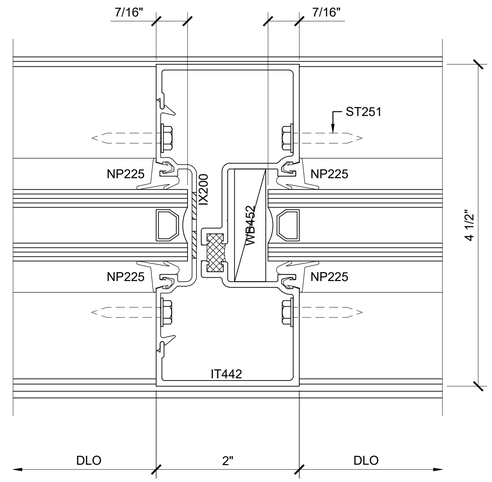
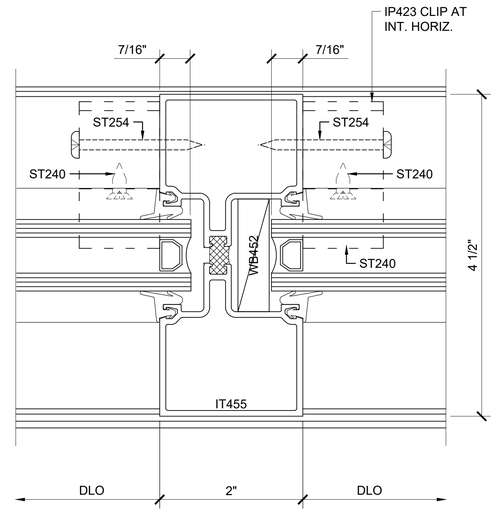
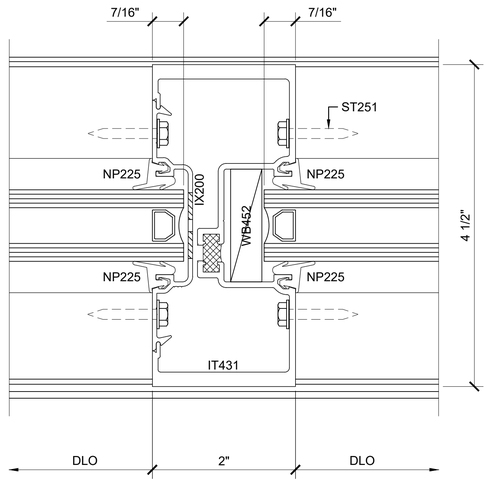


SECTION DETAIL AT INTERMEDIATE VERTICAL (6)

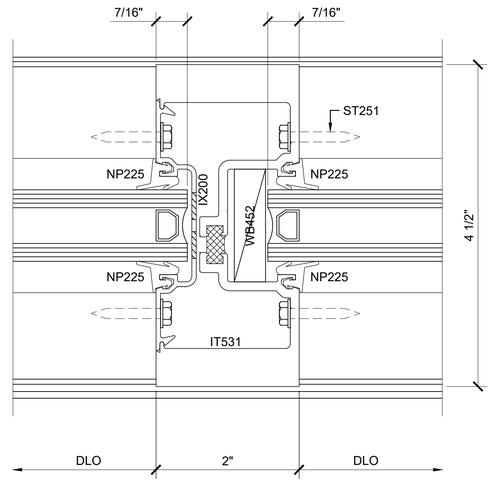


SECTION DETAIL AT HOLLOW INTERMEDIATE VERTICAL (6)

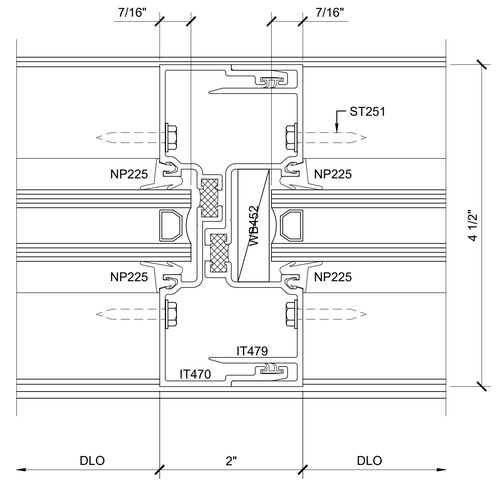
TYPICAL SHEAR BLOCK ASSEMBLY MULLION



SECTION DETAIL AT INTERMEDIATE VERTICAL (7)



SECTION DETAIL AT INTERMEDIATE VERTICAL (8)



SECTION DETAIL AT EXPANSION MULLION (9)

SERIES IT451 CENTER / EXTERIOR GLAZED SHEAR BLOCK STOREFRONT SYSTEM

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Sheet
7.2

STOREFRONTS

SERIES IT451 CENTER GLAZED STOREFRONT SYSTEM CENTER HUNG DOOR FRAMING

IT451 SERIES SPECIFICATIONS

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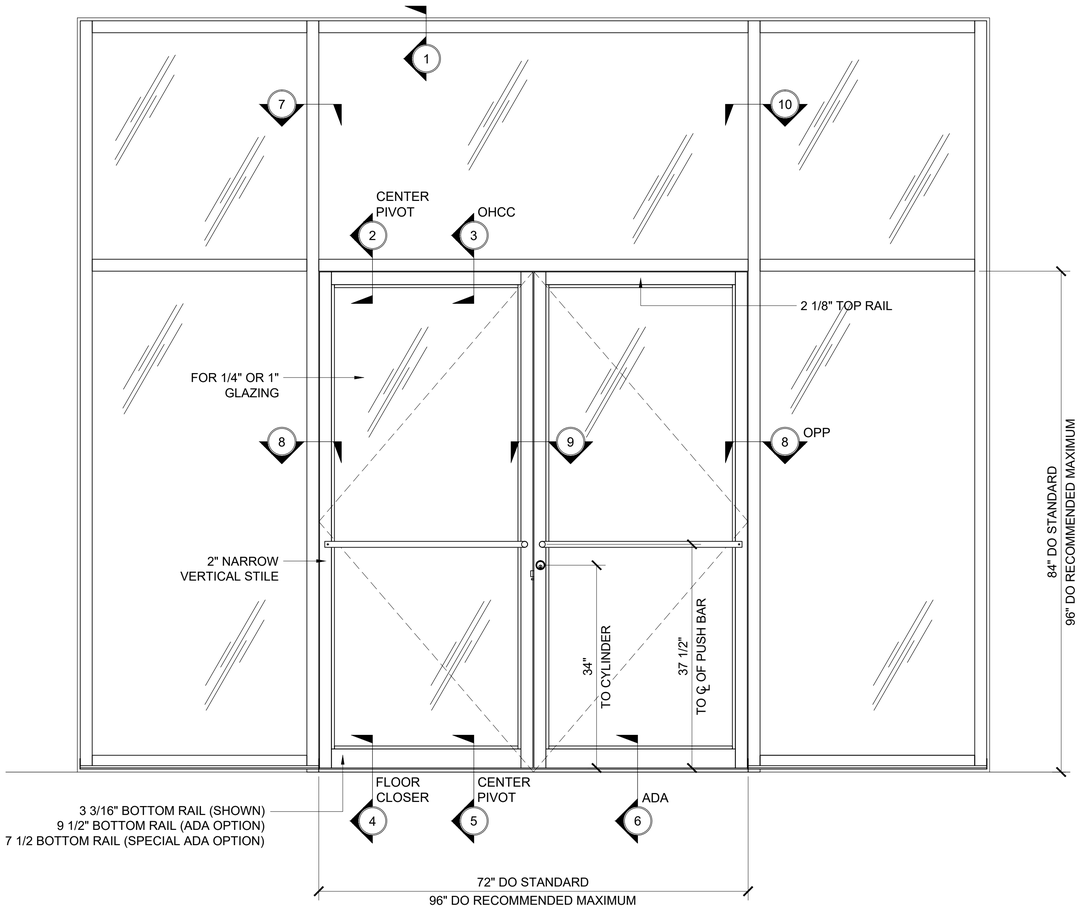
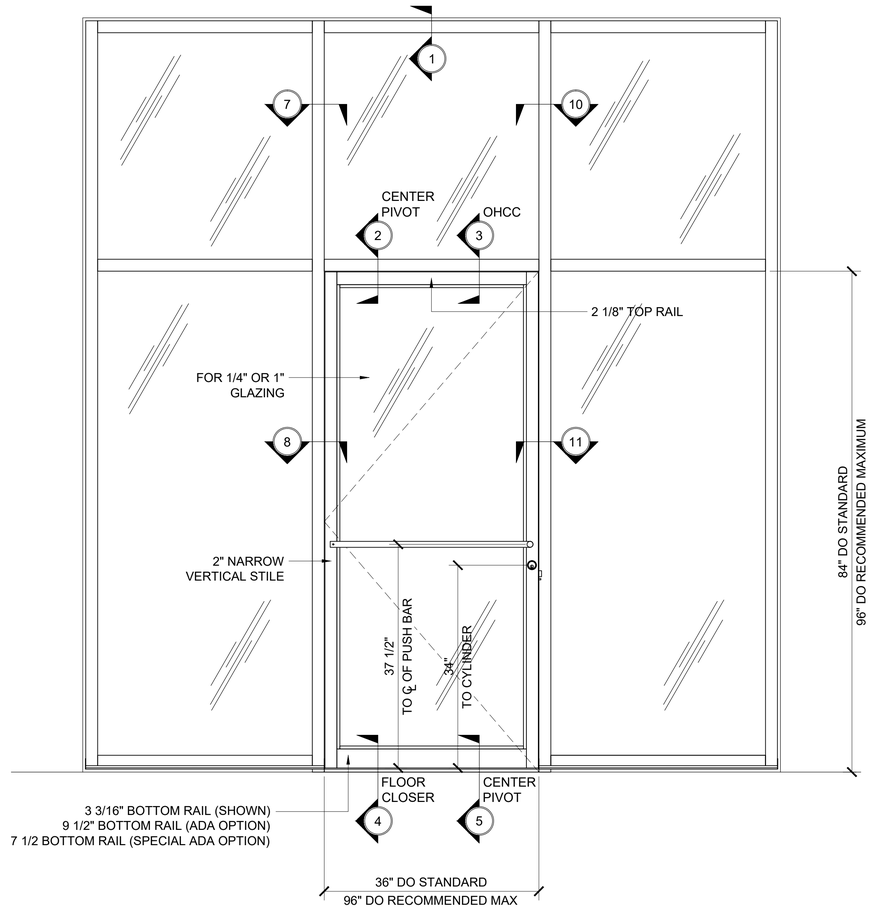
Shear block assembly
Stacking installation option
Interior or Exterior Glazed





STANDARD ABBREVIATIONS

RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLITE OPENING
DO	DOOR OPENING
DD	DOOR DIMENSION
SMC	SURFACE MOUNTED CLOSER
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Drawn By:	AAD
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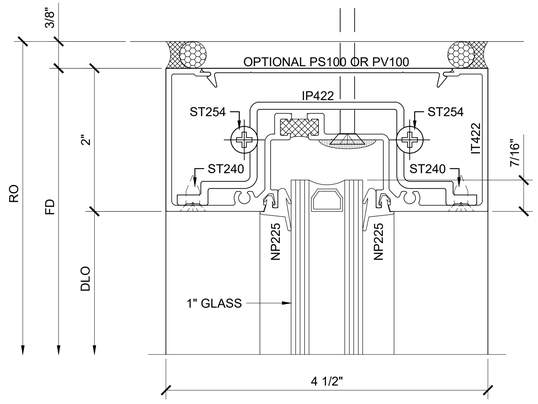
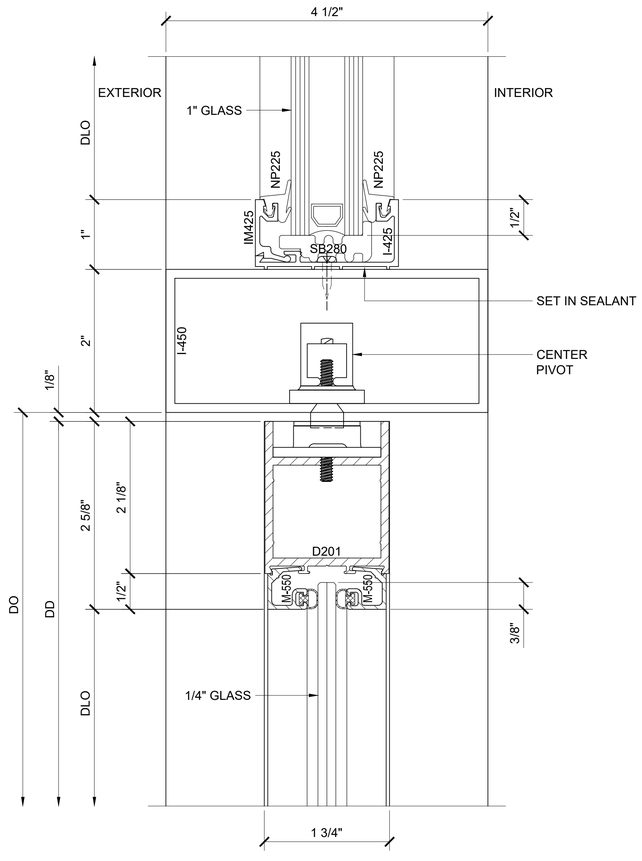
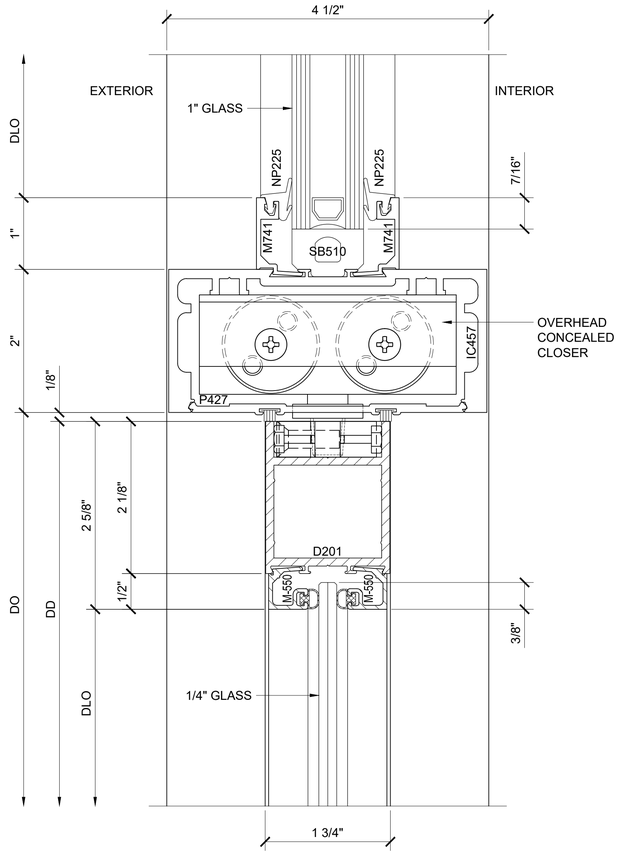


SECTION DETAIL @ STOREFRONT HEAD (1)



SECTION DETAIL @ DOOR HEAD WITH PIVOT (2)



SECTION DETAIL @ DOOR HEAD WITH OHCC (3)

SERIES IT451 CENTER GLAZED STOREFRONT SYSTEM DOOR FRAMING DETAILS (SHOWN WITH OPTIONAL NARROW STILE CENTER HUNG SERIES 250 DOOR SYSTEM)

Revisions By:

C.R.LAURENCE CO. ARCHITECTURAL PRODUCTS
2503 E. Vernon Avenue Los Angeles, CA 90058-1897
PH (800)-421-6144 FX: 800-587-7501 www. crlaurence.com

Discription:
U.S. ALUMINUM
SERIES IT451 CENTER GLAZED
STOREFRONT SYSTEM

Drawn By: AAD
Date: 4/5/13
Scale: AS NOTED
File Name: SERIES IT451 CENTER GLAZED STOREFRONT SYSTEM.dwg

Sheet
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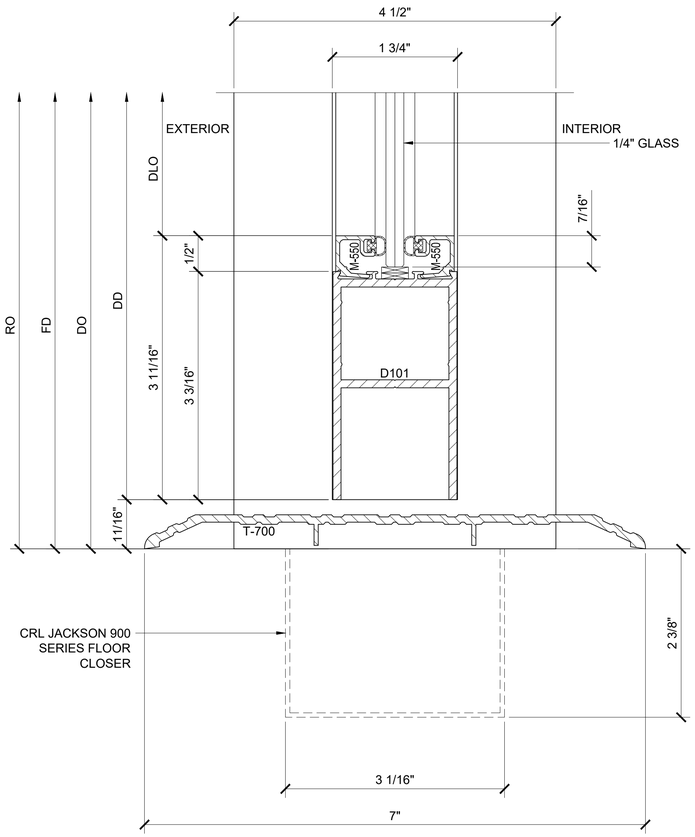
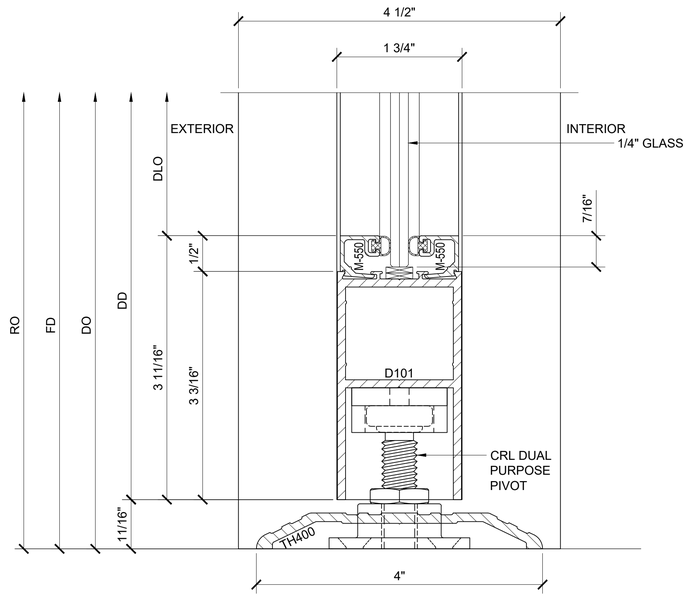
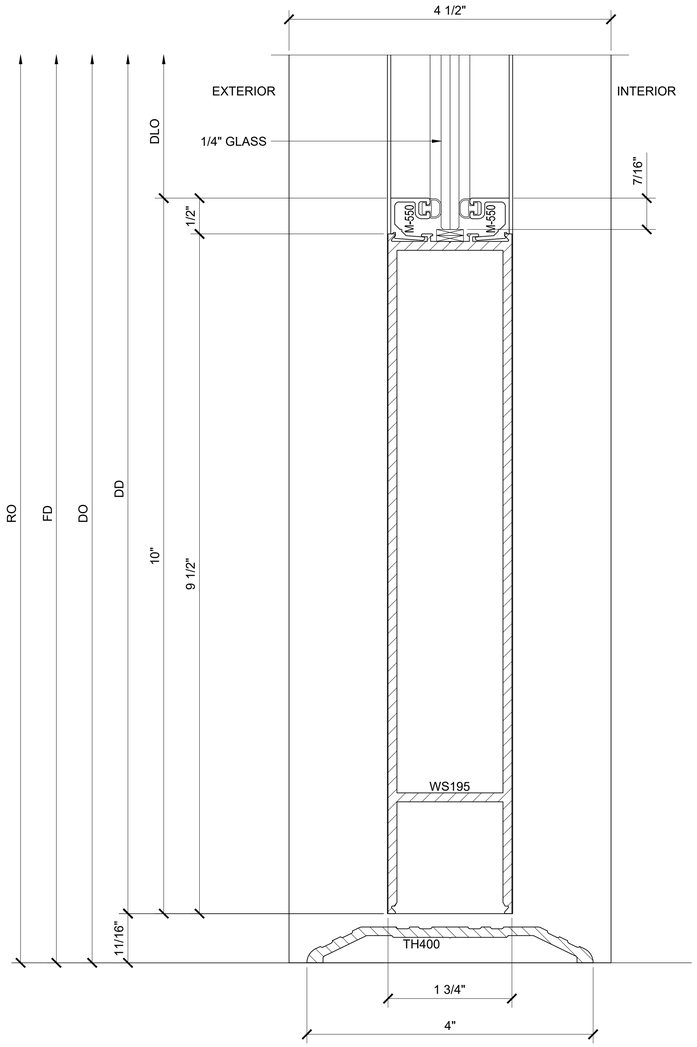


SECTION DETAIL @ DOOR SILL (4)



SECTION DETAIL @ DOOR SILL (5)



SECTION DETAIL @ ADA DOOR SILL (6)

(7 1/2" VERSION IS ALSO AVAILABLE)

SERIES IT451 CENTER GLAZED STOREFRONT SYSTEM DOOR FRAMING DETAILS (SHOWN WITH OPTIONAL NARROW STILE CENTER HUNG SERIES 250 DOOR SYSTEM)

Revisions By:

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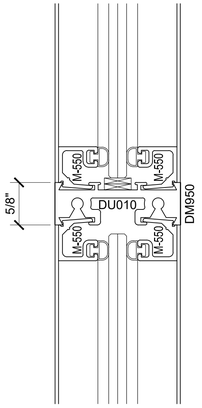
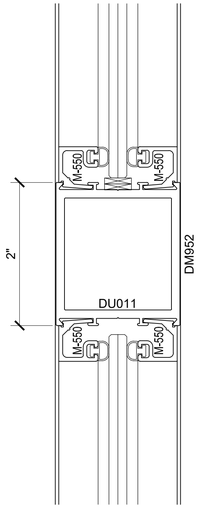
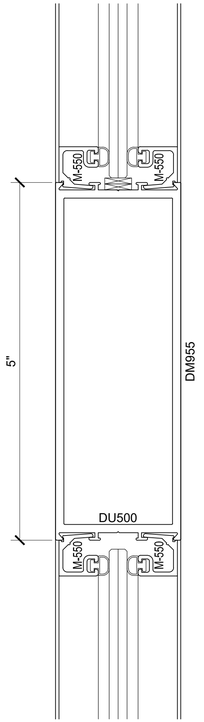
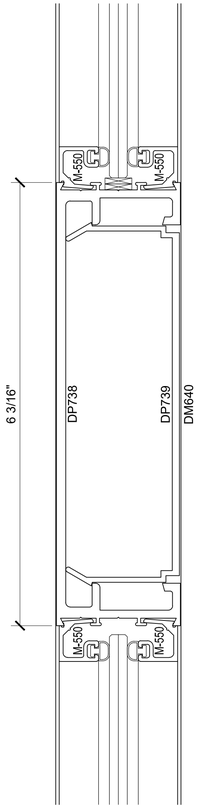
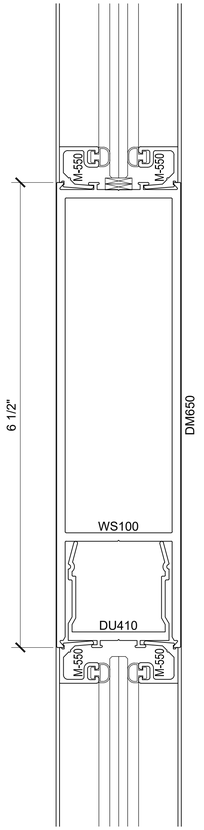
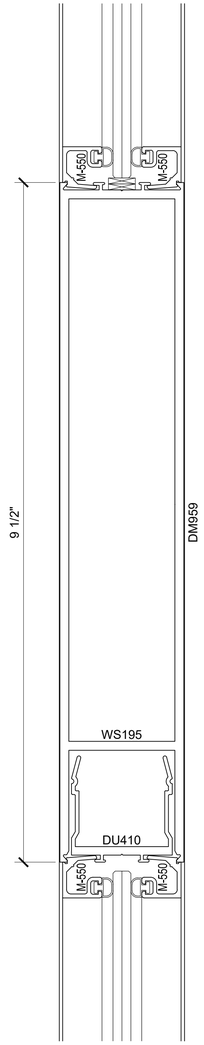




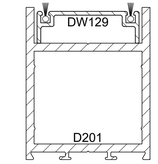


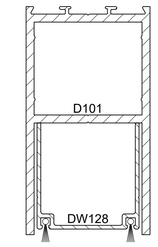


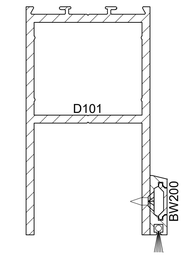


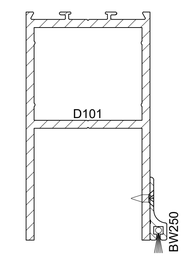


DOOR MUNTINS

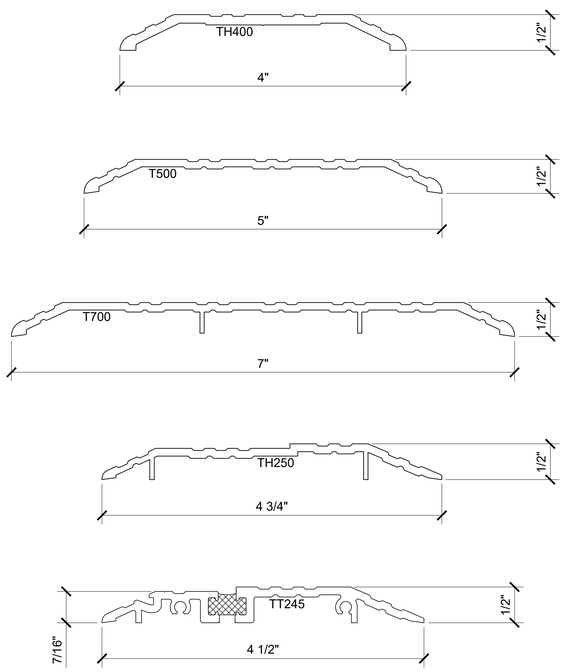




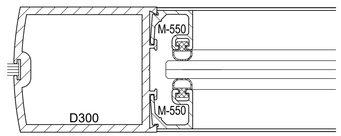




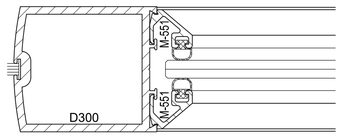
TOP AND BOTTOM WEATHERSTRIPPING



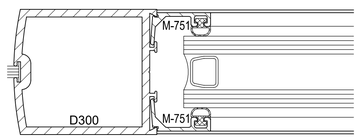
THRESHOLDS



1/4" GLASS - SQUARE



1/4" GLASS - TAPERED



1" GLASS

GLAZING OPTIONS

Revisions By:

C.R.LAURENCE CO. ARCHITECTURAL PRODUCTS
2503 E. Vernon Avenue Los Angeles, CA 90058-1897
PH (800)-421-6144 FX: 800-587-7501 www.crlaurence.com

Discription:
U.S. ALUMINUM
SERIES IT451 CENTER GLAZED
STOREFRONT SYSTEM

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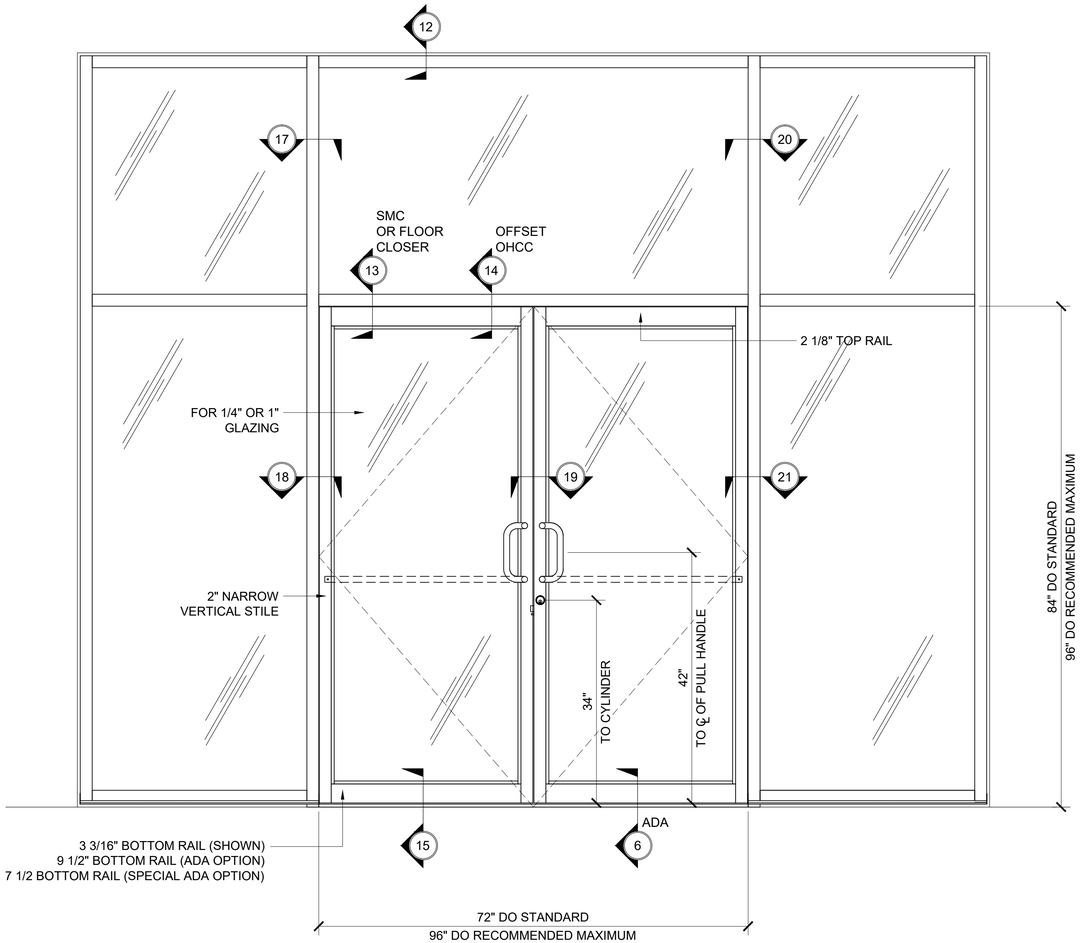
STOREFRONTS

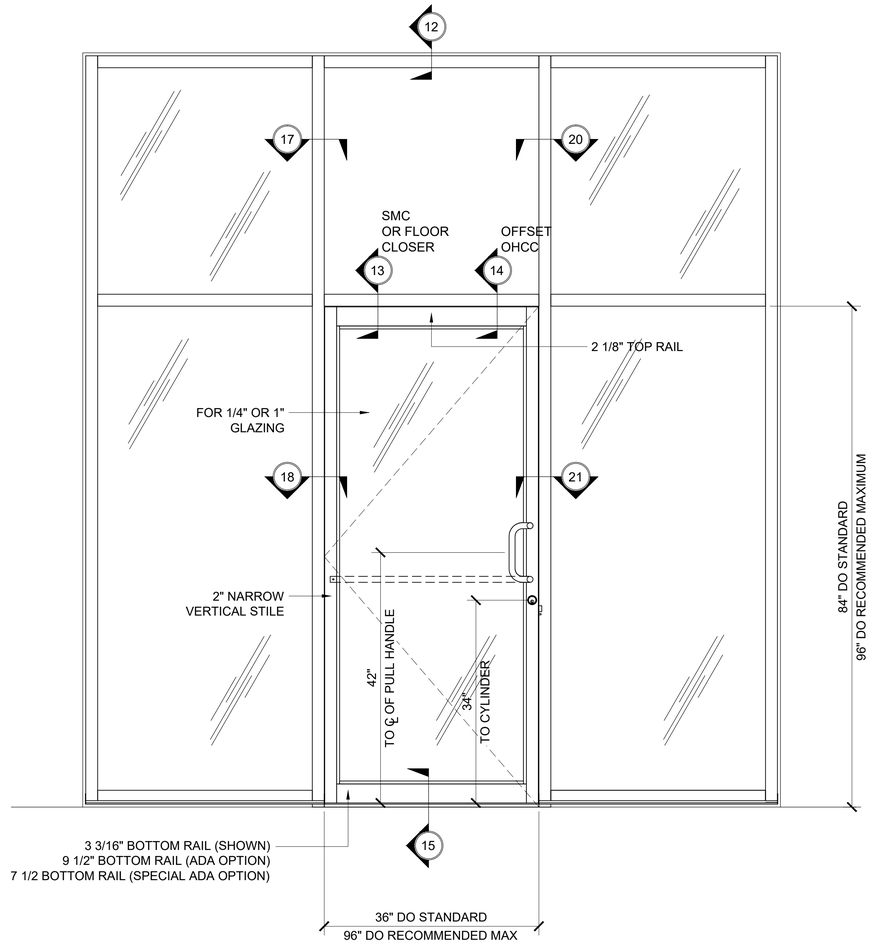
SERIES IT451 CENTER GLAZED STOREFRONT SYSTEM OFFSET HUNG DOOR FRAMING

IT451 SERIES SPECIFICATIONS

Series IT451 offers improved thermal performance using the Poly-Aluminizer™. United States Aluminum offers cost efficient versatile Center Glazed Systems with clean lines and superb performance. Series IT451 may be interior or exterior glazed. A top load EPDM gasket is used to position and weatherseal the glass in the aluminum pocket. Center Glazed Systems are compatible with most Unites States Aluminum entrance doors.

2" x 4 1/2" frame
1" Glazing infill (SHOWN) Optional snap-in reducers for 1/4" or 1/2" glass are available
Struct-Link™ thermal break
Full range of accessory components
Available in an array of architectural coatings and anodized finishes
Screw spline assembly
Shear block assembly
Stacking installation option
Interior or Exterior Glazed





STANDARD ABBREVIATIONS

RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLITE OPENING
DO	DOOR OPENING
DD	DOOR DIMENSION
SMC	SURFACE MOUNTED CLOSER
OHCC	OVERHEAD CONCEALED CLOSER

Revisions By:

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For more than 50 years, U.S. Aluminum has been designing and manufacturing quality architectural aluminum products for the nonresidential construction market. Projects throughout North America are proof that U.S. Aluminum has the manufacturing, engineering, and service capabilities to make your next project a success. Our complete product line includes: doors, entrances, storefronts, impact resistant systems, window walls, curtain walls, sunshades, and commercial windows. Custom systems can be designed to meet specific project requirements. Supplying architects, engineers, and building owners with quality products, on time, is what U.S. Aluminum is all about. Give us a call today to see for yourself that U.S. Aluminum is clearly THE SOLID CHOICE.

PAINT SPECIFICATIONS

DURANAR® Coatings

Duranar® Coatings contain 70% Kynar 500® or Hylar 5000® fluoropolymer resin, and superior performance pigmentation for the best color retention. This coating exceeds the performance requirements of specification AAMA 2605, and offers exceptional fade and chalking resistance for high-rise or high profile projects.

- Minimum of 70% fluoropolymer resin for premium performance in solid colors
- Two coat system: Corrosion inhibiting primer at 0.2 mil. and durable high performance topcoat at 1.0 mil. Minimum total dry thickness or 1.2 mil.
- Hardness: F minimum
- Gloss: Medium (25-35 @ 60˚)
- Meets or exceeds AAMA 2605 specification

DURANAR® SUNSTORM™ Coatings

Duranar® Sunstorm™ Coatings contain 70% Kynar 500® or Hylar 5000® fluoropolymer resin for superior performance in pearlescent colors. This coating exceeds the performance requirements of specification AAMA 2605, and offers exceptional fade and chalking resistance for high-rise or high profile projects.

- Minimum of 70% fluoropolymer resin for premium performance pearlescent colors
- Two coat system: Corrosion inhibiting primer at 0.2 mil. and durable high performance topcoat at 1.0 mil. Minimum total dry thickness or 1.2 mil.
- Hardness: F minimum
- Gloss: Medium (25-35 @ 60˚)
- Meets or exceeds AAMA 2605 specification

The 23 standard colors shown are the most popular colors being specified in today's architectural structures. Custom colors can be mixed and matched as required.

MANUFACTURING FACILITIES

U.S. Aluminum Serves You From 12 Locations in North America

Los Angeles, CA
2450 E. Vernon Ave.
Los Angeles, CA 90058-1802
Toll Free Phone: (800) 262-5151
Phone: (323) 268-4230
Fax: (866) 262-3299

Atlanta, GA
5530 Westpark Drive SW
Atlanta, GA 30336-2645
Phone: (404) 344-3468
Fax: (404) 344-3412

Chicago, IL
5501 W. Ogden Ave.
Cicero, IL 60804-3507
Phone: (708) 458-9070
Fax: (708) 458-7364

Concord, Ontario (Toronto Area)
65 Tigi Ct.
Concord, ON L4K 5E4 Canada
Phone: (905) 303-7966
Fax: (905) 303-7965

Dallas, TX
2080 Lone Star Dr.
Dallas, TX 75212-6390
Phone: (214) 634-7305
Fax: (214) 631-6519

Houston, TX
4420 Windfern Rd.
Houston, TX 77041-8918
Phone: (713) 462-6300
Fax: (713) 462-6306

Langley, BC (Vancouver Area)
5377 272nd St.
Langley, BC V4W 1P1 Canada
Phone: (604) 857-7766
Fax: (604) 857-1377

Miami, FL (Formerly Delta Doors)
7500 N. W. 69th Ave.
Miami, FL 33166-2543
Phone: (305) 888-0077
Fax: (305) 884-3111

Orlando, FL
6950 Presidents Dr.
Orlando, FL 32809-5668
Phone: (407) 857-7900
Fax: (407) 857-7766

Rock Hill, SC (Charlotte, NC Area)
720 Celriver Rd.
Rock Hill, SC 29730-8937
Phone: (803) 366-8326
Fax: (803) 366-5776

St. Louis, MO
11621 Fairgrove Industrial Blvd.
Maryland Heights, MO 63043-3437
Phone: (314) 997-5112
Fax: (314) 997-7504

Waxahachie, TX (Dallas Area)
200 Singleton Dr.
Waxahachie, TX 75165-5094
Phone: (972) 937-9651
Fax: (972) 937-0405

usalum.com

ENTRANCES

SERIES 550

WIDE STILE ALUMINUM DOORS

For Heavy Traffic

USALUMINUM

Series 550
Wide Stile

- For 1/4 " or 1" (6 or 25 mm) Glazing
- Adjustable Weatherstrip Astragal at Meeting Stiles
- Accommodates Most Custom Hardware
- Standard 1" (25 mm) Diameter Solid Push/Pulls
- Exterior and Interior Applications
- Available for Center Hung, Offset Pivot, or Butt Hinge Applications
- Choice of Standard or A.D.A. Access Bottom Rails
- Clear Anodized and Bronze Anodized in Single or Pairs of Doors
- Custom Sizes, Finishes, and Options Available

Our Entrance Doors are consistently built to the highest industry standards, ensuring years of reliable service. All doors are supplied with push/pull hardware, maximum security locks, and easily accommodate a wide variety of custom hardware for specific job requirements.

USALUMINUM
MANUFACTURED IN THE USA

USE MONOLITHIC TEMPERED GLASS

VISIT CRL-ARCH.COM FOR COMPLETE ARCHITECTURAL SPECIFICATIONS

CRL

A CRH COMPANY

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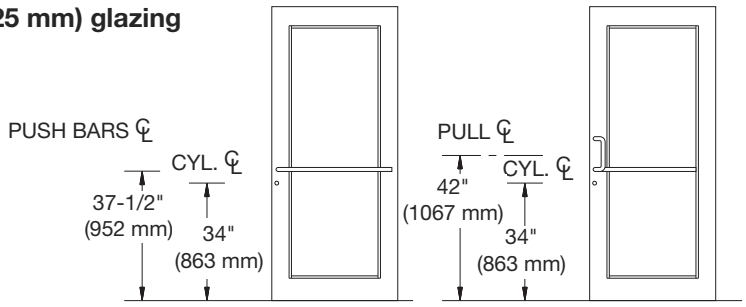
crl-arch.com

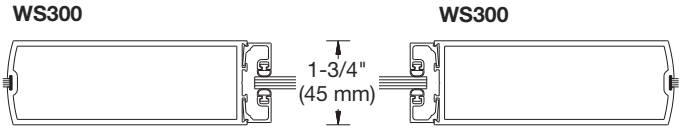
SERIES 550 WIDE STILE
TYPICAL DETAILS

For 1/4" (6 mm) or 1" (25 mm) glazing

For Specifications, Details, and Testing Data go to **usalum.com**.

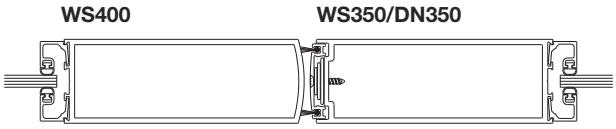


CENTER HUNG DOOR | **OFFSET PIVOT DOOR**

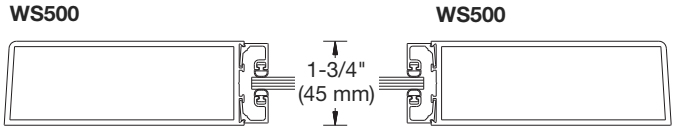


Single Door

CENTER HUNG DOORS

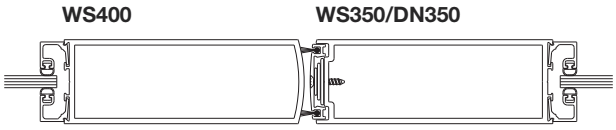


Meeting Stiles for Pairs of Doors

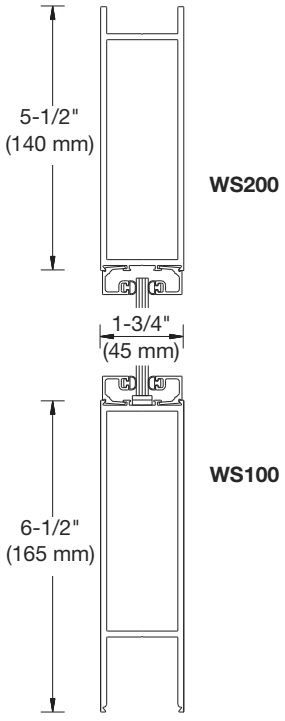


Single Door

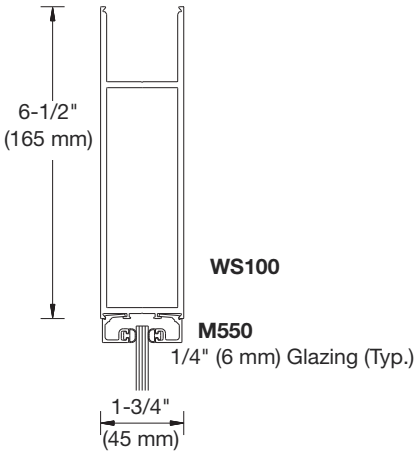
OFFSET PIVOT DOORS



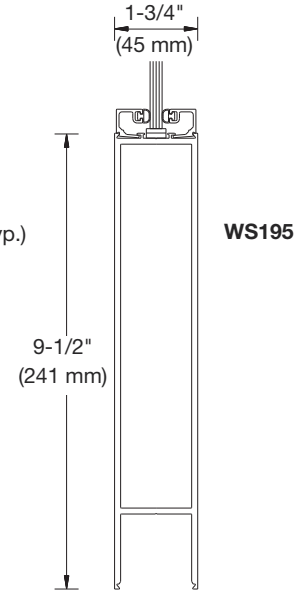
Meeting Stiles for Pairs of Doors



Standard Top and Bottom Rails



Special Top Rail for Offset Hung Doors With Overhead Concealed Closers
NOTE: Special Glass Size Required.



Special Bottom Rail to Comply With A.D.A.

NOT TO SCALE

PHONE: **(800) 262-5151 ext. 5305** | FAX: **(866) 262-3299** | Email: **usalum@crlaurence.com** | Website: **usalum.com**

NEW CLOPAY COMMERCIAL – MODEL 904

architectural series

ALUMINUM FULL-VIEW DOORS

Clopay's new Model 904, possesses a sleeker design with fewer lines and angles to its appearance. It has equal stile spacing with rails and stile profiles more proportional to each other. This new design provides a more aesthetically pleasing appearance making it ideal in applications such as restaurants, auto dealerships and fire stations.

clopaycommercial.com

Frame Detail

Section Joint Seal

Reinforcing Fin (where applicable)

OPTIONS

PANEL OPTIONS

Aluminum Full-View

Solid Aluminum

FRAME/SOLID PANEL COLOR OPTIONS

Clear Aluminum (Anodized)

Standard White (Painted)

Bronze (Painted)

Chocolate (Painted)

Bronze (Anodized)*

Black (Anodized)*

Dark Bronze (Anodized)*

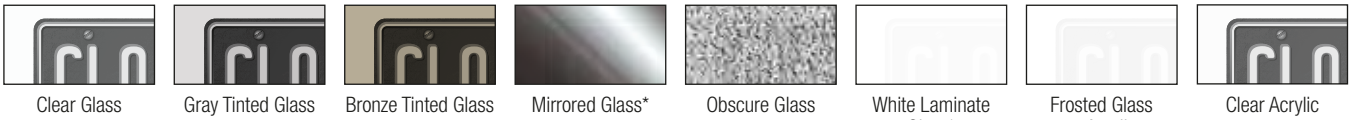
** Additional cost and lead time may apply. The use of "Bronze (Painted)" is recommended due to slight color variation that may occur during the anodizing process.*

CUSTOM PAINT OPTIONS

Color Blast® finish paint system or RAL Powder Coating give you thousands of color options for endless upgrades. See your Clopay Dealer for details.

COLOR BLAST® | RAL

GLASS/PANEL OPTIONS



Clear Glass | Gray Tinted Glass | Bronze Tinted Glass | Mirrored Glass* | Obscure Glass | White Laminate Glass* | Frosted Glass or Acrylic | Clear Acrylic

Gray Acrylic | White Acrylic | Clear Polycarbonate | Bronze Polycarbonate | Aluminum Panel (Color-matched)

**Glass/acrylic panels may be combined with aluminum panels.*
Custom glass and colors available.

PERFORMANCE OPTIONS

HEAVY-DUTY HARDWARE

Double-end Hinge

3" Track

High Performance Hardware

SPECIALTY PRODUCTS

Center Mullions

Exhaust Port

OPTIONAL WARRANTY

Extended 8-year hardware warranty includes upgraded industrial hardware. Upgraded hardware includes 3" track and rollers, 11 gauge hinges, heavy duty brackets, solid shaft and more.

Clopay EXTENDED 8-YEAR HARDWARE WARRANTY

WINDCODE®

Design pressures (DP) up to 14 PSF depending on size. Models tested 50% greater than DP.

STANDARD SPECIFICATIONS	
Max Width	24' 2"
Max Height	20' 0"
Exterior/Interior Panel Thickness	2-1/8"
End Stile Thickness	4.5" wide single up to 14' 2" 6.5" wide double over 14' 2"
Emboss	Recessed panel with smooth surface
Panel Style	Full-view or solid aluminum panel
Section Construction	6063-T5 extruded aluminum alloy
Window Style	Full-view

Glass	DSB glass, tempered glass, acrylic, thicknesses of 1/8", 1/4" and 1/2"	
Solid Panels	Insulated and non-insulated aluminum panels	
Wind Load	Non-impact rated	
Joint Seal	Yes	
Springs	10,000 cycle springs Galvanized aircraft cable with minimum 7:1 safety factor	
Tracks	2" angle mount track with standard lift 3" track where applicable	
Hardware	TPE astragal in aluminum retainer Steel step plate and lift handle Inside slide lock for increased security	Commercial 10-ball steel rollers 14 gauge hinges
Warranty	Standard Paint – 5 Years Material and Workmanship – 1 Year	Color Blast® finish – 5 Years Hardware – 1 Year

Clopay®

For more information on these and other Clopay products, call **1-800-526-4301** or visit **clopaycommercial.com**

MADE IN USA

STEEL | ARCAT | DASMA | IDA www.doors.org

TRUDOOR™

FLUSH HOLLOW METAL DOOR

Heavy-duty steel door for commercial, industrial and institutional applications

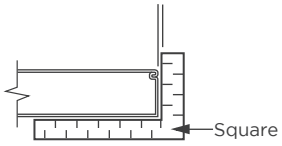
Our stock hollow metal door is an affordable non-handed, square-edge door solution designed to meet your requirements for quality full flush steel doors - for commercial, institutional and industrial applications. Stocked with Steelcraft locations, these doors are designed to satisfy your requirements for durability, security, aesthetics or fire protection. Trudoor is authorized by Warnock Hersey / Intertek to modify, re-certify and label fire-rated metal doors.

Features:

- Heavy-duty, SDI Level 2 - 18 gauge steel faces
- 1-3/4" Thick, non-handed design with reversible hinge plates
- Polystyrene or rigid honeycomb core
- Inverted top and bottom channels for additional stability and protection
- Interlocking seam enhances structural rigidity and durability
- Heavy gauge hinge reinforcements and door closer reinforcement
- Available with a wide range of glass lites, louvers and hardware preps
- Factory applied rust inhibiting primer (no special color options)
- Fire-rated up to 3 hours with WHI / ITS mylar label applied
- Preps include 161 (cylindrical lock), 86ED (mortise lock), RPD (Rim Panic Reinforced)

Code Compliance:

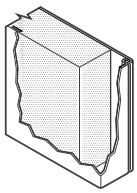
- Meets or exceeds ANSI A250.6 and A250.6
- Construction meets the requirements of ANSI A250.8
- Listed for installations requiring compliance to negative pressure testing (UL-10B) and positive pressure (UL-10C)
- Florida Product Approved



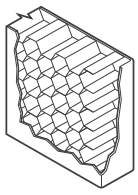
Non-Handed Edge

Intertek

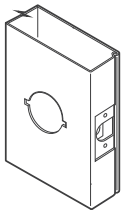
BAA Compliant



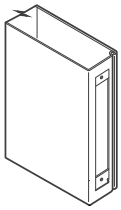
Polystyrene Core



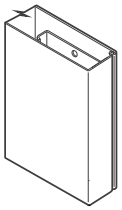
Honeycomb Core



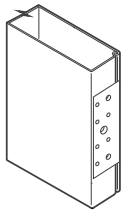
161 Lock



86ED Lock



RPD



Non-Handed Mortise Hinge Prep

Grade and Model:

ANSI A250.8 - SDI 100			Edge Construction	Maximum Sizes		Recommended Gauge of Frame
Level	Model	Description		Single	Pair	
Level 2: Heavy Duty Commercial			18 gauge (1.0 mm) - heavy commercial and institutional applications with high use			
2	1	Full Flush	Visible	4'0" x 8'0"	8'0" x 8'0"	16 gauge (1.3 mm)

Grades and models defined by Steel Door Institute (SDI)

Manufacturers include Steelcraft and ASSA Abloy