

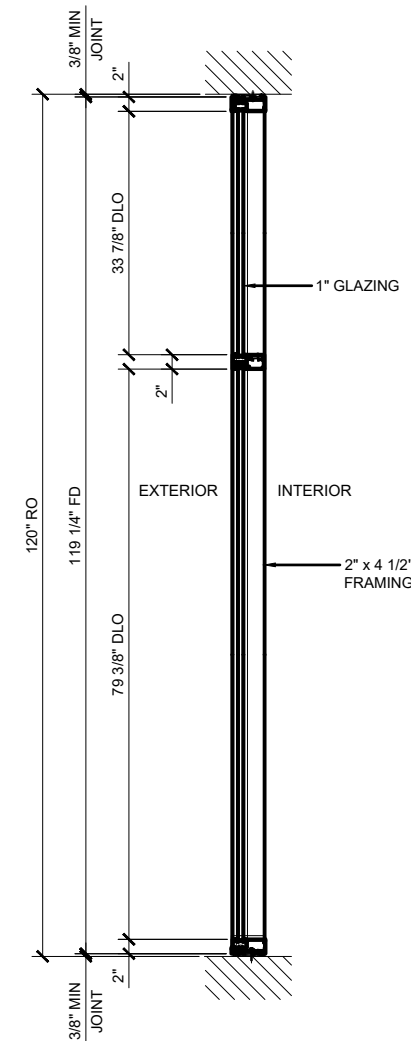
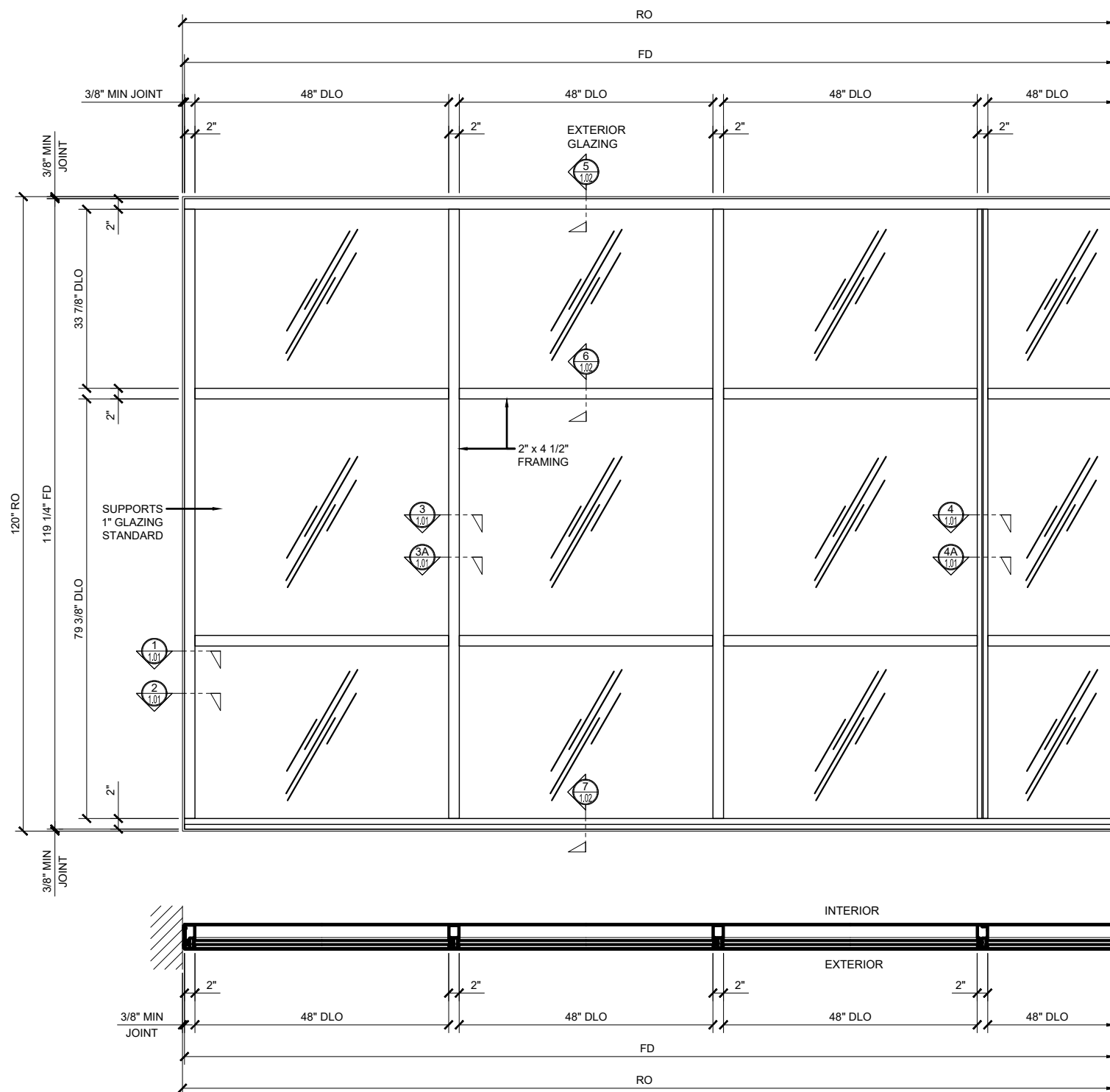
CRL US ALUMINUM - OST451 SERIES THERMAL STACKING WINDOW WALLS (2"X4-1/2" SYSTEM FOR 1" GLASS) EXTERIOR GLAZING

OST451 & OST451SG SERIES SPECIFICATIONS

Fabrication and installation labor costs have always been a decisive factor in selecting framing systems for storefront projects. U.S. Aluminum offers cost efficient versatile Offset Glazed Systems with clean lines and superb performance. Series OST451 & OST451SG were designed for labor saving stacking type installations, and may be interior or exterior glazed. A top load E.P.D.M. gasket is used to position and weatherseal the glass in the aluminum pocket. Offset Glazed Systems are compatible with most U.S. Aluminum entrance doors.

- 2" x 4 1/2" frame
- 1" Glazing infill
- Full range of accessory components
- Available in an array of architectural coatings and anodized finishes
- Anchor clips assembly
- Interior or Exterior Glazed

GLASS SIZING NOTE:
REFERENCE U.S. ALUMINUM CATALOGS & WEB SITE'S LOAD CHARTS FOR SIZING GUIDELINES.

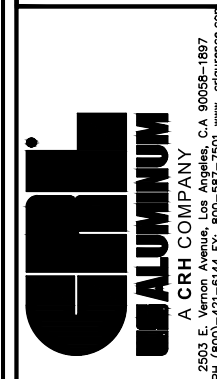


STANDARD ABBREVIATIONS

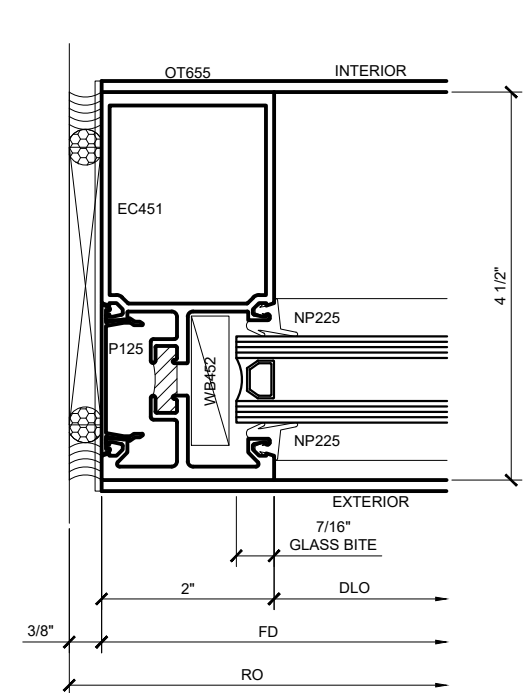
- RO ROUGH OPENING
- FD FRAME DIMENSION
- DLO DAYLIGHT OPENING
- DO DOOR OPENING
- DD DOOR DIMENSION
- DP DIMENSION POINT
- SMC SURFACE MOUNTED CLOSER
- OHCC OVERHEAD CONCEALED CLOSER

Description:
CRL US ALUMINUM
OST451 SERIES
THERMAL STACKING
WINDOWS FOR 1" GLASS

Drawn By: JGM
Date: 04/30/19
Scale: 1"=1'-0"
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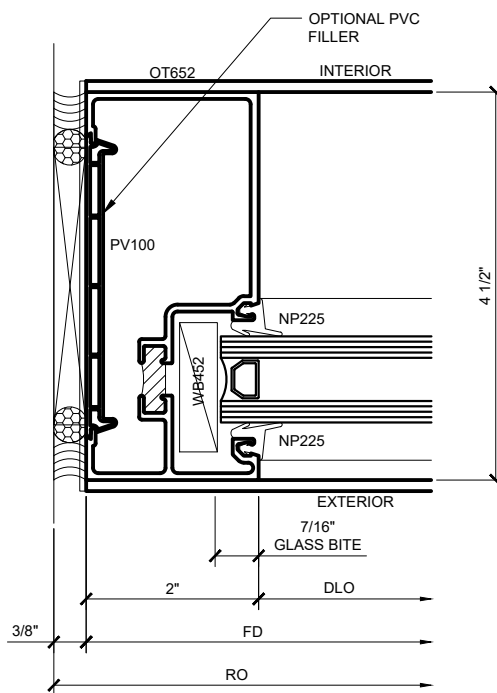


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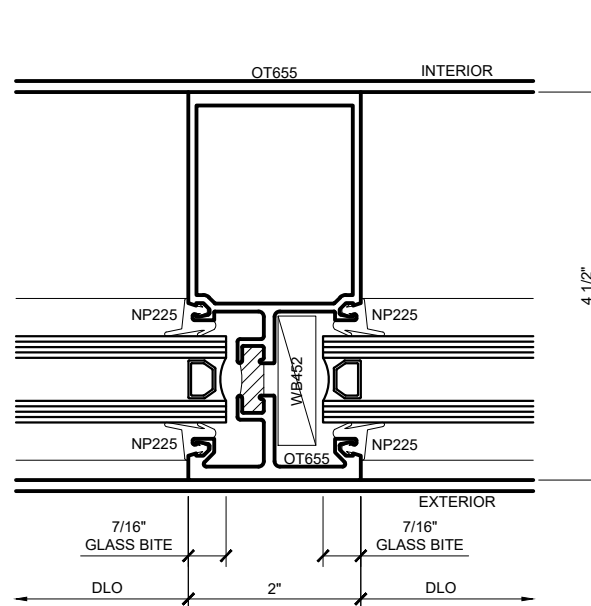
① SECTION DETAIL AT OPTIONAL JAMB

ARCH REF: N/A 1'-0"=1'-0"



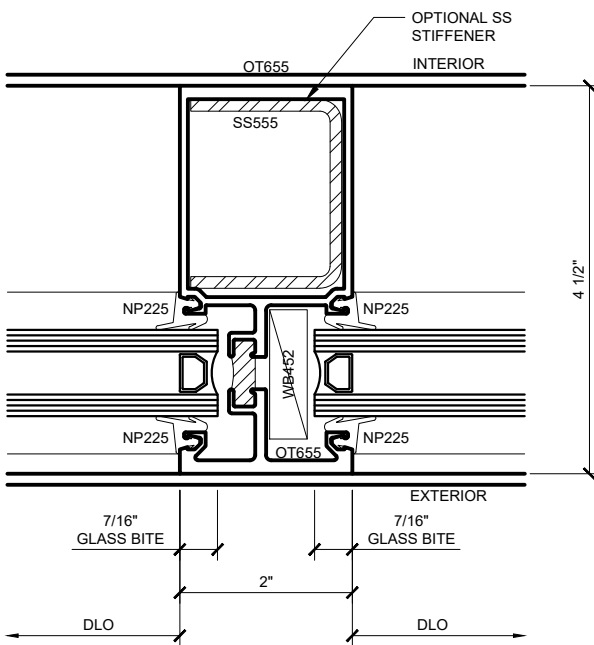
② SECTION DETAIL AT JAMB

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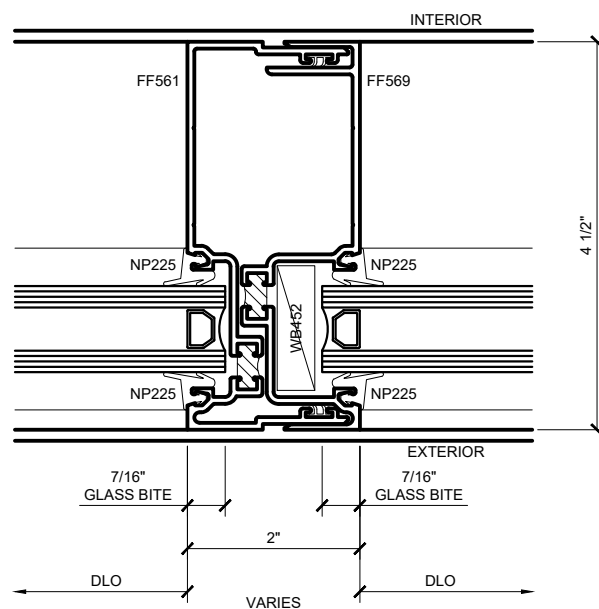
③ SECTION DETAIL AT VERTICAL

ARCH REF: N/A 1'-0"=1'-0"



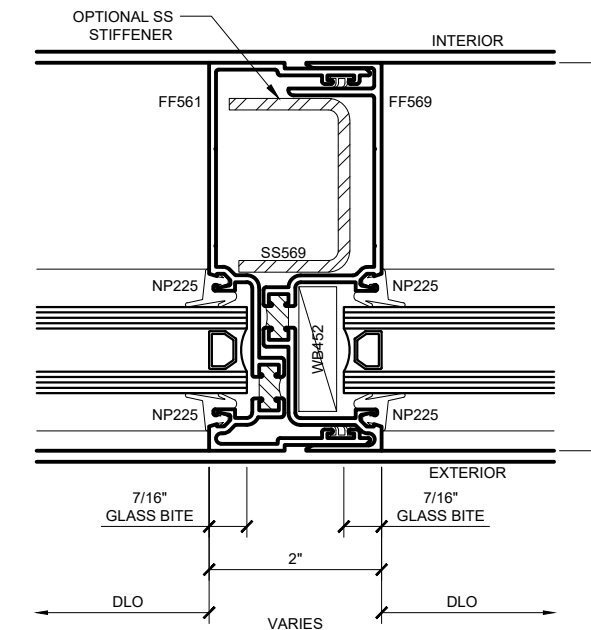
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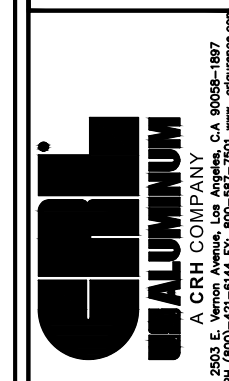
④ SECTION DETAIL AT EXPANSION MULLION

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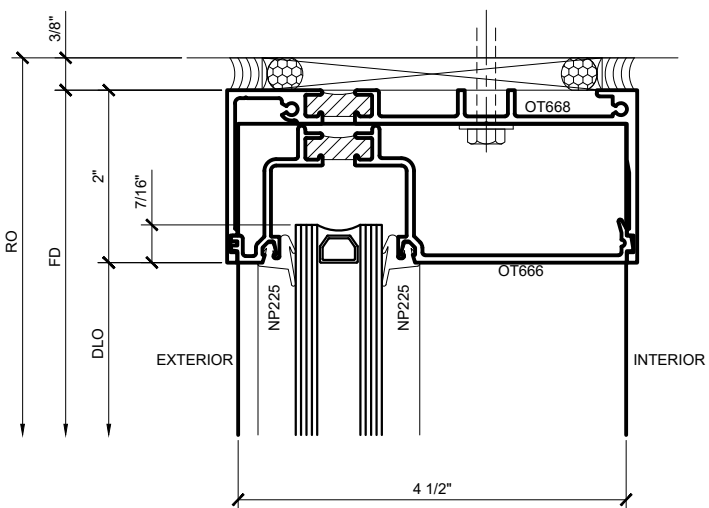
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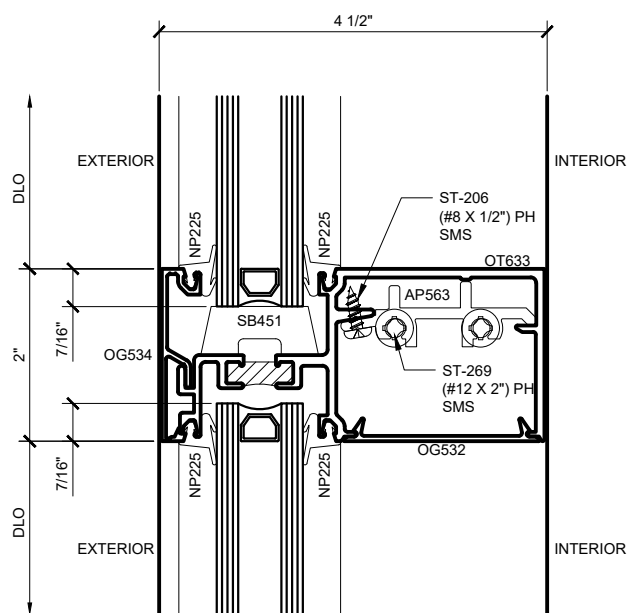


Description:
 CRL US ALUMINUM
 OST451 SERIES
 THERMAL STACKING
 WINDOWS FOR 1" GLASS

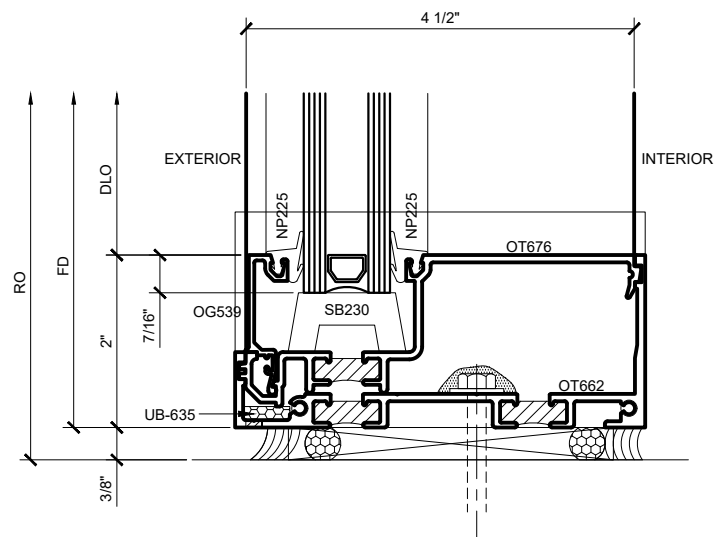
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5 SECTION DETAIL AT HEAD
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"

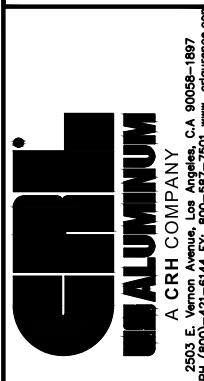


6 SECTION DETAIL AT INTERMEDIATE HORIZONTAL
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"



7 SECTION DETAIL AT SILL
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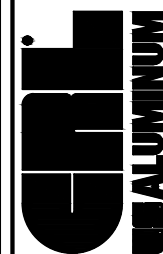
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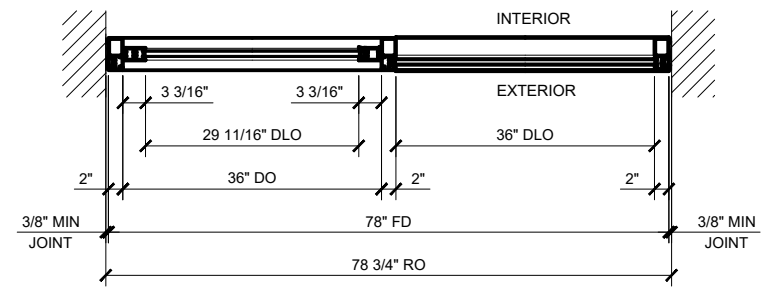
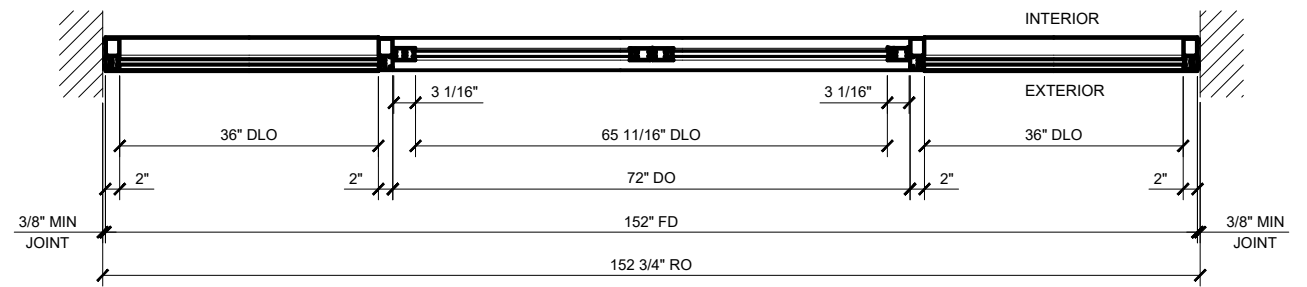
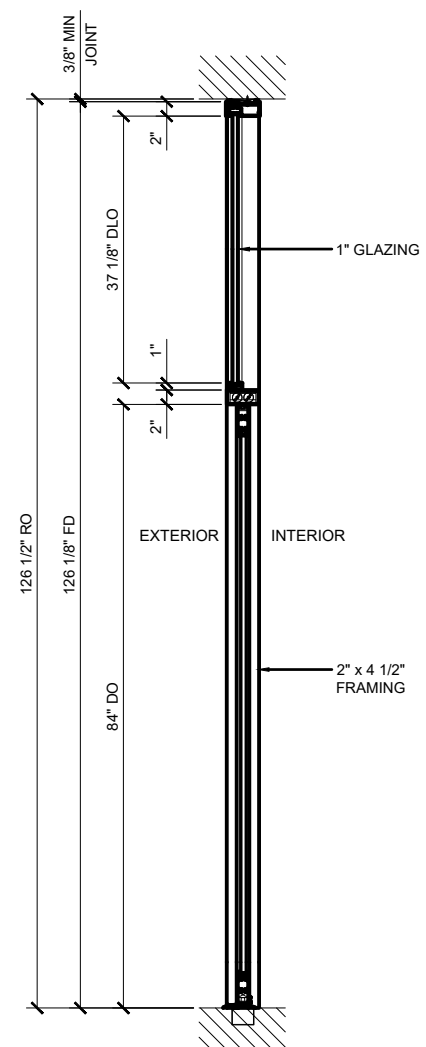
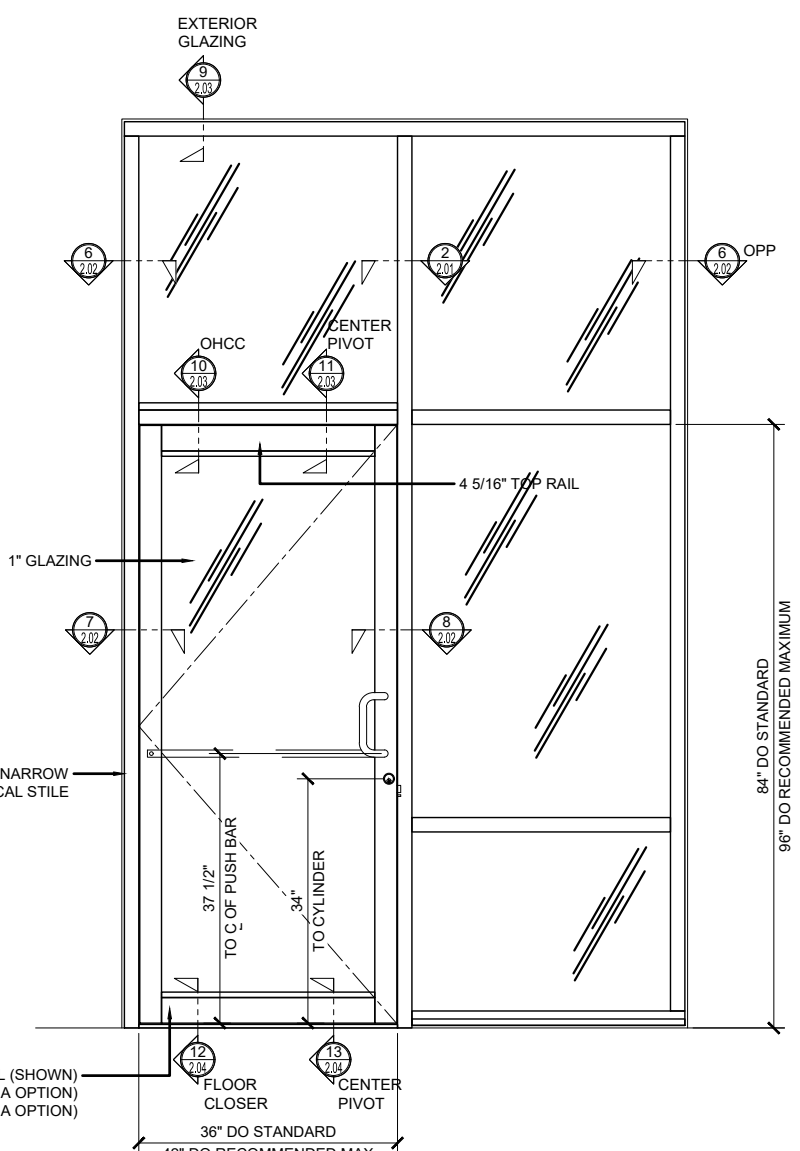
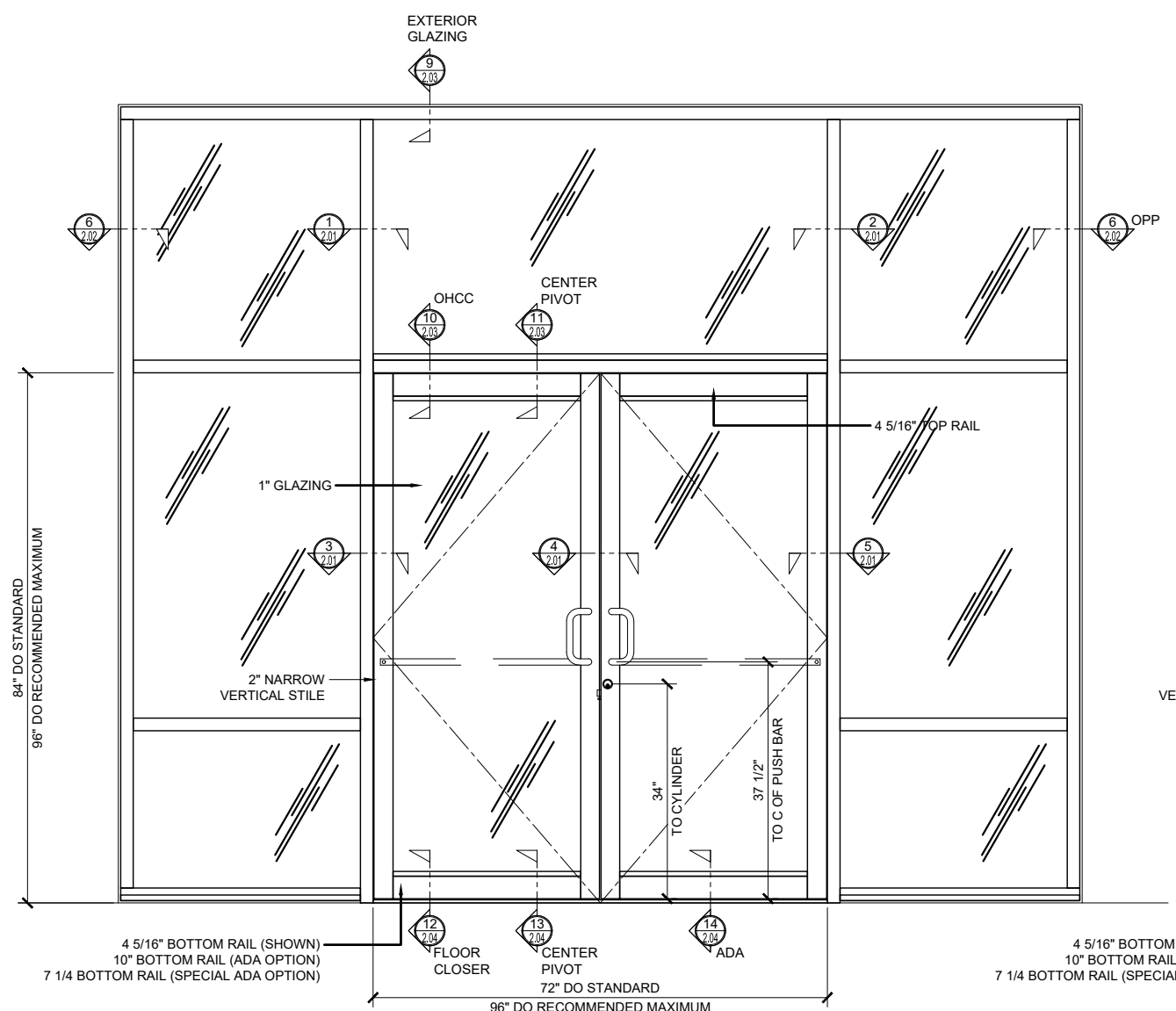
Description:
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 OST451 SERIES
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 WINDOWS FOR 1" GLASS

Drawn By: JGM
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WINDOW WALLS - OST451 SERIES (2"X4-1/2" SYSTEM FOR 1" GLASS) EXTERIOR GLAZING WITH CENTER HUNG DOORS



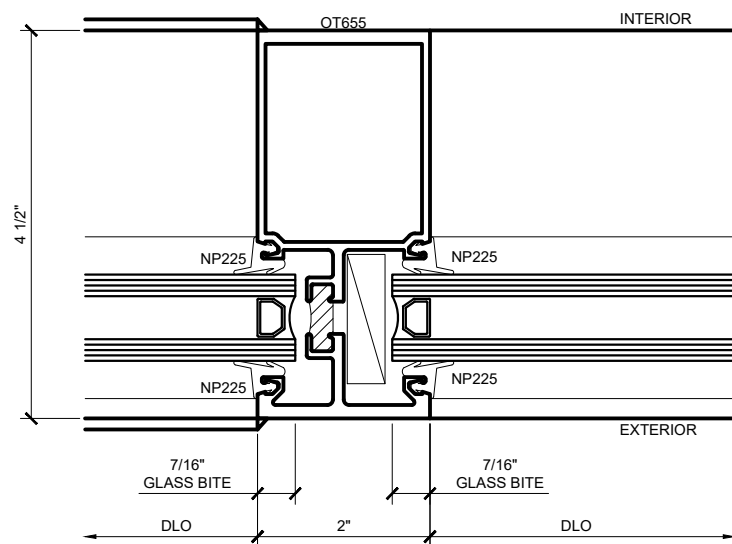
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STANDARD ABBREVIATIONS	
RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLIGHT OPENING
DO	DOOR OPENING
DD	DOOR DIMENSION
DP	DIMENSION POINT
SMC	SURFACE MOUNTED CLOSER
OHCC	OVERHEAD CONCEALED CLOSER

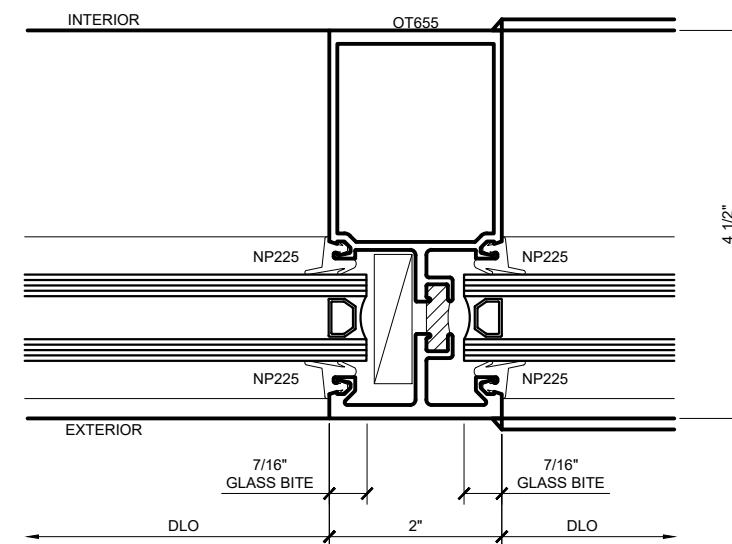
Description:
CRL US ALUMINUM
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THERMAL STACKING
WINDOWS FOR 1" GLASS

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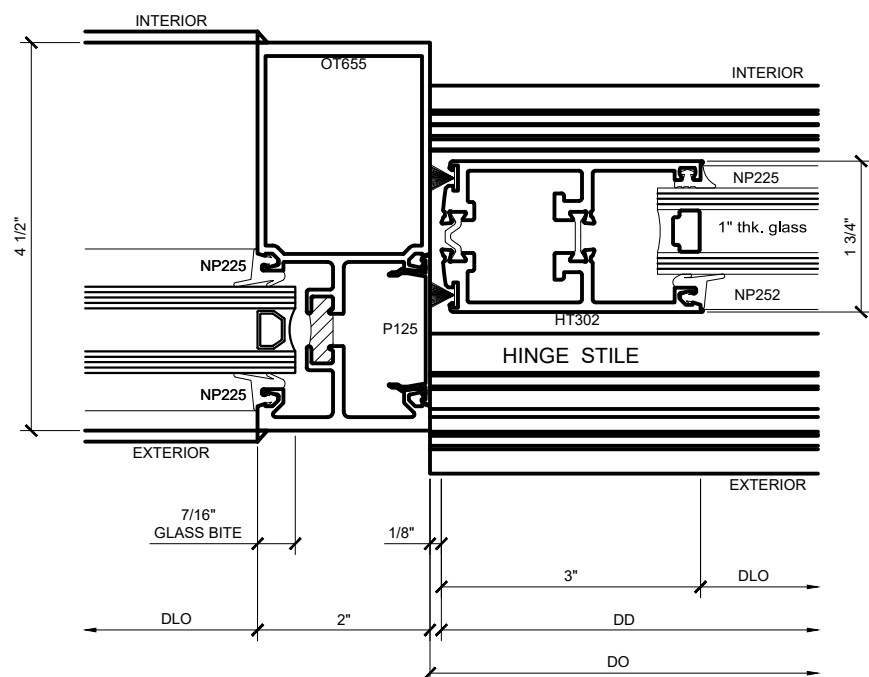
① SECTION DETAIL AT VERTICAL

ARCH REF: N/A 1'-0"=1'-0"



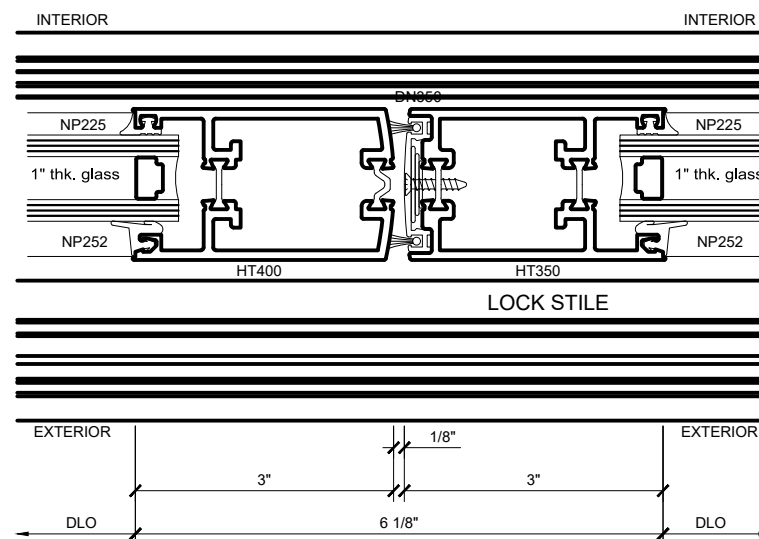
② SECTION DETAIL AT VERTICAL

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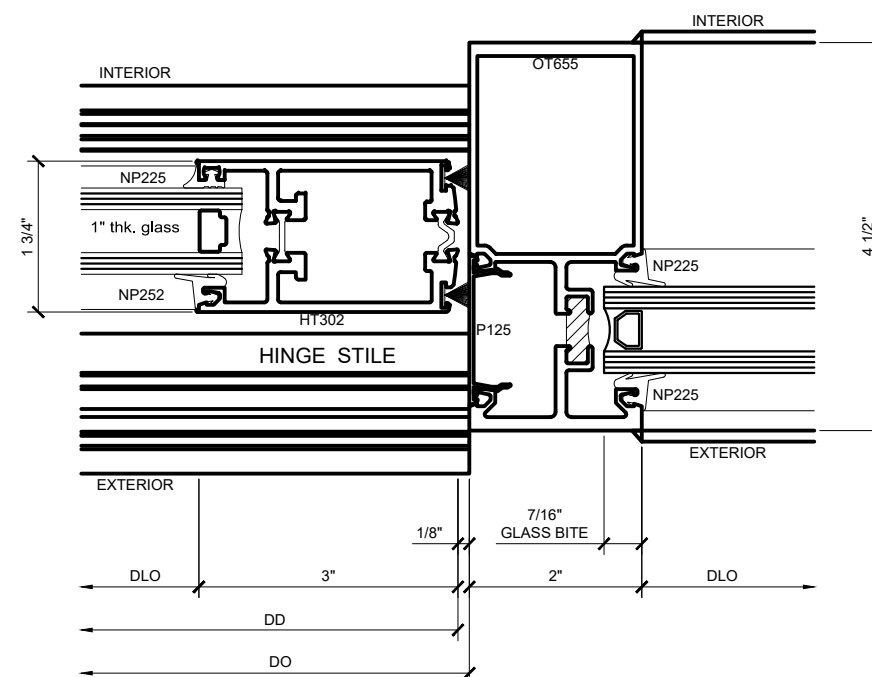
③ SECTION DETAIL AT DOOR JAMB

ARCH REF: N/A 1'-0"=1'-0"



④ SECTION DETAIL AT MEETING STILES

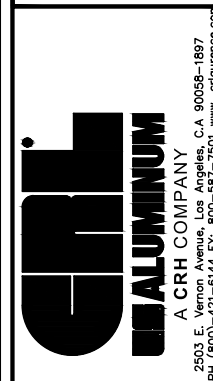
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⑤ SECTION DETAIL AT DOOR JAMB

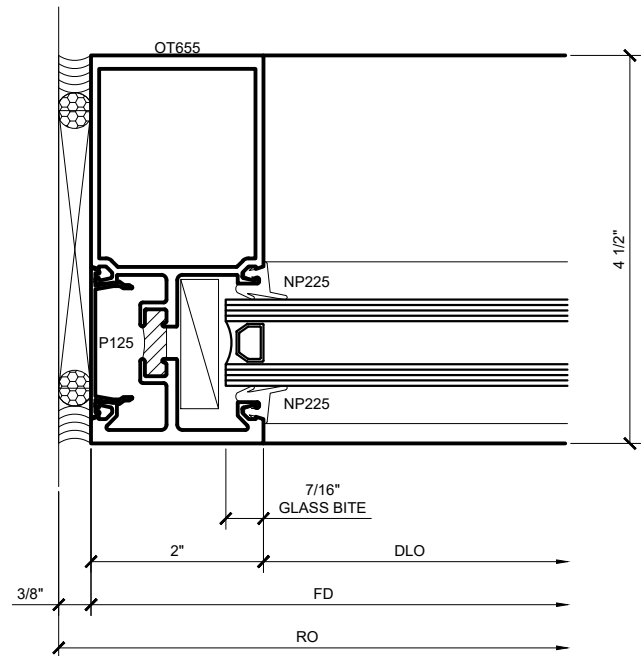
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Revisions By:



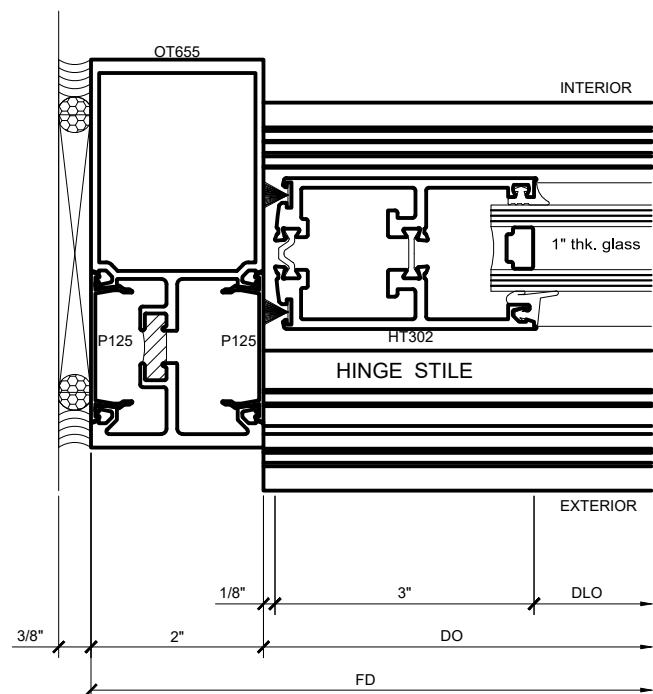
Description:
CRL US ALUMINUM
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THERMAL STACKING
WINDOWS FOR 1" GLASS

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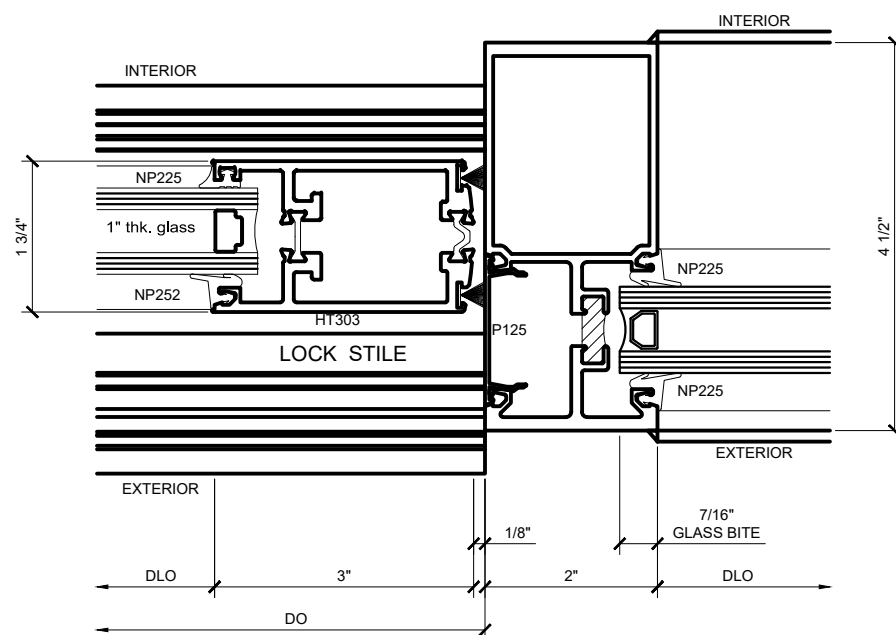
⑥ SECTION DETAIL AT TRANSOM

ARCH REF: N/A 1'-0"=1'-0"



⑦ SECTION DETAIL AT DOOR JAMB

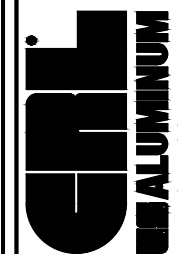
ARCH REF: N/A 1'-0"=1'-0"



⑧ SECTION DETAIL AT JAMB

ARCH REF: N/A 1'-0"=1'-0"

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Description:
CRL US ALUMINUM
OST451 SERIES
THERMAL STACKING
WINDOWS FOR 1" GLASS

Drawn By: TGM

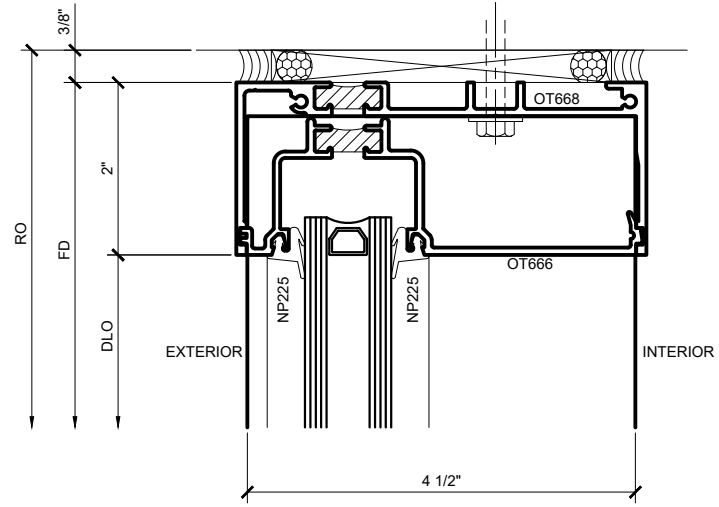
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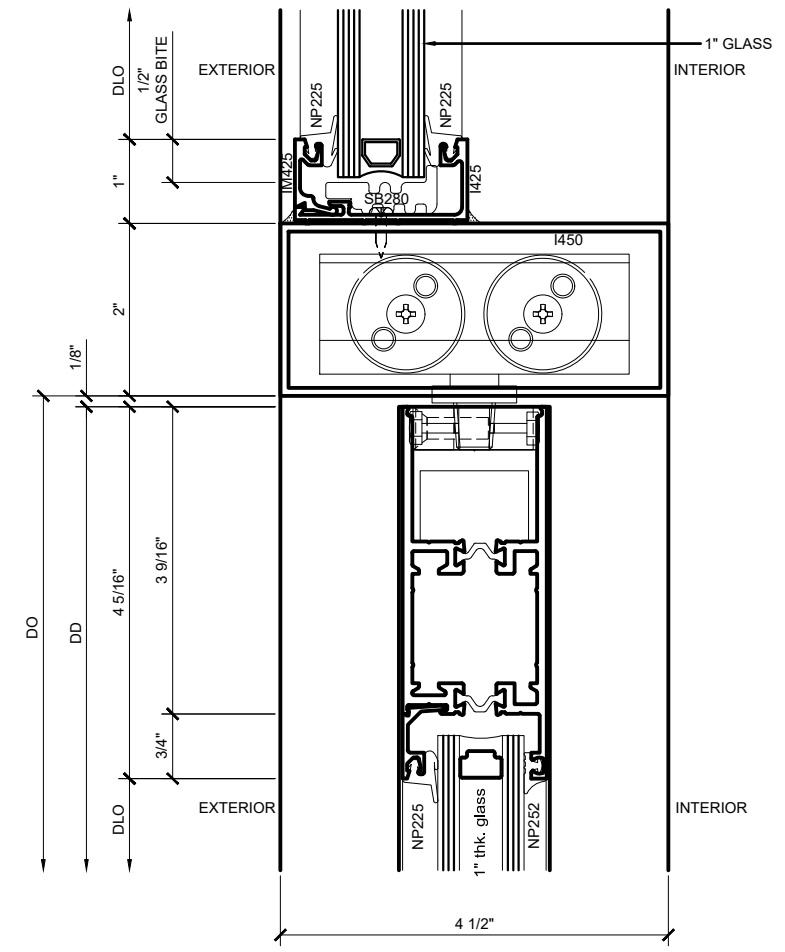
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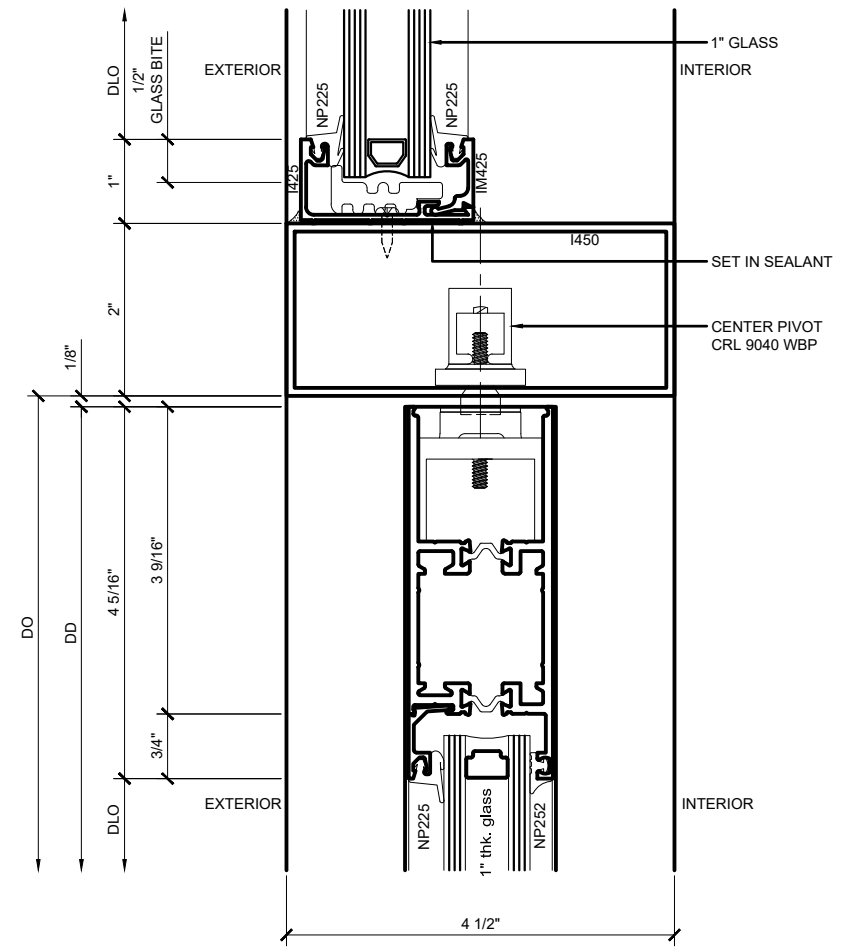
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9 SECTION DETAIL AT HEAD
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"



10 SECTION DETAIL AT DOOR HEAD WITH OHCC
 ARCH REF: N/A 1'-0"=1'-0"



11 SECTION DETAIL AT DOOR HEAD
 ARCH REF: N/A 1'-0"=1'-0"

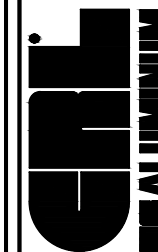
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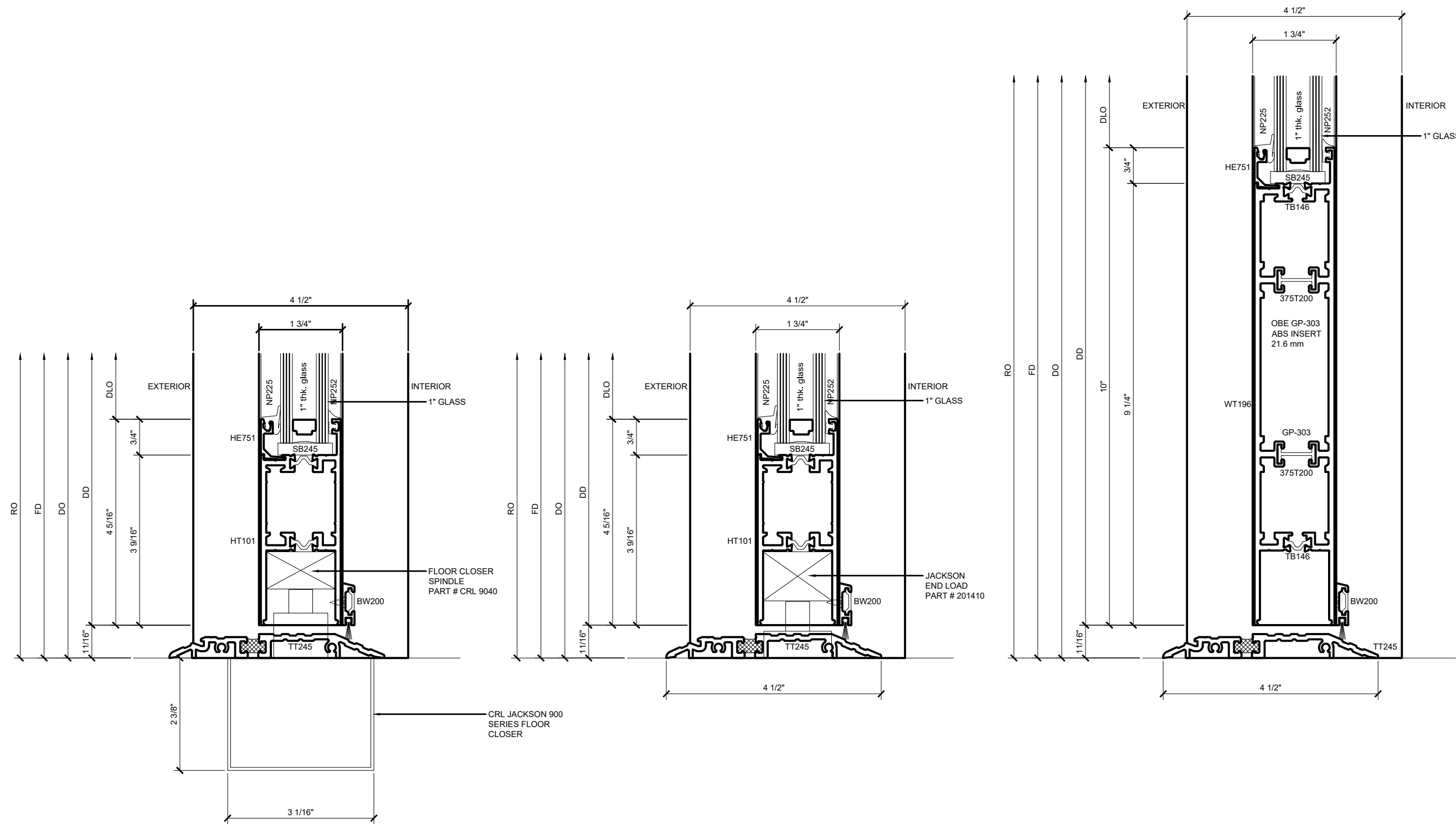
Description:
 CRL US ALUMINUM
 OST451 SERIES
 THERMAL STACKING
 WINDOWS FOR 1" GLASS

Drawn By: TGM
 Date: 04/30/19
 Scale: 1"=1'-0"
 File Name:
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 Sheet

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12 SECTION DETAIL AT DOOR SILL
 ARCH REF: N/A 1'-0"=1'-0"

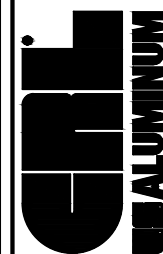
13 SECTION DETAIL AT DOOR SILL
 ARCH REF: N/A 1'-0"=1'-0"

14 SECTION DETAIL AT ADA DOOR SILL
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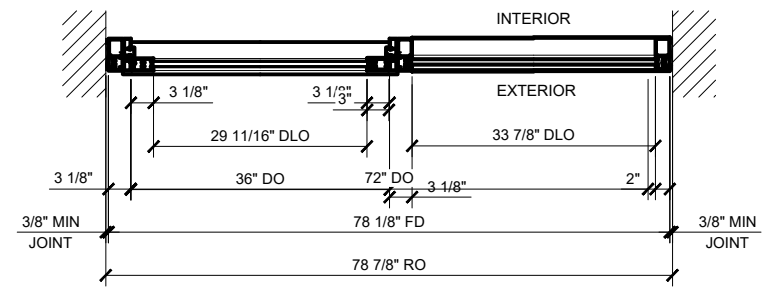
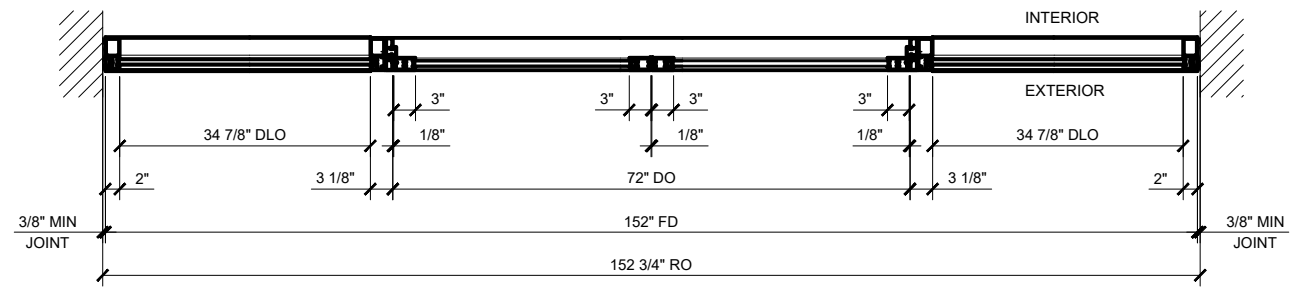
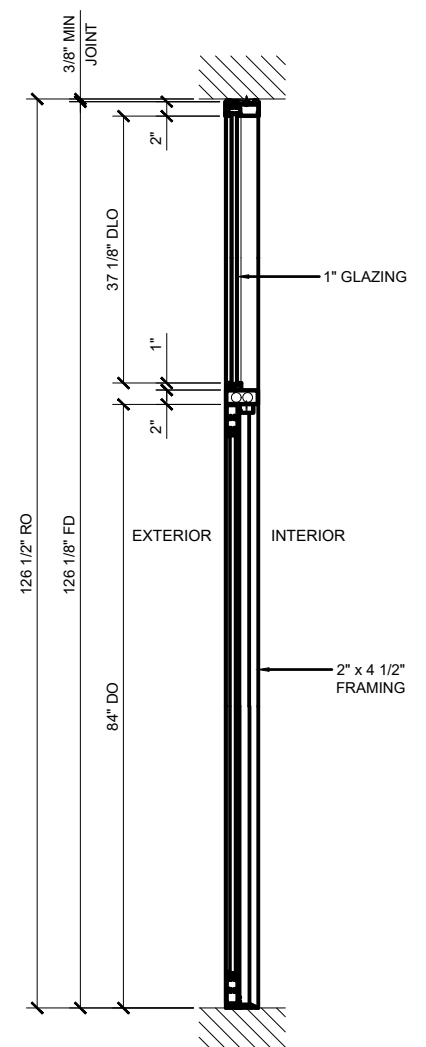
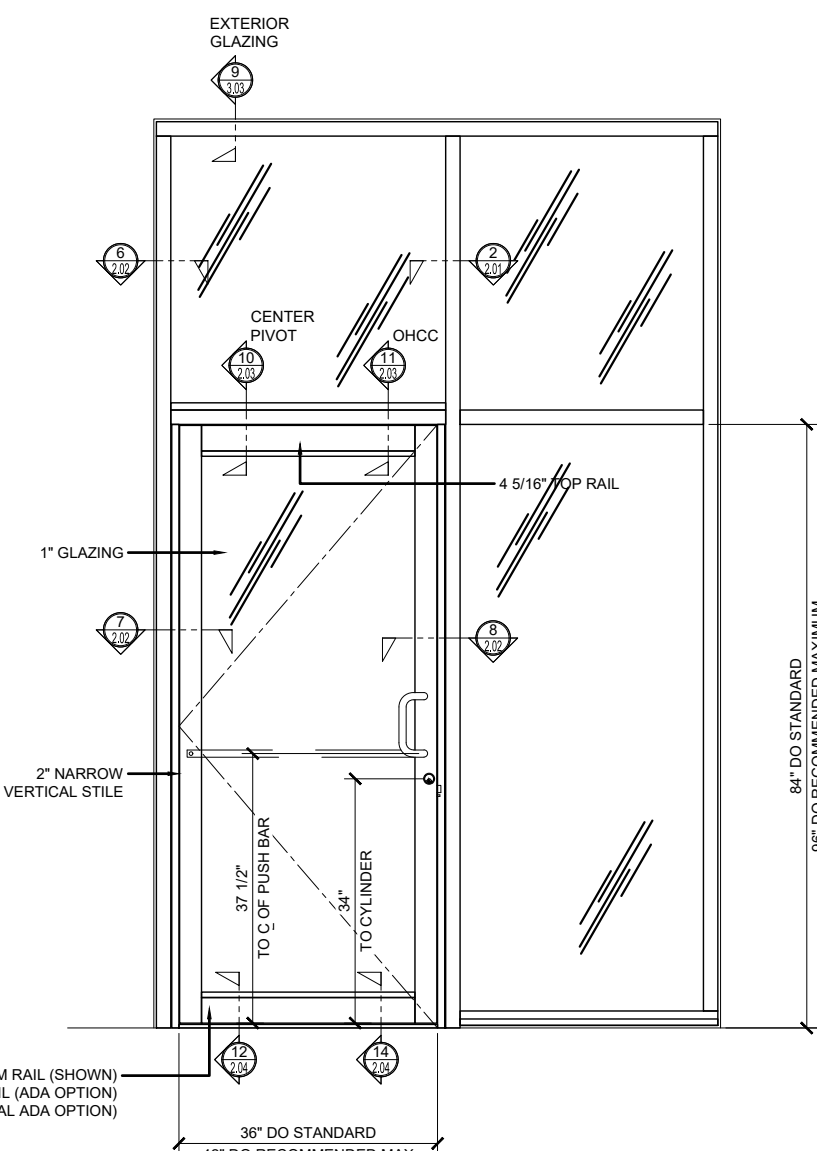
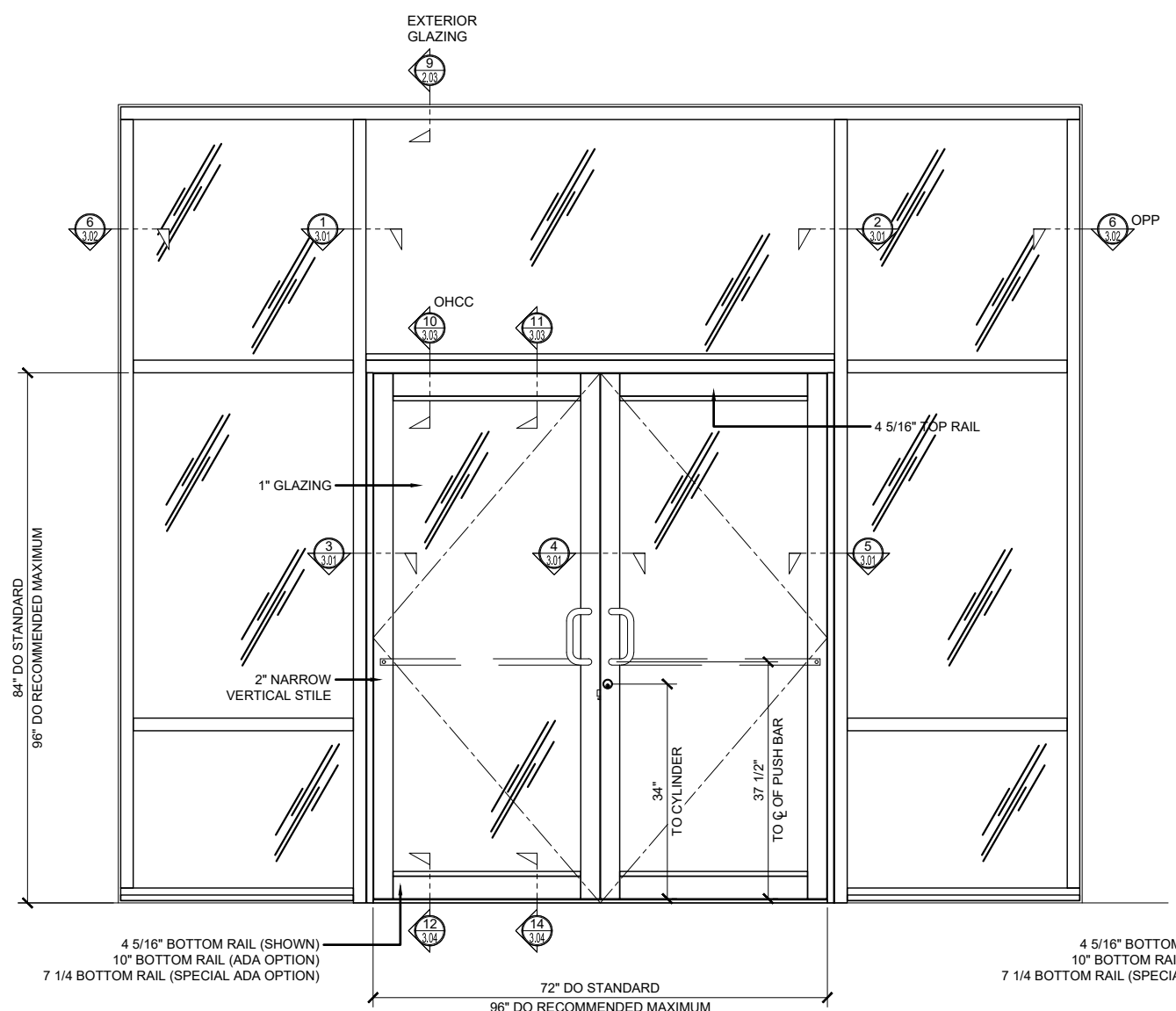
Description:
 CRL US ALUMINUM
 OST451 SERIES
 THERMAL STAKING
 WINDOWS FOR 1" GLASS

Drawn By: TGM
 Date: 04/30/19
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WINDOW WALLS - OST451 SERIES (2"X4-1/2" SYSTEM FOR 1" GLASS) EXTERIOR GLAZING WITH OFFSET HUNG DOORS



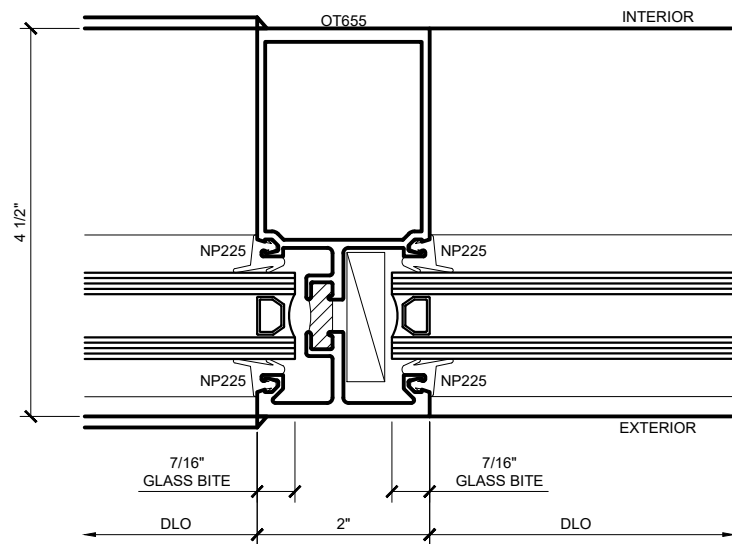
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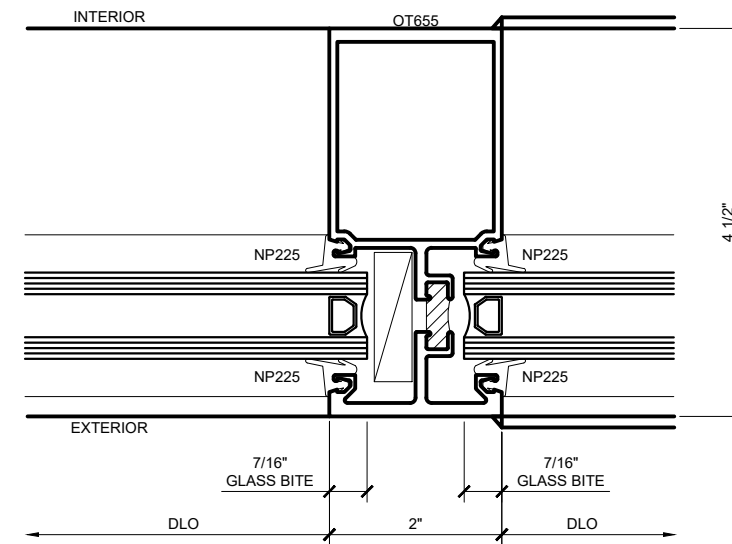
STANDARD ABBREVIATIONS	
RO	ROUGH OPENING
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Description:
CRL US ALUMINUM
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THERMAL STACKING
WINDOWS FOR 1" GLASS

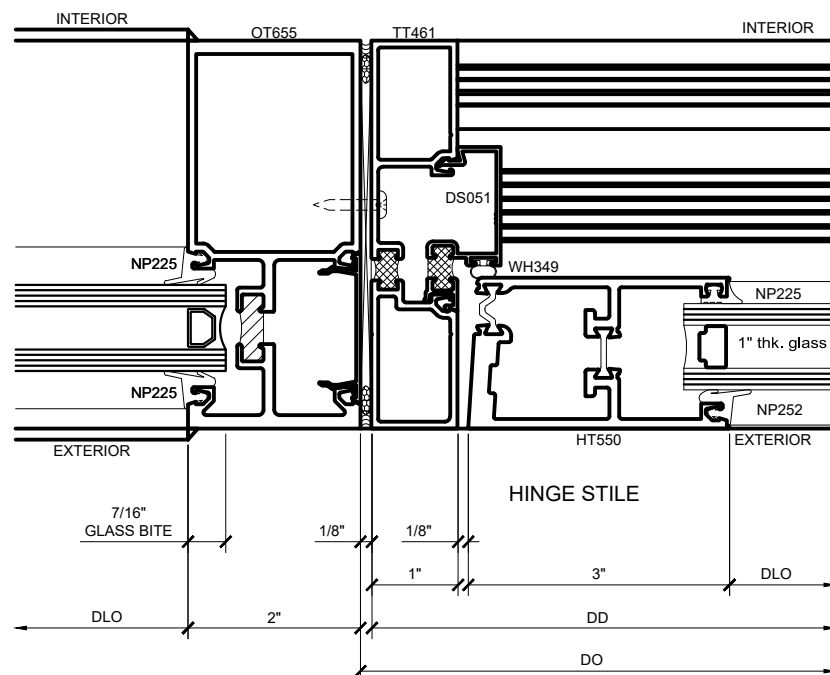
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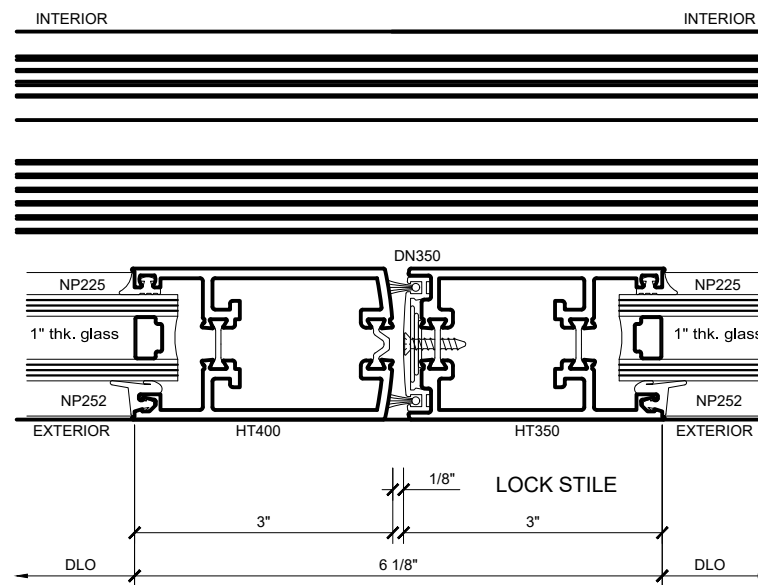
① SECTION DETAIL AT VERTICAL
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"



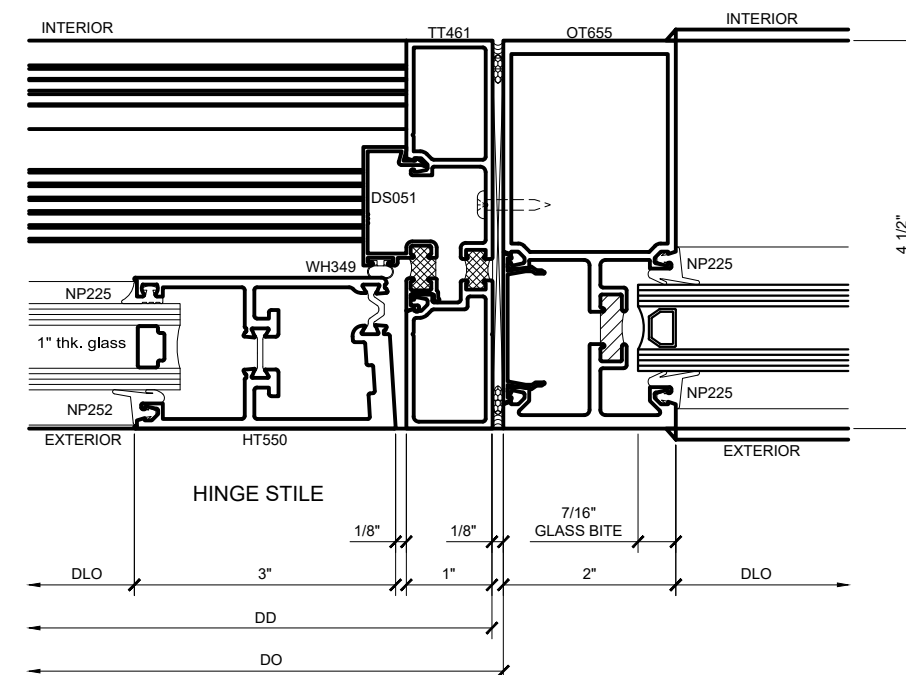
② SECTION DETAIL AT VERTICAL
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"



③ SECTION DETAIL AT DOOR JAMB
 ARCH REF: N/A 1'-0"=1'-0"

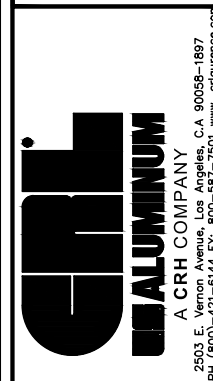


④ SECTION DETAIL AT MEETING STILES
 ARCH REF: N/A 1'-0"=1'-0"



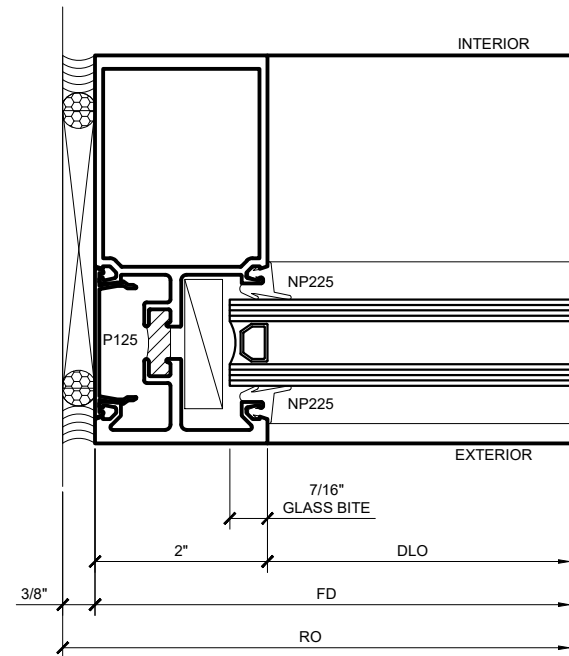
⑤ SECTION DETAIL AT DOOR JAMB
 ARCH REF: N/A 1'-0"=1'-0"

Revisions By:

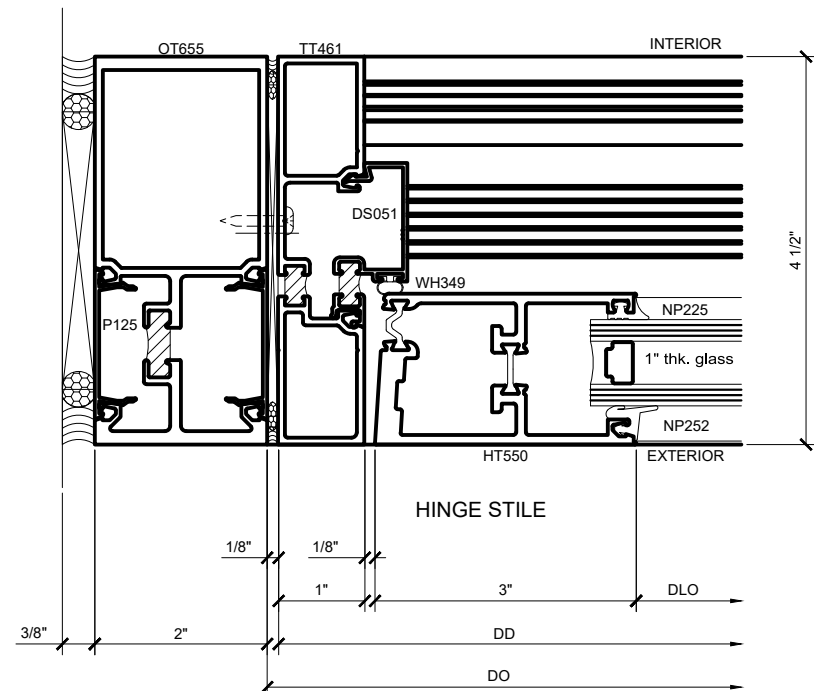


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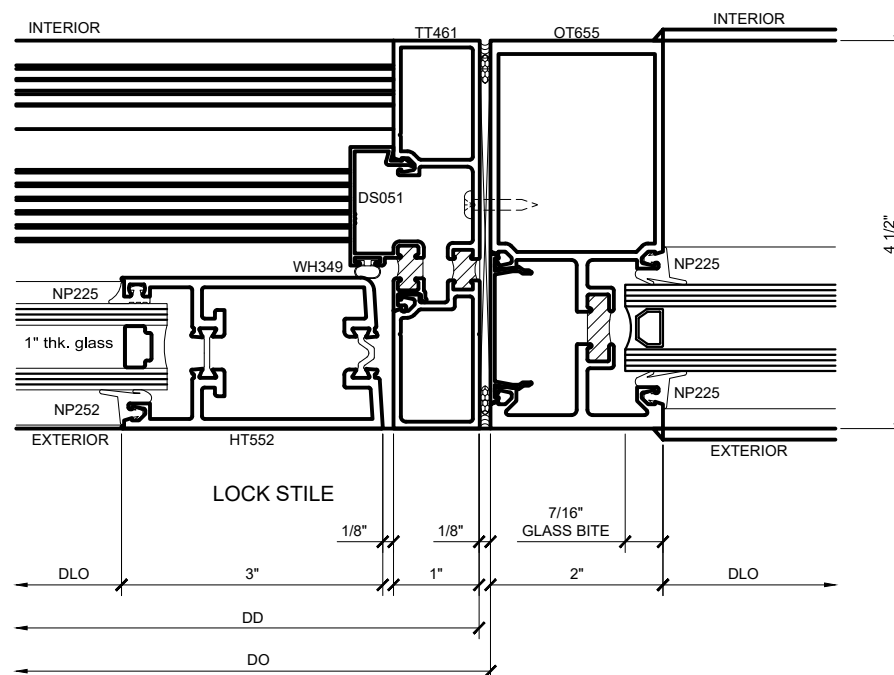
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6 SECTION DETAIL AT TRANSOM
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"

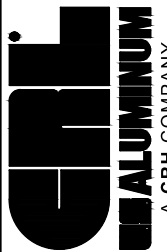


7 SECTION DETAIL AT DOOR JAMB
 ARCH REF: N/A 1'-0"=1'-0"



8 SECTION DETAIL AT JAMB
 ARCH REF: N/A 1'-0"=1'-0"

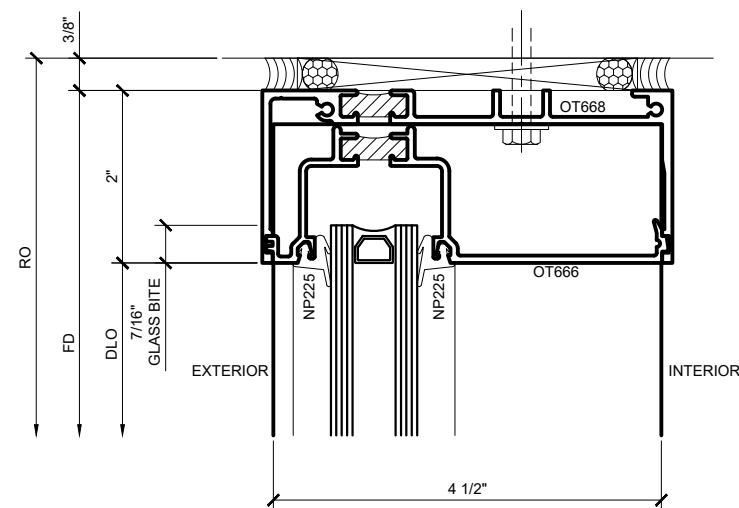
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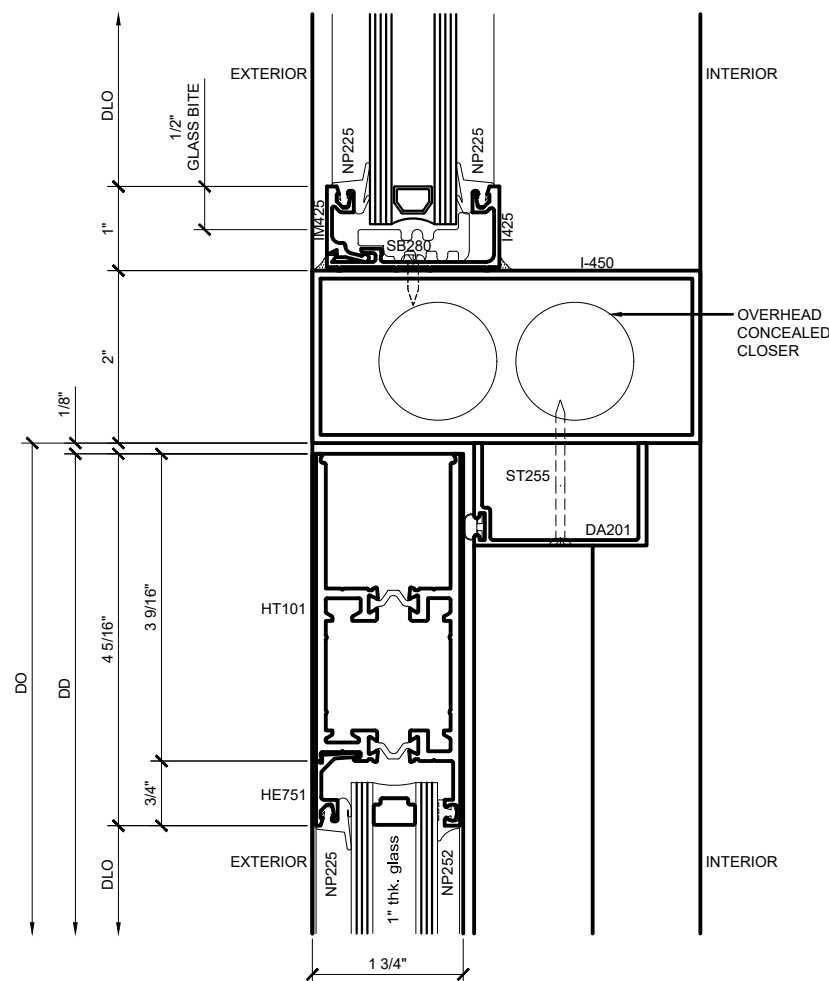
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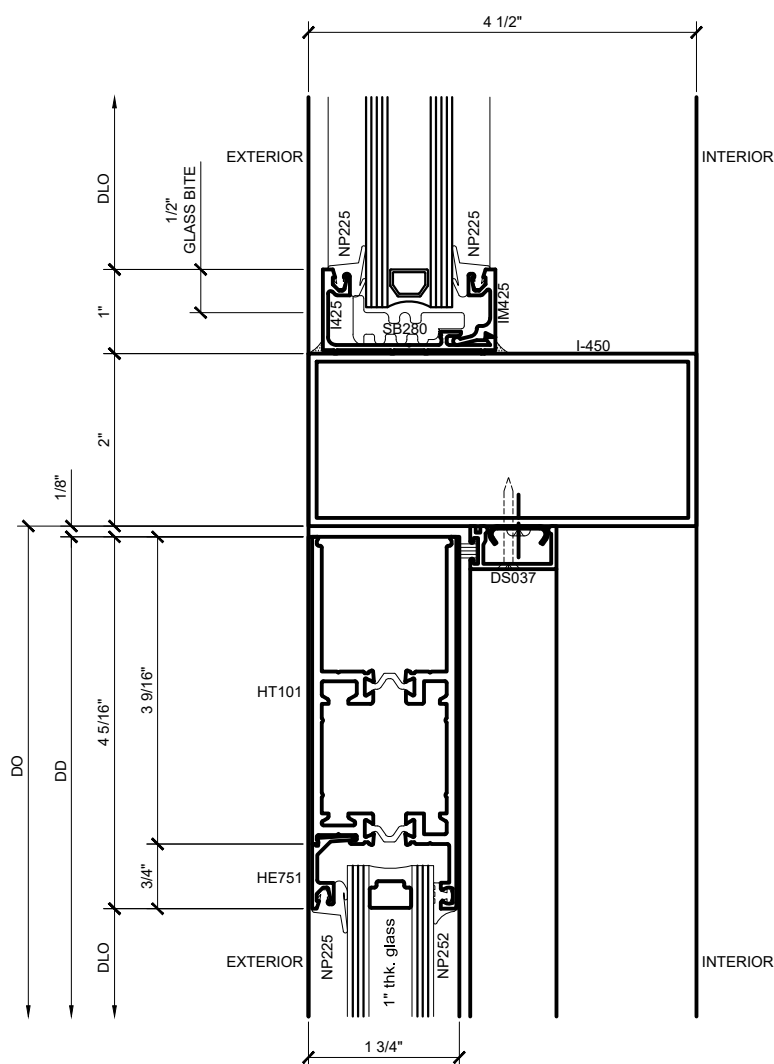
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9 SECTION DETAIL AT HEAD
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"

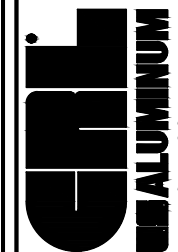


10 SECTION DETAIL AT DOOR HEAD WITH OHCC
 ARCH REF: N/A 1'-0"=1'-0"



11 SECTION DETAIL AT DOOR HEAD
 ARCH REF: N/A 1'-0"=1'-0"

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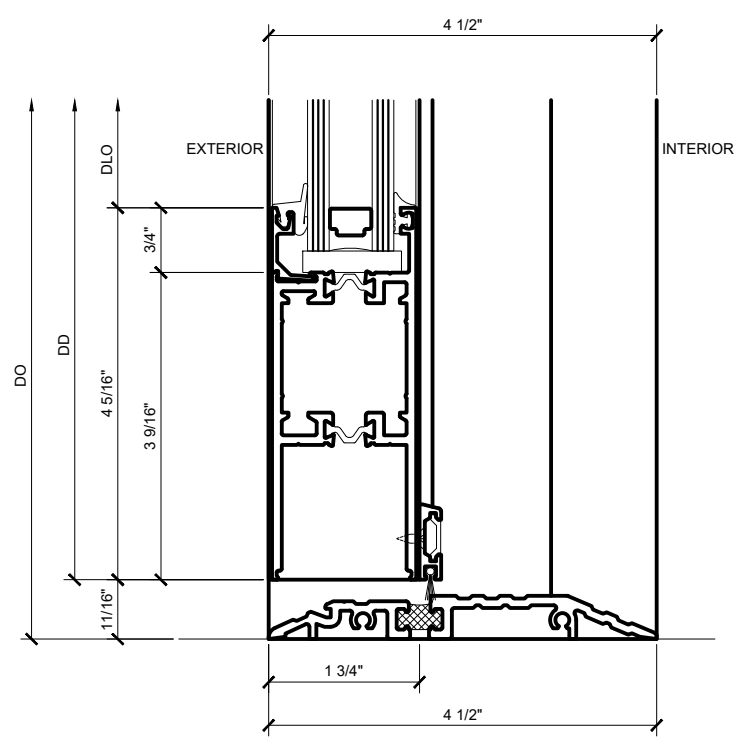
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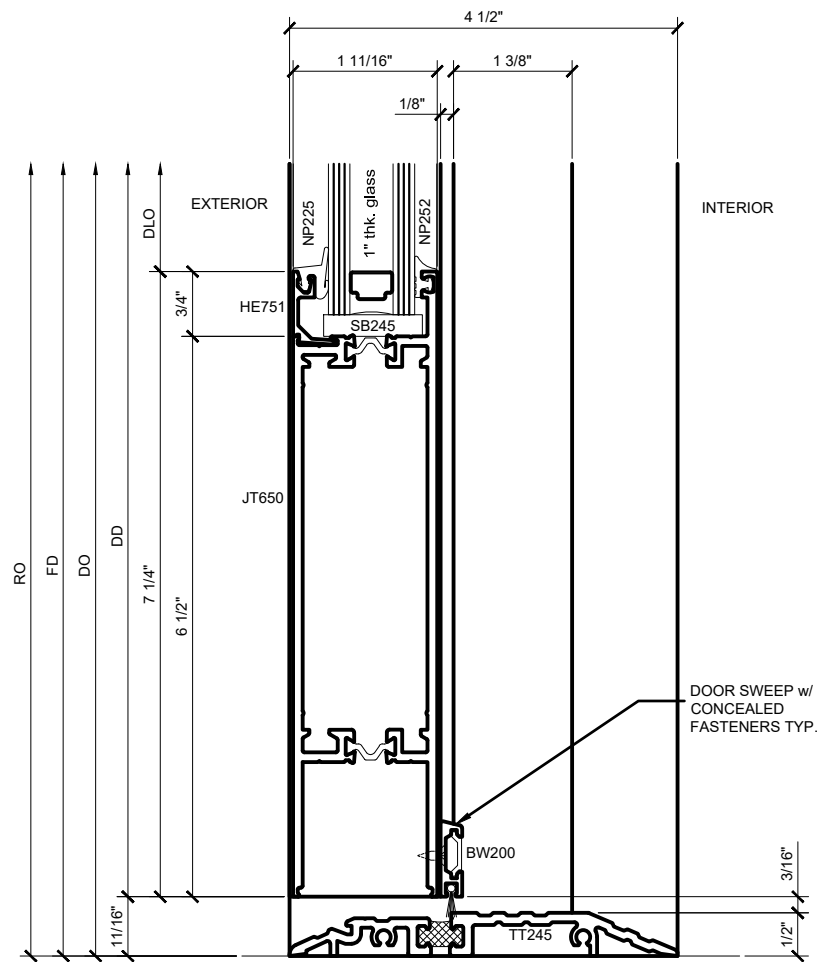
CRL ALUMINUM
 A CRH COMPANY
 2503 E. Vernon Avenue, Los Angeles, CA 90058-1897
 PH (800)-421-6144 FX: 800-587-7501 www.crlaurence.com

Description:
 CRL US ALUMINUM
 OST451 SERIES
 THERMAL STACKING
 WINDOWS FOR 1" GLASS

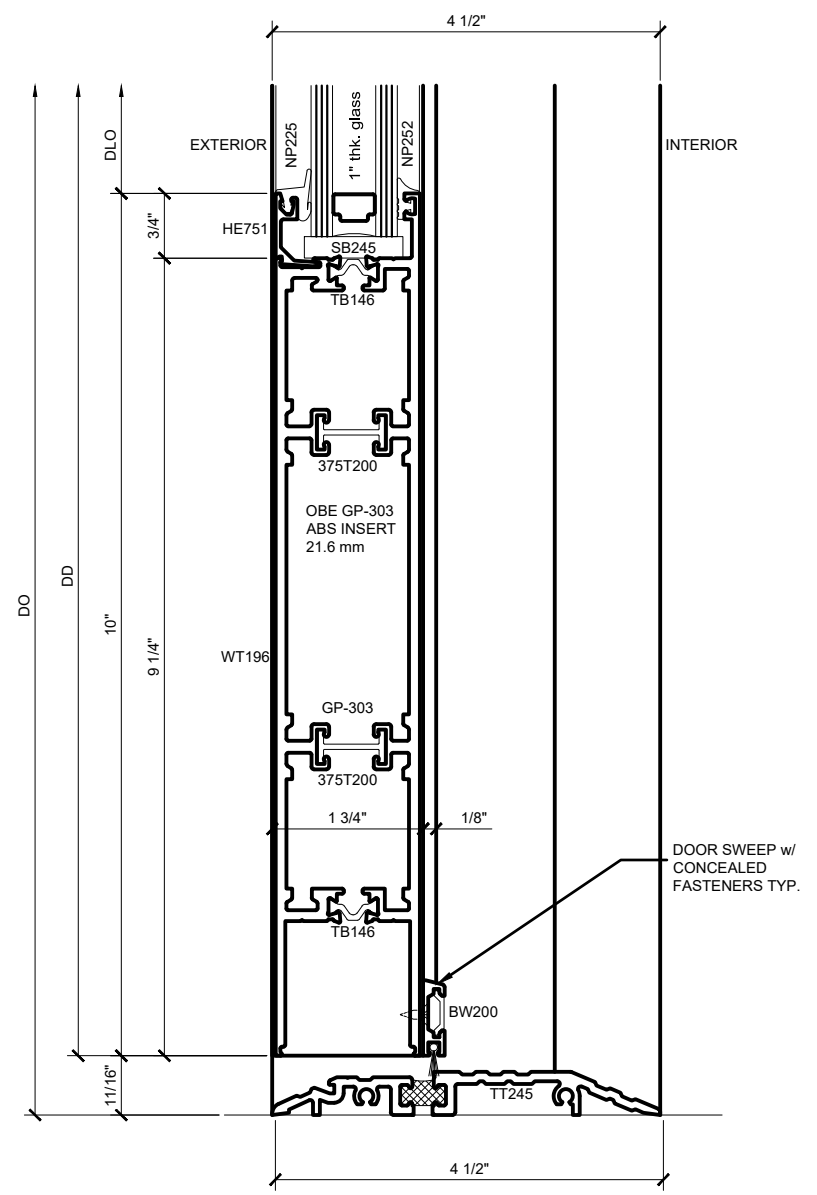
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13 SECTION DETAIL AT DOOR SILL
 ARCH REF: N/A 1'-0\"=1'-0\"

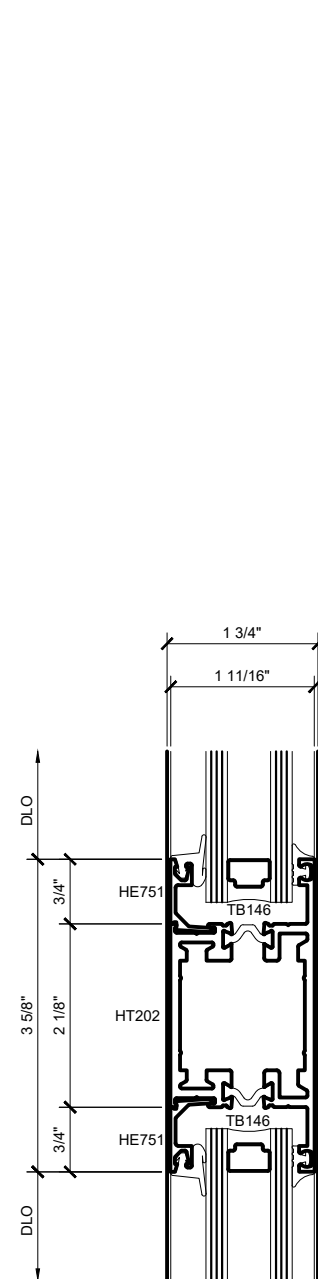


14 OPTIONAL DOOR SILL
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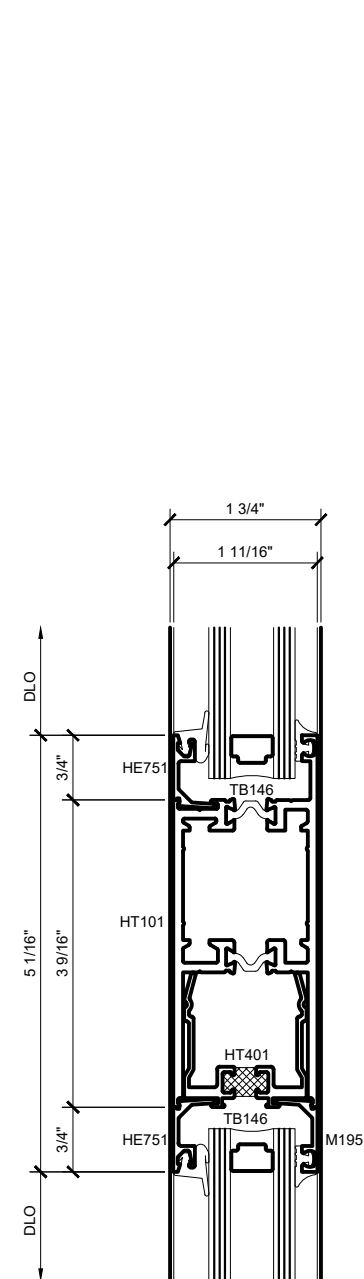


15 SECTION DETAIL AT DOOR SILL
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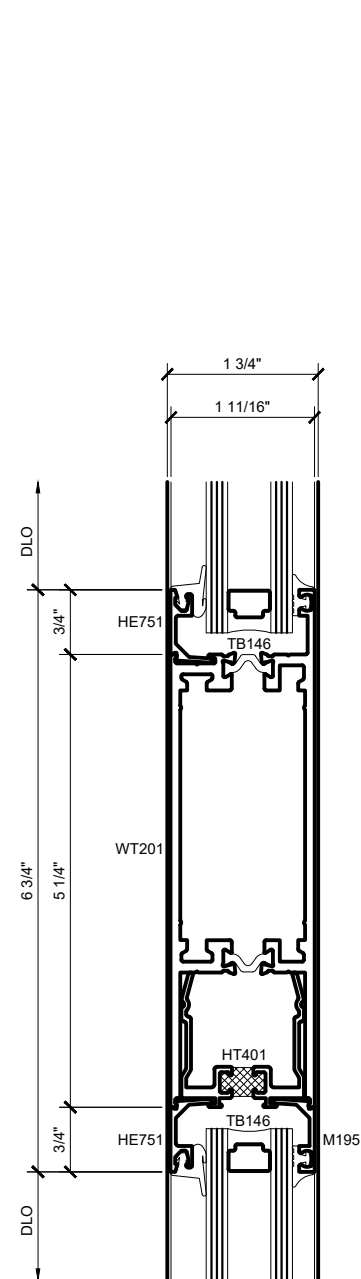
OST451 SERIES DOOR FRAMING DETAILS - EXTERIOR GLAZING (SHOWN WITH OPTIONAL NARROW STILE OFFSET HUNG SERIES 250-T DOOR SYSTEM)



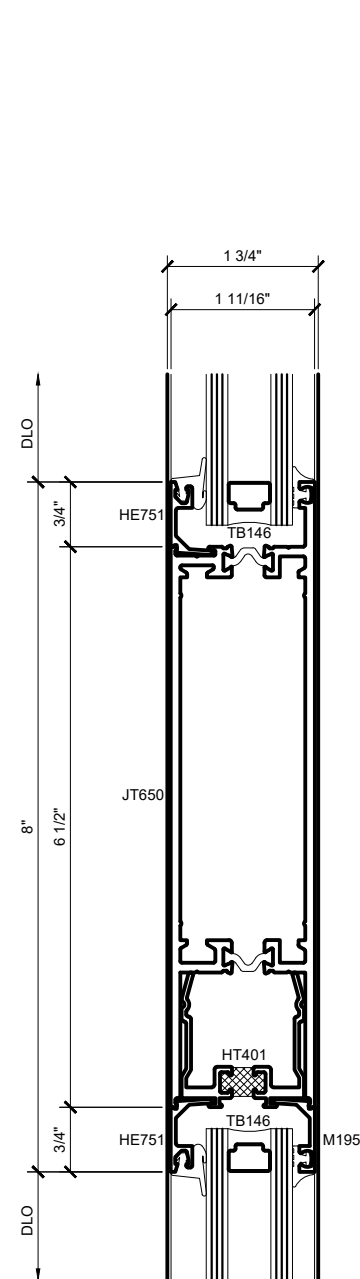
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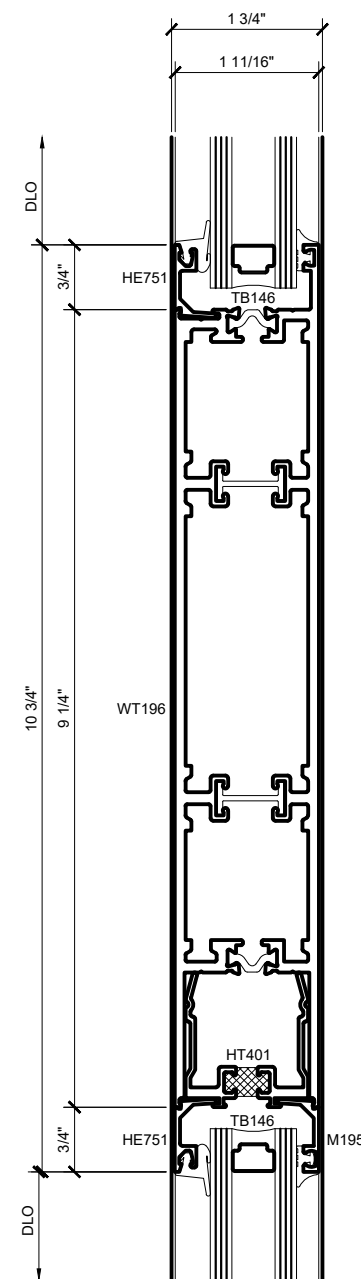
MT101



MT201



MT650



MT196

THERMAL DOOR MUNTINS

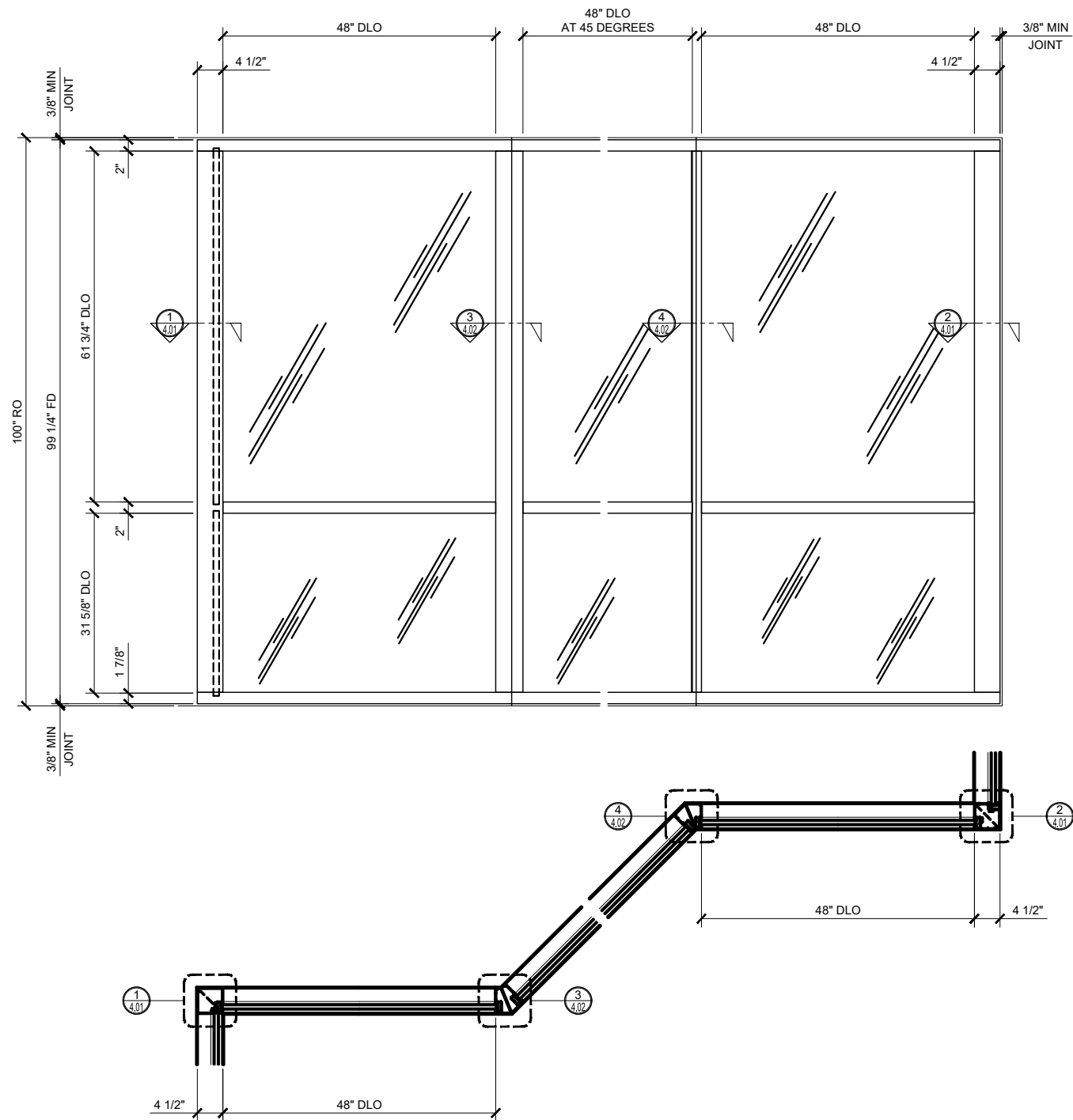
Revisions By:

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ALUMINUM
A CRH COMPANY
2503 E. Vernon Avenue, Los Angeles, CA 90058-1887
PH (800)-421-6144 FX: 800-587-7501 www.cralence.com

Description:
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OST451 SERIES
THERMAL STACKING
WINDOWS FOR 1" GLASS

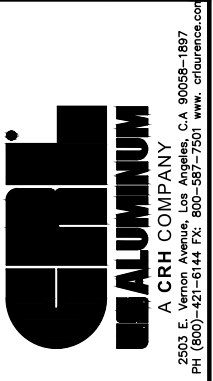
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Date: 04/30/19
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WINDOW WALLS - OST451 SERIES (90 DEGREE & 135 DEGREE CORNERS FOR 1" GLASS)



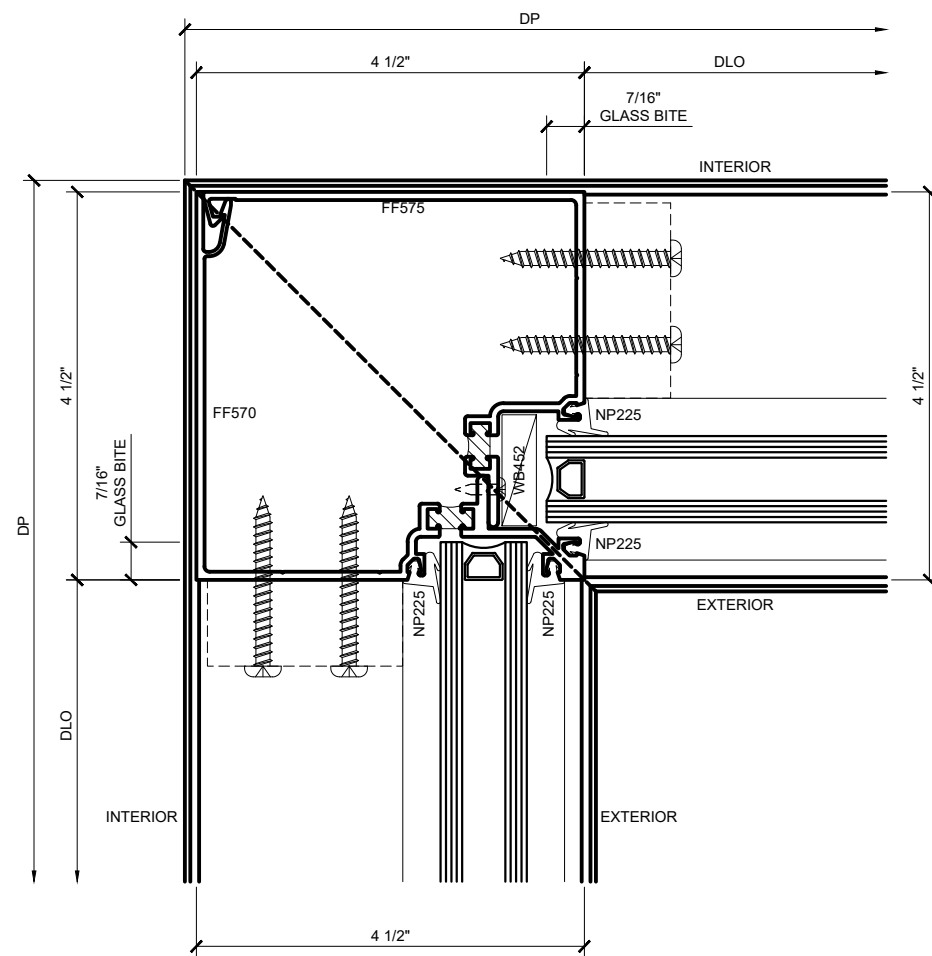
STANDARD ABBREVIATIONS	
RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLIGHT OPENING
DO	DOOR OPENING
DD	DOOR DIMENSION
DP	DIMENSION POINT
SMC	SURFACE MOUNTED CLOSER
OHCC	OVERHEAD CONCEALED CLOSER

Revisions By:

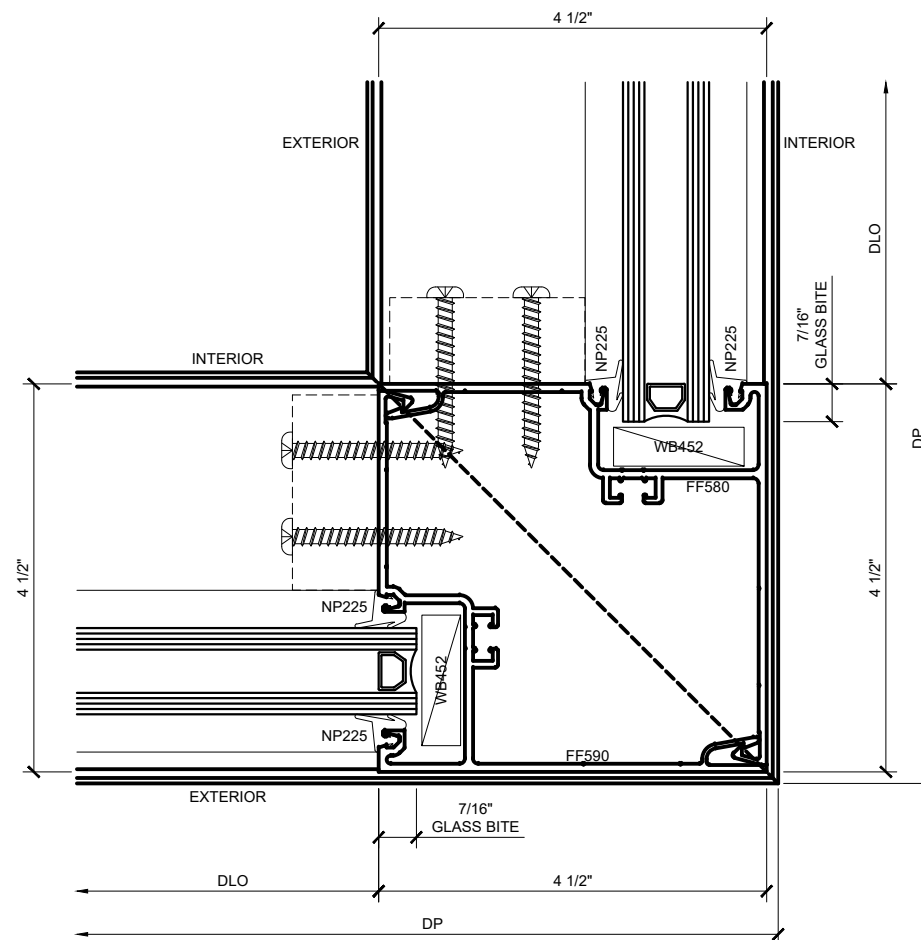


Description:
 CRL US ALUMINUM
 OST451 SERIES
 THERMAL STACKING
 WINDOWS FOR 1" GLASS

Drawn By: JGM
 Date: 04/30/19
 Scale: 1"=1'-0"
 File Name: OST451_Therm_Stacking_Wndw.dwg
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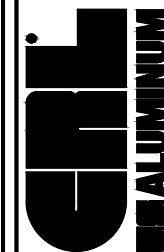
① SECTION DETAIL AT
90 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"



② SECTION DETAIL AT
90 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"

OS-2 OFFSET SYSTEM - OST451 SERIES CORNER DETAILS

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Description:
CRL US ALUMINUM
OST451 SERIES
THERMAL STACKING
WINDOWS FOR 1" GLASS

Drawn By: JGM

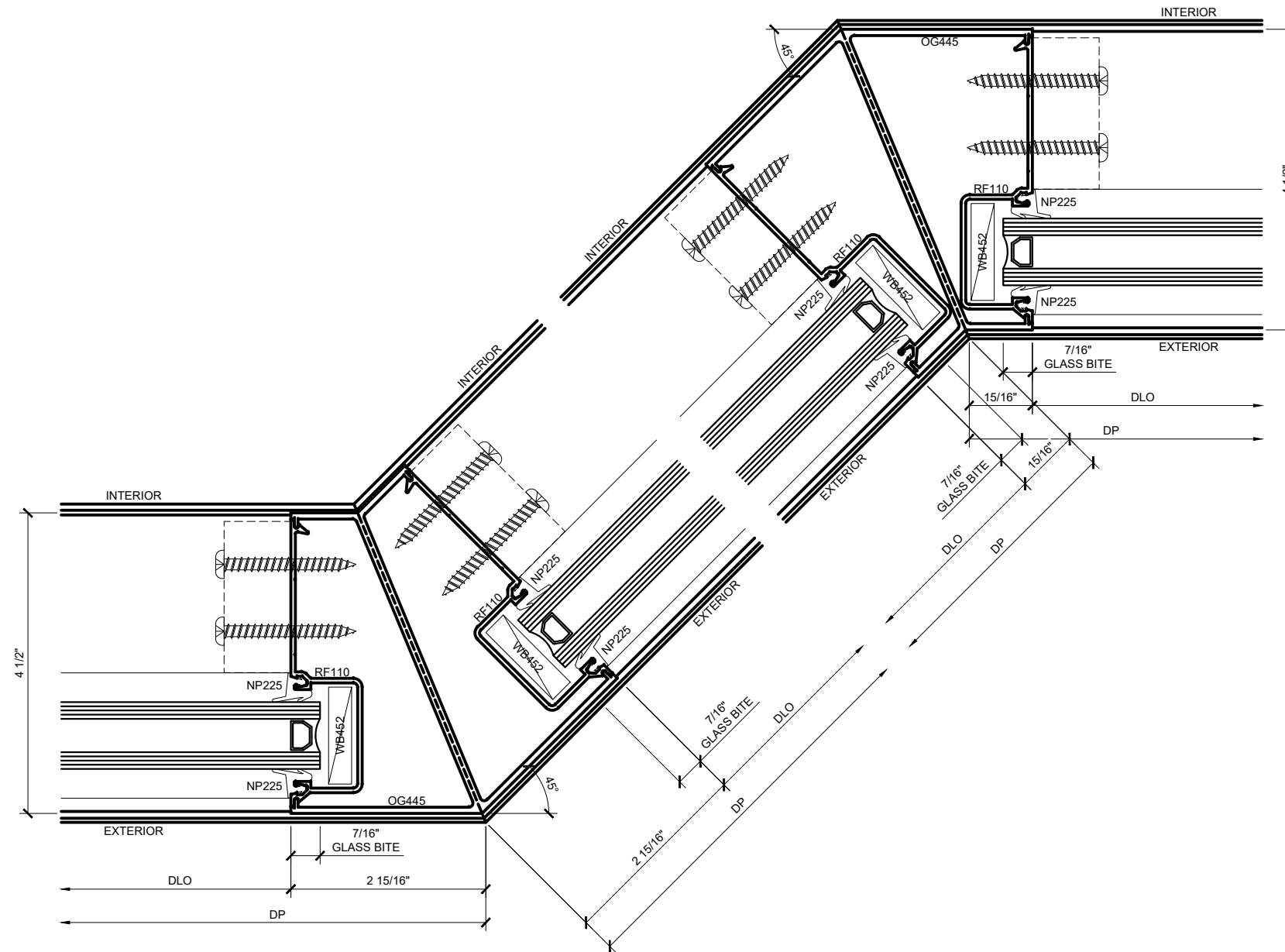
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File Name:

OST451_Therm_Stacking_Wndw.dwg

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③ SECTION DETAIL AT
135 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"

④ SECTION DETAIL AT
135 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"

OS-2 OFFSET SYSTEM - OST451 SERIES CORNER DETAILS

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Description:
CRL US ALUMINUM
OST451 SERIES
THERMAL STACKING
WINDOWS FOR 1" GLASS

Drawn By: JGM

Date: 04/30/19

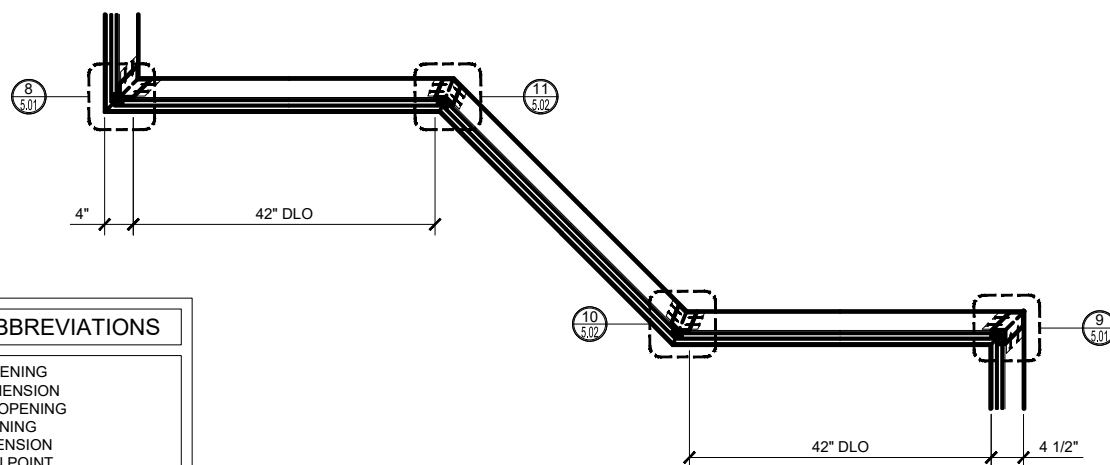
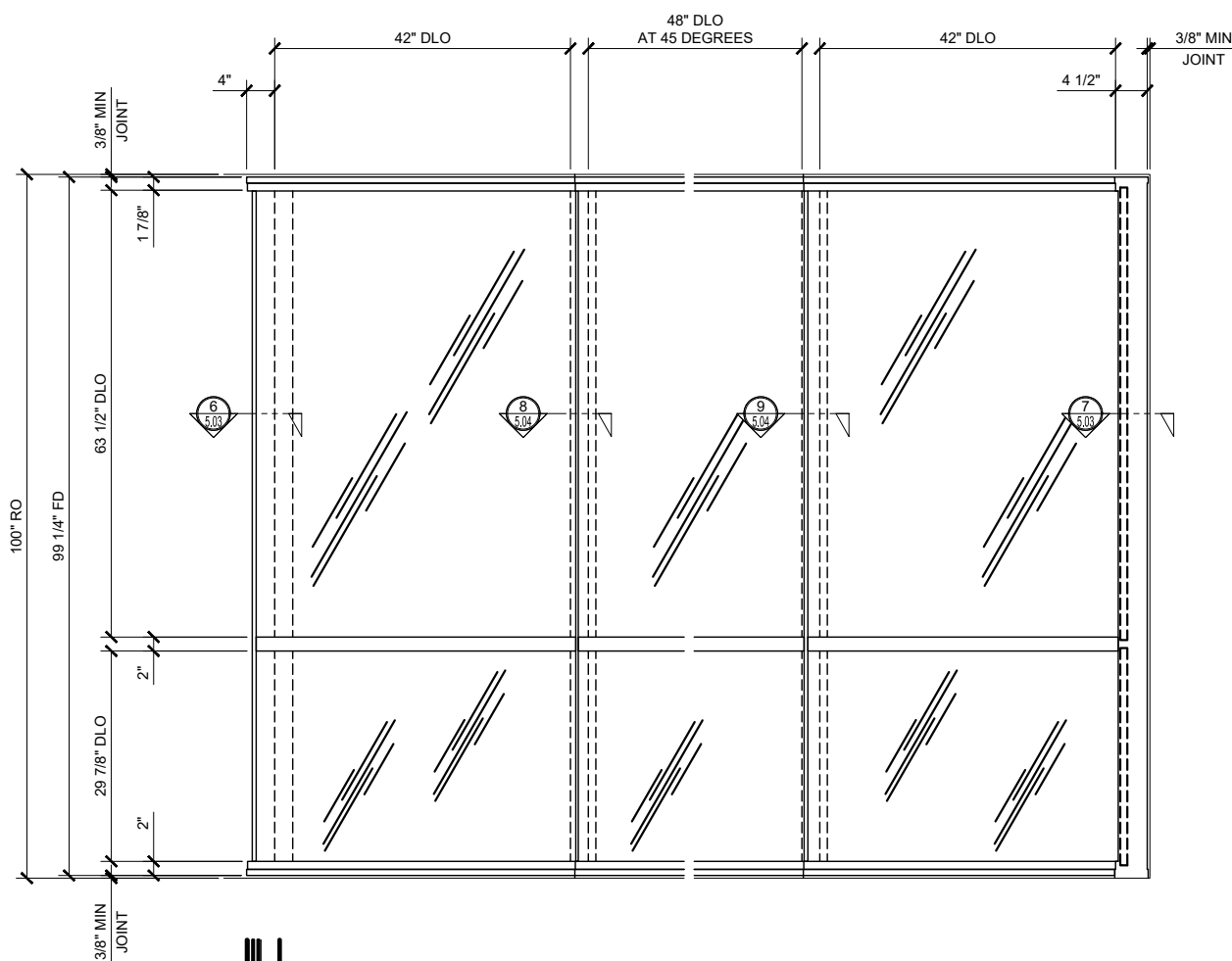
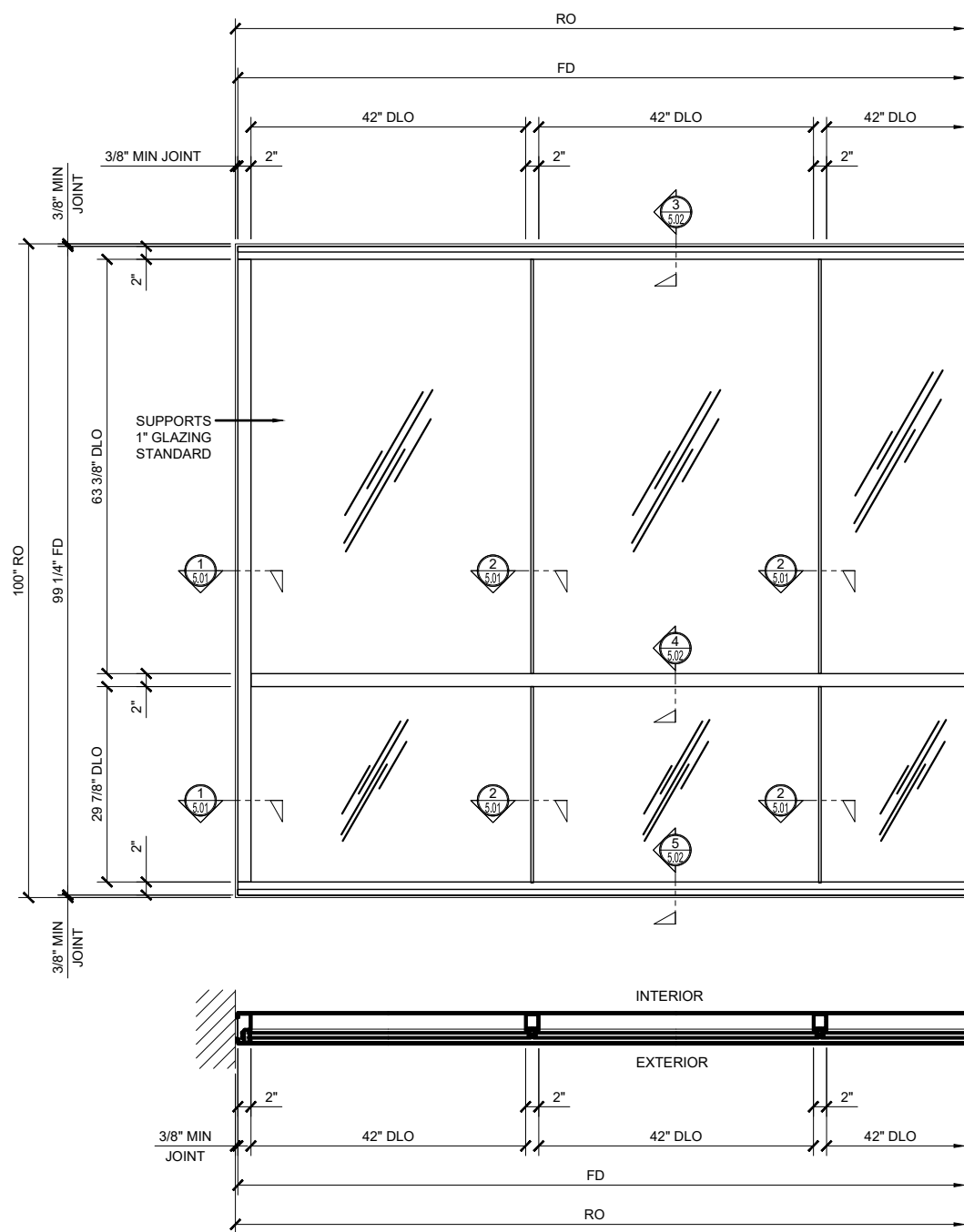
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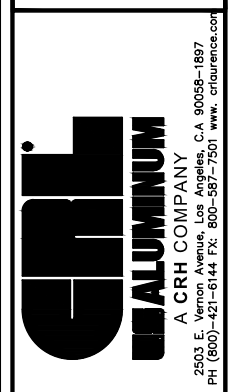
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WINDOW WALLS - OST451SG SERIES / STRUCTURAL SILICONE GLAZING



STANDARD ABBREVIATIONS

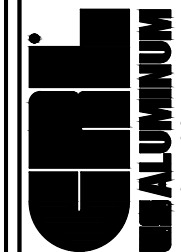
- RO ROUGH OPENING
- FD FRAME DIMENSION
- DLO DAYLIGHT OPENING
- DO DOOR OPENING
- DD DOOR DIMENSION
- DP DIMENSION POINT
- SMC SURFACE MOUNTED CLOSER
- OHCC OVERHEAD CONCEALED CLOSER



Description:
 CRL US ALUMINUM
 OST451 SERIES
 THERMAL STACKING
 WINDOWS FOR 1" GLASS

Drawn By: TGM
 Date: 04/30/19
 Scale: 1"=1'-0"
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Revisions By:

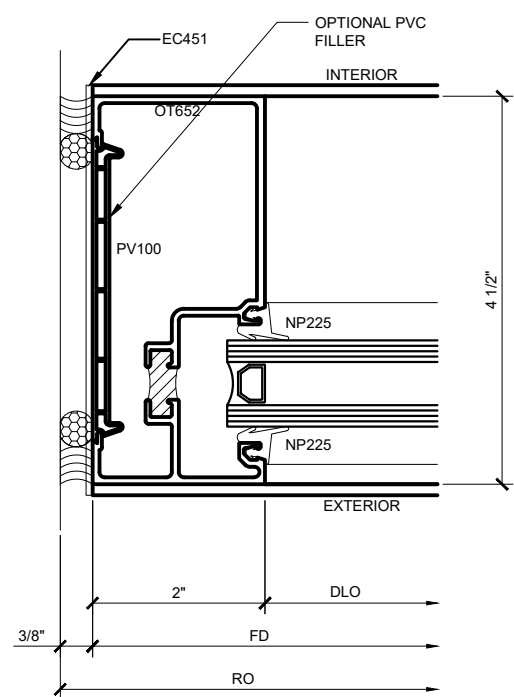


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Description:
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OST451 SERIES
THERMAL STACKING
WINDOWS FOR 1" GLASS

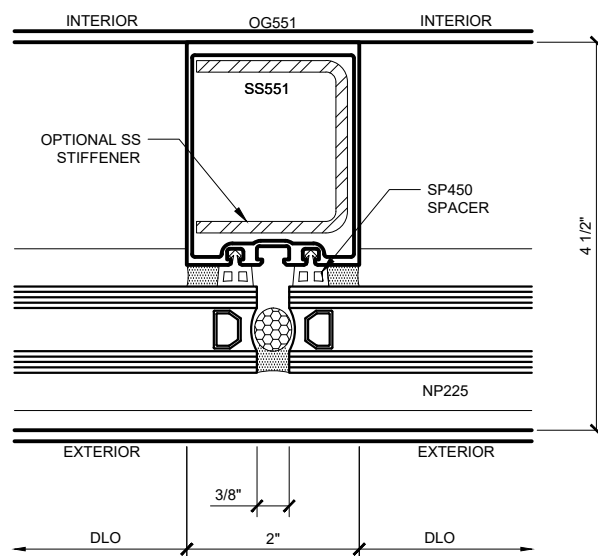
Drawn By: JGM
Date: 04/30/19
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OPTIONAL PVC FILLER



① SECTION DETAIL AT JAMB

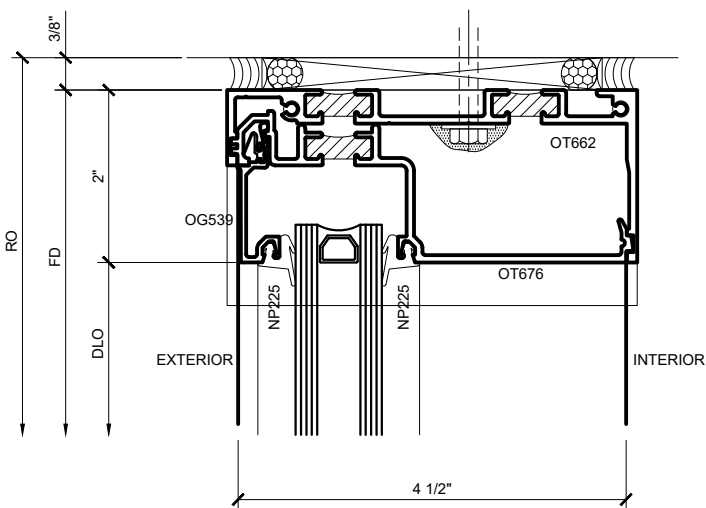
ARCH REF: N/A 1'-0"=1'-0"



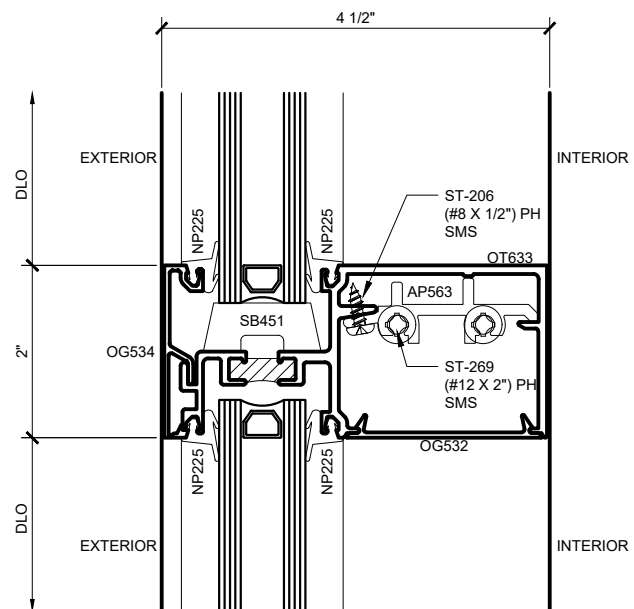
② SECTION DETAIL AT VERTICAL

ARCH REF: N/A 1'-0"=1'-0"

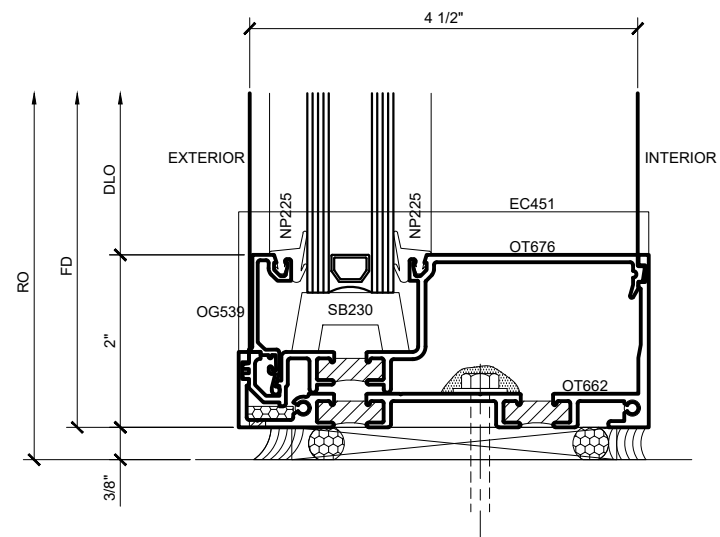
OS-2 OFFSET SYSTEM - OST451SG SERIES STRUCTURAL SILICONE GLAZING DETAILS



③ SECTION DETAIL AT HEAD
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"




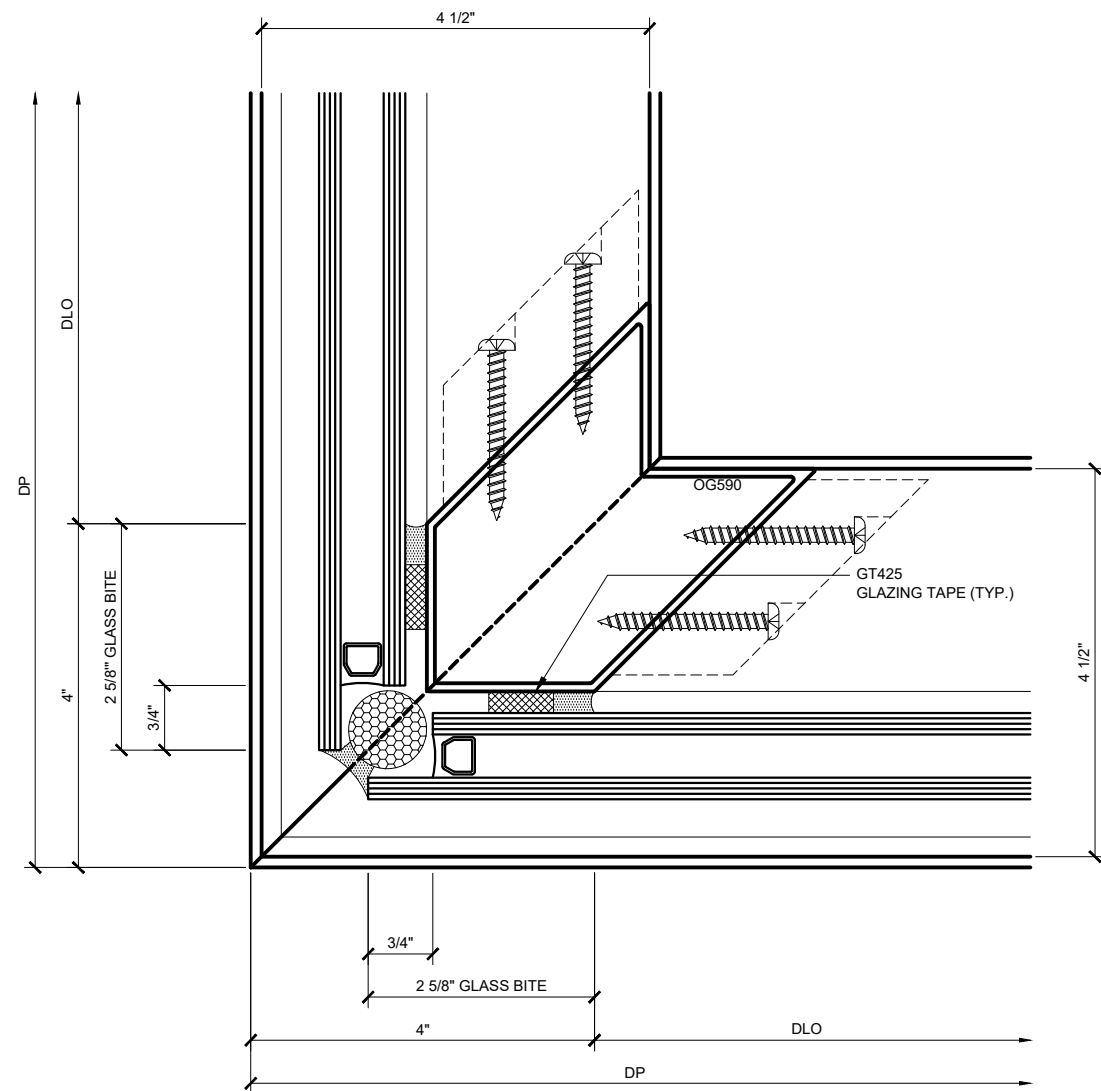
④ SECTION DETAIL AT INTERMEDIATE HORIZONTAL
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"



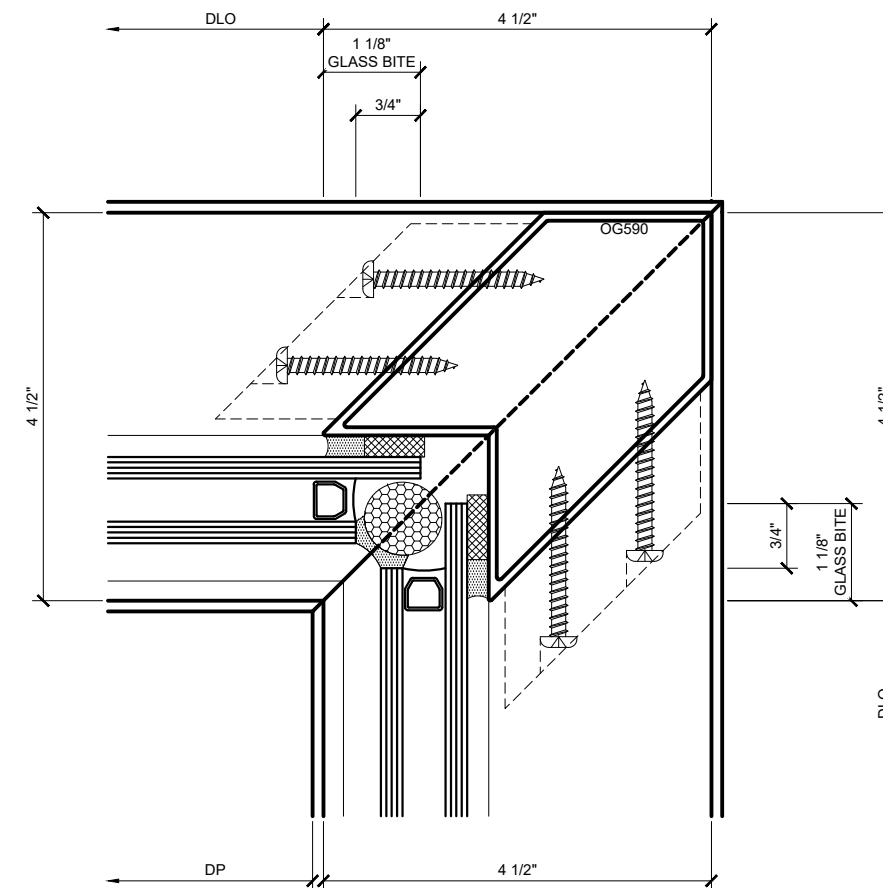
⑤ SECTION DETAIL AT SILL
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"

OS-2 OFFSET SYSTEM - OST451SG SERIES STRUCTURAL SILICONE GLAZING DETAILS

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 <p>A CRH COMPANY 2503 E. Vernon Avenue, Los Angeles, CA 90058-1887 PH (800)-421-6144 FX: 800-587-7501 www.crlaluminum.com</p>	
Description: CRL US ALUMINUM OST451 SERIES THERMAL STACKING WINDOWS FOR 1" GLASS	
Drawn By: JGM	Date: 04/30/19
Scale: 1"=1'-0"	
File Name: OST451_Therm_Stacking_Wndw.dwg	
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5.02	



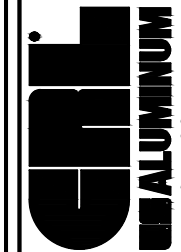
⑧ SECTION DETAIL AT
90 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"



⑨ SECTION DETAIL AT
90 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"

OS-2 OFFSET SYSTEM - OST451SG SERIES STRUCTURAL SILICONE GLAZING CORNER DETAILS

Revisions By:

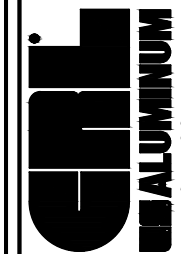


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Description:
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THERMAL STACKING
WINDOWS FOR 1" GLASS

Drawn By: JGM
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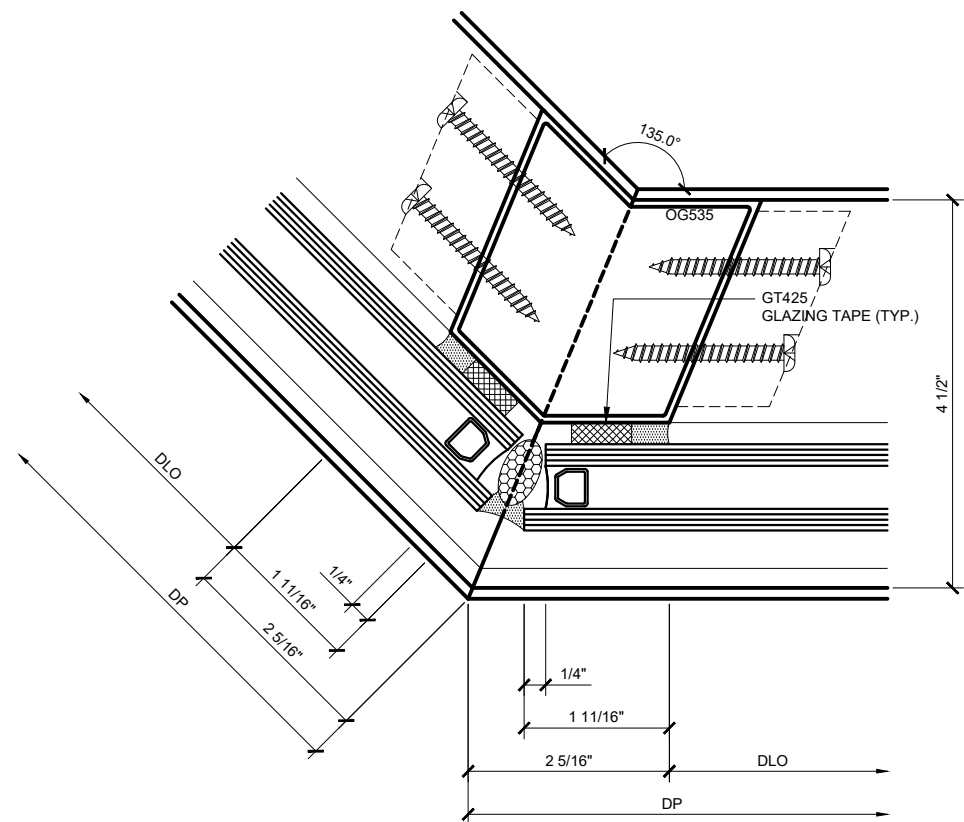
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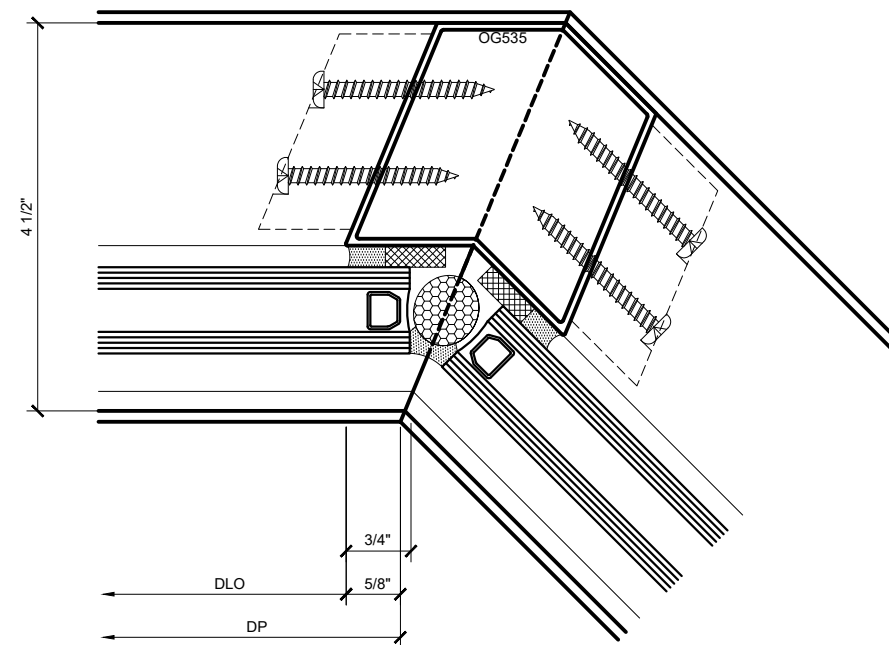
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Description:
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Drawn By: JGM
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File Name:
OST451_Therm_Stacking_Wndw.dwg
Sheet



10 SECTION DETAIL AT
135 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"



11 SECTION DETAIL AT
135 DEGREES CORNER VERTICAL
ARCH REF: N/A 1'-0"=1'-0"

OS-2 OFFSET SYSTEM - OST451SG SERIES STRUCTURAL SILICONE GLAZING CORNER DETAILS