



STOREFRONTS

SERIES FT 451 THERMAL FLUSH FRONT / OFFSET / FLUSH OUT / EXTERIOR AND INTERIOR GLAZING

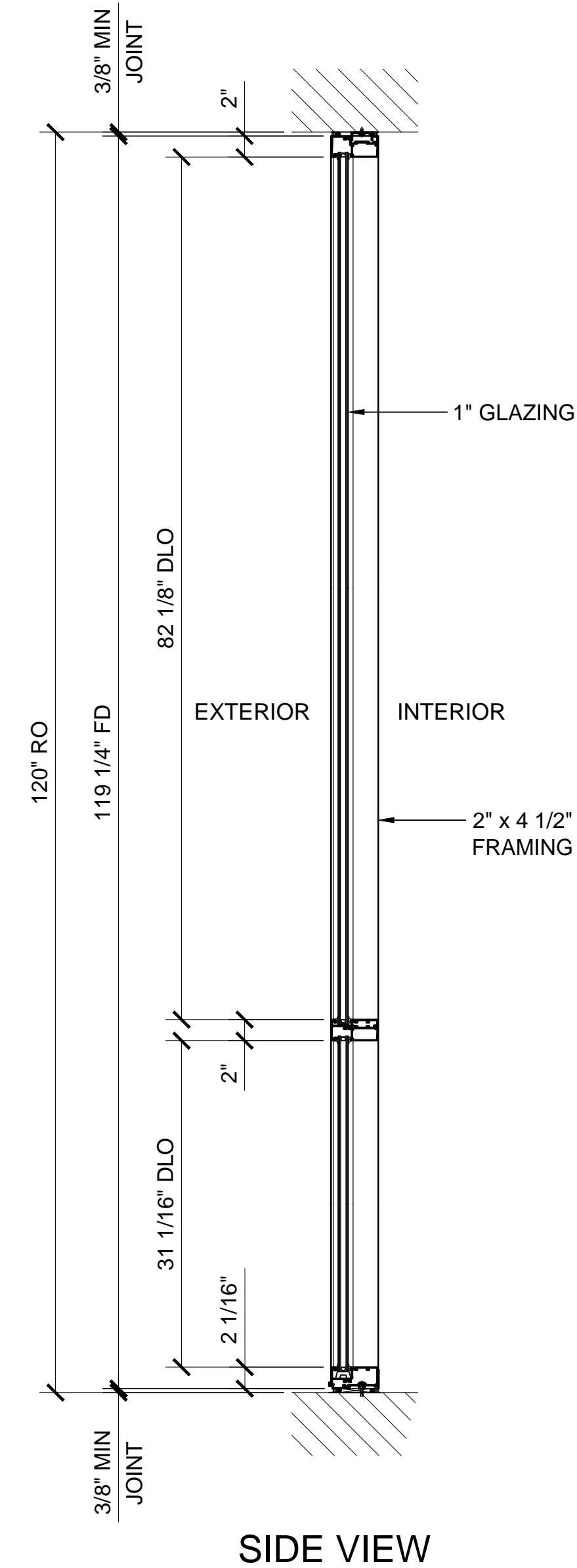
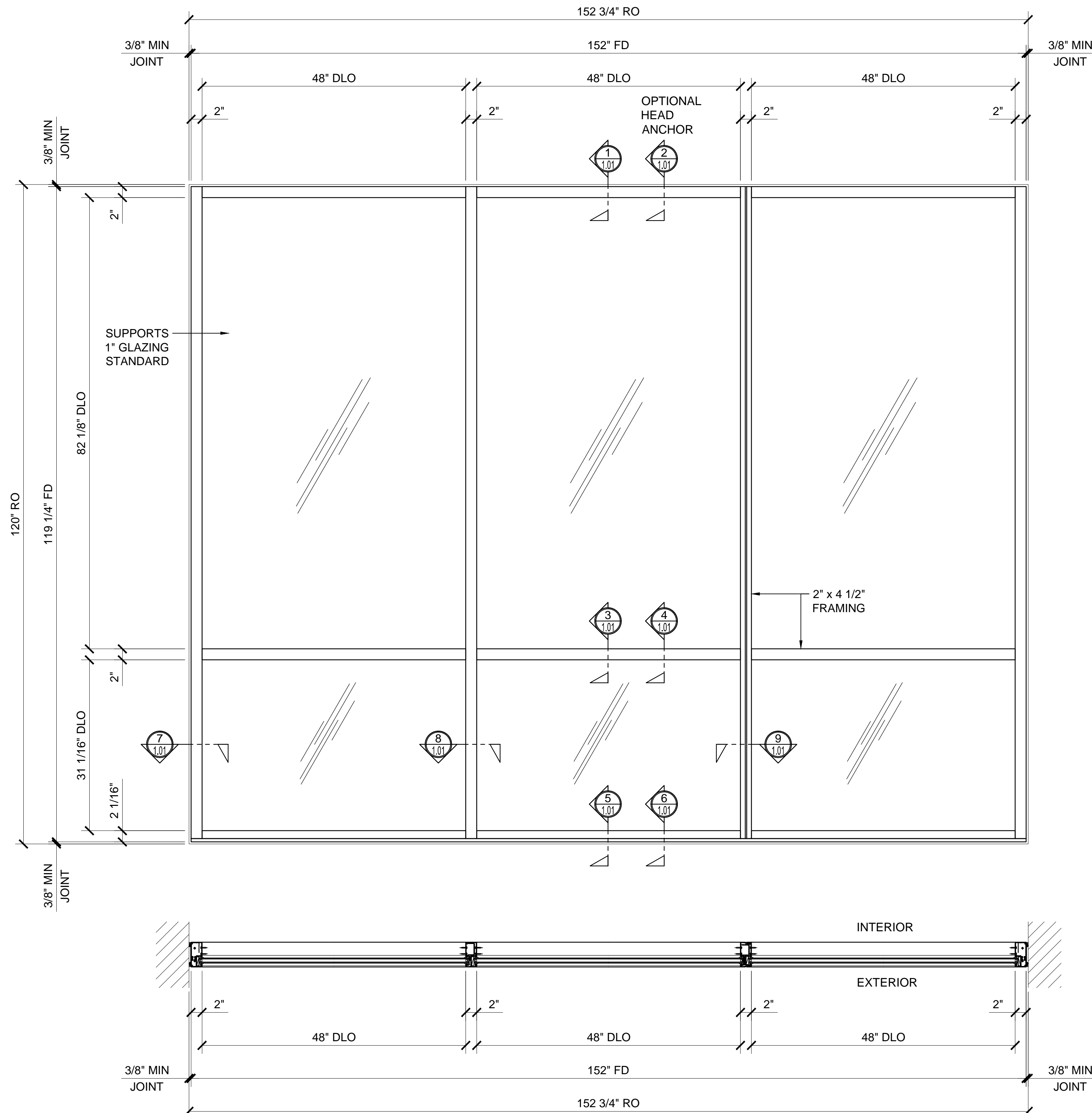
FT451 SERIES SPECIFICATIONS

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 FT451 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
- Thermally Broken
- 1" Glazing infill (SHOWN) Optional snap-in reducers for 1/4" or 1/2" glass are available
- Full range of accessory components
- Available in an array of architectural coatings and anodized finishes
- Screw spline assembly
- Interior or Exterior Glazed

1" = 1'-0"

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



STANDARD ABBREVIATIONS

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

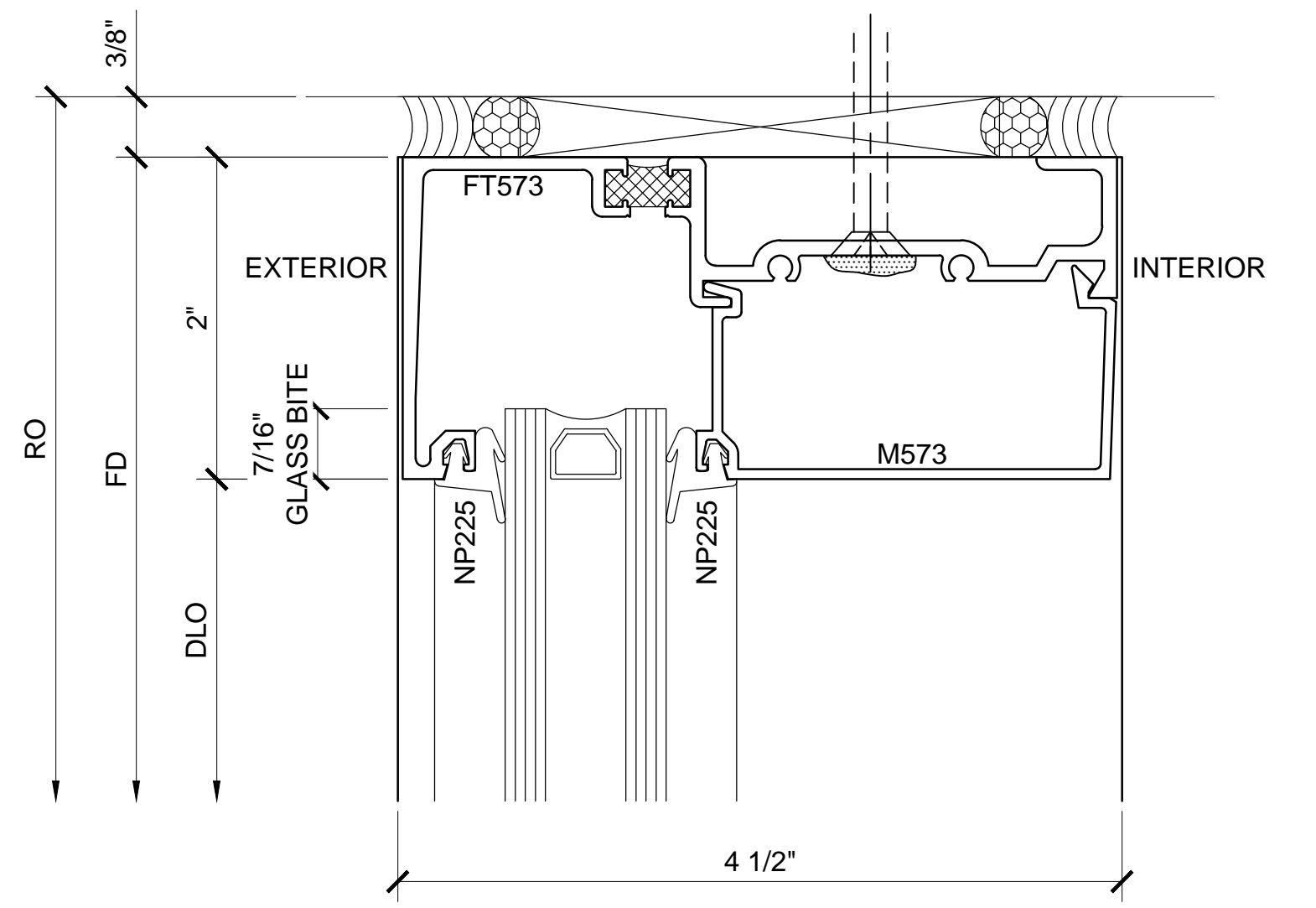
Revisions By:



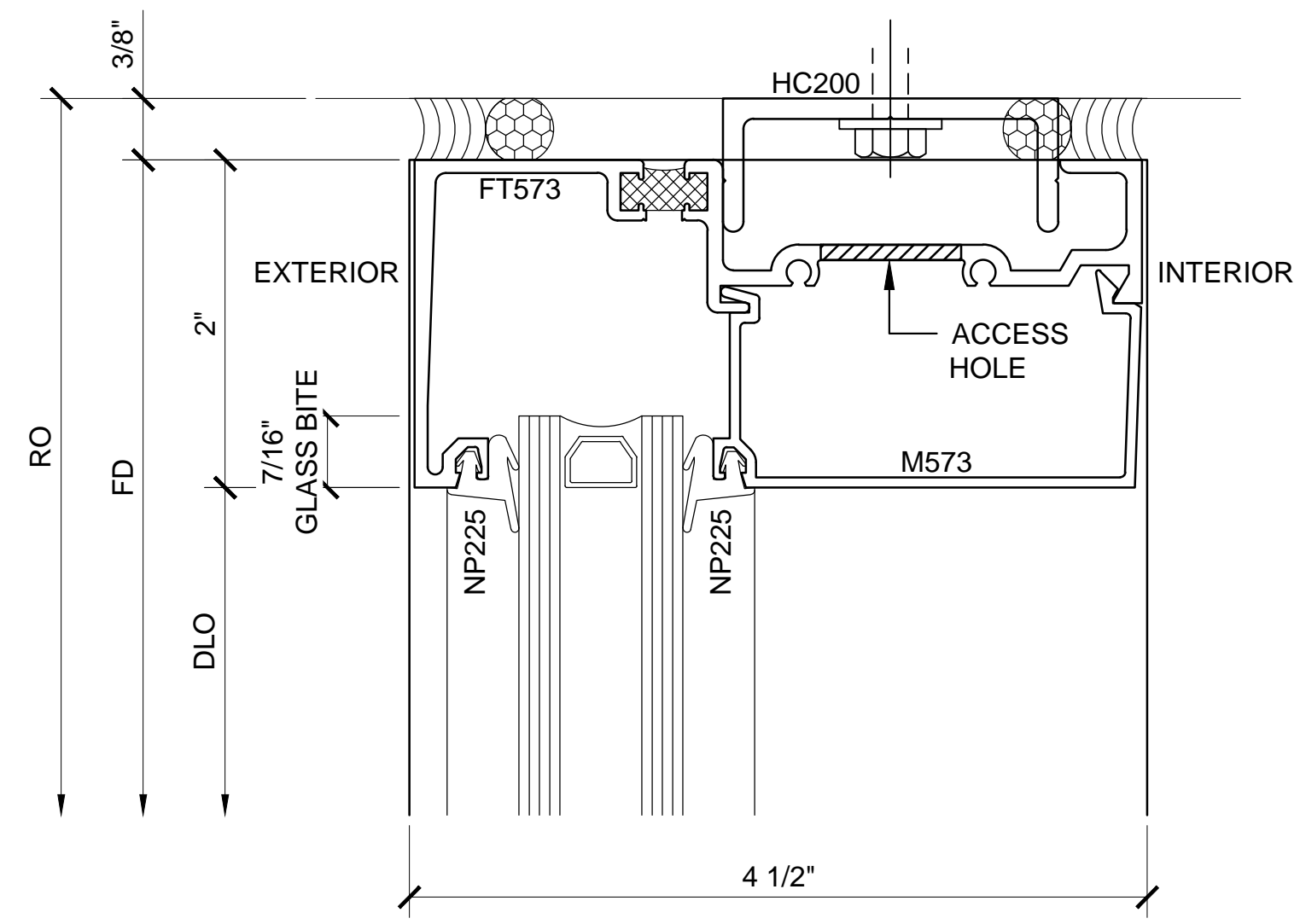
Description:
U.S. ALUMINUM
SERIES FT 451
STOREFRONT SYSTEM

Drawn By: TMG
Date: 12/26/14
Scale: AS NOTED
File Name: FT451 SF.dwg

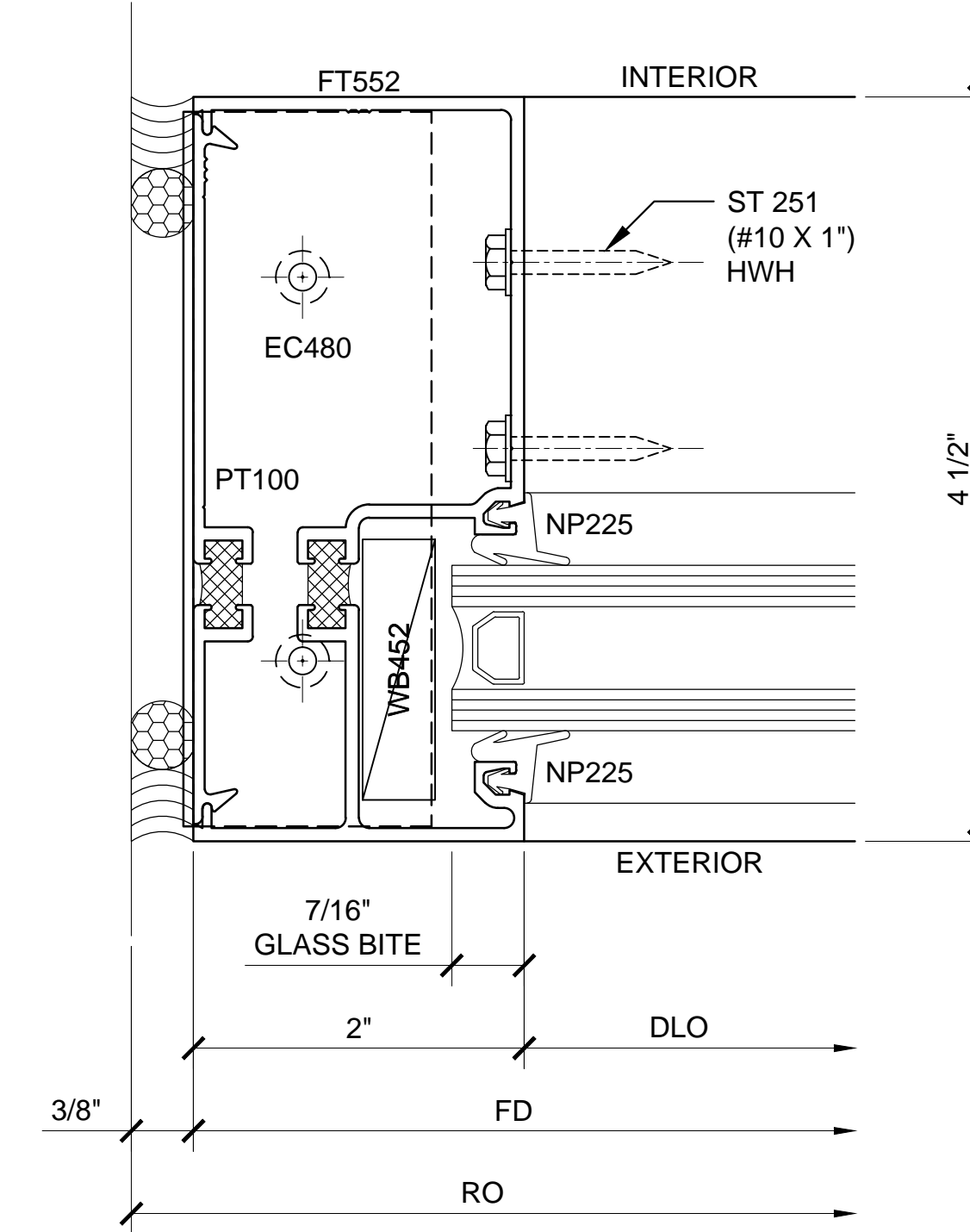
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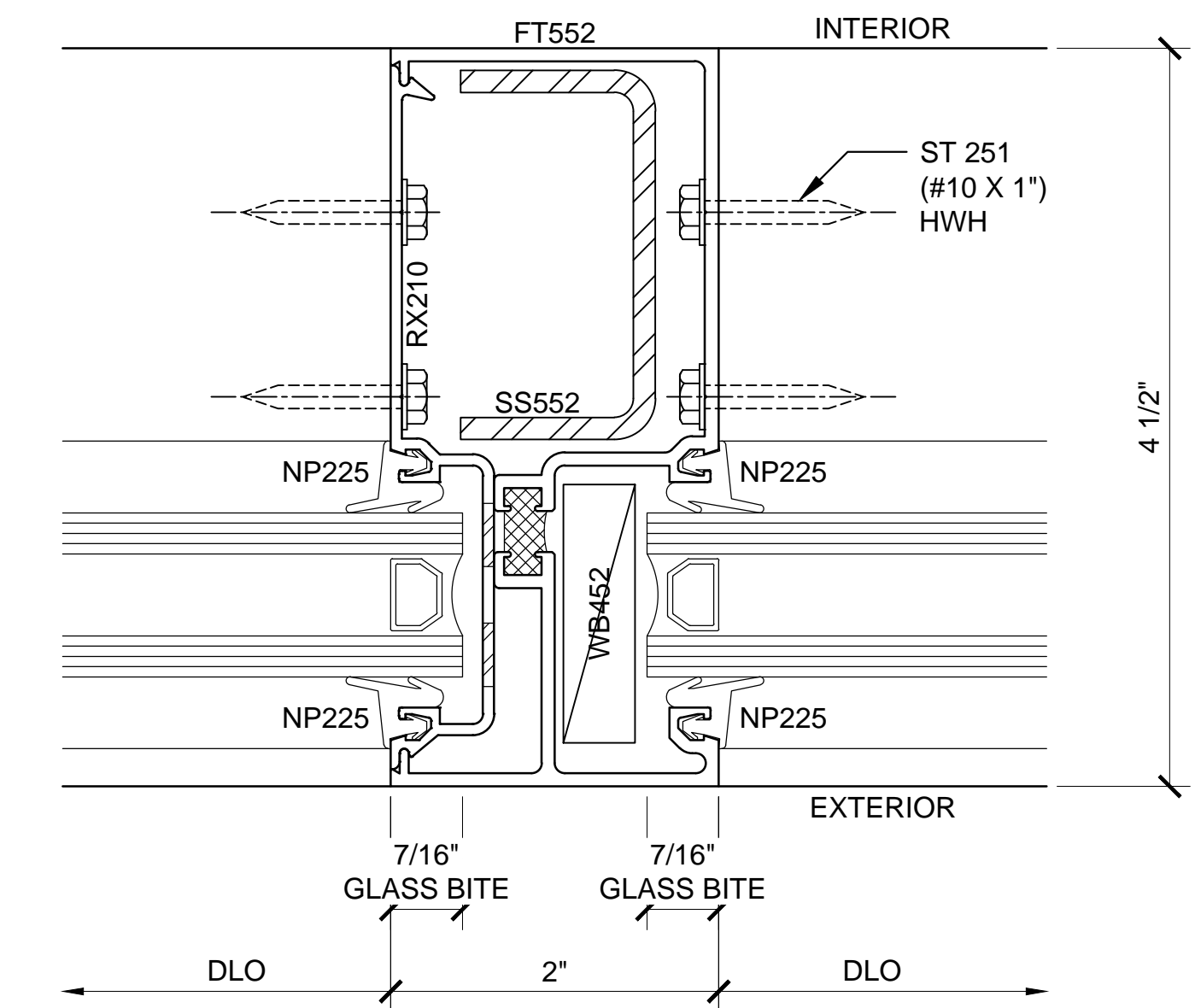
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 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"



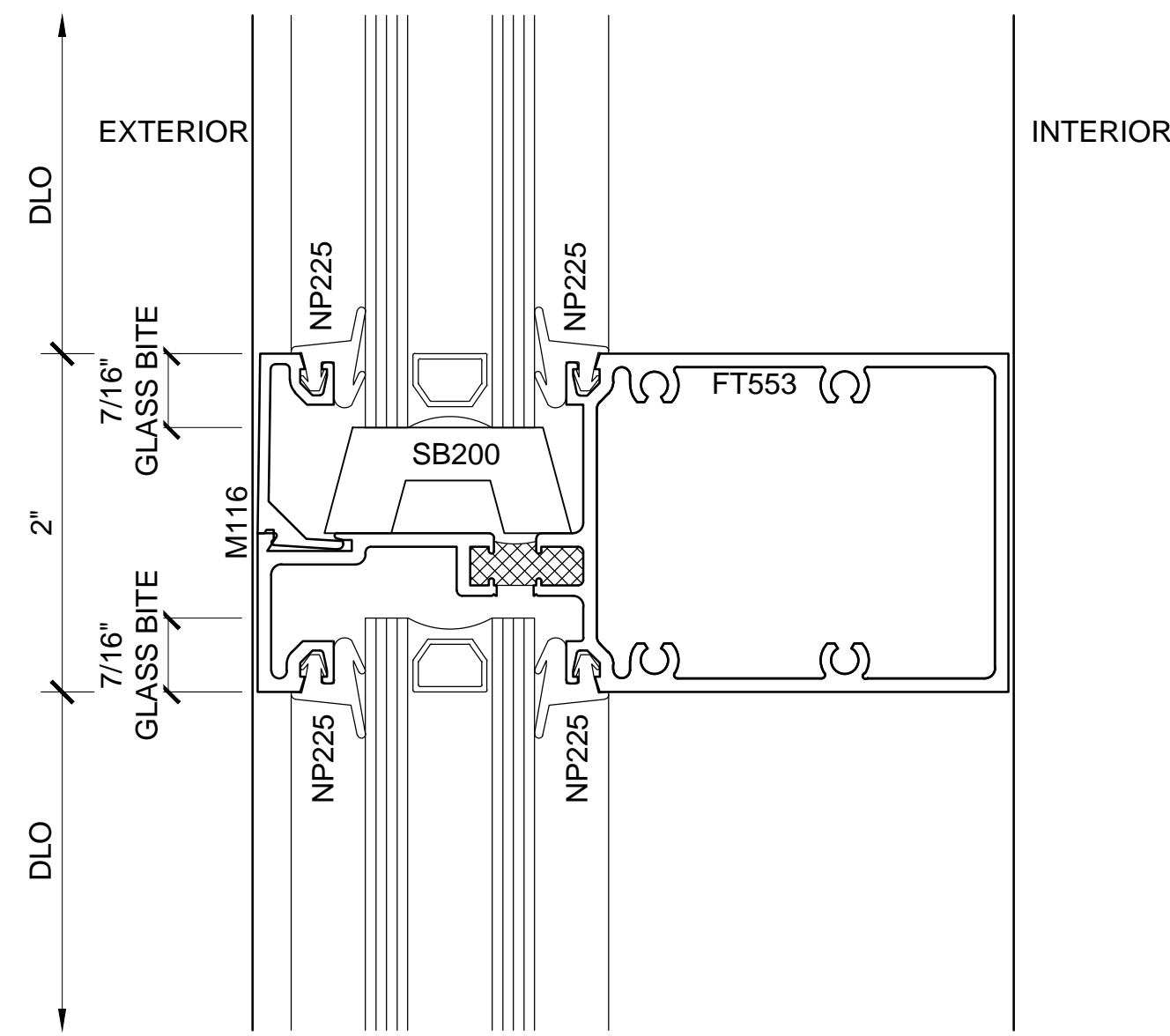
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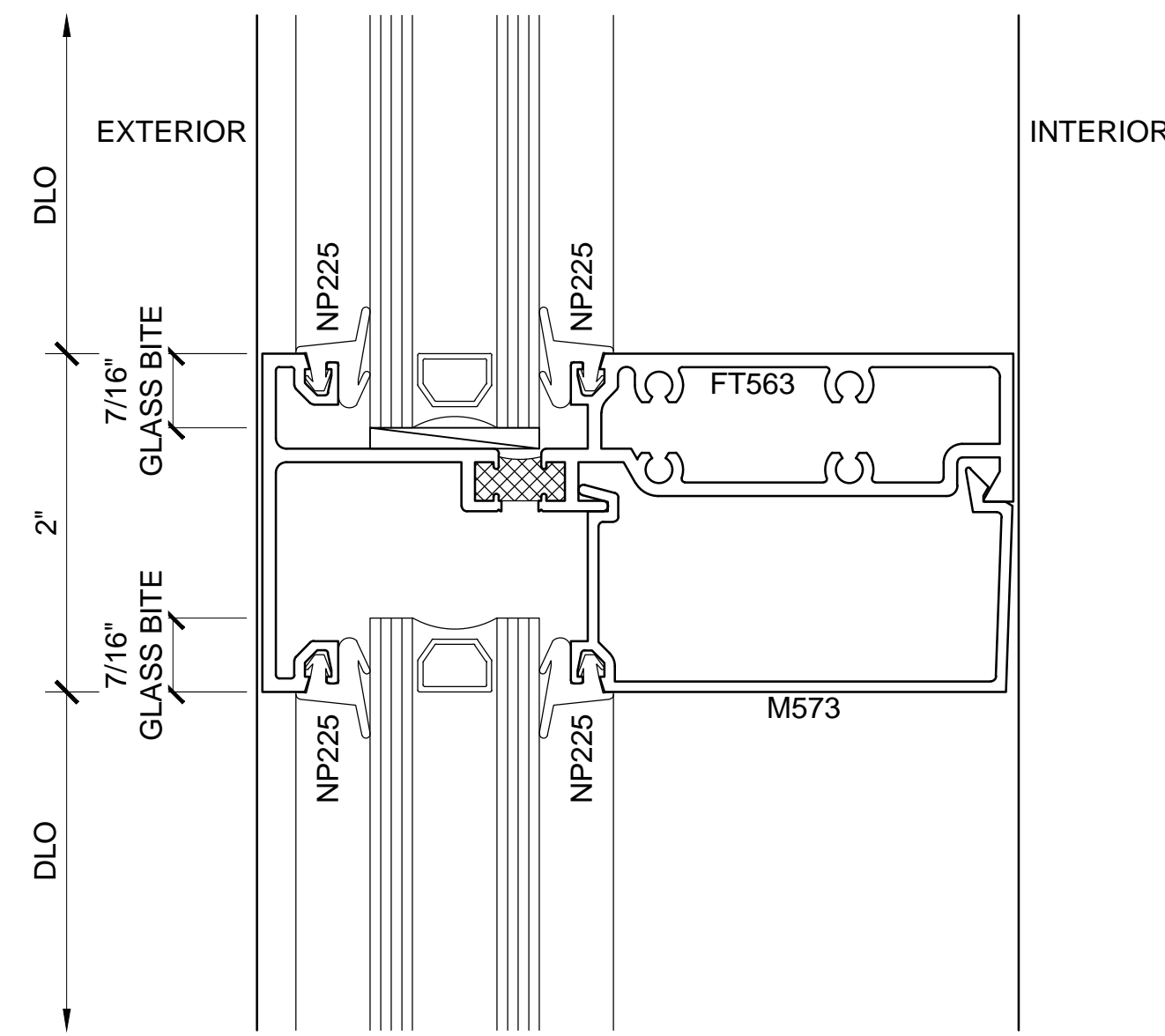
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 ARCH REF: N/A 1'-0"=1'-0"



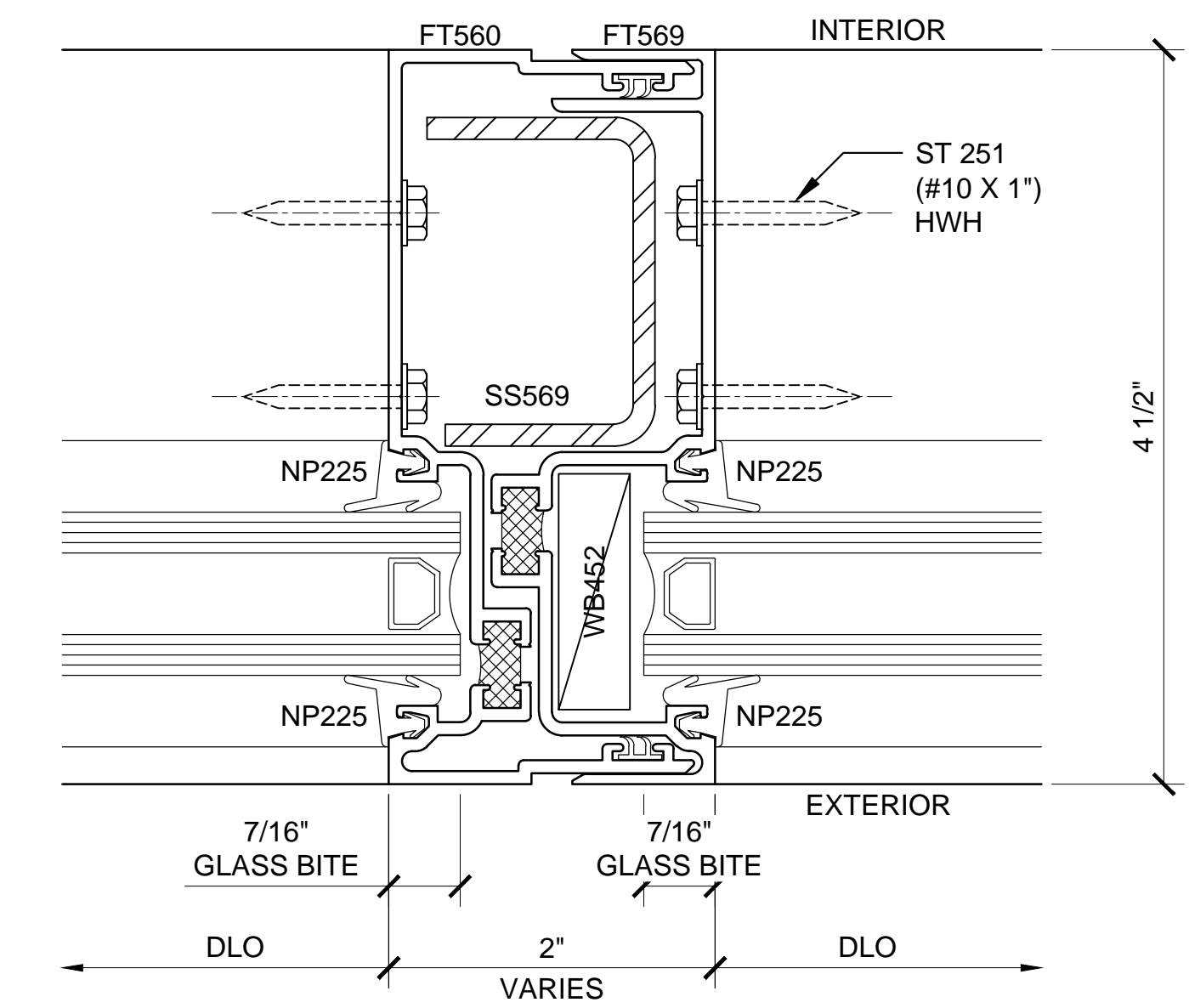
8 SECTION DETAIL AT INTERMEDIATE VERTICAL
 ARCH REF: N/A 1'-0"=1'-0"



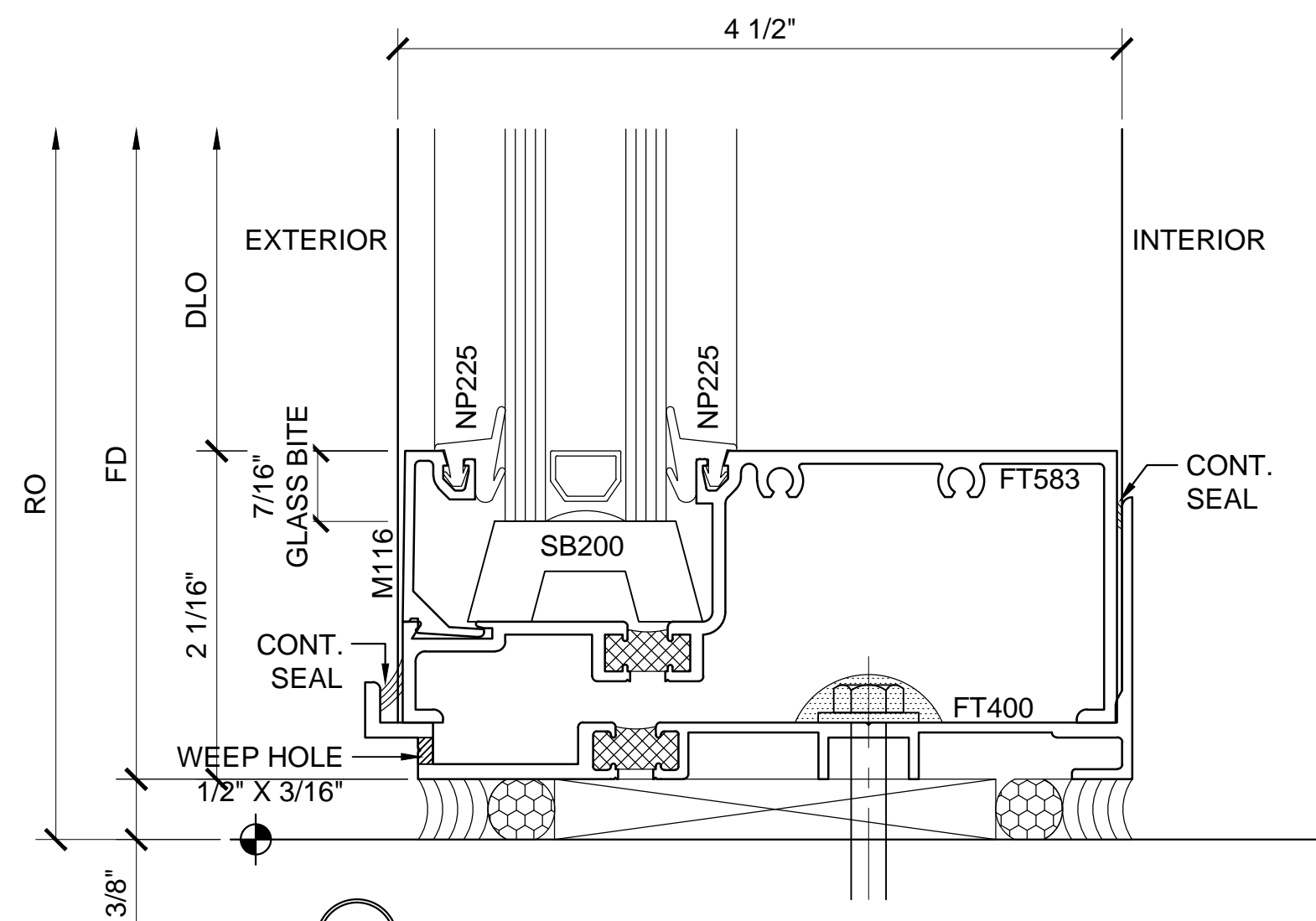
3 SECTION DETAIL AT INTERMEDIATE HORIZONTAL
 ARCH REF: N/A EXTERIOR GLAZING 1'-0"=1'-0"



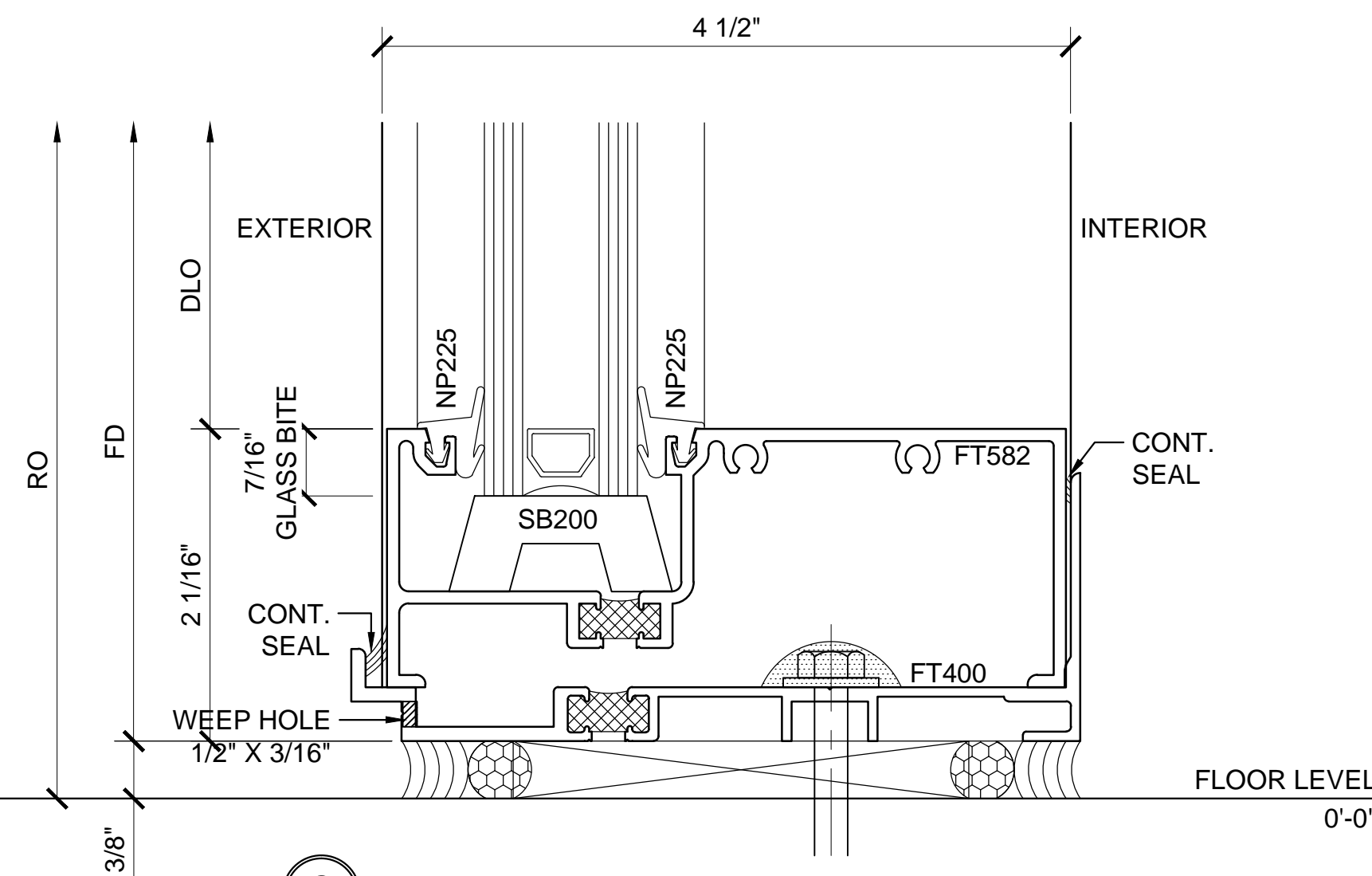
4 SECTION DETAIL AT INTERMEDIATE HORIZONTAL
 ARCH REF: N/A INTERIOR GLAZING 1'-0"=1'-0"



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



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



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

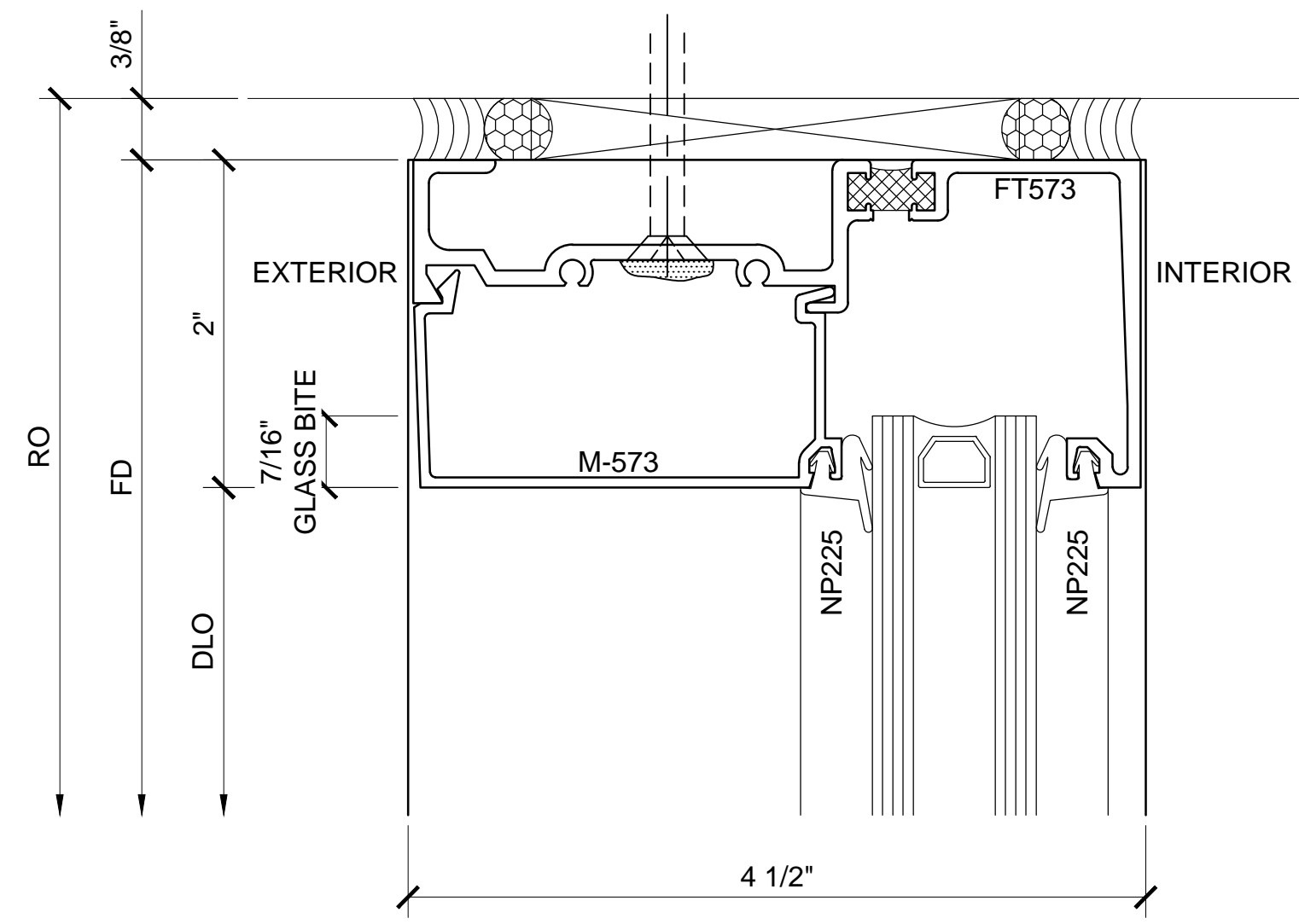
SERIES FT451 FLUSH FRONT STOREFRONT SYSTEM /OFFSET / FLUSH OUT / EXTERIOR AND INTERIOR GLAZING DETAILS

1'-0" = 1'-0"

U.S. ALUMINUM
 SERIES FT 451
 STOREFRONT SYSTEM

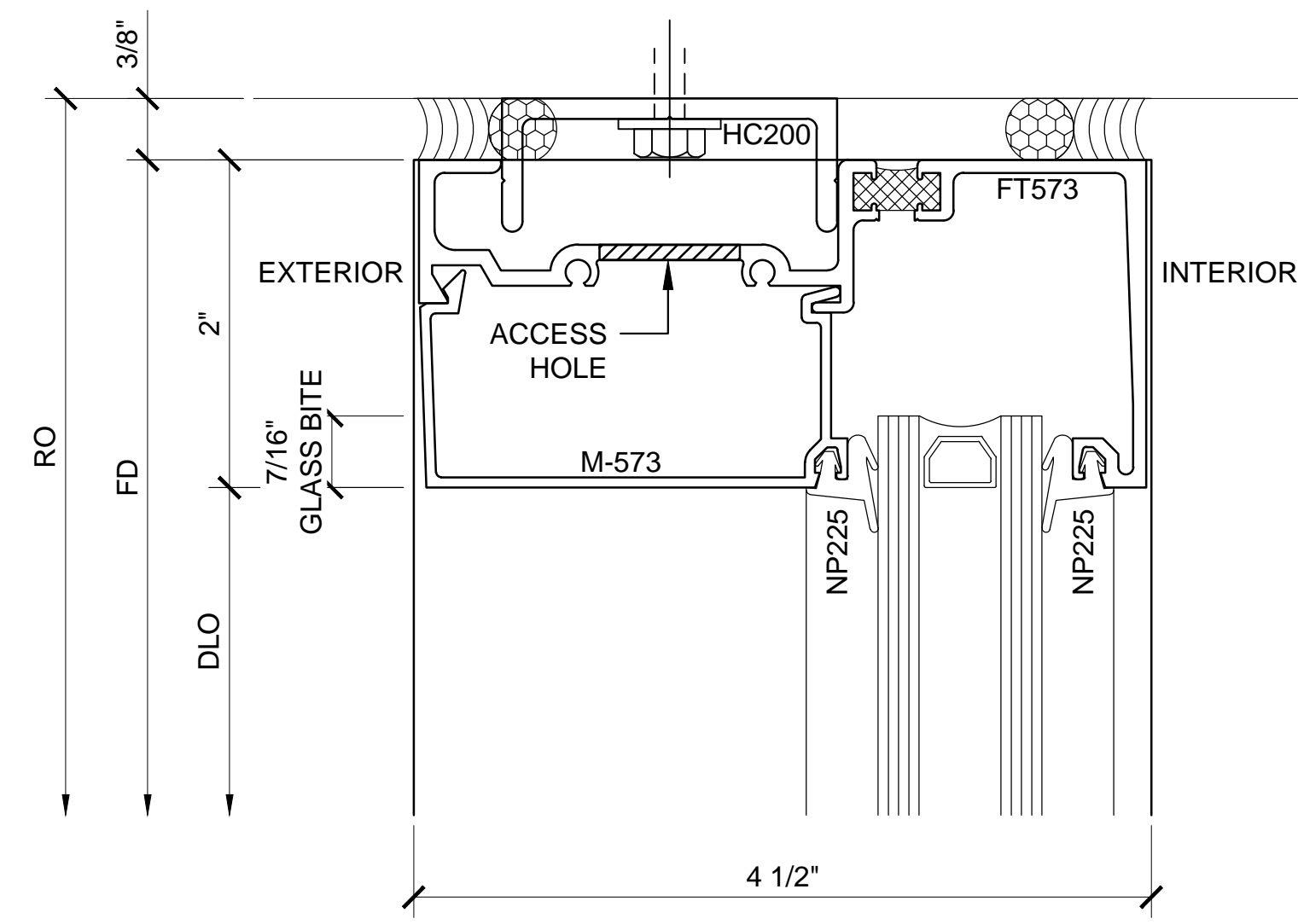
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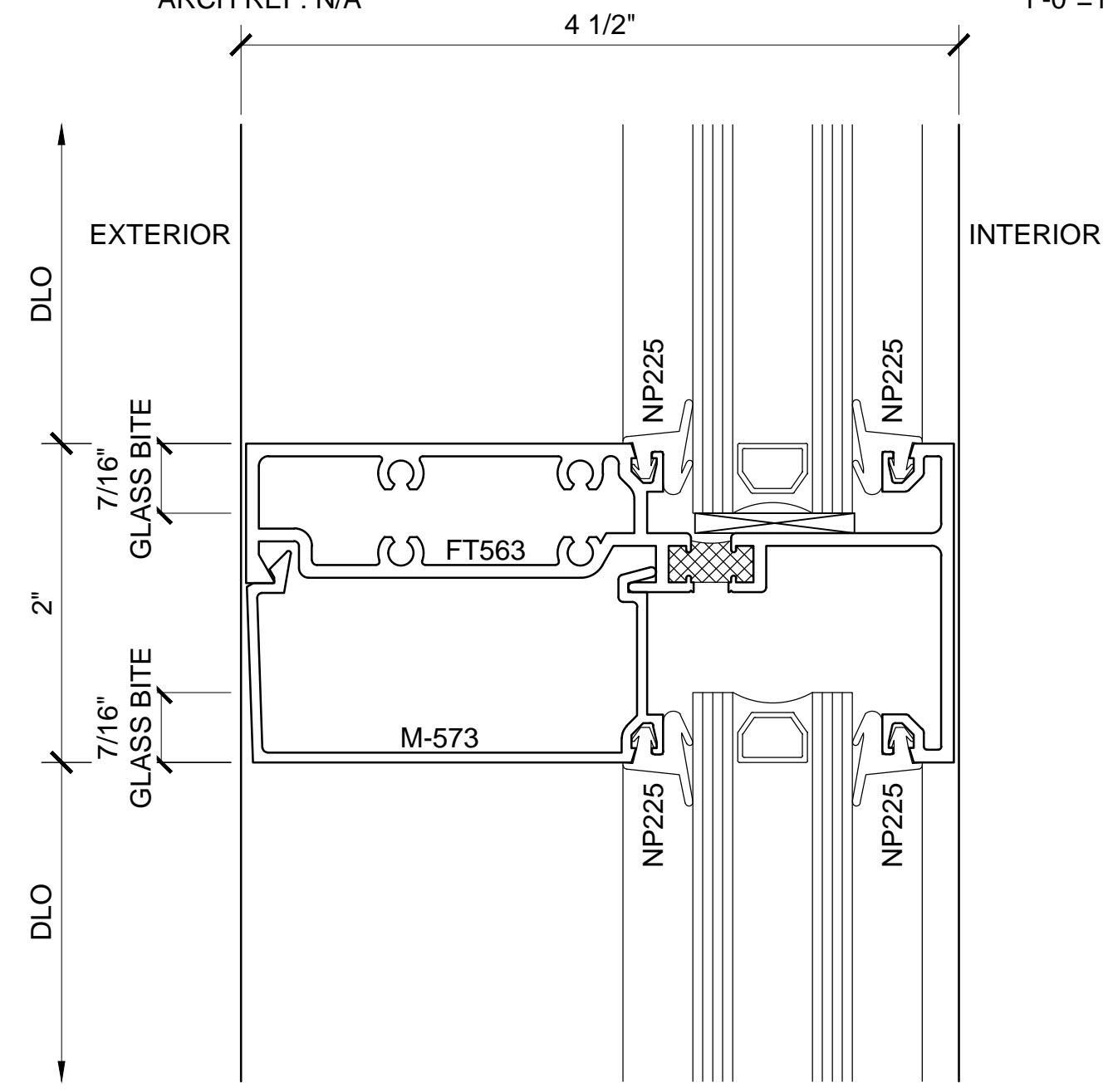
1 SECTION DETAIL AT HEAD

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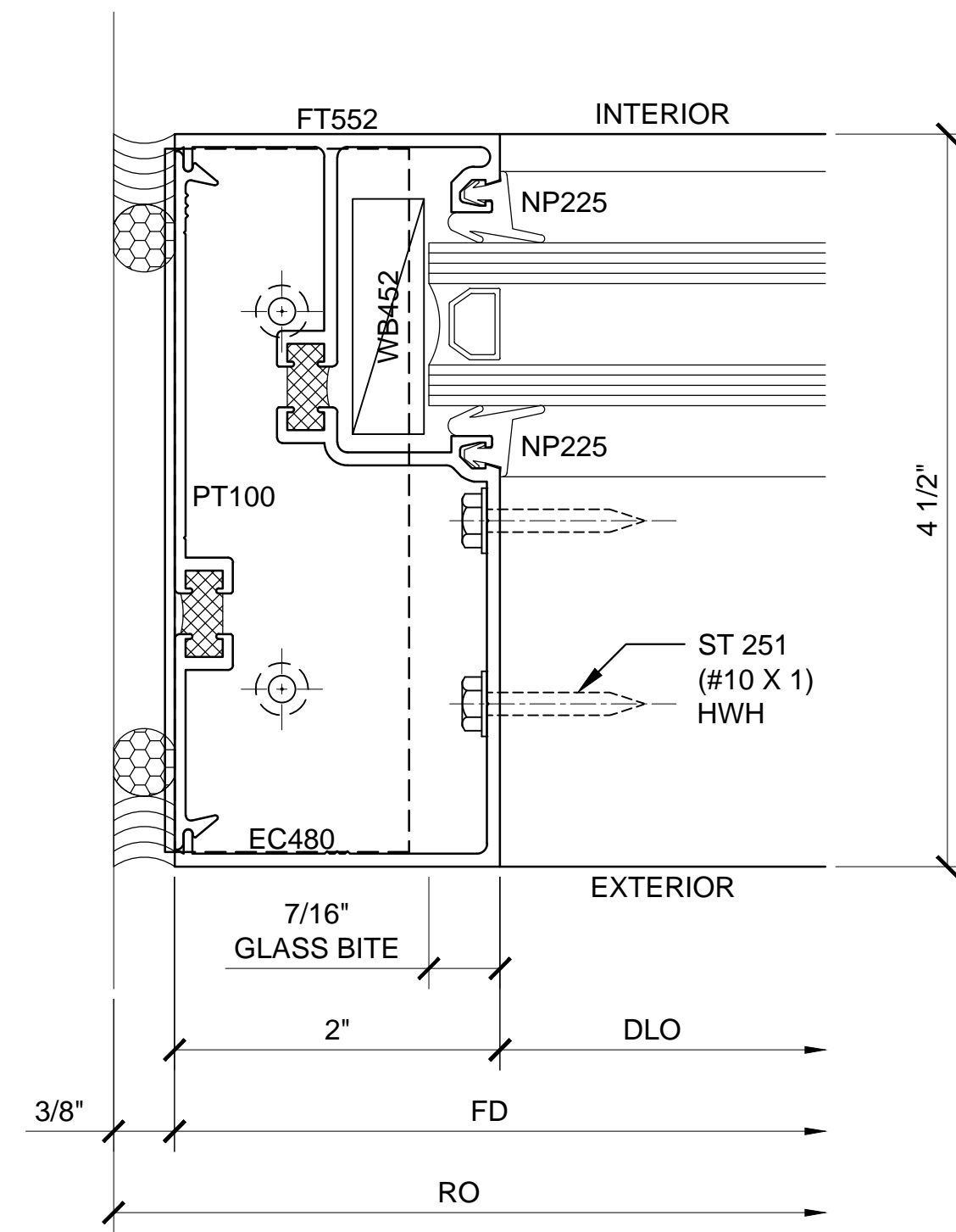
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ARCH REF: N/A 1'-0"=1'-0"



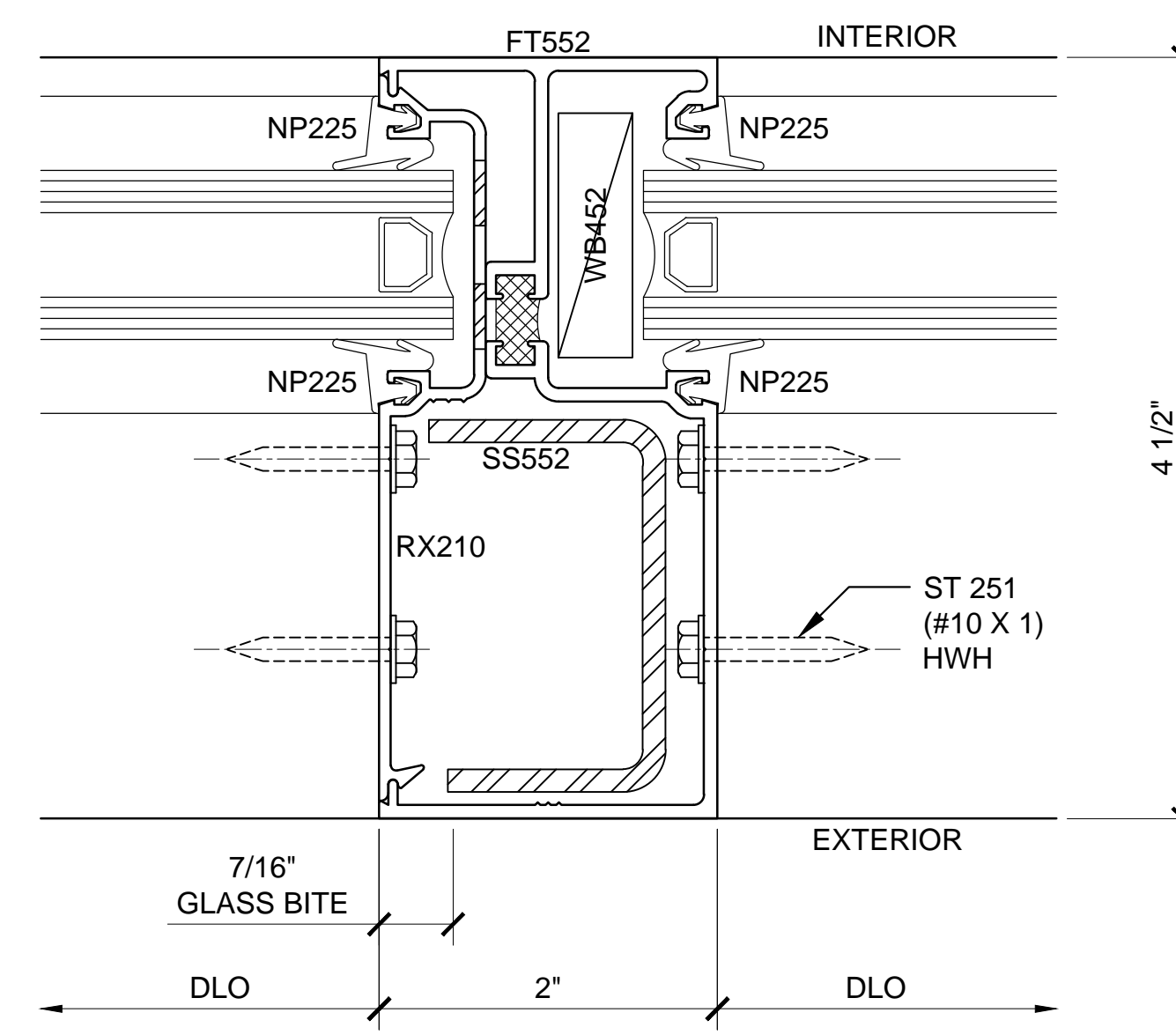
3 SECTION DETAIL AT INTERMEDIATE HORIZONTAL

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



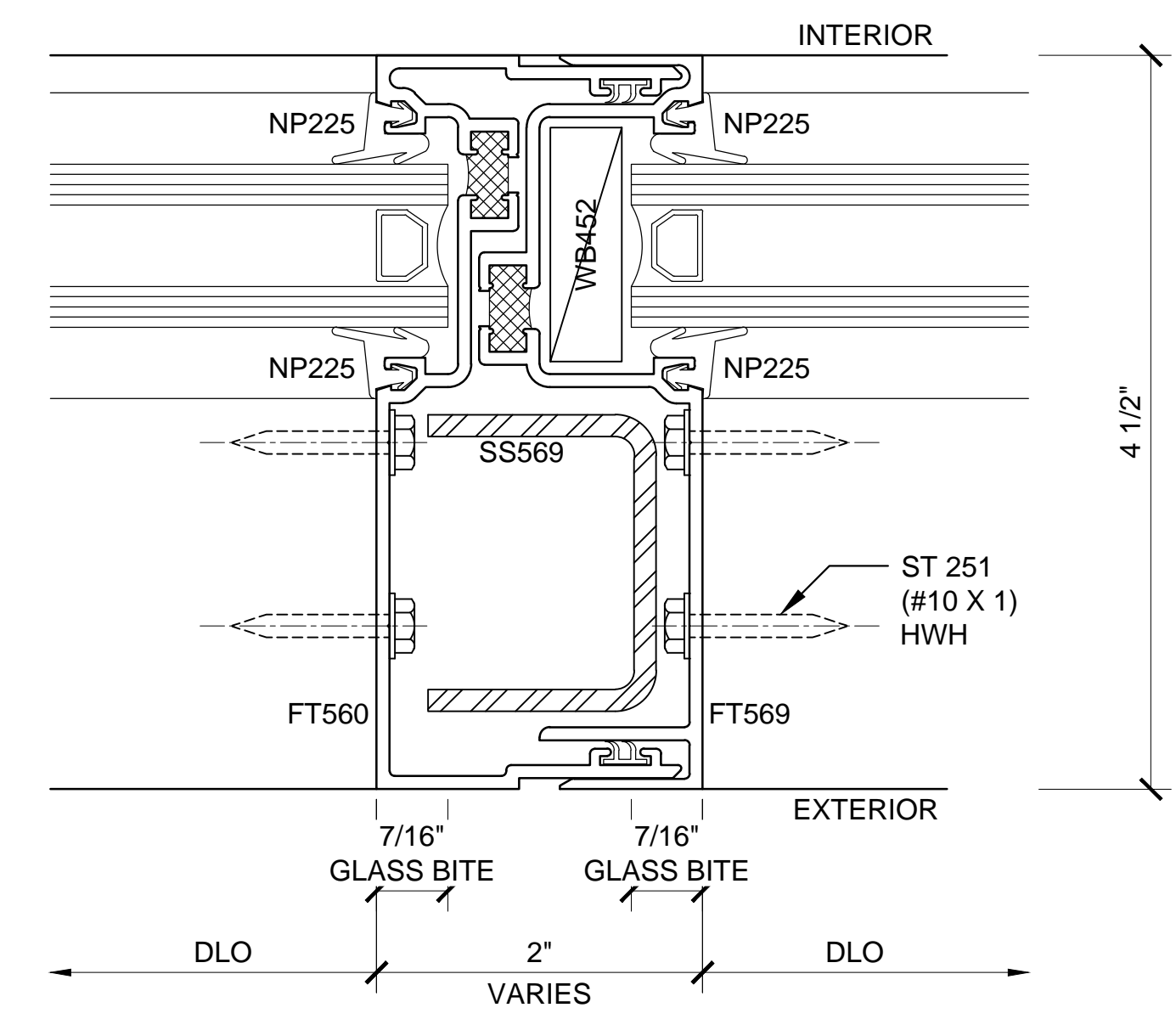
5 SECTION DETAIL AT JAMB

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



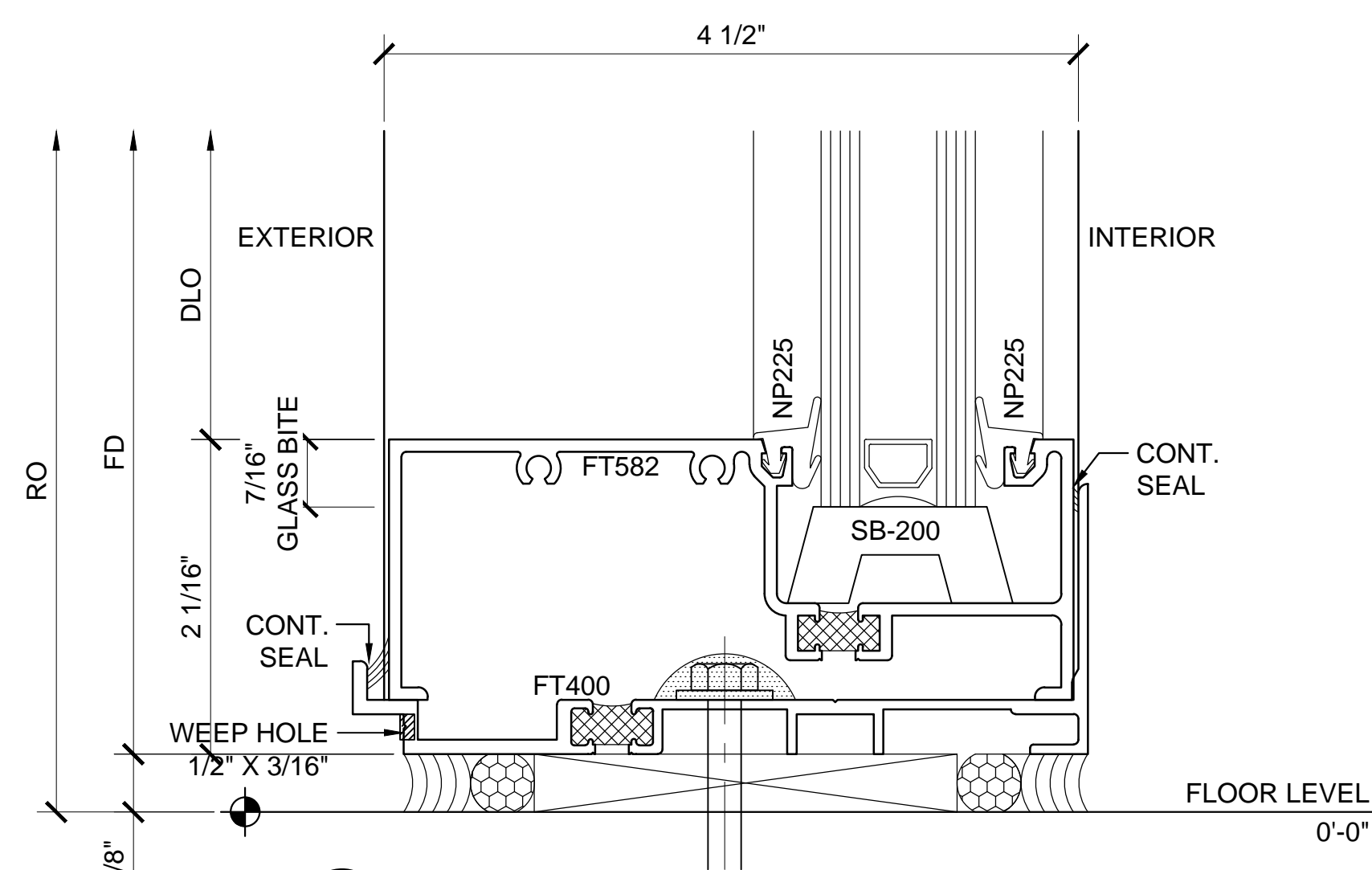
6 SECTION DETAIL AT INTERMEDIATE VERTICAL

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



7 SECTION DETAIL AT EXPANSION VERTICAL

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



4 SECTION DETAIL AT SILL

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

SERIES FT451 FLUSH FRONT STOREFRONT SYSTEM /OFFSET / FLUSH IN / EXTERIOR GLAZING DETAILS

1'-0" = 1'-0"

U.S. ALUMINUM
 SERIES FT 451
 STOREFRONT SYSTEM

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SERIES FT 451 THERMAL FLUSH FRONT / OFFSET / FLUSH OUT - IN

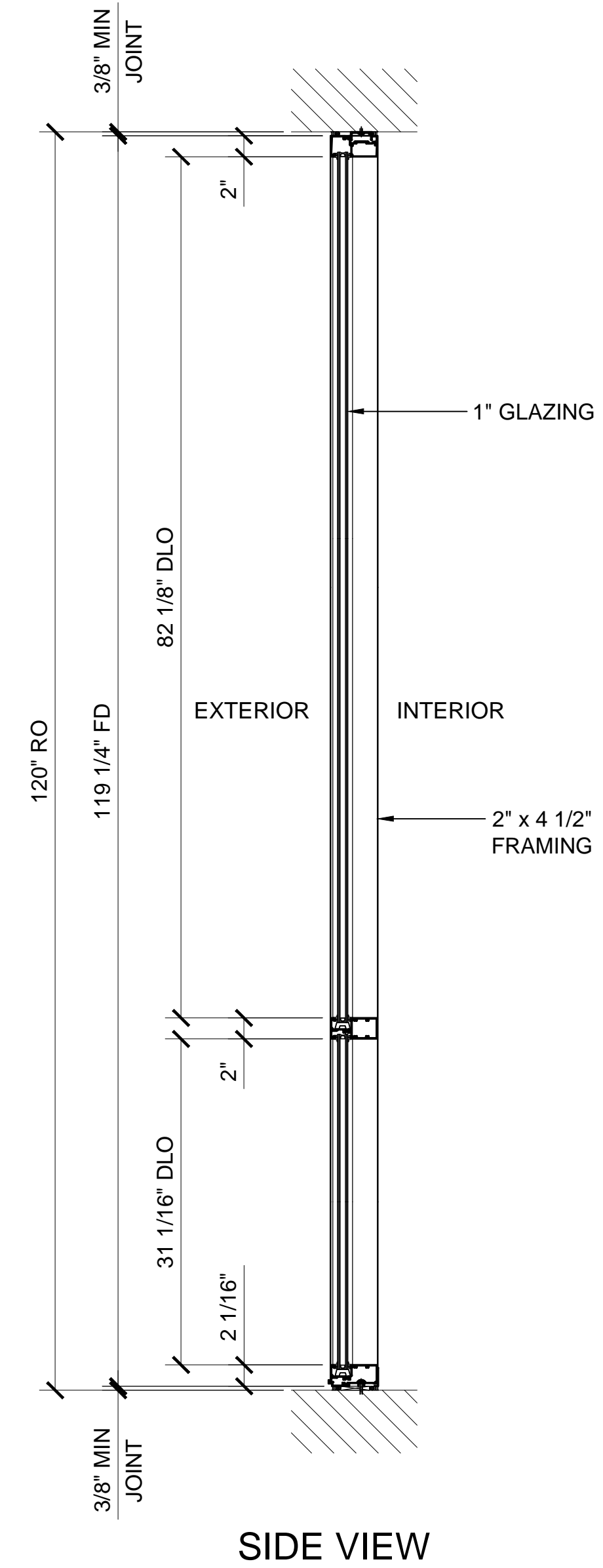
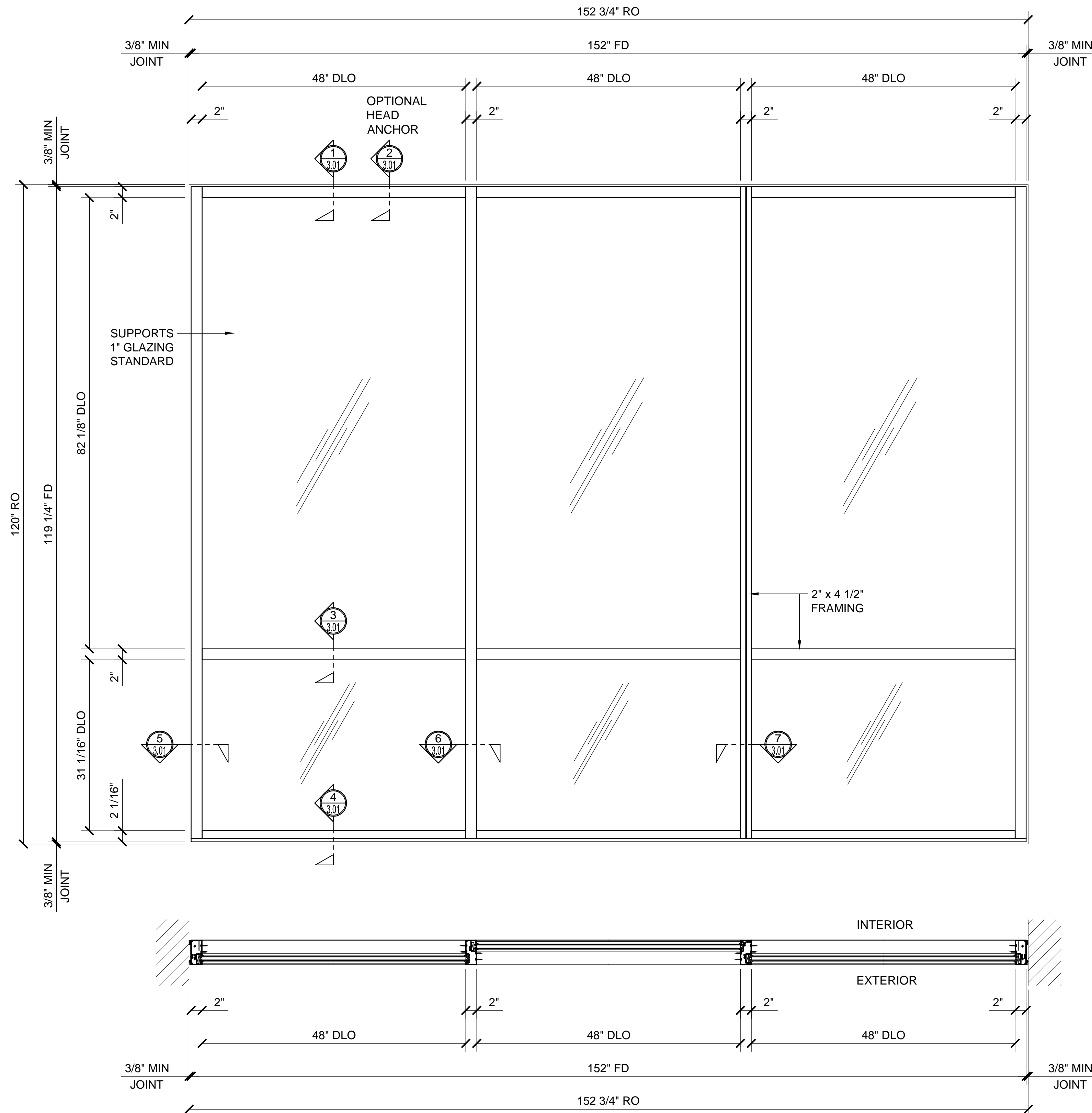
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- Screw spline assembly
- Exterior Glazed



STANDARD ABBREVIATIONS

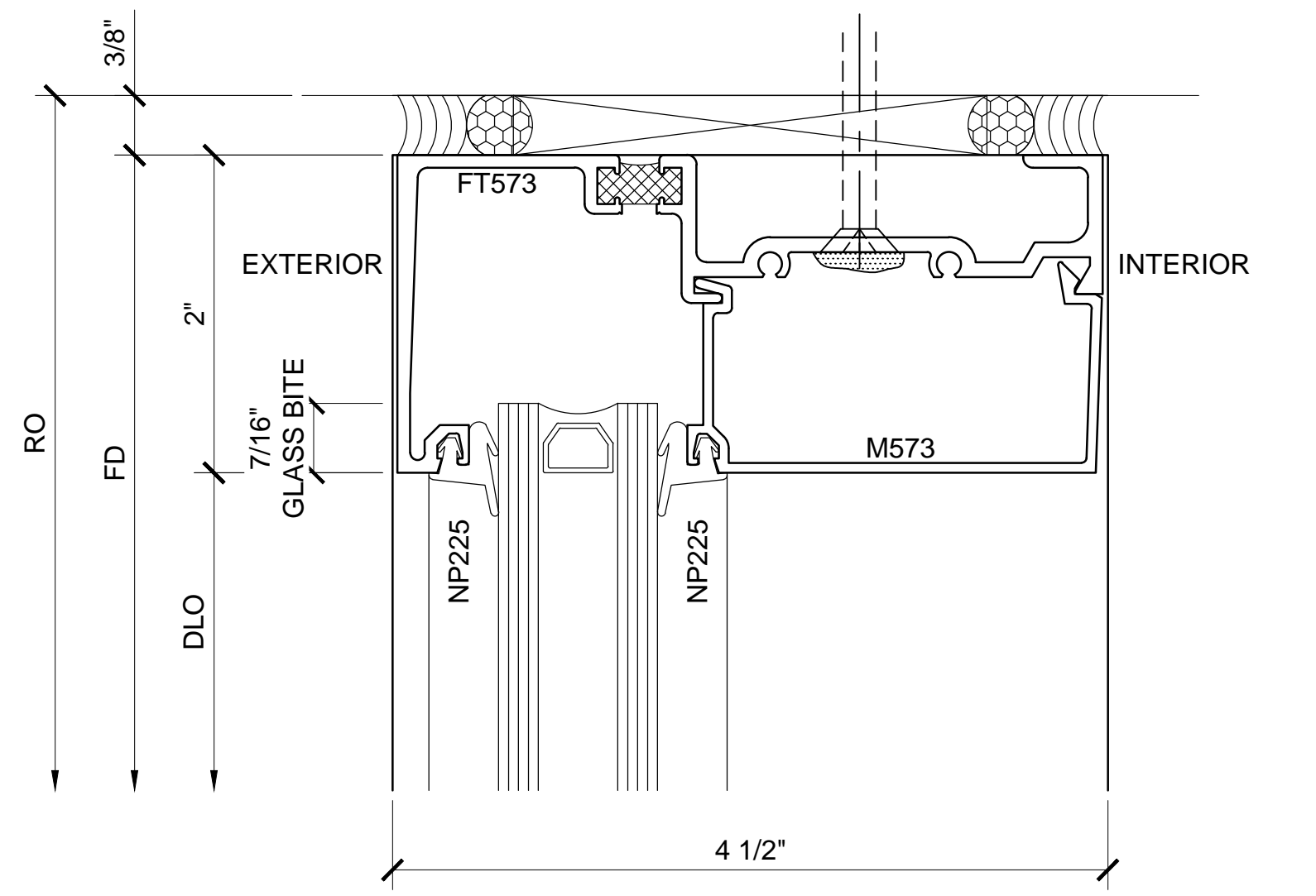
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DLO	DAYLIGHT OPENING
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Revisions By:

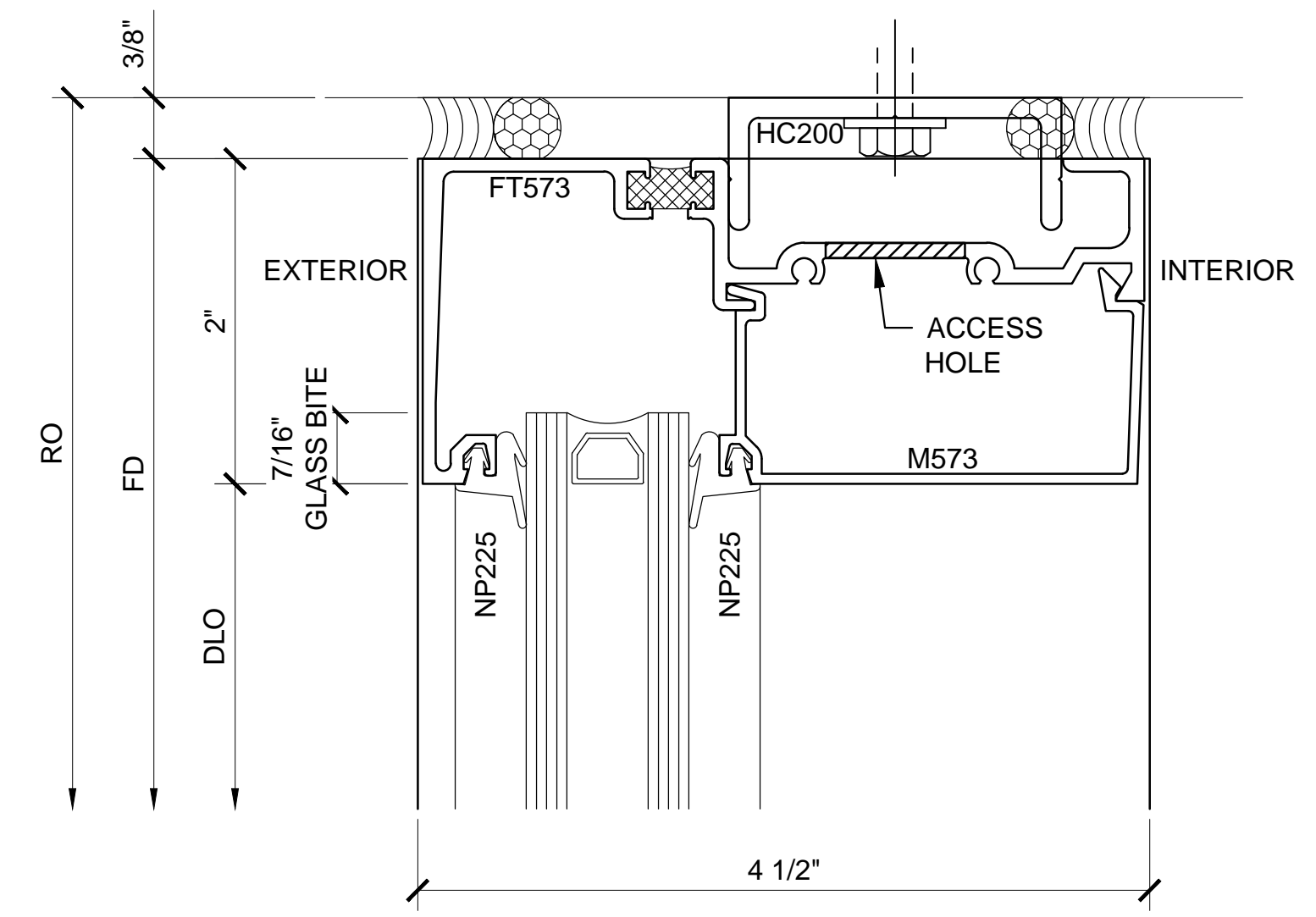
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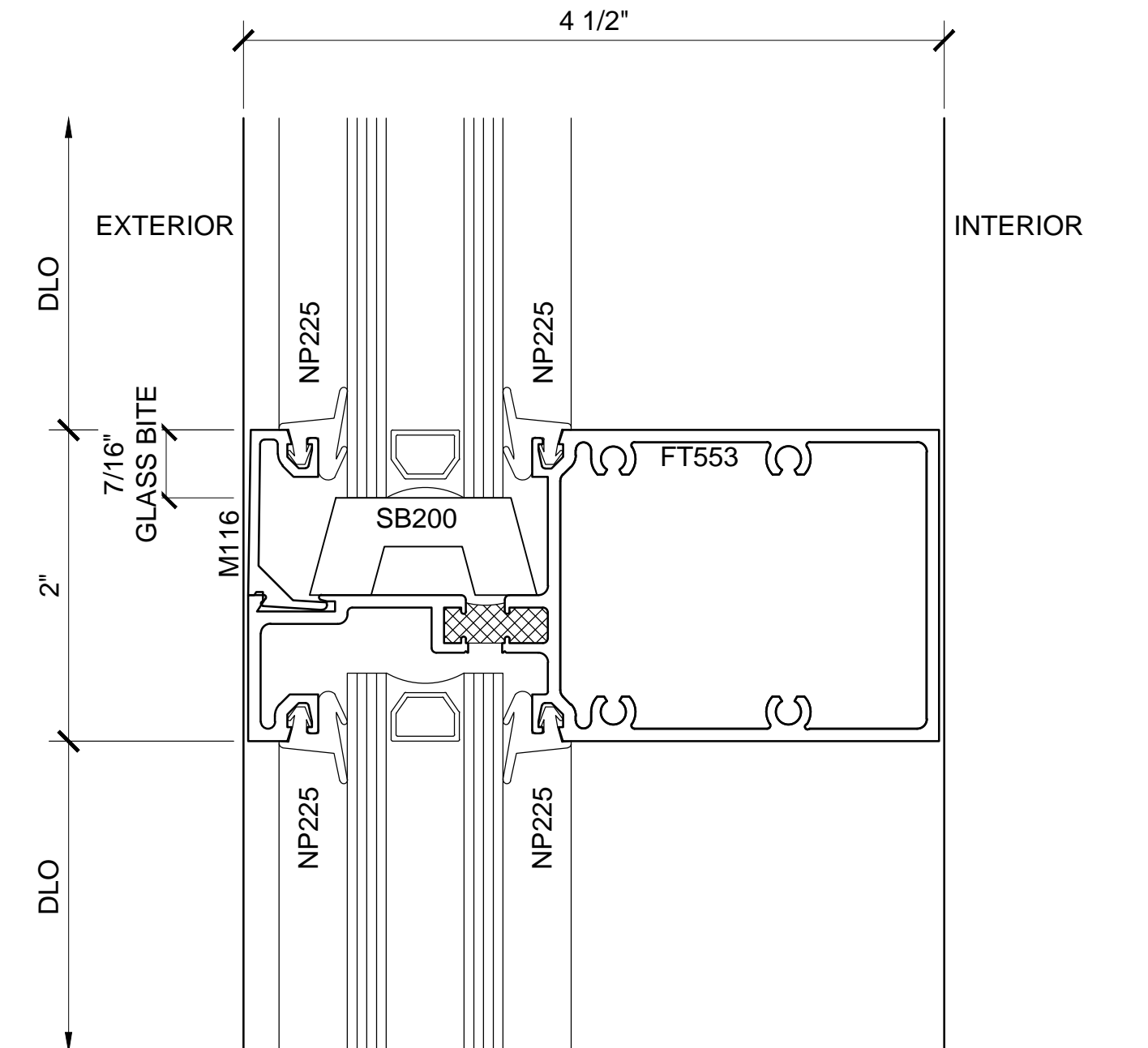
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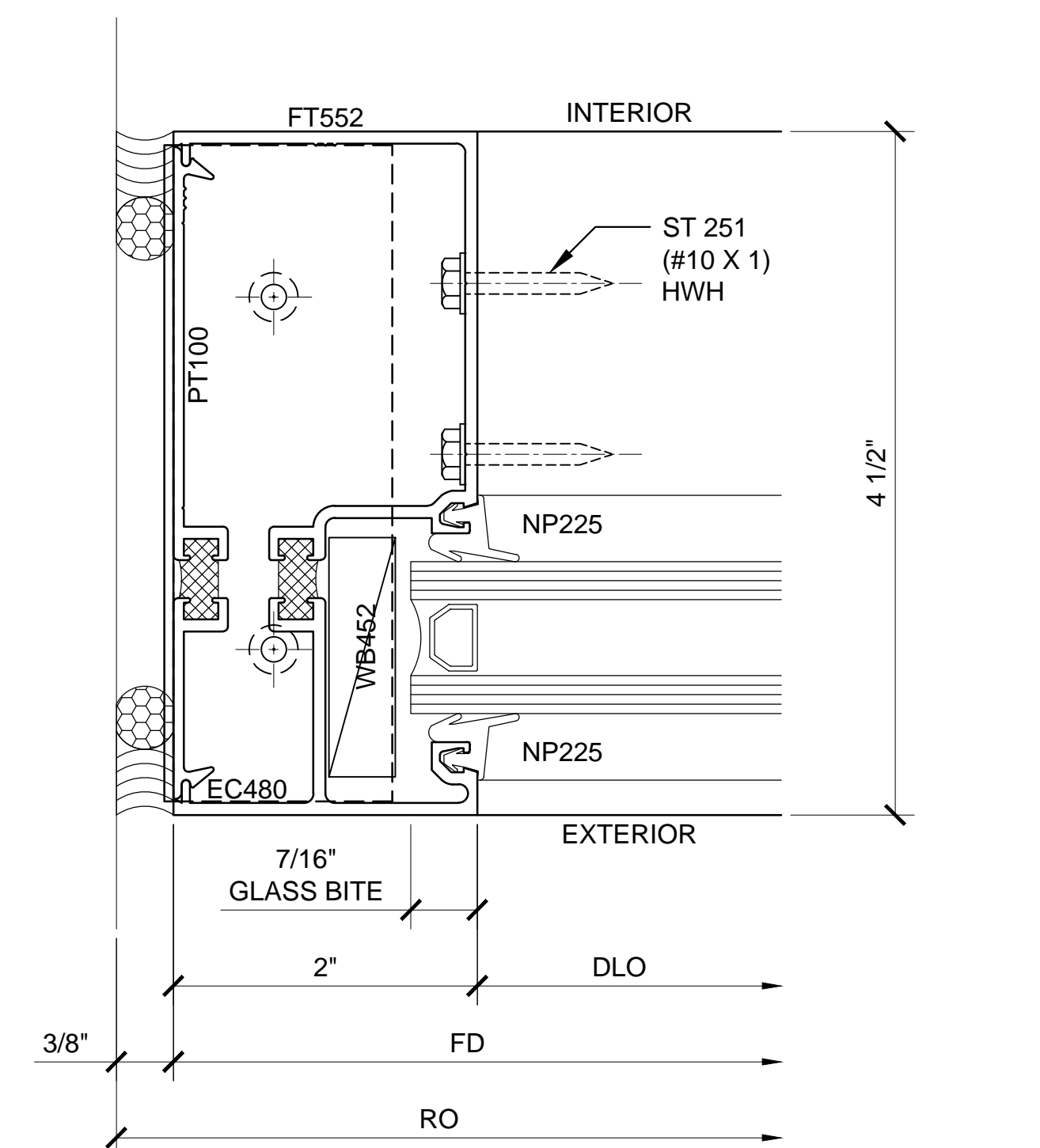
1 SECTION DETAIL AT HEAD
 ARCH REF: N/A 1'-0"=1'-0"



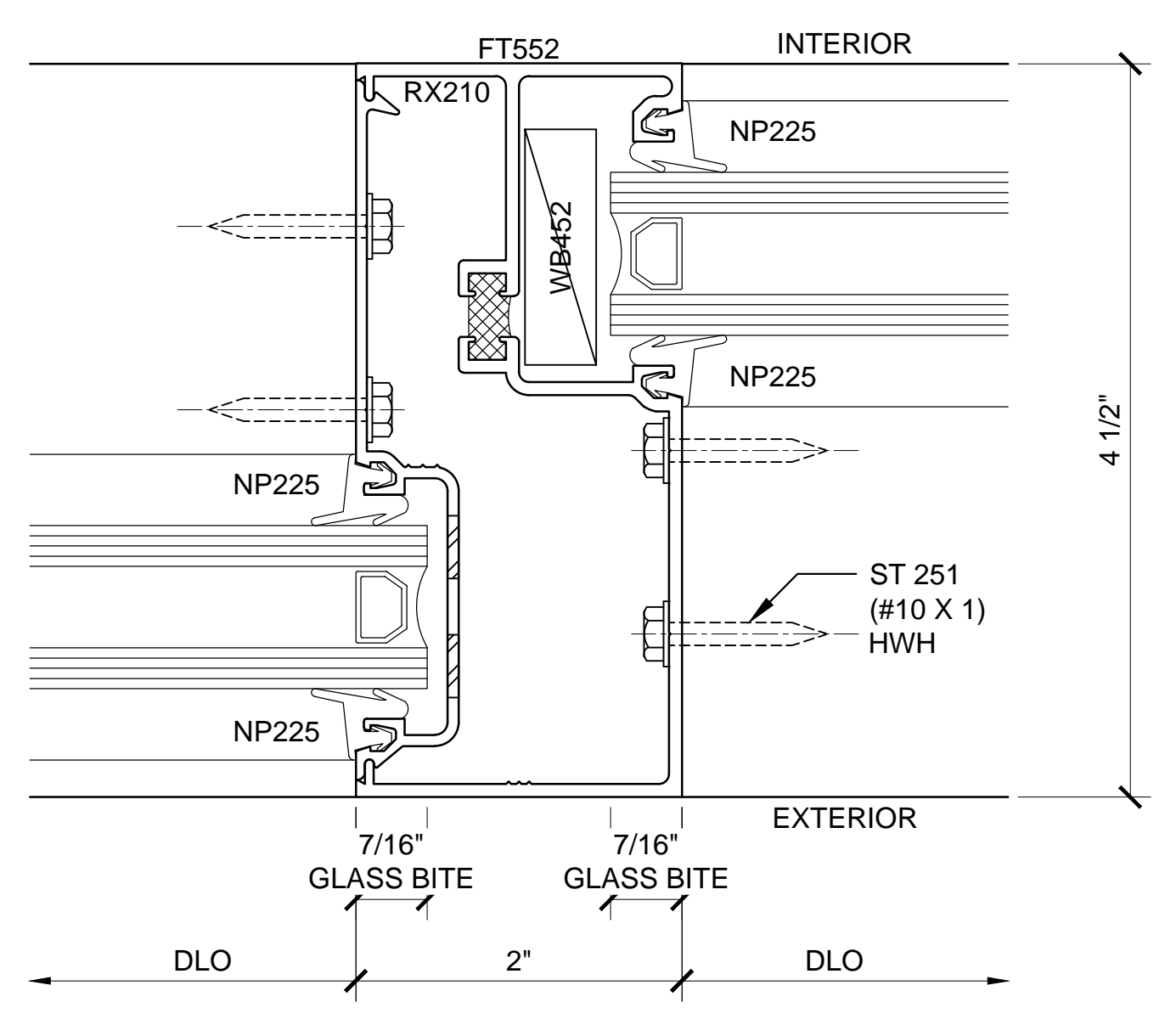
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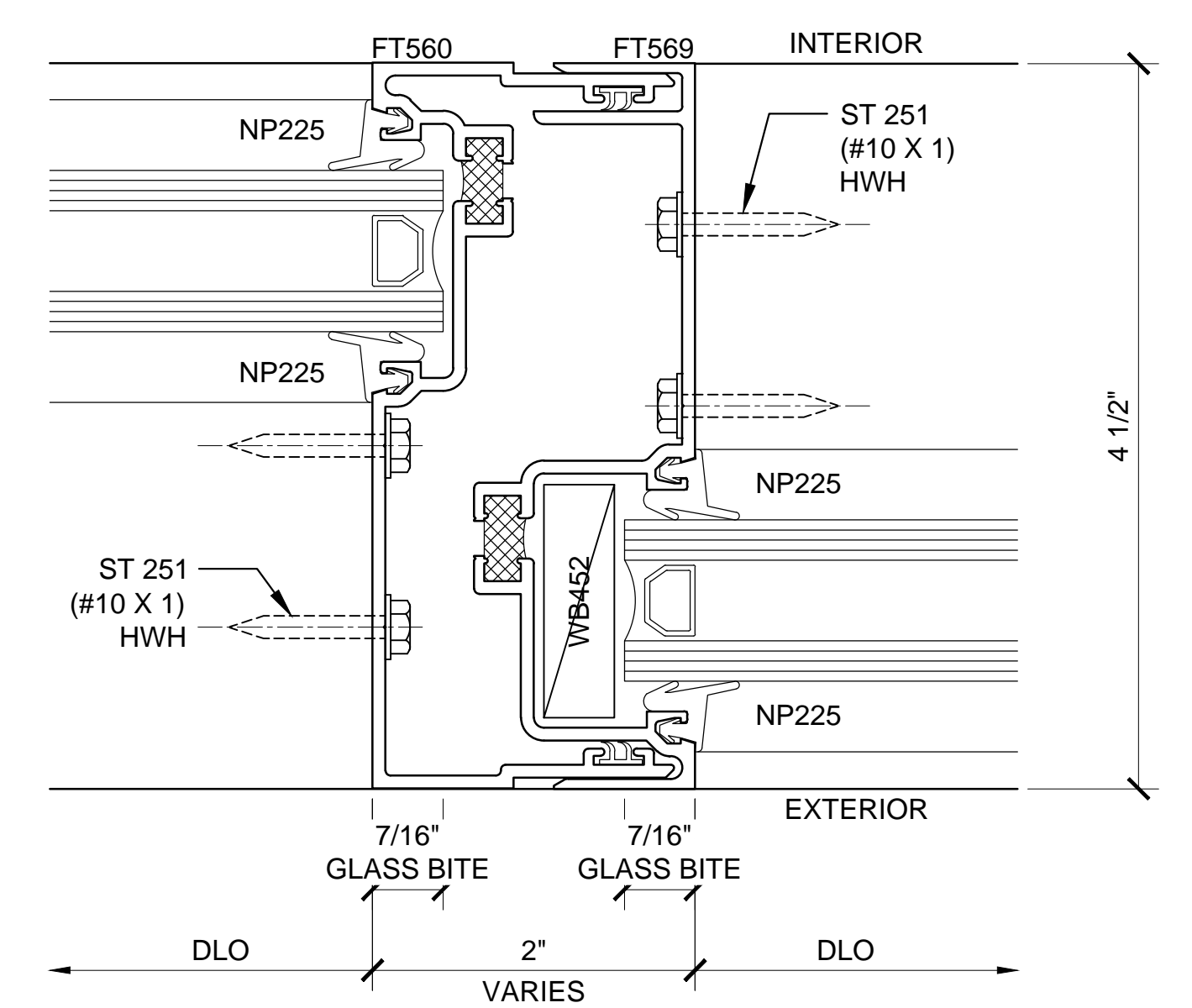
3 SECTION DETAIL AT INTERMEDIATE HORIZONTAL
 ARCH REF: N/A 1'-0"=1'-0"



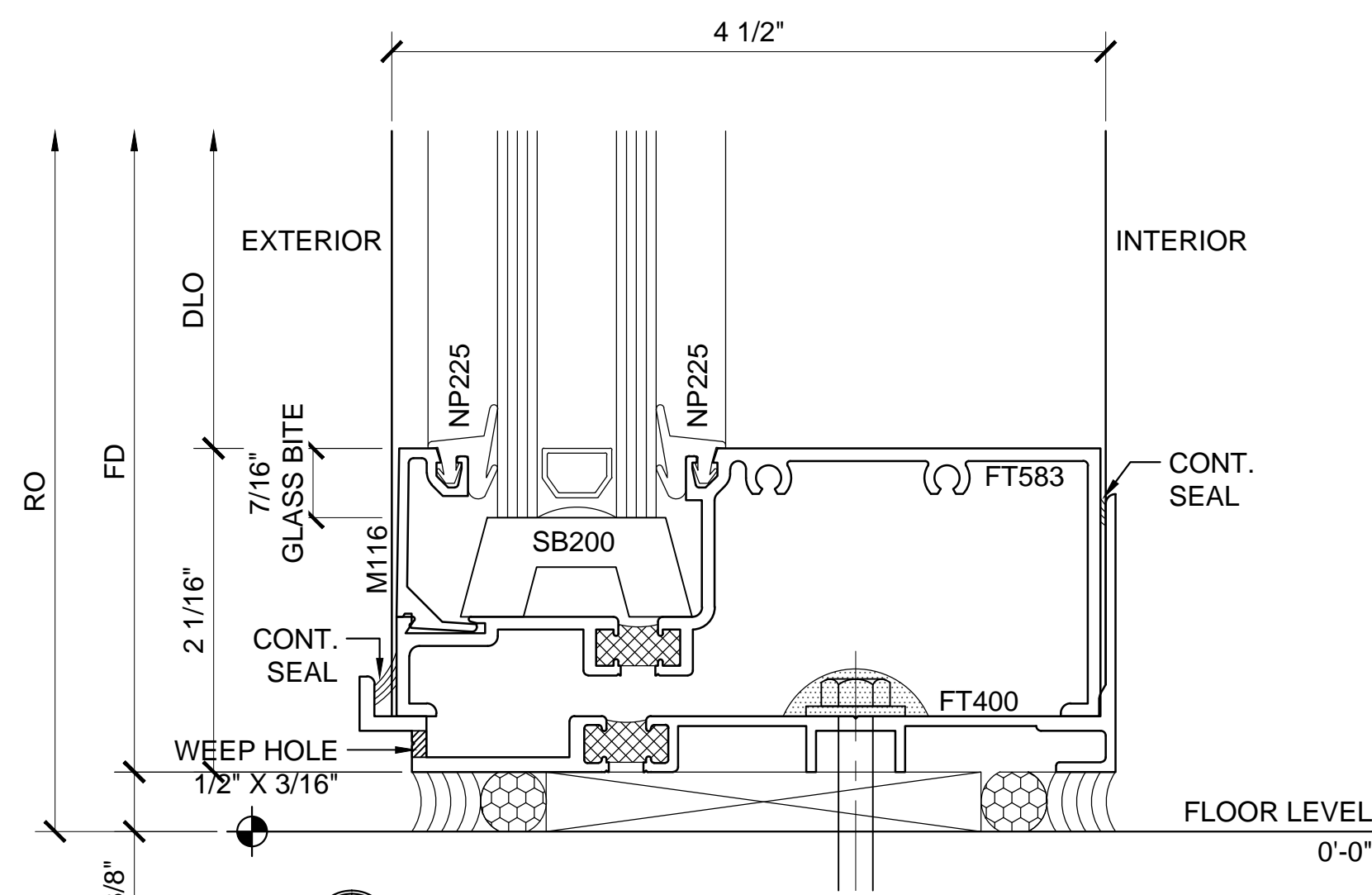
5 SECTION DETAIL AT JAMB
 ARCH REF: N/A 1'-0"=1'-0"



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



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



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

SERIES FT451 FLUSH FRONT STOREFRONT SYSTEM / OFFSET / FLUSH OUT -IN

1'-0" = 1'-0"

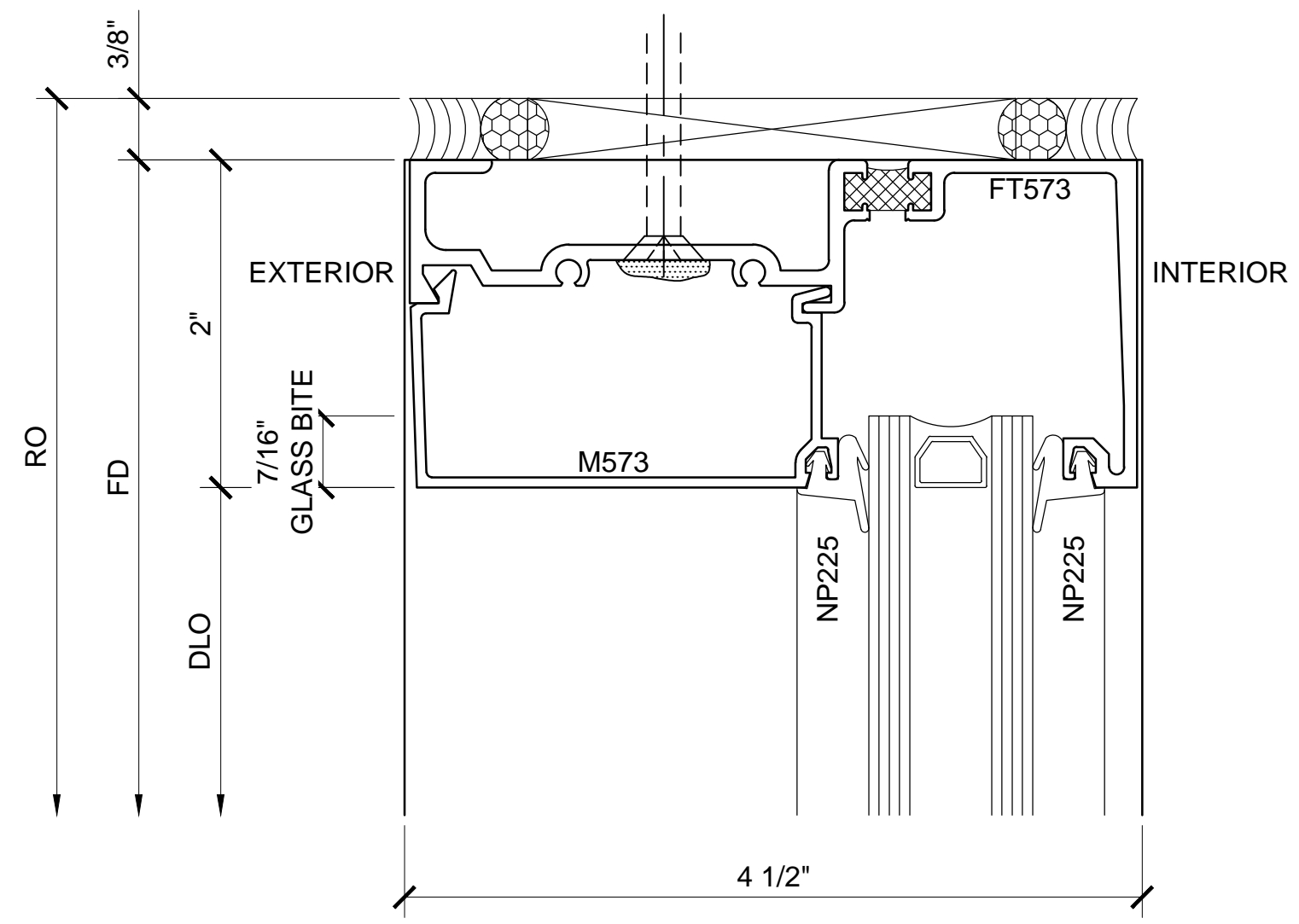
Revisions By:

C.R. LAURENCE CO. ARCHITECTURAL PRODUCTS
 2503 E. Vernon Avenue, Los Angeles, CA 90058-1897
 PH (800)-421-6144 FX 800-587-7301 www.crlaurence.com

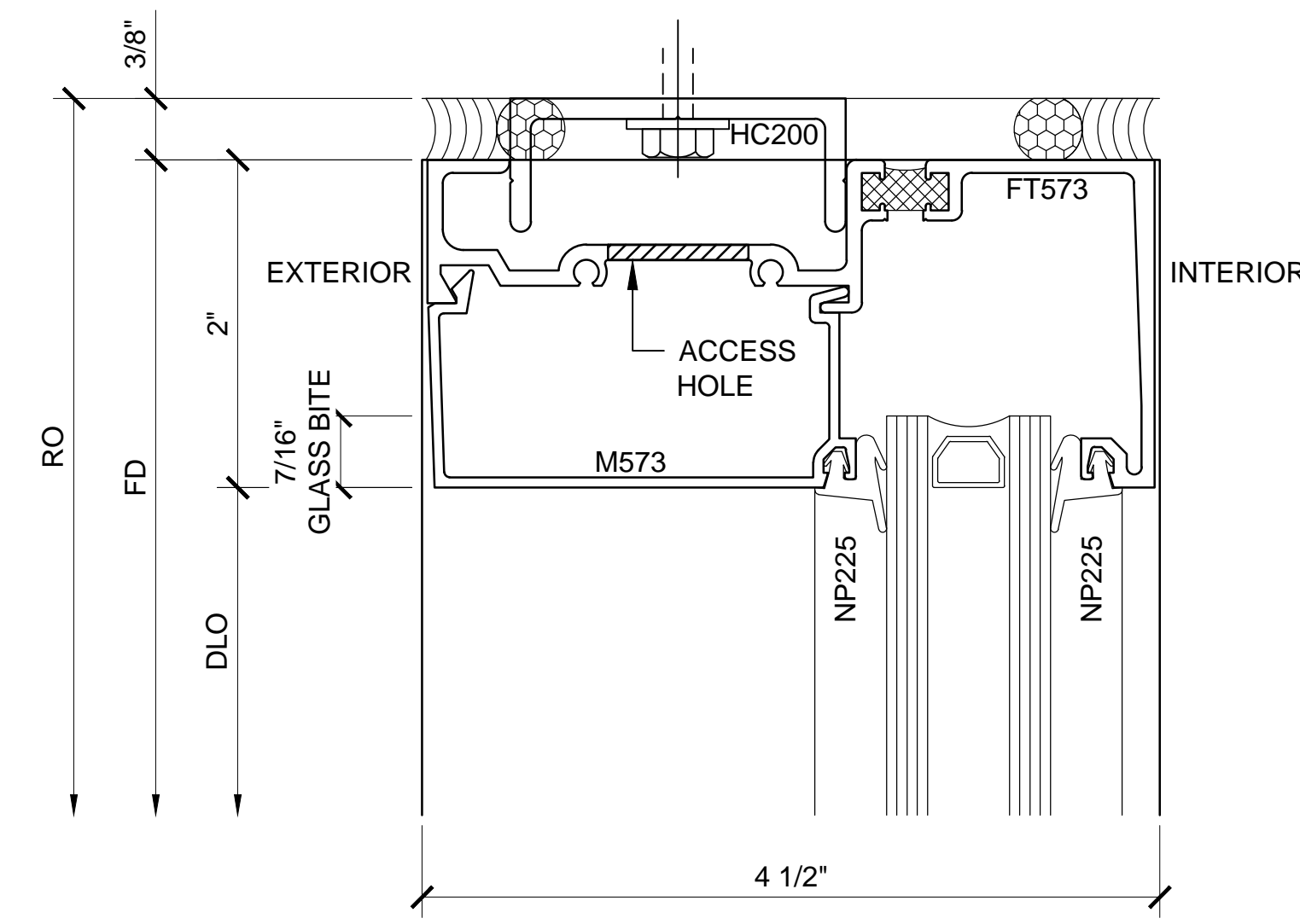
Discription:
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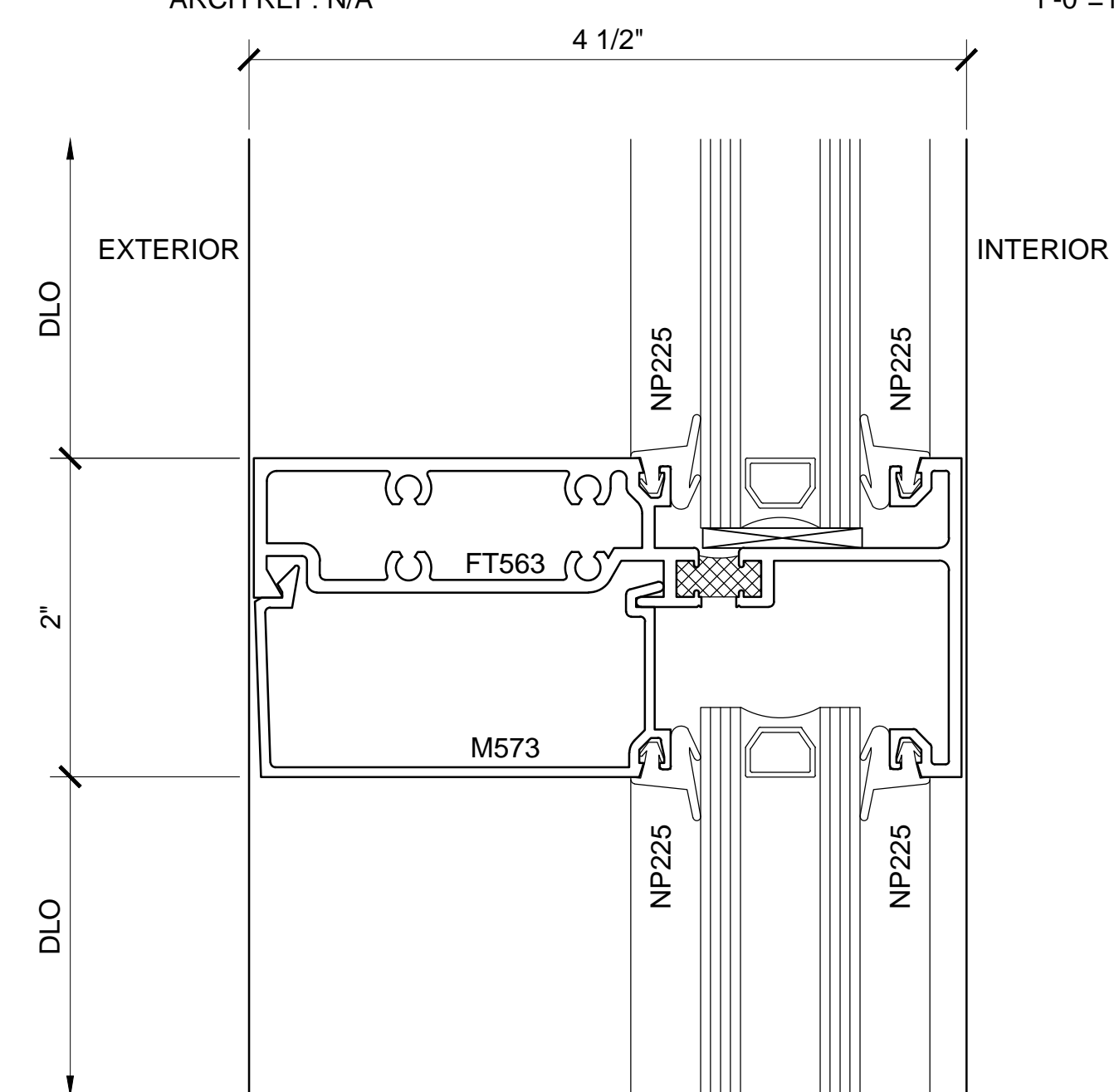
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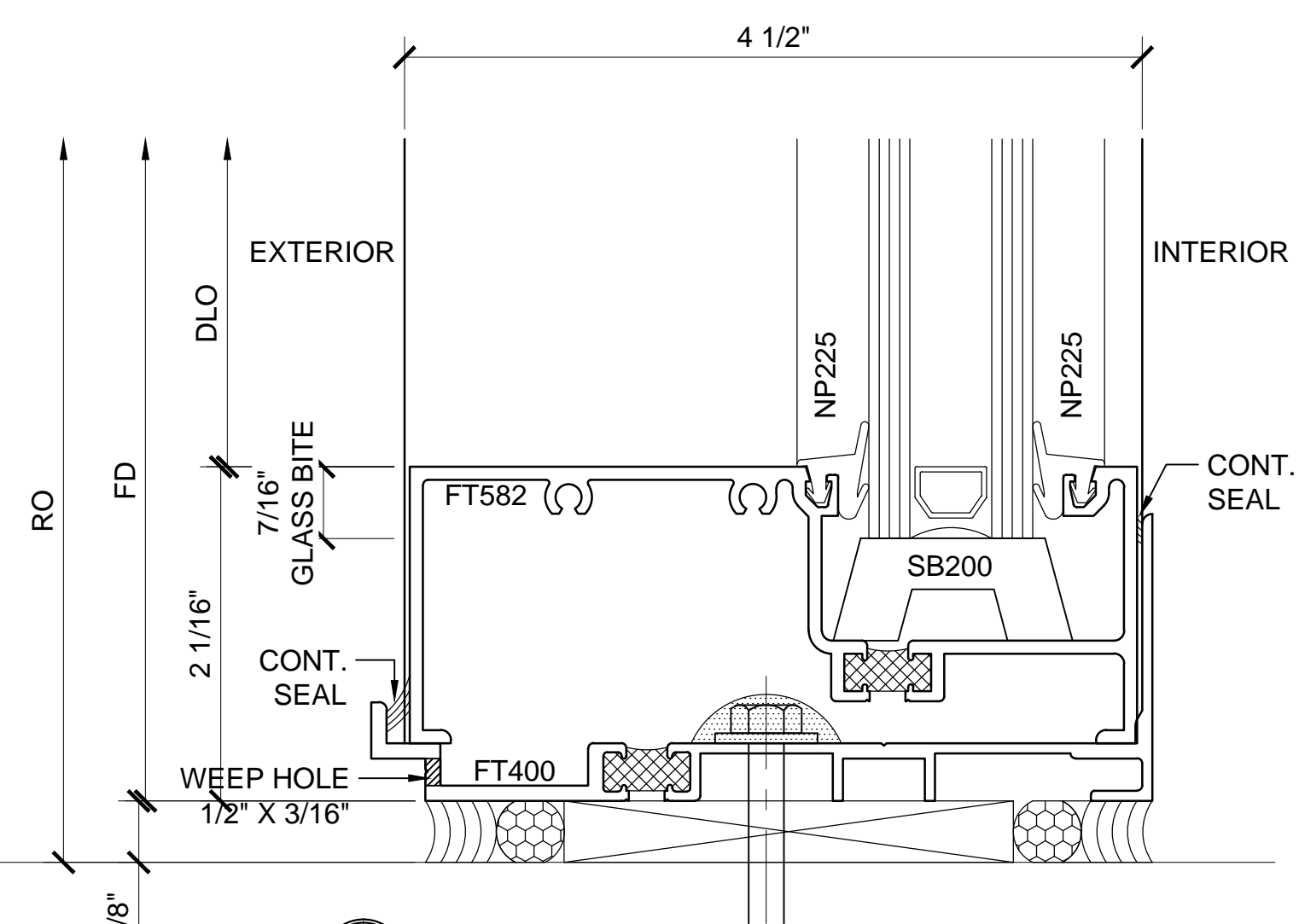
1 SECTION DETAIL AT HEAD
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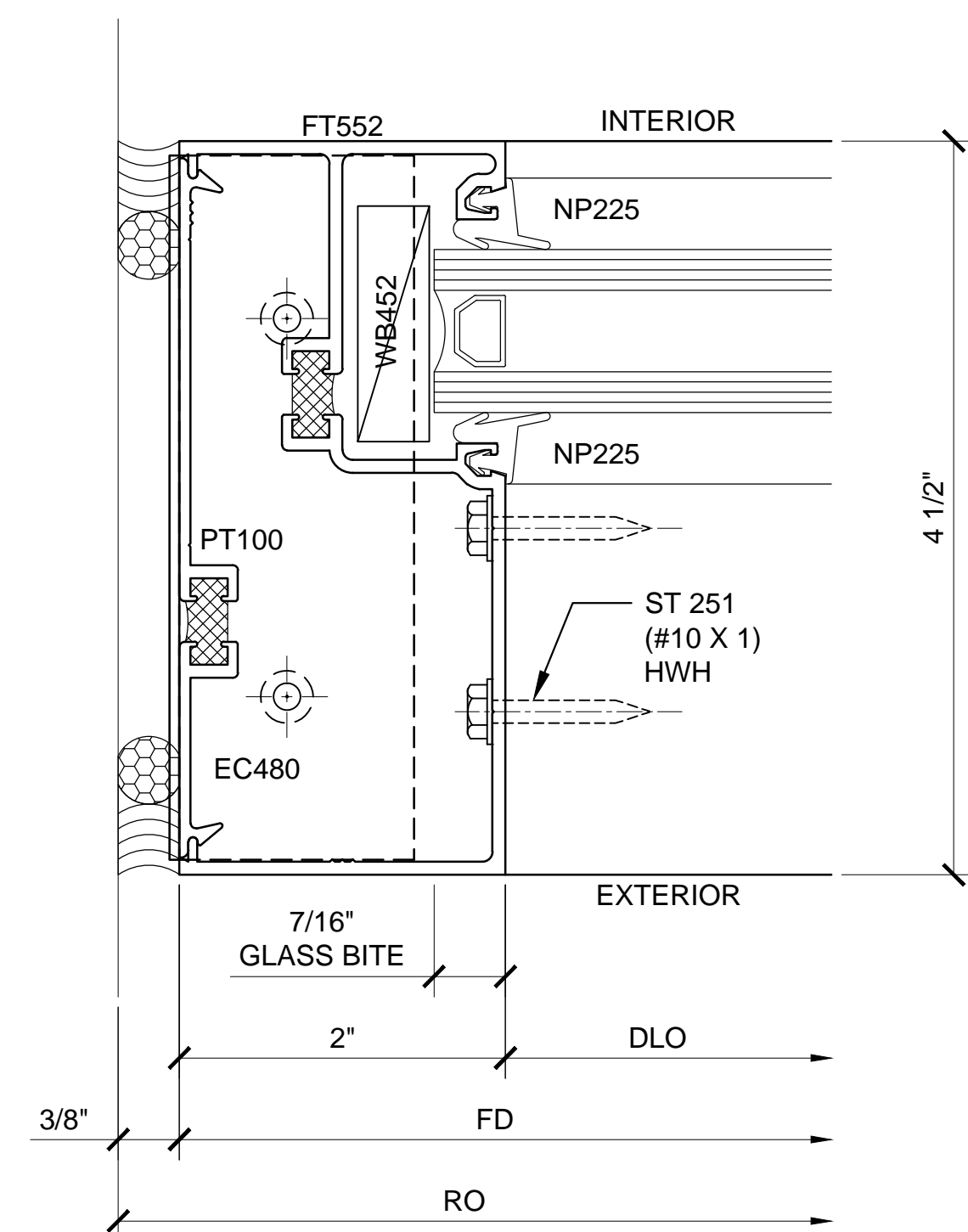
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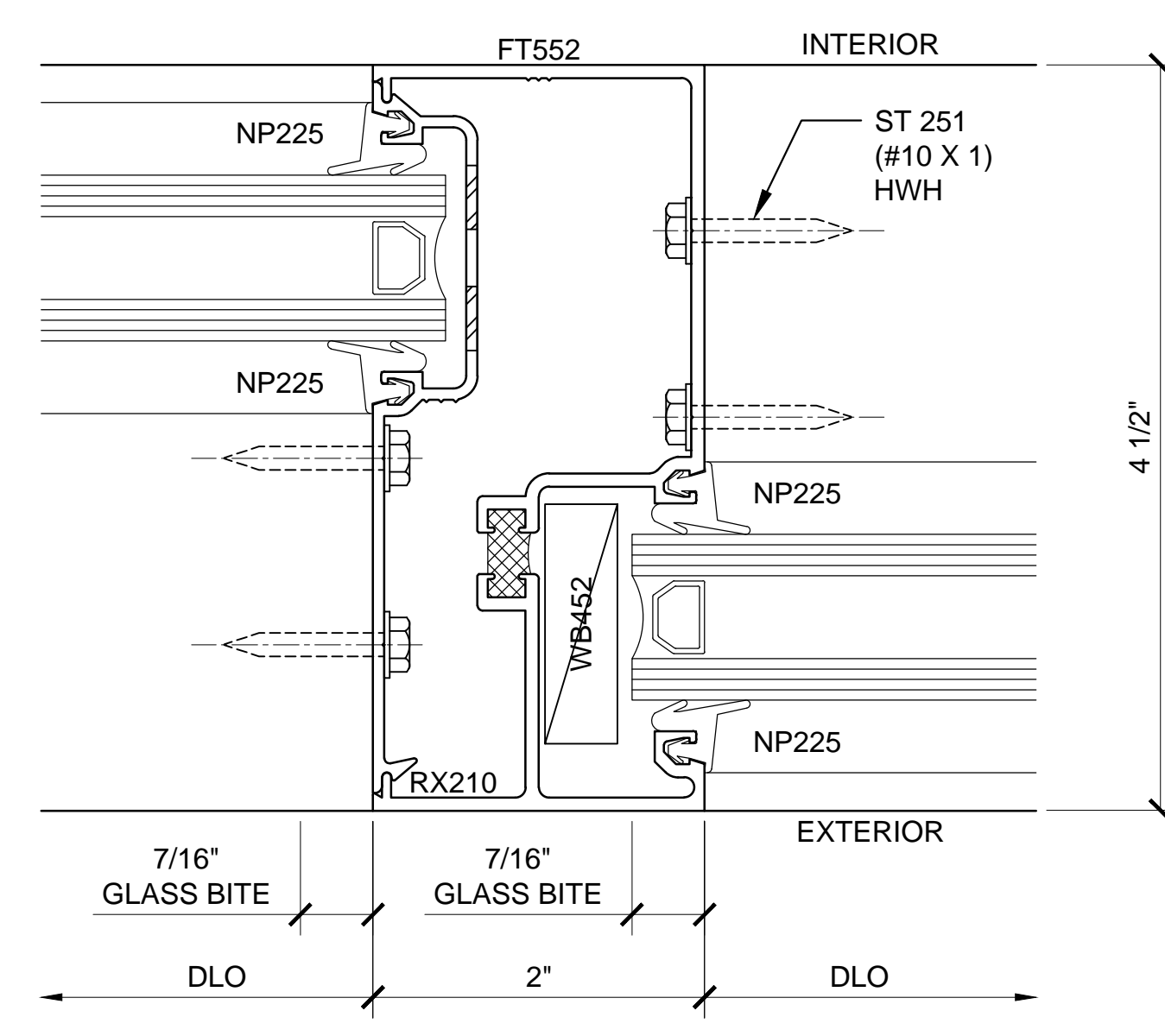
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ARCH REF: N/A 1'-0"=1'-0"



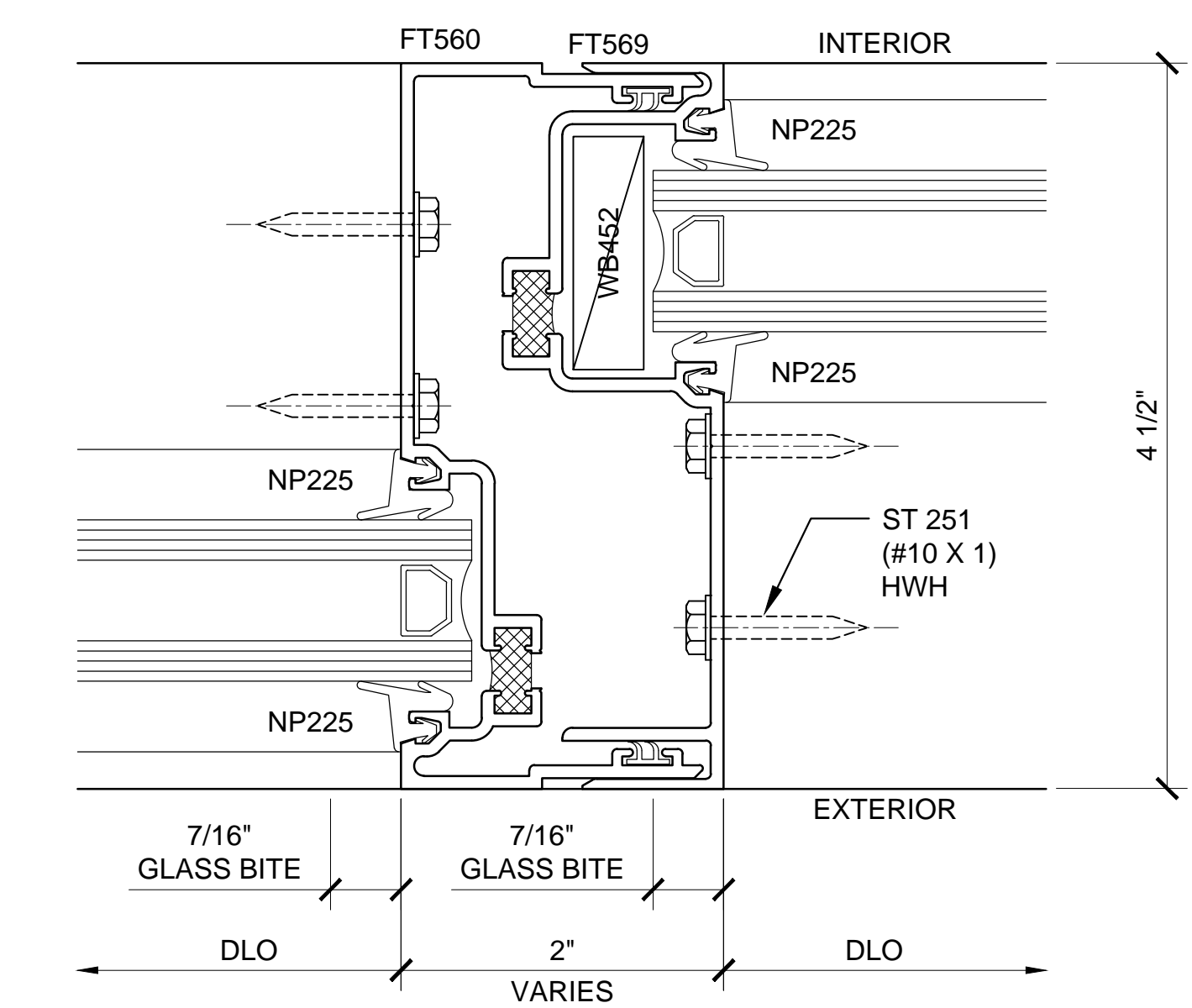
4 SECTION DETAIL AT SILL
ARCH REF: N/A 1'-0"=1'-0"



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



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



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

SERIES FT451 FLUSH FRONT STOREFRONT SYSTEM /OFFSET / FLUSH OUT -IN

1'-0" = 1'-0"

Revisions By:

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C.R. LAURENCE CO. ARCHITECTURAL PRODUCTS
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PH: (800)-421-6144 FX: 800-587-7301 www.crlaurence.com

Description:
**U.S. ALUMINUM
SERIES FT 451
STOREFRONT SYSTEM**

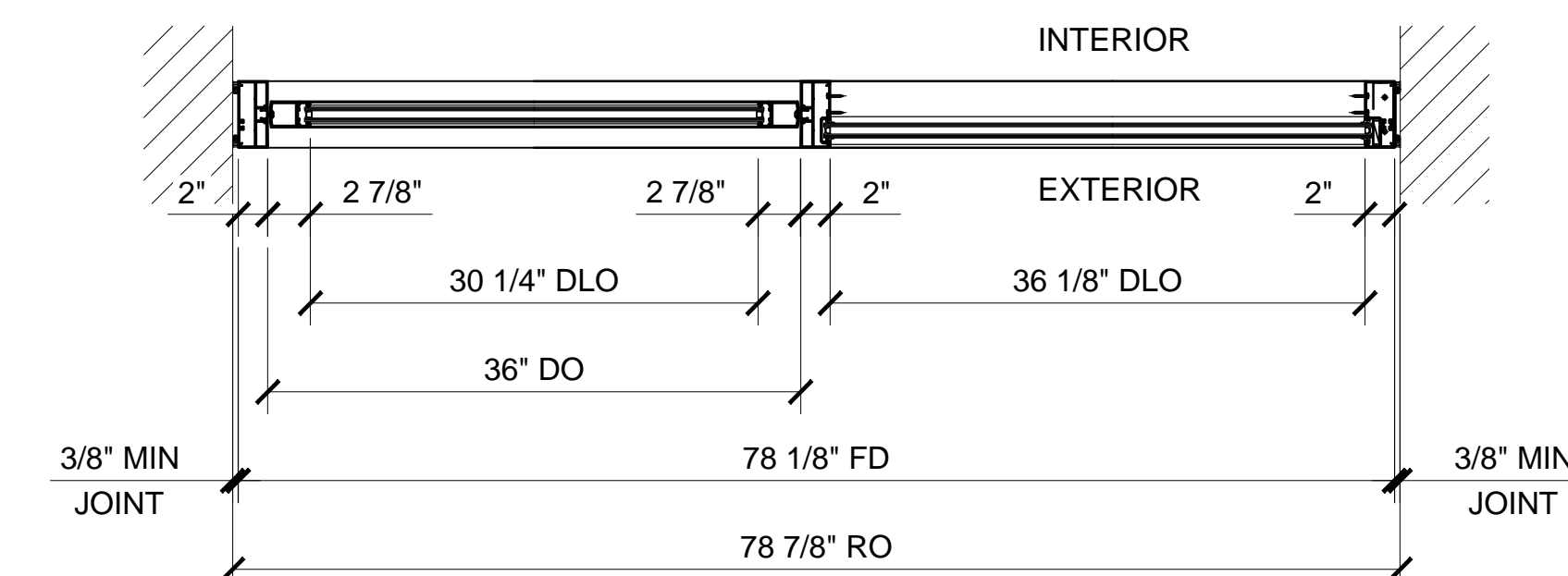
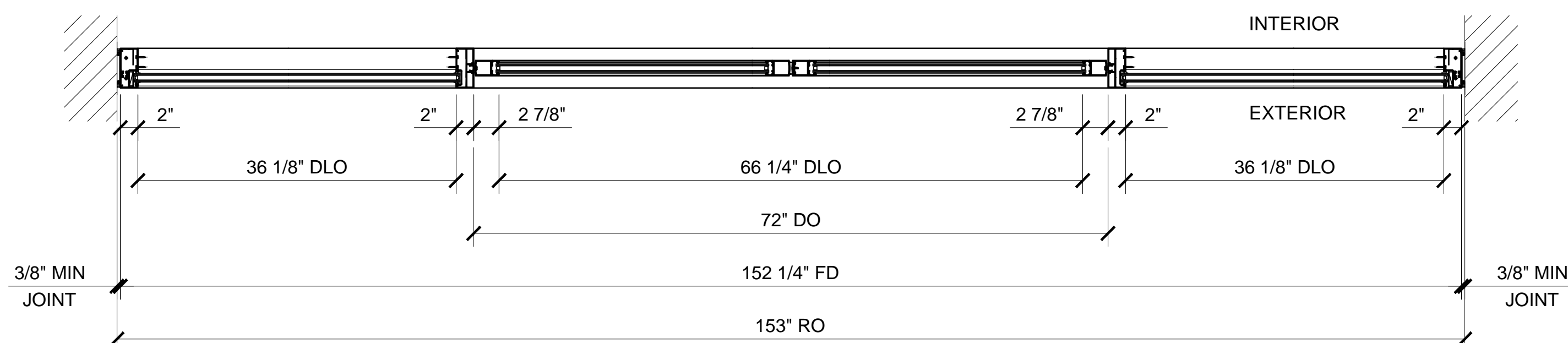
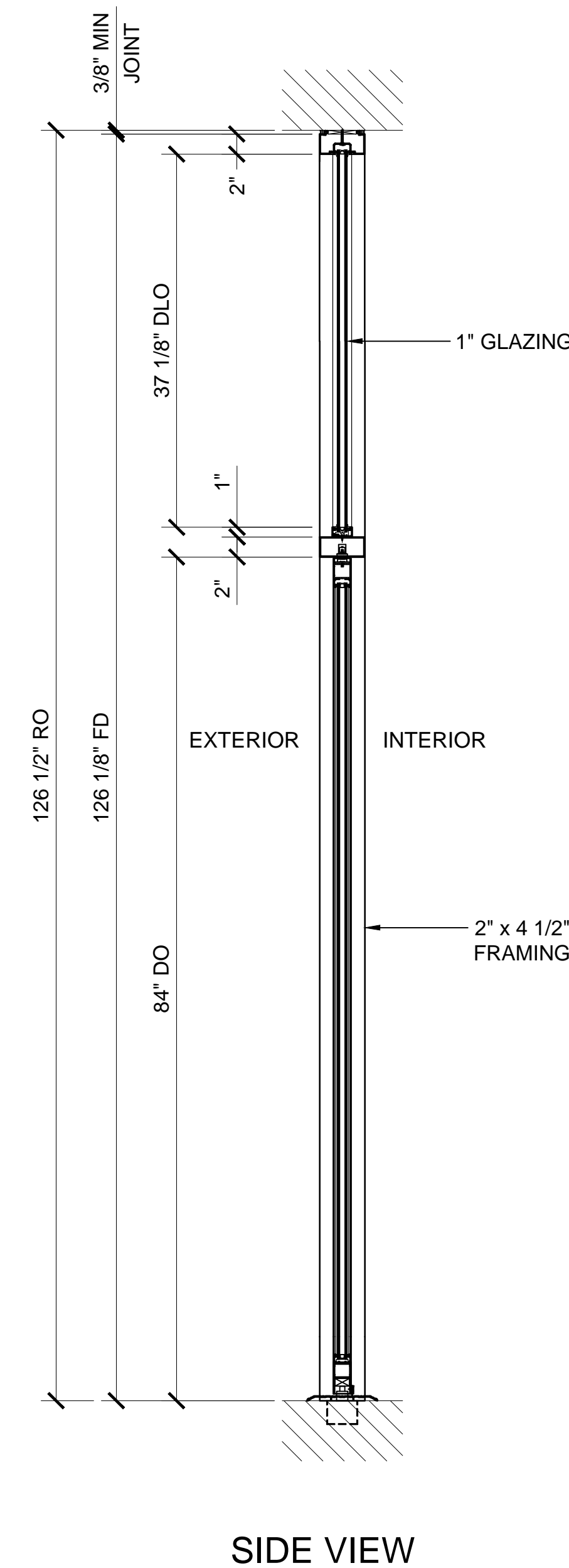
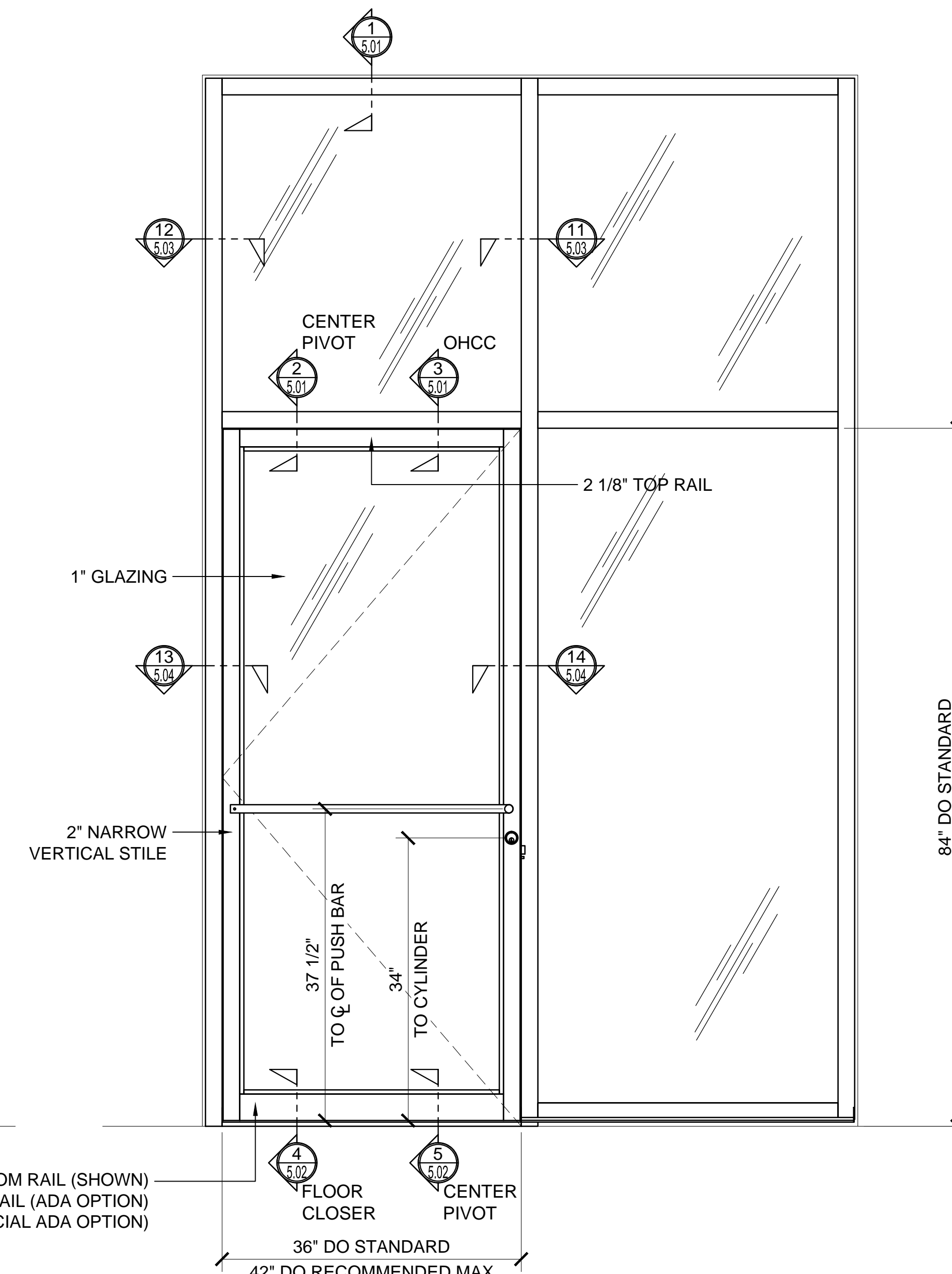
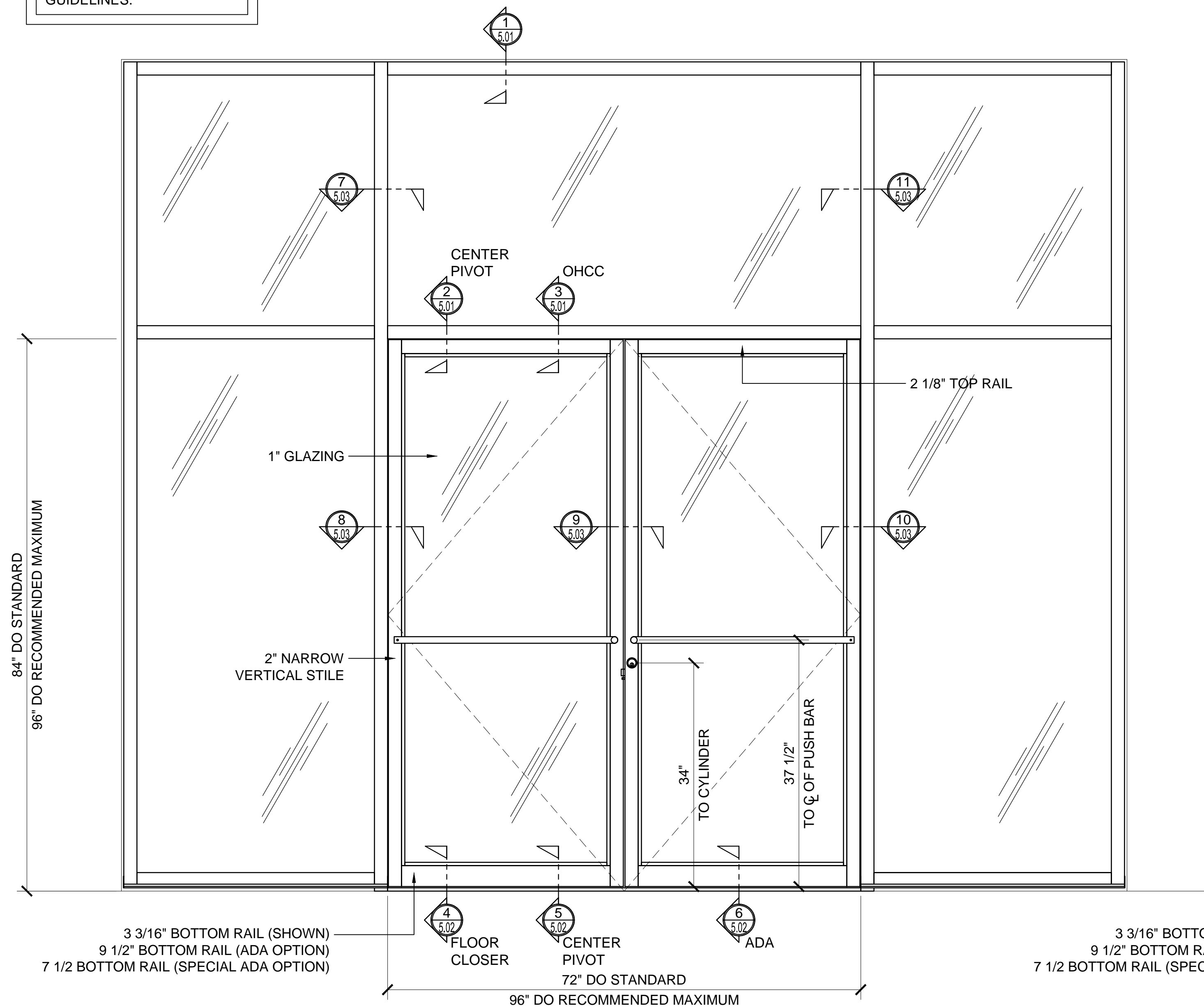
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Date: 12/26/14
Scale: AS NOTED
File Name: FT451 SF.dwg

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SERIES FT 451 THERMAL FLUSH FRONT / OFFSET / FLUSH OUT WITH CENTER HUNG DOOR FRAMING

1" = 1'-0"

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

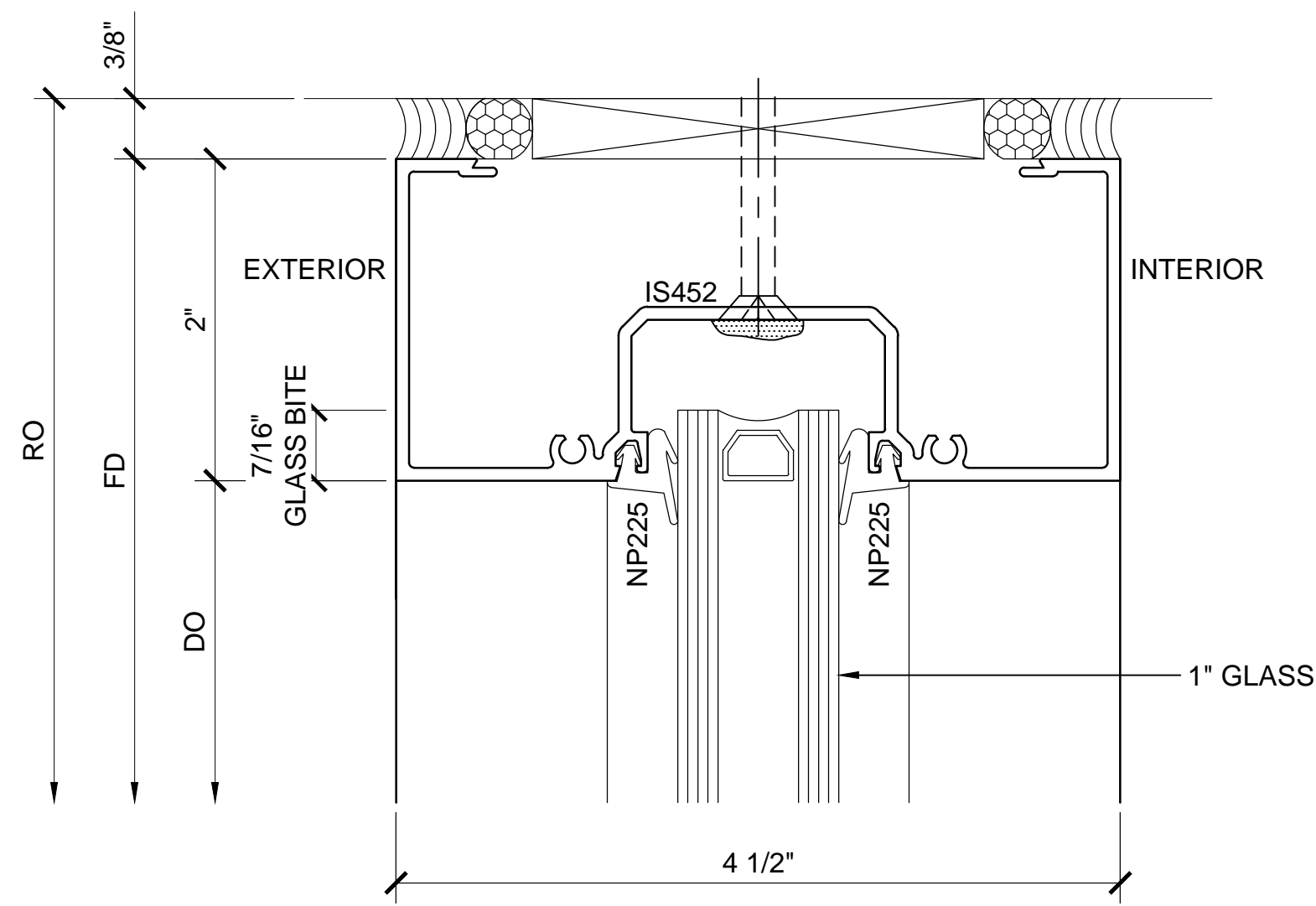


STANDARD ABBREVIATIONS	
RO	ROUGH OPENING
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DLO	DAYLIGHT OPENING
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Description:
 U.S. ALUMINUM
 SERIES FT 451
 STOREFRONT SYSTEM

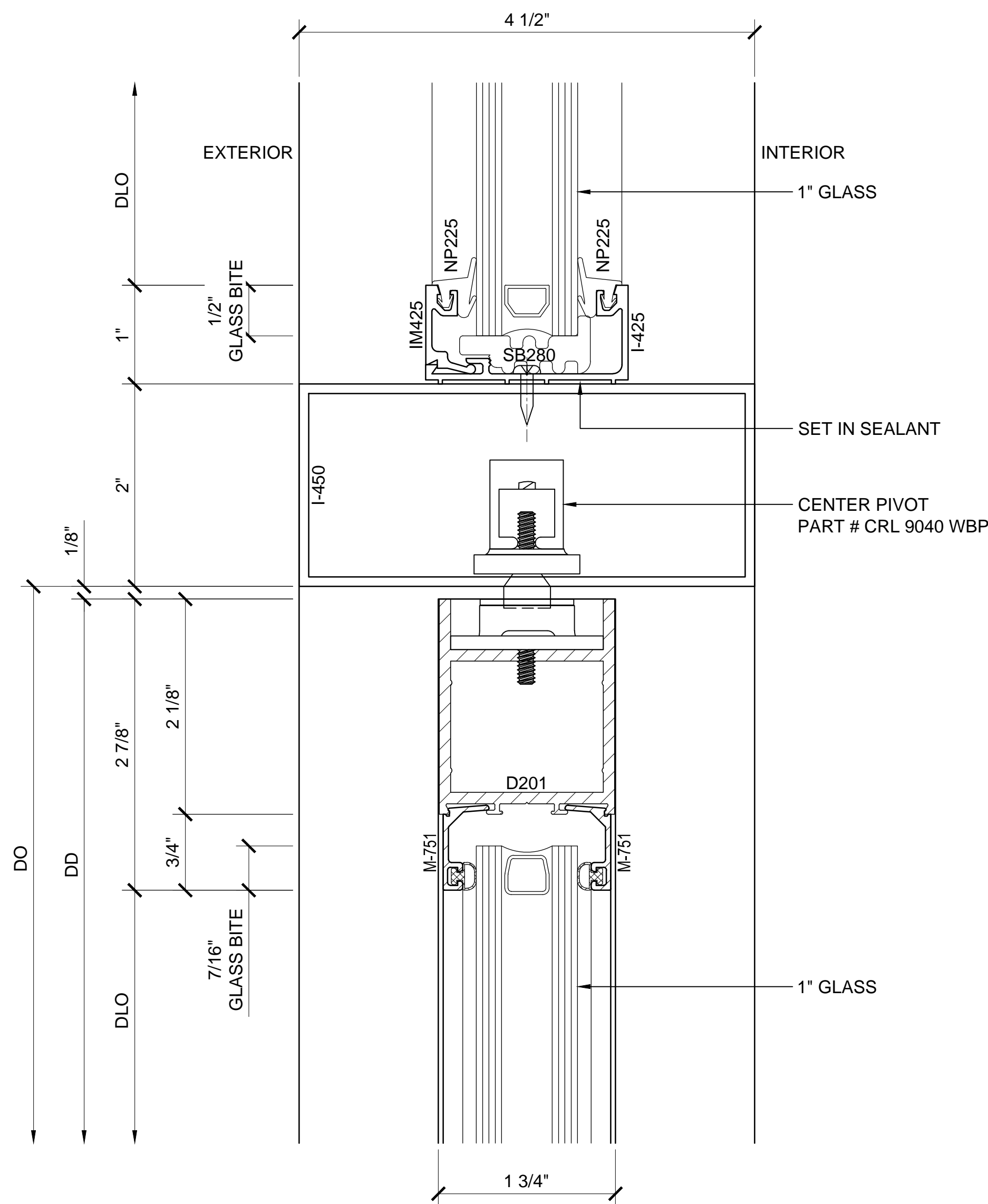
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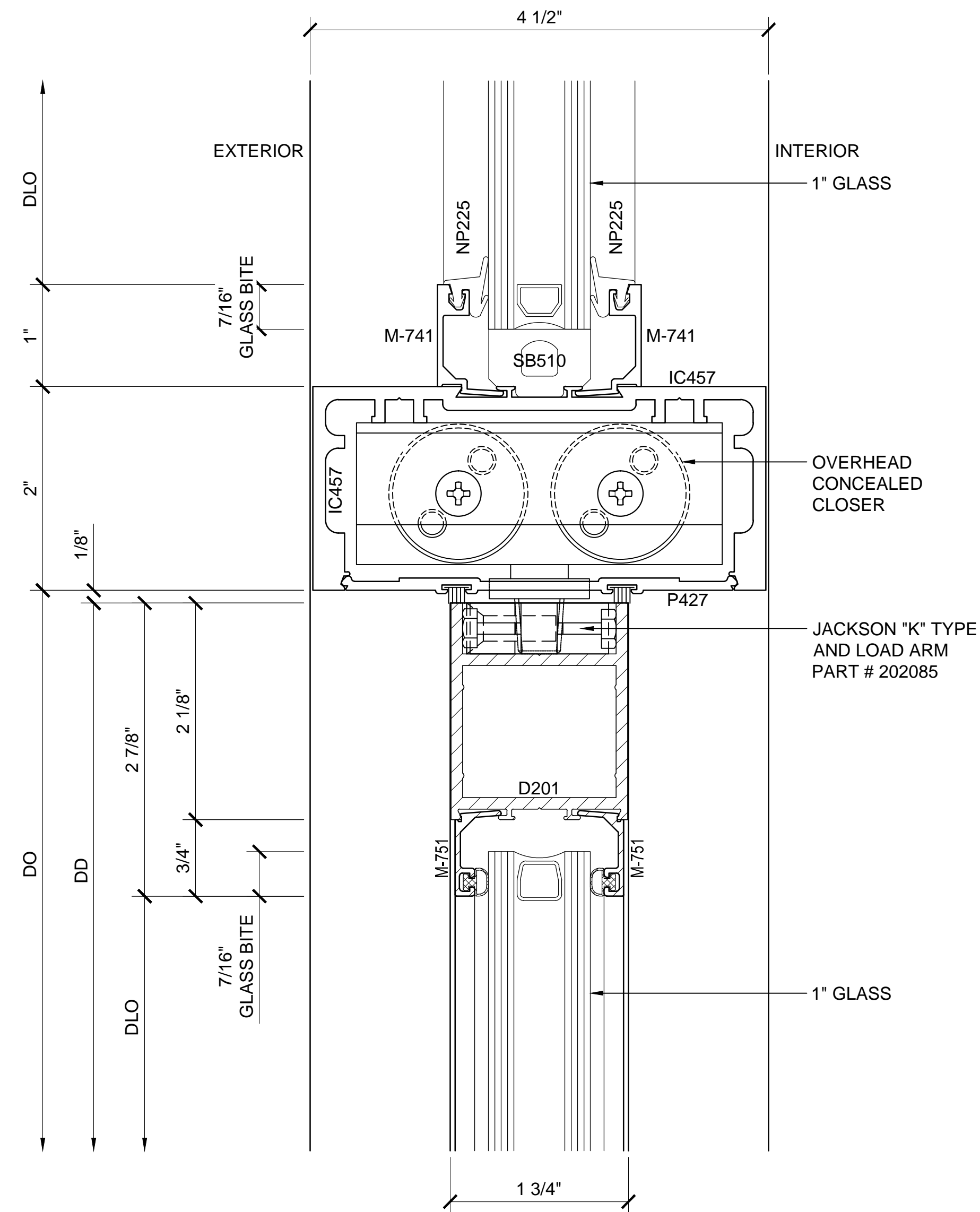
① SECTION DETAIL AT STOREFRONT HEAD

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



② SECTION DETAIL AT DOOR HEAD WITH PIVOT

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



③ SECTION DETAIL AT DOOR HEAD WITH OHCC

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

SERIES FT451 FLUSH FRONT STOREFRONT SYSTEM DOOR FRAMING DETAILS (SHOWN WITH OPTIONAL NARROW STILE CENTER HUNG SERIES 250 DOOR SYSTEM)

Revisions By:

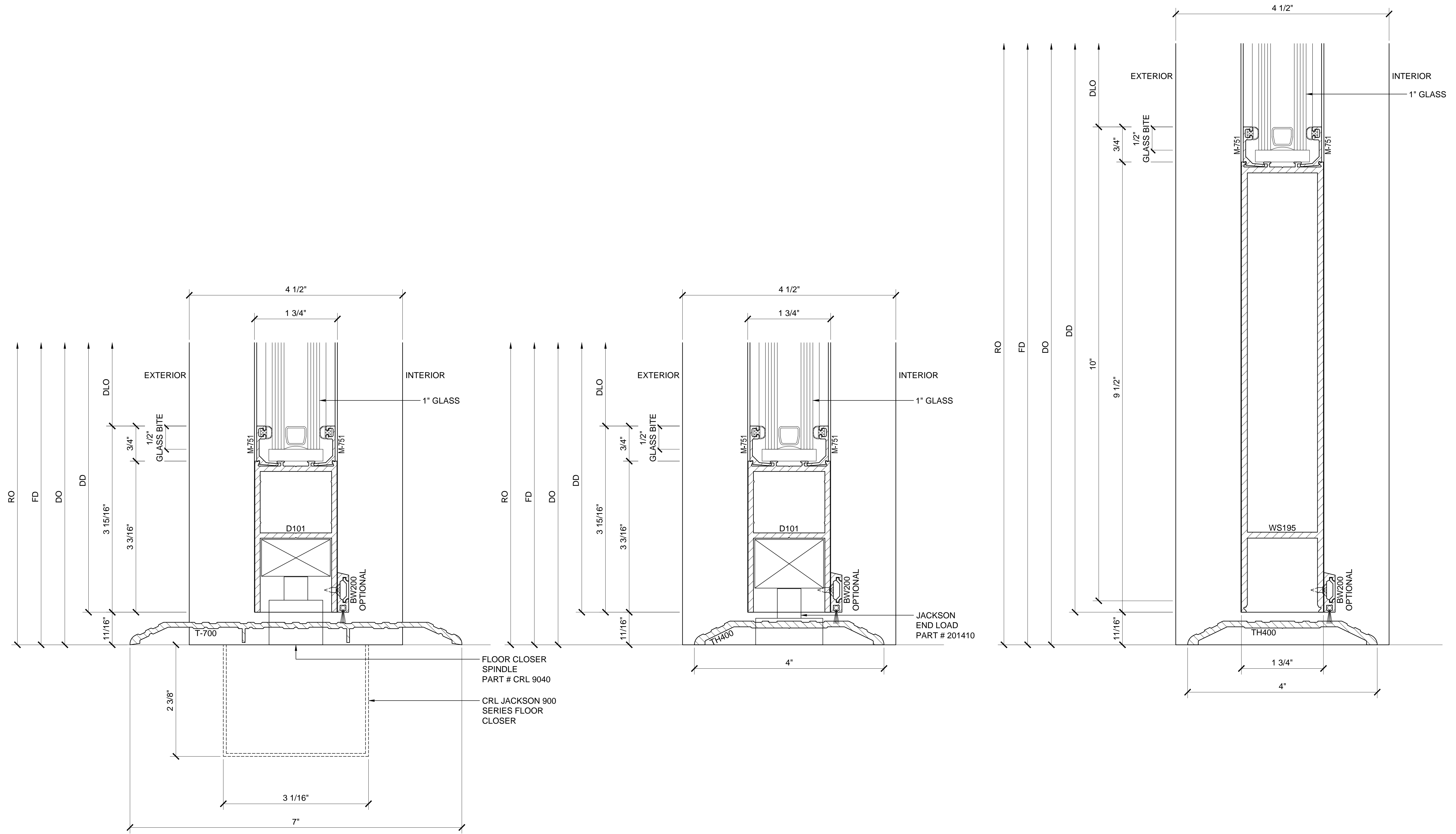


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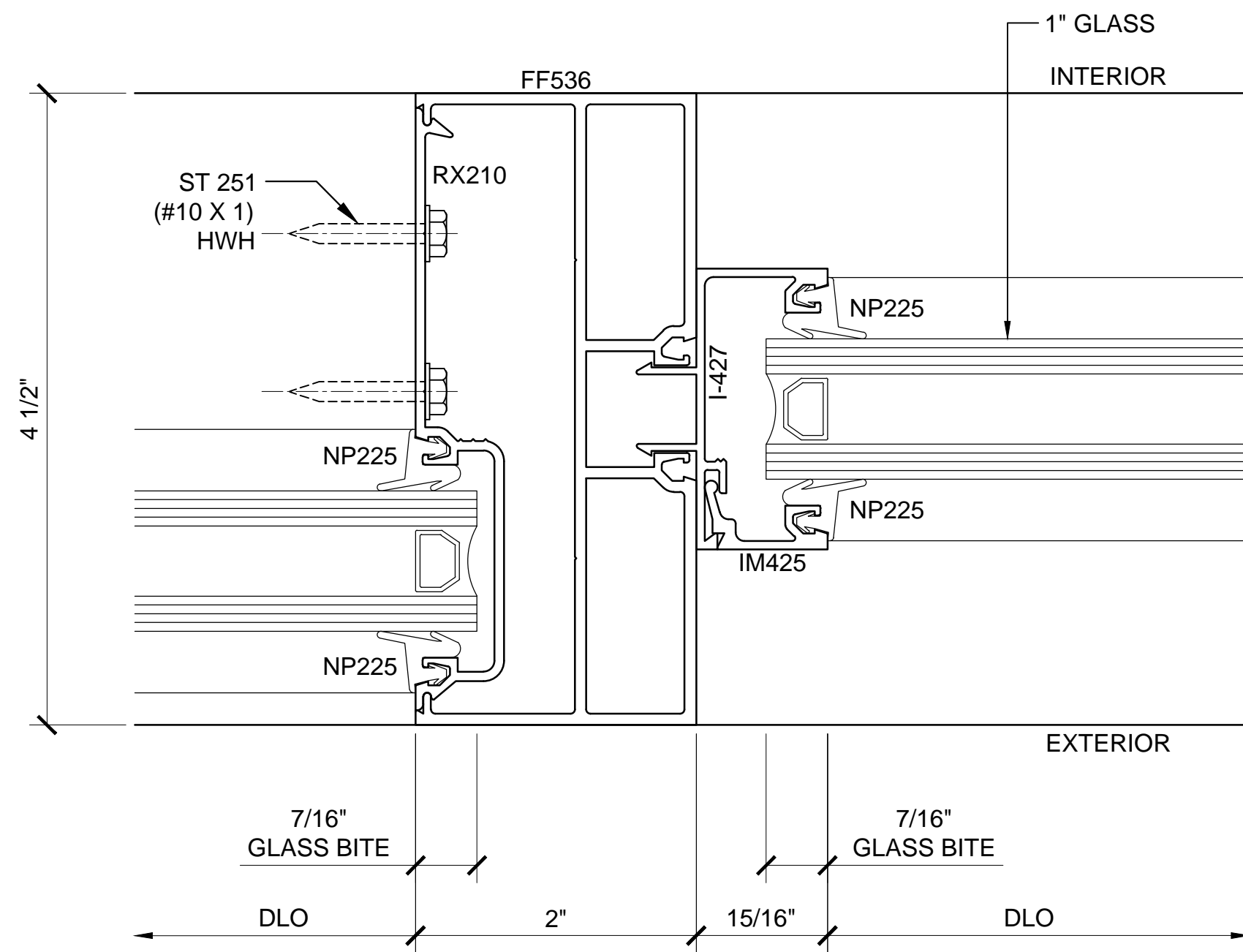
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Description:
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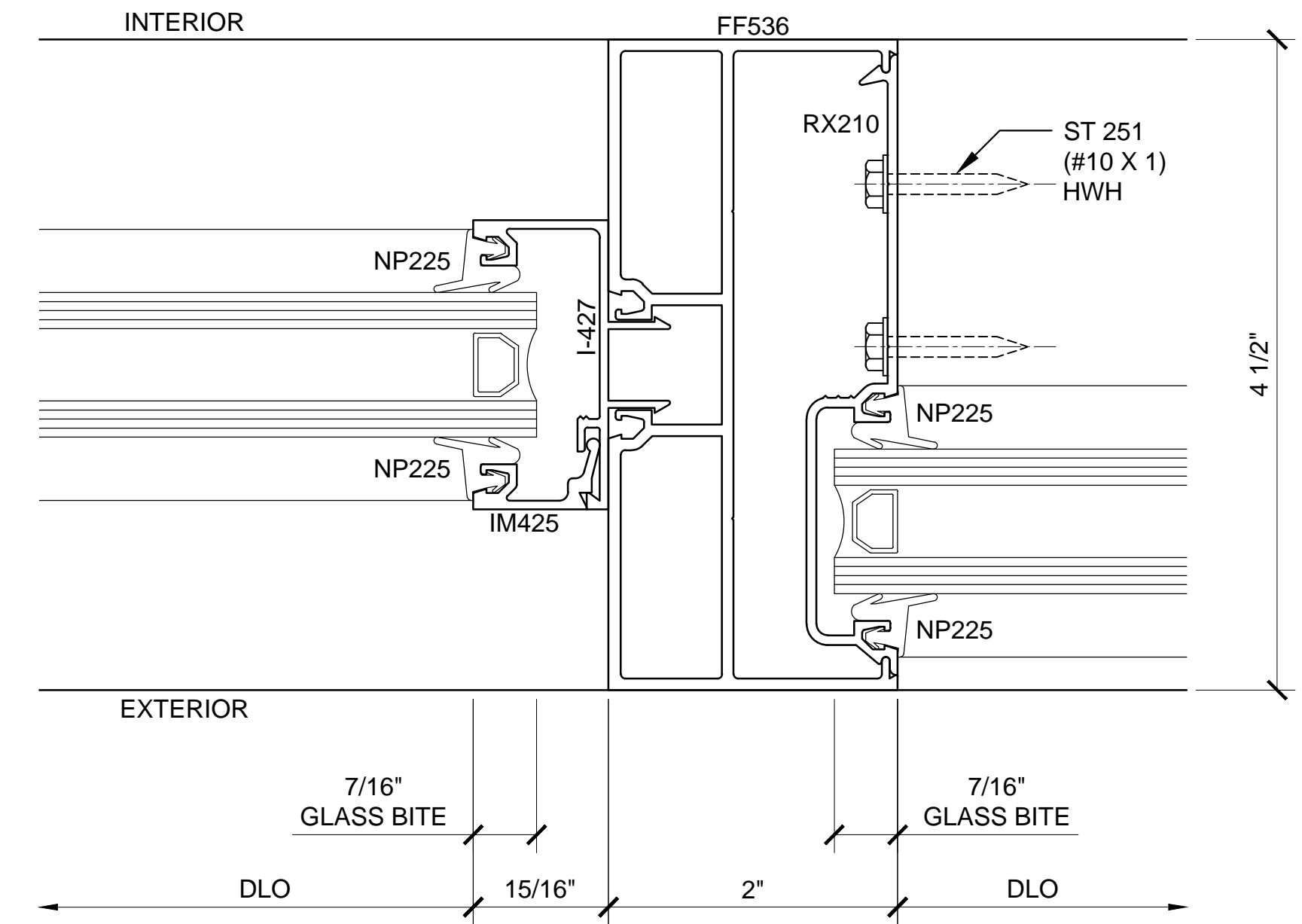
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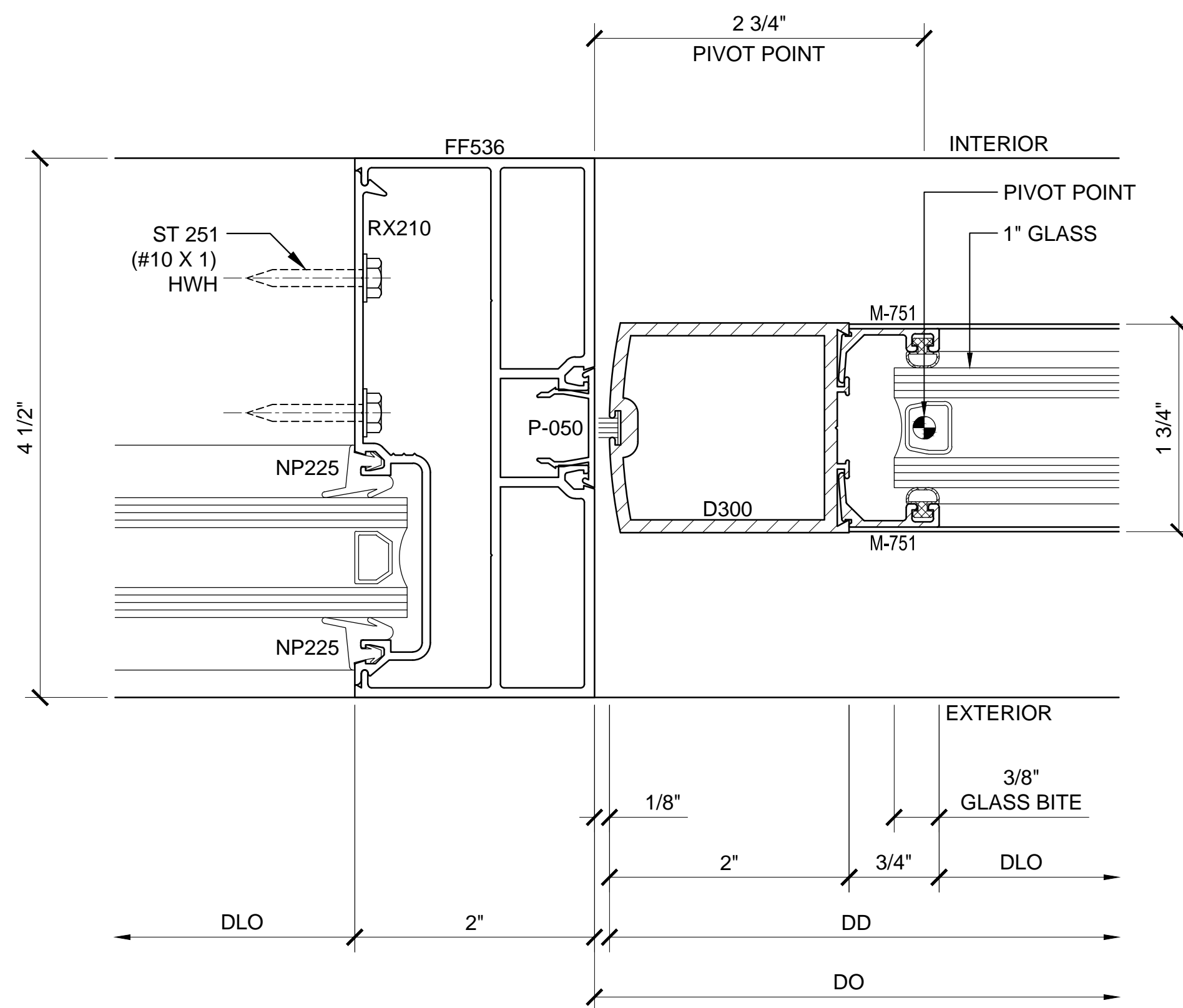
7 SECTION DETAIL AT VERTICAL

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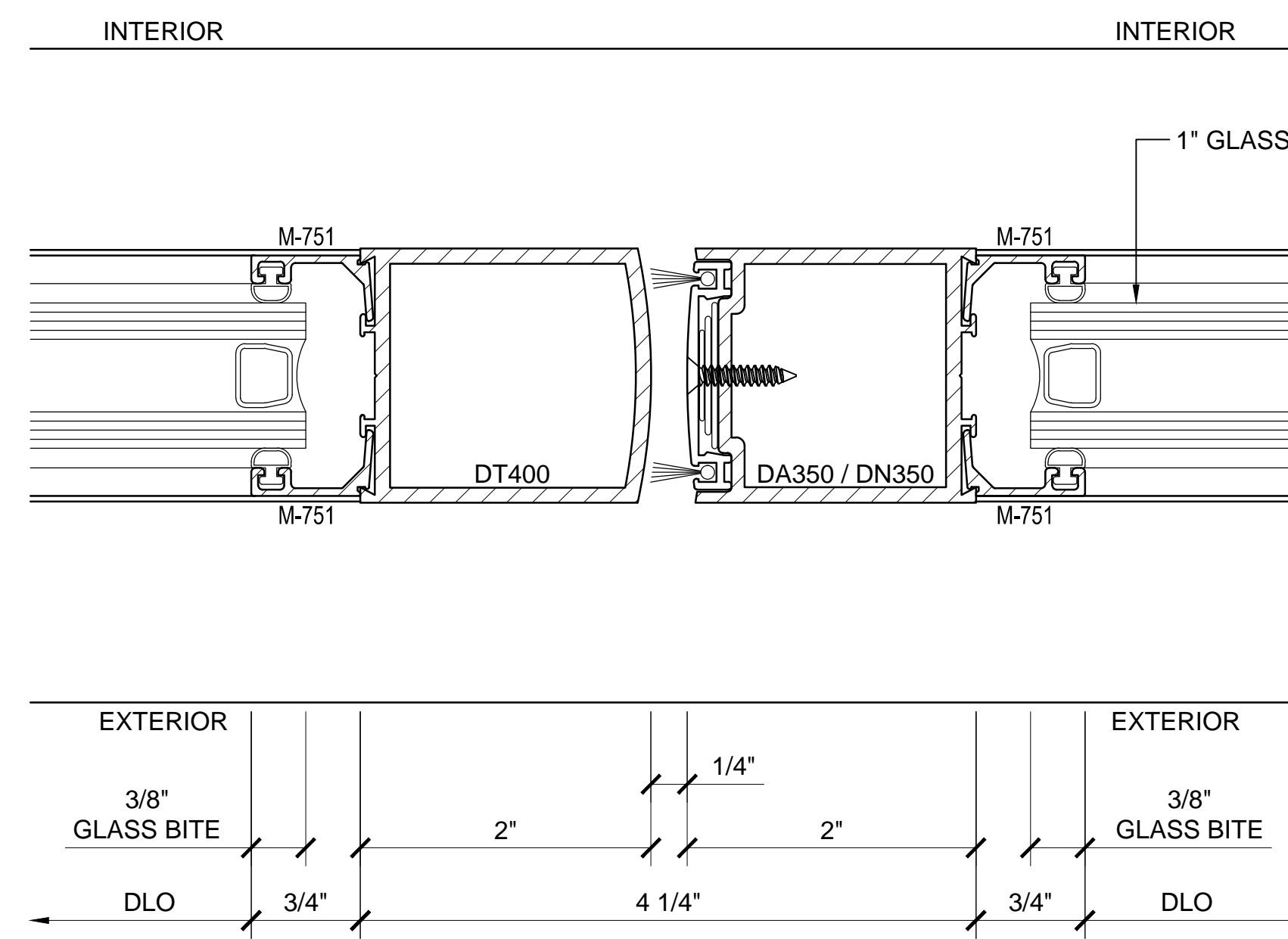
11 SECTION DETAIL AT VERTICAL

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



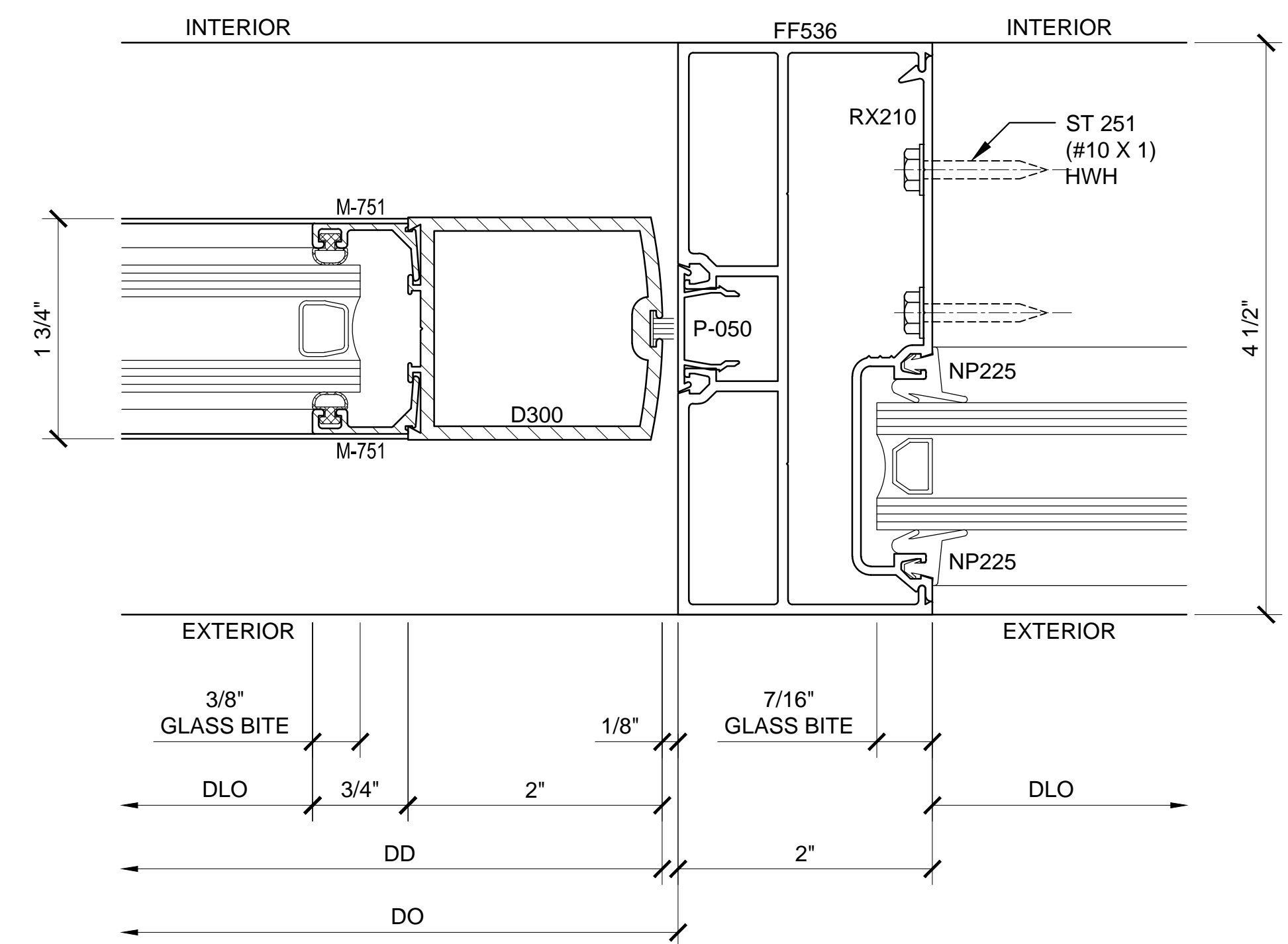
8 SECTION DETAIL AT DOOR JAMB

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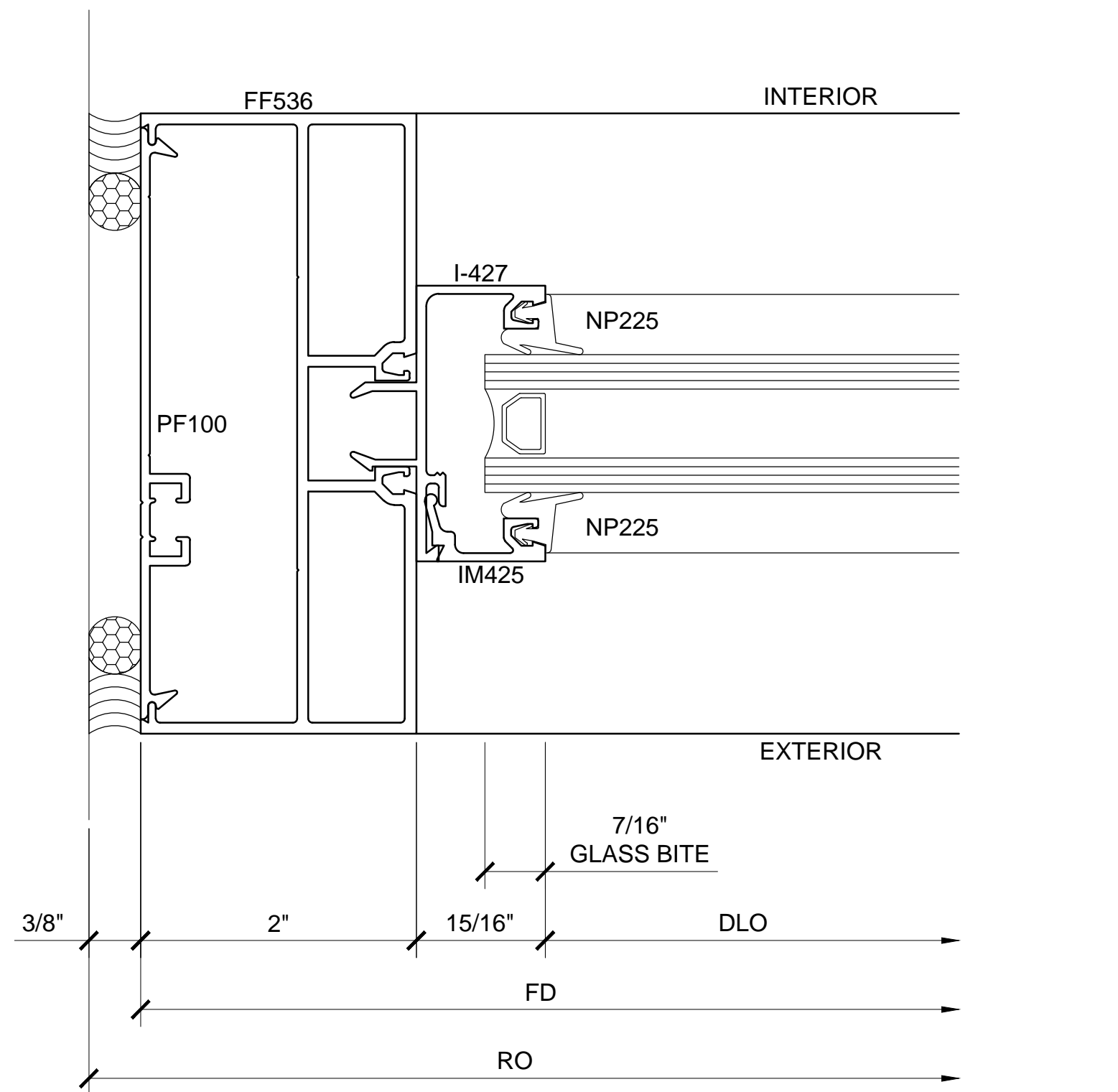
9 SECTION DETAIL AT MEETING STILES

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



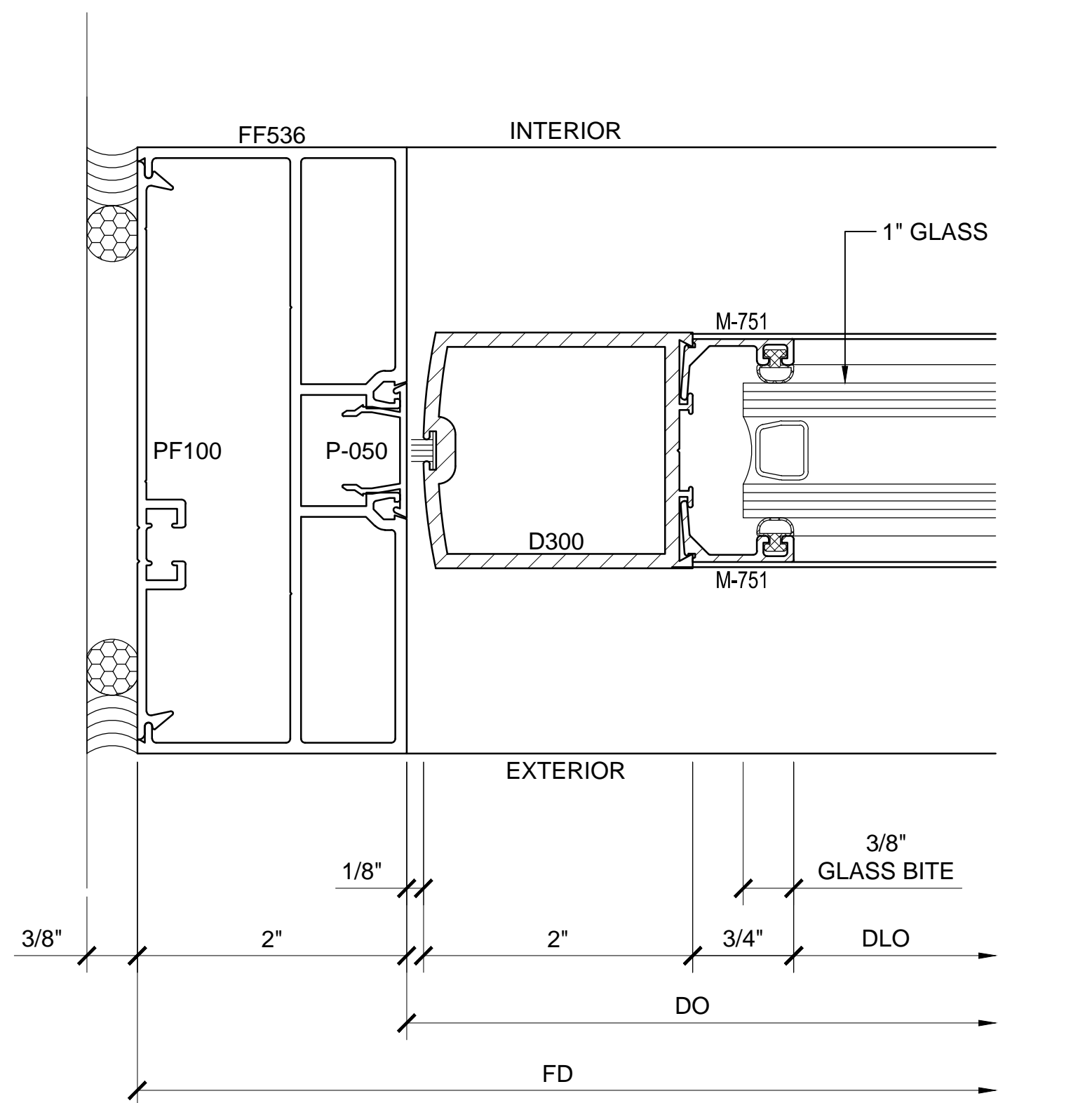
10 SECTION DETAIL AT DOOR JAMB

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



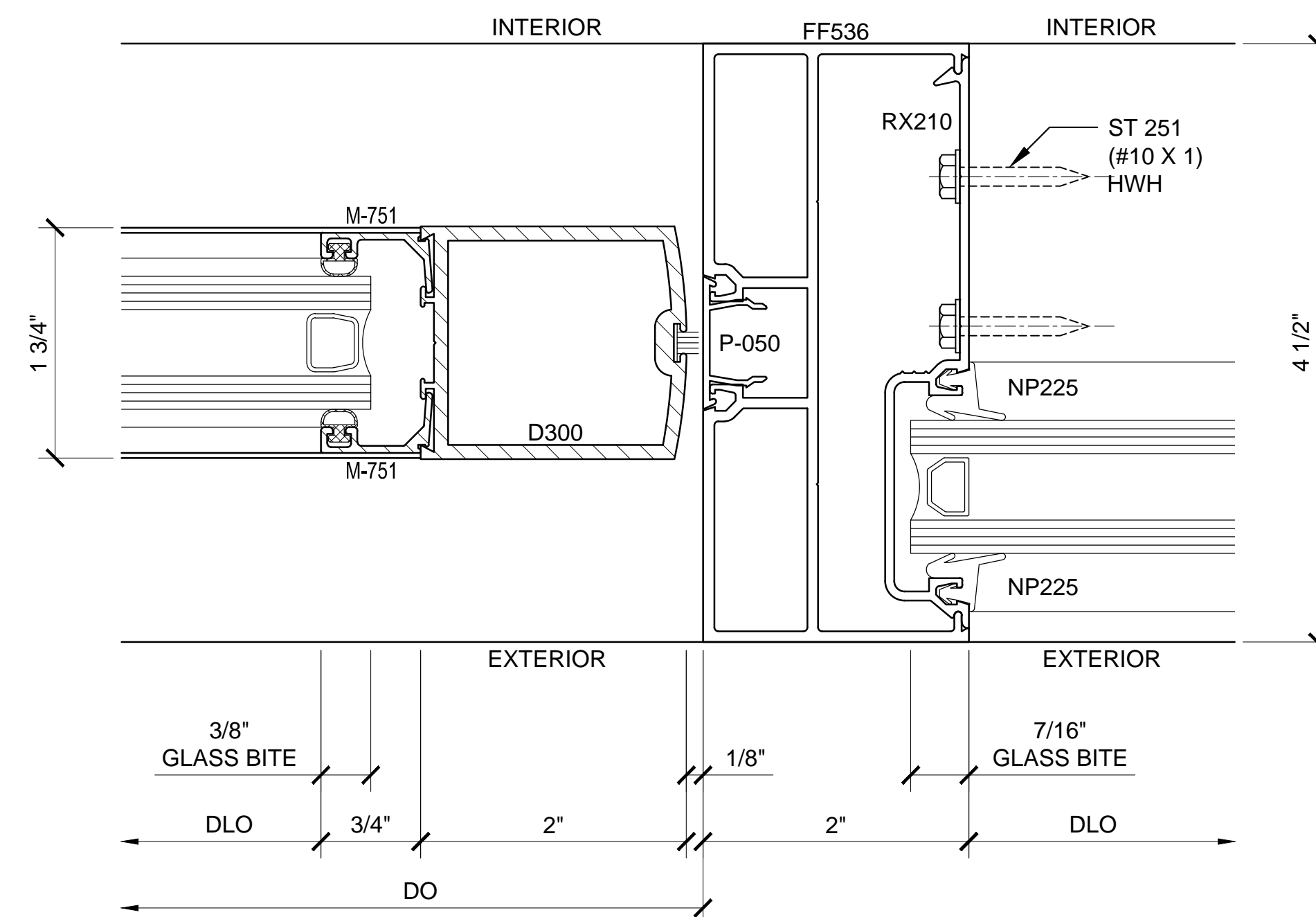
12 SECTION DETAIL AT VERTICAL

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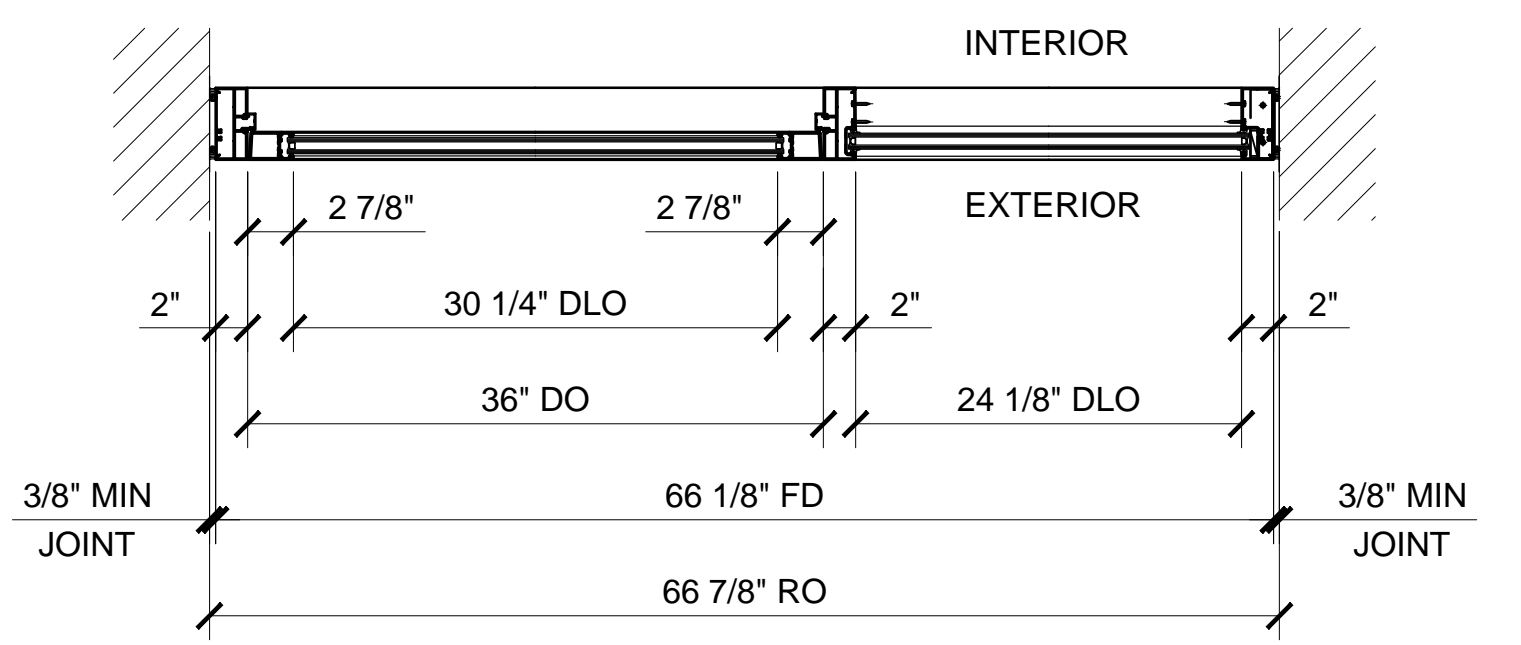
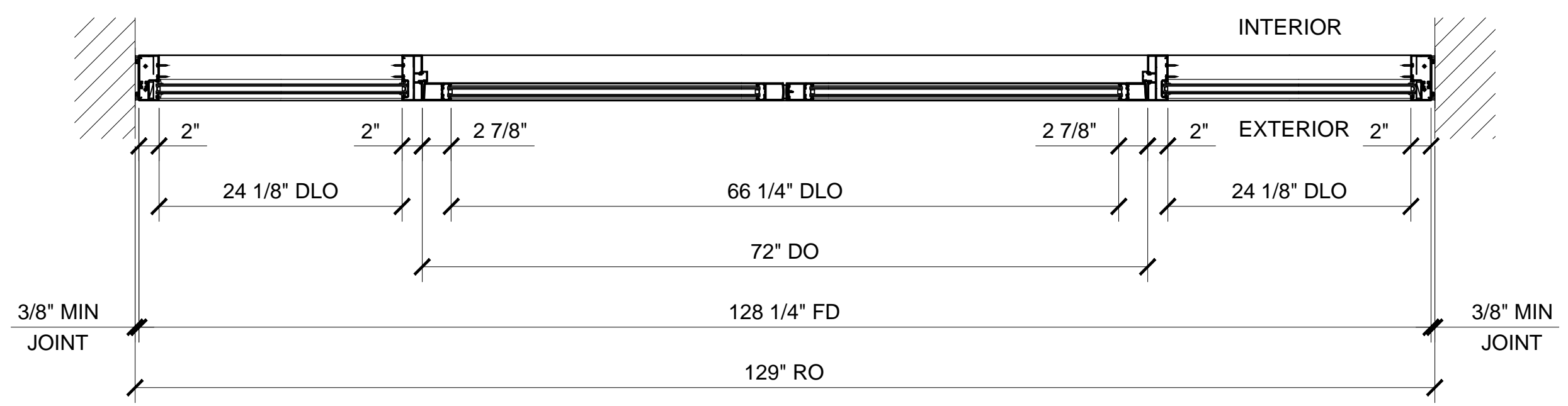
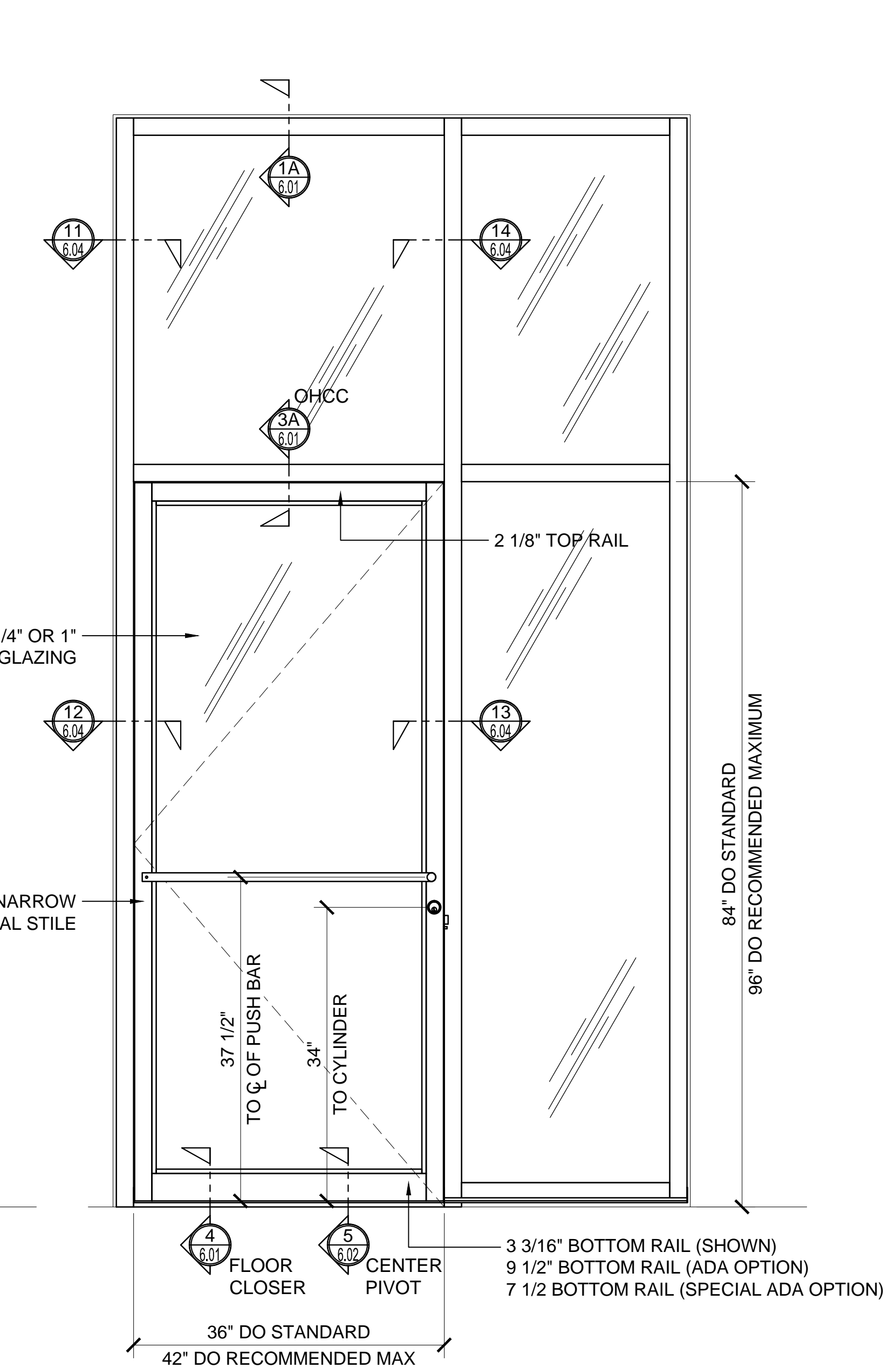
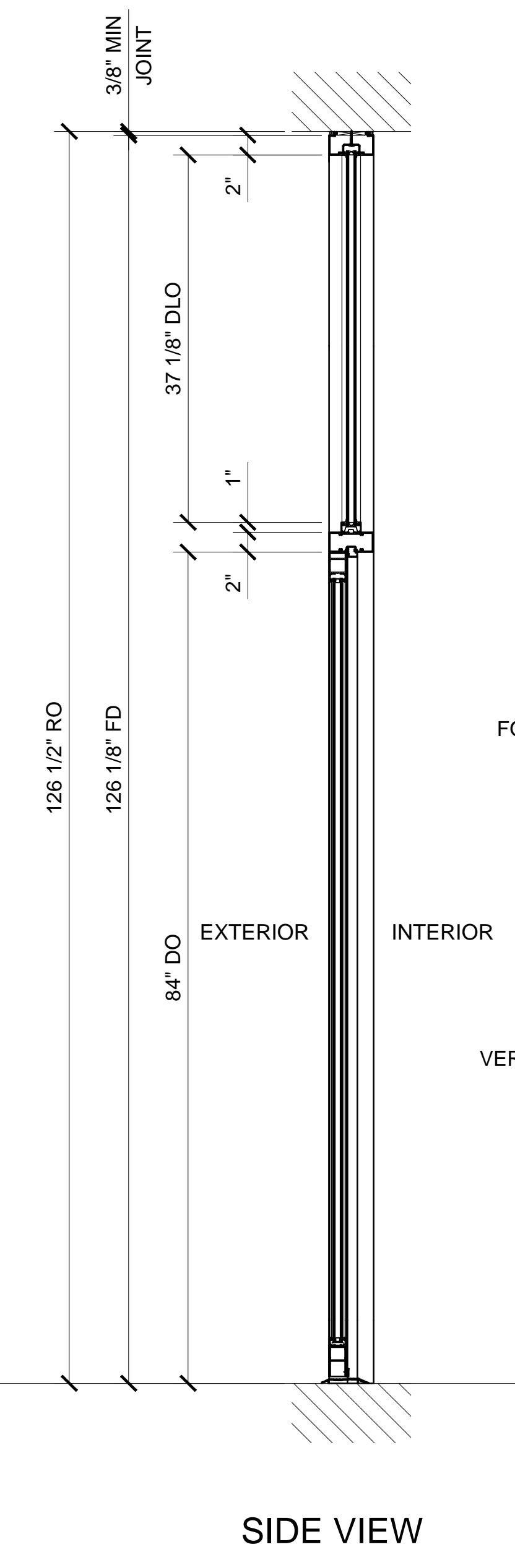
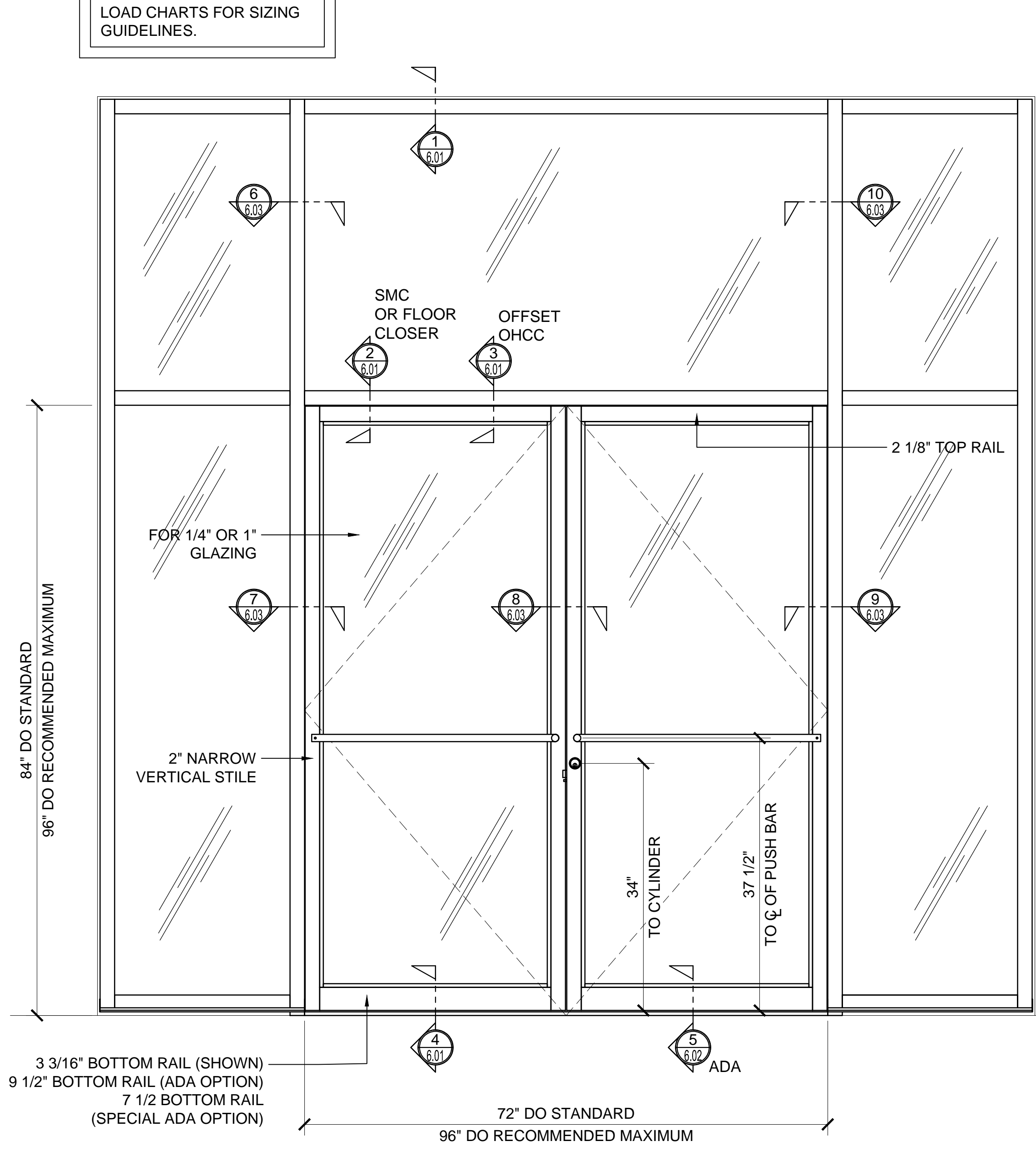
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STANDARD ABBREVIATIONS

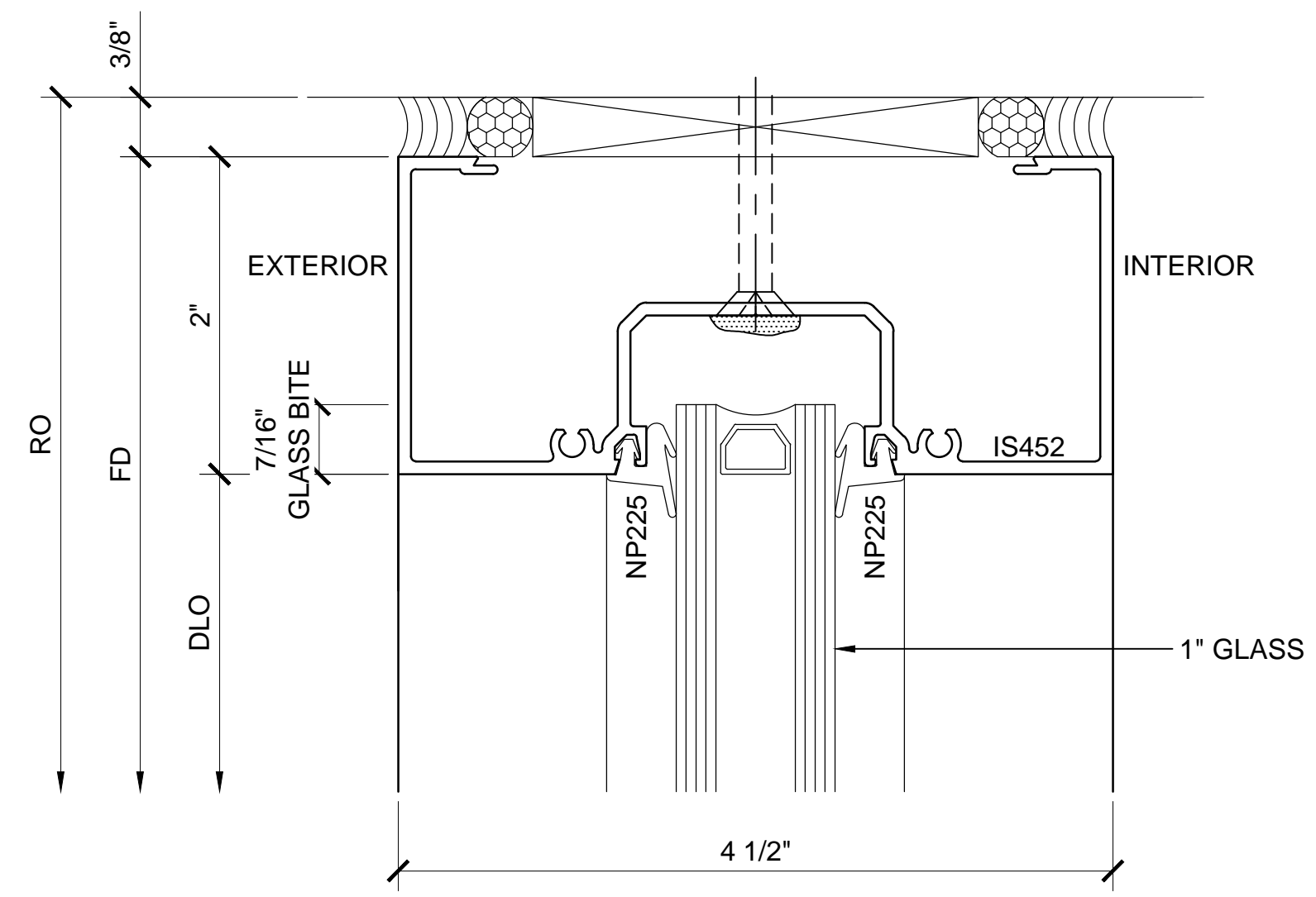
RO	ROUGH OPENING
FD	FRAME DIMENSION
DLO	DAYLIGHT OPENING
DO	DOOR OPENING
DD	DOOR DIMENSION
SMC	SURFACE MOUNTED CLOSER
OHCC	OVERHEAD CONCEALED CLOSER

Revisions By:

Description:
 U.S. ALUMINUM
 SERIES FT 451
 STOREFRONT SYSTEM

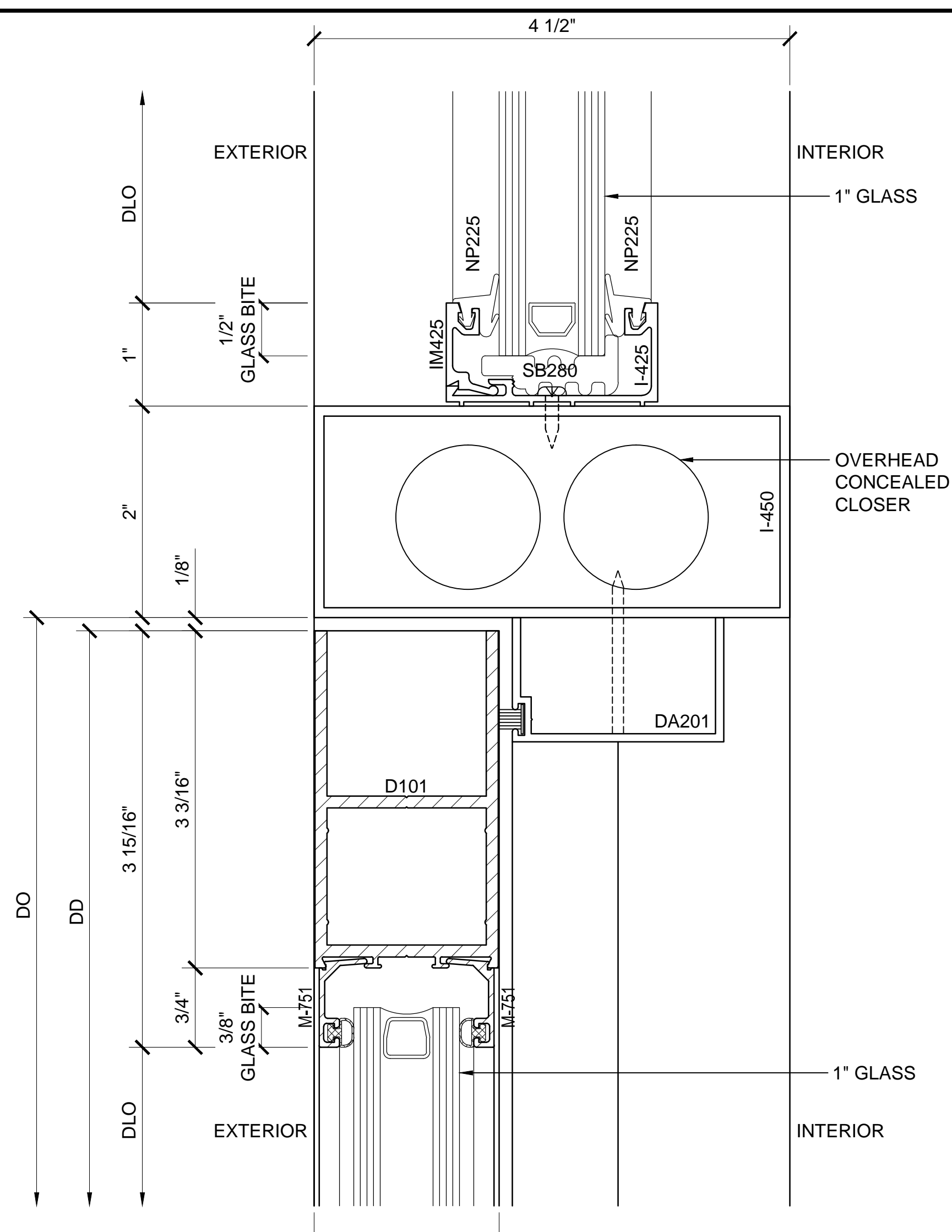
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 Date: 12/26/14
 Scale: AS NOTED
 File Name:
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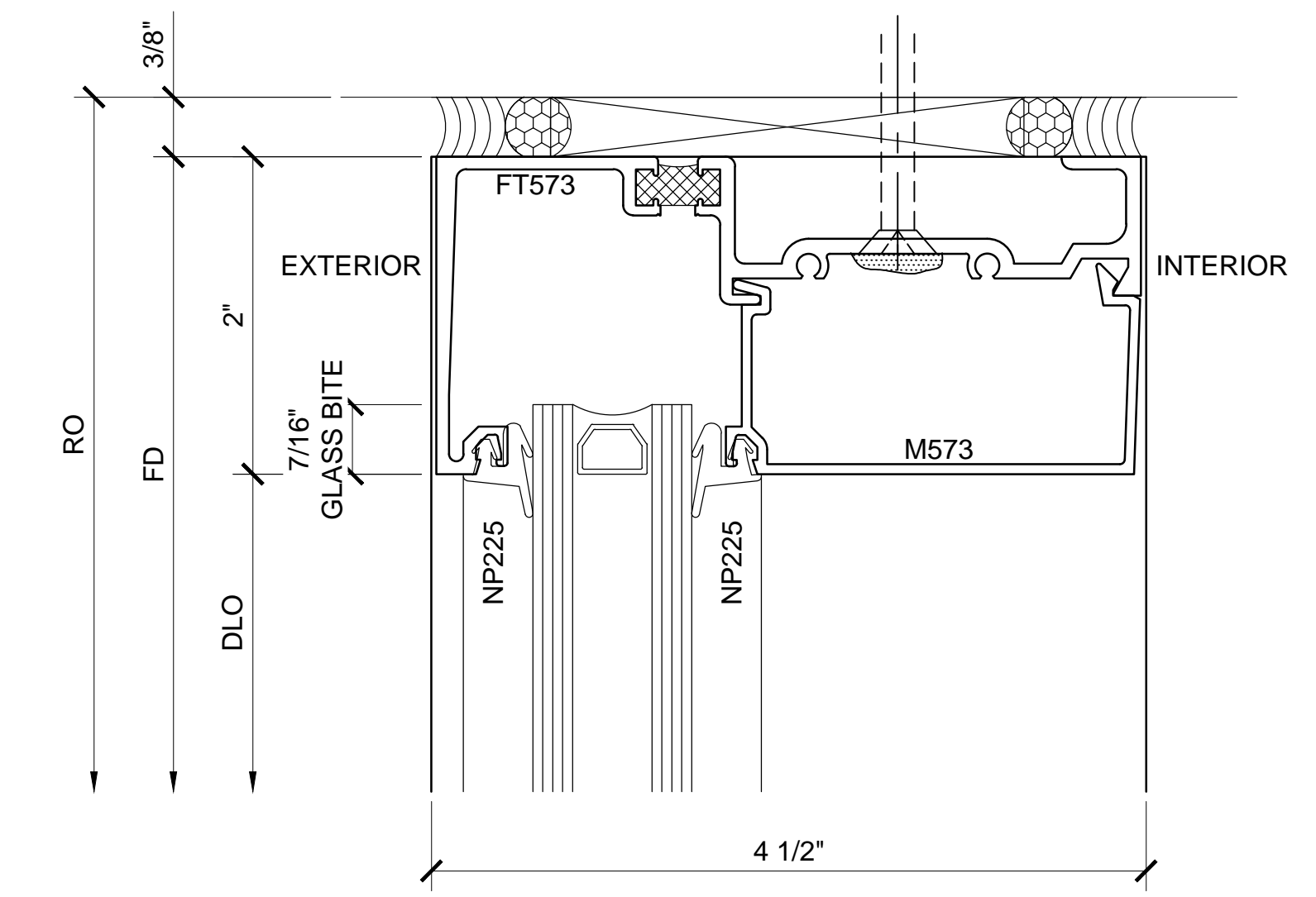
1 SECTION DETAIL AT STOREFRONT HEAD

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



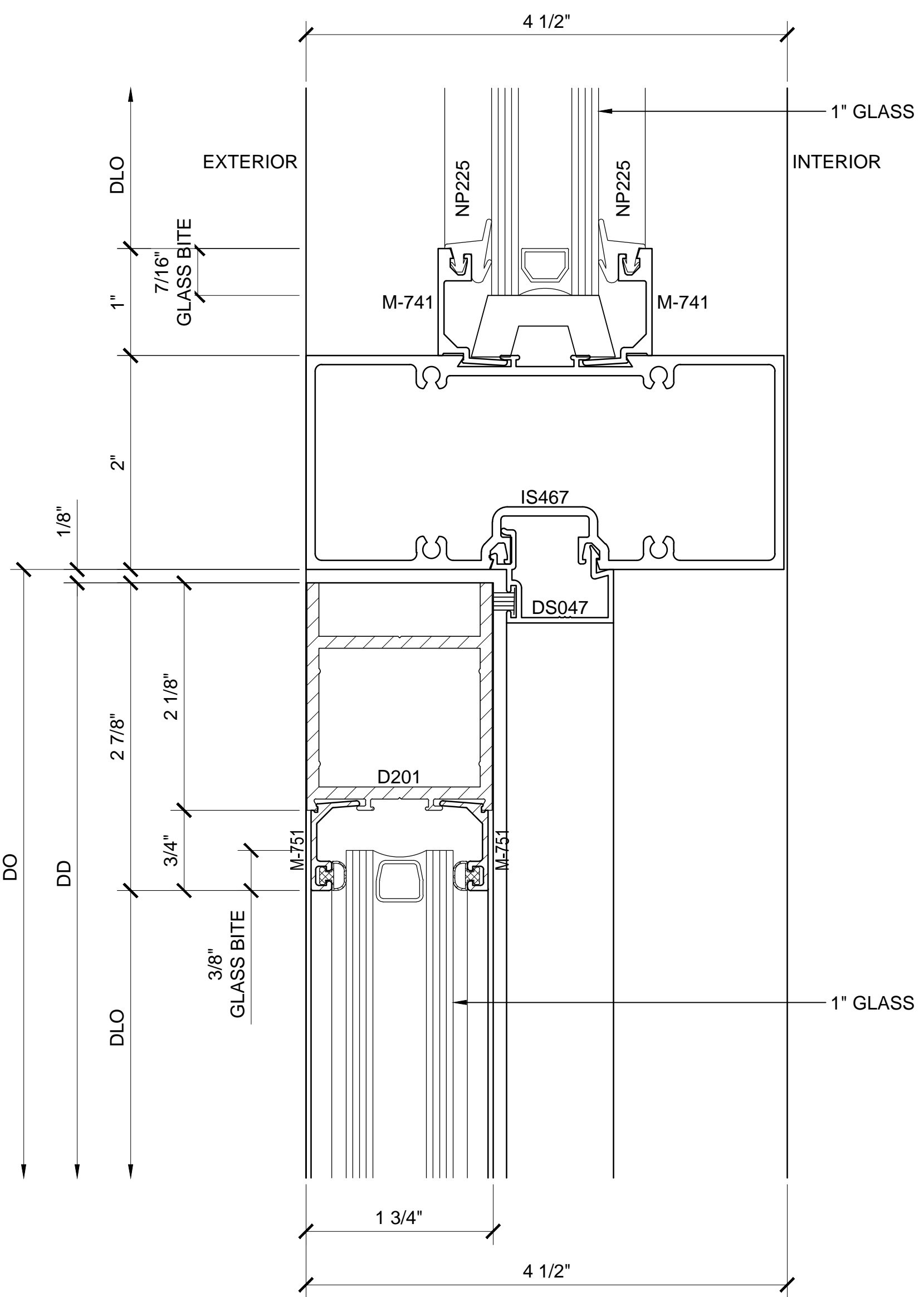
3 SECTION DETAIL AT DOOR HEAD WITH OHCC

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



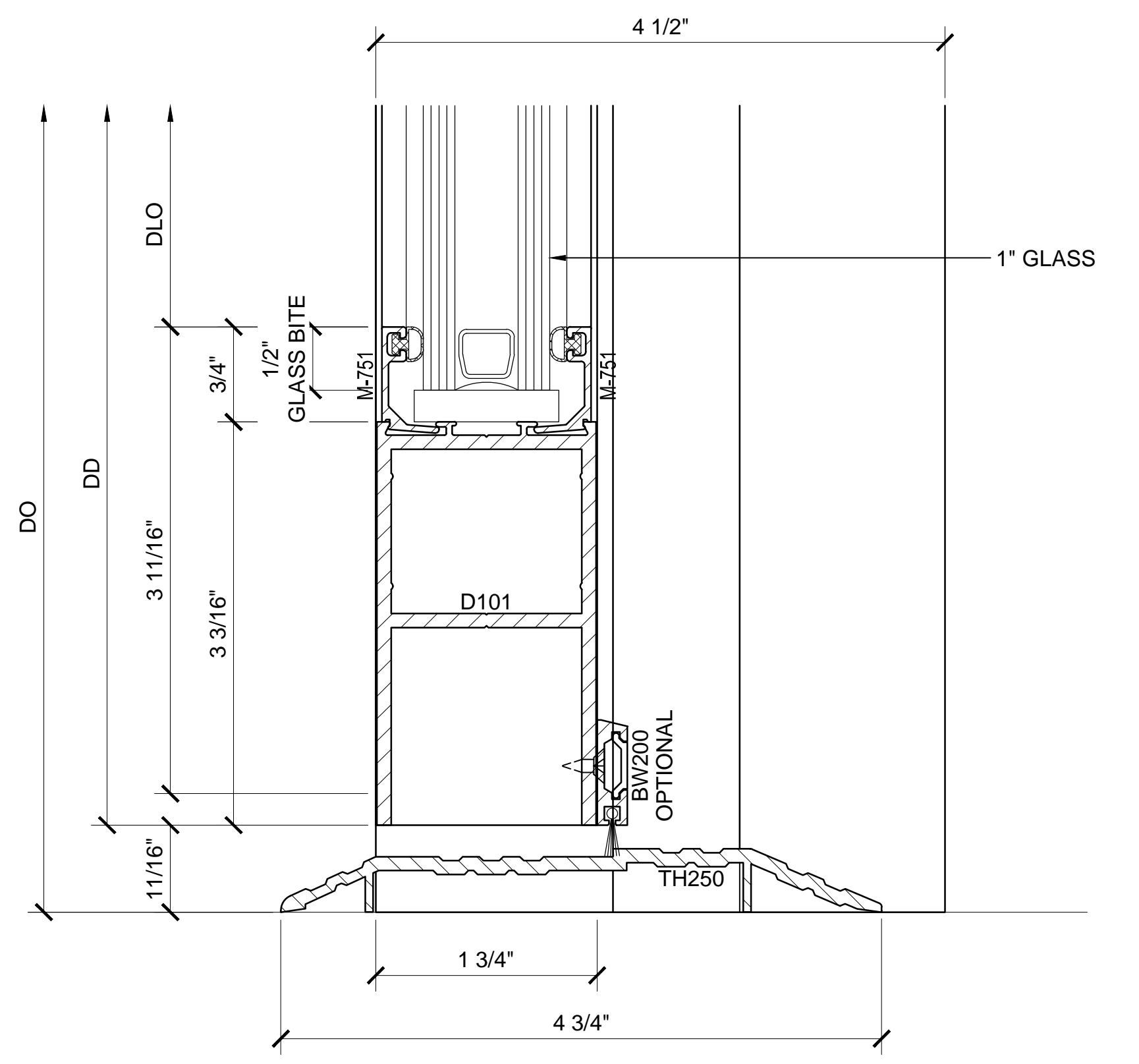
1A SECTION DETAIL AT STOREFRONT HEAD

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



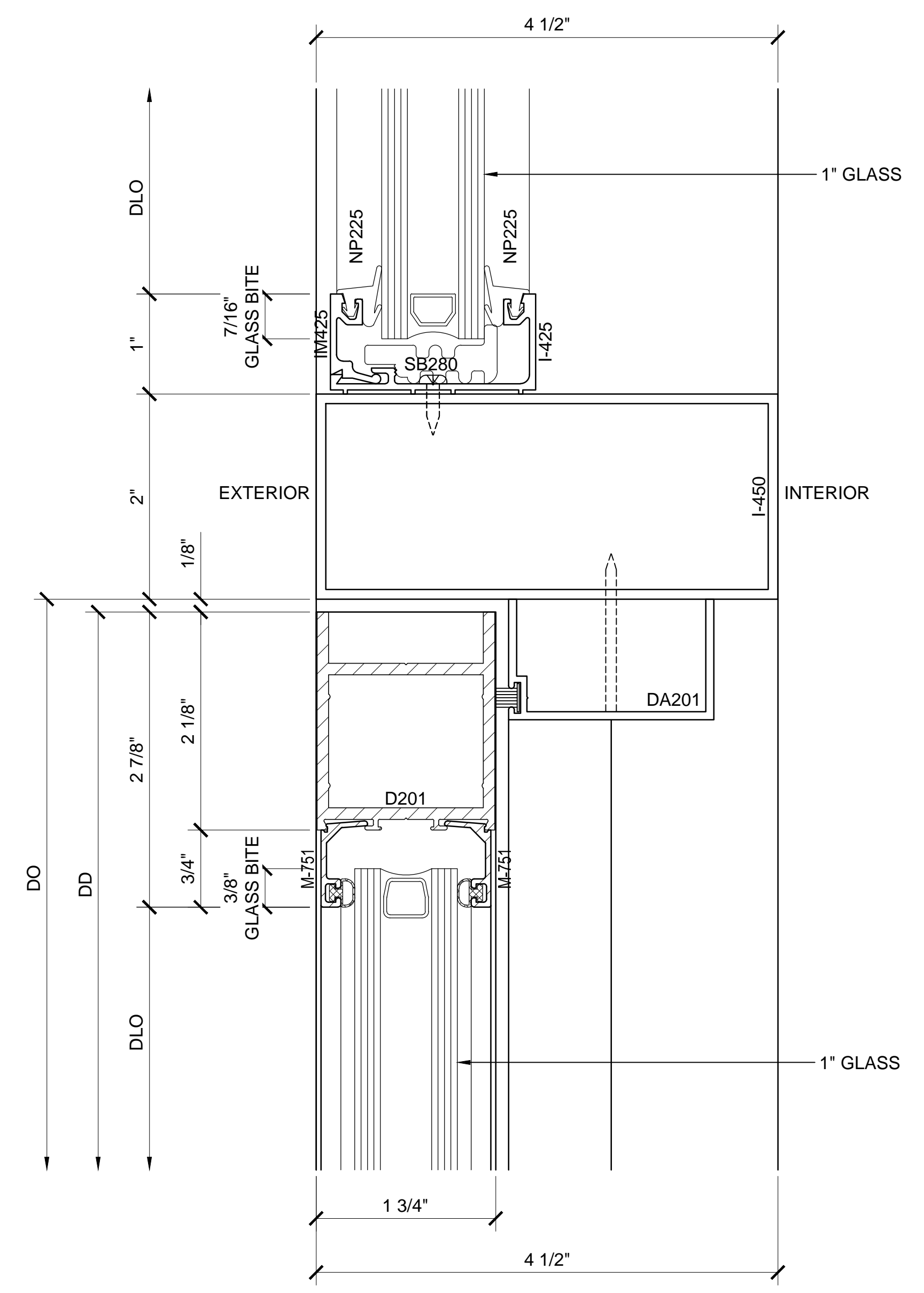
2 SECTION DETAIL AT DOOR HEAD

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



4 SECTION DETAIL AT DOOR SILL

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



3A SECTION DETAIL AT DOOR HEAD

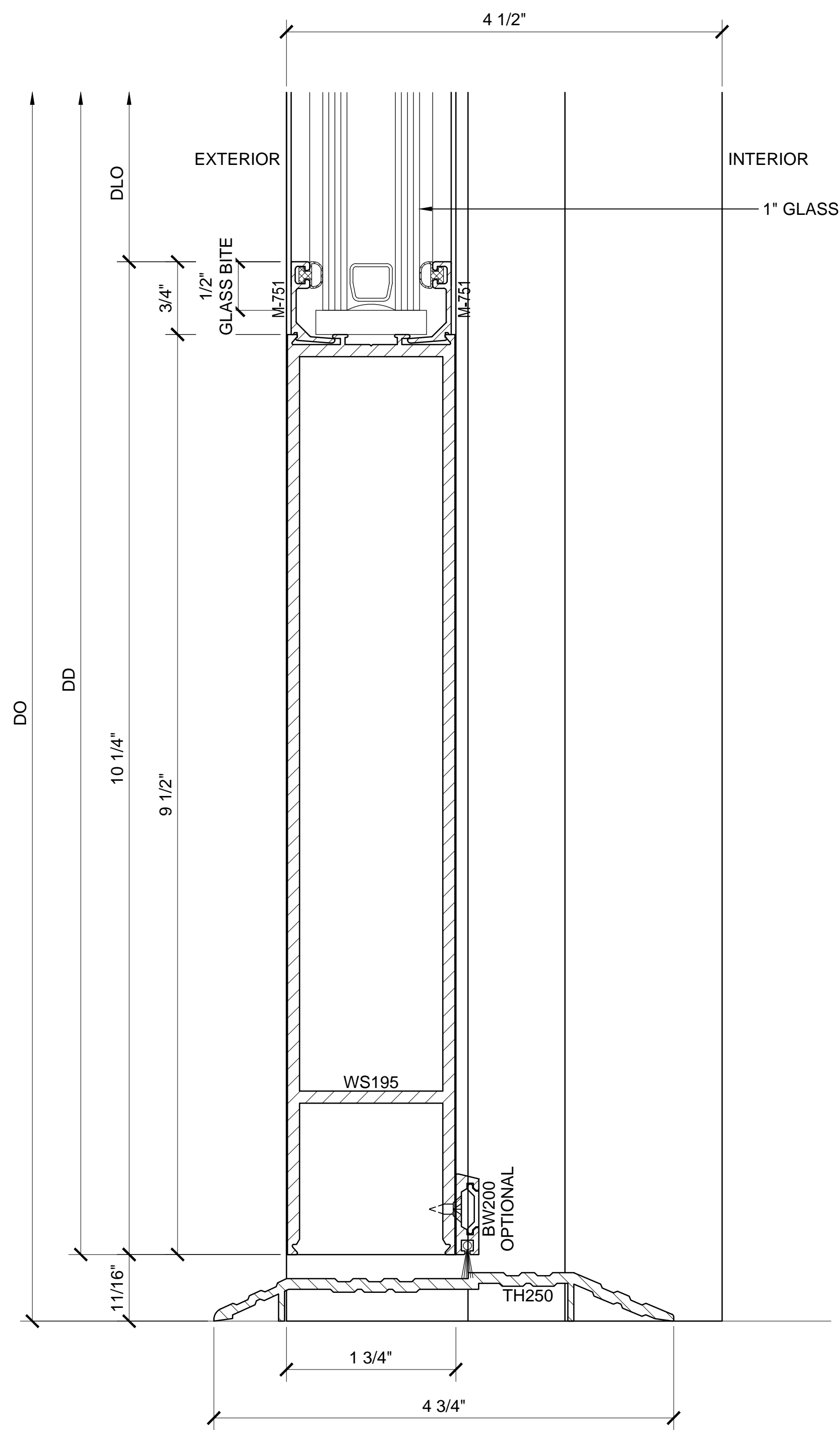
ARCH REF: N/A 1'-0"=1'-0"

SERIES IT451 FLUSH FRONT STOREFRONT SYSTEM DOOR FRAMING DETAILS (SHOWN WITH OPTIONAL NARROW STILE OFFSET HUNG SERIES 250 DOOR SYSTEM)

Description:
U.S. ALUMINUM
SERIES FT 451
STOREFRONT SYSTEM

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5 SECTION DETAIL AT DOOR SILL

ARCH REF: N/A

1'-0"=1'-0"

SERIES IT451 FLUSH FRONT STOREFRONT SYSTEM DOOR FRAMING DETAILS (SHOWN WITH OPTIONAL NARROW STILE OFFSET HUNG SERIES 250 DOOR SYSTEM)

Revisions By:

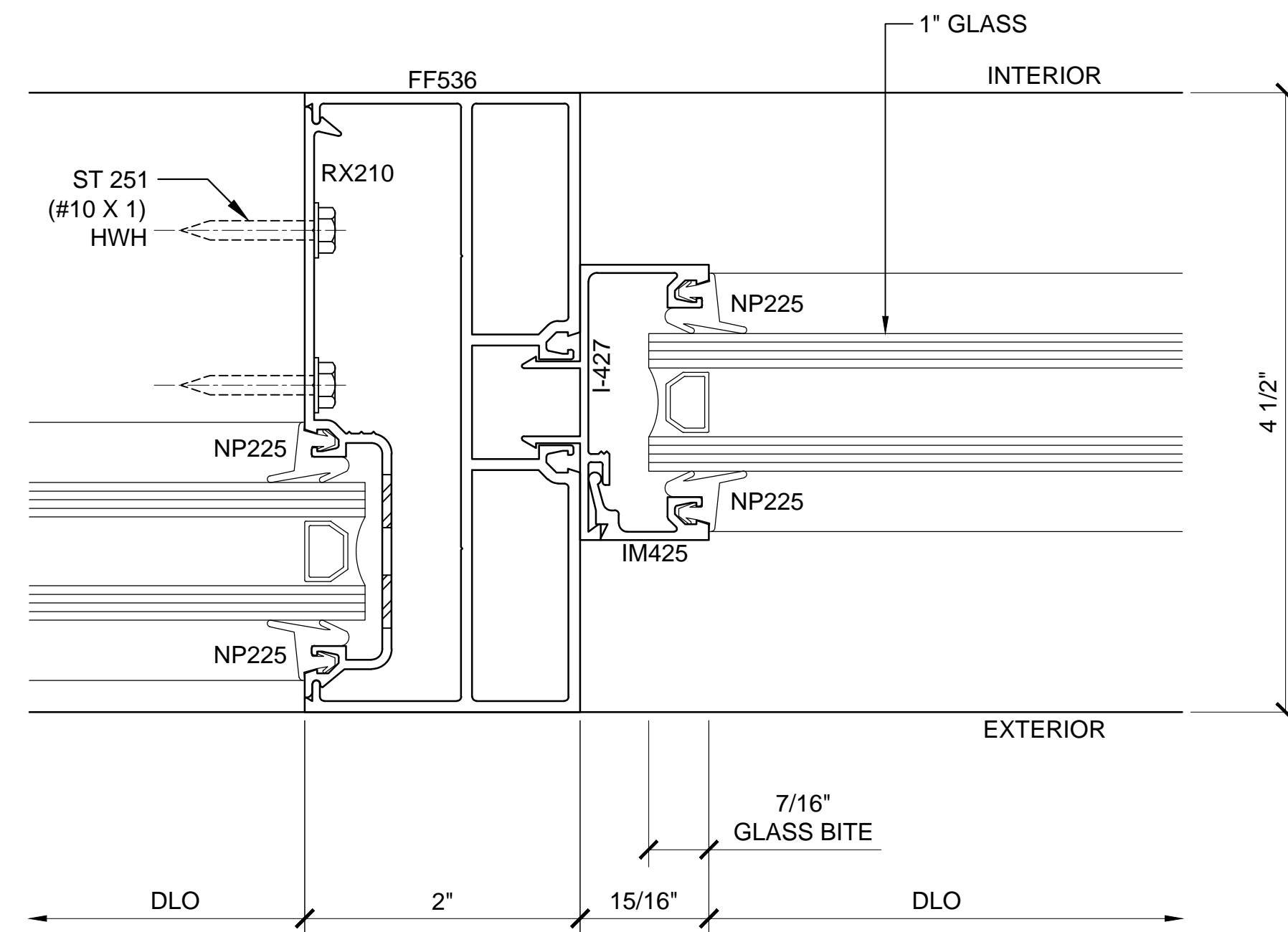


Description:
U.S. ALUMINUM
SERIES FT 451
STOREFRONT SYSTEM

Drawn By: TMG
Date: 12/26/14
Scale: AS NOTED
File Name:
FT451 SF.dwg

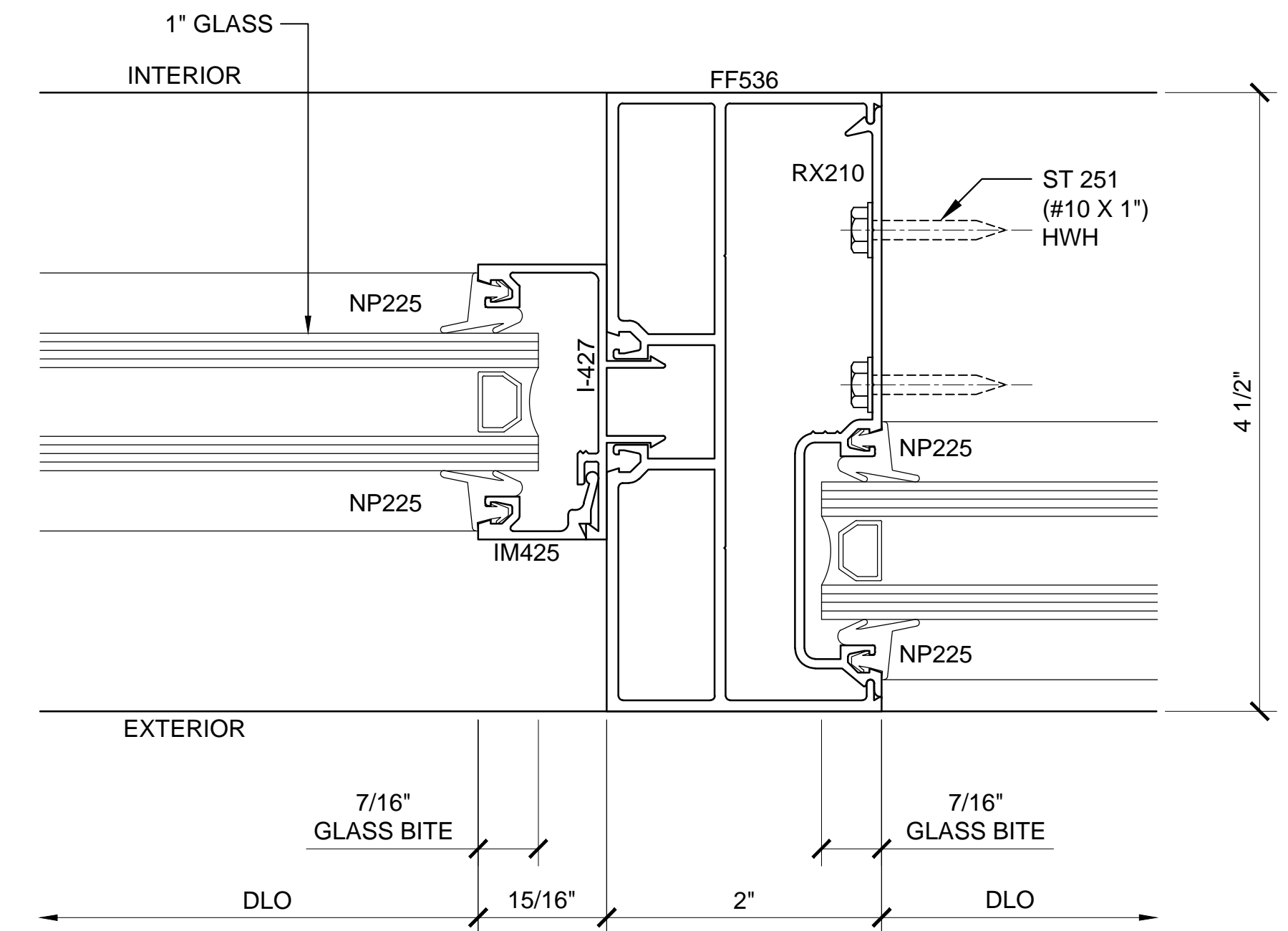
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6.02



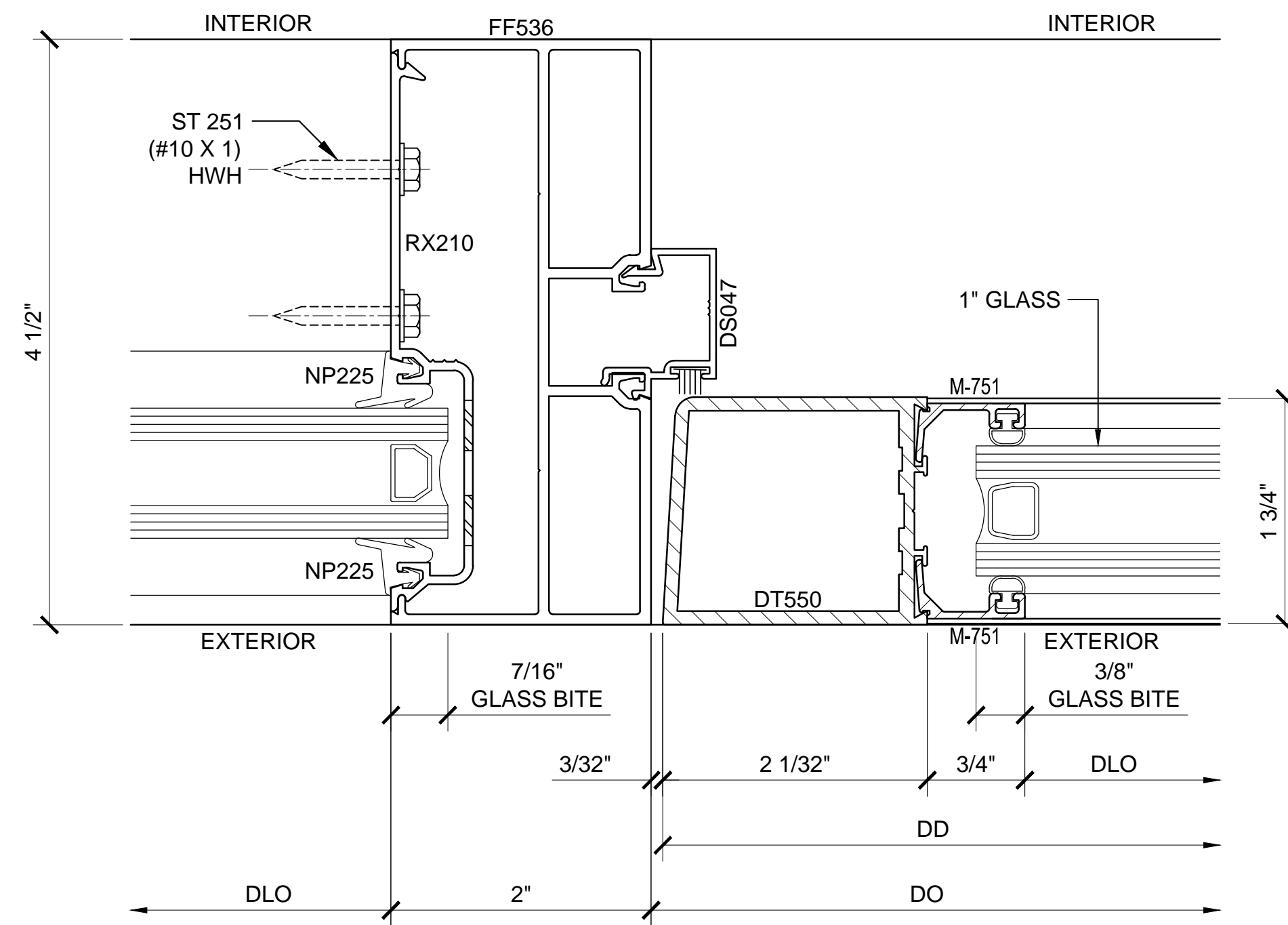
6 SECTION DETAIL AT VERTICAL

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



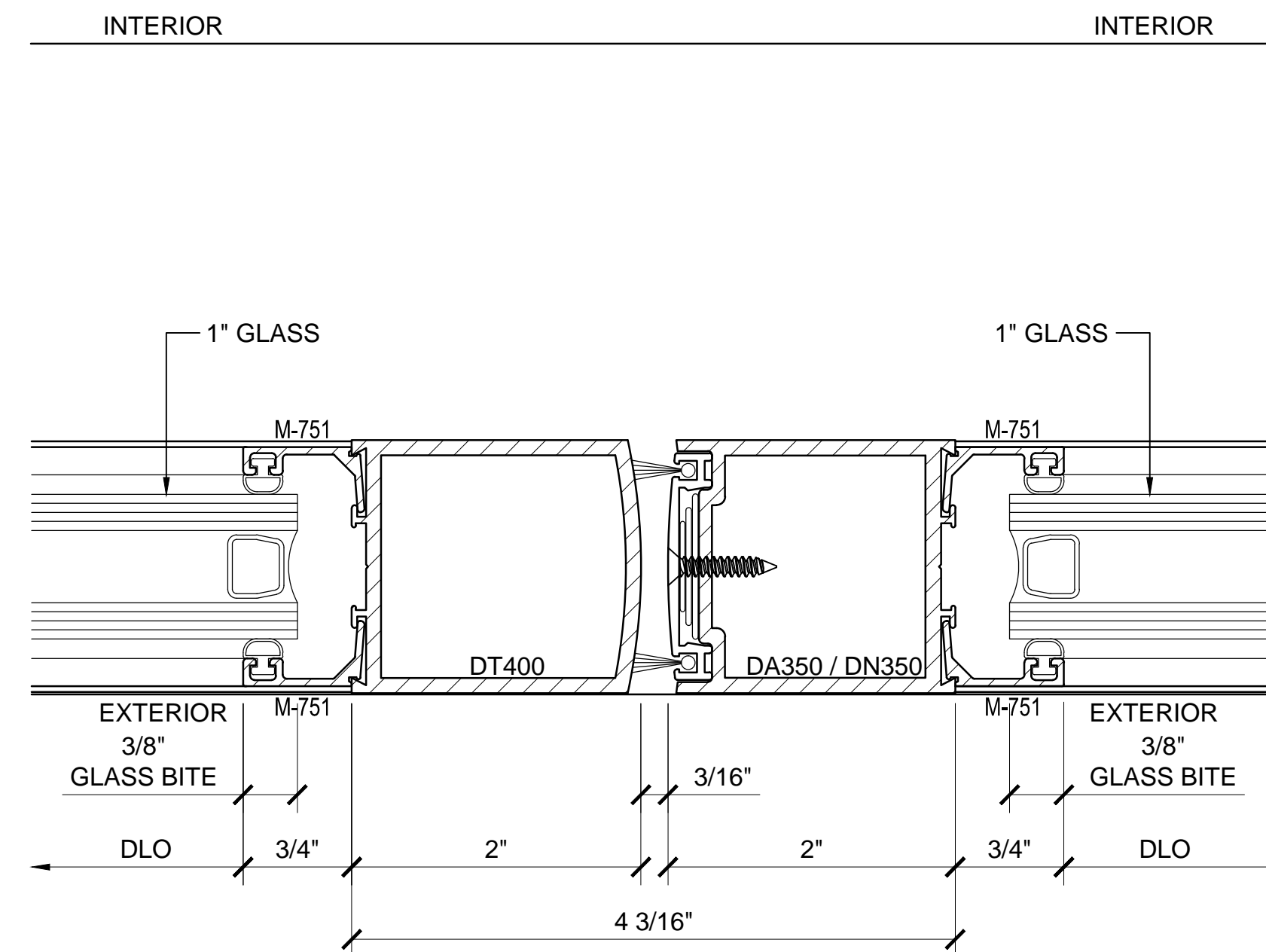
10 SECTION DETAIL AT VERTICAL

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



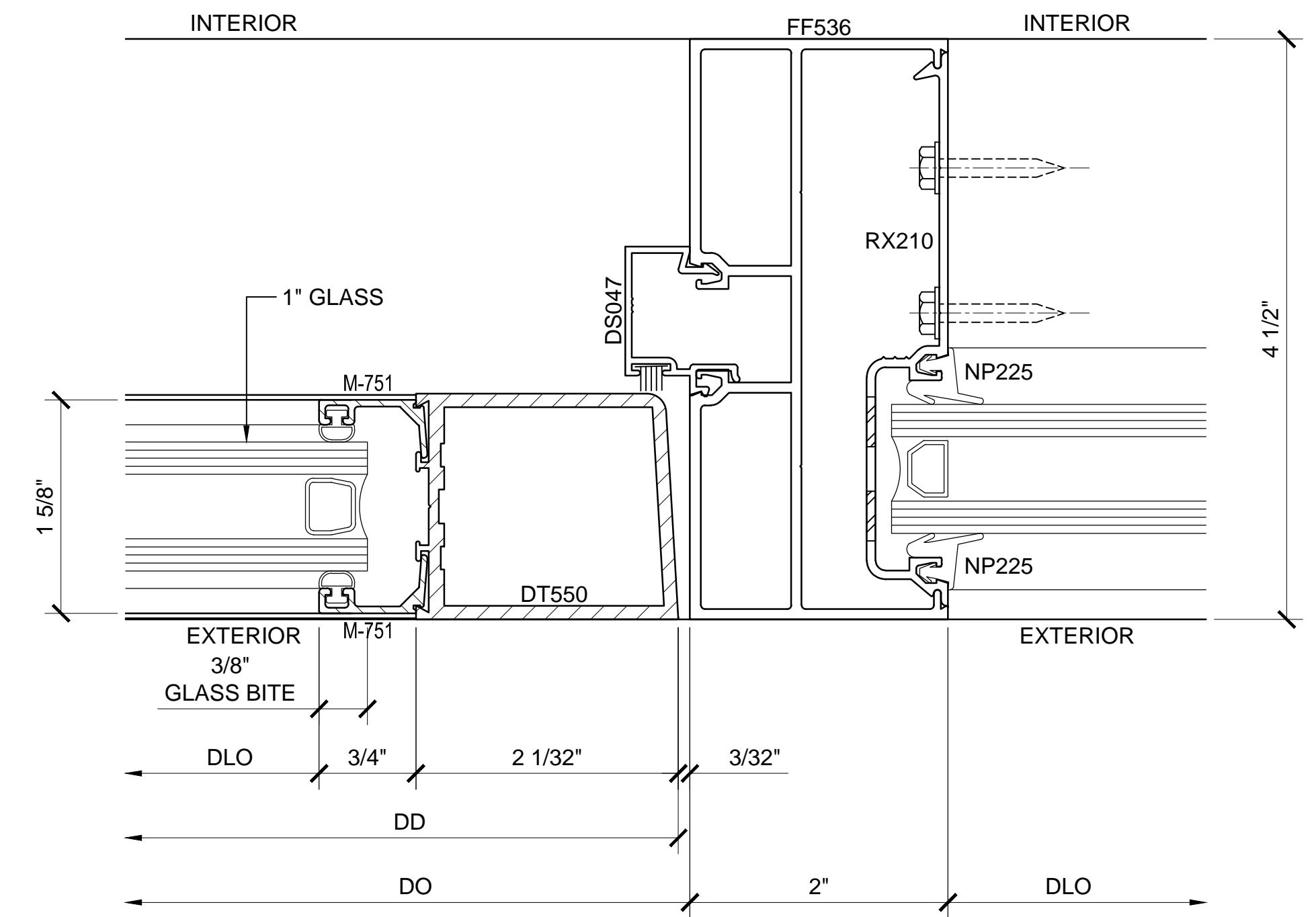
7 SECTION DETAIL AT DOOR JAMB

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



8 SECTION DETAIL AT MEETING STILES

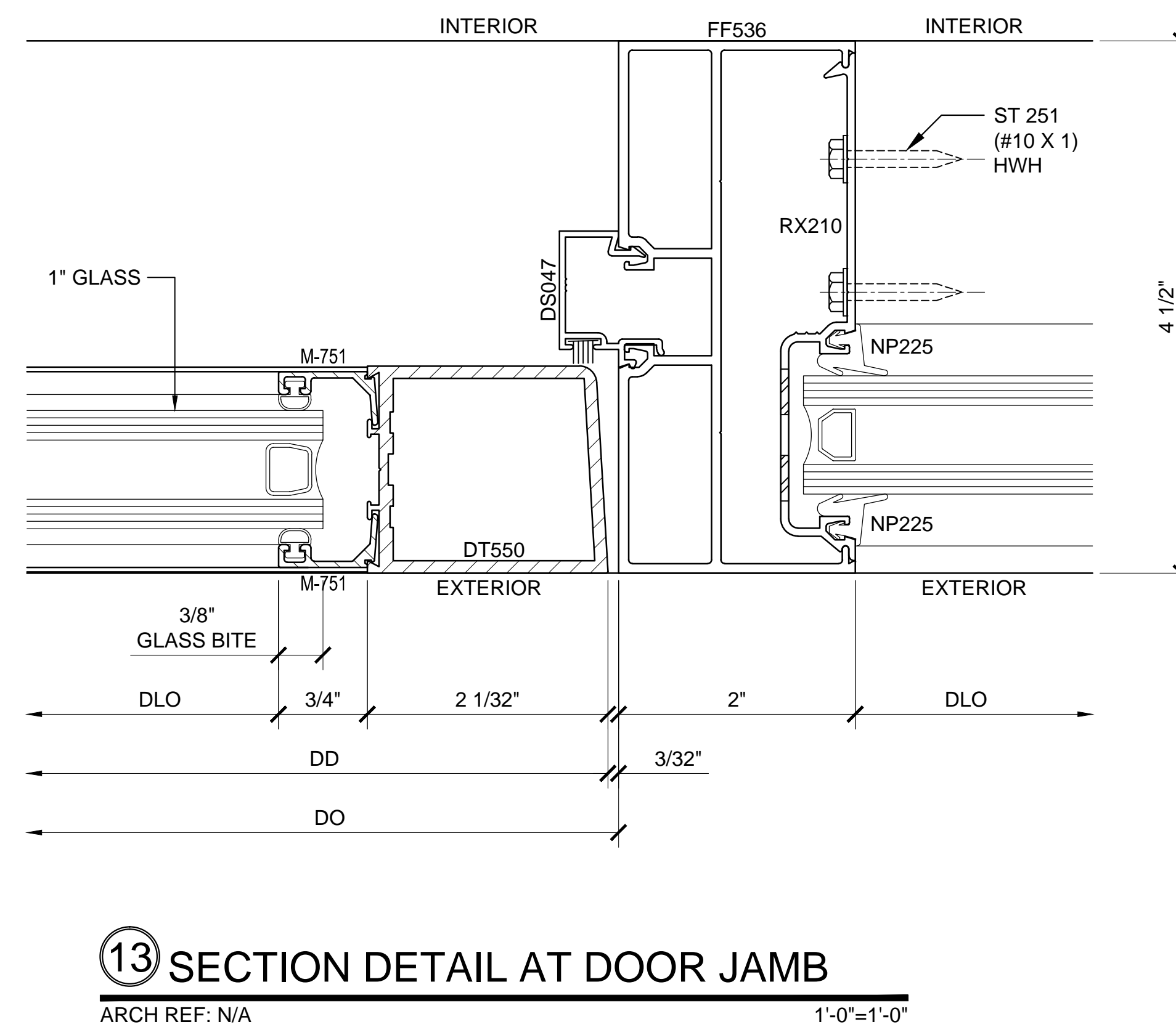
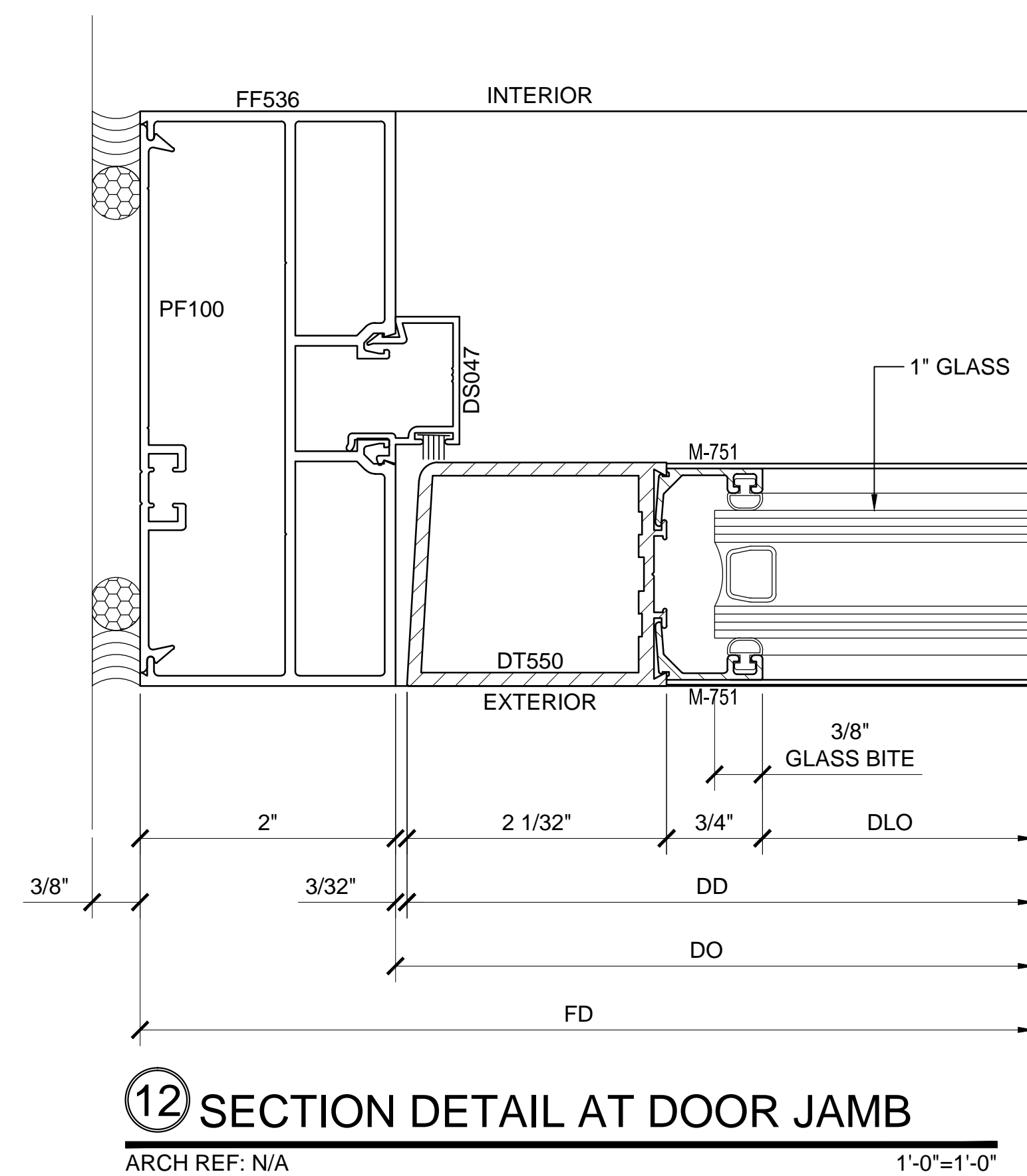
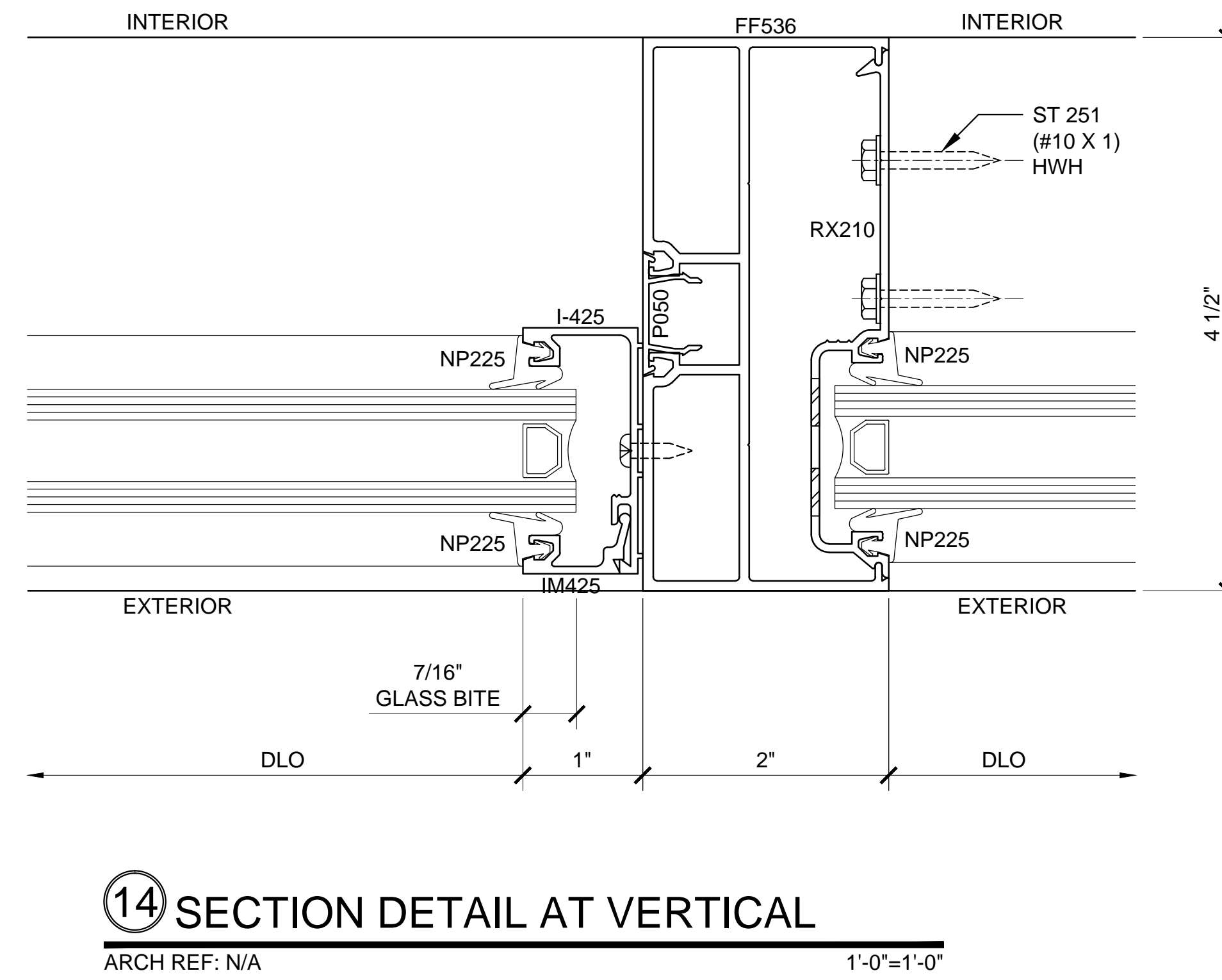
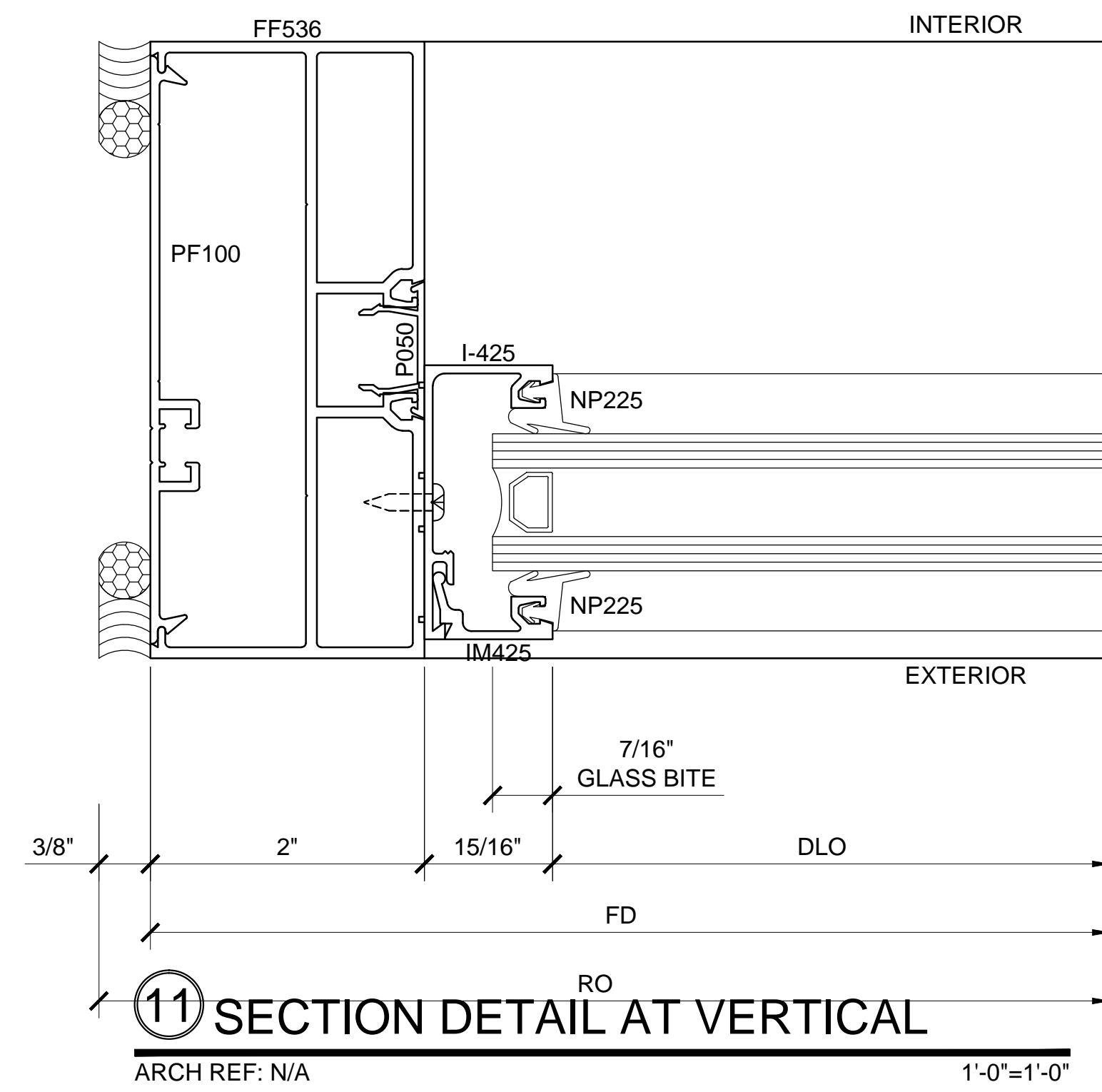
ARCH REF: N/A 1'-0"=1'-0"



9 SECTION DETAIL AT DOOR JAMB

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

Revisions By:



SERIES IT451 FLUSH FRONT STOREFRONT SYSTEM DOOR FRAMING DETAILS (SHOWN WITH OPTIONAL NARROW STILE OFFSET HUNG SERIES 250 DOOR SYSTEM)

Description:
U.S. ALUMINUM
SERIES FT 451
STOREFRONT SYSTEM

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STOREFRONTS

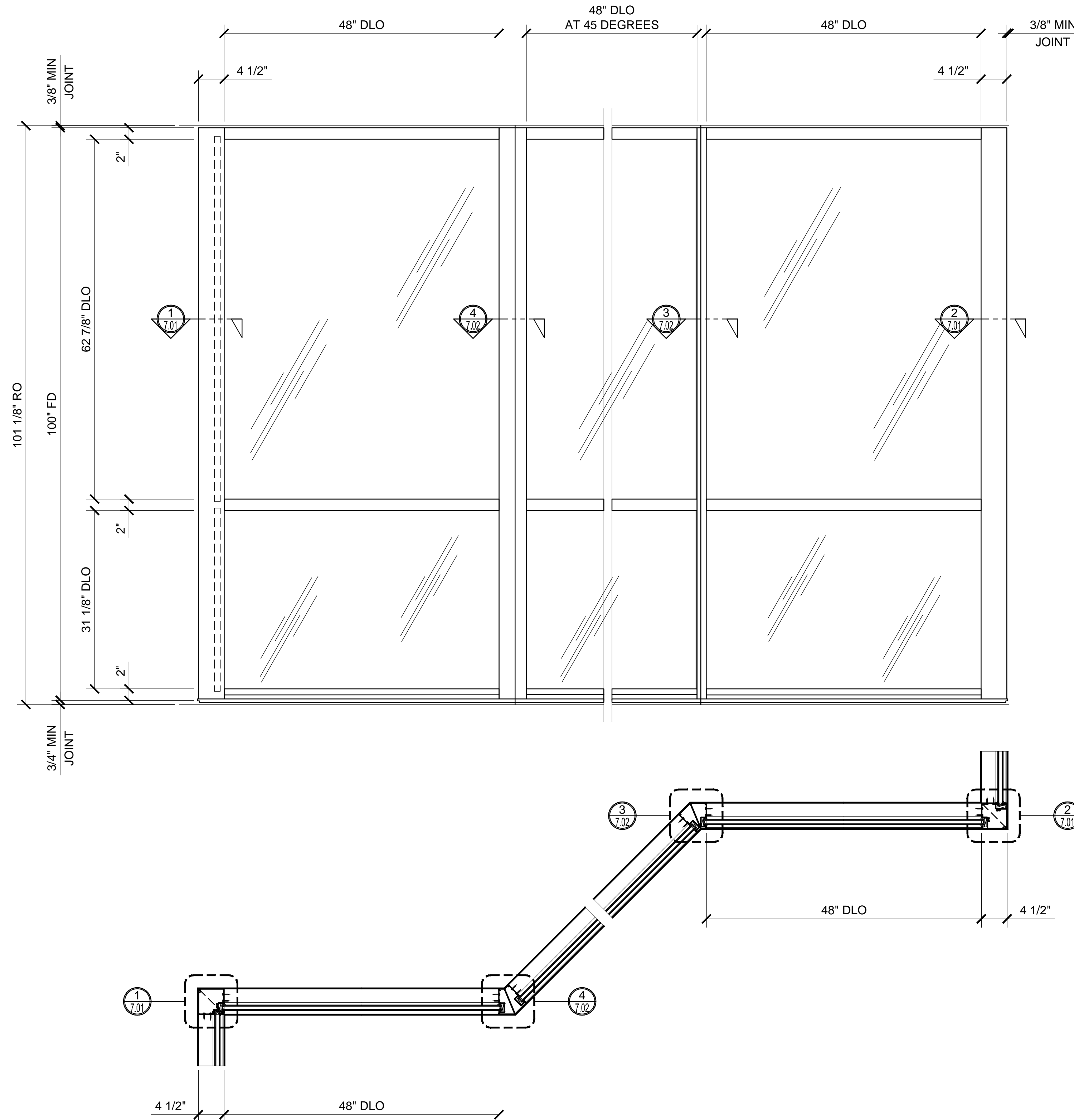
SERIES FT 451 FLUSH FRONT / CORNERS

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

FT451 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 FT451 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
- Thermally Broken
- 1" Glazing infill (SHOWN) Optional snap-in reducers for 1/4" or 1/2" glass are available
- Full range of accessory components
- Available in an array of architectural coatings and anodized finishes
- Screw spline assembly
- Exterior Glazed



STANDARD ABBREVIATIONS

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

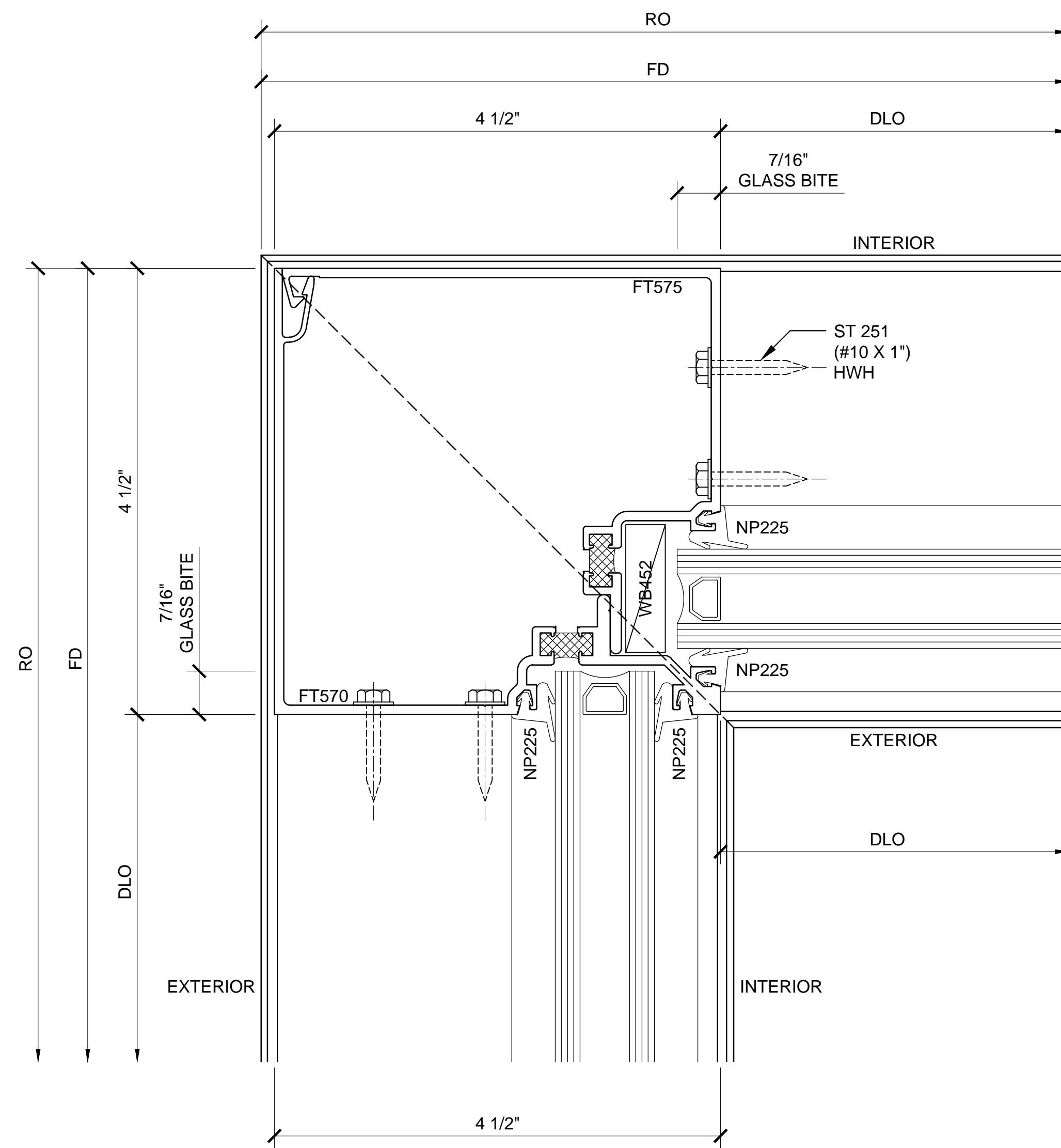
Revisions By:



Description:
U.S. ALUMINUM
SERIES FT 451
STOREFRONT SYSTEM

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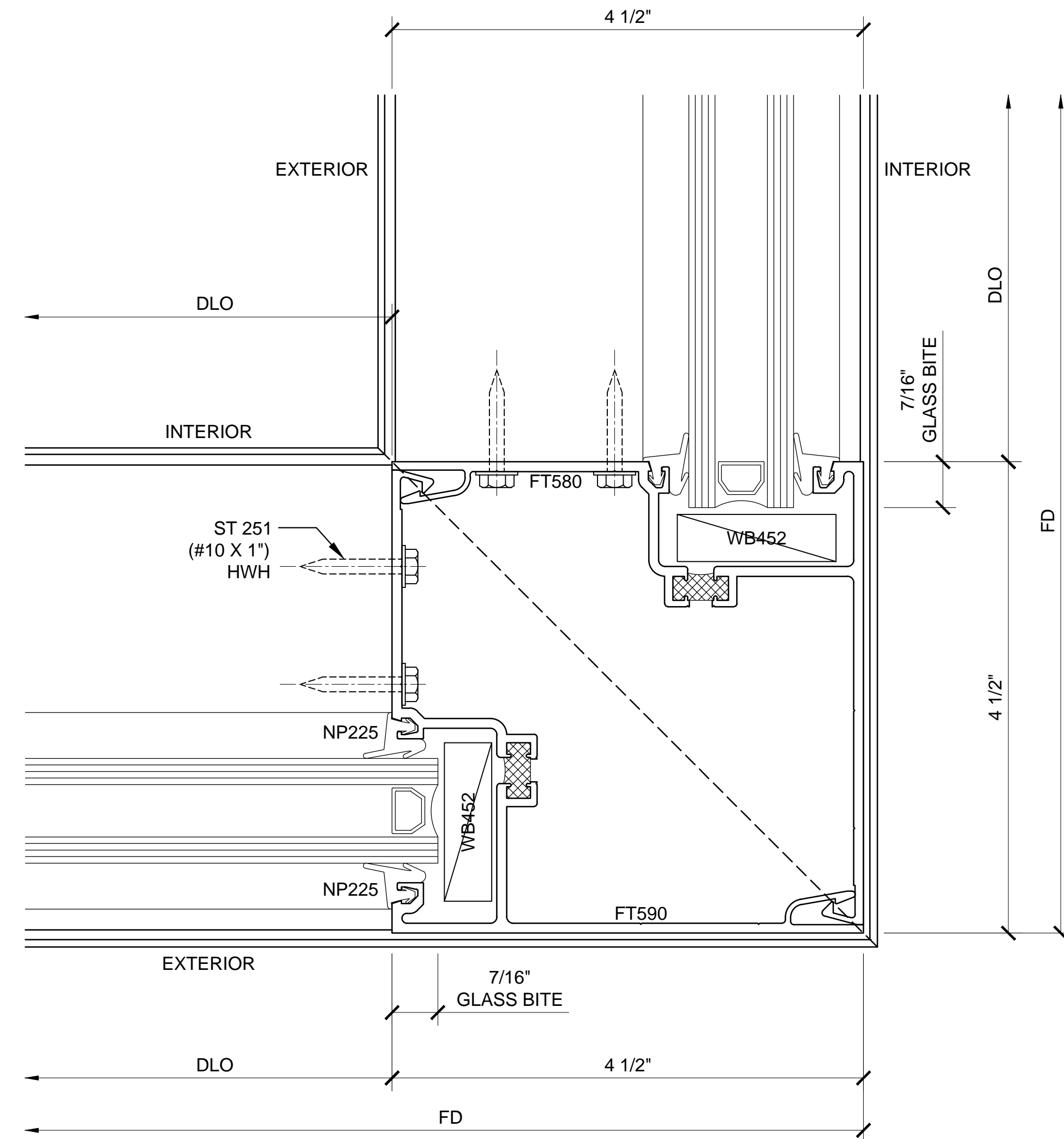
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① SECTION DETAIL AT
 90 DEGREES CORNER VERTICAL

ARCH REF: N/A

1'-0"=1'-0"



② SECTION DETAIL AT
 90 DEGREES CORNER VERTICAL

ARCH REF: N/A

1'-0"=1'-0"

SERIES 451 FLUSH FRONT STOREFRONT SYSTEM / OFFSET / FLUSH OUT / EXTERIOR GLAZING

1'-0" = 1'-0"

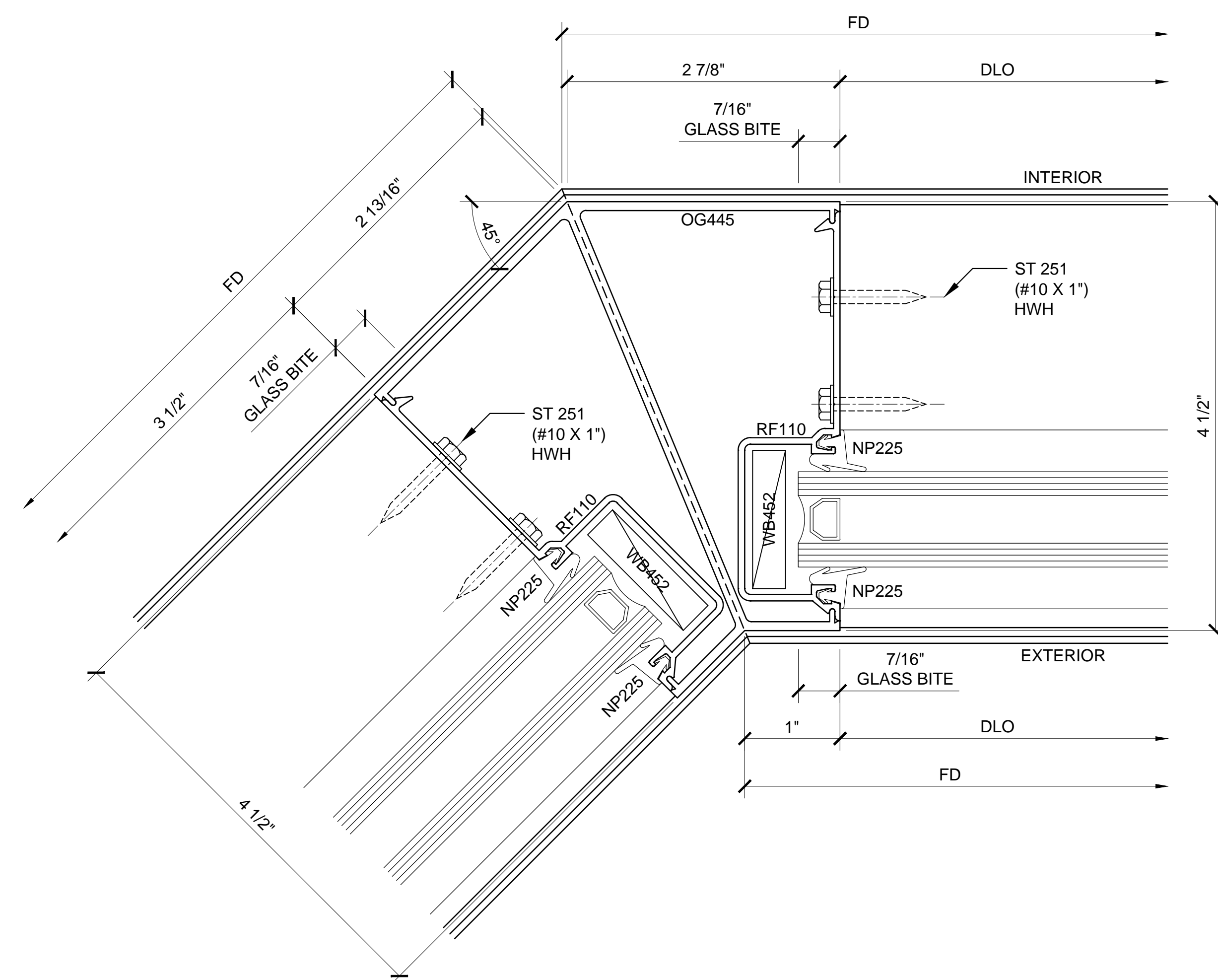
Description:
 U.S. ALUMINUM
 SERIES FT 451
 STOREFRONT SYSTEM

Drawn By: TMG
 Date: 12/26/14
 Scale: AS NOTED
 File Name:
 FT451 SF.dwg

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7.01

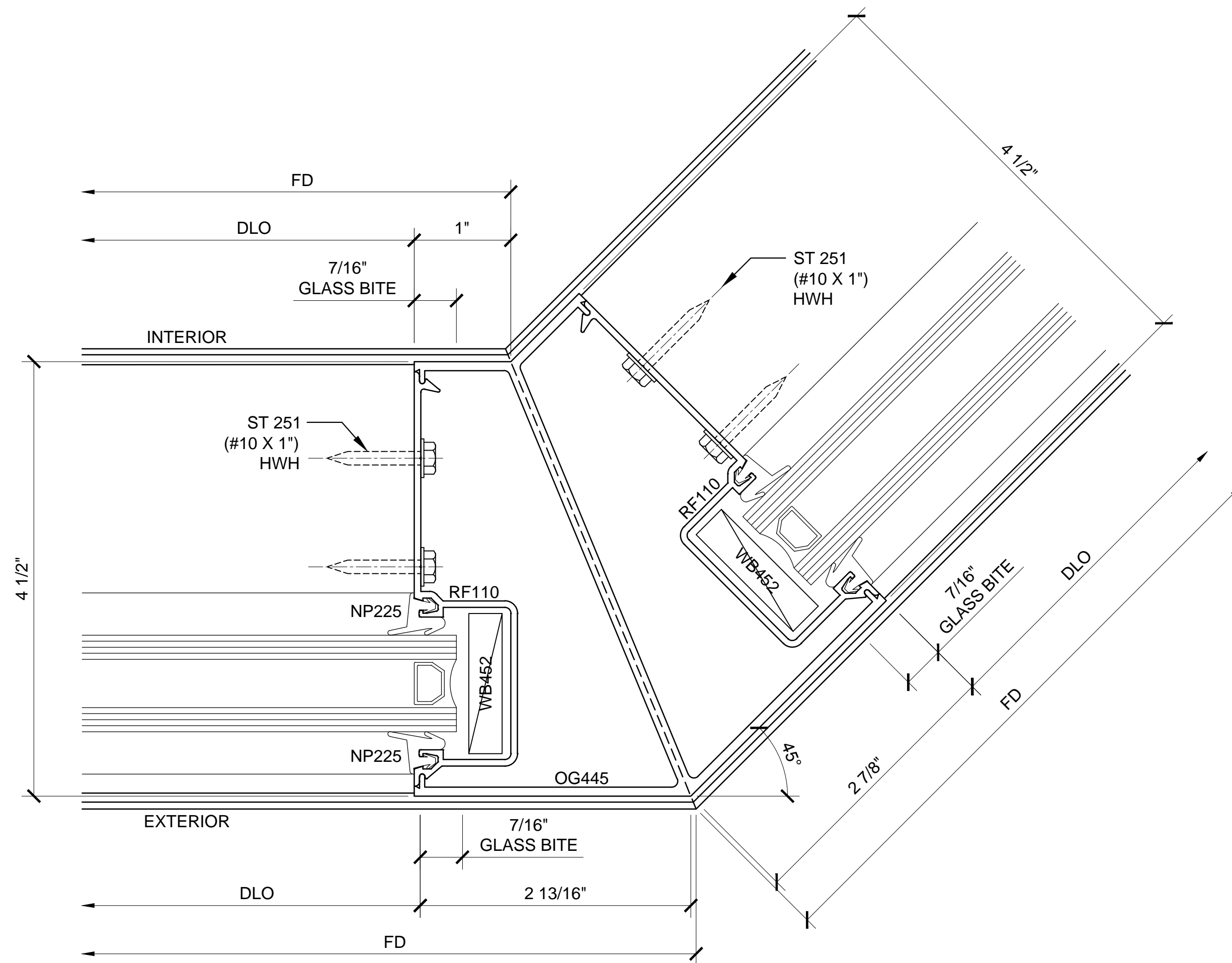
Revisions By:



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"

SERIES 451 FLUSH FRONT STOREFRONT SYSTEM / OFFSET / FLUSH OUT / EXTERIOR GLAZING

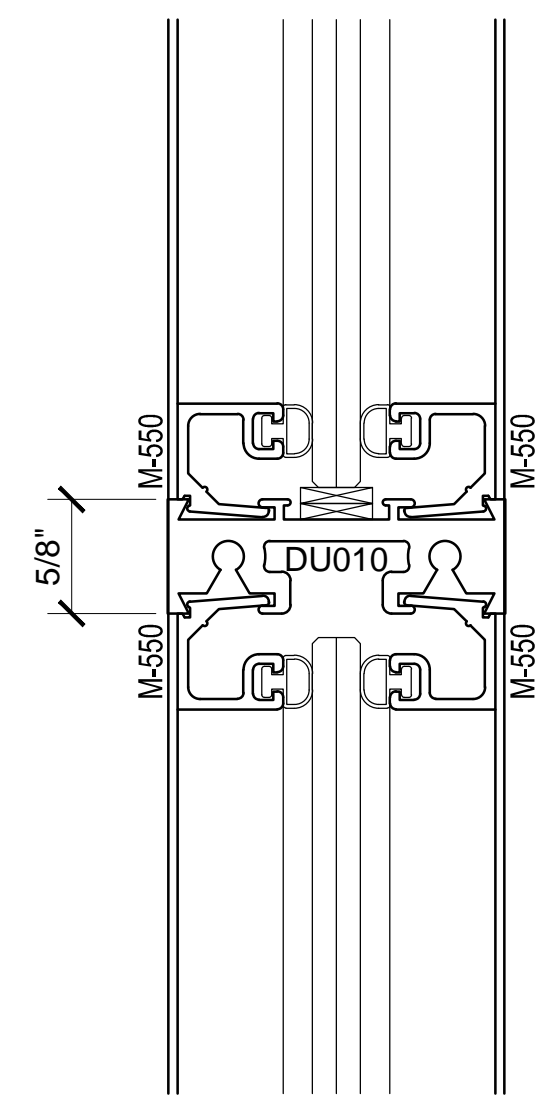
1'-0" = 1'-0"

Description:
U.S. ALUMINUM
SERIES FT 451
STOREFRONT SYSTEM

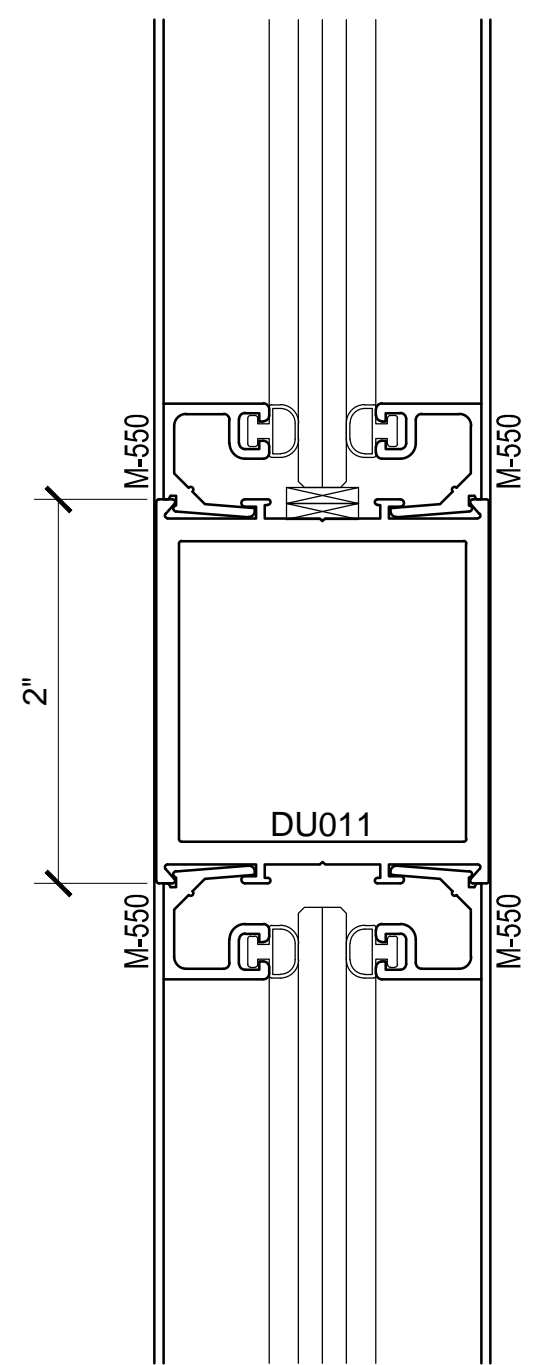
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Date: 12/26/14
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FT451 SF.dwg

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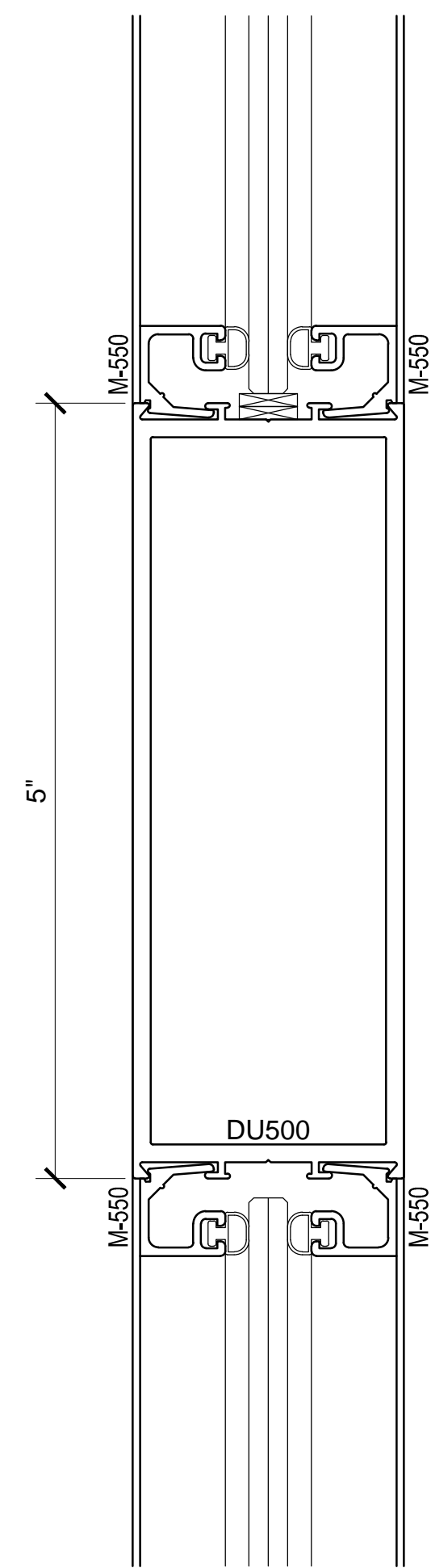
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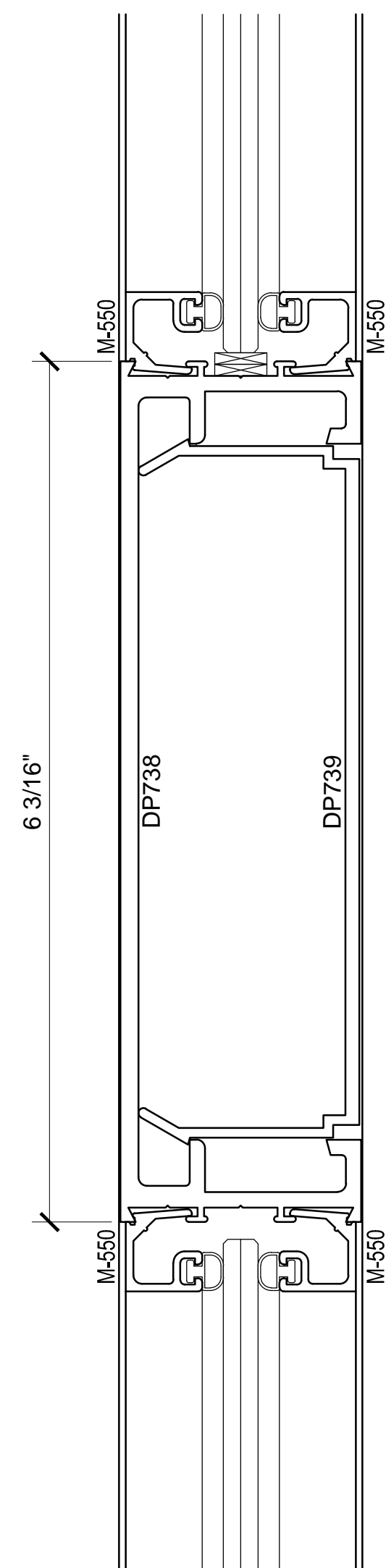
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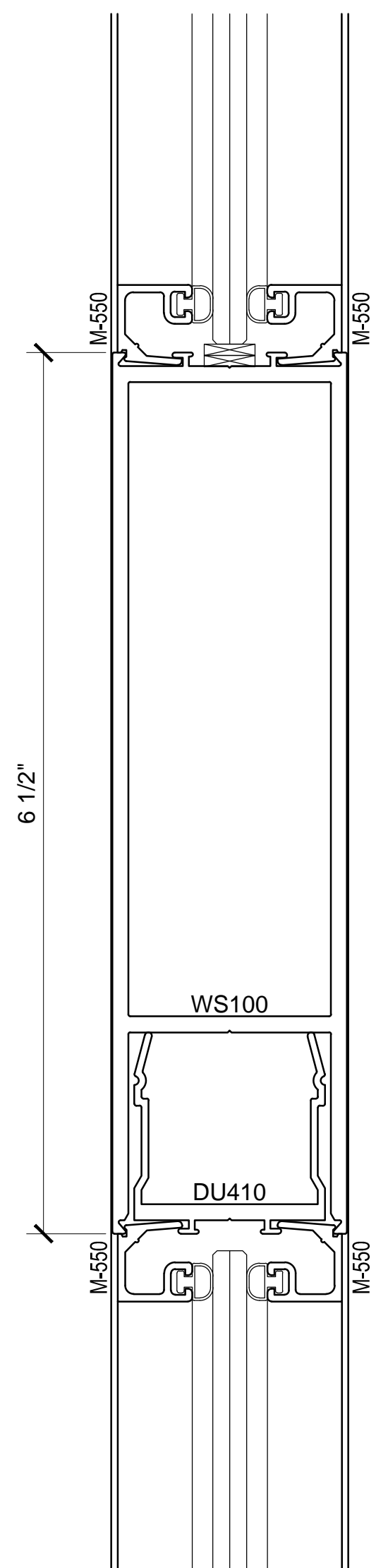
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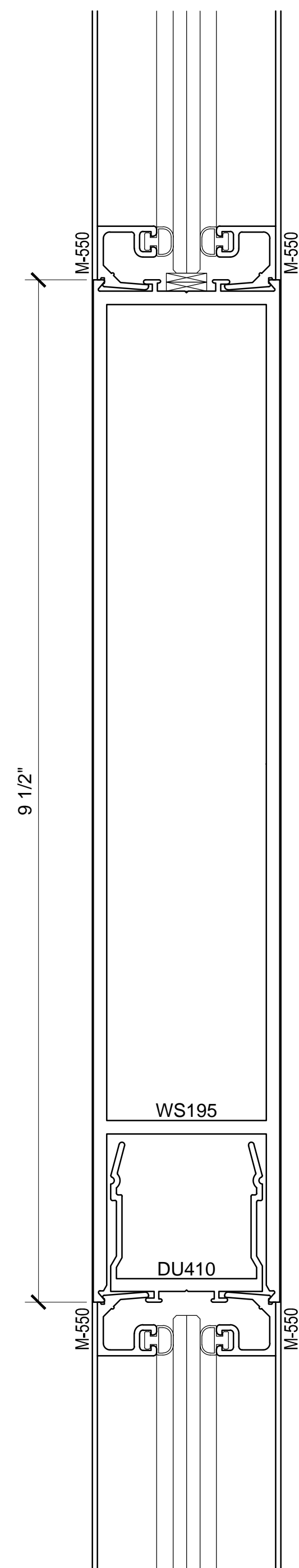
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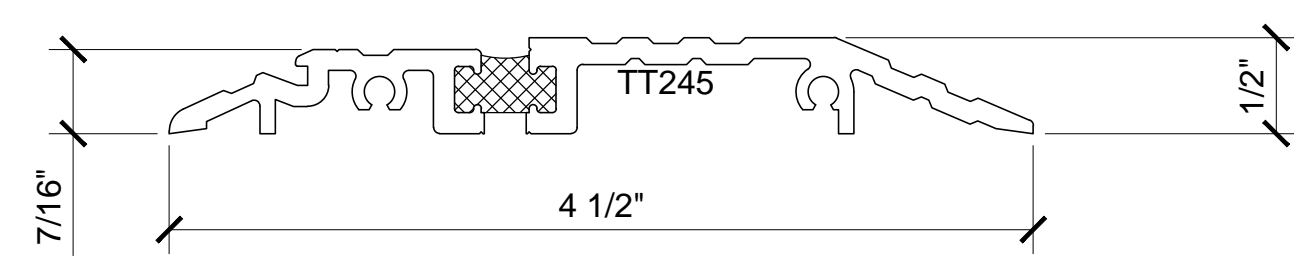
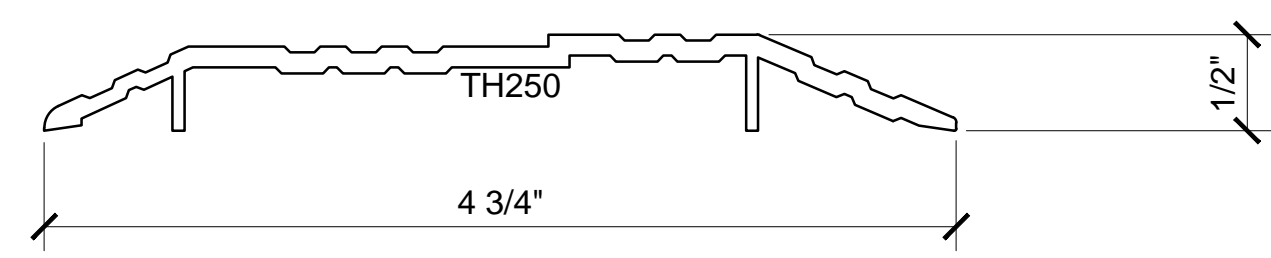
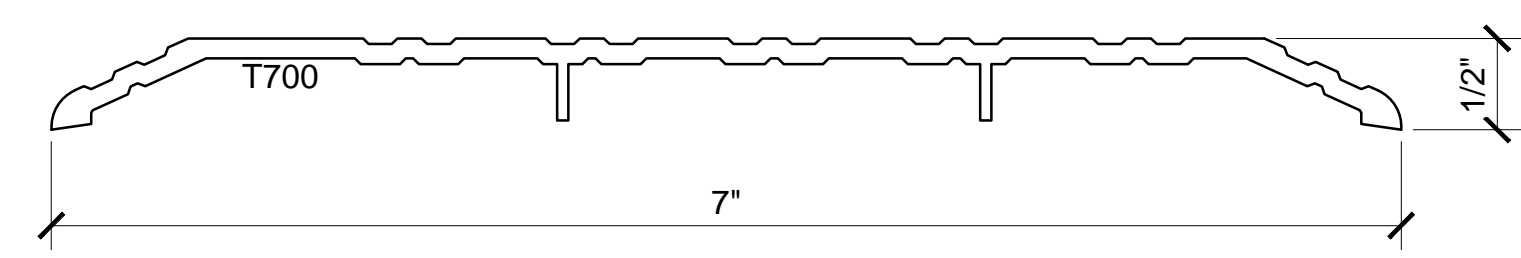
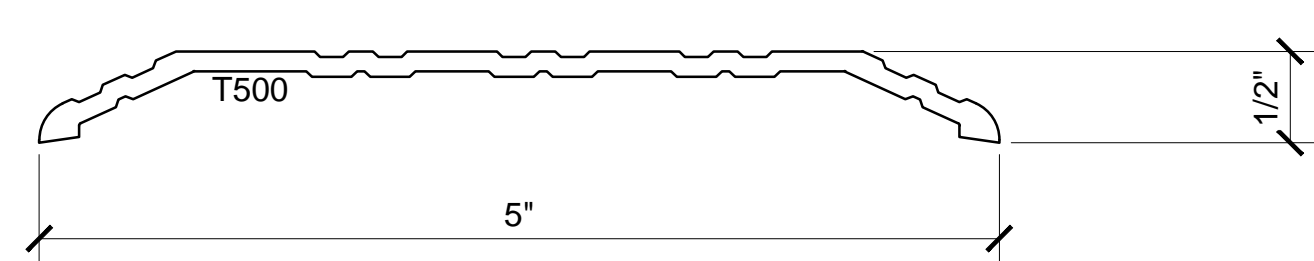
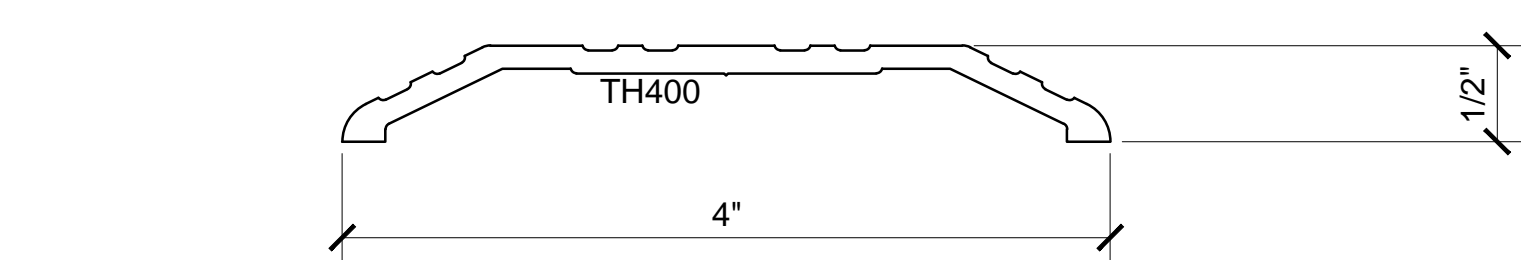
DM640 DM940 ?



DM650

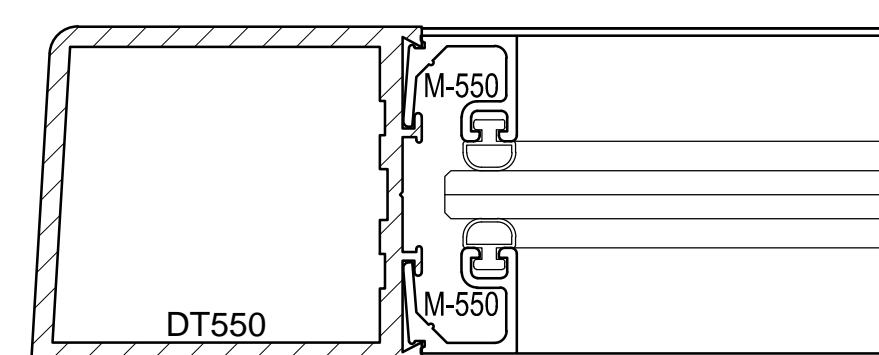


DM959

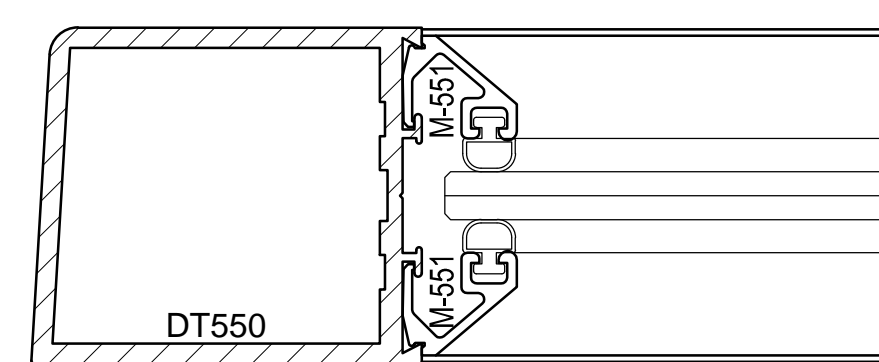


THRESHOLDS

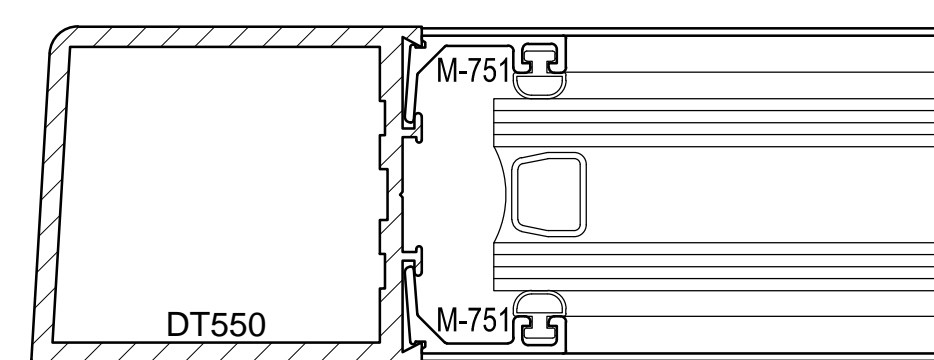
DOOR MUNTINS



1/4" GLASS - SQUARE

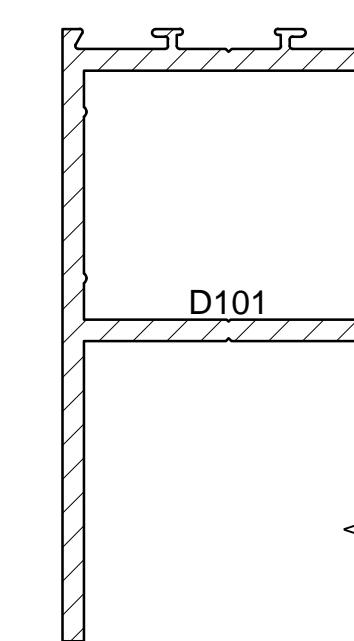
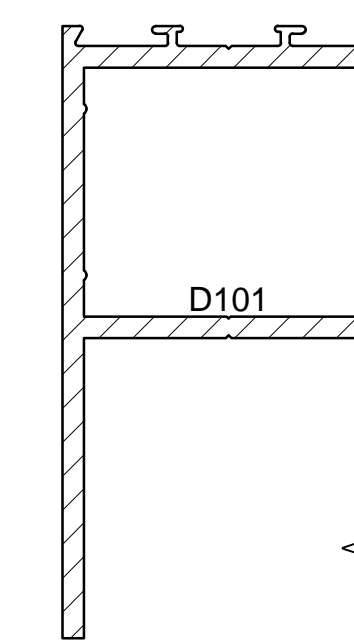
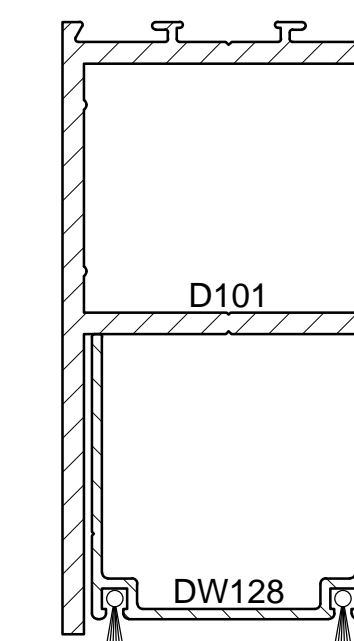
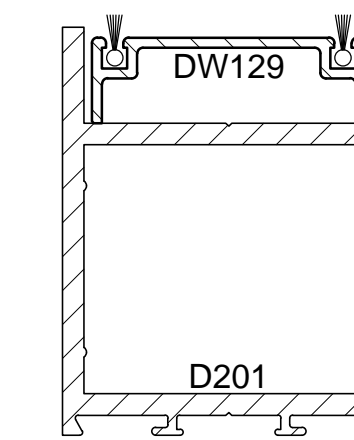


1/4" GLASS - TAPERED



1" GLASS

GLAZING OPTIONS



TOP AND BOTTOM WEATHERSTRIPPING

Revisions By:



Description:
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7.03