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## YES 45 FS STOREFRONT SYSTEM FOR 1/4" GLAZING
## 1-3/4" x 4-1/2"

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**WIND LOAD / DEAD LOAD CHARTS** ..... Page 10 to 12

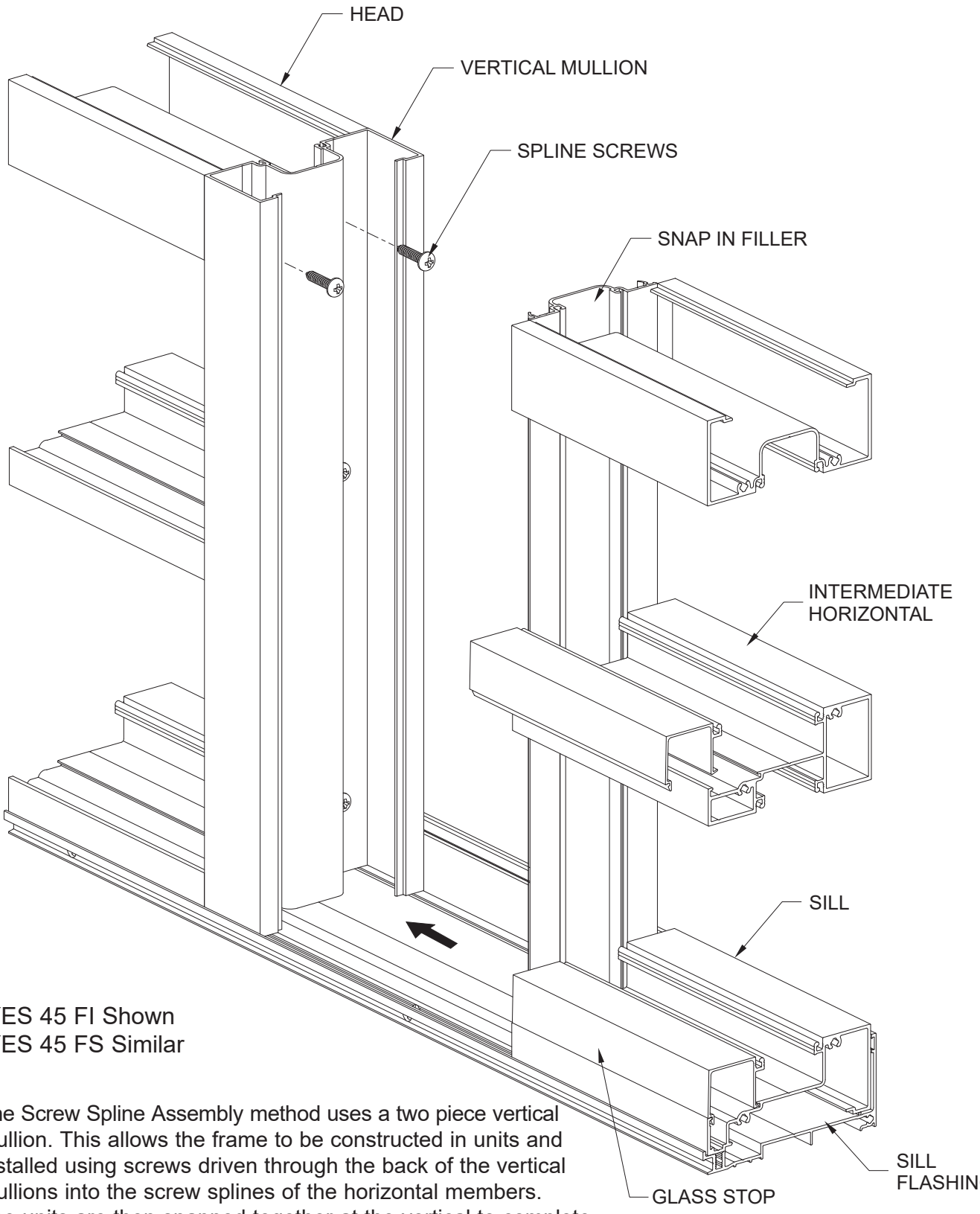
## YES 45 FI STOREFRONT SYSTEM FOR 1" GLAZING
## 2" x 4-1/2"

**FRAMING MEMBERS (1/4 SIZE)** ..... Page 13 to 17

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*The latest installation instructions for this product are available at www.ykkap.com.

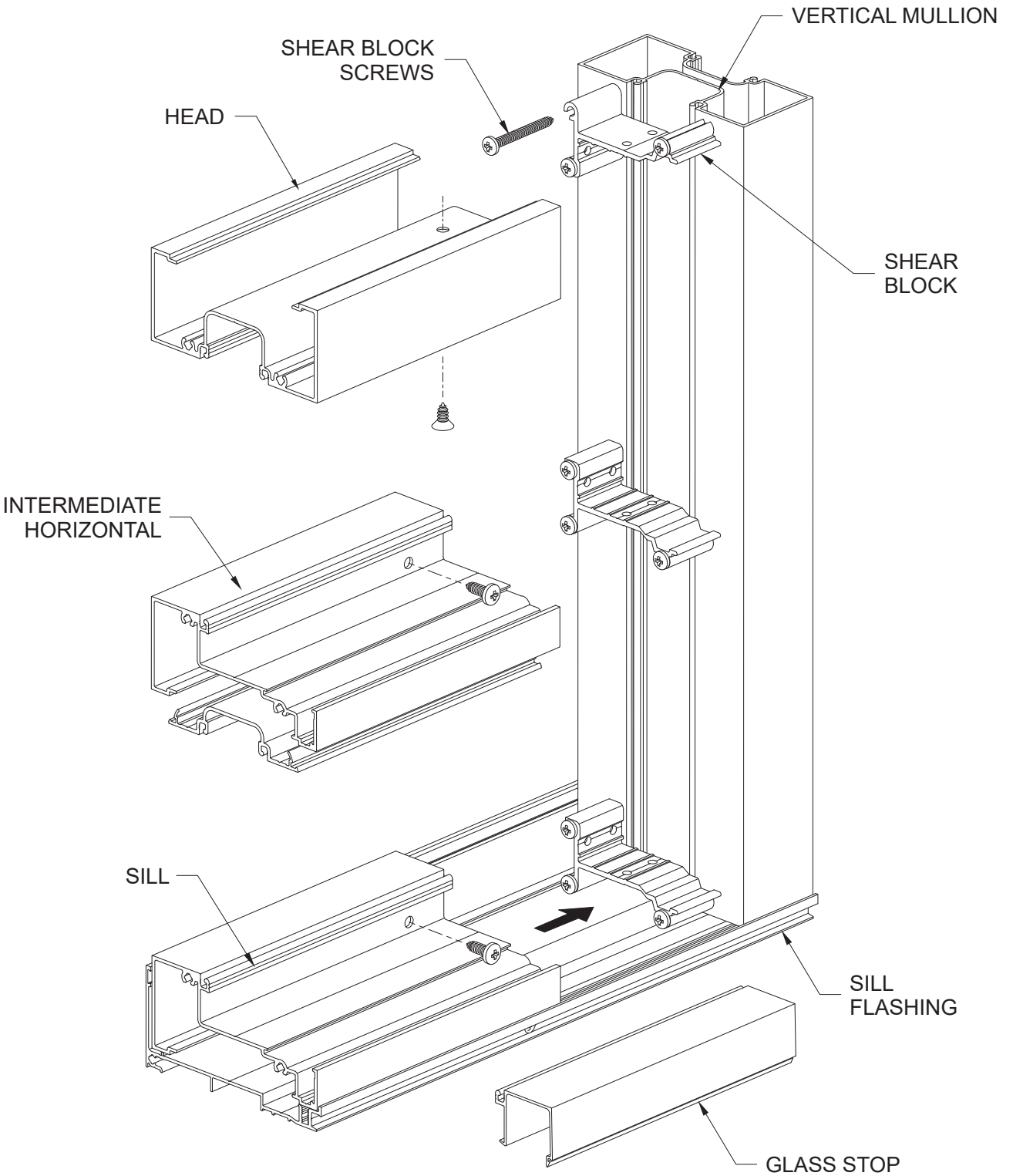
## SCREW SPLINE ASSEMBLY




YES 45 FI Shown
YES 45 FS Similar

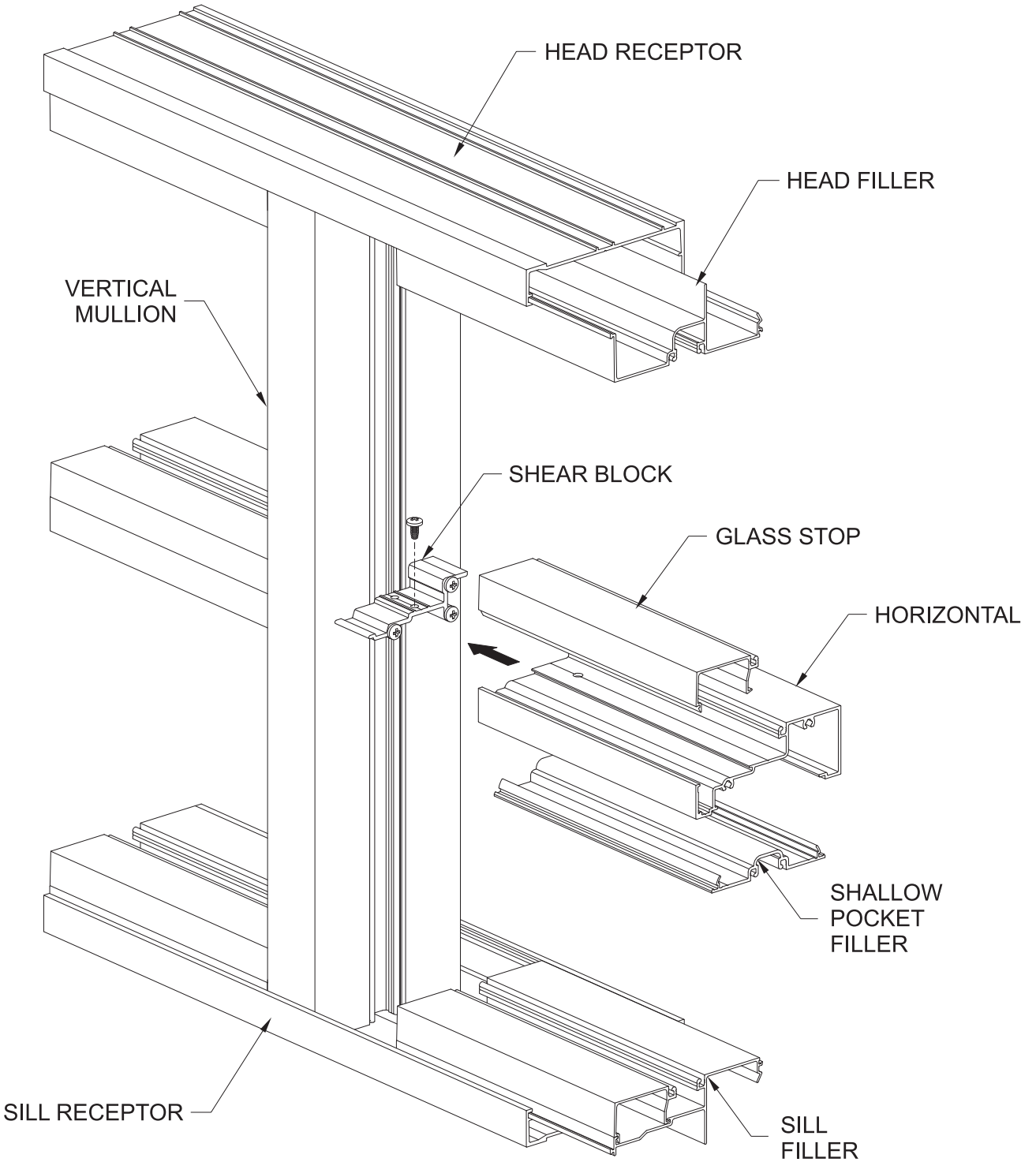
The Screw Spline Assembly method uses a two piece vertical mullion. This allows the frame to be constructed in units and installed using screws driven through the back of the vertical mullions into the screw splines of the horizontal members. The units are then snapped together at the vertical to complete the fabrication.

## SHEAR BLOCK ASSEMBLY



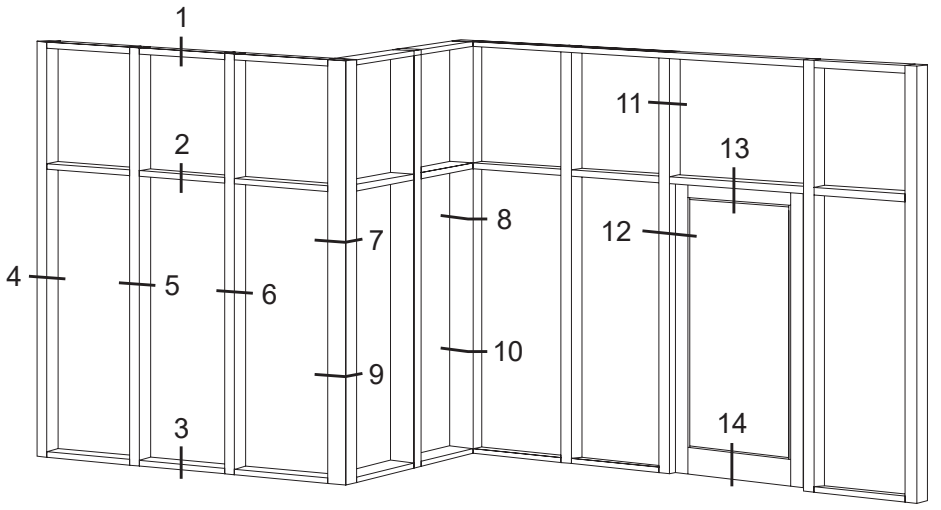

The Shear Block Assembly method uses shear blocks to attach horizontal members to tubular vertical mullions. This allows for a stronger joint connection.

## STOREFRONT CAN ASSEMBLY



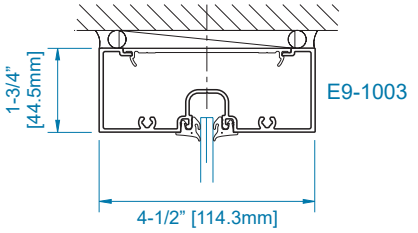

**Note:** YES 45 FS Shown, YES 45 FI Similar.

# YES 45 FS FRAMING MEMBERS

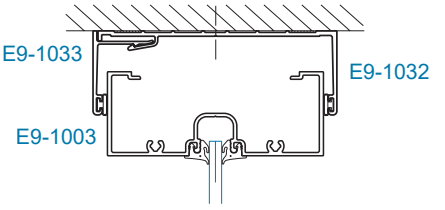



SCALE: 1/4 SIZE

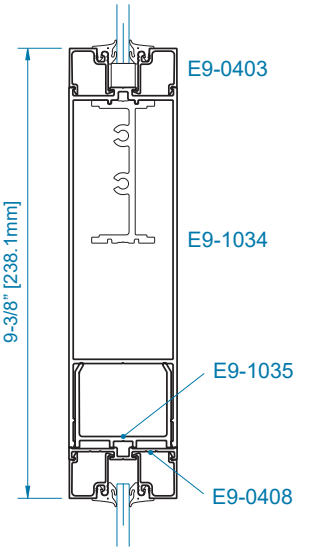
0 3 6



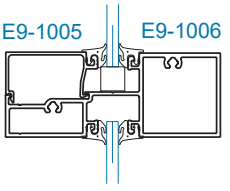

SECTION 1
HEAD



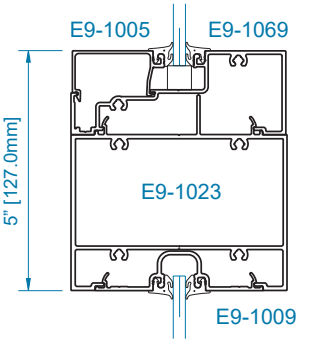

SECTION 1A
HEAD RECEPTOR



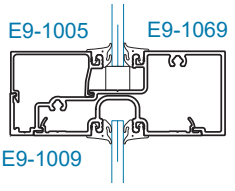

SECTION 2C
9-3/8" SIDELITE MIDRAIL



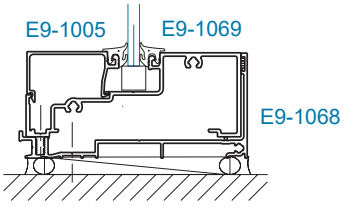

SECTION 2
HORIZONTAL



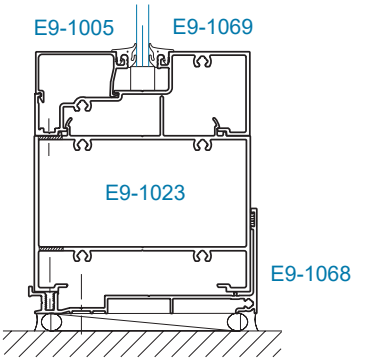

SECTION 2B
5" HORIZONTAL



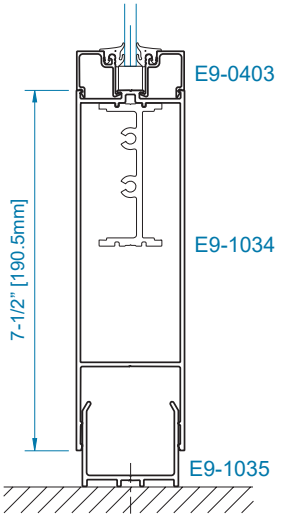

SECTION 2A
TWO PIECE HORIZONTAL




SECTION 3
SILL

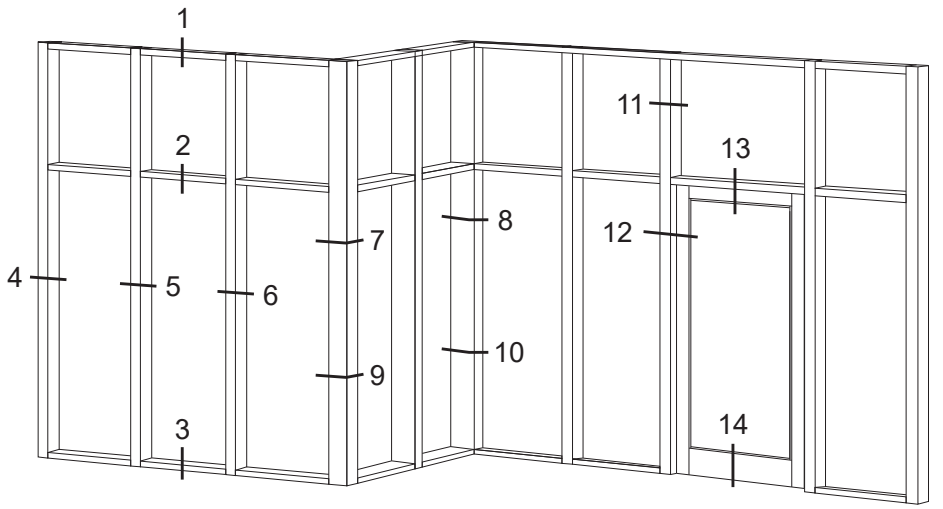



SECTION 3A
5" SILL

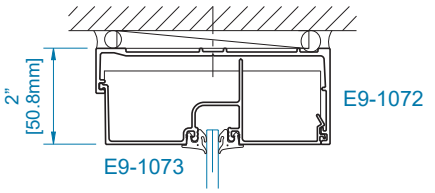



SECTION 3B
7-1/2" SIDELITE BASE

# YES 45 FS CAN/RIBBON FRAMING MEMBERS

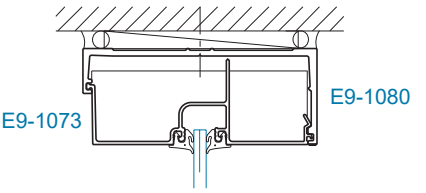



## STANDARD

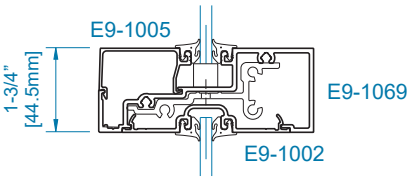



SECTION 1B
O.G. RIBBON HEAD

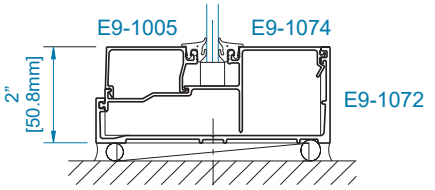
## HEAVY DUTY



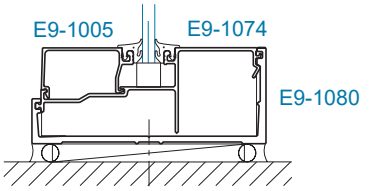

SECTION 1C
O.G. RIBBON HEAD




SECTION 2D
O.G. RIBBON
HORIZONTAL

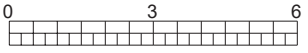



SECTION 3C
O.G. RIBBON SILL

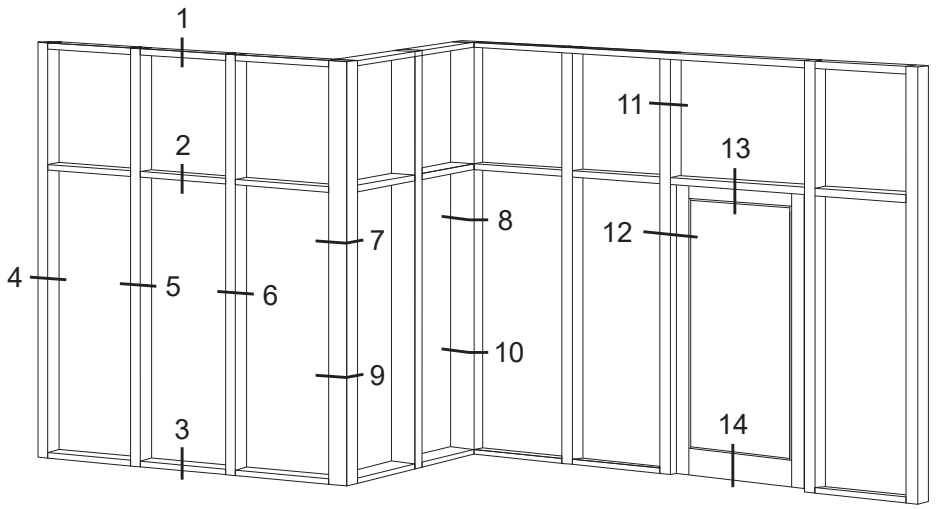



SECTION 3D
O.G. RIBBON SILL

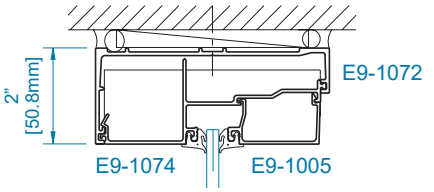
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# YES 45 FS CAN/RIBBON FRAMING MEMBERS

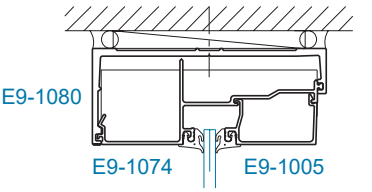



## STANDARD

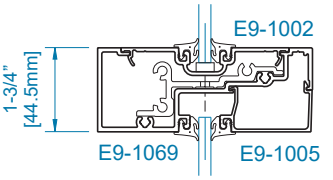



SECTION 1D
I.G. RIBBON HEAD

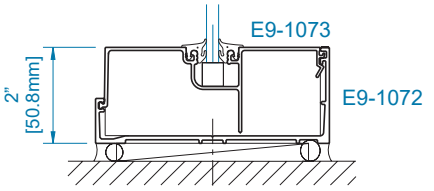
## HEAVY DUTY



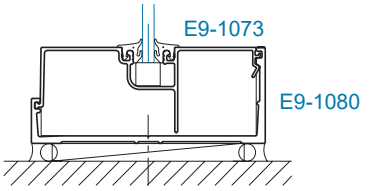

SECTION 1E
I.G. RIBBON HEAD




SECTION 2E
I.G. RIBBON
HORIZONTAL

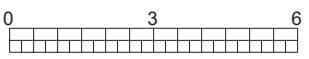



SECTION 3E
I.G. RIBBON SILL



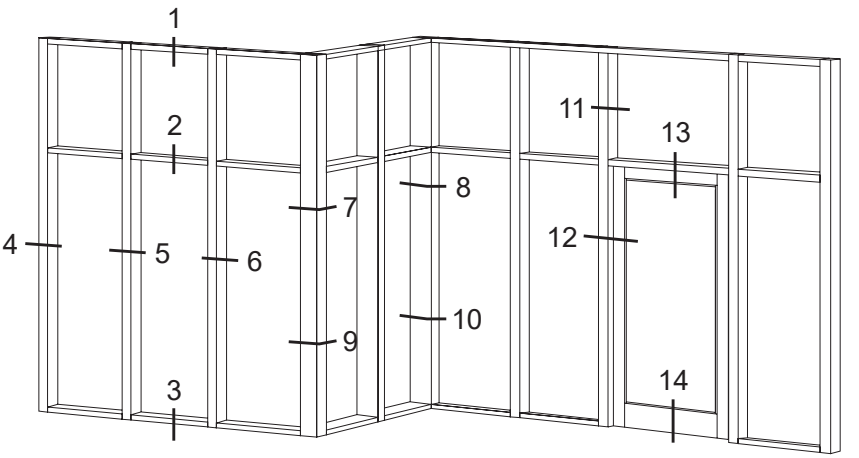

SECTION 3F
I.G. RIBBON SILL

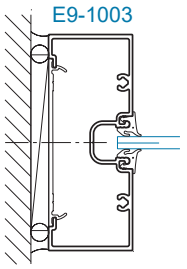
SCALE: 1/4 SIZE



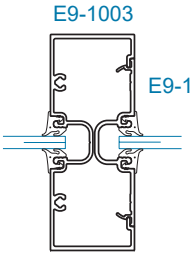
# YES 45 FS FRAMING MEMBERS

SCALE: 1/4 SIZE
0 3 6

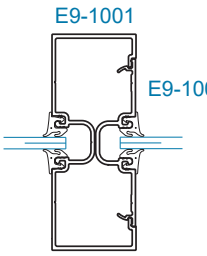


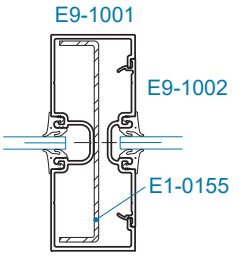

SECTION 4
JAMB



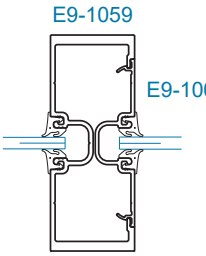

SECTION 5
VERTICAL



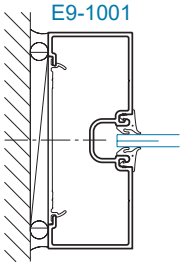

SECTION 5A
VERTICAL



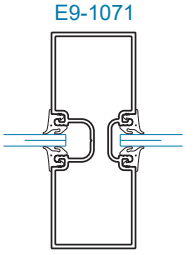

SECTION 5B
VERTICAL W/
STEEL REINFOR.



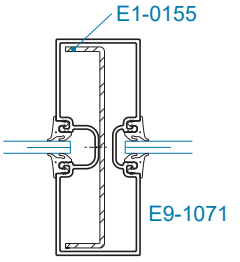

SECTION 5C
HEAVY DUTY
VERTICAL



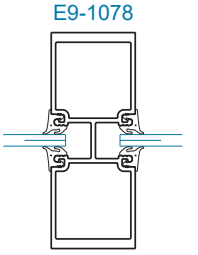

SECTION 4A
JAMB



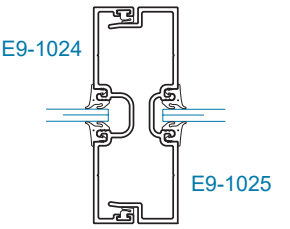

SECTION 5D
TUBULAR
VERTICAL



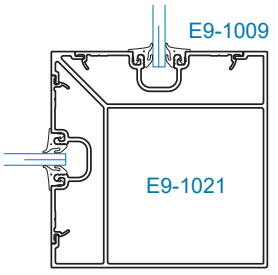

SECTION 5E
VERTICAL W/
STEEL REINFORCING



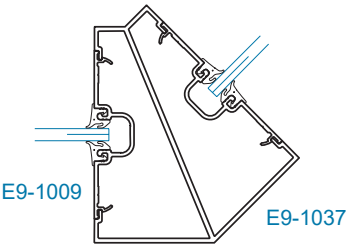

SECTION 5F
HEAVY DUTY
TUBULAR VERTICAL



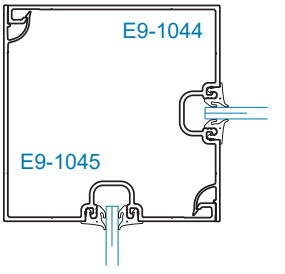

SECTION 6
EXPANSION
MULLION



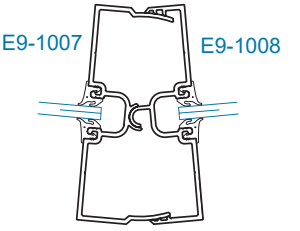

SECTION 7
90° OUTSIDE CORNER




SECTION 7A
135° OUTSIDE CORNER

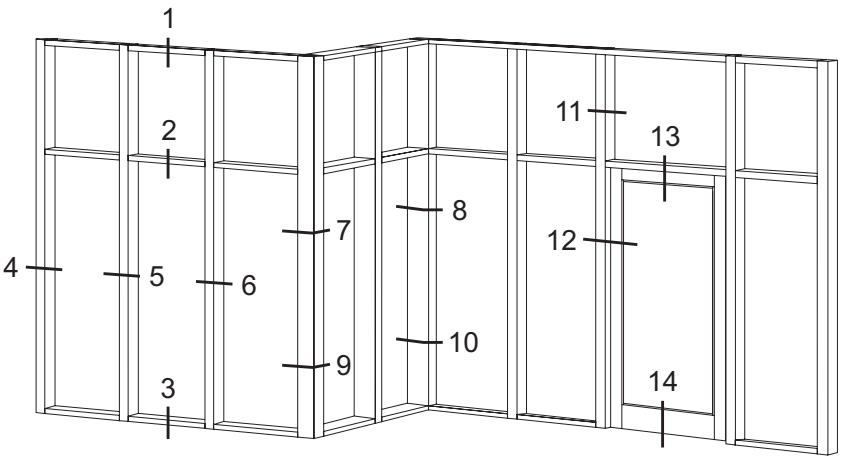



SECTION 8
90° INSIDE CORNER



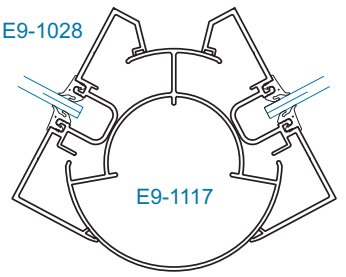

SECTION 9
0° - 15° HINGED
MULLION

# YES 45 FS FRAMING MEMBERS

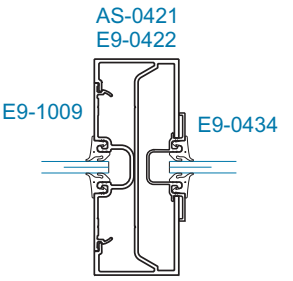



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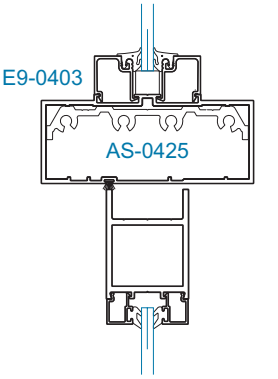
0 3 6



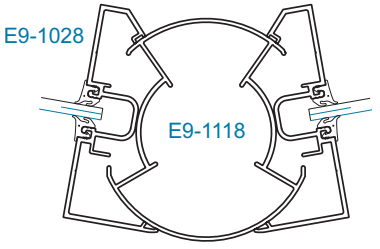

SECTION 9A
90°-133° FLEXIBLE
MULLION



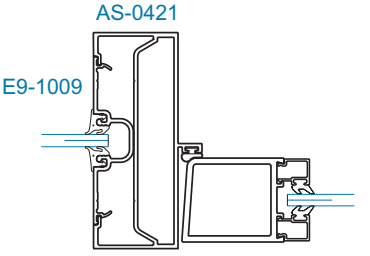

SECTION 11
DOOR JAMB @TRANSOM



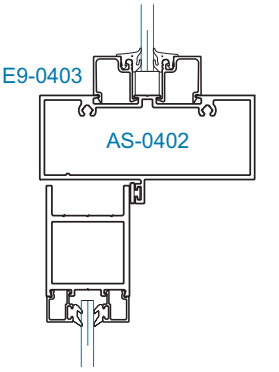

SECTION 13A
DOUBLE ACTING
TRANSOM BAR



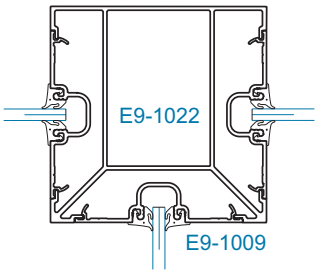

SECTION 9B
134°-170° FLEXIBLE
MULLION



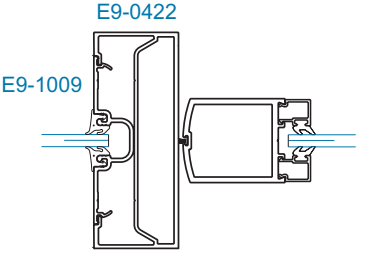

SECTION 12
SINGLE ACTING
DOOR JAMB



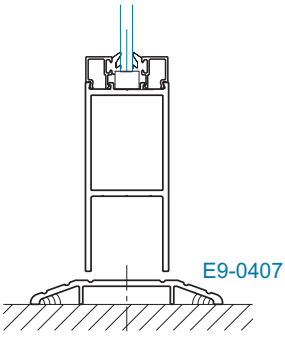

SECTION 13
SINGLE ACTING
TRANSOM BAR




SECTION 10
THREE-WAY
90° CORNER




SECTION 12A
DOUBLE ACTING
DOOR JAMB




SECTION 14
BOTTOM RAIL

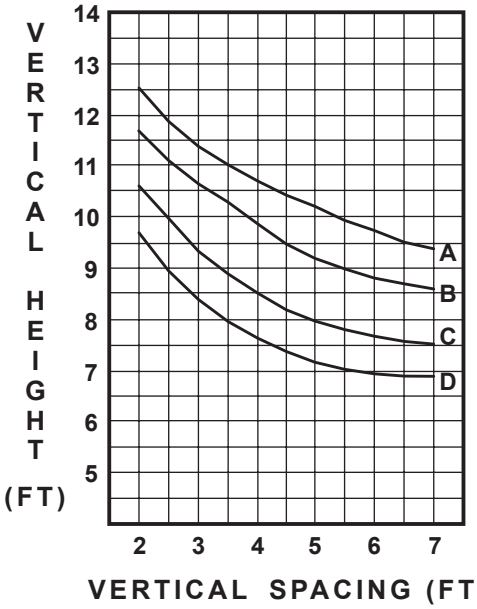
# YES 45 FS WIND LOAD CHARTS

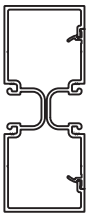
DEFLECTION CRITERIA: AAMA TIR-A11 - L/175 or
L/240 + 1/4" (6.4mm) - FOR SPANS GREATER THAN 13'-6" (4.1m) BUT LESS THAN 40'-0" (12.2m)
CODES AND SPECIFICATIONS MAY VARY, NO SINGLE LITE OF GLASS SHALL DEFLECT MORE THAN 3/4" (19.1mm)

ALLOWABLE WIND LOAD STRESS
YKK AP tested standard. Contact YKK AP for more information.

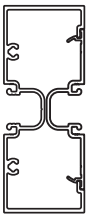
These charts include unbraced length analysis and are based off at least one horizontal being placed at the midpoint of the span. For other applications, please contact YKK AP engineers at 1-866-955-2732.

## E9-1001 / E9-1009



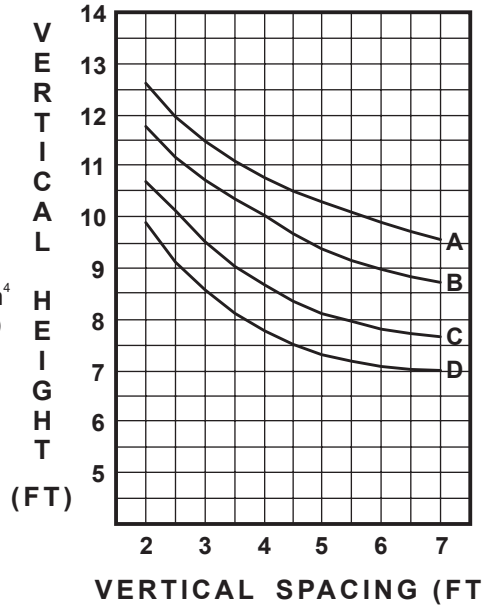
Ixx=2.649 in$^4$
(110.25 cm$^4$)



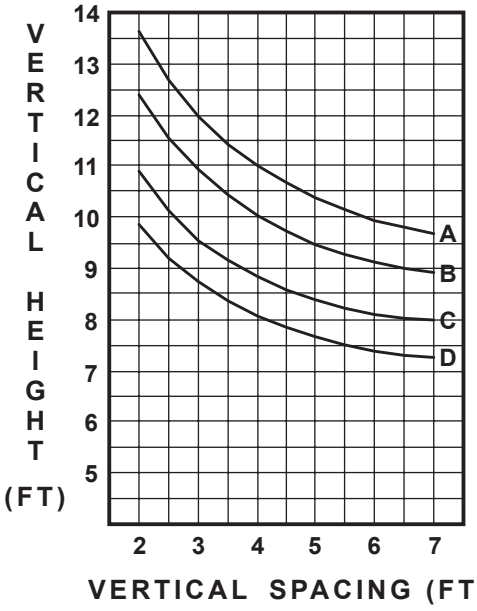
Ixx=2.797 in$^4$
(116.42 cm$^4$)

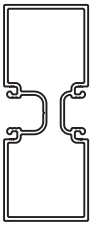
A=15 PSF (720 Pa)
B=20 PSF (960 Pa)
C=30 PSF (1440 Pa)
D=40 PSF (1920 Pa)

## E9-1003 / E9-1009

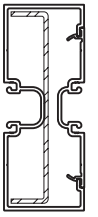



## E9-1071



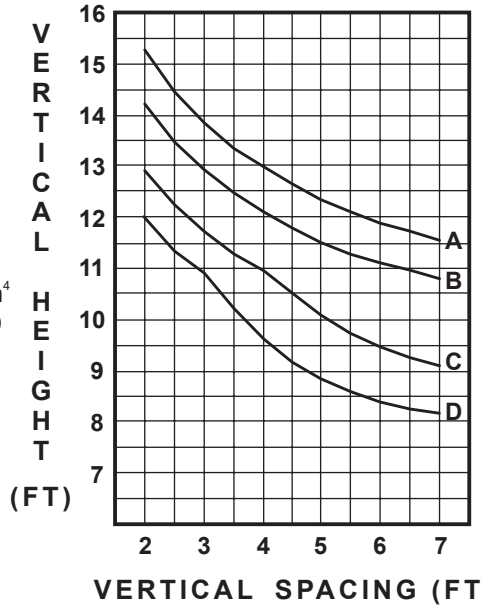



Ixx=2.477 in$^4$
(103.10 cm$^4$)



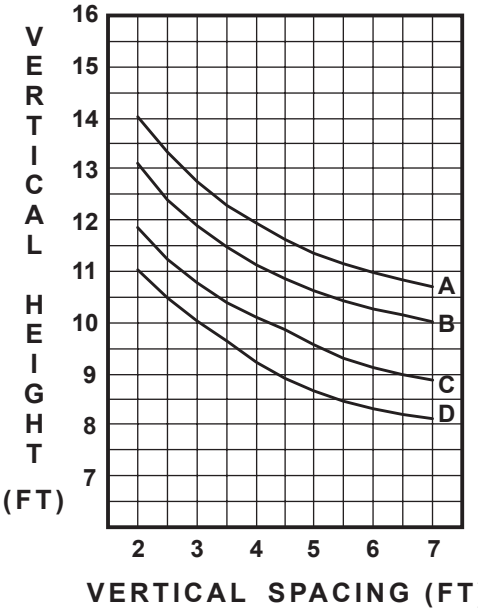
Ixx=5.902 in$^4$
(245.70 cm$^4$)

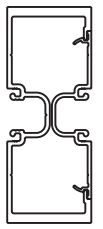
## E9-1001 / E9-1002 / E1-0155



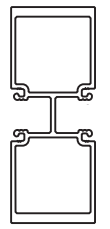
# YES 45 FS WIND AND DEAD LOAD CHARTS

## E9-1059 / E9-1009



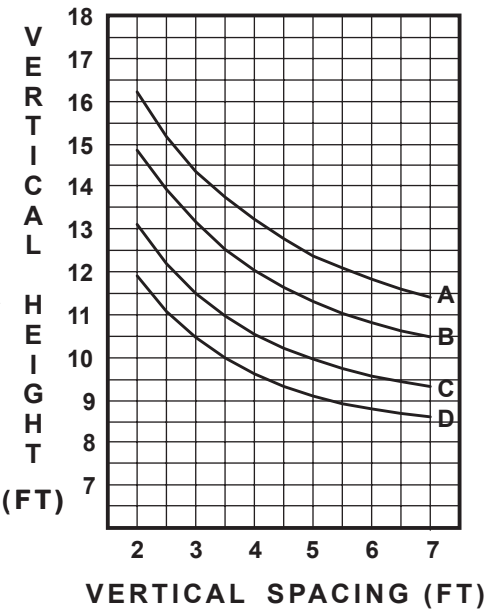
Ixx=4.560 in$^4$
(189.80 cm$^4$)



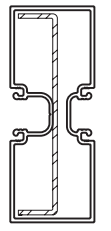
Ixx=4.372 in$^4$
(181.98 cm$^4$)

A=15 PSF (720 Pa)
B=20 PSF (960 Pa)
C=30 PSF (1440 Pa)
D=40 PSF (1920 Pa)

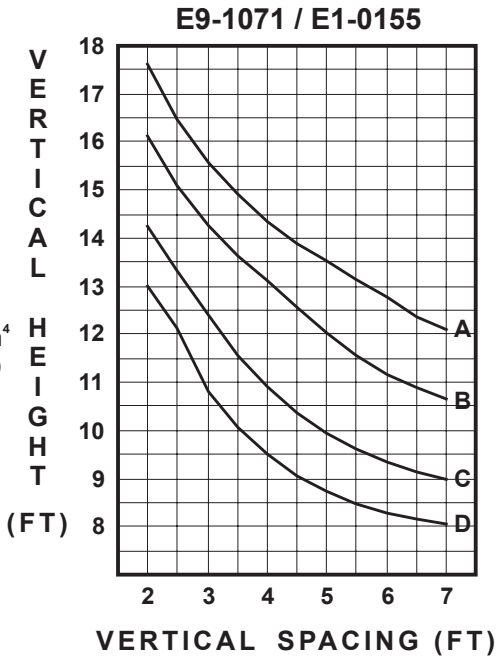
## E9-1078



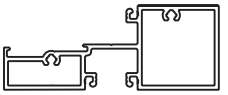

## E9-1071 / E1-0155



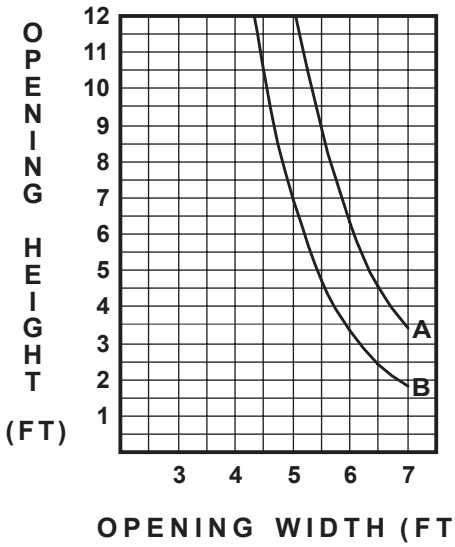
Ixx=5.734 in$^4$
(238.65 cm$^4$)

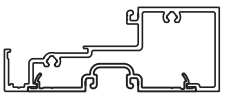


# YES 45 FS DEAD LOAD CHARTS

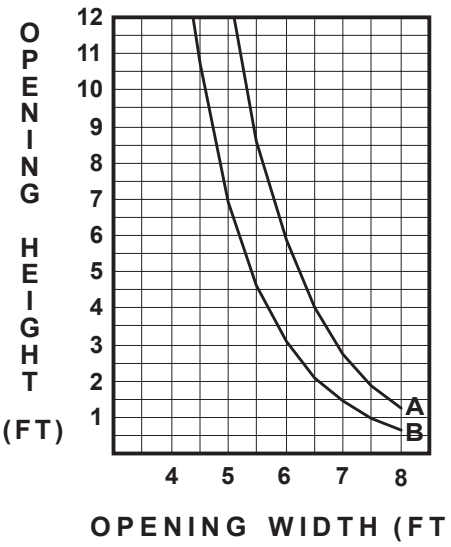


E9-1006



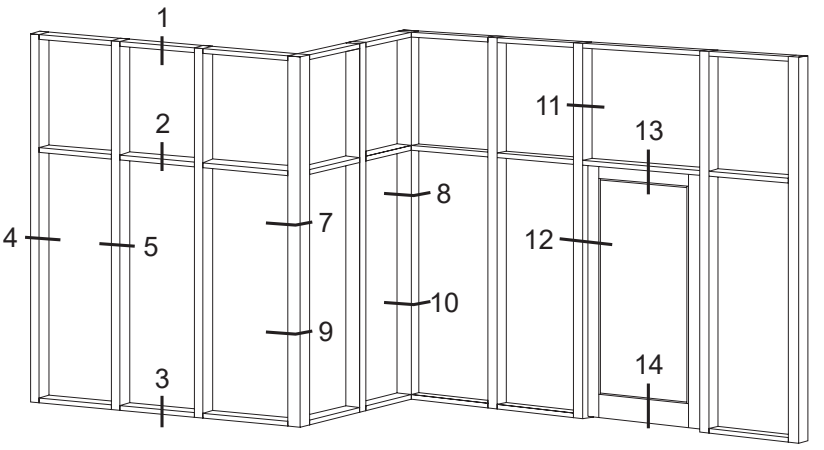
E9-1069 / E9-1002

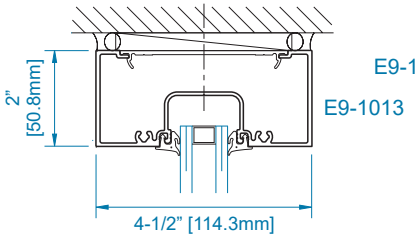


# YES 45 FI FRAMING MEMBERS

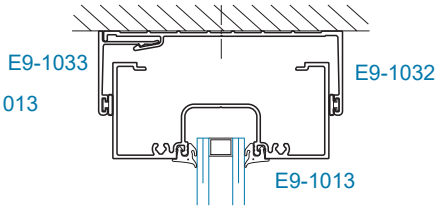
SCALE: 1/4 SIZE

0 3 6

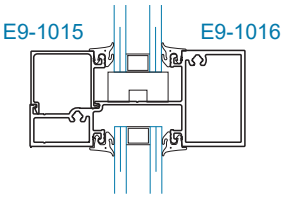


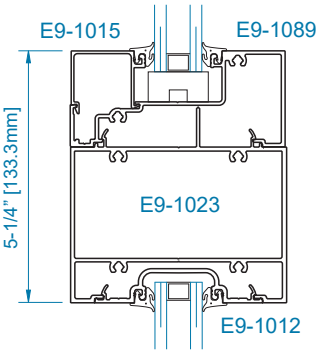

SECTION 1
HEAD



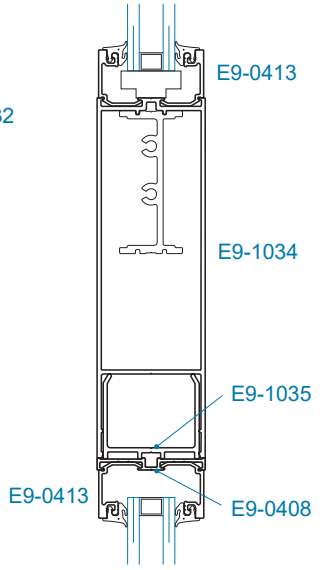

SECTION 1A
HEAD RECEPTOR



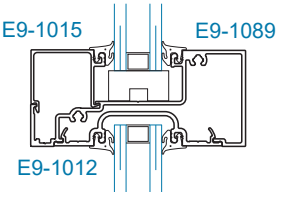

SECTION 2
HORIZONTAL



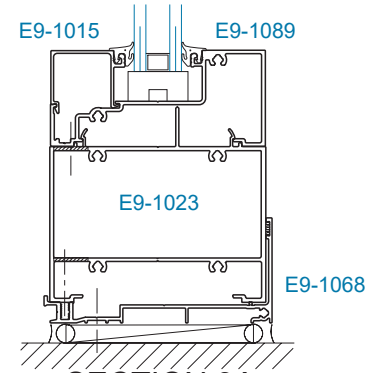

SECTION 2B
5-1/4" HORIZONTAL



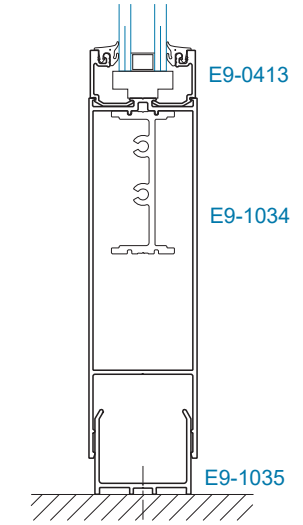

SECTION 2C
9-3/4" SIDELITE MIDRAIL



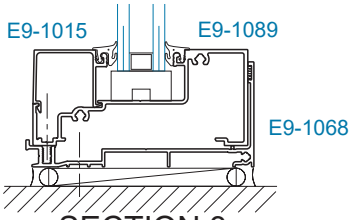

SECTION 2A
TWO PIECE HORIZONTAL




SECTION 3A
5-1/4" SILL



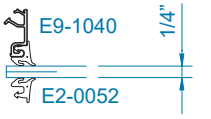

SECTION 3B
7-1/2" SIDELITE BASE



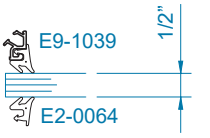

SECTION 3
SILL

## GLAZING OPTIONS

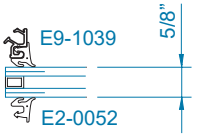
1




2



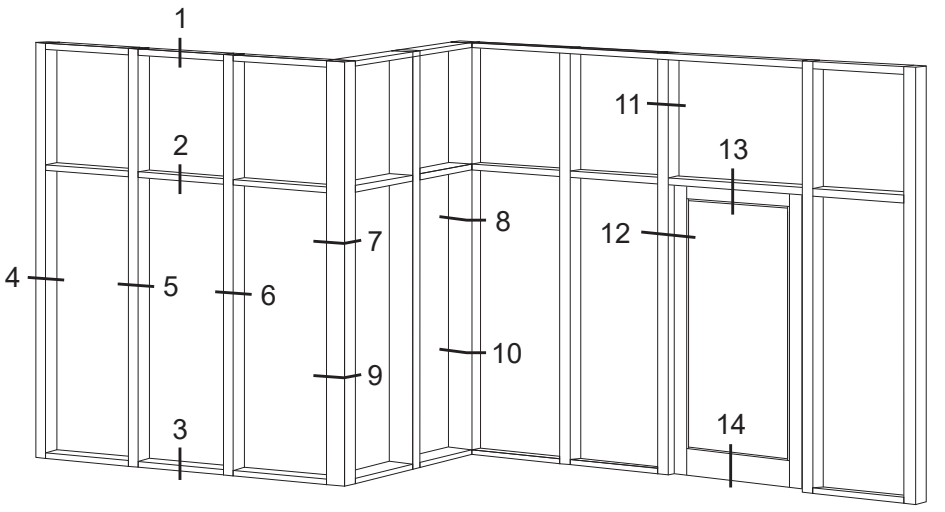

3



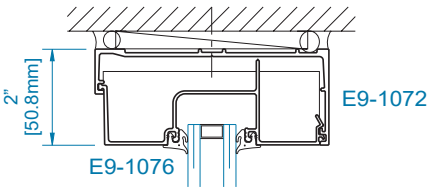

4



## YES 45 FI CAN/RIBBON FRAMING MEMBERS

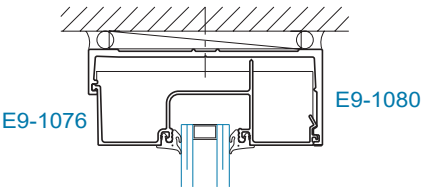



### STANDARD

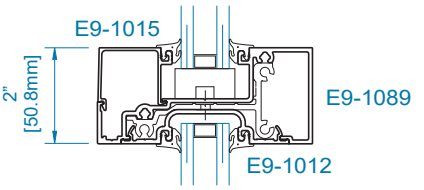



SECTION 1B
O.G. RIBBON HEAD

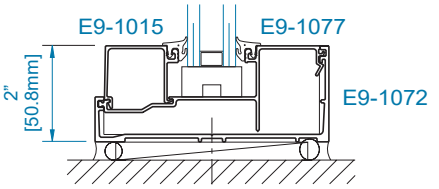
### HEAVY DUTY



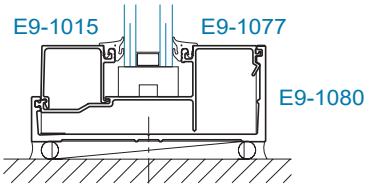

SECTION 1C
O.G. RIBBON HEAD




SECTION 2D
O.G. RIBBON
HORIZONTAL

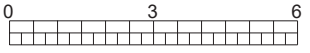



SECTION 3C
O.G. RIBBON SILL

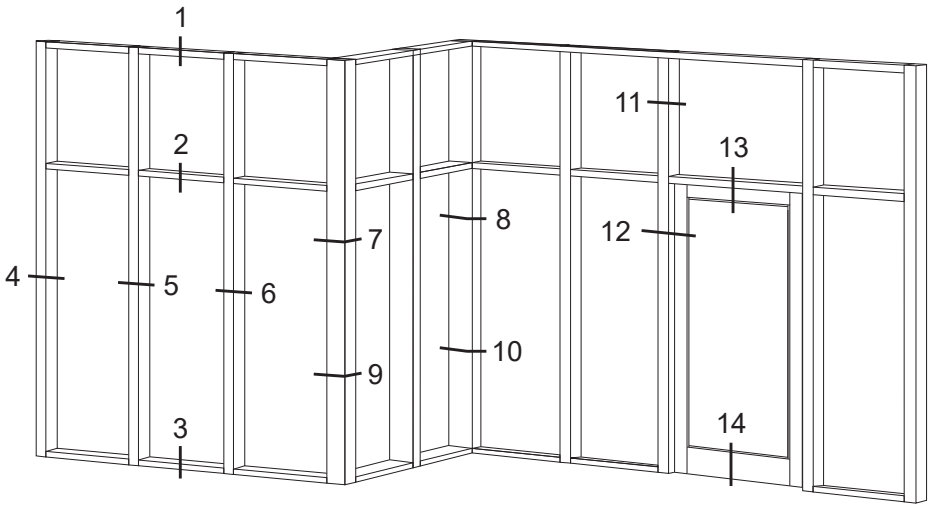



SECTION 3D
O.G. RIBBON SILL

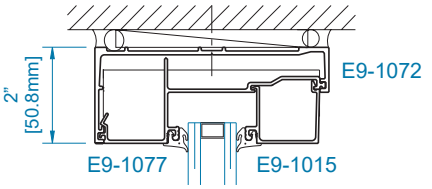
SCALE: 1/4 SIZE



# YES 45 FI CAN/RIBBON FRAMING MEMBERS

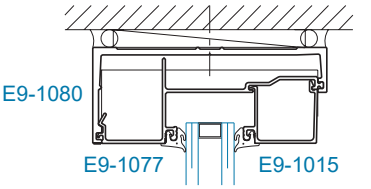



## STANDARD

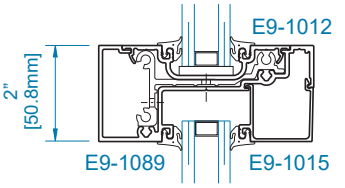



SECTION 1D
I.G. RIBBON HEAD

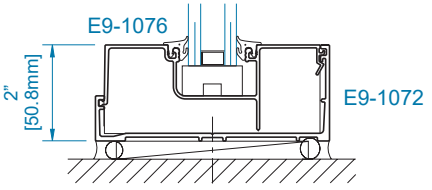
## HEAVY DUTY



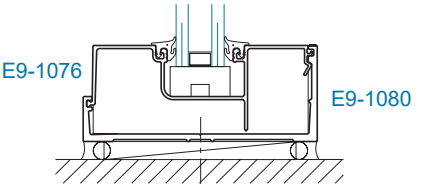

SECTION 1E
I.G. RIBBON HEAD




SECTION 2E
I.G. RIBBON
HORIZONTAL

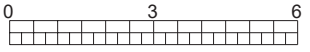



SECTION 3E
I.G. RIBBON SILL




SECTION 3F
I.G. RIBBON SILL

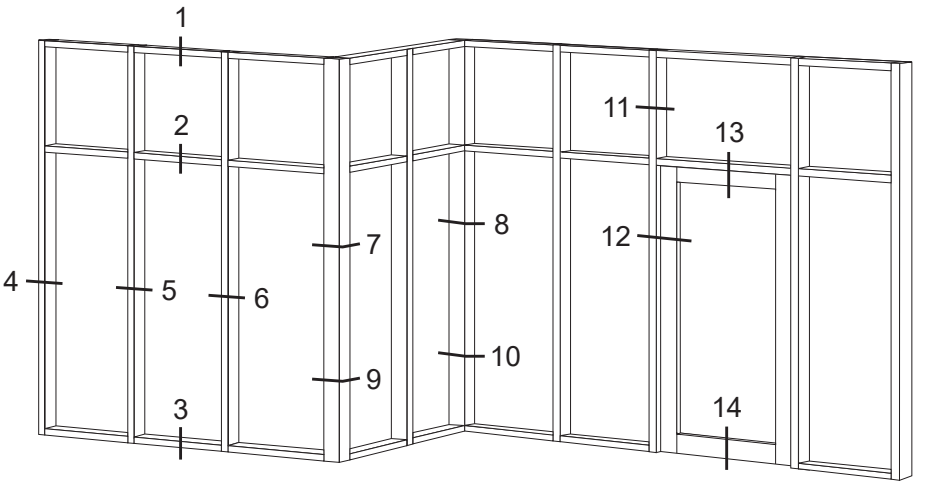
SCALE: 1/4 SIZE

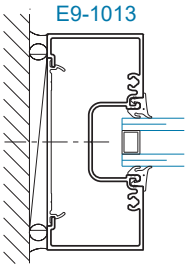


# YES 45 FI FRAMING MEMBERS

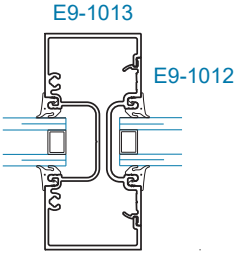
SCALE: 1/4 SIZE

0 3 6

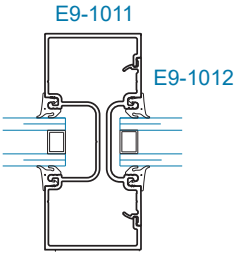


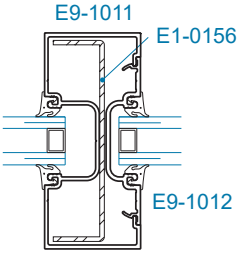

SECTION 4
JAMB



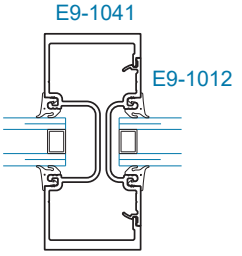

SECTION 5
VERTICAL



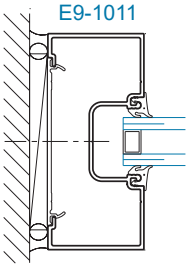

SECTION 5A
VERTICAL



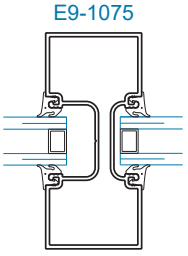

SECTION 5B
VERTICAL W/
STEEL REINFORCING



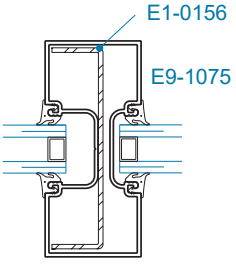

SECTION 5C
HEAVY DUTY
VERTICAL



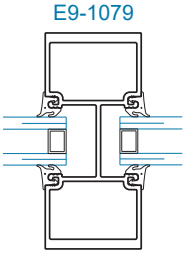

SECTION 4A
JAMB



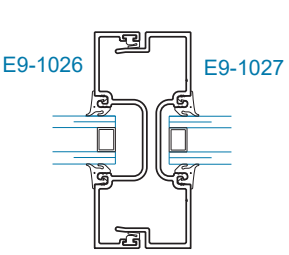

SECTION 5D
TUBULAR
VERTICAL



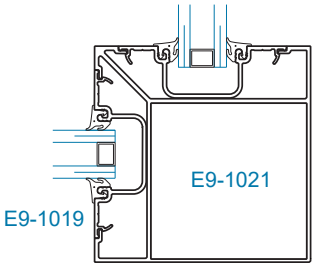

SECTION 5E
TUBULAR VERTICAL W/
STEEL REINFORCING



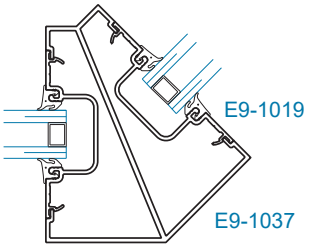

SECTION 5F
HEAVY DUTY
TUBULAR VERTICAL



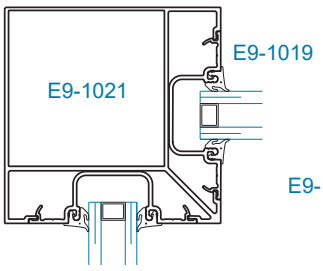

SECTION 6
EXPANSION
MULLION



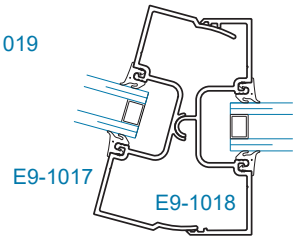

SECTION 7
90° OUTSIDE CORNER




SECTION 7A
135° OUTSIDE CORNER

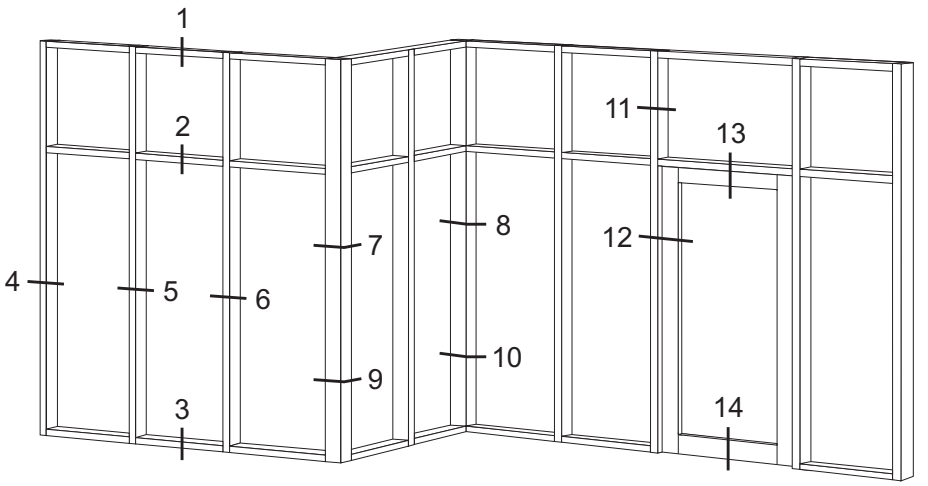


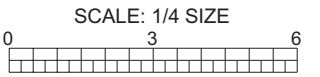

SECTION 8
90° INSIDE CORNER

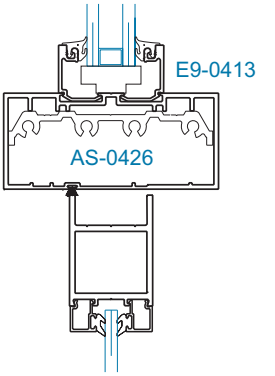



SECTION 9
0° -15° HINGED
MULLION

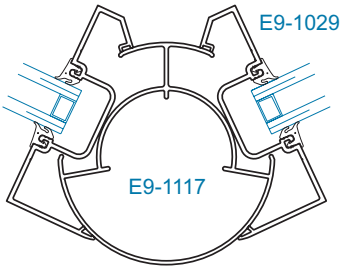
# YES 45 FI FRAMING MEMBERS



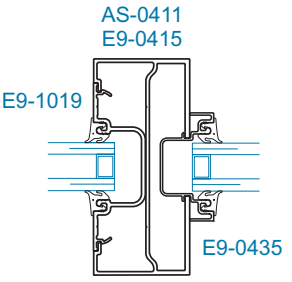



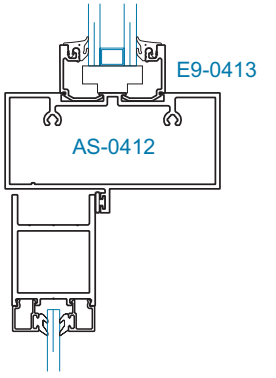

SECTION 13A
DOUBLE ACTING
TRANSOM BAR



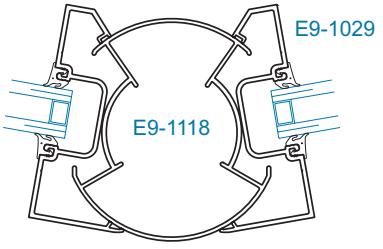

SECTION 9A
93°-133° FLEXIBLE MULLION



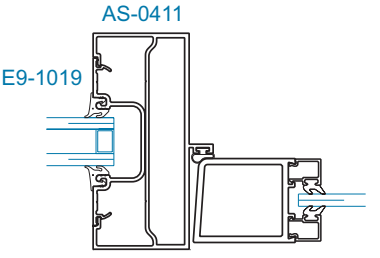

SECTION 11
DOOR JAMB @TRANSOM



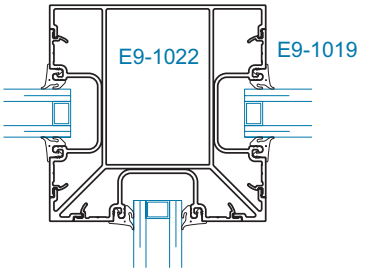

SECTION 13
SINGLE ACTING
TRANSOM BAR



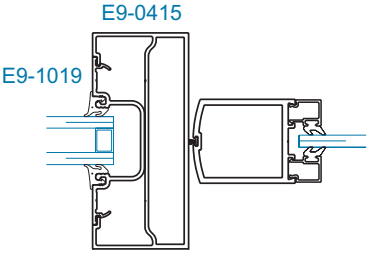

SECTION 9B
134°-170° FLEXIBLE MULLION



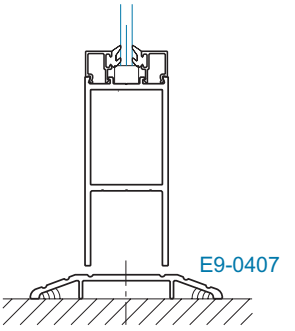

SECTION 12
SINGLE ACTING
DOOR JAMB




SECTION 10
THREE WAY
90° CORNER




SECTION 12A
DOUBLE ACTING
DOOR JAMB




SECTION 14
BOTTOM RAIL

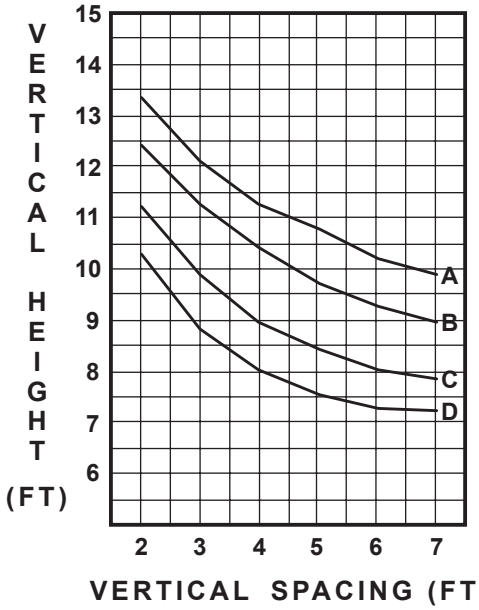
# YES 45 FI WIND LOAD CHARTS

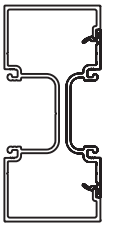
DEFLECTION CRITERIA: AAMA TIR-A11 - L/175 or
L/240 + 1/4" (6.4mm) - FOR SPANS GREATER THAN 13'-6" (4.1m) BUT LESS THAN 40'-0" (12.2m)
CODES AND SPECIFICATIONS MAY VARY, NO SINGLE LITE OF GLASS SHALL DEFLECT MORE THAN 3/4" (19.1mm)

ALLOWABLE WIND LOAD STRESS
YKK AP tested standard. Contact YKK AP for more information.

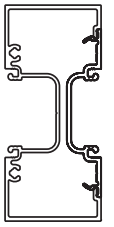
These charts include unbraced length analysis and are based off at least one horizontal being placed at the midpoint of the span. For other applications, please contact YKK AP engineers at 1-866-955-2732.

## E9-1011 / E9-1012



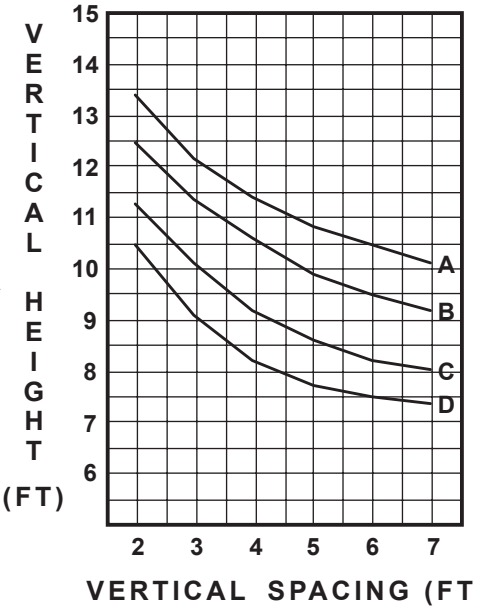
Ixx=2.988 in$^4$
(124.37 cm$^4$)



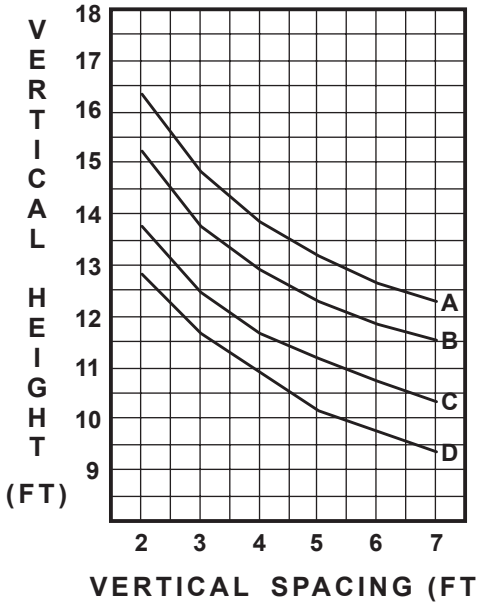
Ixx=3.204 in$^4$
(133.36 cm$^4$)

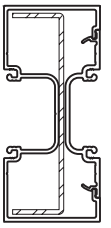
A=15 PSF (720 Pa)
B=20 PSF (960 Pa)
C=30 PSF (1440 Pa)
D=40 PSF (1920 Pa)

## E9-1013 / E9-1012

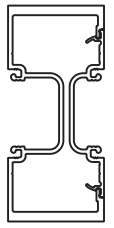



## E9-1011 / E9-1012 / E1-0156



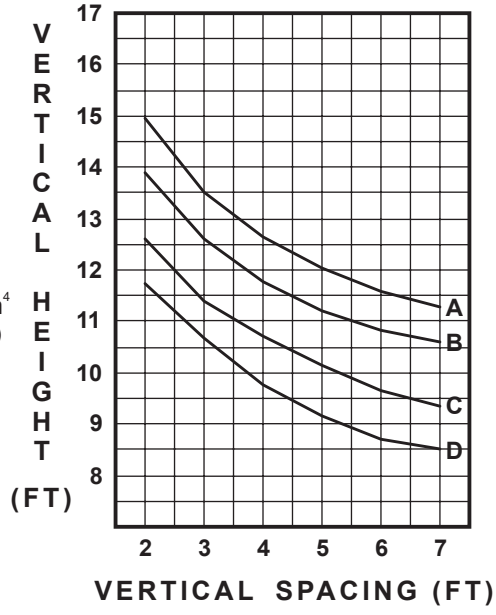



Ixx=6.816 in$^4$
(283.70 cm$^4$)



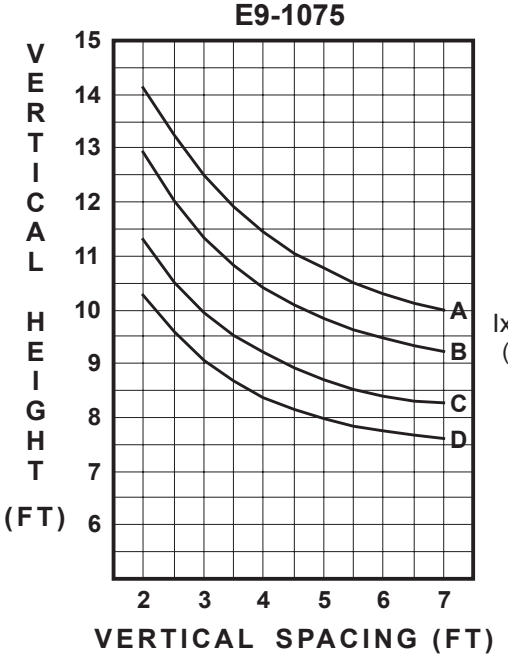
Ixx=5.183 in$^4$
(215.73 cm$^4$)

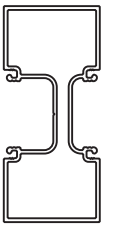
## E9-1041 / E9-1012



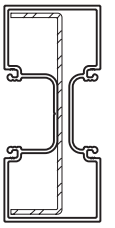
# YES 45 FI WIND LOAD CHARTS

## E9-1075



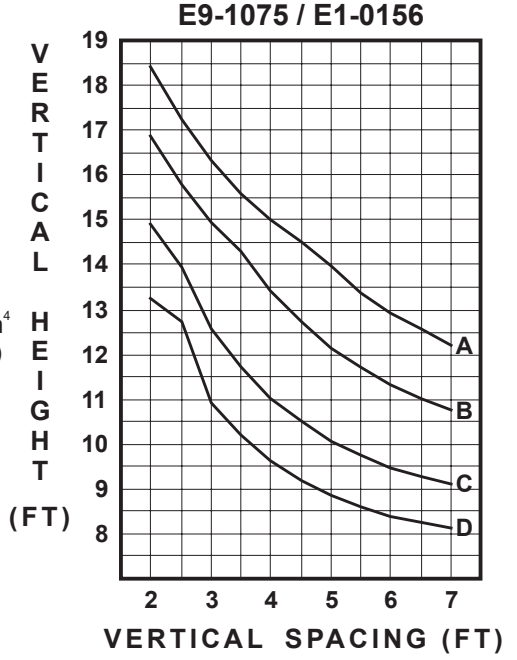



Ixx=2.801 in$^4$
(116.59 cm$^4$)



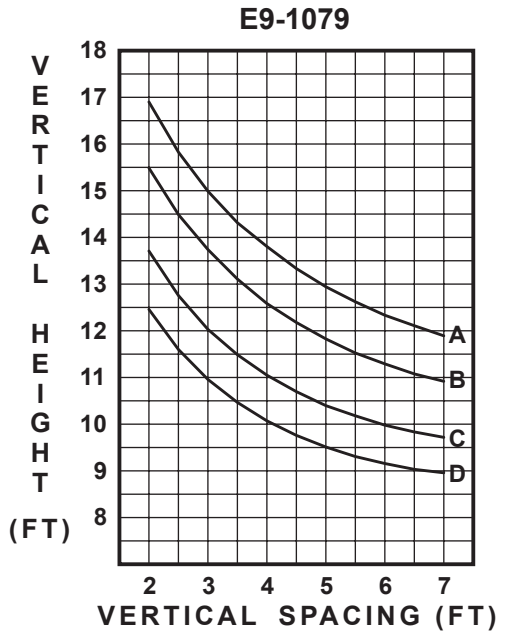
Ixx=6.629 in$^4$
(275.92 cm$^4$)

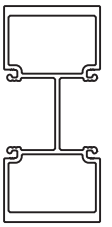
## E9-1075 / E1-0156




A=15 PSF (720 Pa)
B=20 PSF (960 Pa)
C=30 PSF (1440 Pa)
D=40 PSF (1920 Pa)

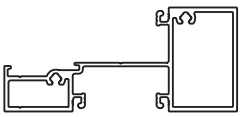
## E9-1079



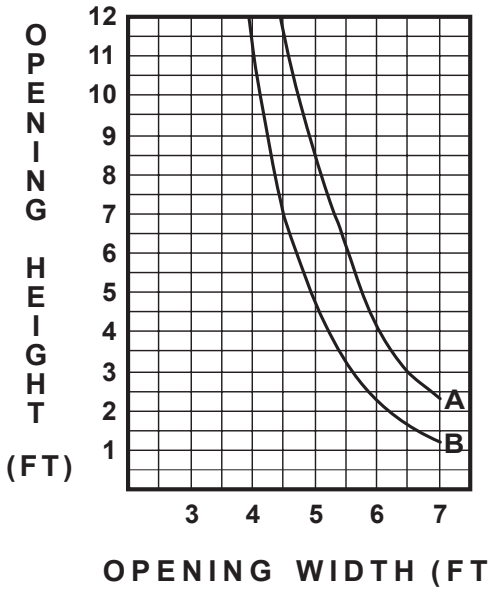



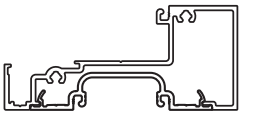
Ixx=5.018 in$^4$
(208.86 cm$^4$)

# YES 45 FI DEAD LOAD CHARTS



**E9-1016**



**E9-1089 / E9-1012**

