

# **SPECIFICATIONS: 9000 SERIES 1 3/4" x 4 1/2"**

## **GENERAL DESCRIPTION**

Work includes furnishing all necessary materials, labor and equipment for the installation of the aluminum framing system as specified herein.

**NOT** included: Structural support of the framing system.

## **PERFORMANCE REQUIREMENTS**

Structural Performance-Deflection shall be tested in accordance with ASTM E330. Maximum deflection of a member shall not exceed L/175 of its span, and when the load is removed there shall be no evidence of permanent deformation or damage when tested under a load of (SPECIFY) PSF.

## **PRODUCTS/MATERIALS**

Extrusions shall be AA-6063-T5 alloy and temper (ASTM B221 alloy G.S. 10A-T5) with a nominal wall thickness of .090". Fasteners shall be aluminum; stainless steel or zinc plated steel in accordance with ASTM A 164. Glazing gaskets shall be EPDM elastomeric extrusions or vinyl with a fiberglass reinforcement cord to prevent stretching.

## **FABRICATION**

The framing system shall provide for flush glazing on all sides with no projecting stops. Vertical and horizontal framing members shall have a nominal face dimension of 1 3/4", with an overall depth of 4 1/2".

## **FINISHES**

All exposed framing surfaces shall be free of scratches and other serious blemishes. Aluminum extrusions shall be given an acid etch, followed by an anodic oxide treatment conforming to the American Architectural Metal Association to obtain a color anodized finish AA-M12C2XA31 class II (clear anodized) or AA-M12C2XA44 class I (dark bronze anodized). Wood grain, black anodize, powder coat, and Kynar finishes are available upon request.

## **EXECUTION**

The framing system shall be installed, glazed, and adjusted by experienced workers in accordance with the Ramco's installation instructions and the approved shop drawings.

## **CLEANING AND PROTECTION**

After installation all metal surfaces shall be cleaned to remove contaminants. All work shall be protected against damage until approved by the general contractor. Thereafter, it shall be the responsibility of the general contractor to provide protection and final cleaning.

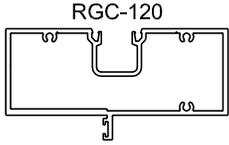
**NOTE:** "Always Service All Ways" is our trade mark and to keep up with today's innovations Ramco reserves the right to change specifications without written notice.



RELIABLE ARCHITECTURAL METALS COMPANY

9751 ERWIN STREET  
DETROIT, MI 48213  
PH: 800.445.0263 FAX: 313.924.8877

9000 SERIES  
INDIVIDUAL EXTRUSIONS  
1/4 SCALE



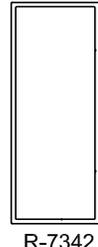
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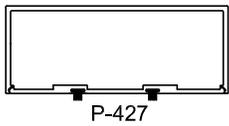
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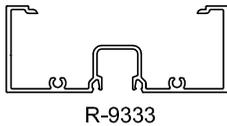


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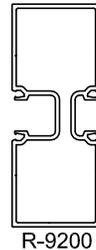
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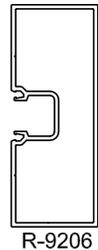
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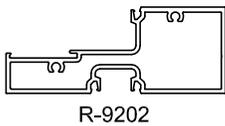
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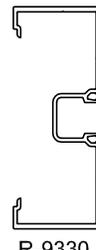
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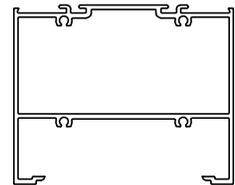
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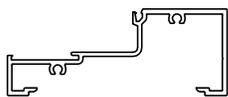
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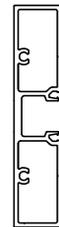
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R-9204



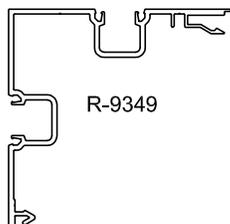
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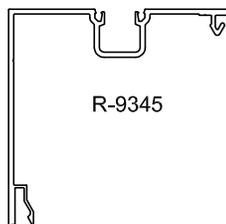
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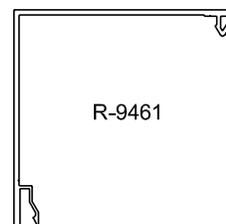
9000 SERIES  
INDIVIDUAL EXTRUSIONS  
1/4 SCALE



R-9349



R-9345



R-9461



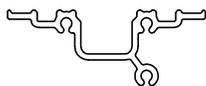
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R-9300



R-9302



R-9114



TR-5114 VINYL



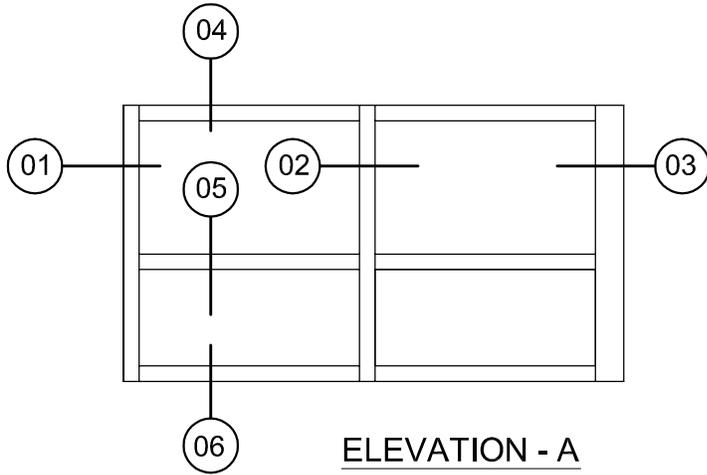
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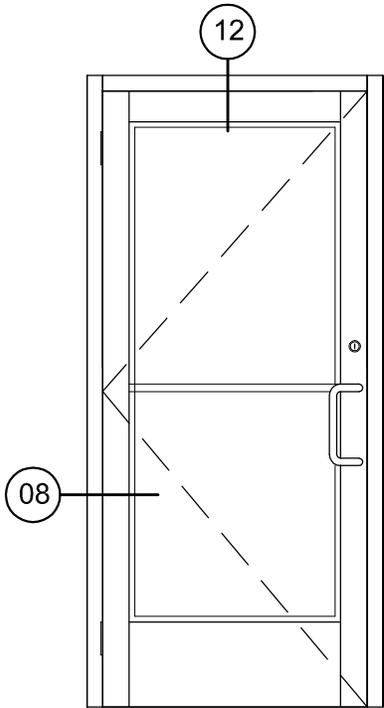
# 9000 SERIES

## STOREFRONT TYPICAL ELEVATIONS

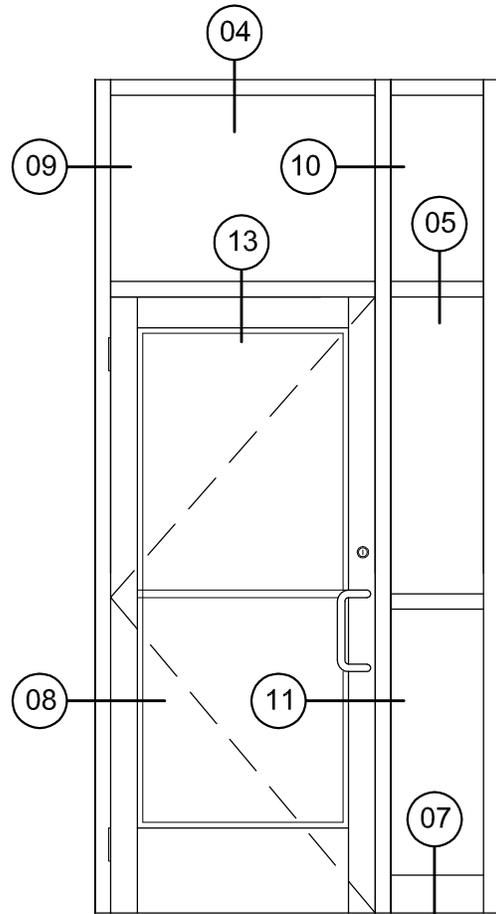
(1/4" GLAZING)



ELEVATION - A



ELEVATION - B



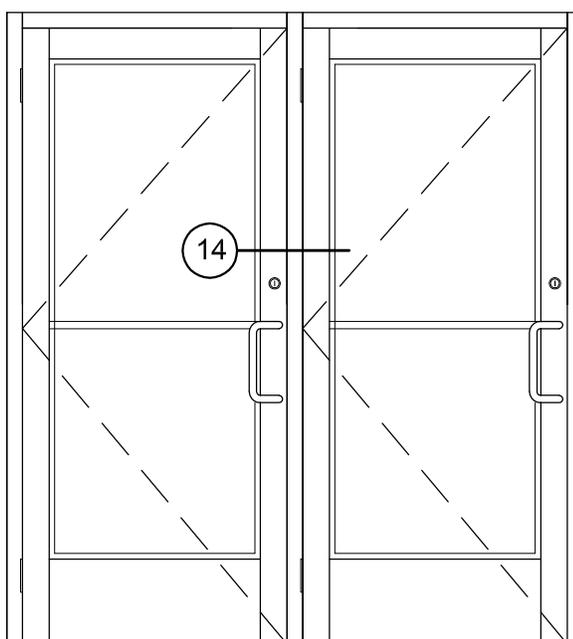
ELEVATION - C



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**9000 SERIES**  
STOREFRONT TYPICAL ELEVATIONS  
(1/4" GLAZING)



ELEVATION - D



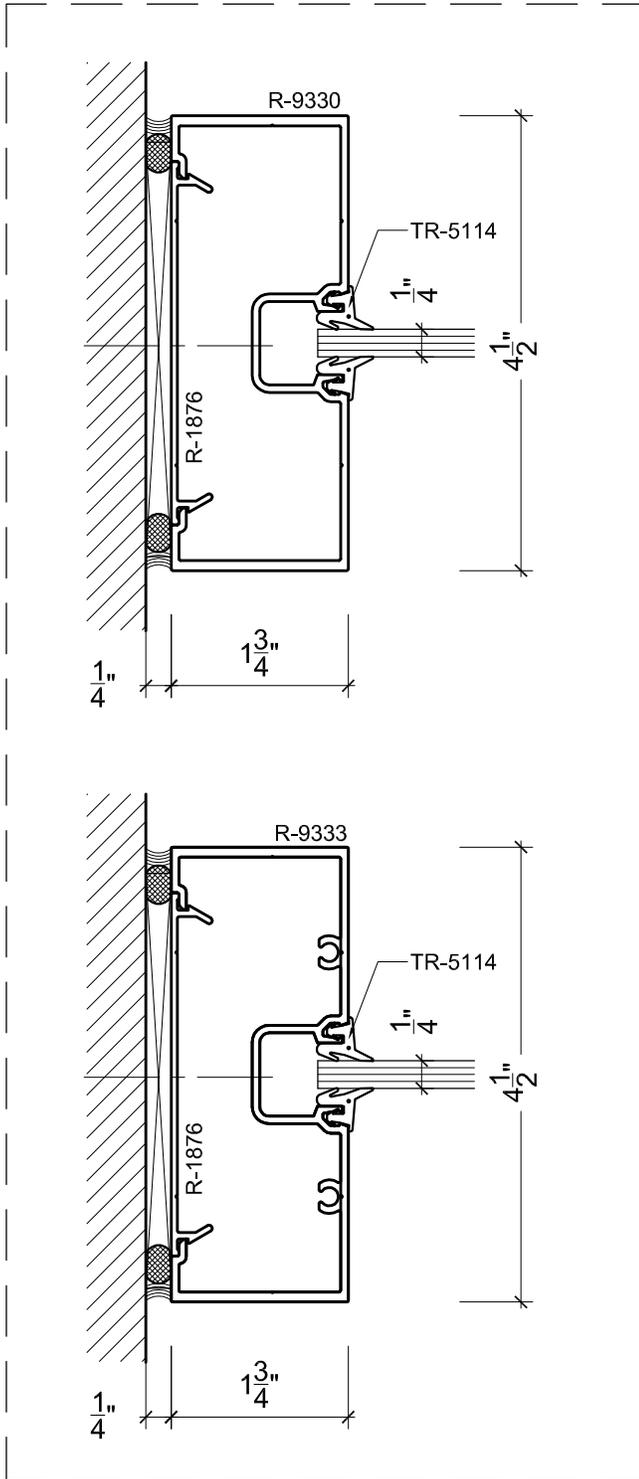
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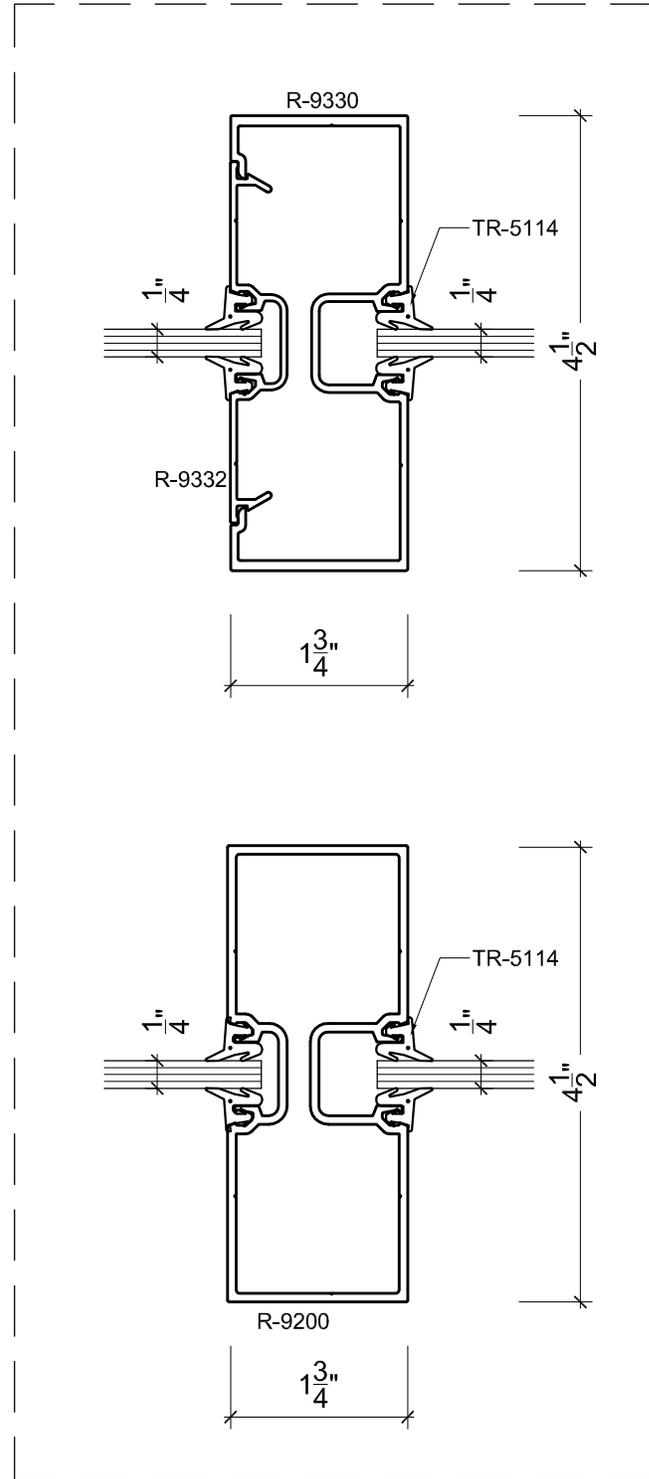
# 9000 SERIES

DETAILS

1/2 SCALE



SECTION 1



SECTION 2



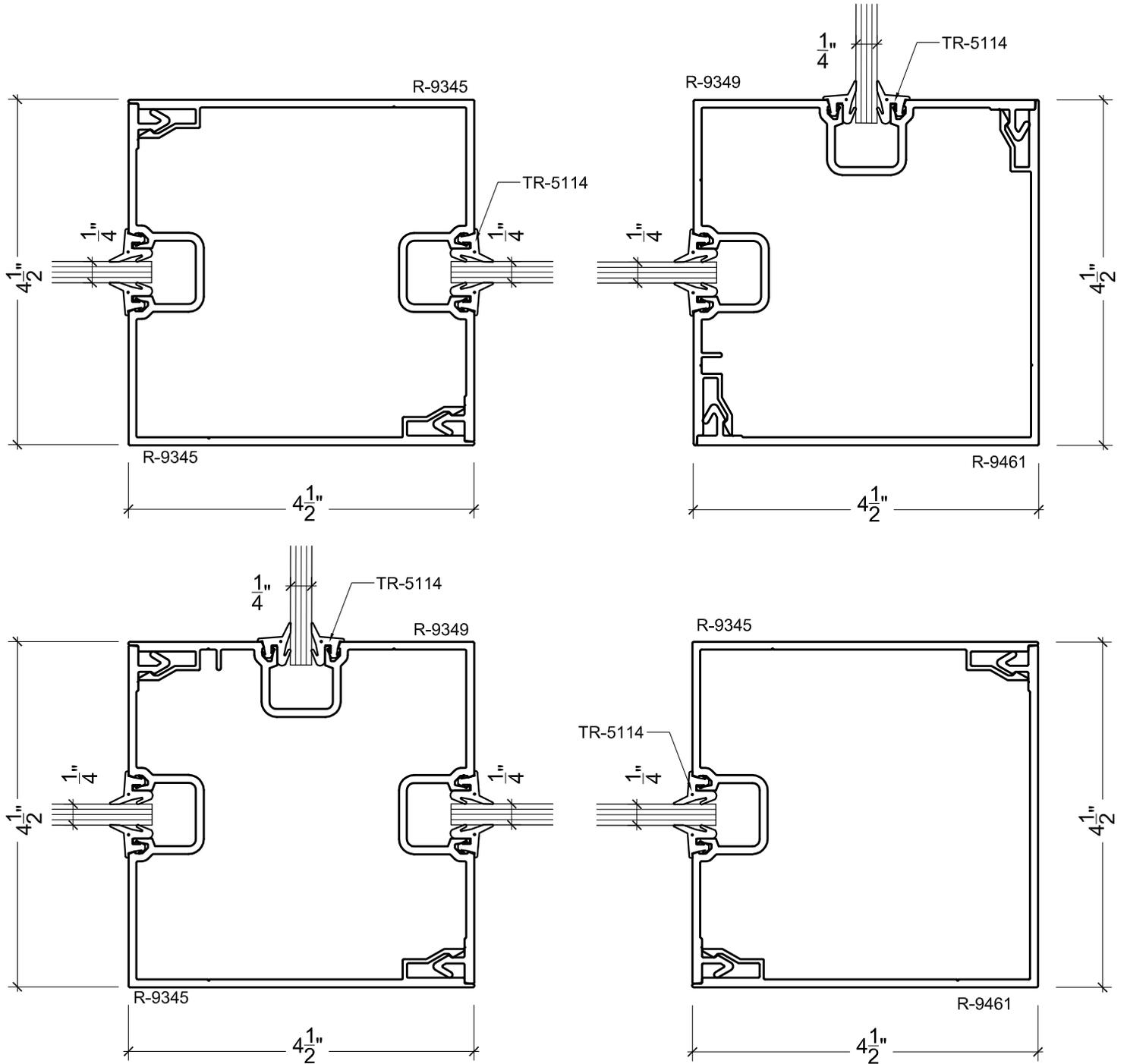
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## SECTION 3



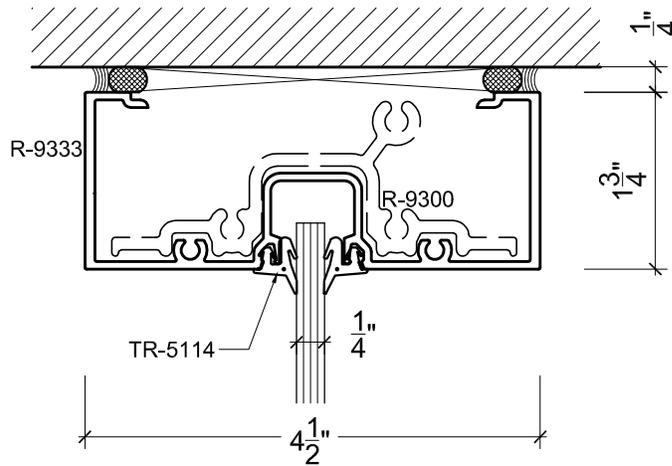
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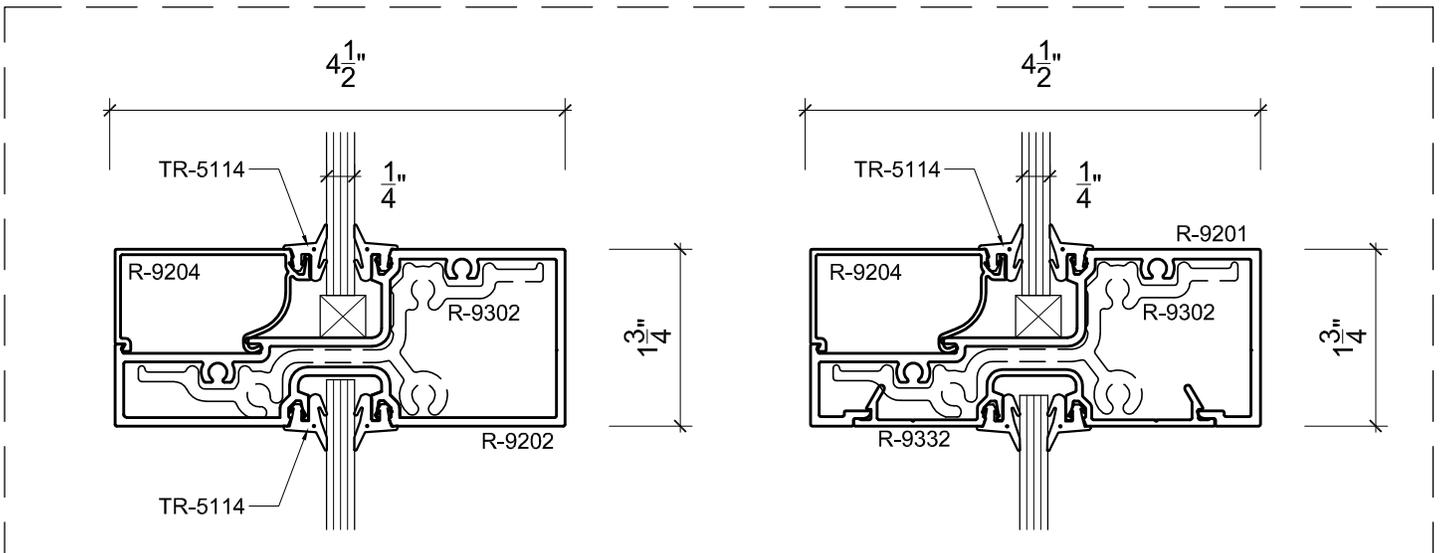
# 9000 SERIES

DETAILS

1/2 SCALE



SECTION 4



SECTION 5



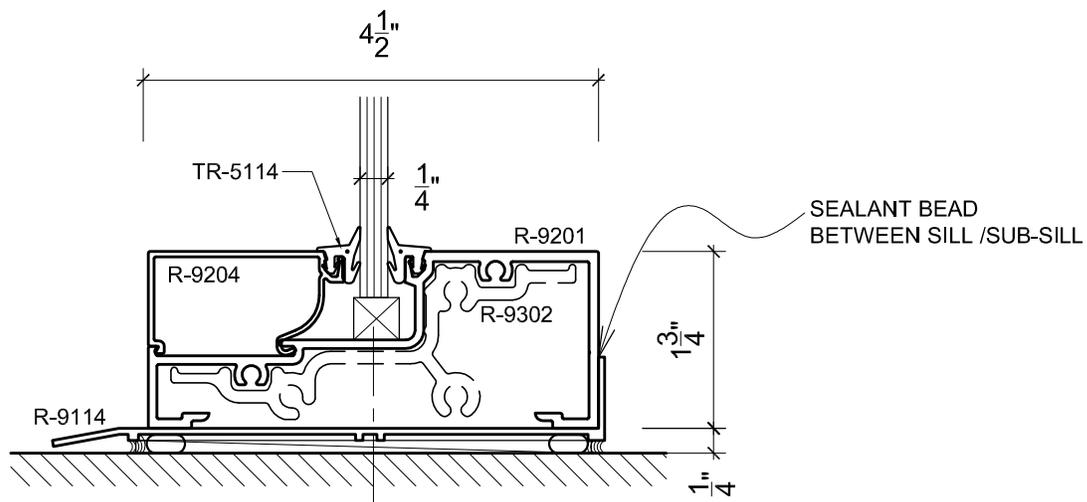
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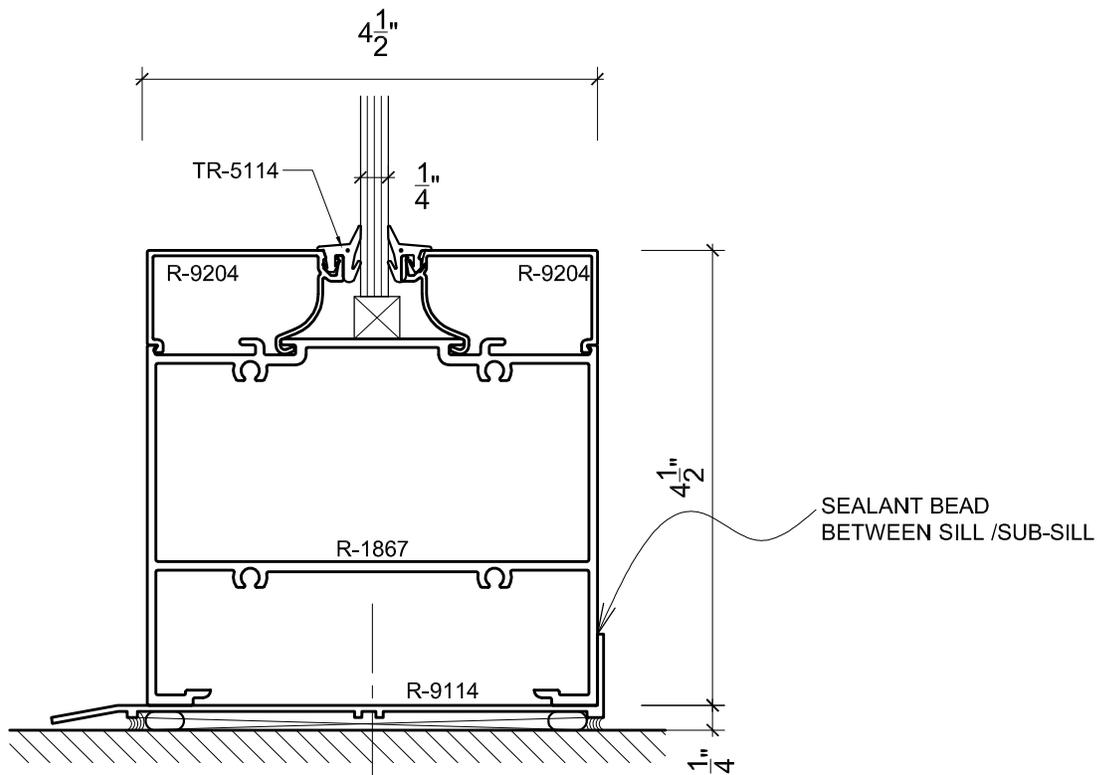
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DETAILS

1/2 SCALE



SECTION **6**



SECTION **7**



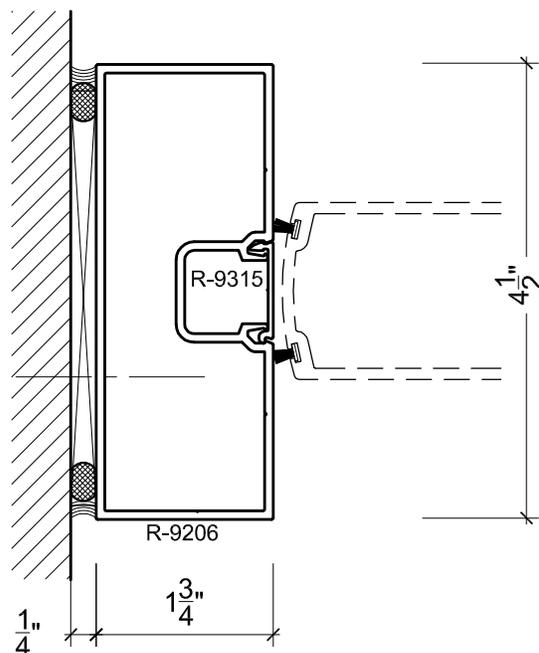
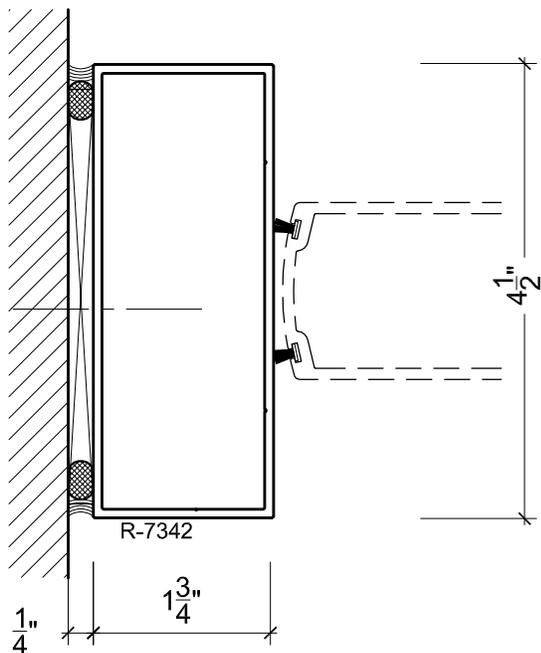
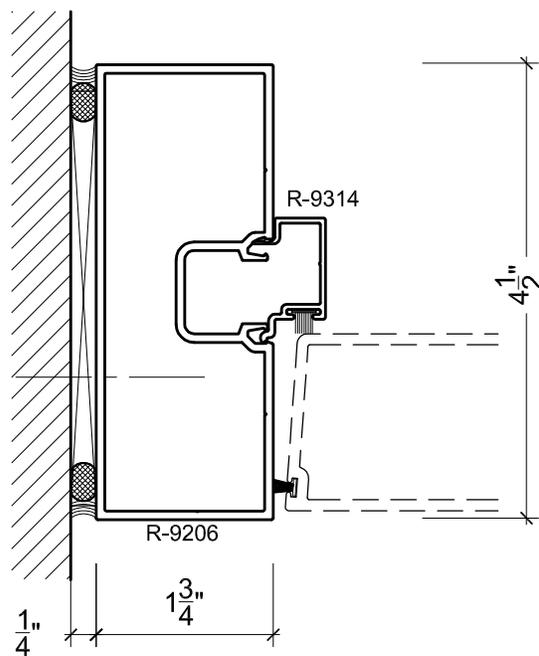
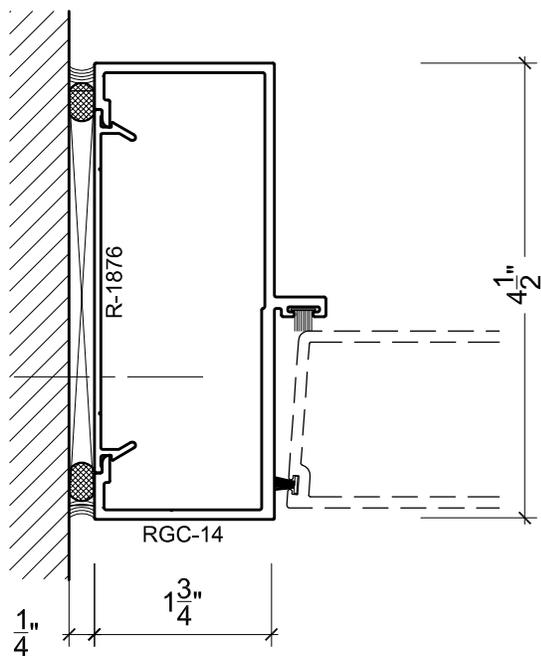
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DETAILS

1/2 SCALE



## SECTION 8



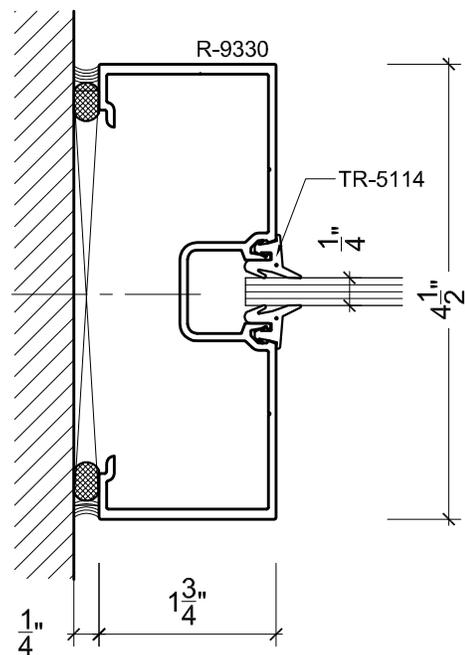
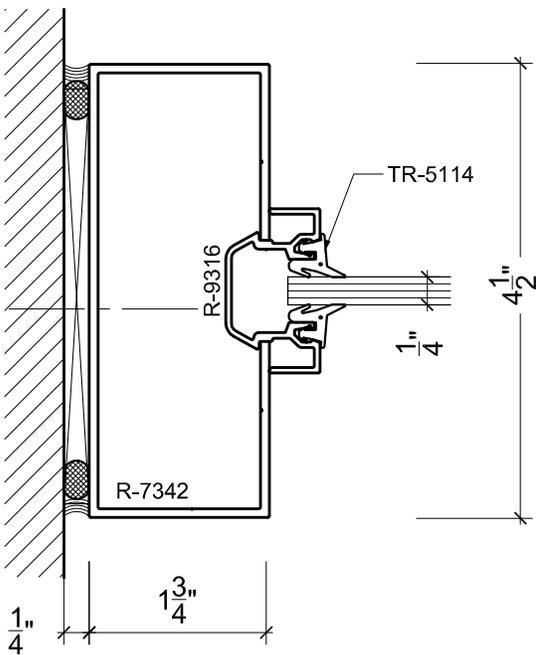
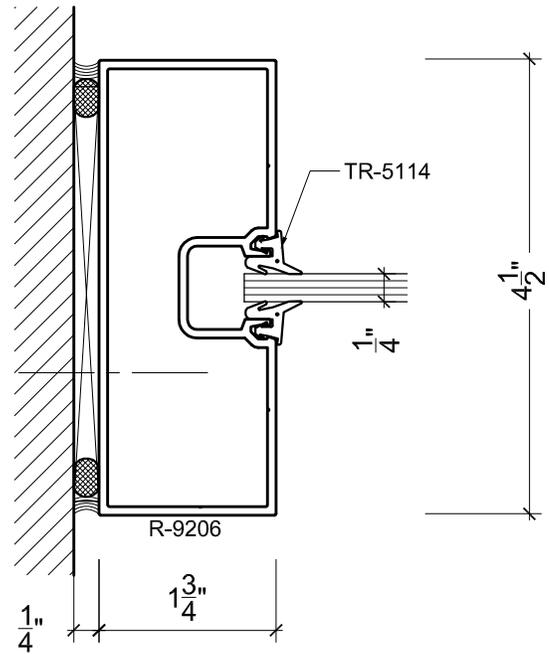
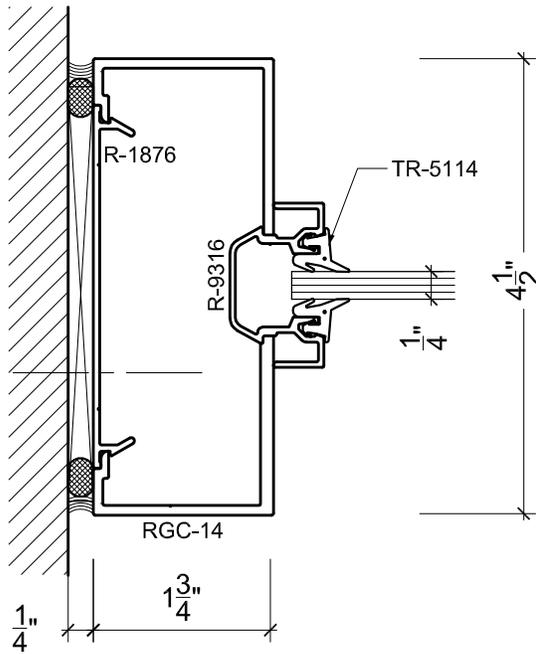
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1/2 SCALE



## SECTION 9



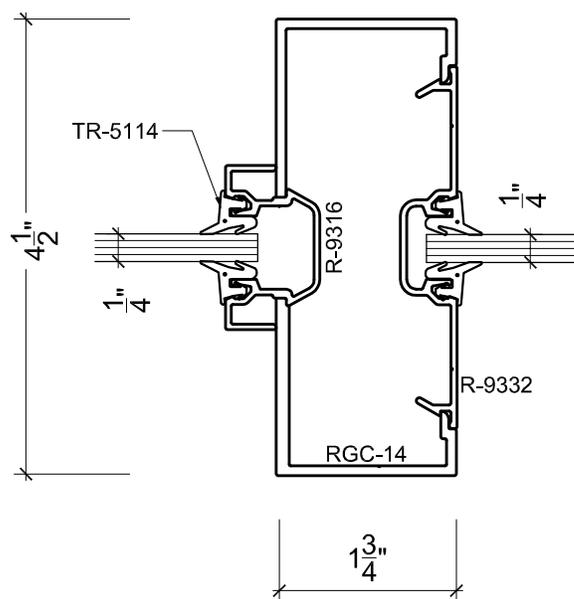
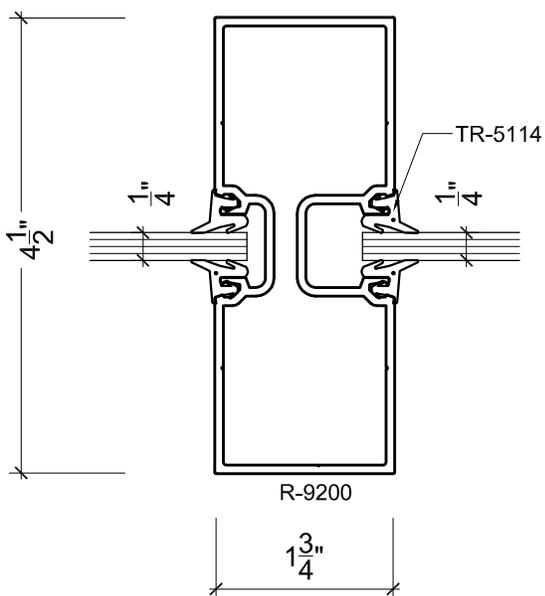
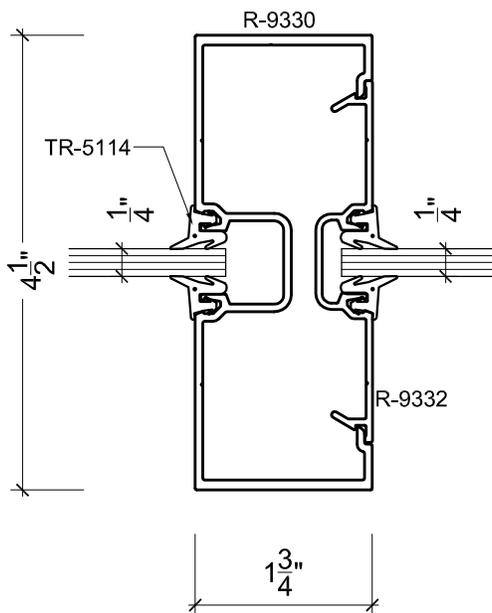
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## SECTION 10



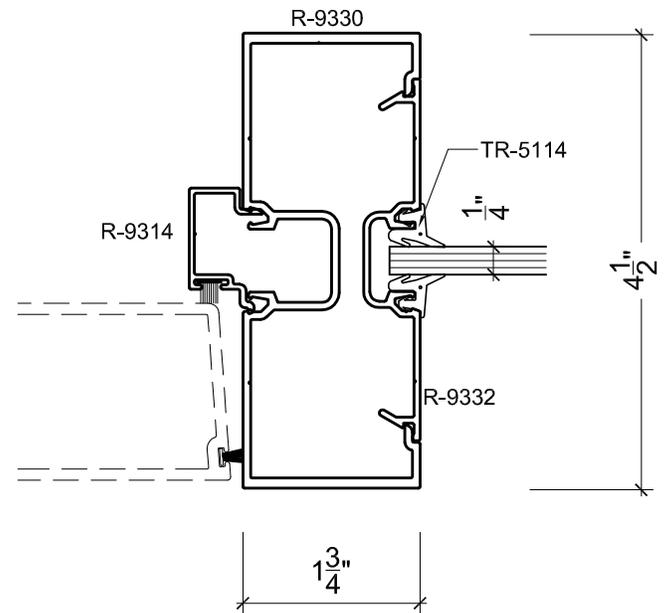
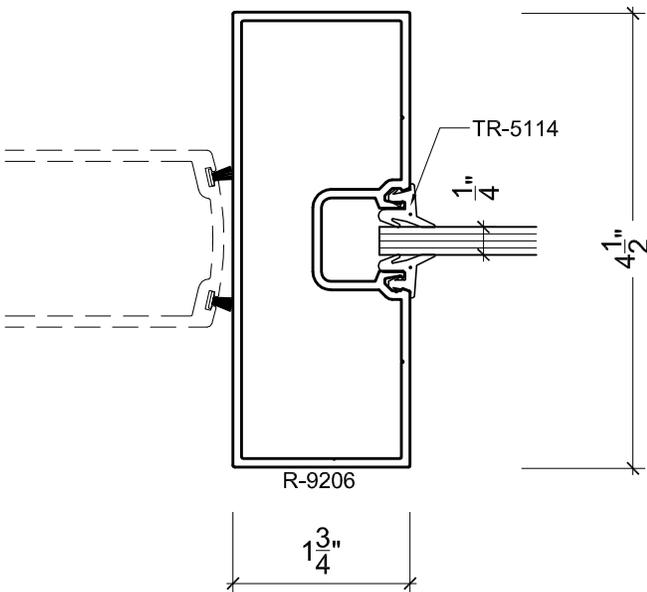
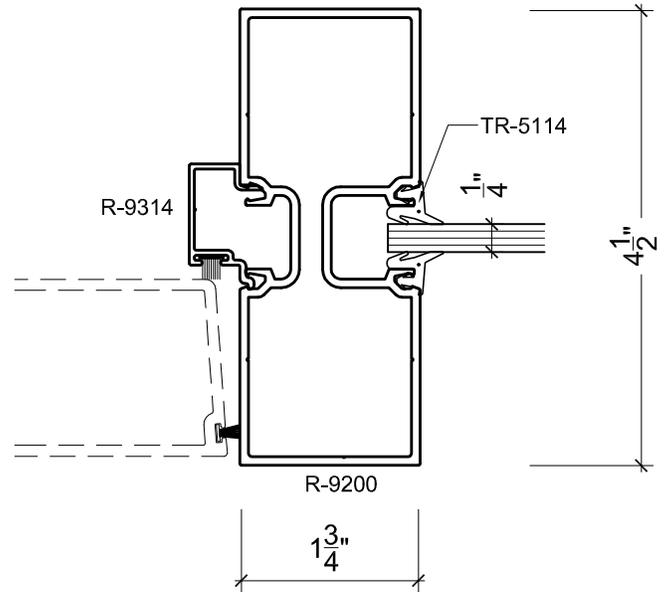
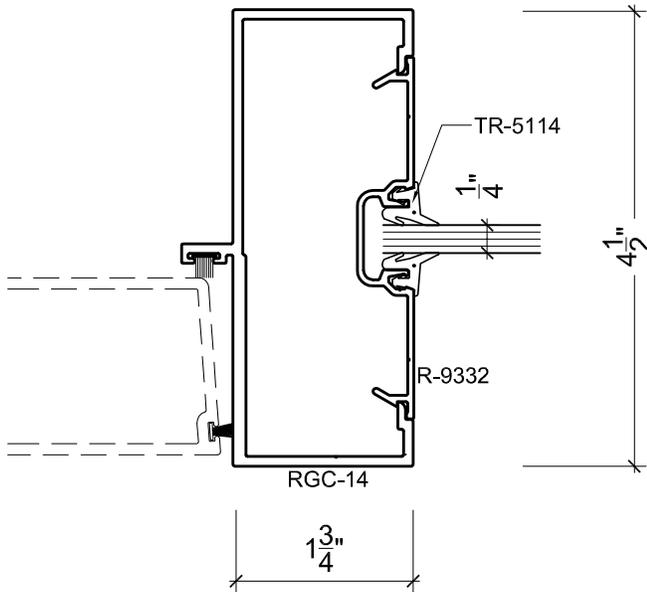
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DETAILS

1/2 SCALE



## SECTION 11



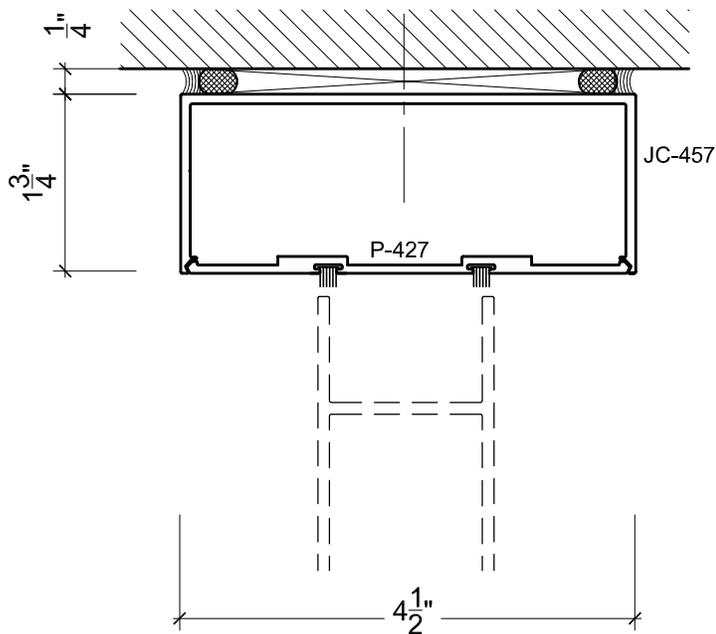
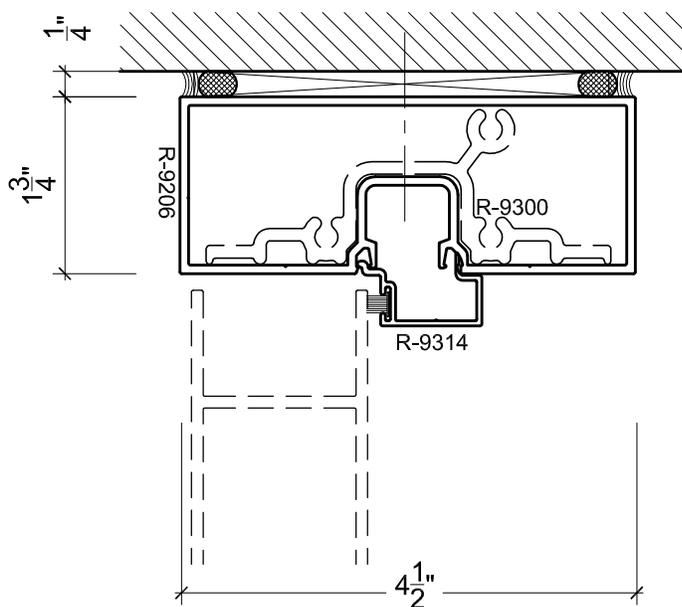
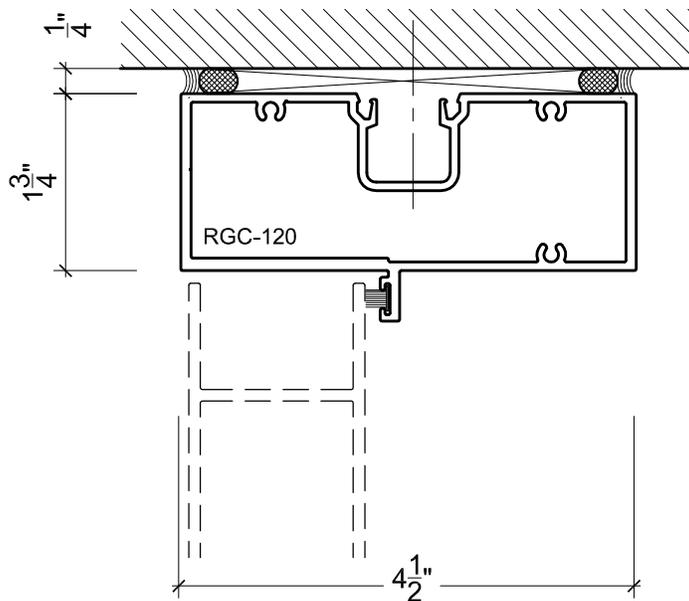
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DETAILS

1/2 SCALE



## SECTION 12



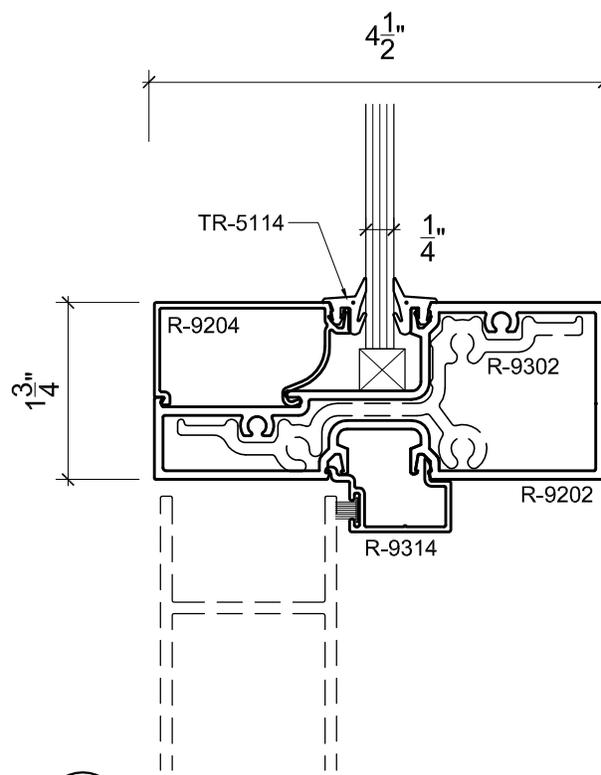
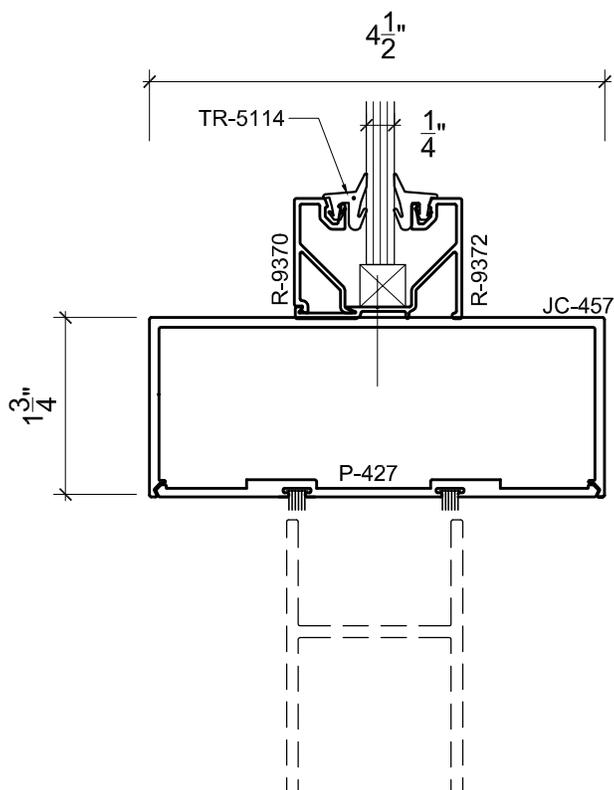
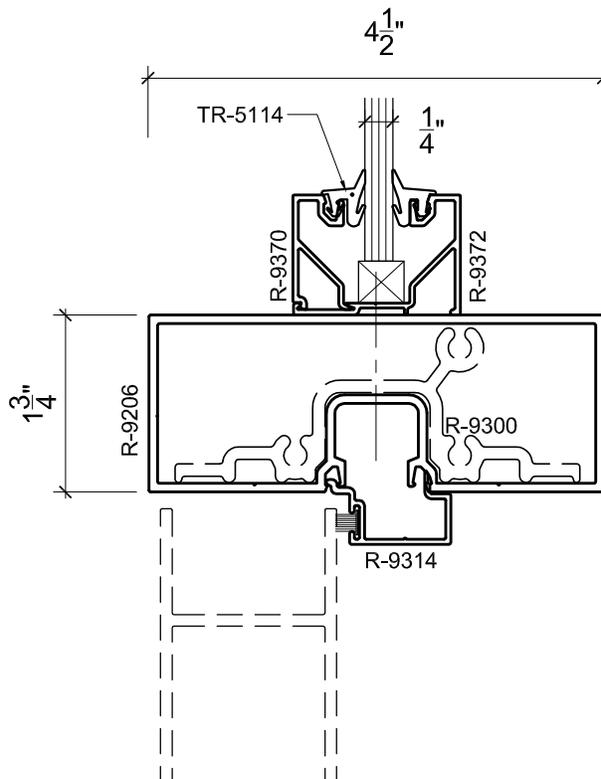
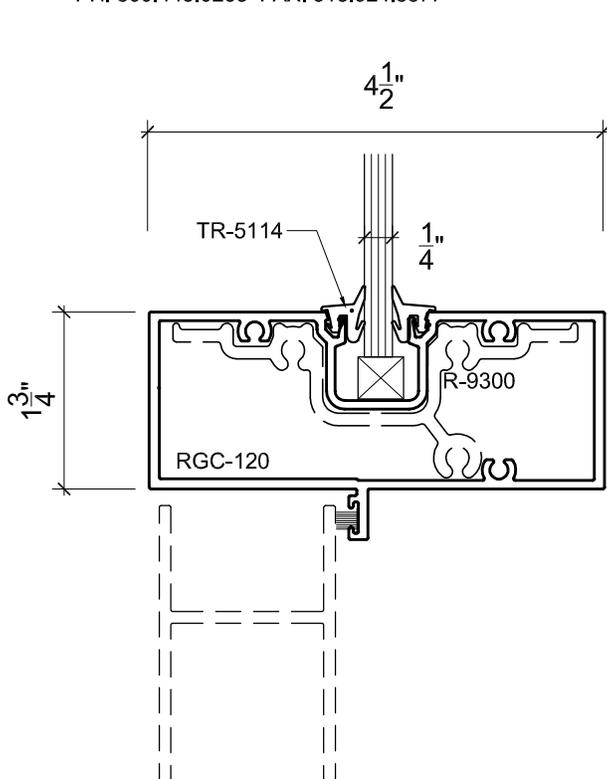
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# 9000 SERIES

DETAILS

1/2 SCALE



## SECTION 13



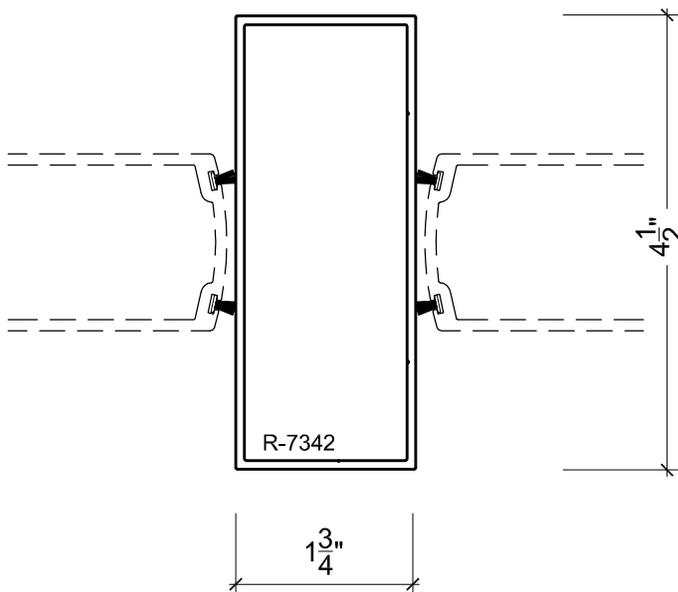
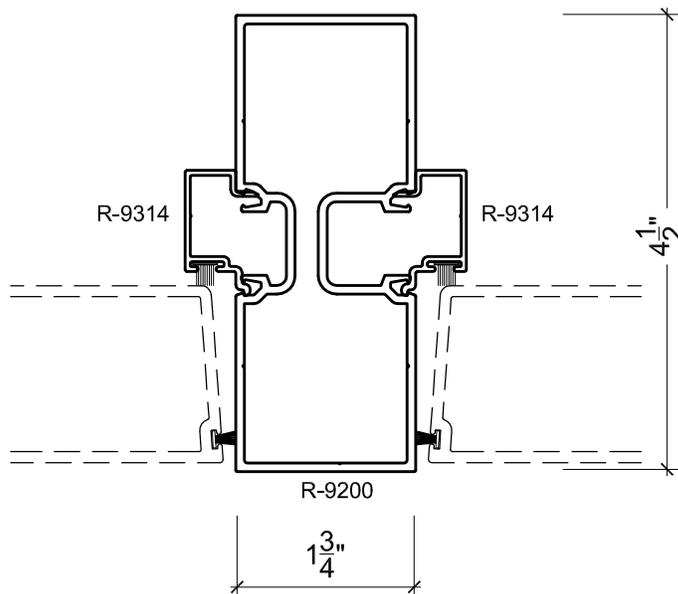
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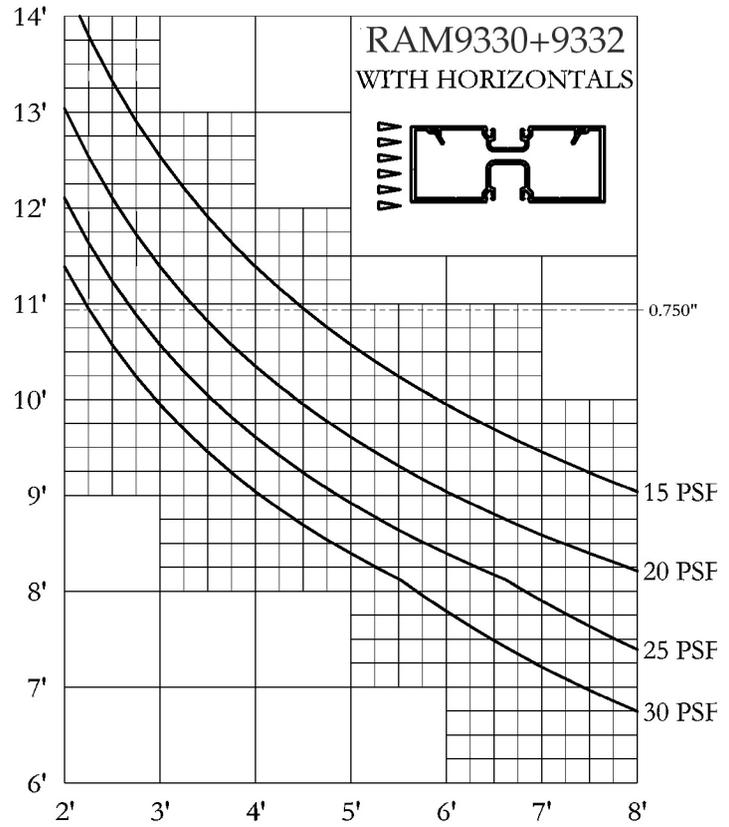
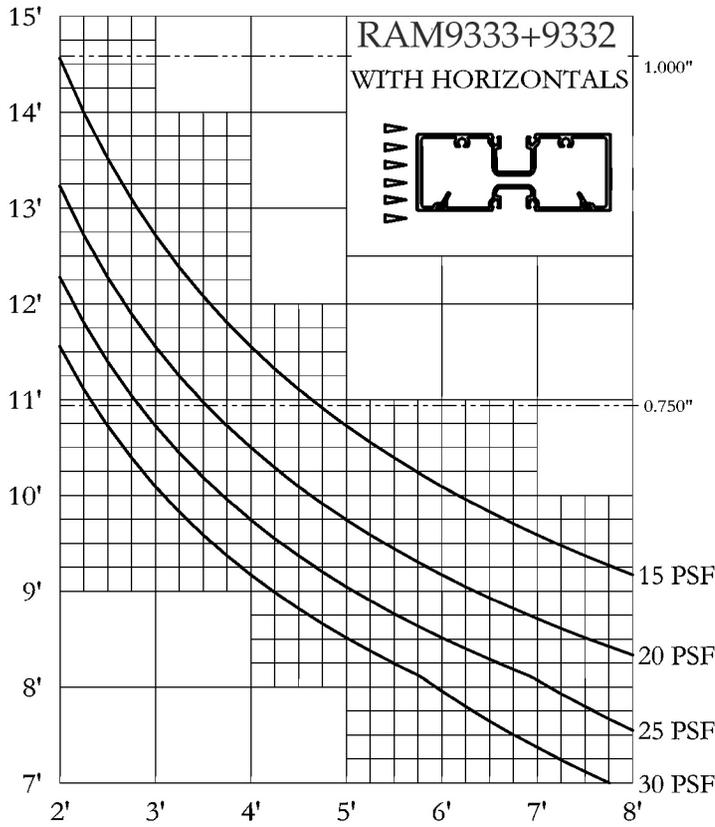
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DETAILS

1/2 SCALE



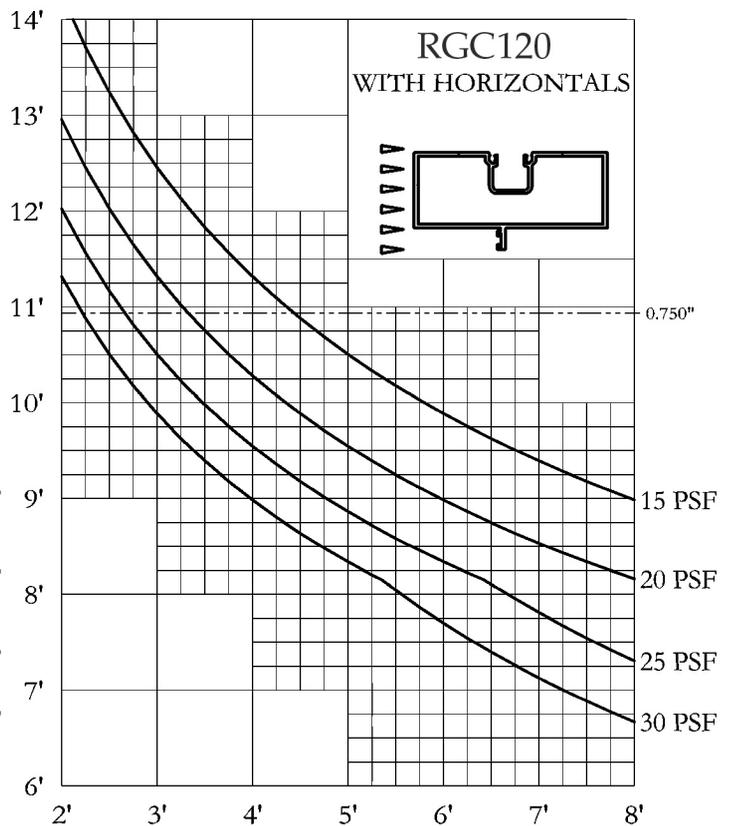
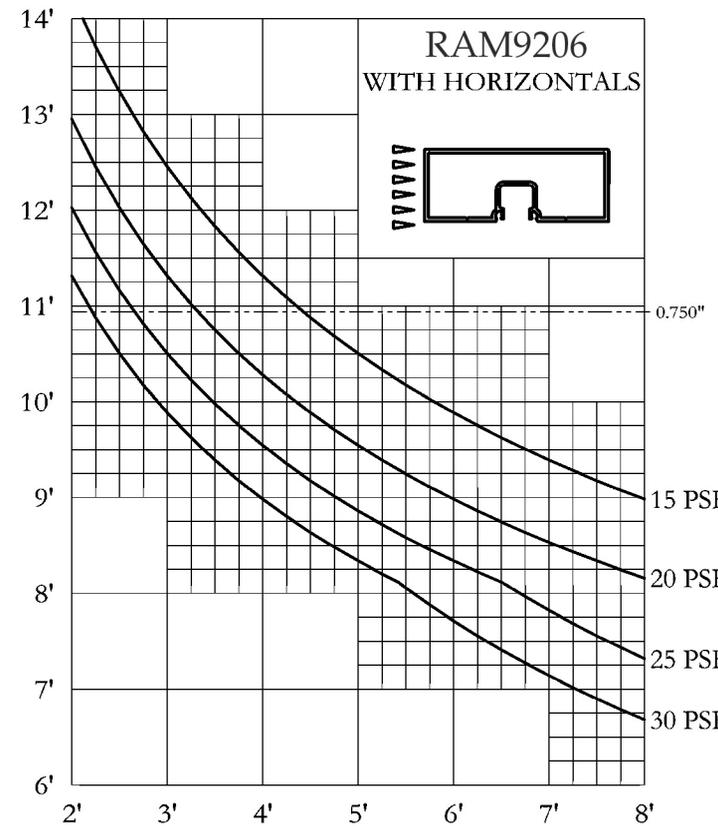
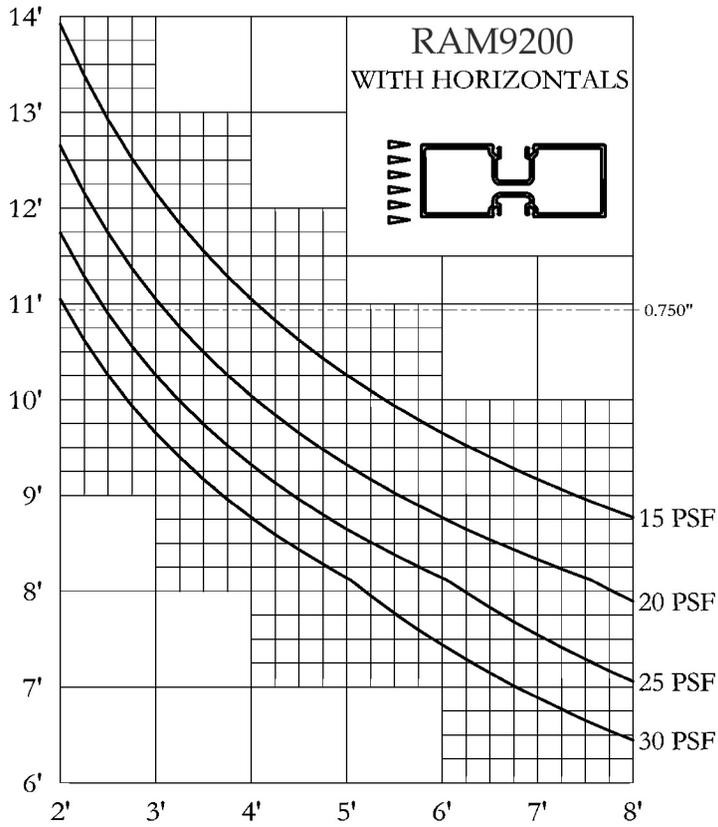
## SECTION 14



#1 THESE WINDLOAD CHARTS ARE BASED UPON THE LESSER OF DEFLECTION RATIO (L/175) OR STRESS (12667)

#2 THESE STRUCTURAL CURVES ARE ESTIMATES AND ARE PRESENTED TO THE BEST KNOWLEDGE OF THE WILLIAM L BONNELL CO. IT IS, HOWEVER, THE RESPONSIBILITY OF THE CUSTOMER TO BE SATISFIED THAT THE CURVES ARE CORRECT. THE WILLIAM L BONNELL CO. MAY NOT BE HELD RESPONSIBLE IN ANY WAY FOR THE FAILURE OF PERFORMANCE RESULTING FROM THE USE OF THESE CURVES.

WINDLOAD CHARTS  
 1 3/4" x 4 1/2" FLUSH GLAZED  
 RAM-9000 SERIES



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