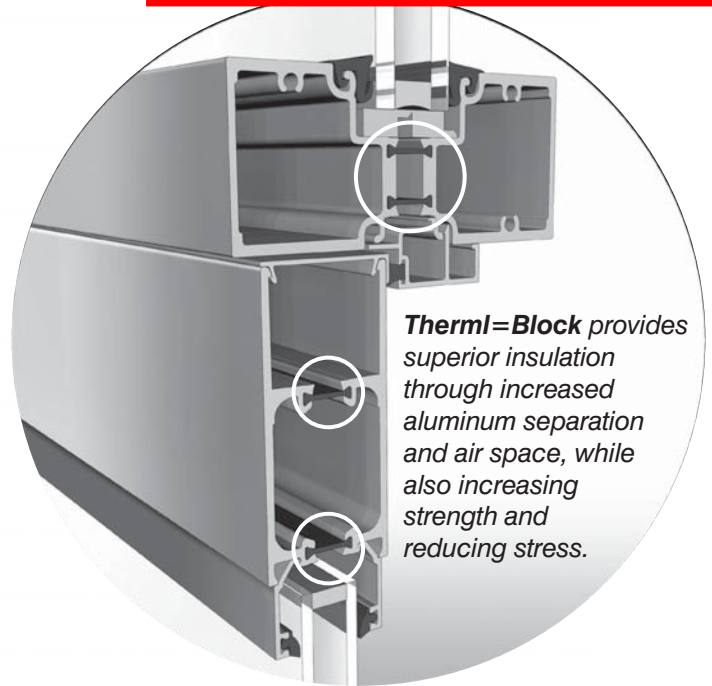


Thermal=Block™

CRF > 56 U_c < .65

CURLES NECK DAIRY BUILDING -
RICHMOND

TYPICAL NEW STOREFRONT DOORS



Description

Tubelite Thermal Entrances are designed using the same durable components as our Standard Entrances for outstanding craftsmanship and strength, with the additional benefit of maximum insulating properties. The Thermal Door has a face dimension of 4" for Medium Stile and 5" for Wide Stile members, and is designed for typical commercial use with a greater variety of hardware options. Bottom rail height is 10" for accessibility requirements. Snap-in glass stops provide for 1" glazing thicknesses.

Thermal Entrances are furnished with mortised butt hinges, offset pivots or continuous hinges as specified. Standard deadbolt locks, and concealed vertical rod or rim panic exit devices may also be selected. Standard pull handles have been designed for ADA access and have matching push bars.

The Tubelite Thermal Door frame has snap-in door stops to conceal frame anchors and provide an excellent weatherseal. Open-back vertical door jambs allow easy, fast assembly with the screw-spline head member. Snap-in vertical frame closures easily accommodate addition of sidelights and incorporation with thermal storefront framing.

4.02 Thermal Entrances Guide Specifications

General

Description

Furnish all necessary materials, labor and equipment for the complete installation of aluminum entrance doors, door frames and hardware as shown on the drawings and specified herein.

Doors and frames shall be as manufactured by Tubelite Inc., Walker, Michigan. Whenever substitute products are to be considered, supporting technical literature, samples, drawings and performance data must be submitted ten (10) days prior to bid in order to make a valid comparison of the products involved.

Test reports certified by an independent laboratory must be made available upon request.

Product

Performance Requirements

Air infiltration shall not exceed .30 CFM/Ft² when tested in accordance with ASTM E-283 at a test pressure of 1.60 PSF. Actual test result was .30 CFM/Ft².*

There shall be no uncontrolled water entry when tested in accordance with ASTM E-331 "Water Penetration of Exterior Windows, Curtainwalls and Doors by Uniform Static Air Pressure Difference" at a test pressure of 0 PSF.

Thermal transmittance due to conduction (U_c) shall not be greater than .651 - thermal strut, BTU/Hr/Ft²/F degree when tested in accordance with AAMA 1503-98. Condensation Resistance Factor (CRF) shall not be less than 56 - thermal strut, when tested in accordance with AAMA 1503-98.

Structural performance per ASTM E330-02 shall be based on an actual deflection of 0.02" at a test pressure of 30.09 PSF.

Materials

Extrusions shall be of aluminum alloy 6063-T5 extruded within commercial tolerance and free from defects impairing strength and/or durability. Door stile and rail sections to be a minimum of .125 inch wall thickness. Door frame sections to be of .080 inch minimum wall thickness, with glazing and door moldings a minimum of .050 inch.

Threaded steel tension rods of .375 inch diameter shall run the full width of the top and bottom rails and shall be fixed with aluminum lugs and lock nuts.

Door glazing shall be by means of a fixed gasket of high quality extruded elastomeric material. Door frame members shall have a continuous wool

pile/vinyl fin weatherstripping at the head and jamb members. Bottom rail weatherstrip at threshold is standard. Door stops shall be of snap-in design on butt hinge and offset pivot applications, eliminating use of exposed screws.

All door and frame members shall be accurately fitted to flush hairline joints.

Thermal barrier shall be a dual glass fiber strut crimped in place separating interior from exterior surfaces for efficient thermal performance of door and frame members. Thresholds have a two part chemically curing, unfilled polyurethane casting resin poured in place.

Finish

All exposed framing surfaces shall be free of scratches and other serious blemishes.

Finish to be: (architect select)

Etched and clear anodized
(AAM10C21A31) Class 2
Clear (C2)
(AAM10C21A41) Class 1
Clear (C1)

Electrolytically deposited color
(AAM10C21A44) Class 1
Champagne (CH)
Medium Bronze (MB)
Dark Bronze (DB)
Extra Dark Bronze (EB)
Black (BL)

Fluoropolymer painted color _____.

Execution

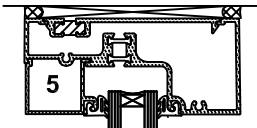
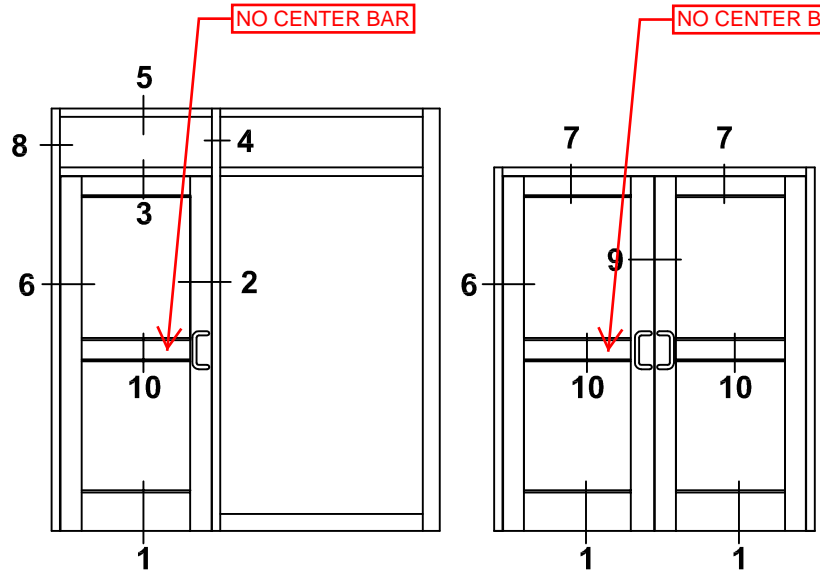
Installation

Shall be in accordance with the manufacturer's installation instructions and the approved shop drawings. *Additional requirements to exceed published results for air and water performance are noted in the test reports.

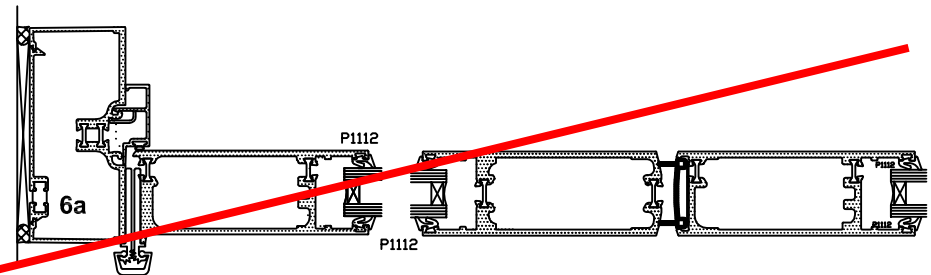
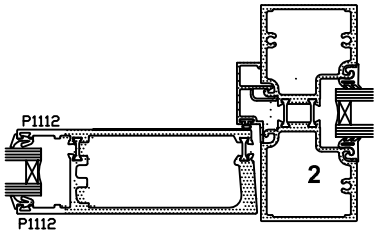
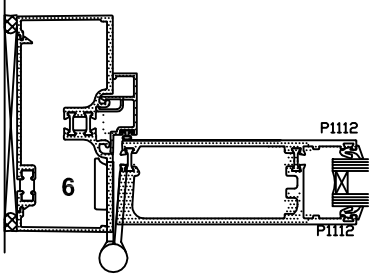
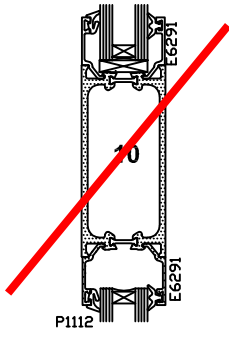
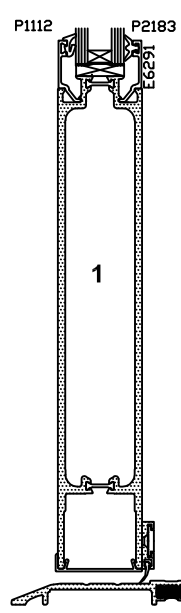
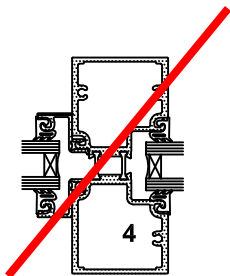
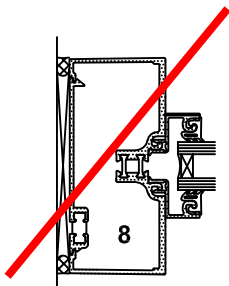
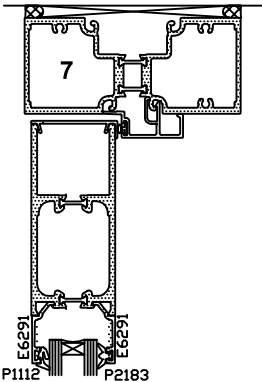
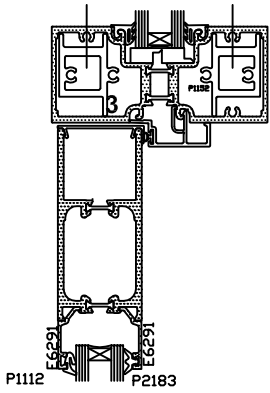
Note: In keeping with Tubelite's policy of continuing product improvements, all specifications are subject to change without written notice by the manufacturer.

Page 4.03
Thermal Entrances
 Detail Elevation 1/4 Size

CAD DETAIL FILE NO.
 111ELEV



- NOTES:**
- INTERIOR & EXTERIOR FINISH TO BE CLEAR ANODIZED ALUMINUM
 - FOLDING DOOR AT WEST BAY FRONT TO BE FABRICATED FROM STANDARD STOREFRONT DOOR PANELS



*SEALANT, ROD, & ANCHORS NOT BY TUBELITE

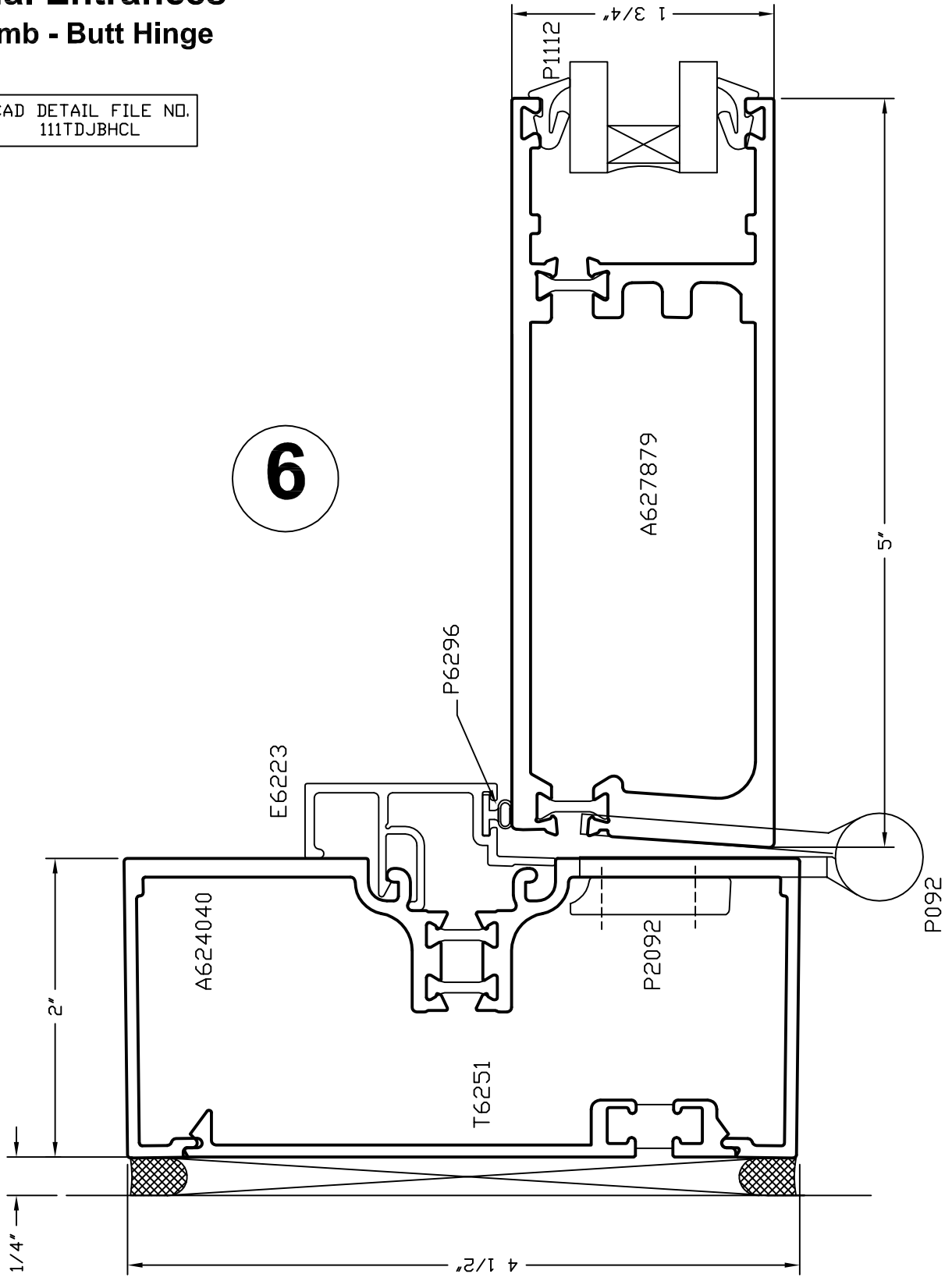
4.04

Thermal Entrances

Door Jamb - Butt Hinge

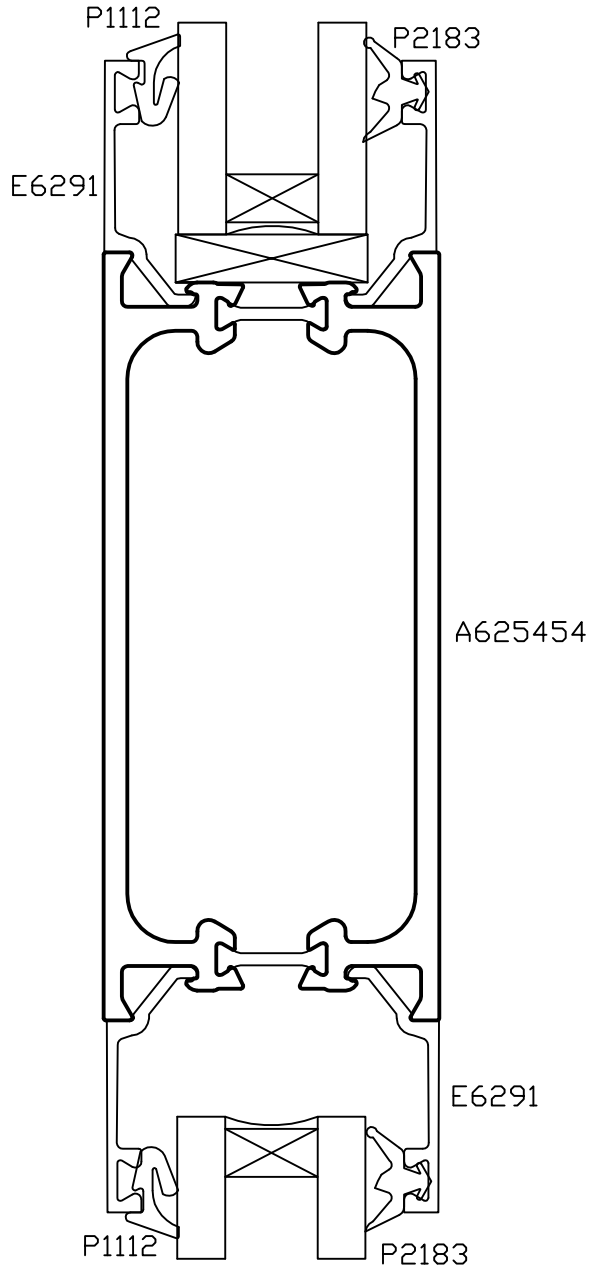
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6



4.06 Thermal Entrances Door - 4 Inch Midrail

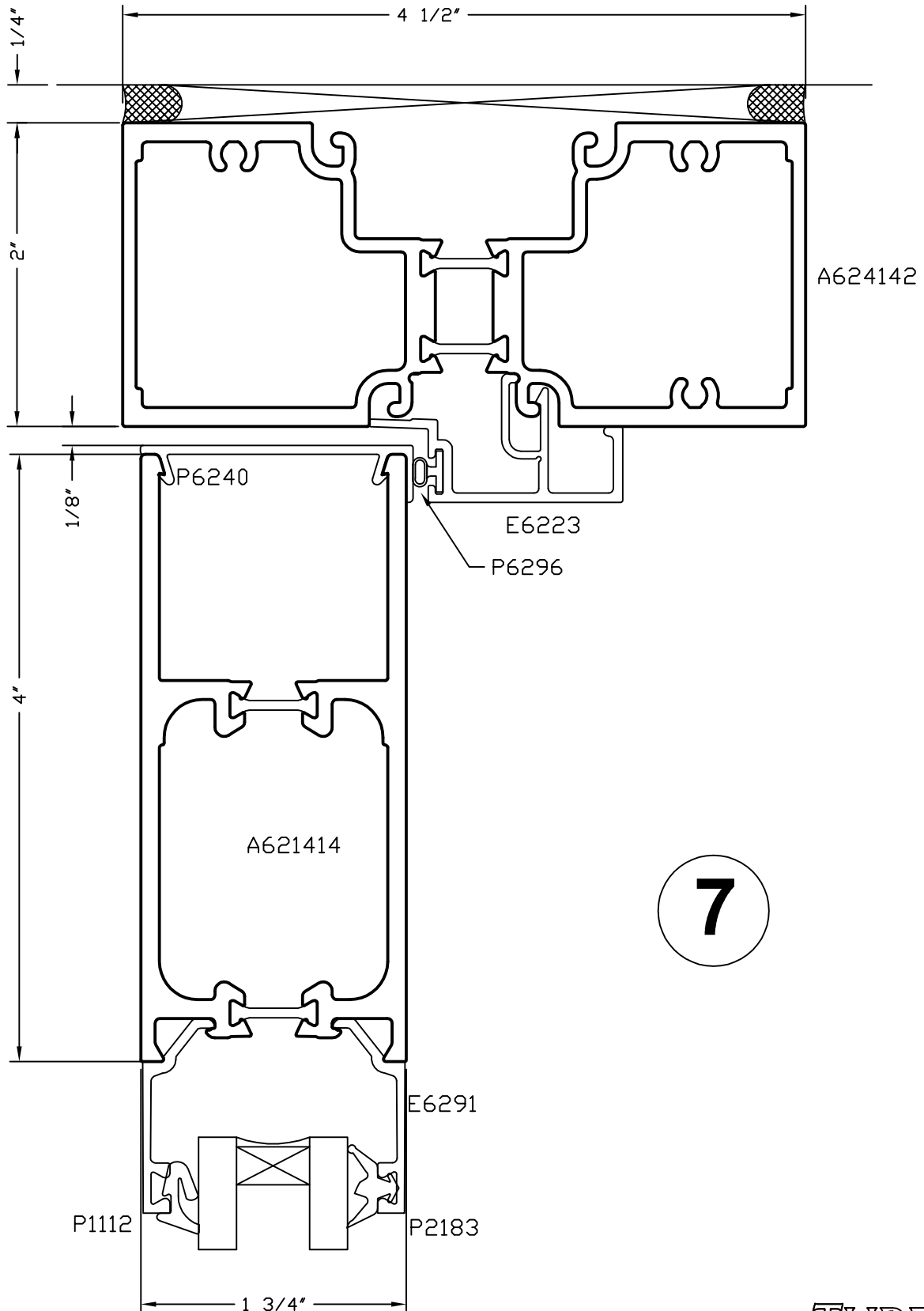
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10

Thermal Entrances Head

CAD DETAIL FILE NO.
111TDHEAD

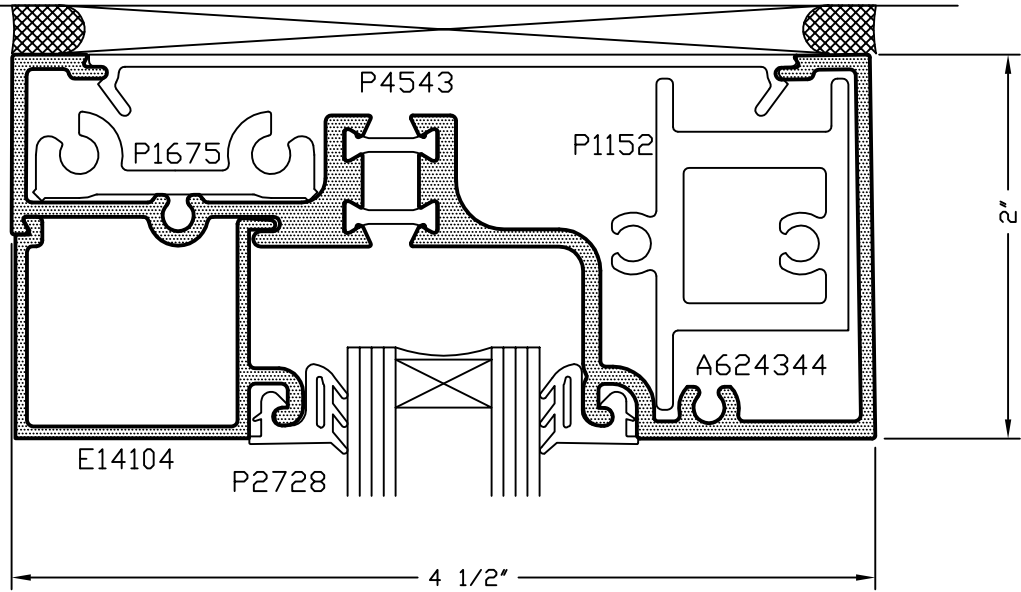


*SEALANT, ROD, & ANCHORS NOT BY TUBELITE

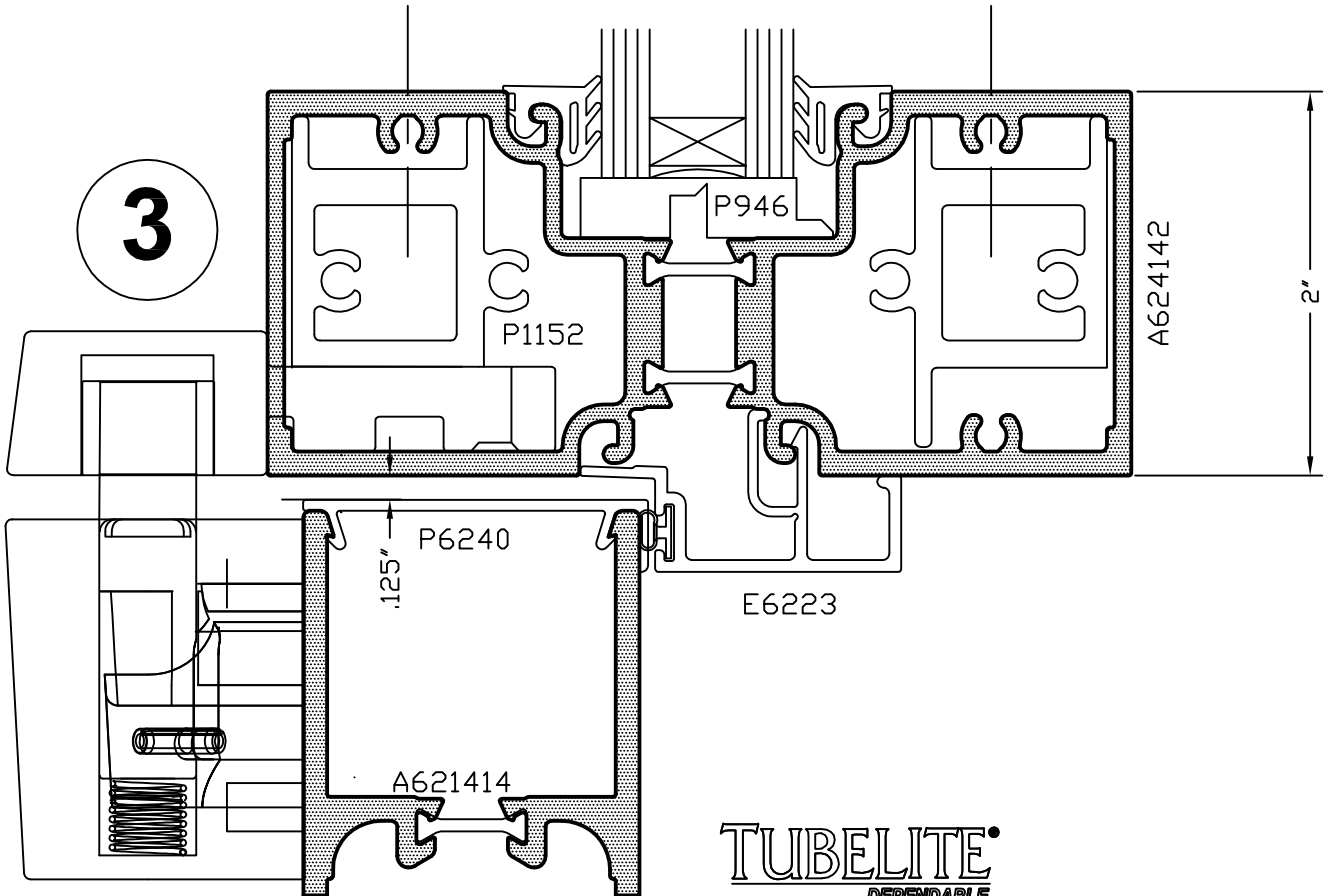
4.12 Thermal Entrances Transom Head

CAD DETAIL FILE NO.
111TDTRANSHEAD

5



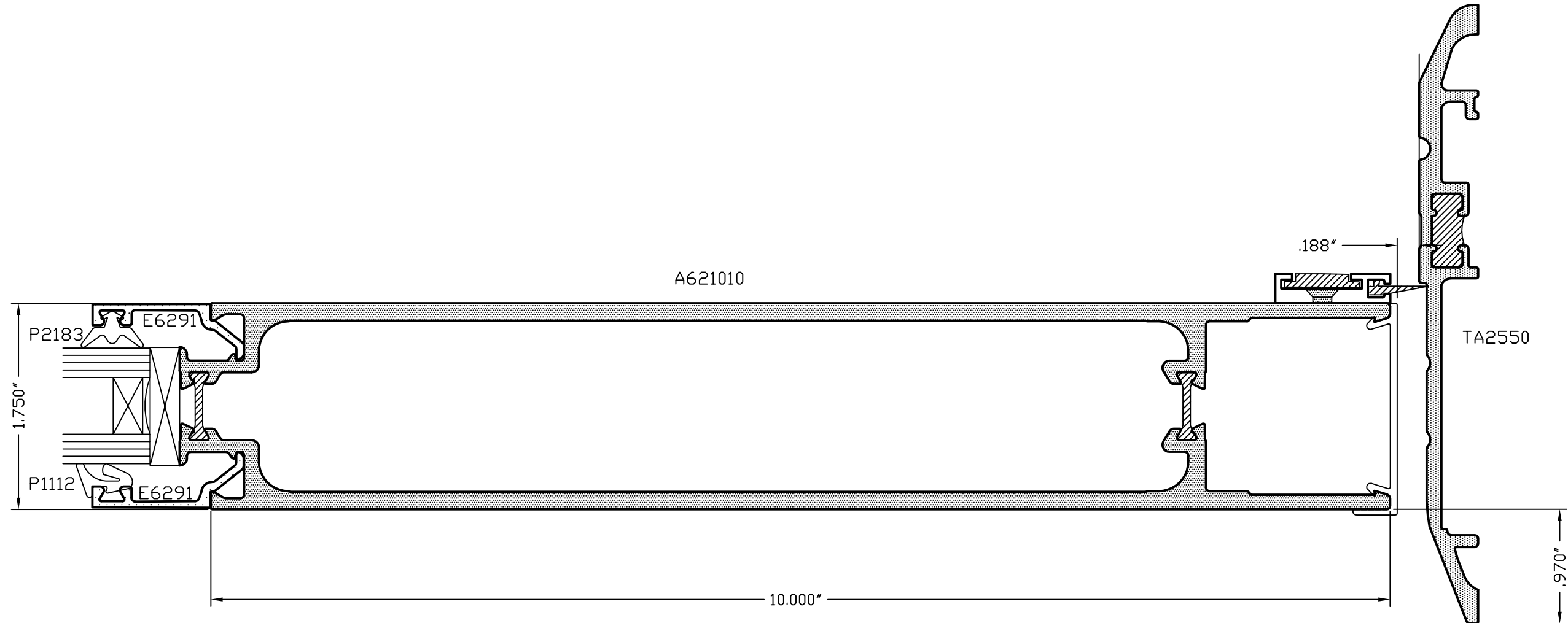
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TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

4.13 Thermal Entrances Bottom Rail 10 Inch

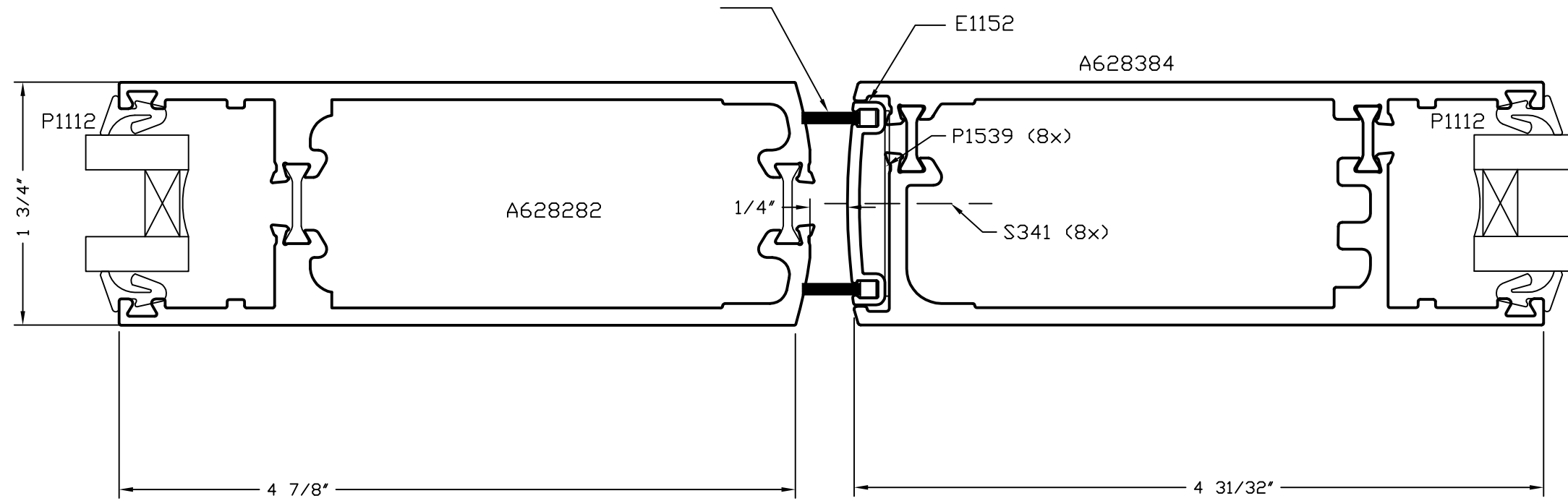
CAD DETAIL FILE NO.
111TDBR10



*SEALANT, ROD, & ANCHORS NOT BY TUBELITE

4.14 Thermal Entrances Door Stile Adjustable

CAD DETAIL FILE NO.
111TDAS



9

*SEALANT, ROD, & ANCHORS NOT BY TUBELITE