

TUBELITE®

DEPENDABLE

**LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS**



INT45 INTERIOR STOREFRONT

INSTALLATION INSTRUCTIONS

3056 Walker Ridge Dr. NW, Suite G • Walker, MI 49544 • 800-866-2227

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TABLE OF CONTENTS










GENERAL CONSTRUCTION NOTES.....	5
PARTS LIST	6-8
QUICK REFERENCE CHECKLIST.....	9
ELEVATION DETAILS	10-17
FRAME FABRICATION	
Step 1 Determine Frame Size.....	19
Step 2 Cut Material to Size.....	20
Step 3 Fabricate Vertical Drywall Adaptors.....	21
Step 4 Fabricate Horizontal Members.....	22
FRAME ASSEMBLY	
Step 5 Assemble Elevation.....	22
Step 6 Attach Drywall Adaptors.....	23
FRAME INSTALLATION	
Step 7 Install Assembled Elevation.....	24
Step 8 Insert Drywall Adaptor.....	25

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GENERAL CONSTRUCTION NOTES

1. These instructions cover typical product application, fabrication, installation and standard conditions and are general in nature. They provide useful guidelines, but the final shop drawings may include additional details specific to the project. Any conflict or discrepancies must be clarified prior to execution.
2. Materials stored at the job site must be kept in a safe place protected from possible damage by other trades. Stack with adequate separation so materials will not rub together and store off the ground. Cardboard or paper wrapped materials must be kept dry. Check arriving materials for quantity and keep a record of where various materials are stored.
3. All field welding must be done in accordance with AISC guidelines. All aluminum and glass should be shielded from field welding to avoid damage from weld splatter. Results will be unsightly and may be structurally unsound. Advise general contractor and other trades accordingly.
4. Coordinate protection of installed work with general contractor and/or other trades.
5. Coordinate sequence of other trades which affect framing installation with the general contractor (e.g. fire proofing, back up walls, partitions, ceilings, mechanical ducts, HVAC, etc.).
6. General contractor should furnish and guarantee bench marks, offset lines and opening dimensions. These items should be checked for accuracy before proceeding with erection. Make certain that all adjacent substrate construction is in accordance with the contract documents and/or approved shop drawings. If not, notify the general contractor in writing before proceeding with installation because this could constitute acceptance of adjacent substrate construction by others.
7. Isolate all aluminum to be placed directly in contact with masonry or other incompatible materials with a heavy coat of zinc chromate or bituminous paint. Fasteners attaching framing to building structure are typically not provided by Tubelite. Note: Use only flat head fasteners at head and jamb conditions.
8. Sealant selection is the responsibility of the erector, installer and/or glazing contractor and must be approved by the sealant manufacturer with regard to application and compatibility for its intended use. All sealants must be used in strict accordance with the manufacturer's instructions and applied only by trained personnel to surfaces that have been properly prepared.
9. Sealant must be compatible with all materials with which they have contact, including other sealant surfaces. Consult the sealant manufacturer for recommendations relative to shelf life, compatibility, cleaning of substrate, priming, tooling adhesion, etc. All surfaces coming in contact with waxes or oils through the fabrication or assembly process must be cleaned to assure proper adhesion of sealant.
10. Drainage gutters and weep holes must be kept clean at all times. Tubelite will not accept responsibility for improper drainage as a result of clogged gutters and weep holes.
11. This product requires clearances at the head, sill and jambs to allow for thermal expansion and contraction as well as construction tolerances. Refer to final distribution drawings for joint sizes. Joints smaller than 1/4" may be subject to failure. Consult the sealant manufacturer for proper sizing of joints.
12. All materials are to be installed plumb, level and true with regard to established bench marks and column center lines established by the general contractor and check by the erector, installer and/or glazing contractor.
13. Cleaning of exposed aluminum surfaces should be done per AAMA recommendations.
14. Due to varying perimeter conditions and job performance requirements, anchor fasteners are not specified in these instructions. For anchor fastening, refer to the shop drawings or consult the fastener supplier.
15. Check www.tubeliteinc.com for any installation instruction updates.






STANDARD EXTRUSIONS

SHAPE	DESCRIPTION	PART No.
	Standard Open Back Head/Jamb/Vertical	E4541
	Sill	E4540
	Intermediate Horizontal	E4503
	Glass Stop	E4504
	Snap In Filler	E4543
	Post Drywall Adaptor - Female	E45201
	Post Drywall Adaptor - Male	E45200
	Pre Drywall Adaptor - Female	E45203
	Pre Drywall Adaptor - Male	E45202

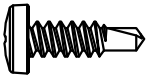
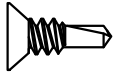










SUBFRAME EXTRUSIONS

SHAPE	DESCRIPTION	PART No.
	Standard Open Back Head/Jamb/Vertical with screw splines	E4TB111
	Standard Open Back Head/Jamb/Vertical without screw splines	E4TB11
	Subframe Adaptor	E45204

ENTRANCE EXTRUSIONS

SHAPE	DESCRIPTION	PART No.
	Door Header	E45124
	Concealed Closer Header	E0041
	Concealed Closer Door Stop	E2298
	Open Back Door Jamb	E4544
	Snap-In Door Stop	E4531

GASKETS and SETTING BLOCKS

SHAPE	DESCRIPTION	PART No.
	Screw	S445
	Screw	S444
	Gasket	P2728
	Gasket (gray)	P2728S
	Gasket	P487
	Gasket (gray)	P487S
	Drywall Adaptor Gasket	P2511
	Drywall Adaptor Gasket (gray)	P2511S
	Gasket	P4500
	Gasket (gray)	P4500S
	Door Gasket	P1098A
	Setting Block	P575

QUICK REFERENCE CHECKLIST

1. Make sure the opening is square.
2. Ensure surfaces that will be sealed are free of contaminants that can lead to adhesion issues.
3. Glass bites must be equal on all sides.
4. Double check anchor size and location against installation instructions or approved shop drawings.
5. All glazing pockets will accept glazing up to and including 1/2" thick.
6. Glass dimensions should not exceed daylight opening (D.L.O.) plus 5/8". This formula does not take into account out-of-square openings or glass tolerances. Consult the glass manufacturer before determining final glass sizes.
7. When cutting gaskets, add 1/16" to 1/8" per foot of daylight opening for shrinkage (an eight of an inch per foot is approximately 1%).
8. When installing gaskets, always begin at each end of the gasket and work toward the center. Do not stretch the gasket or it will return to its original form, creating gaps at the gasket intersections.

GLASS SIZE CALCULATION

Typical Framing:

Glass Width = D.L.O. + 5/8"

Glass Height = D.L.O. + 5/8"

Glass Height at Sill = D.L.O. + 9/16"

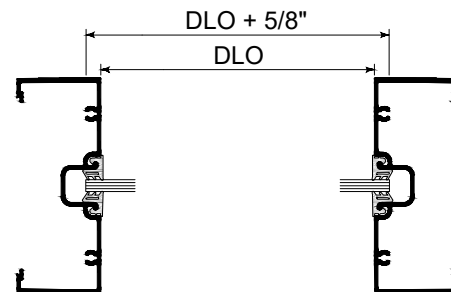
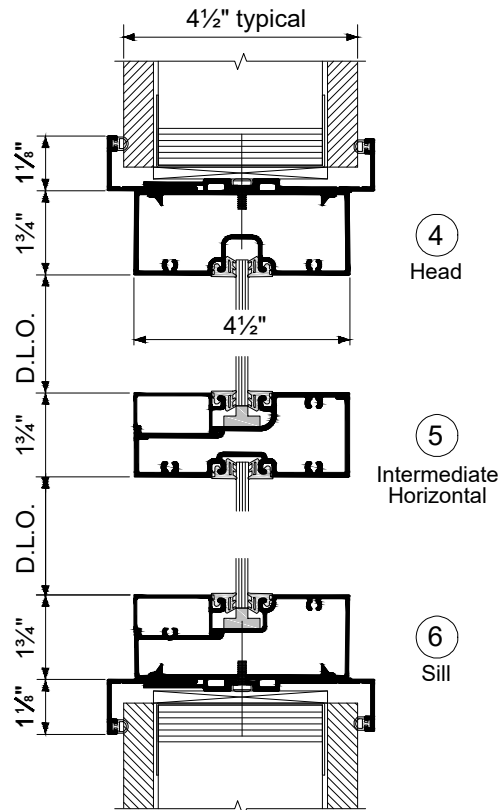
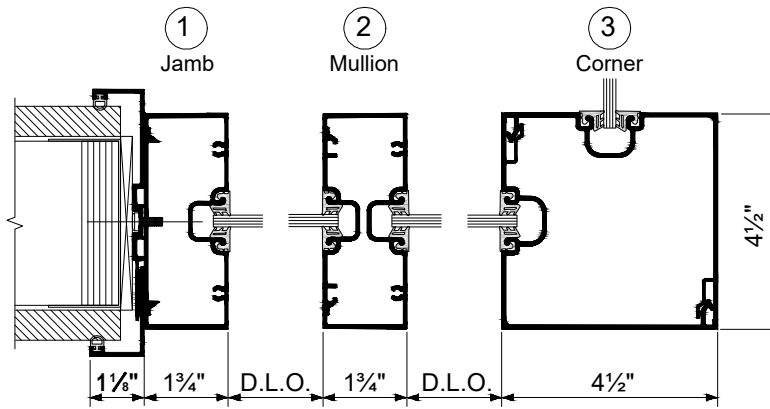
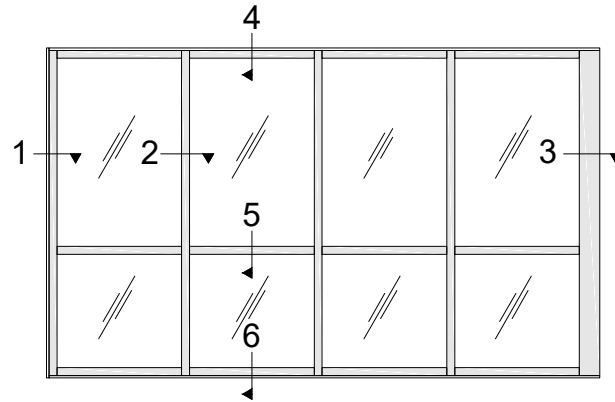
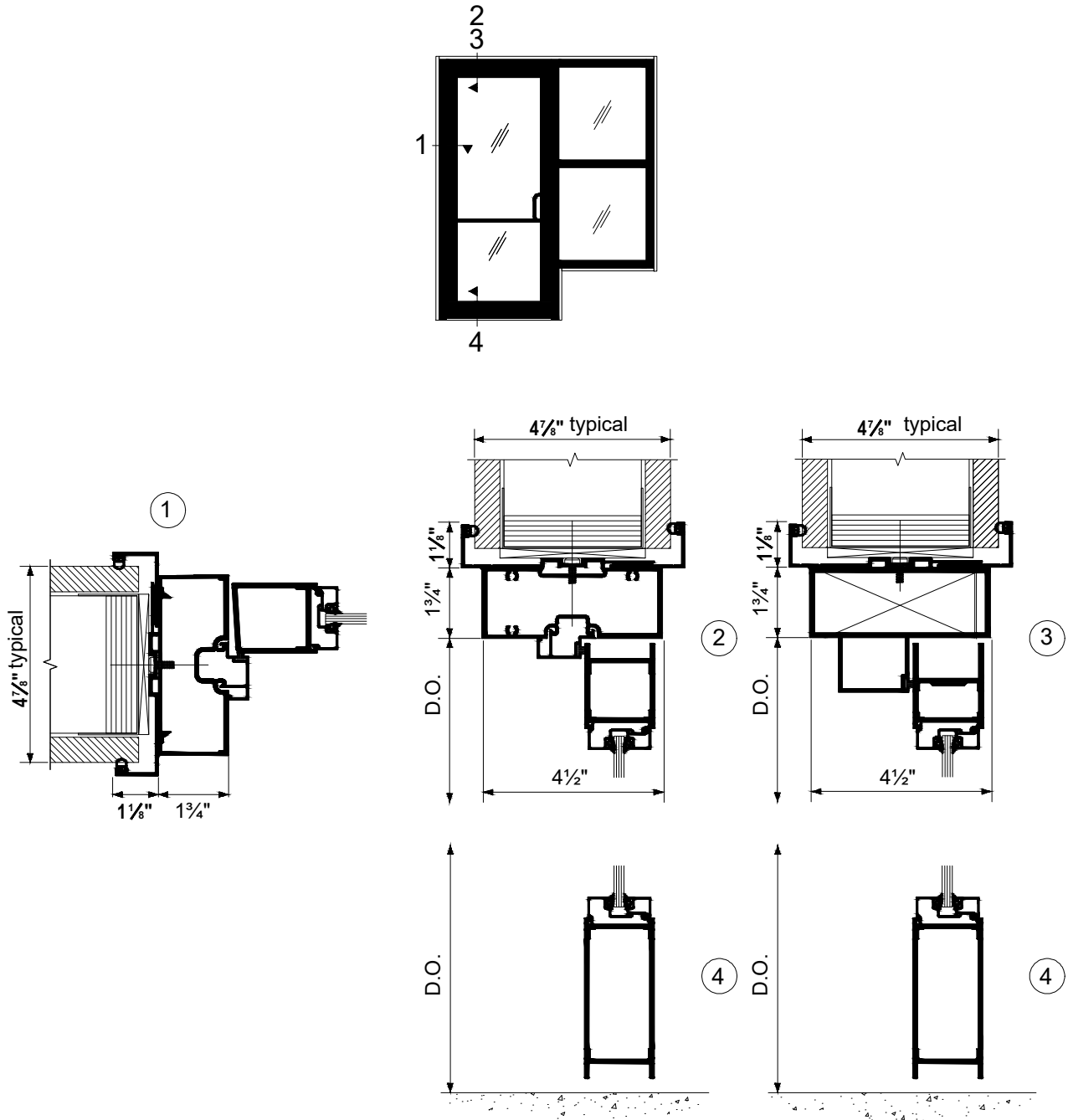


Fig. 9.1

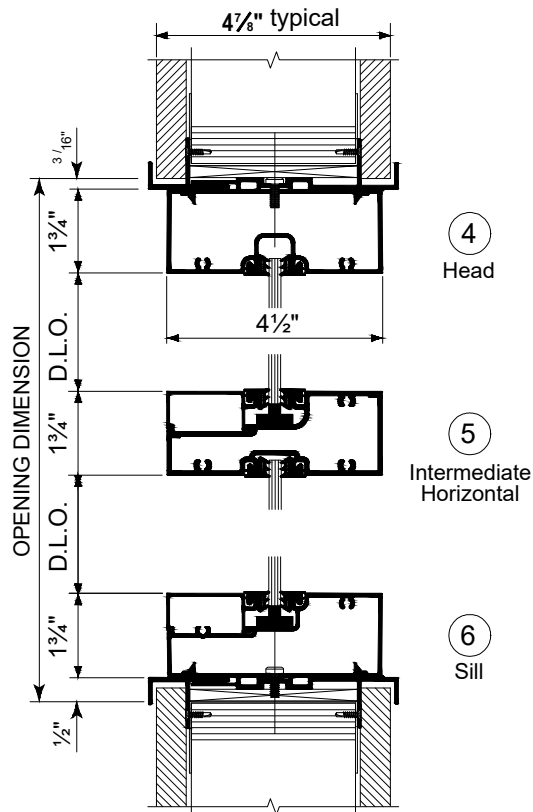
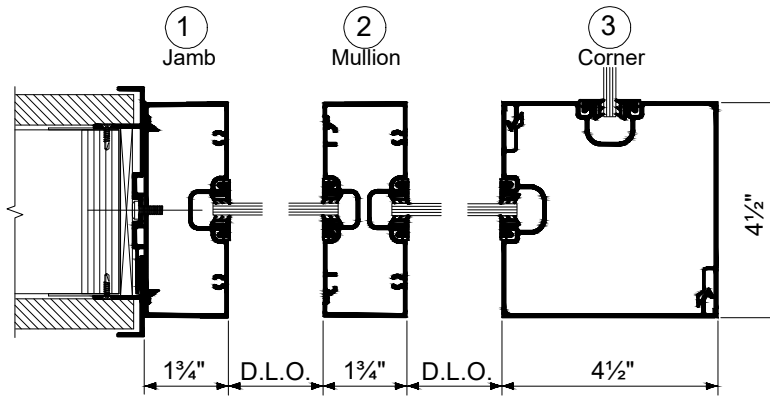
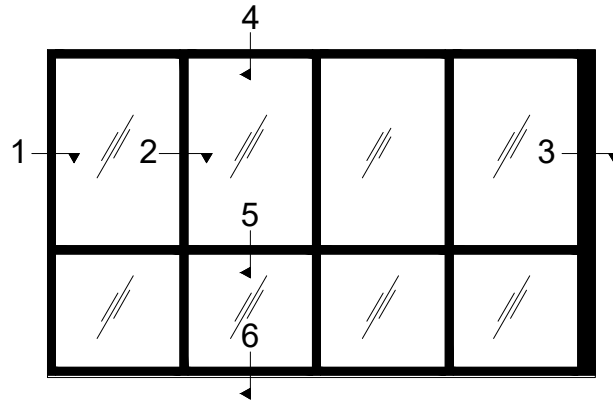
POST DRYWALL
TYPICAL ELEVATION with DETAILS



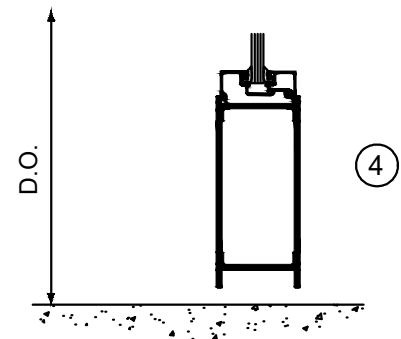
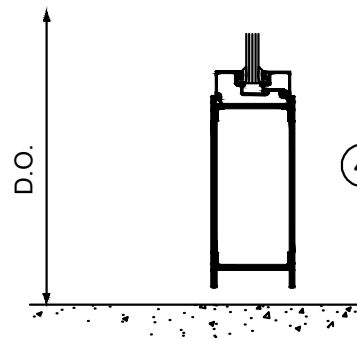
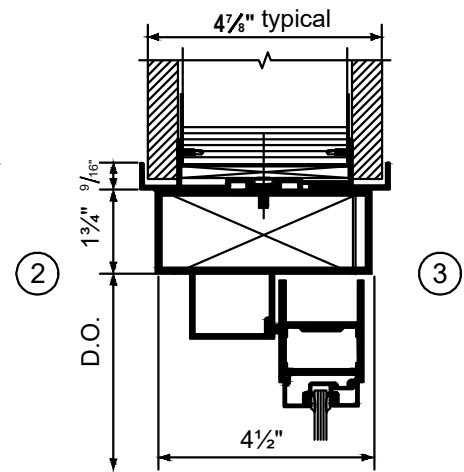
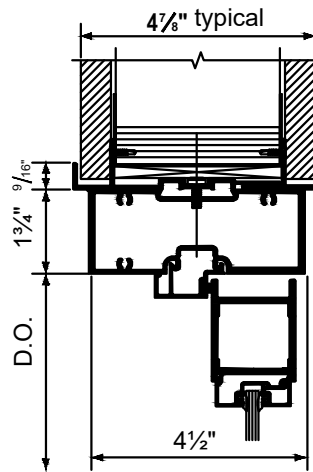
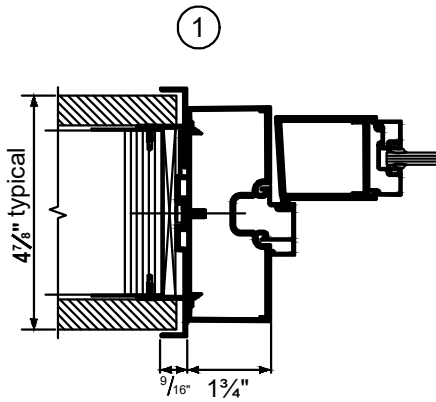
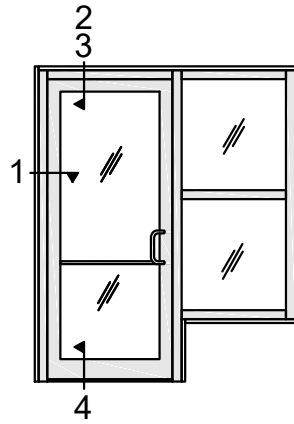
POST DRYWALL DOOR FRAME ELEVATION with HORIZONTAL DETAILS



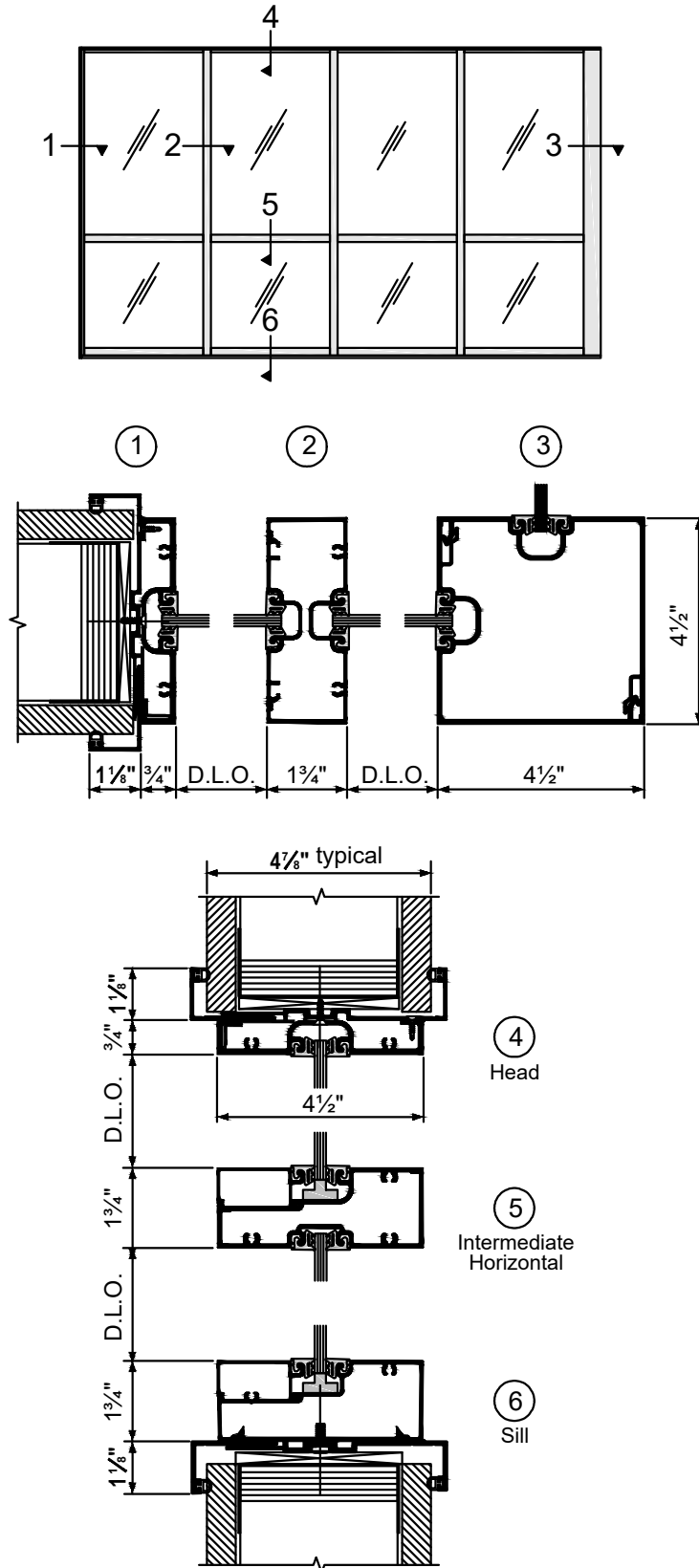
PRE DRYWALL
TYPICAL ELEVATION with DETAILS



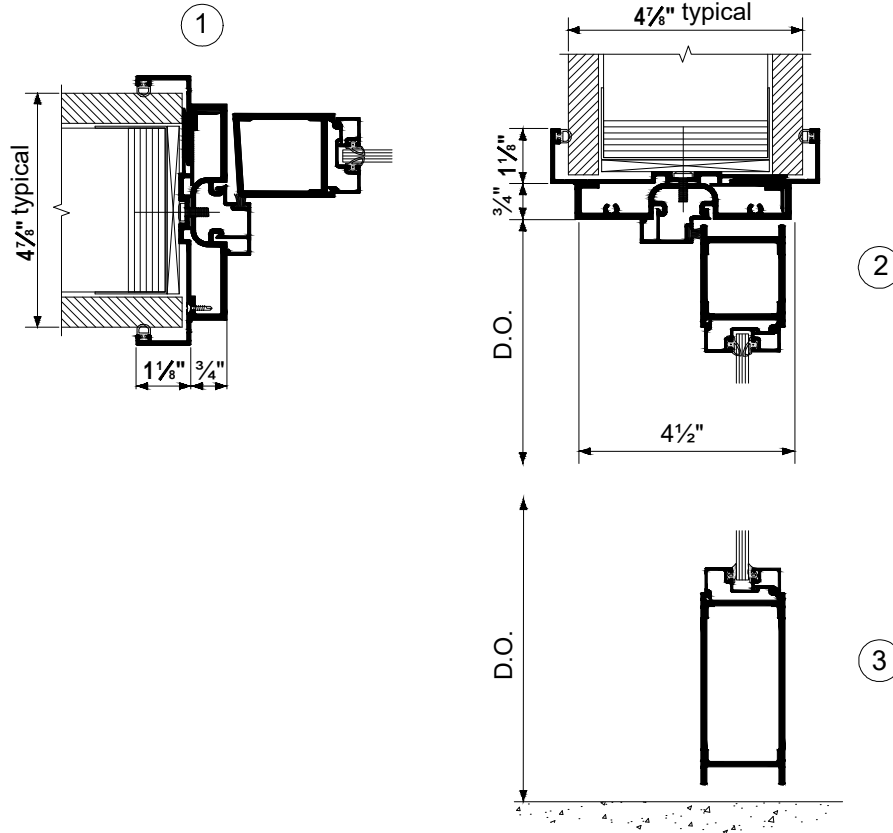
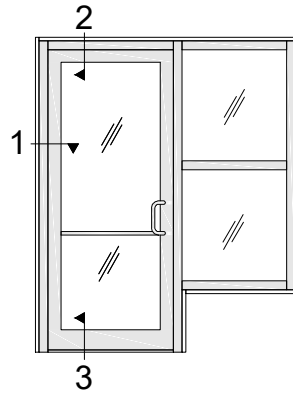
PRE DRYWALL DOOR FRAME ELEVATION with HORIZONTAL DETAILS



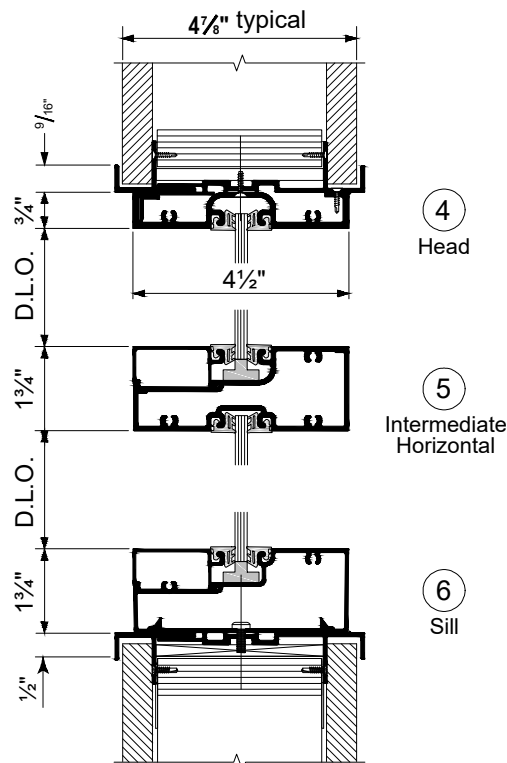
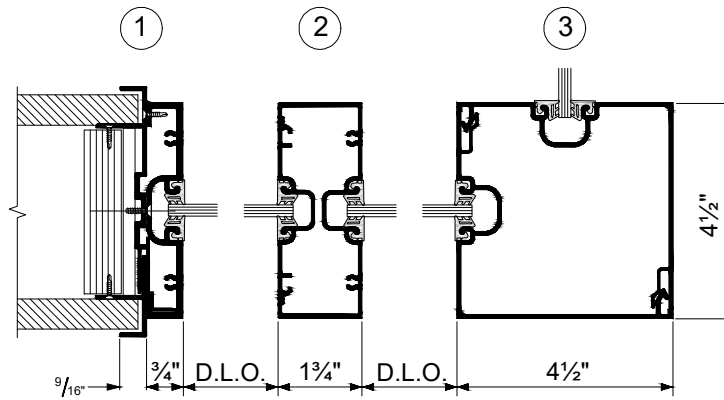
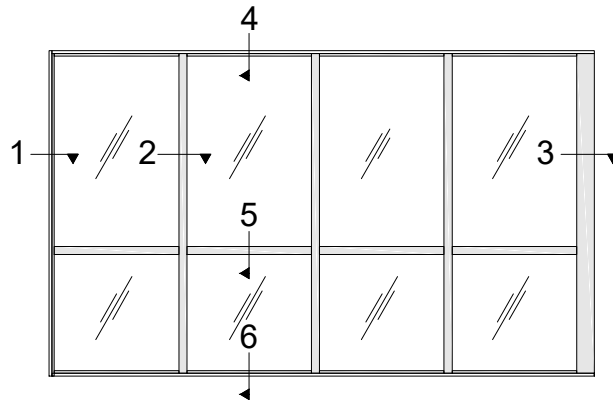
POST DRYWALL SUBFRAME
TYPICAL ELEVATION with DETAILS



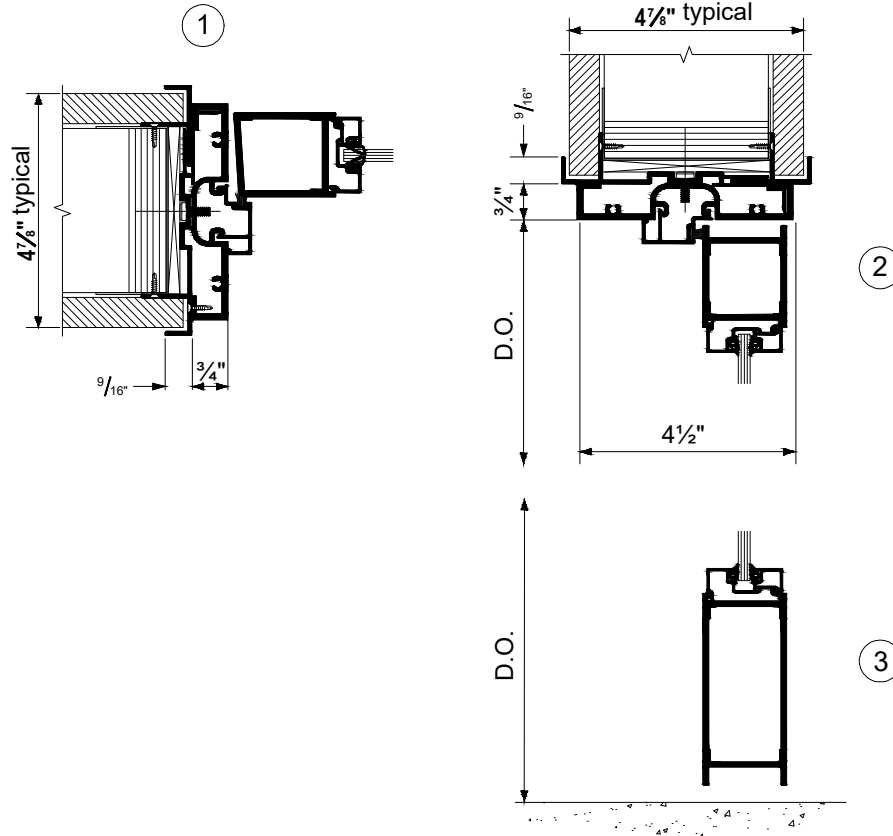
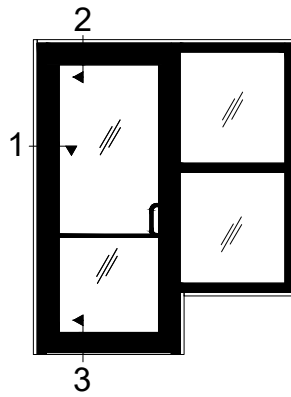
POST DRYWALL SUBFRAME DOOR FRAME ELEVATION with HORIZONTAL DETAILS



PRE DRYWALL SUBFRAME
TYPICAL ELEVATION with DETAILS



PRE DRYWALL SUBFRAME DOOR FRAME ELEVATION with HORIZONTAL DETAILS



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FRAME FABRICATION

Step 1: Determine Frame Size

Frame Width

- A. Make sure the opening is square and plumb. Measure each diagonal of the opening. SEE Fig. 19.1.

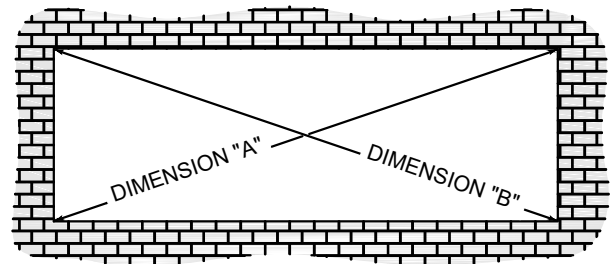


Fig. 19.1 DIMENSION "A" = "B"

- B. Measure the width of the opening at the top, middle and bottom. Select the smallest of these dimensions and subtract 1" to allow a minimum of 1/2" at jambs for shimming and receptor. SEE Fig. 19.2.

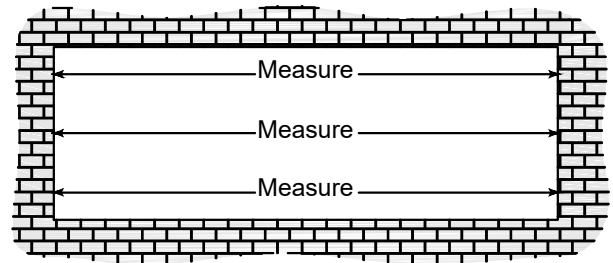


Fig. 19.2

Frame Height

- C. Measure the height of the opening at several points along the entire width of the opening. Select the smallest of these dimensions and subtract 1" to allow a minimum of 1/2" at sill and 1/2" at head for shimming and receptor. Allow larger clearance if necessary to accommodate building tolerances or out of square openings. SEE Fig. 19.3.

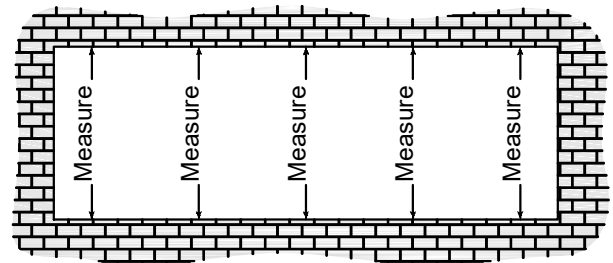


Fig. 19.3

FRAME FABRICATION

Step 2: Cut Material to Size

Note: Door framing material comes cut to size from the factory. In cases of door frames with transoms, the door jambs must be cut down in the field to size and head member attached per standard instructions shown within this manual.

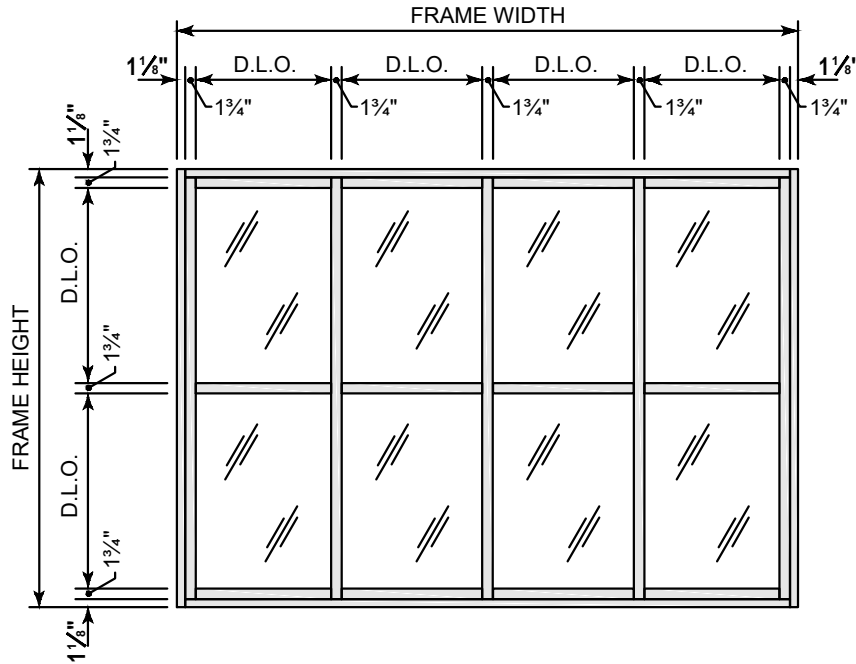


Fig. 20.4

Framing Members

Post Drywall Vertical Adaptors.....	Frame height + 2 1/4"
Pre Drywall Vertical Adaptors.....	Frame height + 1 1/8"
Horizontal Drywall Adaptors.....	Storefront unit frame width
Verticals.....	Cut length to equal storefront height
Head, Horizontal & Sill.....	D.L.O.
Horizontal & Sill Glass Stops.....	D.L.O. - 1/32"
Snap-In Fillers.....	Refer to Approved Shop Drawings

Accessories

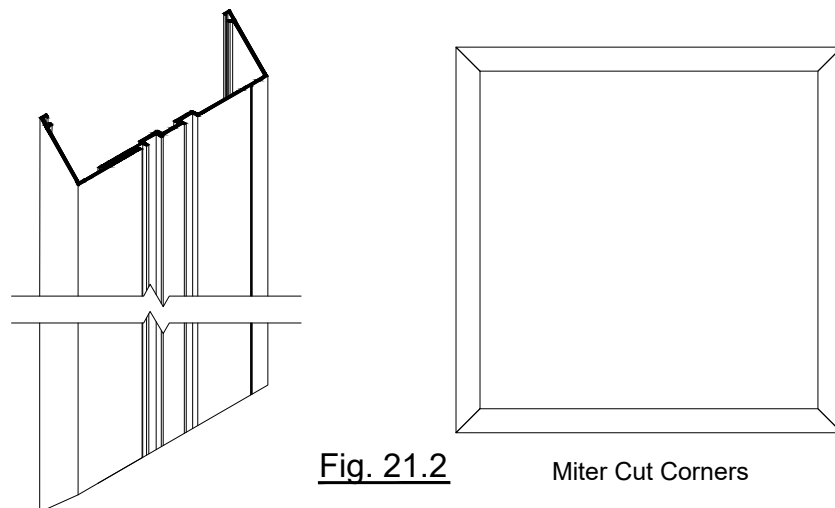
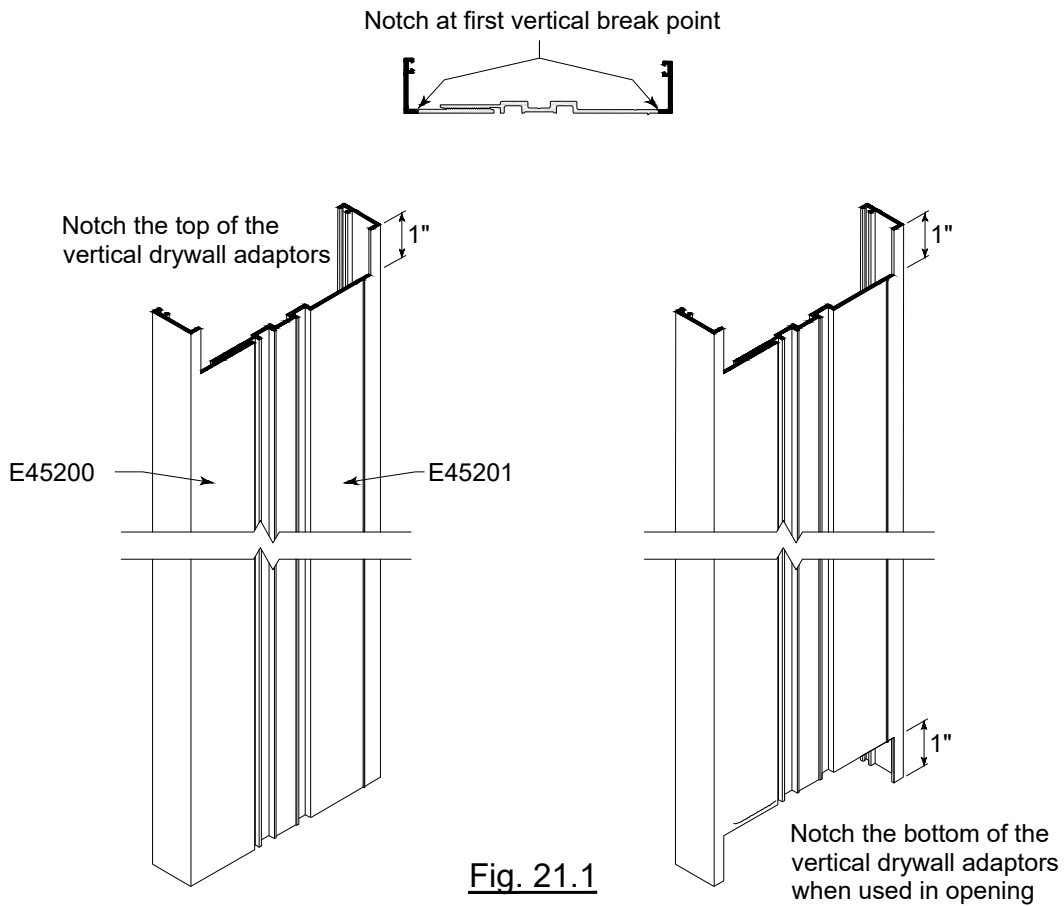
Exterior Gasket.....	D.L.O. + Allowance*
Interior Gasket.....	D.L.O. + Allowance*

*Allowance = 1/8" extra length per foot of D.L.O.

FRAME FABRICATION

Step 3: Fabricate Vertical Drywall Adaptors

- A. From top of vertical INT45 framing notch at first vertical break point down 1" to clear drywall and stud at head. SEE Fig. 21.1
- B. (Optional) Drywall adaptor framing can be miter cut if preferred. SEE Fig. 21.2



FRAME ASSEMBLY

Step 4: Fabricate Horizontal Members

- A. Horizontal INT45 to be cut at frame width.

Step 5: Assemble Elevation

- A. Assemble elevation. SEE Fig. 22.1

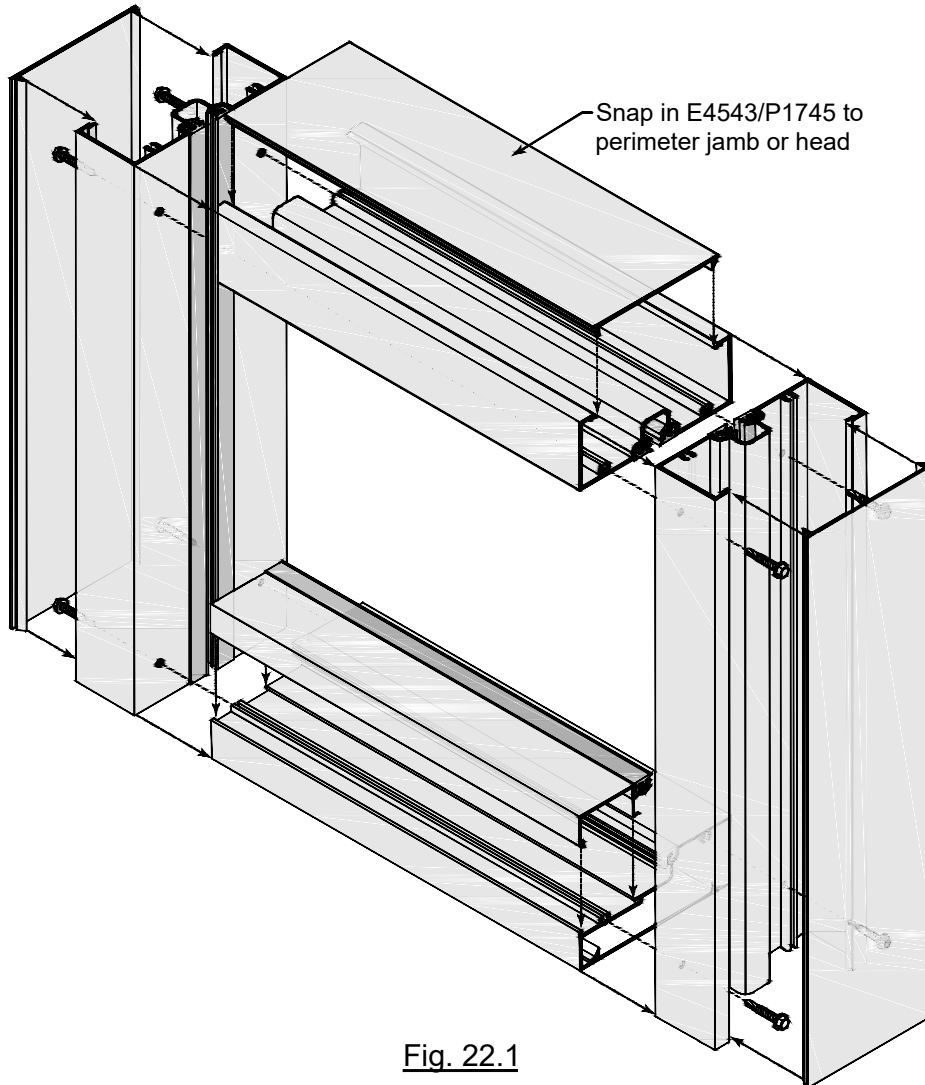


Fig. 22.1

FRAME ASSEMBLY

Step 6: Attach Drywall Adaptors

- A. Attach E45201 to the perimeter E4543 or P1745. SEE Fig. 23.1

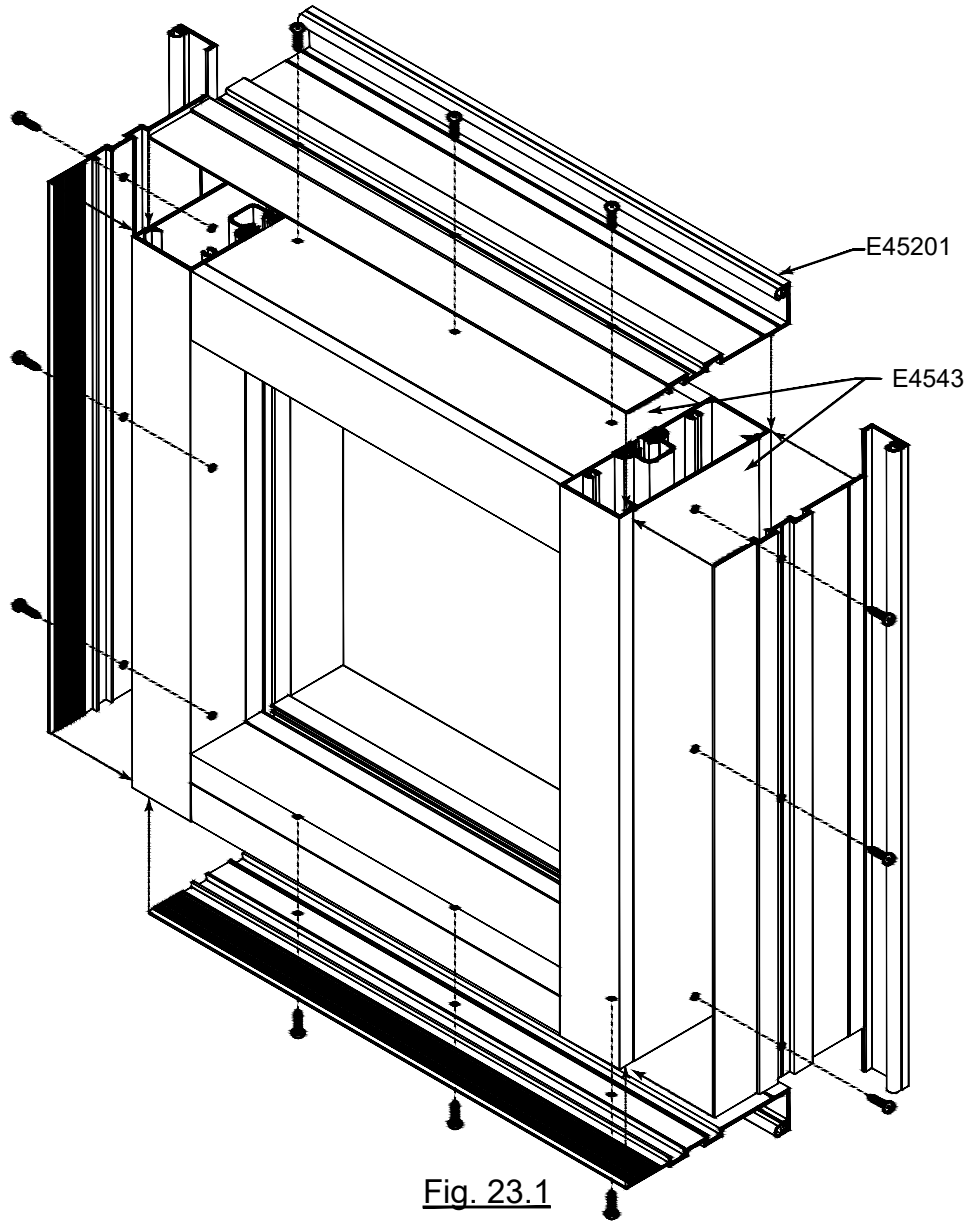


Fig. 23.1

FRAME INSTALLATION

Step 7: Install Assembled Elevation

- A. Install assembled elevation into opening, shim and anchor at perimeter. SEE Fig. 24.1 & Fig. 24.2

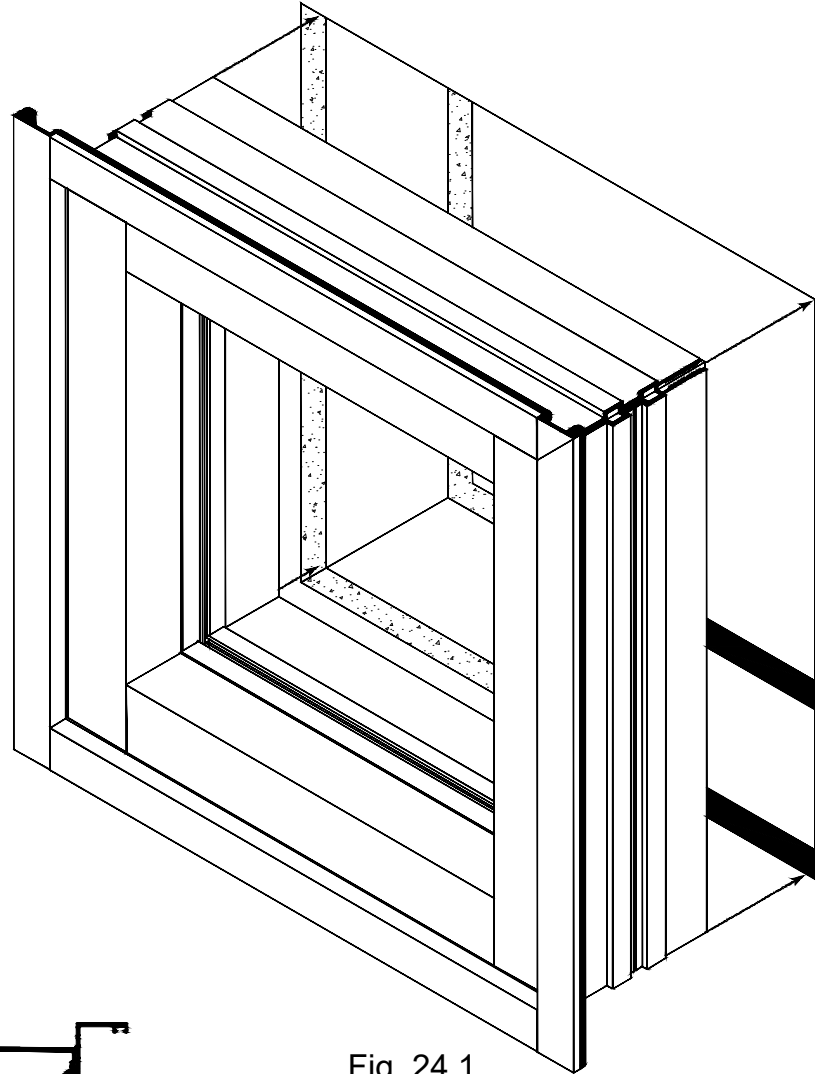


Fig. 24.1

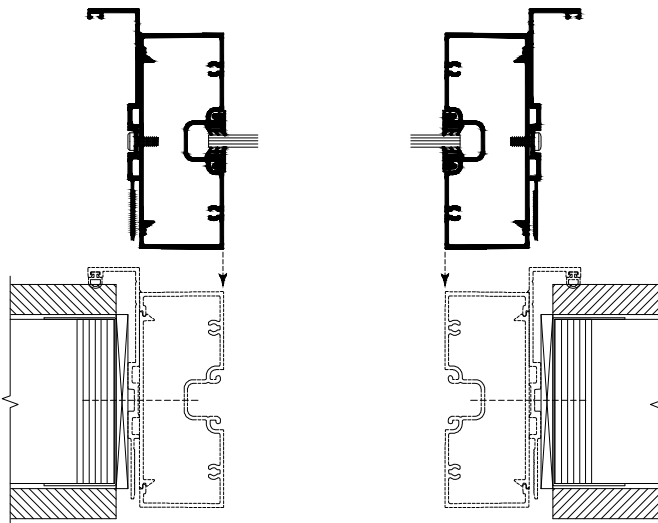


Fig. 24.2

FRAME INSTALLATION

Step 8: Insert Drywall Adaptor

A. Insert E45200 into E45201. SEE Fig. 25.1 & Fig. 25.2

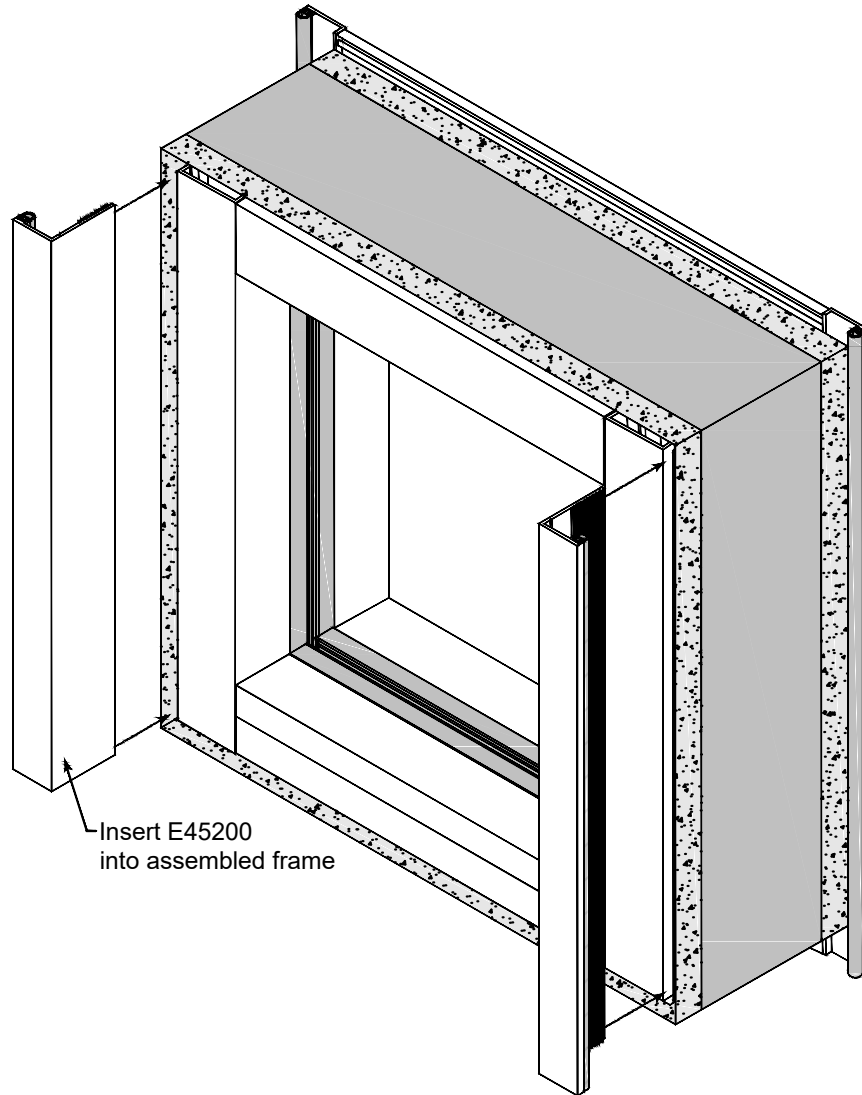


Fig. 25.1

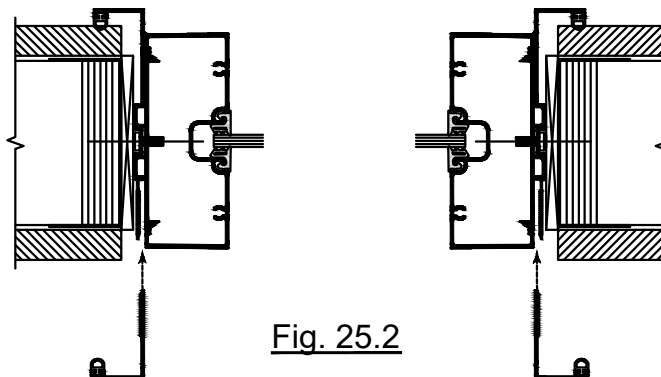


Fig. 25.2