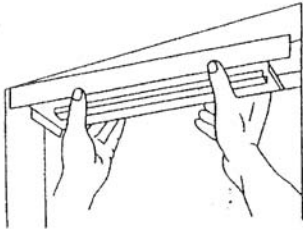
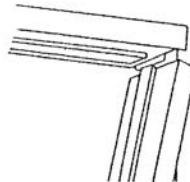


Installation Instructions: DELTAPlus Frame Installation Checklist



1. Check opening for proper swing, then sleeve header over the wall.

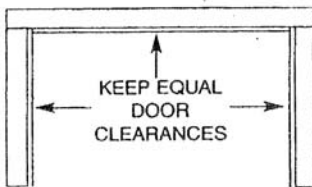


2. Hold jambs at an angle and sleeve the upper portions over the wall. Push upward to engage the jamb tops into the space between the aligning tabs and door stop of the header then sleeve the rest of the jambs completely over the wall. Rotate jambs if wall fit is snug.

3. Pull down on header to bring entire frame down to the finished floor. If carpeting is used, the base on which it is to be laid shall be considered the finished floor. For other floor coverings (Hardwood flooring, tile, etc.), the frame may be raised to rest on blocking of the same thickness as the flooring to be used.

After frame is attached, the blocking can be removed to allow the floor covering to be slipped underneath.

DO NOT FASTEN FRAME YET!



4. Hang prefit door and close into opening. Use door to square opening and adjust frame sections to door to achieve equal clearances between door and frame.

Installation without the use of the door will void the warranty.

FASTENING PROCEDURE

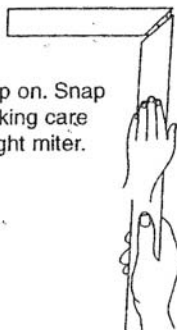
5. Fasten hinge side first with fasteners (dry wall screws) at all hinge locations and follow with fasteners 11 inches on center on the hinge jamb. Then proceed to fasten header, starting at the hinge side and across to strike side (be sure to bring header down into firm contact with jamb tops). Secure head section to jambs with the four (4) steel Corner Clips provided, using 1/2" Type S-12 pan head screws. The long leg of the clip attaches to jamb leg and fits snugly between extruded trim projections. When fastening strike jamb continue to check for uniform clearance.

WHEN FASTENING FRAME ON BACKSIDE BE SURE THAT JAMBS ARE NOT COCKED OR OUT OF LINE.

FIRE RATED FRAMES REQUIRE ONE FASTENER EVERY 11 INCHES (+-.1/4").

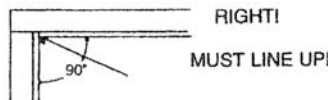
6. ATTACH TRIM

Align trim equidistant on header and snap on. Snap on Jamb trim taking care to position for tight miter.



SOME MODULEX TIPS FOR GOOD INSTALLATIONS

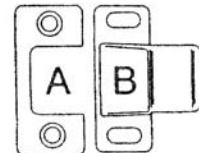
7. For good trim miters, header ends MUST line up evenly with jamb edges.



IMPORTANT
 MAINTAIN 90° ANGLE. DO NOT ALLOW GAP TO SHOW WHERE HEADER MEETS UPRIGHT.

Always install the door and frame together

When installing adjustable strike, fit place "A" over "B" cup section and screw into prepunched holes of strike emboss; close door into opening and push "B" section inward until door fits snugly; the open door and tighten screws firmly.



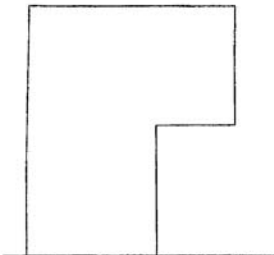
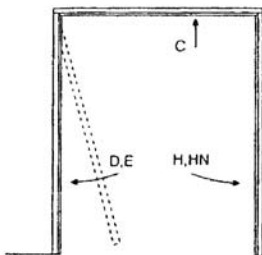
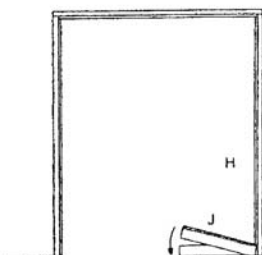
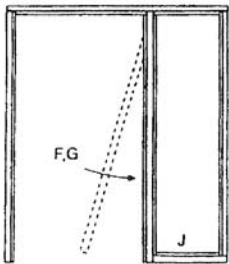
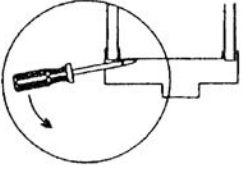
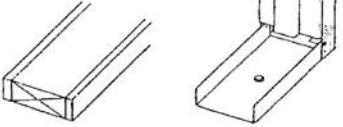
SILENCERS

Application temperature range: 50°F to 100°F. To obtain maximum adhesion, surfaces must be clean, dry, free of grease, wax, oil, dust and other foreign material which might affect adhesion. Clean surfaces with low strength solvents such as isopropyl alcohol or heptane.

Installation Instructions: DELTAPlus Frame Tips and Precautions

1. Check rough opening. Dimensions are nominal door width + 1¼" and jamb height + 1".
2. Check for correct wall thickness.
3. Check for correct hardware preparation and reinforcement. Use closer reinforcement if necessary.
4. Use screws instead of nails so frame can be adjusted if necessary.
5. Use a template door or the actual door to align the frame.
6. Headers and uprights must fit tightly together at 90° angle so trim miters will form perfect 45° angles with no gaps.
7. Apply fasteners 11 inches on center on both sides of the frame, required for fire rating. Fire inspectors may reject frames with inadequate fasteners.
8. To comply with U.B.C. 7-2 97 Positive Pressure the following requirements must be met:
 - Maximum size of opening is 8-0 x 9-0
 - Minimum #6 drywall screws space at 11+¼" and 2" from any end, on both sides
 - Length of screws must be sufficient to penetrate into steel stud by at least ½" and into wood stud at least 1"
 - Minimum wall thickness is 3½"
 - A wood door or steel stiffened fire rated positive pressure steel door must be used. For a wood door use Pemko HSS2000 or equal, or an approved concealed system.
 - See gasketing or door manufacturing installation instructions.
9. Field painted frames must be thoroughly cleaned to remove any substances that would inhibit paint adhesion. Light sanding with Scotchbrite is recommended. Acrylic water based paints require a prime coat and must be tested in advance for compatibility.
10. When applying adhesive backed gasket, frame must be thoroughly cleaned with TSP or similar detergent taking care not to leave a residue.

Installation Instructions: DELTAPlus Sidelite

 <p>1. Check rough opening. Width is nominal door dim. + sidelite + 2" for each mullion + 1/4". Height is jamb height + 1". If using transom, height is jamb height + transom height + 2" for mullion + 1".</p>	 <p>2. Sleeve header with mullion bracket applied, (c) over wall, then sleeve outside jams (either D, E, H, or HN) over wall. All parts must have mullion brackets installed where required.</p>	 <p>3. Install stud with drywall (1) or insert material to finished floor (2).</p>
 <p>4. Slide mullion(s) over bracket at head swinging into place over sill (J). All intermediate mullions (if used) must be positioned before swinging last mullion into place (see "mullions" section below)</p>	 <p>5. Level and center head, fasten hinge jamb, then hang door in opening. Position jamb(s) and/or mullion(s) to maintain equal clearance around door.* When parts are set, fasten jamb(s) to wall. Fasten mullion(s) to sill (J) using tek screw.</p> <p>*Warranty is voided if door is not installed with frame.</p>	 <p>6. Move parts toward mullion to get all joints tight. Glass area should be square when all pieces are tight. Apply fasteners on both sides of frame.</p>
<p>7. Align trim equidistant on header and snap on.</p>	<p>8. Apply jamb trim in the same manner. Then apply all mullion trim and finally sidelite sill trim.</p>	<p>9. Apply silencers to the strike side. Install hardware on door and install adjustable strike (if provided) to keep door tight to jamb when closed. Install other hardware using necessary reinforcements provided.</p>



TA-41 Glass Stop Dimpler Tool -
 Used to meet 2" fire rating requirements

MULLIONS

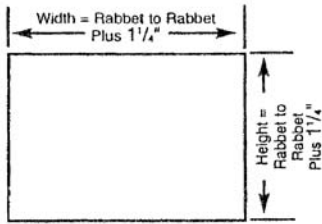
1. Before placing jamb pieces in opening, locate and apply mullion brackets as required. Sleeve jams over walls, but do not fasten.
2. Start at one end of the assembly and place mullions over brackets. If horizontal mullions are used they must be placed on the jamb then on the vertical mullion as it is tipped into position.
3. When all mullions are in place the jams should be brought tight to the mullion.
4. When mullions are in place and joints are tight proceed with anchoring as shown on the instructions.

See other side for additional information

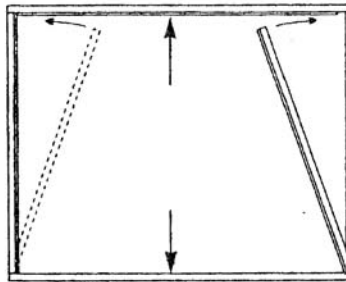
Installation Instructions: DELTA***Plus*** Sidelite Tips and Precautions

1. Check for correct rough opening dimensions.
2. Check for correct wall thickness.
3. Check for correct hardware preparation and reinforcement.
Use closer reinforcement if necessary.
4. Use screws instead of nails so frame can be adjusted if necessary.
5. Use a template door or the actual door to align the frame.
6. Headers and uprights must form a 90° angle so casing miters will form perfect 45° angles with no gaps.
7. Apply fasteners 11 inches on center on both sides of the frame, required for fire rating.
Fire inspectors may reject frames with inadequate fasteners.
8. Field painted frames must be thoroughly cleaned to remove any substances that would inhibit paint adhesion. Light sanding is recommended.
Adhesion of water based paints is not guaranteed.
9. When applying adhesive backed gasket, frame must be thoroughly cleaned.
10. Glass stop must be pierced and dimpled a maximum of 2" from each end for anchorage to maintain fire ratings.

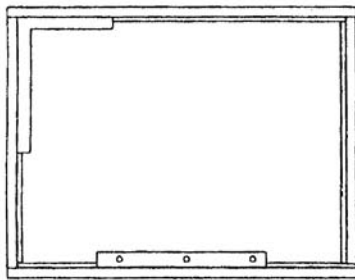
Installation Instructions: DELTAPlus Borrowed Lite



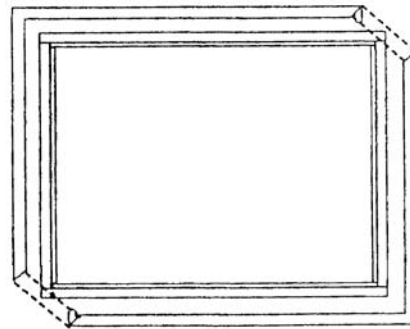
1. Check rough opening. Dimensions are Rabbet to Rabbet + 1 1/4\".



2. Sleeve bottom sill over wall, then top header. Sleeve both jambs over wall and interlock jambs with tabs on header and sill. If using mullions, see mullion instructions below.



3. Level bottom sill and fasten. Using a square, align both side jambs to bottom sill to form square corners. Fasten sides 11\" on center. Pull top header tight to jambs and fasten. Anchor both sides of the frame keeping all joints tight and corners at 90° angles. Apply fasteners 2\" from each end and no more than 11\" on center.



4. Align trim equidistant on header/sill and snap on. Snap on jamb trim and check for tight fit at miters.



TA-41 Glass Stop Dimpler Tool
 Use to meet 2\" fire rating requirements.

MULLIONS

1. Before placing jamb pieces in opening, locate and apply mullion brackets as required. Sleeve jambs over walls, but do not fasten.
2. Start at one end of the assembly and place mullions over brackets. If horizontal mullions are used they must be placed on the jamb then on the vertical mullion as it is tipped into position.
3. When all mullions are in place the jambs should be brought tight to the mullion.
4. When mullions are in place and joints are tight proceed with anchoring as shown on the instructions.

Installation Instructions: DELTAPlus Borrowed Lite Tips and Precautions

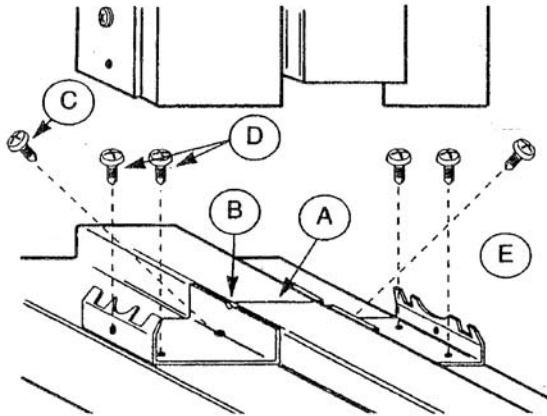
1. Check for correct rough opening dimensions.
2. Check for correct wall thickness.
3. Use screws instead of nails so frame can be adjusted if necessary.
4. Field painted frames must be thoroughly cleaned to remove any substances that would inhibit paint adhesion. Light sanding is recommended. Adhesion of water based paints is not guaranteed.

FIRE RATED OPENING REQUIREMENTS

1. Labeled glass.
2. Glass stop must be pierced and dimpled a maximum of 2" from each end for anchorage.
3. Glazing compound required (Fire rated Silicone Sealant required for use with Firelite glass).
4. Maximum wire glass clearance of 1/8" overall; 1/4" overall for Firelite.
5. Either floor channel can be ordered from the factory or drywall applied on both sides to a steel or wood stud to meet label requirements.
6. Apply fasteners 11 inches on center on both sides (full perimeter of frame). Fire inspectors may reject frames with insufficient fasteners.

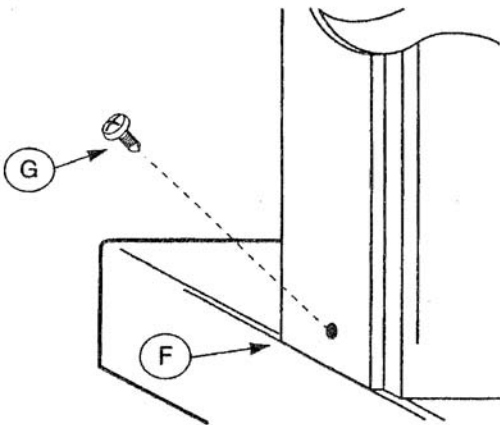
Installation Instructions: Mullion Bracket

1. BRACKET INSTALLATION



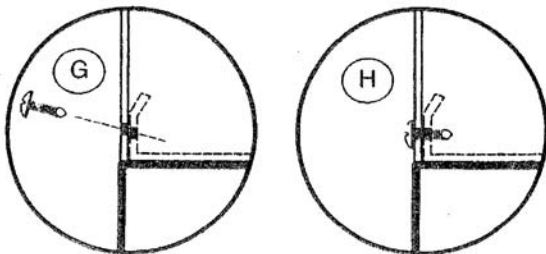
- (A) Establish a center line for mullion and scribe a line across the door stop
- (B) Align the "V" notch in the mullion bracket with the line scribed in step A.
- (C) Apply first screw at a 45° angle to secure bracket to door stop.
NOTE: Be very careful to keep bracket aligned with the scribe line.
- (D) Apply remaining two screws to complete bracket installation.
- (E) Repeat steps B through D to attach second bracket to opposite side. Remember to keep alignment with the scribe line.

2. MULLION INSTALLATION

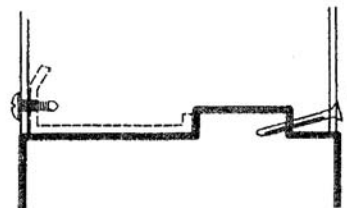


- (F) Press mullion down over the brackets forming a tight fit with the frame.
NOTE: At this point the holes in sides of the mullion are slightly offset from the holes in the mullion brackets. The offset hole will be used to pull the mullion down onto the frame after tightening. (See mullion screw detail)
- (G) Insert screw which will enter at an angle.
- (H) Tighten screw which will bring mullion hole into alignment with bracket hole.

MULLION SCREW DETAIL



On wall sizes $3\frac{3}{4}$ " and less, use mullion bracket on the doorside rabbet and secure opposite side with a $1\frac{1}{4}$ " drywall screw as shown.
NOTE: Always install mullion screw first.



*Caution: Do not over tighten screw