INTEGRITY PATIO DOOR
Mullion Kit Instructions

BEFORE YOU BEGIN

IMPORTANT: Read these instructions thoroughly before beginning to assemble any multiple Integrity units. Failure to assemble as recom-
mended will void any warranty, written or implied. Refer to specific prod-
uct installation instructions for proper installation methods.

NOTE: When specifying or considering the structural load requirements
for windows and doors, it is important to consider the method of fastening
the unit(s) together in addition to the method of fastening multiple
assemblies into an opening. The methods contained herein may not be
appropriate for all performance requirements. Selection of the
appropriate fastening method(s) is the sole responsibility of the installer,
contractor, structural engineer, architect, building owner and/or installer.

Patio door multiple assemblies can be factory ordered with a single or
multiple wide transom, 7336 round top, or 7318 elliptical round top above
two panel doors as long as an RO height of 100 1/2 (2553) is not ex-
ceeded.

Assemblies exceeding these limitations must be field mullied and must be as-
sembled using a structural mullion kit designed specifically for Integrity multi-
ple assemblies. Contact your Integrity dealer for additional information.

The construction adhesive called for in the round top over patio door
instructions should meet AFG-01 specifications, as established by the
American Plywood Association.

WARNING: Practice safety! Wear safety glasses or goggles and
appropriate hearing protection when assembling multiple Integrity
window and door products.

INDEX

Direct Glaze Transom over Patio Door ..................................... 1
Multiple Wide Transom over Patio Door .................................. 3
Round Top/Elliptical over Patio Door ........................................ 4
IRTM over Patio Door .......................................................... 6

YOU WILL NEED TO SUPPLY

Safety glasses Hearing protection
Phillips screwdriver Scrap pieces of wood
Power drill 7/64” drill bit
3/16” drill bit Hacksaw
Clamps
Silicone sealant w/gun
16 gauge 1/2” x 1/2” staples w/gun

PARTS SHIPPED WITH MULLION KIT -
Transom over Patio Door

ILLUSTRATIONS
(not to scale) DESCRIPTION AND COLOR PART/PROFILE NUMBER

Interior mull trim* W/1241

1 - Aluminum mulling pin* A330

Mull sealant foam tape - one sided 96” (2438) 11869508

26 gauge 3 1/2” x 16” galvanized mulling tin - two sheets 02070302

2 - Structural brackets
6” (1816) 11860014
10” (3810) 11860009

Nailing fin connector 10500213

#8 x 3/8” Phillips pan head screws 05050423

#7 x 3/4” Phillips flathead wood screw 11800260

TRANSOM OVER PATIO DOOR

* Length / color will vary depending on particular mull kit ordered.

YOU WILL NEED TO SUPPLY

Safety glasses Hearing protection
Phillips screwdriver Scrap pieces of wood
Power drill 7/64” drill bit
3/16” drill bit Hacksaw
Clamps
Silicone sealant w/gun
16 gauge 1/2” x 1/2” staples w/gun

MULLING PROCEDURES - DIRECT GLAZE TRANSOM OVER PATIO DOOR

1. Secure the patio door in a rigid standing position. Remove the
wing nut and shipping block from the head jamb of the patio door
as shown in illustration 1.

INTERIOR VIEW

2. Temporarily remove the screen door track assembly. Slide the
screen roller bar to one side and remove the
#8 x 1/2” Phillips head screws located in the
screen track. Move the
roller bar to the opposite
side and remove
remaining screws securing screen track.
See illustration 2.

3. Remove the nailing fin/drip cap from the sill
of the transom and
head jamb of the patio
doors. Apply the mull
sealant foam tape along the entire length of the
head jamb ensuring it is
1/4” (6) from the exterior
dge of the Ultrex frame. See illustration

19970051
01/02/2003
4. Loosen the two stationary bracket screws in the head jamb so the points will be just below the surface of the head jamb as shown in illustration 4.

CAUTION: When positioning the transom onto the patio door it will be necessary to have the assistance of another individual.

5. Position the transom on the head jamb of the patio door. Check to be sure that both ends of the transom sill are flush with the patio door head jamb. Apply clamps at each end of the interior side of the head jamb and sill to prevent movement. Use scrap pieces of wood to prevent marring of the wood surface. Make sure that the mull pin kerf lines up on both ends. See illustration 5. Drill out the outer edges of the nailing fin/drip cap kerf at the mullion with a 3/16" drill bit as shown in illustration 5. Clean filings from drilled area to ensure easy installation of the mull pin.

6. Insert mull pin the full length of the mullion ensuring that it is recessed 1/4" to allow for sealant placement later. If necessary drive the mull pin with a hammer. See illustration 6.

7. Fasten interior of mull units with 1/2" x 1/2" 16 gauge staples spaced every 4" (102). See illustration 6.

8. Center mulling tin over mullion and attach to wood jamb liner with 1/2" x 1/2" 16 gauge staples. Follow location and quantity recommendations for staples shown in illustration 7. Measure 3 1/8" (79) from the exterior edge of the jamb and predrill screw locations through mulling fin and first layer of the patio door Ultrex using a 7/64" drill bit. Attach tin to Ultrex with #8 x 3/8" Phillips panhead wood screws. See illustration 7.

9. Attach structural masonry brackets 2" above mullion with two #7 x 5/8" flathead wood screws. See illustration 8.

10. Apply silicone sealant at both mullion joints from the frame exterior edge to the drip cap/nailing fin kerf and across the kerf over the mulling pin as shown in illustration 9. Apply nailing fin connector by removing the paper backing from the connector and pressing into place. See illustration 9.

11. Tighten the two stationary bracket screws loosened earlier in step 4. Replace the screen door track assembly removed earlier in step 2.

12. If applicable jamb extension can now be installed. Follow installation instructions for installing unit into rough or masonry opening.

NOTE: Interior mull trim should be applied after unit is completely installed and interior trim is applied.
MULTIPLE WIDE TRANSOM OVER PATIO DOOR

Parts Shipped With Mullion Kit - Transom over Patio Door

<table>
<thead>
<tr>
<th>ILLUSTRATIONS (not to scale)</th>
<th>DESCRIPTION AND COLOR</th>
<th>PART/PROFILE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interior mull trim*</td>
<td>W1241</td>
</tr>
<tr>
<td></td>
<td>Aluminum mulling pin*</td>
<td>A330</td>
</tr>
<tr>
<td></td>
<td>Mull sealant foam tape - one sided</td>
<td>96° (2438) 11869508</td>
</tr>
<tr>
<td></td>
<td>Steel mull tie</td>
<td>11040358</td>
</tr>
<tr>
<td></td>
<td>Structural masonry bracket</td>
<td>6&quot; 11860014</td>
</tr>
<tr>
<td></td>
<td>10&quot; 11860009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nailing fin connector</td>
<td>10500213</td>
</tr>
<tr>
<td></td>
<td>#7 x 5/8&quot; Phillips flathead wood screw</td>
<td>11800758</td>
</tr>
</tbody>
</table>

* Length / color will vary depending on particular mull kit ordered.

YOU WILL NEED TO SUPPLY

Safety glasses
Phillips screwdriver
Power drill
3/16" drill bit
Clamps
Silicone sealant w/gun
16 gauge 1/2" x 1/2" staples w/gun

Phillips screwdriver
Power drill
3/16" drill bit
Hacksaw
16 gauge 1/2" x 1/2" staples w/gun

Mulling Procedures - Multiple Wide Direct Glaze Transom over Patio Door

NOTE: Instructions below describe mulling a two wide direct glaze transom over a 6068 patio door, procedures are similar for a three wide transom.

1. Lay the two transom frames on a flat surface in the desired mullling configuration (interior facing up). Remove nailing fin from sill and side jambs that will be mulled together. Apply mull sealant foam tape along the entire length of one jamb to be mulled ensuring it is located 1/4" (6) from the exterior edge of the Ultrex frame. See illustration 10.

IMPORTANT: Units should be flush and square with each other.

2. Position units together in the desired configuration. Check to be sure that the frames at both ends of the mullion are flush and the nailing fin kerfs are aligned. Lightly clamp units together on interior (use wood blocks to protect interior) near each end to hold mulled units in place. See illustration 11.

3. Drill out the outer edges of the nailing fin/drip cap kerf at the mullion with a 3/16" drill bit as shown in illustration 12. Clean fillings from drilled area to ensure easy installation of the mull pin. Insert mull pin the full length of the mullion ensuring that it is recessed 1/4" to allow for sealant and horizontal mull pin application later. If necessary drive the mull pin with a hammer. See illustration 12.

4. Fasten interior of mulled units with 1/2" x 1/2" 16 gauge staples spaced every 4" (102). Make sure mulled units are flush and square at sill and jamb liners. See illustration 13.

5. Install steel mullion tie across head jambs and fasten with two #7 x 5/8" Phillips flathead wood screws into each unit. See illustration 14. Install structural masonry brackets 4" (102) from mullion and attach with one #7 x 5/8" Phillips head screw as shown in illustration 14.
6. Apply silicone sealant at the head jamb mullion joint from the frame exterior edge to the drip cap/nailing fin kerf and across the kerf over the mulling pin as shown in illustration 9. Apply nailing fin connector by removing the paper backing from the connector and pressing into place. See illustration 15.

7. Follow preceding instructions on mulling a single transom over an Integrity patio door.

**ROUND TOP/ELLIPTICAL OVER PATIO DOOR**

**Parts Shipped With Mullion Kit - Round Top over Patio Door**

<table>
<thead>
<tr>
<th>ILLUSTRATIONS (not to scale)</th>
<th>DESCRIPTION AND COLOR</th>
<th>PART/PROFILE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Interior Mull Trim" /></td>
<td>Interior Mull Trim</td>
<td>W1241</td>
</tr>
<tr>
<td><img src="image" alt="V803 Connecting barb fastener" /></td>
<td>V803 Connecting barb fastener 96” (2438)</td>
<td>15812008</td>
</tr>
<tr>
<td><img src="image" alt="Mull sealant foam tape" /></td>
<td>Mull sealant foam tape 96” (2438)</td>
<td>11869508</td>
</tr>
<tr>
<td><img src="image" alt="26 gauge 3 1/2” x 16” galvanized mulling tin - two sheets" /></td>
<td>26 gauge 3 1/2” x 16” galvanized mulling tin - two sheets</td>
<td>02070302</td>
</tr>
<tr>
<td><img src="image" alt="Structural Masonry Bracket" /></td>
<td>Structural Masonry Bracket 6” (1816) 10” (3810)</td>
<td>11860014 11860009</td>
</tr>
<tr>
<td><img src="image" alt="Nailing fin connector" /></td>
<td>Nailing fin connector</td>
<td>10500213</td>
</tr>
<tr>
<td><img src="image" alt="#8 x 3/8” Phillips pan head screws" /></td>
<td>#8 x 3/8” Phillips pan head screws</td>
<td>05050423</td>
</tr>
<tr>
<td><img src="image" alt="#7 x 5/8” Phillips flathead wood screw" /></td>
<td>#7 x 5/8” Phillips flathead wood screw</td>
<td>11800758</td>
</tr>
</tbody>
</table>

* Length / color will vary depending on particular mull kit ordered.

**YOU WILL NEED TO SUPPLY**

- Safety glasses
- Hearing protection
- Phillips screwdriver
- Power drill
- 7/64” drill bit
- Clamps
- Silicone sealant w/gun
- 16 gauge 1/2” x 1/2” staples w/gun
- APA rated AFG-01 spec. (or equivalent) sealant/adhesive

**Mulling Procedures - Round Top/Elliptical over Patio Door**

1. Secure the patio door in a rigid standing position. Remove the wing nut and shipping block from the head jamb of the patio door as shown in illustration 16.

2. Temporarily remove the screen door track assembly. Slide the screen roller bar to one side and remove the #8 x 1/2” Phillips head screws located in the screen track. Move the roller bar to the opposite side and remove remaining screws securing screen track. See illustration 17.

3. Remove the shipping blocks from the sill of the round top unit as shown in illustration 18.

4. Insert the connecting barb fastener into the kerf along the entire length of the sill on the round top unit as shown in illustration 19. Apply a 1/8” (3) bead of APA rated AFG–01 sealant/adhesive to the exterior side of the connecting barb as shown in illustration 19.
5. Apply mull sealant foam tape along the entire length of the patio door head jamb ensuring that it is located 1/4" (6) from the exterior edge of the Ultrex frame. Leave approximately 1 1/2" (38) excess to wrap around each jamb. Remove paper backing.

6. Loosen the two stationary bracket screws in the head jamb so the points will be just below the surface of the head jamb as shown in illustration 21.

**CAUTION:** When positioning the round top onto the patio door it will be necessary to have the assistance of another individual.

7. Align round top unit flush with side jambs and exterior of patio door. Press barb into patio door drip cap kerf to mull. See illustration 22.

**NOTE:** Before proceeding make sure that the vinyl connecting barb is fully seated in the kerfs of both units and that they are flush and square.

8. Use wood blocks and clamp on exterior to press together. Start on one side and clamp every 2" (51) until completely joined.

**CAUTION:** Do not use excessive pressure on exterior clamp, damage may result to Ultrex.

9. Lightly clamp units together on interior (use wood blocks to protect interior) near each end to hold mull units in place. Fasten interior of mull units with 1/2" x 1/2" 16 gauge staples spaced every 4" (102). See illustration 23.

10. Center and attach mulling tin over mullion and fasten securely with 1/2" x 1/2" 16 gauge staples. Follow location and quantity recommendations shown in illustration 24. Measure 3 1/8" (79) from the exterior edge of the jamb and predrill screw locations through mulling tin and first layer of the patio door Ultrex using a 7/64" drill bit. Attach tin to Ultrex with #8 x 3/8" Phillips panhead wood screws. See illustration 24.

11. Attach structural masonry brackets 2" above mullion with two #7 x 5/8" flathead wood screws. See illustration 24.

12. Apply silicone sealant at mullion joints from the frame exterior edge to the drip cap/nailing fin kerf and across the kerf over the recessed mulling pin as shown in illustration 25. Apply nailing fin connectors at mullions by removing the paper backing from the connector and pressing into place.

13. Tighten the two stationary bracket screws loosened earlier in step 6. Replace the screen door track assembly removed earlier in step 2.

14. If applicable jamb extension can now be installed. Follow installation instructions for installing unit into rough or masonry opening. Interior mull trim should be applied after unit is completely installed and interior trim is applied.
### Standard Parts Shipped with IRTM to Patio Door Mullion Kits

<table>
<thead>
<tr>
<th>ILLUSTRATIONS (not to scale)</th>
<th>DESCRIPTION AND COLOR</th>
<th>PART/PROFILE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - Mull filler blocks 12&quot; (305)</td>
<td></td>
<td>W7431 31500006</td>
</tr>
<tr>
<td>2 - Mulling tin 3 1/2 x 16&quot; (64x406)</td>
<td></td>
<td>02070302</td>
</tr>
<tr>
<td>2 - Foam nailing fin connectors</td>
<td></td>
<td>10500213</td>
</tr>
<tr>
<td>1 Roll - Mull sealant foam tape One sided adhesive 96&quot; (2438)</td>
<td></td>
<td>11869508</td>
</tr>
<tr>
<td>1 - Aluminum mulling pin*</td>
<td></td>
<td>A330</td>
</tr>
<tr>
<td>1 - Mull trim*</td>
<td></td>
<td>W1242</td>
</tr>
<tr>
<td>4 - Structural brackets 6&quot; 10&quot;</td>
<td></td>
<td>11860014 11860009</td>
</tr>
<tr>
<td><strong>NOTE:</strong> 10&quot; brackets are not a part of the mull kit. Used on 6 9/16 jambs, these must be ordered separately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 - #7x5/8&quot; Phillips flat head wood screws</td>
<td></td>
<td>11800758</td>
</tr>
<tr>
<td>6 - #8x3/8&quot; Phillips pan head screws</td>
<td></td>
<td>05050423</td>
</tr>
</tbody>
</table>

* Length / color will vary depending on particular mull kit ordered.

### Mulling Procedures

1. Lay frames on a flat surface in the desired mulling configuration (interior side up). Remove nailing fin from head jamb of patio door. Remove shipping blocks from sill of IRTM. Attach additional mull filler blocks to the IRTM sill as needed, flush to the interior, with 3/16" x 1" staples. See illustration 1.

2. Apply mull tape to the entire width of the head jamb on the patio door ensuring that it is located 1/4" (6) from the exterior edge of the Ultrex frame. See illustration 2.

3. Drill out end of nailing fin/drip cap kerf on IRTM and Patio Door with a 3/16" (5) drill bit. This will allow installation of the mulling pin. See illustration 3.

### YOU WILL NEED TO SUPPLY

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety glasses</td>
<td>Hearing protection</td>
</tr>
<tr>
<td>Power drill/driver w/Phillips head bit</td>
<td>Clamps</td>
</tr>
<tr>
<td>7/64” drill bit</td>
<td>Silicone sealant w/ gun</td>
</tr>
<tr>
<td>1/2” crown x 1” leg 16 gauge staples</td>
<td>Staple gun</td>
</tr>
<tr>
<td>1/2” crown x 1/2” leg 16 gauge staples</td>
<td>Hacksaw</td>
</tr>
</tbody>
</table>
4. Measure length of mullion at exterior, subtract 1/2" (13) and cut mulling pin to size with a hacksaw.

5. Place frames together so ends are flush and nailing fin kerfs are aligned. Lightly clamp the units together. Slide the aluminum mulling pin into the nailing fin/drip cap kerf. A hammer may aid in the application of the mull pin. The mull pin ends must be recessed 1/4" to allow sealant application later. See illustration 4

6. Making sure the mulled units are flush at the interior and square on the ends, fasten the interior of mulled units with 1/2" x 1" staples spaced every 4" (102). See illustration 5.

7. Center and attach mulling tin over mullion 3/8" (10) from the interior and fasten with 1/2" x 1/2" staples to jamb of round top unit. Measure and pre-drill screw locations with a 7/64" drill bit through the first layer of the patio door Ultrex jamb as shown. Attach with #8 x 3/8" pan head screws. Finish fastening the mull tin with 1/2" x 1/2" staples on the wood jamb liner of the patio door unit. See illustration 6.

8. Apply structural mull brackets 4" from each side of mullion on both jambs. Attach each of the brackets with the two #7 x 5/8" screws provided. See illustration 7. Follow instructions included with brackets.

9. Apply silicone sealant at the mullion frame exterior edge to the drip cap/nailing fin kerf and across the kerf over the mulling pin as shown in illustration 8.

10. Apply nailing fin connectors to nailing fin at mullion and seal around the edge of the connectors as shown in illustration 9. If applicable, jamb extension can now be installed. Follow installation instructions for installing unit into rough or masonry opening.

NOTE: It is important that care be exercised when moving a mulled assembly from the mullion area to the rough opening.