The B&D Roll-A-Doors in combination with one or more removable mullions makes possible almost any width of door opening. A number of smaller doors rather than one big door combines the advantages of individual low effort operation with the privacy and weather protection of a smaller opening. Whenever needed, with all doors in the raised position, the mullion can be simply disengaged to provide an unrestricted full width opening.

OPENING CONSTRUCTION
In addition to the necessary side and head clearances the structure above the opening needs to have sufficient strength to accommodate the weight of the doors at the point where the mullion and door supporting brackets are attached. It is also important for the door posts, piers or columns at each side of the opening to be flush or in line with the back face of the head or lintel. Packing of the lintel or conversely the piers may be necessary to achieve this situation.

MEASURING
When measuring the height of an opening where mullions are to be used it is most important that the measurement of the opening where the mullion is to be located be given as well as the side measurement. This is needed so that due allowance can be made for any irregularity in the floor or lintel levels. Also, the construction of the lintel or header should be checked that it has sufficient strength and braced in such a way to accommodate the weight of two or more doors.Lintels that subsequently sag will jamb the mullion and make it inoperable.

CLEARANCES* (Refer Note)
Head and side clearances for openings using mullions are the same as those for single doors which are shown in the dimension panel on the appropriate B&D Roll-A-Door Series 1 or 2 brochure and installation sheet. When the mullion is removed it should be noted that the top bracket securing the mullion will project downwards 90mm (Series 1 doors), 70mm (Series 2 doors to 2400 high), 0mm (Series 2 over 2400mm).

MULLION DATA & DIMENSIONS
Series 1 (Residential & Commercial)
Each mullion comprises a removable section and a support bracket. The removable section is of extruded aluminium incorporating two “U” channel guides and a fluted face. This section engages with a support bracket which is designed to accommodate the axles of two separate doors. When required the removable section is disengaged from the bracket by activating a spring loaded latch.

Dimensions
Dimensions for Series 1 mullions.

| Overall width including guide section nominal | 120mm |
| Effective width excluding guide section nominal | 70mm |

Opening Size Calculations
Two Doors - Where 75mm minimum side fixing is available.
The width of the opening equals the sum of the two door widths plus 20mm, example: Using two 2490mm wide doors then the opening will be 2490 x 2 plus 20mm = 5000mm. Conversely, the total width of the doors required will equal the width of the opening less 20mm.

Two Doors - Where 100mm side fixing is available.
Because of the additional side room available the allowance of 20mm can be ignored if so desired, thus making the opening equal to the sum of the two door widths, ie. 4980mm as in the example above.

Three or More Doors
The widths of the opening equals the sum of the doors plus 20mm for the first mullion and 70mm for each additional mullion. Example: Using three 2490mm wide doors then the opening will be 2490mm x 3 = 7470mm plus 90mm, ie. 20mm + 70mm = 7560mm.

Series 2 (Industrial & Commercial)
Each mullion comprises an extruded aluminium removable section engaging into a support bracket designed with a common support plate to accommodate the axles of two individual doors. The removable section incorporates two “U” channel guides to take Series 2. The section is specially reinforced for use with doors over 3000mm high. The removable section can be of the ‘lift out’ type if not more than 3000mm high which engages with the support bracket by way of a spring loaded plunger.
Hinged Mullions
For all doors over 3000mm high a hinged mullion is advised. With this system the mullion is connected to the supporting bracket by a hinge, and is raised up out of the way by a winch or counterweight via a wire rope and a series of pulleys (these items are not included with the mullion kit).

Chain Operated Doors
Standard mullions cannot accommodate the side room required for chain wheel operation. Double door arrangements with chain operation should therefore have their chain wheels mounted on the side away from the mullion.

Dimensions
Dimensions for Series 2 mullions.

<table>
<thead>
<tr>
<th>Series 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall width including guide section</td>
<td>200mm</td>
</tr>
<tr>
<td>Effective width excluding guide section nominal</td>
<td>115mm</td>
</tr>
</tbody>
</table>

Opening Size Calculations

Two Doors – Series 2
The width of the opening equals the sum of two door widths plus 15mm. Conversely, the size of the doors required will equal the width of the opening less 35mm.

INSTALLATION INSTRUCTIONS

How to install mullions for two doors of equal width.
Axle clamps must be fitted to both axles.

You should have:

SERIES 1

**Bracket**

**Floor Plate**

**Spring Loaded Plunger**

**Head Stops**

**Tongue**

**Removable Mullion**

SERIES 2
**FIGURE 3**
Establish a string line across the floor in line with the back of the opening.

**FIGURE 4**
Place floor plate in position and fasten. Chisel or chip out recess for mullion tongue.

Minimum depth:
Series 1 - 12mm
Series 2 - 25mm

**FIGURE 5**
*NOTE: SERIES 1 DOORS ONLY.*
See ‘Clearances’.

Sit mullion bracket onto the mullion engaging the spring loaded plunger.

**NOTE:** Mullion should be correct length ie. The mullion bracket should protrude down into the opening 90mm. If not the bottom of the mullion should be cut following the original shape.

**FIGURE 6**
With bracket in position between guide lines on lintel, mark a line across the top of the bracket.

Then disengage the bracket and remove mullion.

**FIGURE 7**
Clearance for removal of mullion.

Lift bracket up, mark and drill holes.

Ensure bolt heads do not foul nylofelt or slide clips.

3-4mm for masonry lintel. 6mm or more for timber to allow for any sag.

**FIGURE 8**
Check operation and proceed with installation of the doors.

**NOTE:** The Series 1 mullion bracket had been designed for installation of doors in the restricted headroom position. Follow the appropriate steps in the door installation instructions.
Removable Mullions Installation Instructions

INSTALLATION INSTRUCTIONS

Of mullions for three or more doors or doors of different widths.

NOTE: If a combination of two Series 1 mullions is to be used one of the brackets is supplied with a removable common bracket plate. This is necessary to allow the middle door to be placed into position. The procedure is basically the same as for single mullion fixing, except the positioning of the centre mark for the mullion brackets. This determined as follows:

FIGURE 9

Mark off a measurement equal to the nominal* width of the first door plus 10mm for Series 1, 20mm for Series 2.

For the second and successive mullions mark off a measurement equal to the nominal* width of the second door plus 70mm for Series 1 or 115mm for Series 2.

Alternatively, make a guidestick to the actual width of the first door plus 10mm. Install the first mullion in position and the second mullion held temporarily in position, butt the guidestick against the inside guide channels of both mullions. Mark the bracket position at the lintel and proceed with installation.

NOTE: The nominal width is 5mm greater than the actual measured width of the curtain. (eg. a nominal 2450mm wide door actually measures 2445mm.

FIGURE 10

Alternatively, make a guidestick to the actual width of the first door plus 10mm. Install the first mullion in position and the second mullion held temporarily in position, butt the guidestick against the inside guide channels of both mullions. Mark the bracket position at the lintel and proceed with installation.

SPECIAL NOTE - INDUSTRIAL HINGED MULLIONS

Separate guidelines relating to the installation of hinged mullions are available. However due to the variation in situations it is recommended that trained installers carry out this work. The basic measurement details noted in this brochure also apply to Series 2 hinged mullions.