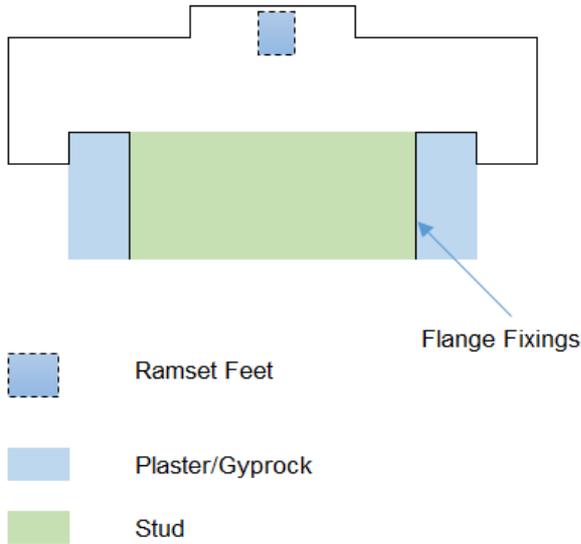




## FRAME FIXING DETAILS

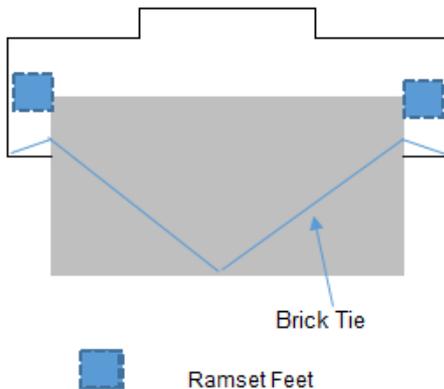
### 1. Fire Rated Stud and Plasterboard Wall

- Ramset Feet:** Centre of Stop Section  
Min 20mm Length Ramset Pins
- Flange Fixings:** Max 300mm Centres to Hinge and Lock Stiles  
Min 10 Gauge Steel Flat top screws, 16mm in length
- Backfill:** Grout / Cement / Mortar Mix / Plaster



### 2. Masonry Wall

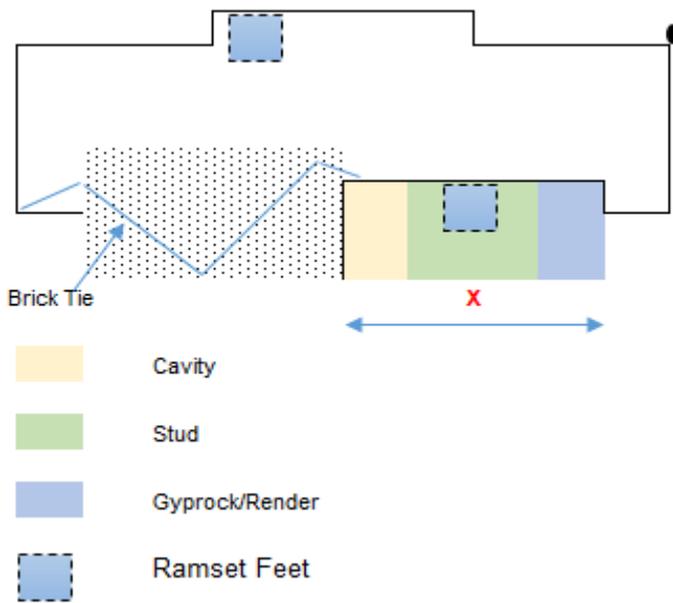
- Ramset Feet:** Positioned in centre of each architrave  
Min 20mm Length Ramset Pins
- Brick Ties:** Max 400mm Centres to Hinge and Lock Stiles  
3mm Galvanised or stainless-steel wire ties
- Backfill:** Grout / Cement / Mortar Mix / Plaster





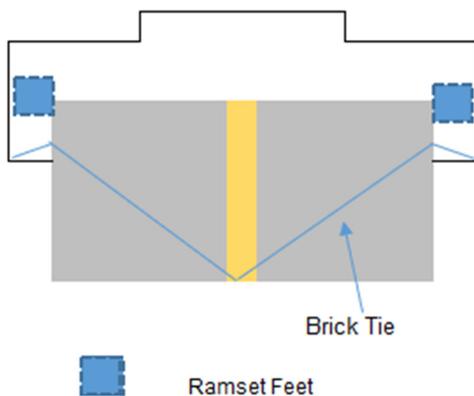
### 3. Brick Veneer

- Ramset Feet:** Positioned at stop Section, in line with centre of brick/block  
 Additional tab to middle of stud side section when 'x' measurement is greater than 100mm  
 Min 20mm Length Ramset Pins
- Brick Ties:** Max 400mm Centres to Hinge and Lock Stiles  
 3mm Galvanised or stainless-steel wire ties
- Stud Fixings:** Max 300mm Centres to Hinge and Lock Stiles  
 Steel Stud - Min 10 Gauge Steel Flat top screws, 16mm in length through the 'x' section of the frame return  
 Timber Stud - Min 10 Gauge Steel Screws that are appropriate length to pass through the stud and 'x' section of the frame return
- Backfill:** Grout / Cement / Mortar Mix / Plaster



### 4. Double Brick Wall

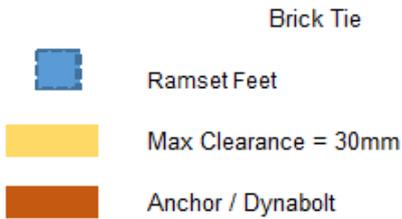
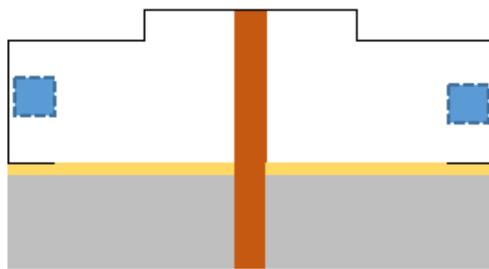
- Ramset Feet:** Positioned in centre of each architrave  
 Min 20mm Length Ramset Pins
- Brick Ties:** Max 400mm Centres to Hinge and Lock Stiles  
 3mm Galvanised or stainless-steel wire ties
- Backfill:** Grout / Cement / Mortar Mix / Plaster
- Note:** Installer to close off cavity to ensure frame is fully closed and filled.





## 5. Retrofit Wall

- Ramset Feet:** Positioned in line with centre of stop section  
Min 20mm Length Ramset Pins
- Anchors/Dyna bolts:** Max 400mm Centres to Hinge and Lock Stiles  
Min 10mm diameter Sleeved anchors  
Off Centred fixings if fitting into a double brick wall
- Backfill:** Grout / Cement / Mortar Mix / Plaster
- Clearances:** Max 30mm between Frame and Wall  
Clearance areas must be fully backfilled
- Packers:** Material may be plastic, steel, or other non-combustible materials  
Must be secure when backfilling the frame and clearance areas



## 6. Cast-in Concrete Wall Systems

- Ramset Feet:** Positioned in line with centre of stop section  
Min 20mm Length Ramset Pins
- Flange Fixings:** Max 300mm Centres to Hinge and Lock Stiles  
Min 10 Gauge Steel Flat top screws, 16mm in length
- Backfill:** Concrete – Cast in with the wall  
Door Frame must be adequately braced before concrete filling wall + frame
- Note:** Bracing every 500mm

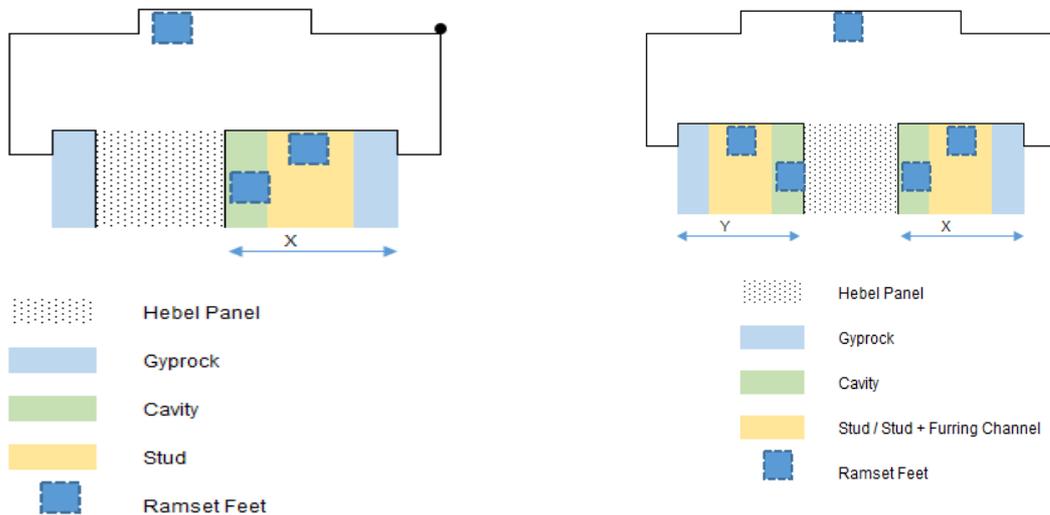






## 9. Hebel Cavity and Combination Walls

- Ramset Feet:** Stop Section, in line with centre of Hebel panel  
 Additional tab to middle of stud side section when 'x' measurement is greater than 100mm  
 Additional tab to middle of stud side flange when 'x' measurement is greater than 100mm  
 Min 20mm Length Ramset Pins
- Flange Fixings:** Max 300mm Centres to Hinge and Lock Stiles  
 Min 50mm coarse thread bugle head screws to one flange side  
 14-10 x 65mm hex head type 17 screws to other flange side
- Stud Fixings:** Max 300mm Centres to Hinge and Lock Stiles  
 Steel Stud - Min 10 Gauge Steel Flat top screws, 16mm in length through the 'x' section of the frame return  
 Timber Stud - Min 10 Gauge Steel Screws that are appropriate length to pass through the stud and 'x' section of the frame return
- Backfill:** Grout / Cement / Mortar Mix / Plaster



## Wide Hebel Cavity and Combination Walls

- Ramset Feet:** Stop Section, in line with centre of Hebel panel  
 Additional tab to middle of stud side section when 'x' and/or 'y' measurement is greater than 100mm  
 Additional tab to middle of stud side flange when 'x' and/or 'y' measurement is greater than 100mm  
 Min 20mm Length Ramset Pins
- Flange Fixings:** Max 300mm Centres to Hinge and Lock Stiles  
 Min 50mm coarse thread bugle head screws to one flange side  
 14-10 x 65mm hex head type 17 screws to other flange side
- Stud Fixings:** Max 300mm Centres to Hinge and Lock Stiles  
 Steel Stud - Min 10 Gauge Steel Flat top screws, 16mm in length through the 'x' section of the frame return  
 Timber Stud - Min 10 Gauge Steel Screws that are appropriate length to pass through the stud and 'x' section of the frame return
- Backfill:** Grout / Cement / Mortar Mix / Plaster
- Throat Width** Max 350mm