

# **PARTIWALL®**

# SHAFTLINER™ Fire Barrier Installation Procedure

- Ensure that SHAFTLINER™ panels, Partiwall® studs and end tracks are the same length. Cut to length if required.
- In a multi-level SHAFTLINER fire barrier, Partiwall studs at upper levels must align with the studs below.
- Partiwall aluminium clips must be installed progressively as SHAFTLINER fire barrier is erected.
- Partiwall aluminium clips must be spaced at maximum 600mm horizontally and 3000mm vertically.
- For aligned floors Partiwall aluminium clips must be directly opposite on both sides of the Partiwall studs.
- For offset floors Partiwall aluminium clips can be staggered in line with floors on each side of the wall.
- Fix Partiwall aluminium clips to Partiwall studs with 2 x 10g x 16mm Type 'D' drill point wafer head screws (2 x 10g x 30mm Type 'D' drill point wafer head screws if fixing through 16mm FIRESTOP® plasterboard).
- Fix Partiwall aluminium clip to timber frame with 2 x 6g x 25mm Type 'W' timber screws or 2 x 2mm x 30mm galvanised nails.
- SHAFTLINER fire barrier must be adequately braced against wind forces until the building is enclosed.



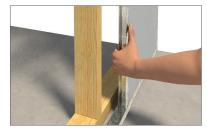
#### Step 1: Install base track

- Use full track lengths, spaced 6mm apart.
- Position Partiwall track at min 20mm clearance along full length of the timber frame, starting and ending in line with the timber frame.
- Fix each track length to foundation with approved all-steel fasteners at 600mm maximum spacing and at both ends.



## Step 2: Install first SHAFTLINER panel

- To enable fixing of aluminium clip, cut the first SHAFTLINER panel to width so that its edge falls not less than 50mm from timber stud.
- Fit SHAFTLINER panel fully down into the Partiwall base track and align with end of track.
- Fit Partiwall end track tightly over outer edge of SHAFTLINER panel and screw fix end and base tracks junction with 10g x 16mm Type 'D' drill point wafer head screws.
- Fix Partiwall end track to timber frame with Partiwall aluminium clip.



# Step 3: Install first Partiwall stud and clip

- Fit Partiwall stud fully down into the Partiwall base track and move tight over the edge of SHAFTLINER panel. Tap lightly to give a snug fit.
- Fit second SHAFTLINER panel into Partiwall base track and push tight into the Partiwall stud.
- Fix Partiwall stud to timber frame top plate with Partiwall aluminium clip.



# Step 4: Continue installing SHAFTLINER panels and Partiwall studs

- Continue to install SHAFTLINER panels and Partiwall studs until reaching end of wall.
- As framing progresses, fix Partiwall studs to timber framing with Partiwall aluminium clips.
- Cut the last SHAFTLINER panel in line with the end of Partiwall base track.
- Fit Partiwall end track tightly over the edge of the panel and screw fix end and base tracks junction with 10g x 16mm drill point wafer head screws both sides.
- Fix end track to timber frame with Partiwall aluminium clip.

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Systems Solutions Partiwall®



#### Step 5: Seal base track

 Apply continuous Firesound<sup>™</sup> sealant along Partiwall<sup>®</sup> base track/floor junction on one side only.



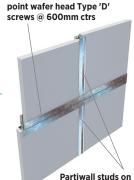
# Step 6: At mid-floors

- Screw laminate 16mm FIRESTOP® to one side of SHAFTLINER™ fire barrier with 10g x 40mm Type 'L' laminating screws at max 400mm centres (both directions) and nom 10mm from the edges. Ensure minimum 150mm overlap above floor and below ceiling level. Plasterboard joints do not need to be set with compounds. Ensure joints are tight.
- Screw fix Partiwall aluminium clips through 16mm FIRESTOP into Partiwall studs and end tracks and fix Partiwall aluminium clips to timber frame.



#### Step 7: Install top track

- Using full track lengths, fit Partiwall top track over the installed SHAFTLINER panels and Partiwall studs.
- Push top track fully down over the top of Partiwall studs.
- Screw fix top and end track junctions with 10g x 16mm
  Type 'D' drill point wafer head screws.



upper levels must

align with studs below

Continuous Partiwall tracks fixed back-to-back

with 10g x 16mm drill

#### Step 8: Next level of SHAFTLINER fire barrier

- Using full track lengths, install Partiwall bottom track for the upper level of SHAFTLINER fire barrier back-to-back with the top track below and leaving 6mm gap between track lengths. Screw fix each track length with 10g x 16mm wafer head screws at 600mm maximum centres and at each end.
- Install SHAFTLINER panels, Partiwall studs and clips as per level below. Partiwall studs must align with studs below.



## Step 9: At roof

- Measure and cut SHAFTLINER panels and Partiwall studs to pitch of roof.
- Allow 25mm gap at top of SHAFTLINER panels for frame shrinkage and roof movement in pitched roof, flat metal roof, parapet and box gutter applications.
- Fix Partiwall track on rake and fix Partiwall studs to roof frame on one side with Partiwall aluminium clips.
- Screw fix top and end track junctions with 10g x 16mm Type 'D' drill point wafer head screws.
- Screw-laminate 16mm FIRESTOP to one side of SHAFTLINER with 10g x 40mm Type 'L' laminating screws at 400mm max centres (both directions) and nom 10mm from edges. Plasterboard joints do not need to be set with compounds. Ensure joints are tight.
- Screw fix Partiwall aluminium clips through 16mm FIRESTOP into Partiwall studs and end tracks and fix Partiwall aluminium clips to timber frame.



# Step 10: Seal for fire

- Install continuous USG Boral Firepack® mineral fibre packer at external wall junctions (brick veneer construction only) and under roofing.
- Fill cavities between roof battens with compressed USG Boral Firepack mineral fibre packer.

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