tenon
PARTITIONS

Flexplus

Method Statement

11/04

method statement

Flexplus

INTRODUCTION

We strongly recommend that all sections of this document be read thoroughly before site installation commences. It is important that the relevant Health and Safety legislation be observed at all times i.e., suitable clothing and equipment etc,

These installation guidelines have been prepared based on the following site conditions and assumptions: -

- All materials have been checked and there are no shortages.
- All materials are suitably stored to minimise damage.
- The site dimensions compare with installation drawings.
- The partitions are to be installed to the underside of an existing suspended ceiling grid. To enable the grid to be made good if the partitions are relocated, fixing to the main runner should be avoided. All fixings should be positioned on 1200mm or 600mm cross tees.
- This guide deals with basic construction principals and is not intended to cover all variations. If you are unable to find the details that you require then please call the Tenon Technical Department on 0114 231 8030 for assistance.

1: SETTING OUT

- Mark the intended partition layout on the suspended ceiling by means of a chalk line. (Avoid excessive chalk lines which will not be covered by the finished partitions or alternatively remove the relevant ceiling tiles.)
- Transfer the layout to the floor and wall abutments by means of a plumb line. Where the layout shows door modules adjacent to three way junctions and corner posts, it is recommended that a small board infill (200mm wide) is fitted into the junction post behind the door, this will allow the door to fully open through 90°.
- If the door frames are fitted directly into the three way or corner posts it is important to fix a floor mounted door stop to restrain the door and prevent the furniture from damaging the board (or glass) behind the door when in the fully open position.
- The door stop should not be positioned too close to the base of the door frame as with continued use this will exert undue stress on the hinge fixings. Position the door stop further back towards the leading edge of the leaf.

2: BOARD DECORATION

Always ensure that a suitable width wall covering is selected and it is applied with the manufacturers recommended adhesive. There are three options when considering decorating the partition boards: -

Factory Decorated

- Panels may be supplied with wall covering factory laminated ready for cutting and installation on site.
- To avoid damage to the pre-decorated face of the panels, care should be taken when offloading and moving these to the working area.

Pre- Decorated On site

- To minimise waste, panels should be cut to size before decorating, laid flat ensuring that they are supported at both ends on suitable benches or staging.
- Using board lengths as a guide, cut the wall covering to length leaving approximately 50mm over at each end.
- Thoroughly stir the adhesive and apply evenly to the wall covering using a lamb's wool roller, making sure that the entire surface of the paper is covered.
- Apply the wall covering to the panel and smooth out the paper using a clean spatula. Work from centre of board outwards to remove all trace of air bubbles or excess adhesive.
- Using a clean sharp knife blade, trim off the excess wall covering flush with the panel ends and long edges.
- Any surplus adhesive should be removed immediately with a soft cloth and clean warm water.
- Decorated panels should be laid flat, stacked face to face, and allowed to rest overnight before fitting.

Decorated In Position

- This method calls for the wall covering to be applied to the panels in the upright position with the panels already fitted into the partition, and should be carried out before the skirting is fitted.
- Cut the wall covering to the required "drop" leaving approximately 50mm over at each end.
- Lay the wall covering pattern side down on a clean table and apply adhesive evenly with a roller to the entire area of the paper.
- Loosely fold the paper over to roughly cover ¾ of its length, then fold the remaining ¼ in from the opposite end.
- Set the paper aside and allow to rest for 5 minutes.
- Peel back the top ¼ of the paper and slide into position at the top of board. Once aligned peel back the remainder and allow to hang loosely.
- Smooth the paper out with a clean spatula, working outwards from centre of board towards the edges.
- Working with a sharp knife blade and a clean straight edge, cut the wall covering tightly into the edges of the upright posts and head channel. Trim the bottom edge of paper to below the height of the skirting.
- Remove any surplus adhesive immediately with a soft cloth and clean warm water.
- NB. When estimating vinyl usage it is advisable to allow a suitable wastage factor.

3: HEAD CHANNEL OPTIONS

Before commencing installation of the partition, consideration should be given to the layout and method of construction with regard to the choice of head channel.

P01 Reversible Head Channel

- The reversible head channel will be used in most installations and is designed to accommodate both solid and glazed construction.
- The reversible head channel should be used deep side down in partition runs where only solid modules are to be fitted.
- If fitting glazed or a combination of glazed and solid, then the P01 section should be fixed with the shallow side down.
- Where the partition changes direction and standard square junction posts are used (P06 & P40) the head channel should be mitred for the post to be fixed beneath it.
- Junction posts should be fitted to the head channel using A11 steel brackets. The bracket should be fixed to the post approximately 2mm below the exact position so that a tight joint is achieved when the post is fixed in place.
- Where radius profile junction posts are used they must be fitted to the underside of the ceiling with the P01 square cut and fitted into either side of the post.
- The corner post should be fitted to the ceiling using A11 brackets fitted to both faces, plumbed in both directions and fixed to the floor with A11 brackets.

4: JUNCTION POSTS

- Junction posts should always be fixed using A11 steel fixing brackets located top and bottom and on both faces.
- All sections with a radius profile must be cut to extend from floor level to underside of suspended ceiling with the P01 reversible head channel square cut and fitted into either side of the post.
- Square section profiles should be cut to extend from floor level to the underside of the P01 reversible head channel, which in all cases should have a mitred corner detail.

5: ABUTMENTS

Wherever practical installation should start from a corner post and work back to an abutment fitted against a wall. Abutment posts are designed to enable the last panel to be fitted, there are two types available.

Option 1.

- When using the P92/P93 assembly, fix P92 section to wall and fit the last panel.
- Fit TF276 steel spring clips to the P92 section positioned top, bottom and at 600mm centres in between.
- Fit the P93 section securely to the P92 abutment post using a rubber mallet or timber block and hammer.

Option 2.

- When using the alternative P04/P05 assembly, fix the P05 section to the wall and fit the last panel.
- Cut the P04 flat section to length.
- Hold the P04 in position on the P05 and using a 7/64" bit, drill, off centre through the P04 taking care in making the pilot holes in the return edge of P05 abutment section.
- Pilot holes should be positioned at the top and bottom and at 600mm centres in between.
- Remove the P04 and using a centrebit, countersink the pilot holes along the length of the P04 section.
- Reposition the P04 onto the P05 abutment and fix in place using ¾" x No.6 bright countersunk self-tapping screws.
- When the partition is powder coated the screw heads should be covered with a matching touch up paint applied with a fine brush.

6: UPRIGHT POSTS

- P02 standard upright posts are used throughout the layout at 1200mm module centres, and are fixed to the head channel using A11 brackets.
- Using an off cut of reversible head channel, set the position of A11 bracket and fix at the top of P02 upright post. The bracket should be fixed approx' 2mm short of exact position to ensure a tight joint between post and channel.
- It is recommended that all posts be fixed to the floor using A11 brackets.

7: SOLID MODULE CONSTRUCTION

- Position the P01 on the chalk line deep side down and fix to the suspended ceiling grid (cross tees) at 600mm. centres.

- Fix the P92 wall abutment post at either end and at 600mm centres in between. This section should extend from floor level to the underside of the head channel.

Assuming the layout starts from a fitted corner post and works back to an abutment fitted against a wall: -

- Mark the position of full width (1200mm) modules and door modules (900mm) on the floor ensuring that cut panels (i.e. ones less than 1200mm wide) are positioned adjacent to wall abutments.

- Using a post as a starting point, locate P22A/B floor pans and shoes along the line of the partition. Use two sets per module; positioned 200mm in from the proposed edge of the panel.

- Having removed the steel shoe insert, fix to the floor through the pre-punched hole in steel pan, and then reposition the steel shoe within the floor pan. It is recommended that where practical all modules be fitted with two sets of pans and shoes.

- Measure from the top of the floor shoe to the bottom edge of the head channel and add 10/12mm. Cut the infill panel to this dimension.

- Remove the steel shoes from inside the floor pan and set to one side.

- Lift the panel into the floor pan close to upright post, taking care to support the panel whilst in the vertical position.

- Raise one side of the panel and locate into the head channel. Hold the panel in position and refit the steel shoe into the floor pan.

- Repeat the procedure and refit the second steel shoe

- Manoeuvre the panel over the pans and shoes into the web of the upright post. Reposition the steel shoe in the floor pan if necessary.

- Measure from the floor to the bottom edge of the head channel close to edge of last fitted panel. Using the measurement cut a P02 upright post to size and fix an A11 steel bracket to the post as previously described, clamp into position and fix to the head channel

- Check that the post is plumb and the edge of the panel is fully located into the post. Fix the post to the floor with an A11 bracket.

- If the floor is uneven, then measure the position of next post (a P03 can be used to set this dimension) and if necessary trim the bottom edge of the panel to ensure it is level when in position on the pans and shoes. Check the edge of the panel for level with a plumb line or spirit level, and then continue to build sequentially until the end of the partition is reached.

- Cut the last panel and fit into the P92 abutment post. Fit TF276 spring clips to the P93 and secure in position with a rubber mallet.

8: HALF GLAZED CONSTRUCTION

Follow the instructions for erecting solid modules; remembering to fit P01 head channel shallow side down.

- Mark the dado height on the upright post at the start of the glazing run.
- Cut a panel to the required height and install on the pans and shoes, ensuring that it is level.
- Using a P03 as a guide, mark the position of the next post at the head of the partition and fix to the head channel with an A11 bracket.
- Position a P03 pre-bracketed transom on top of the panel and screw fix through the brackets to the adjoining posts.
- Reverse the brackets on the adjacent transom to avoid the fixings snagging on the next module.
- Continue the procedure for the remainder of the glazing, taking a level from first fitted transom.

The following procedures should then be followed when fitting chair and bead to any sized glazed module.

- Measure the inside horizontal opening size of the glazed module and deduct 5mm from this measurement.
- Square cut the horizontal P16 glazing chair to length, notch the ends of sections to avoid the chair snagging on the transom brackets and fit to the aperture. (Horizontal sections are fitted first and are retained in position by the vertical sides).
- Square cut the P17 glazing bead and fit into the chair. Follow the same procedure when fitting the chair and bead to double-glazed or offset single glazed modules.

9: SOLID/GLAZED/SOLID CONSTRUCTION

- If the top of the glazing is to line through with the height of the doorframe, then the door module should be fitted first and the height of the top-glazing transom set level with the door head transom. (See "Door modules" for instructions.)
- Follow the general instructions for the erection of solid partitions, remembering to fit the P01 head channel shallow side down.
- Mark the height of the top glazing transom on the upright post.
- Using a P03 as a guide, set the position of the next P02 upright post;, bracket as before and fix to the head channel.
- Cut the panel for the top solid infill and fit in place between the upright posts.
- Hold the panel in place, check for level and fix the P03 pre-bracketed transom to the upright posts to set the top level of glazing.
- Fit the bottom panel and the bottom transom as for "half glazed construction" and continue for the remainder of the glazing.
- Measure the inside horizontal opening size of the glazed module and deduct 5mm from this measurement.
- Square cut the horizontal P16 glazing chair to length, notch the ends of sections to avoid the chair snagging on the transom brackets and fit to the aperture. (Horizontal sections are fitted first and are retained in position by the vertical sides).
- Square cut the P17 glazing bead and fit into the chair. Follow the same procedure when fitting the chair and bead to double-glazed or offset single glazed modules.

10: FULL HEIGHT GLAZED CONSTRUCTION

Follow the general instructions for the erection of a solid partition, remembering to fit the P01 shallow side down.

- Using a P03 pre-cut transom as a spacer set the position of the next post at the partition head and fix to head channel as before.
- Using the P03 again, set the position of the post at the base, set to plumb, bracket and fix the post to the floor.
- Position the P34 flaxcore packer between the posts in lieu of the pans and shoes. (it is not necessary to fix this packer to the floor.) Ensure the P34 is level packing or trimming as necessary.
- Position a P03 pre-bracketed transom onto the flaxcore packer and fix through the brackets to the adjoining P02 upright posts.
- Measure the inside horizontal opening size of the glazed module and deduct 5mm from this measurement.
- Square cut the horizontal P16 glazing chair to length, notch the ends of sections to avoid the chair snagging on the transom brackets and fit to the aperture. (Horizontal sections are fitted first and are retained in position by the vertical sides).
- Square cut the P17 glazing bead and fit into the chair. Follow the same procedure when fitting the chair and bead to double-glazed or offset single glazed modules.

11: BANDED GLAZING CONSTRUCTION

Follow the general instructions for the erection of a solid partition, remembering to fit the P01 shallow side down.

- Fix P01 head channel shallow side down.
- Before setting the position of the P03 transoms, construct base/skirting plinth and fix adjacent upright post.
- Measure from the top of the P03 transom to underside of head channel and divide dimension to form required number of equal height apertures.
- Where a glazing line is required at door head height, the door module should be installed before the glazing (see "Door modules" for instructions).
- The level of this P03 transom should be taken from the height of the pre-cut transom fitted above the doorframe.
- Mark heights of banded glazing on P02 upright posts.
- Ensure level and fix P03 pre-bracketed transoms between P02 upright posts at required heights.
- To avoid the bracket fixings of the transoms snagging the corresponding position on the next module, the P03 should be alternately reversed on consecutive modules. Fit the glazing chair and bead as previously described.
- Measure the inside horizontal opening size of the glazed module and deduct 5mm from this measurement.
- Square cut the horizontal P16 glazing chair to length, notch the ends of sections to avoid the chair snagging on the transom brackets and fit to the aperture. (Horizontal sections are fitted first and are retained in position by the vertical sides).
- Square cut the P17 glazing bead and fit into the chair. Follow the same procedure when fitting the chair and bead to double-glazed or offset single glazed modules.

12: DOOR FRAME INSTALLATION

All Flexplus single doorframe packs are supplied to be "universal" i.e. they can be cut on site for either right or left handing.

- Set the distance between the upright posts either side of the frame using the pre-cut bracketed transom supplied in the pack.
- Fix the posts at the partition head with the steel fixing brackets (A11); ensure that the posts are plumb in both vertical planes and fix to the floor.
- To set the height of the bottom edge of the door transom, add 22mm to the height of the door leaf to be used. The allowance for floor coverings is 6mm, so where unusually thick carpets are encountered this dimension needs to be altered accordingly.
- Measure from the floor level and mark the height on the upright post. Check that the upright posts are plumb in both vertical planes.
- If the module is to be solid above the door then position the panel between the upright posts and hold in place while the door transom is fitted.
- Fit the bottom of the transom to the mark on the post, set to level and screw fix through the brackets into the posts. If the panel over the door is to be glazed, fit the chair and bead as previously described.
- Doorframe legs are supplied 50mm oversize and are trimmed at one end to suit once the handing of the frame has been decided.
- Commencing with the door head, offer the frame section into the formed opening. Using 38mm x No 8 countersunk self-tapping screws, fix through the pre-drilled holes located in the rebate behind the doorstop.
- To avoid damage to the frame it is recommended that an 'extended bit' is used to locate the screws.
- Screw the hinges and the lock box to the frame. Using the hinges as a guide, mark the position and let the hinges into the edge of the door to finish flush with the lipping.
- Using the centre line of the lockbox as a guide, mark the position of the lock and furniture and fit to the door.
- Fit the door seal into the rebate in the frame.

13: SPECIALIST SECTIONS

P07 Aluminium Nibbed Post

- Due to the additional strength gained by the section profile, the P07 may be used to construct partitions over 3.6m high and up to a maximum height of 4.2m.
- P07 nibbed posts are used in the same manner as standard P02 posts and can accept solid, glazing and door modules. Due to the profile of the section, the skirting has to be fitted in module form i.e. in 1200mm lengths, as the knibbed protrusion will not allow the skirting to run across the face of the post in continuous lengths.

P11 76mm Circular Post

- Circular posts are used to form irregular angled junctions. To ensure a tight joint, the P01 head channel should be notched with a 'V' where it abuts the post.
- To form an irregular angled corner post assembly, plant two P02 upright posts onto the P11. The P11 should be cut to extend from floor level to the underside of the suspended ceiling.
- Fix the P11 in place using A11 steel angle brackets at the top and bottom. Always ensure that the brackets are positioned so that they are behind the fixed position of the PO2.
- The P11 will accommodate three P02 upright posts when forming an irregular three-way junction.

P12 Shallow Channel

The shallow channel is used in several different ways: -

- Abutment: used in lieu of P92/93 where the partition is constructed away from a fixed point.
- Four Way Post: when fixed to the back of a P31 three way post, a P12 forms a four way junction post which can receive solid, glazing and door modules.
- 'Y' Post: When fixed to the flat face of a P90 angled 90° corner post, the P12 forms an effective 'Y' post detail which can receive solid, glazing and door modules.

P13 Heavy Duty Upright Post/ Capping Section

- P13 sections maybe used to construct partitions up to maximum height of 6000mm. On theses occasions the section should also be used as the head channel with the uprights fitted at the ceiling in the same manner as described for the standard upright post P02.
- The P13 may also be used to form a rigid capping detail on a freestanding partition. When used in this application it is recommended that the P15 infill section is fitted into the top web of the section to give the capping a finished appearance.

P15 Infill Section

- The P15 infill section is used to cap off the open face of any of the standard upright/junction post, forming an end post or used to line out an opening to accept a sliding glass hatch.

14: SKIRTING

Laminate Skirting

- A01 skirting should be cut to the required lengths determined by the partition layout.
- Apply A07 skirting foam to the top reverse edge of the skirting.
- Using a suitable knife cut the foam away from the skirting where it crosses the face of the upright post.
- Holding the skirting in position, drill pilot holes through the skirting to coincide with the upright post using a 7/64" drill bit.
- Drill further pilot holes between the posts to coincide with the steel pans and shoes, then fix into position using 25mm x N° 6 black flange screws

Aluminium Skirting

A02 skirting should be cut to the required lengths determined by the partition layout. This skirting may be fitted by two different methods.

Option 1.

- Position the section with the 6mm return edge to the floor and apply A07 skirting foam to the top reverse edge.
- Using a suitable knife cut the foam away from the skirting where it crosses the face of the upright post.
- Drill pilot holes (as for laminate skirting) and countersink the holes using a centre bit
- Fix the skirting in position using 25mm x N° 6 zinc countersunk screws.
- This method should also be used on full height glazed modules where a P34 glazing packer has been used.

Option 2

- Position the skirting against the base of the partition with the 6mm return edge uppermost and mark the position of the upright posts on the skirting.
- Using a hacksaw and a fine file, notch the return edges so that the section can fit flush around the profile of the upright.
- Apply A07 skirting foam to the bottom inside edge of the skirting.
- Drill pilot holes (as for laminate skirting) and countersink the holes using a centre bit.
- Fix the skirting in position using 25mm x N° 6 zinc countersunk screws.