



Ls90

## Method of Build



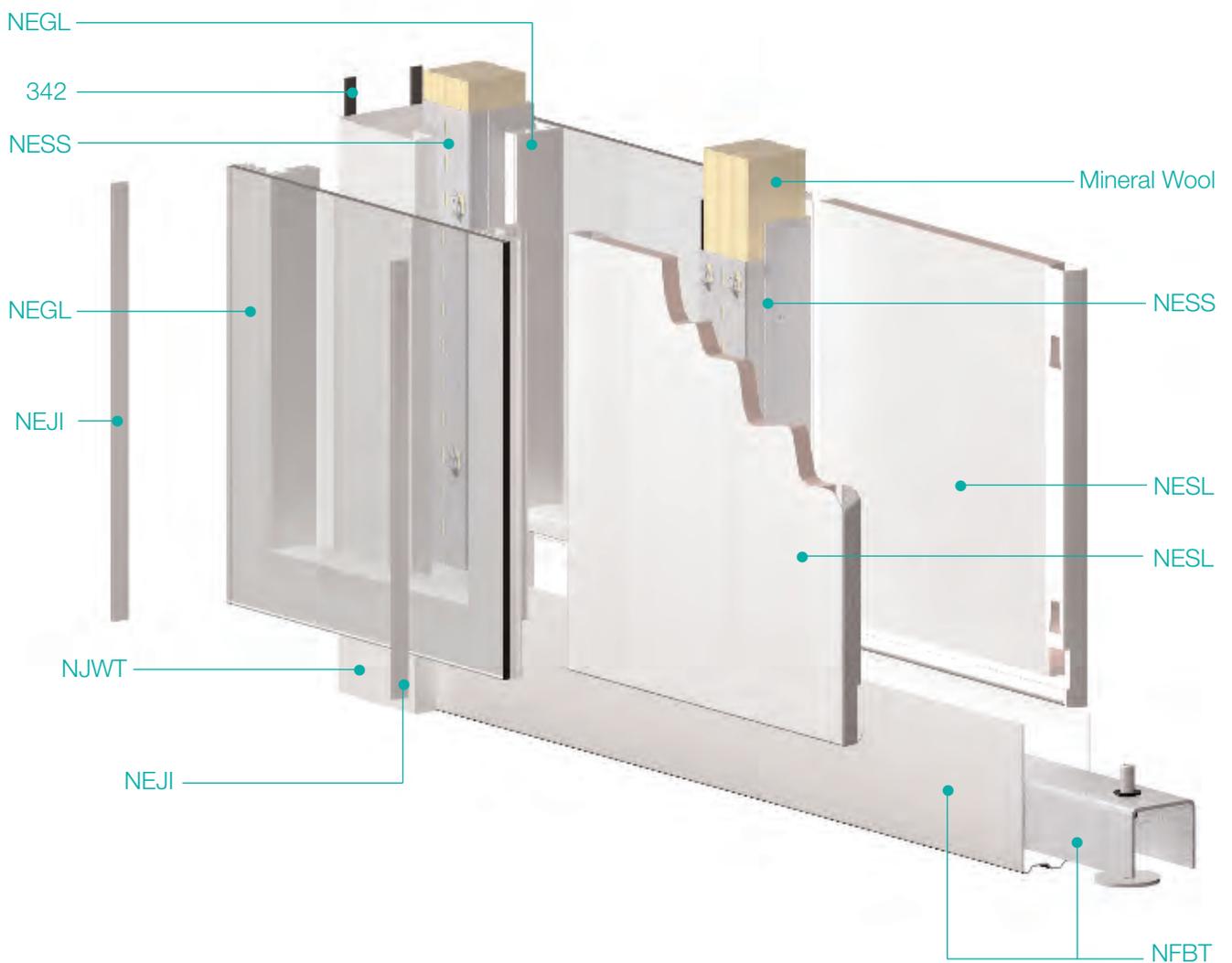
Ls90 - a recessed head and base bi-block system with a range of interchangeable panel types and finishes along with deflection head and base tracks

Love the space you're in.

# Ls90 - partitioning system

## Method of Build

*Note:*  
For clarity the cavity infill has not been shown



90mm Recessed head and base bi-block system

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## Introduction

Ls90 is a demountable and relocatable partitioning system allowing for plus or minus 25mm maximum floor to ceiling height tolerance.

The system incorporates the following features and detailing:

- Recessed Head and base
- Special Hook-lug Steel Stud
- Base Levelling System
- Steel Panel Elements
- Veneered, Painted and Laminated MDF Panel Elements
- Flush Bi-Bloc Frameless Glazed Elements
- Integral Venetian Blinds (optional)
- Prefabricated Adjustable Aluminium Doorset
- Service Panel
- Modular Planning
- Pre-sized Elements and Junction Posts
- Minimal on-site componentry
- Components kitted and wrapped

## 1.0 General Setting Out

1.1 In common with standard 'setting out' procedures, chalk lines are used to indicate the centre-line of Head and Base Tracks. These Tracks form a recessed shadow detail at the head and base of the Ls90 system and are ideally set-out as follows:

- Use chalk line to denote the centre-line of Base Track or Head Track as appropriate and plumb to ensure both align vertically.
- Determine the corridor and cross-run locations of 90 deg Corners.
- Denote the T Junction cross-run locations, ensuring the centre-line coincides with the centre of a corridor-run Steel Stud and of building window mullions.
- Determine the Pre-formed Head and Base Track locations for 135 deg Elbow Junctions and Y Junctions.
- Determine the Doorset locations to allow cutting of the Base Track before fixing to the floor.

### Important points to note:

1.2 Head and Base Tracks are recessed from the face of all Elements of the System, therefore they do not represent the overall partition thickness.

- Overall partition thickness = 90mm
- Overall Track thickness = 57mm

1.3 When levelling the studs (on the Levelling Platform) it is vital that the head and base tolerance is considered. By setting the top of the Levelling Foot 20mm above the Levelling platform, the base recess is set to 100mm. Only set the base to 100mm as initially; this will change once you start levelling. It is vital that the top of the stud is 10mm clear from the underside of the Head Track, otherwise the head recess will be less than 40mm, and the Elements will not hook onto the stud.

When laser levelling check the floor and ceiling are within the system tolerances (Head: 50mm plus or minus 10mm, Base: 100mm plus or minus 15mm).

1.4 See Section 2 for detailed notes on the preformed Head and Base Track components for 90 deg Junction, T Junction, 135 deg Elbow Junction, Y Junction and Stop-End.

1.5 See Section 2 for detailed notes on spacing between Base Tracks for Doorsets.

**Note:** Please refer to the Method of Build and details incorporated within this booklet before proceeding with setting out.

**Note:** Check with an authorised Manager that you are working with the approved layout drawings. Identify the areas of installation and mark out the partition layout.

**Note:** Use the **Ls90 Quick Start Guide** for setting out Head and Base Tracks. This guide has the dimensions for every head and base junction condition including cut positions for doorsets.

## 2.0 Head and Base Tracks

### Head Track

- 2.1 The 1.2mm gauge steel Head Track component is pre-punched with both fixing slots and 7mm diameter holes along its length.
- 2.2 Before installing, fit two strips of 12mm x 6mm Compression Seal (Code: 342) along the grooves on the top of the Head Track. Acoustic Sealant (Code: 924) can also be used in conjunction with the Compression Seal.
- 2.3 The 7mm diameter holes accept an M6 countersunk set screw for fixing the Head Track to a beam type ceiling grid. Alternatively, the standard Head Track fixings to a ceiling grid are No.8 countersunk self-tapping screws at 600mm nominal centres. Drill the Head Track along the centre groove with a 4mm drill bit where necessary to fix to the ceiling grid.
- 2.4 Ensure abutting Track ends are machined clean, de-burred and have square-cut flange edges. Site-cutting of the Head Track is only required at a Wall Abutment, or occasionally when abutting to a pre-formed component. For example, if two pre-formed Head Tracks abut then one of them may require cutting to set correct planning layout.
- 2.5 The Head Track expresses a 50mm nominal recessed 'shadow gap' detail at the partition head and provides for plus or minus 10mm ceiling run tolerance.
- 2.6 The Head Track channel receives the 54mm Steel Stud (with hook-lugs) as a sliding fit for fire resistance performance expansion and as a deflection head. The Steel Stud is factory prepared to suit the installation Ceiling Height. The following nominal Ceiling Heights require the top hook-lugs on the Steel Stud to be tapped flush with a hammer: 2590mm to 2660mm, 2890mm to 2960mm, 3190mm to 3260mm, 3490mm to 3560mm.
- 2.7 Having established the setting out of the Head Track the Base Track is plumbed to align vertically. Ensure this is done accurately to ensure vertical alignment at junctions and correctly swinging doors. A laser level is perfect.

### Base Track

- 2.8 Using the Head Track as the datum, plumb down, mark and set out the Base Track position(s), preferably using a laser level. The 1.2mm gauge steel Base Track component is pre-punched with both fixing slots and 7mm diameter holes along its length.

- 2.9 Before installing on hard floor surfaces, fit two strips of 12mm x 6mm Acoustic Compression Seal (Code: 342) along the grooves on the bottom of the Base Track. Acoustic Sealant (Code: 924) can also be used in conjunction with the Compression Seal.
- 2.10 For structural floors, fixings are at 600mm nominal centres using No.8 countersunk self-tapping screws with expansion plugs. Similarly, these screws are used with metal suspended flooring. Drill the Base Track along the centre groove with a 4mm drill bit where necessary, such as beside a Doorset. The Base Track will follow the level of the finished floor and should be installed over the carpet.
- 2.11 Ensure abutting Track ends are machined clean, de-burred and have square-cut flange edges. Site cutting of the Base Track is only required at a Wall Abutment, at a Doorset (where the ends are covered), or occasionally when abutting to a pre-formed component. For example, if two pre-formed Base Tracks abut then one of them may require cutting to set correct planning layout.
- 2.12 The Base Track expresses a 100mm nominal recessed 'shadow gap' detail at the partition base and provides for plus or minus 15mm floor run tolerance. The Levelling Platform with Levelling Feet sits within the Base Track and is continuously levelled to provide a platform for the Steel Studs. Once levelled, the Steel Studs provide hook-lugs to receive the Elements and racking slots to receive shelving.
- 2.13 The recessed Base Track assembly provides a telescopic base detail with a flush uninterrupted skirting face.
- 2.14 Where a Doorset occurs the Head Track is continuous but the Base Track and Levelling Platform must be cut to leave a 1020mm opening (Double: 1920mm). This 1020mm (1920mm) opening must be central within the final position of the doorset, i.e. the Doorset is 1100mm (Double: 2000mm) Module Centres therefore the Base Track must run into both door-jambs by 40mm leaving a 1020mm (1920mm) opening between them. This dimension is for a Doorset within a straight run only. Read further for openings at junctions.

## Track Junctions

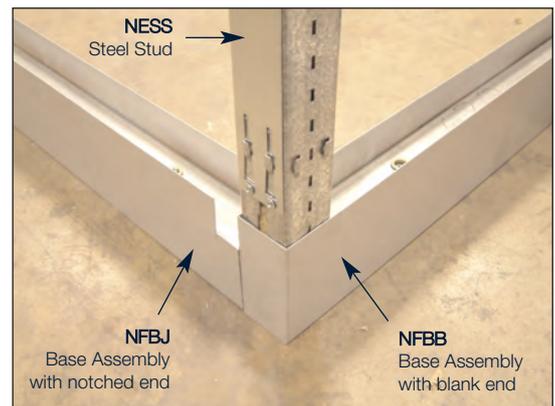
- 2.15 Ls90 has three types of end conditioned Head and Base Track to form the 90° Corner or T Junction detail. There are:
- The Head and Base Track with Blanked End
  - The Head and Base Track with Notched End
  - The Base Track with Door Junction End

## T Junction

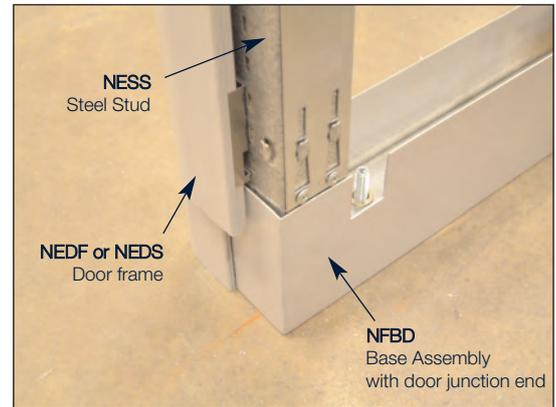
- 2.16 In all instances the visual continuity of the Head Track is maintained. The corridor Head Track is continuous and the abutting cross-wall Head Track has the Notched End.
- 2.17 The corridor Base Track is also continuous, and the abutting cross-wall has the Notched End. The Notched End allows the room-side Elements of the corridor run to be installed and allows for ceiling and floor tolerance variations.
- 2.18 Where a corridor run has two Doorsets with a cross-wall between them a different Base Track arrangement is required. The Base Track with Door Junction End should be used for the cross-wall between the two Doorsets, there is no corridor Base Track here. The cross-wall Base Track (with Door Junction End) has a Blanked and Notched End condition. The Base Track with Door Junction End should be positioned so that the face of its Blanked End is aligned with the outside face of the other corridor Base Tracks either side of the Doorsets. In this instance the opening between the end of the corridor Base Track and the side face of the cross-wall Base Track is 1032mm (Double: 1932mm).

## 90 deg Corner

- 2.19 The 90 deg Corner is very similar to a T Junction. The corridor Head Track continues in front of the cross-wall Head Track, finishing with a Blanked End 28mm beyond the centre-line of the cross-wall Head Track. This allows the face of the Blanked End to be aligned with the outside face of the cross-wall Head Track.
- 2.20 The corridor Base Track also continues in front of the cross-wall Base Track, finishing with a Blanked End 28mm beyond the centre-line of the cross-wall Base Track.
- 2.21 A plumb line or laser line may be used to align the Base Track Blanked End with the Head Track Blanked End.
- 2.22 The cross-wall Head and Base Tracks have the Notched End, which abuts the corridor Head and Base Tracks. The Notched End allows the room-side Elements of the corridor run to be installed and allow for ceiling and floor tolerance variations.
- 2.23 The face of the corridor Head Track Blanked End and the Base Track Blanked End will align with the outside face of the cross-wall Head Track with Notched End and Base Track with Notched End. To help align the cross-wall Track with the corridor Track install both together but do not fix tightly until both Tracks are aligned.

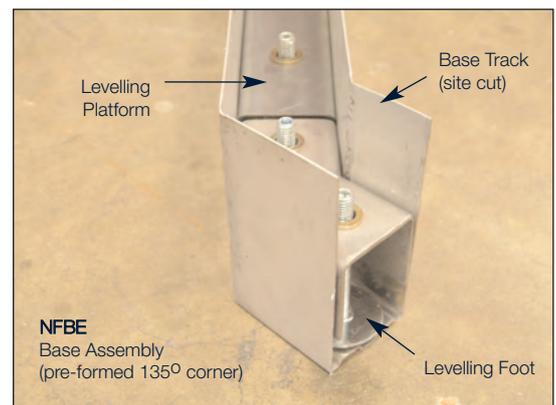
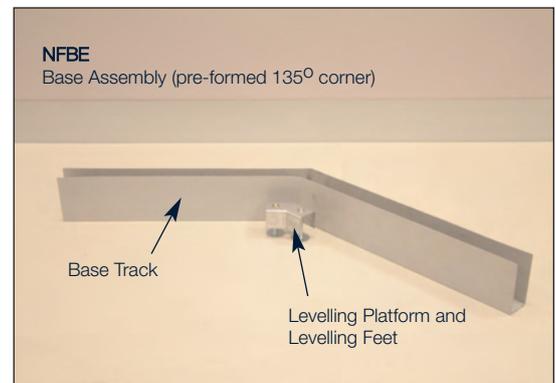


- 2.24 Where a corridor has a Doorset at a 90 deg Corner a different Base Track arrangement is required. The Base Track with Door Junction End should be used for the cross-wall between the two Doorsets, there is no corridor Base Track here. The cross-wall Base Track (with Door Junction End) has a Blanked and Notched End condition. The Base Track with Door Junction End should be positioned so that the face of its Blanked End is aligned with the outside face of the other corridor Base Tracks either side of the Doorsets. In this instance the opening between the end of the corridor Base Track and the side face of the cross-wall Base Track is 1032mm (Double: 1932mm).



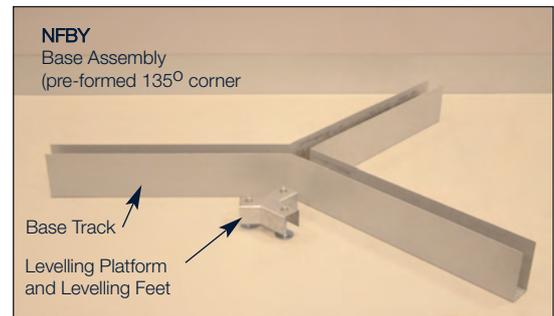
### 135 deg Corner

- 2.25 The 135 deg Corner uses pre-formed Head and Base Track sections. These are welded Tracks that have been preset at 135 deg. They project 600mm from each Module Centre; for example, if 1200mm Modules are installed from a 135 deg Corner then the pre-formed Head and Base Track sections will finish in the centre of the 1200mm Modules.
- 2.26 Use a plumb line or laser line to align the pre-formed Base Track with the pre-formed Head Track.
- 2.27 Typically, do not cut the pre-formed Head and Base Tracks. Always cut the abutting Head or Base Track, that will often be plain Track.
- 2.28 Where a Doorset occurs at a 135 deg Corner it is necessary to cut the Base Track. It is not necessary to cut the Levelling Platform which is manufactured to the correct size to accept a Doorset on a 135 deg Corner. Use the end of Levelling Platform (insert into the Track first) to determine the point at which the Base Track needs to be cut back to allow for the Doorset. Always check setting out dimensions with the Ls90 Quick Start Guide.



## Y Junction

- 2.29 The Y Junction uses pre-formed Head and Base Track sections. These are welded Tracks that have been preset to the Y Junction angles. They project 600mm from each Module Centre; for example, if 1200mm Modules are installed from a Y Junction then the pre-formed Head and Base Track section will finish in the centre of the 1200mm Modules.
- 2.30 Use a plumb line or laser line to align the pre-formed Base Track with the pre-formed Head Track.
- 2.31 Typically, do not cut the pre-formed Head and Base Tracks. Always cut the abutting Head and Base Track, that will often be plain Track.
- 2.32 Where a Doorset(s) occurs at a Y Junction it is necessary to cut the Base Track. It is not necessary to cut the Levelling Platform which is manufactured to the correct size to accept a Doorset(s) on a Y Junction. Use the end of Levelling Platform (insert into the Track first) to determine the point at which the Base Track needs to be cut back to allow for the Doorset(s). Always check setting out dimensions with the Ls90 Quick Start Guide. The Y Junction will accept a Doorset from any of the three sides.



## Fire Resistance

- 2.33 Where fire resistant partitions are required Intumescent Mastic (Code: DJ10104) must be used. Using a Mastic Gun apply two generous beads of mastic along grooves in the top surface of Head Tracks before fixing them to the ceiling. Refer to Komfort Summary of Performance Documentation for detailed information.

## 3.0 Wall Abutment

### Tolerance Wall Abutment

- 3.1 The Ls90 Tolerance Wall Abutment consists of a two-part adjustable steel channel assembly that is Element height and provides for plus or minus 20mm lateral tolerance. This tolerance allows the abutment to accept pre-sized and special width Elements.
- 3.2 The Head and Base Tracks are cut to the building wall.
- 3.3 The Abutment Wall Channel must be fixed to the building wall. Stick two strips of 6mm x 2mm Foam (Code: 175) along the back of the main web, approximately 10mm from the edges, as an acoustic seal. Acoustic Sealant (Code: 942) can also be used in conjunction with the Compression Seal. Position the section 100mm from the floor and drill centrally through the elongated slots in the main web of the section. Use necessary fixings for the structure type but do not tighten the fixings screws.

The elongated slots will allow the Abutment Wall Channel to be slid up and down the wall to align with the levelled Elements.

- 3.4 Once the Levelling Platform has been levelled, insert a Steel Stud into the Abutment Stud Channel and lock them together by pulling the Abutment Stud Channel down over the hook-lugs on the Steel Stud.

**Note:** It is vital the Abutment Stud Channel is pulled down fully onto the hook-lugs. A simple check is that the distance from the bottom of the Steel Stud to the bottom of the Abutment Stud Channel is 35mm (measured accurately).

- 3.5 Insert this assembly into the Base Track and lean the assembly at an angle until the top of the assembly can be slid back up into the Head Track. Once vertical, slide the assembly over the Abutment Wall Channel.

- 3.6 Insulation quilt or slab (10 Kg) must be used inside the cavity between the Abutment Wall Channel and the Abutment Stud Channel as an acoustic seal.

## Cut-Panel Wall Abutment

- 3.7 Where greater lateral tolerance is required - avoiding site survey dimensioning - an on-site construction arrangement is available, whereby the last Plasterboard Elements are trimmed to width. The trimmed edge is covered within the Cut-Panel Wall Abutment.

- 3.8 The Cut-Panel Wall Abutment comprises of an aluminium Abutment Channel and two aluminium Abutment Trims that clip together using concealed Klick Fasteners. The Abutment Channel is pre-notched at 600mm centres to accept the Plasterboard Support Rails. The bottom of the Abutment Channel is determined by the first notch being 8mm from the end.

- 3.9 The Head and Base Tracks are cut to the building wall.

- 3.10 The Abutment Channel must be fixed to the building wall. Stick two strips of 12mm x 6mm Foam (Code: 342) along recess in the back of the main web, as an acoustic seal. Acoustic Sealant (Code: 924) can also be used in conjunction with the Compression Seal. Position the section 140mm from the floor and drill centrally through the elongated slots in the main web of the section. Use necessary fixings for the structure type but do not tighten the fixing screws. The elongated slots will allow the Abutment Channel to be slid up and down the wall to align correctly.

- 3.11 The partition must now be installed before completion of the Cut-Panel Wall Abutment is possible.

- 3.12 Once the partition has been installed up to the last full Module the Cut-Panel Wall Abutment can be finished as the size of the last (cut) Plasterboard Element is now known. Cut the Plasterboard Support Rails to length so that one end hooks onto the last Steel Stud and the other (cut) end fit into the machined slots on the Abutment Channel. Use a Spirit Level to check the Plasterboard Support Rails and adjust the Abutment Channel up or down the wall and tighten screws once the level is determined.

**Note:** If a Special Height Plasterboard Support Rail is required (see Plasterboard Elements - Section 6.35) then a simple two-cut triangular notch is required on the Abutment Channel. Use a Spirit Level when positioning the Plasterboard Support Rail.

3.13 Install the Plasterboard Elements (as shown in Section 6.35), cutting the panel down to within 11mm to 15mm short of the wall. Using 25mm No.8 Drywall Screws (Code: 319), fix through the Plasterboard Element and Plasterboard Support Rail into the Abutment Channel at 600mm centres and approximately 25mm from the wall. Ensure the panel joint between the two last panels is tight.

**Note:** The Plasterboard Elements have a steel angle along the top and bottom edge of the board underneath the vinyl. When cutting a Plasterboard Element, first cut the edge of the board using a sharp knife to the correct size, then cut the top and bottom of the board (and hidden steel angle) with a hacksaw.

3.14 Pre-fit Klick fasteners at 600mm centres along the length of the two Abutment Trims. Install the Abutment Trims in the Abutment Channel by aligning the Klick Fasteners correctly with the Abutment Channel and pressing firmly to clip the Abutment Trim into position. The Abutment Trims are Element height and can be aligned with the bottom of the Plasterboard Elements.

## 4.0 Doorset

### Door frame

4.1 The Door frame is factory prepared and painted ready for site installation and provides for plus or minus 15mm floor run tolerance with a two-part frame assembly. The Inner Door frame is fixed to the Outer Door frame and contains Door Leaf. The Outer Door frame is Element height and locks onto the hook-lugs on the Steel Stud inline with all other Elements.

4.2 The Door frame is prefabricated to size, together with all machining and fitting of hinges, striking box, Locking Strips, intumescent (FR only) and is fitted with a Transporting Brace along the bottom.

4.3 With the Levelling Platform levelled and the Steel Studs in position the Door frame can be installed. As the Door frame is a mono-bloc Module that fits around the Steel Studs, it should be installed before any other Modules. Carefully move the two Steel Studs - either side of the Door frame location - apart to allow the mono-bloc Door frame to be inserted up over the Head Track. Slide to one side to allow the bottom of the Inner Door frame stile to slip over Base Track, and then slide to the other side so that the other Inner Door frame Stile can slip over the Base Track.

**Note:** When a Doorset occurs on a 90 deg Corner or T Junction the Inner Door frame only slips over Base Track on one side. The other side abuts the Base Track with Blanked End so that there are no gaps. Due to the Steel Stud being trapped laterally in the cross-run Base Track it cannot be moved out of the way for Door frame installation; therefore, the Door frame should be inserted onto the trapped (corner) Steel Stud first.

- 4.4 Lift the Outer Door frame so that the Steel Studs can be moved back into position to allow the Outer Door frame to be pulled down over the hook-lugs on the Steel Stud. Before pulling the Outer Door frame down the Door frame must be positioned and locked. Accurately position the Door frame to the required location - Plasterboard Support Rails can be used to set-out stud positions - setting 945mm to 946mm (Double: 1845mm to 1846mm) between the Inner Door frame stiles (Door Leaf rebate: 940mm leaf plus 2.5mm to 3.0mm either side) and using a spirit level to ensure the Door frame is plumb. The Steel Studs must now be fixed in position. With the Steel Stud sitting on the Levelling Platform and the Outer Door frame lifted up, using a 13mm No.8 Wafer Head Jack Point Screws (Code: DF21013) screw through the Base Track and into the Steel Stud. This fixing must be both sides of the Steel Stud on both stiles. It must be fixed 80mm from the top of the lowest hook-lug (on the Steel Stud) and vertically inline with the hook-lugs behind the Outer Door frame for it to be concealed. The Outer Door frame can now be pulled down over the hook-lugs on the Steel Stud.

**Note:** It is vital the Outer Door frame is pulled down fully onto the hook-lugs. A simple check is that the distance from the bottom of the Steel Stud to the bottom of the Outer Door frame is 35mm (measured accurately).

- 4.5 Ensure the Inner Door frame is sitting down against the floor. Fix the Inner Door frame to the Outer Door frame by drilling through the pre-drilled countersunk holes at 450mm centres (in the Inner Door frame) into the Outer Door frame and screwing together using 38mm No.8 Countersunk Pozi Screws (Code: 311).
- 4.6 Cover the fixings using the Door frame Gasket (Code: 868), which is pre-cut to size.
- 4.7 Although the Door Leaf can now be installed it is recommended that it is installed towards the end of the partition installation for two reasons. Firstly, the veneer can be scratched or damaged; and secondly, Modules fitted adjacent to the Door frame will ensure there is no framework movement when installing the Door Leaf that may impede the leaf action.

## Light Switch

- 4.8 Ls90 Door frame can be pre-machined to accept our K206 Rocker Switch. This has a choice of Face Plates in either Matt Chrome (Code: K212MC) or Polished Chrome (Code: K212PC). Note that a Grid Plate (Code: K212G) is also required.
- 4.9 Determine the location of the switch so that a 13mm diameter hole can be drilled in the steel stud. The centre of this hole must be 11mm from the centre line of the stud and at the height of the switch.
- 4.10 A hole must be drilled and a grommet inserted in the Head Track for the electrical cable. This should be done by an Electrician to the necessary regulations.
- 4.11 The cable must be fed down the stud before the Door frame is positioned. The stud can be disassembled by removing the screws and plates along one side to make feeding the electrical cable much simpler.

- 4.12 As the Door frame is moved into position carefully feed the cable through the switch hole in the Door frame and then locate and fit the Door frame as standard.
- 4.13 The switch can now be connected to the cable and screwed to the Door frame using the Grid Plate. The Cover Plate can then be fitted. This should be done by an Electrician to the necessary regulations.

## Door Leaves

- 4.14 Ls90 uses solid core door leaves that are 44mm thick, square edge and finished in various veneers and laminates.
- 4.15 The leaf is left blank for accurate routing and hanging on-site.
- 4.16 The standard Komfort striking box can be adjusted slightly back and forth to ensure flush face positioning, so before fixing the box test the door position.
- 4.17 Where specified, ironmongery that is other than Komfort supply, will be subject to prior approval by Komfort manufacturing to ensure that it can be accommodated in the Door Leaf.

## Fire Resistance

- 4.18 Where fire resistant partitions are required the Doorframe has the necessary intumescent pre-fitted. Various Door Leaf types may require extra intumescent. Refer to Komfort Summary of Performance Documentation for detailed information.

## 5.0 Junctions

### T Junction

- 5.1 A T Junction is created using a T Junction Post (on a cross-wall) connected to a standard Module Joint (the Steel Stud) in a corridor run.
- 5.2 The Steel Stud on the corridor run is inserted within the corridor run Head and Base Tracks. The centre of this Steel Stud must be aligned with the centre-line of the cross-wall. Any permutation of Element can be installed onto this Steel Stud in the corridor run, expressing the standard 4mm inter-element joint gap (except Plasterboard Elements). Install the corridor run Elements before commencing cross-wall Element installation.

**Note:** When fixing to a corridor run with Plasterboard Elements (V Butt Joint) - on the office side - the T Junction Brackets used to fix the T Junction Post must be installed before the Plasterboard Elements are butted together. A Joint Gap of 3mm will occur on the office side of the corridor run due to the space required for the T Junction Brackets.

- 5.3 The cross-wall commences by fitting three T Junction Brackets into the corridor run Steel Stud by hooking them into the racking slots along the Steel Stud. Stick two strips of 6mm x 2mm Foam (Code: 175) along the back web of the T Junction Post that will abut the corridor run Elements. Align the T Junction Brackets with the holes in the T Junction Post and slide the T Junction Post into position. The threaded rod of the T Junction Brackets will pass through holes in the T Junction Post. Use a nut and tighten the T Junction Post to the corridor run; do not over-tighten, ensure the threaded rod does not project beyond the nut.
- 5.4 The T Junction Post has pre-fabricated ends that close the notches in the Head and Base Tracks.
- 5.5 The cross-wall Elements can now be installed.

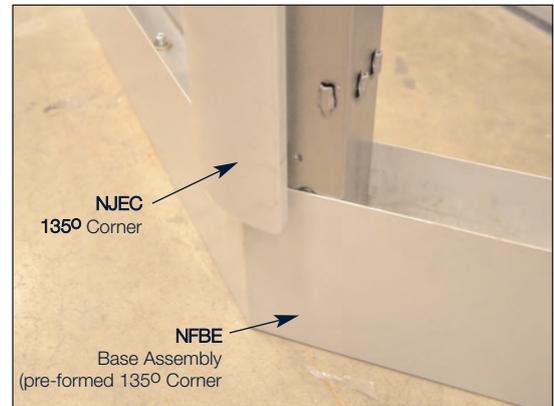
## 90 deg Corner

- 5.6 The 90 deg Corner is created using a 90 deg Corner Post (Stop End) (on a corridor run) and a T Junction Post (on a cross-wall).
- 5.7 The Steel Stud on the corridor run is inserted within the corridor Head and Base Tracks. The centre of this Steel Stud must be aligned with the centre-line of the cross-wall - the Head and Base Tracks should do this.
- 5.8 The 90 deg Corner Post (Stop End) comes with fully assembled and cut to Element height. Position the 90 deg Corner Post over the end of the Steel Stud ensuring it is the correct way up (key slots in the locking strip) and that the thick edge faces the cross-wall. The 90 deg Corner Post can now be pulled down over the hook-lugs on the Steel Stud.
- Note:** It is vital the 90 deg Corner Post is pulled down fully onto the hook-lugs. A simple check is that the distance from the bottom of the Steel Stud to the bottom of the 90 deg Corner Post is 35mm (measured accurately).
- 5.9 Install the corridor run Elements before commencing cross-wall Element installation. Any permutation of Element can be installed onto this Steel Stud in the corridor run, expressing a standard 4mm inter-element joint gap (except Plasterboard Elements).
- Note:** When fixing to a corridor run with Plasterboard Elements (V Butt Joint) - on the office side - the T Junction Brackets used to fix the T Junction Post must be installed before the Plasterboard Elements are installed. A joint gap of 3mm will occur on the office side of the corridor run, between the 90 deg Corner Post and the Plasterboard Element, due to the space required for the T Junction Brackets.
- 5.10 The cross-wall commences by fitting three T Junction Brackets into the corridor run Steel Stud by hooking them into the racking slots along the Steel Stud. Stick two strips of 6mm x 2mm Foam (Code: 175) along the back web of the T Junction Post that will abut the corridor run Elements. Align the T Junction Brackets with the holes in the T Junction Post and slide the T Junction Post into position. The threaded rod of the T Junction Brackets will pass through holes in the T Junction Post. Use a nut and tighten the T Junction Post to the corridor run; do not over-tighten, ensure the threaded rod does not project beyond the nut.

- 5.11 The T Junction Post has pre-fabricated ends that close the notches in the Head and Base Tracks.
- 5.12 The cross-wall Elements can now be installed.

## 135 deg Corner

- 5.13 The 135 deg Corner post comprises of three parts - an aluminium 135 deg Corner Post and two steel Junction Post Studs.
- 5.14 Notches in the ends of the 135 deg Corner Post allow the post to be leant at a angle until the top of the post can be slid up into the Head Track and the bottom can be slid over the Base Track. The 135 deg Corner Post can then be slid along the Head and Base Tracks and around the elbow until it sits centrally on the corner.



**Note:** When sliding the 135° Corner Post along the Head and Base Tracks and around the elbow be careful not to scratch the Head and Base Tracks. Two people - one person at the top and one at the bottom - should do this together.

- 5.15 Slide one of the Junction Post Studs into the Head and Base Tracks and up to the 135 deg Corner Post. Using 13mm No.6 Countersunk Pozi Screws (Code: K7F3) fix the Junction Post Stud to the 135 deg Corner Post at 600mm centres on both sides of the Junction Post Stud. Ensure the bottom of the Junction Post Stud is 35mm from the bottom of the 135 deg Corner Post. There is a square hole on the Junction Post Stud to help, the top of the square hole is 40mm from bottom of the 135 deg Corner Post. Once fixed accurately fix the second Junction Post Stud to the 135 deg Corner Post.

**Note:** For sound insulation, quilt can be used between the Junction Post Studs and the 135 deg Corner Post while assembling this junction.

- 5.16 The Elements can now be installed.

**Note:** If a Doorset occurs on a 135 deg Corner whereby the doorset is trapped (e.g. 90 deg Corner on one side of the Doorset and 135 deg Corner on the other) then the trapped condition should be installed first (e.g. the 90 deg Corner). The 135 deg Corner must then be assembled by starting with a Junction Post Stud, placing it into the back of the Doorset but not fully and not locking the Doorset onto it yet. Then slide the Junction Post into position, and then the second Junction Post Stud into position. Screw fix the Junction Post Studs to the Junction Post as standard, then lock the Doorset onto the assembled Junction Post.

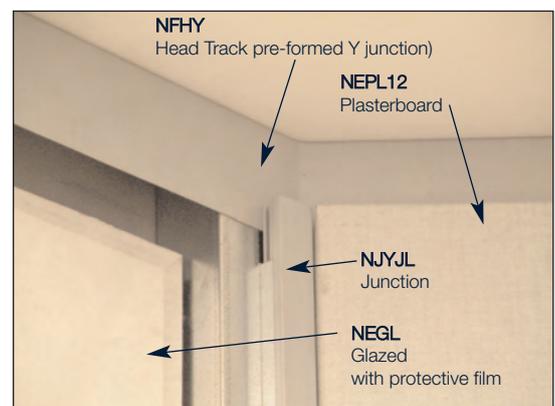
## Y Intersection

- 5.17 The Y Intersection post comprises of four parts - an aluminium Y Intersection Post, two steel Y Junction Post Studs, and a steel Junction Post Stud.
- 5.18 Using 13mm No.6 Countersunk Pozi Screws (Code: K7F3) fix the Junction Post Stud to the Y Intersection Post at 600mm centres on both sides of the Junction Post Stud. Ensure the bottom of the Junction Post Stud is 35mm from the bottom of the Y Intersection Post - there are two square holes on the bottom of the Junction Post Stud to help.
- 5.19 Notches in the ends of the Y Intersection Post (and attached Junction Post Stud) allow the post to be leant at an angle until the top of the post can be slid up into the Head Track and the bottom can be slid over the Base Track. This assembly must be slid along the 135 deg run of the Y Intersection - not the two 90 deg runs - until the Y Intersection Post abuts the Head and Base Tracks.
- 5.20 Slide one of the Y Junction Post Studs into the Head and Base Tracks and up to the Y Intersection Post. Using 8mm No.6 Pan-head Pozi Screws (Code: 301) fix the Y Junction Post Stud to the Y Intersection Post at 600mm centres on both sides of the Y Junction Post Stud. Ensure the bottom of the of the Y Junction Post Stud is 35mm from the bottom of the Y Intersection Post. A simple check is that the notches at the bottom of the Y Junction Post Stud are 40mm from the bottom of the Y Intersection Post. Once fixed accurately fix the second Y Junction Post Stud to Y Intersection Post.
- Note:** For sound insulation, quilt can be used between the Y Junctions Post Studs (and Junction Post Stud) and the Y Intersection while assembling this junction.
- 5.21 The Elements can now be installed.

## 6.0 The Elements

### Glazed

- 6.1 The flush, frameless bi-bloc Glazed Elements are works pre-fabricated and pre-glazed as 45mm thick (half partition thickness) Elements. The vertical edges have locking strips with key slots to hook onto the hook-lugs of the Steel Stud. They are consequently readily relocatable with minimum site installation and being bi-bloc the Element weight and handling is reduced. The prefabricated Elements have a 6mm thick toughened glass pane with bevelled edges adhered to a mitred aluminium frame that has integral locking strips for hooking onto the hook-lugs on the Steel Studs. They are delivered as a sealed unit with a protective film on the back.
- 6.2 The Glazed Elements are Ceiling Height minus 150mm, where the base recess is 100mm ( $\pm 15$ mm) and the head recess is 50mm ( $\pm 10$ mm).



6.3 Using two Triple Glass Suckers position the Element on the floor in front of where it is about to be installed. Lift the Element and sit it against the Steel Studs nominally 100mm from the floor (or 50mm from the ceiling) - it should now be touching the hook-lugs; then lift the Element until it pushes back over the hook-lugs to hit the Steel Stud face. The Element can now be pulled down over the hook-lugs.

**Note:** It is vital the Glazed Element is pulled down fully onto the hook-lugs. A simple check is that the distance from the bottom of the Steel Stud to the bottom of the Glazed Element (glass edge) is 35mm (measured accurately)

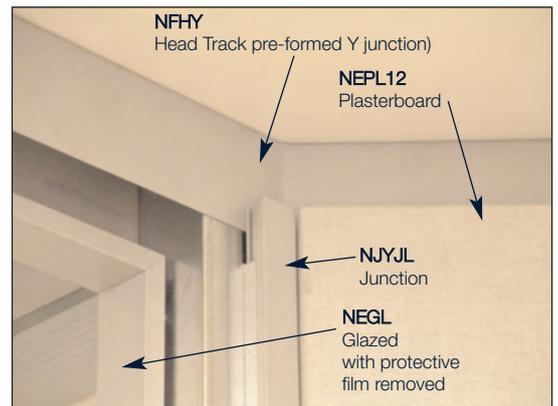
**Note:** Do not remove the protective film from the back of the Element.

**Note:** Use Adjustable Module Spacer on the back of the Steel Studs while installing the first Element to space the Steel Studs correctly.

6.4 If Adjustable Module Spacer were used to space the Steel Studs then these can now be removed.

**Note:** For sound insulation, quilt can be used above and below the Glazed Element - tucked into the Head and Base Tracks - before installing the second Glazed Element.

6.5 Using two Triple Glass Suckers position the second Element on the floor in front of where it is about to be installed (behind the first Element). The protective film on the back of both Glazed Elements should now be removed to ensure a dust-free cavity. Lift the Element against the Steel Studs nominally 100mm from the floor (or 50mm from the ceiling) - it should now be touching the hook-lugs; then lift the Element until it pushes back over the hook-lugs to hit the Steel Stud face. The Element can now be pulled down over the hook-lugs and should align with its mating Element.



6.6 The joint gap between two adjacent Glazed Elements is the standard 4mm.

**Note:** Manifestation is available for glass application either works or site applied.

## Venetian Blinds

6.7 Ls90 is designed to accommodate standard 25mm slat Venetian Blinds offset within the cavity of a Glazed Module. The blind is operated by a knob control and cable mechanism.

6.8 The blind head box is concealed in the bi-bloc head framing of the first installed Element, on the corridor side of the partition (control knob on office side).

- 6.9 The Venetian Blind is sent as a separate Element. It will need to be fixed to the top of the Glazed Element using a number of 50mm long strips of 1mm thick double-sided adhesive tape. 8mm No.6 Pan-head Pozi Screws (Code: 301) can also be used to secure the blind. The blind must be position very accurately so that the outside face of the blind box is aligned with the centre of the partition (back face of the 45mm thick Glazed Element). The glazing framework is pre-machined to accept the blind slat ladder, and Bottom Rail Hold Down Clips - to hook the bottom of the blind - have been pre-fitted.
- 6.10 Once the location of a control cable has been determined, the Steel Stud within which the cable will run must be un-assembled by removing the spacer plates partially from one side. To do this, unscrew the spacer plates and use a screwdriver to lift the top edge of the spacer plate over its locking tabs and slide the spacer plate off its hook-lugs. Once these have been removed the cable can be fed through the pre-punched hole approximately 1025mm (and 1175mm) from the floor. Depending on the ceiling height (position of spacer plates on the Steel Stud) a 10mm hole may need to be drilled in the top spacer plate (approximately 40mm from the top of the Steel Stud) for the control cable. The stud can now be carefully reassembled.
- 6.11 Install the Glazed Element containing the blind, ensuring the control cable does not interfere or get trapped.
- 6.12 Connect the cable ferrule to the splined rod and tighten with a 2mm Allen Key (supplied).
- 6.13 Carefully lower the slats, controlling with the pulley cord and hook the Bottom Rail onto the Bottom Rail End Cap Clips. Tighten the pulley cord and tie off, then lay it in the blind head box.
- 6.14 Before installing the opposing Glazed Element ensure the blind slats are clean, straight, sitting correctly in their ladder cord, and are not damaged.

## Fire Resistance

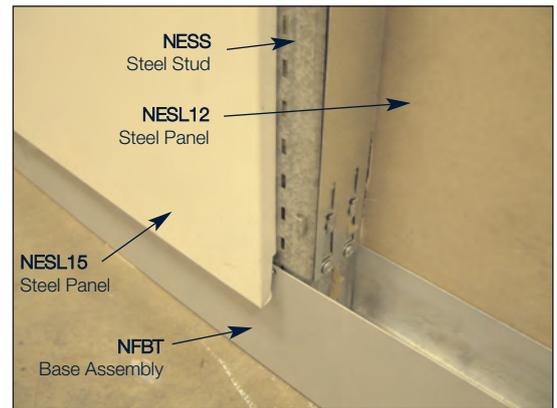
- 6.15 Where fire resistant partitions are required the Glazed Element (NEGL\_F: with FR Clips and pre-fitted intumescent), although installed in the same manner, requires intumescent within the 4mm inter-element joint gap. Refer to Komfort Summary of Performance Documentation for detailed information.

## Steel

- 6.16 The prefabricated Steel Elements are nominally 18mm thick with 0.8mm rolled and pressed steel skin, with a 12.5mm backing substrate and stiffener rails - as necessary dependant on Element width. The vertical return edges are pre-notched with key slots to hook onto the hook-lugs of the Steel Stud.
- 6.17 The Steel Elements are finished in polyester powder coat paint to selected colours, and being steel the Element allows for a magnetic wall facility.

6.18 The Steel Elements are Ceiling Height minus 150mm, where the base recess is 100mm ( $\pm 15$ mm) and the head recess is 50mm ( $\pm 10$ mm).

6.19 Using two Triple Glass Suckers position the Element on the floor in front of where it is about to be installed. Lift the Element and sit it against the Steel Studs nominally 100mm from the floor (or 50mm from the ceiling) - it should now be touching the hook-lugs; then lift the Element until it pushes back over the hook-lugs to hit the Steel Stud face. The Element can now be pulled down over the hook-lugs.



**Note:** It is vital the Steel Element is pulled down fully onto the hook-lugs. A simple check is that the distance from the bottom of the Steel Stud to the bottom of the Steel Element is 35mm (measured accurately).

**Note:** Use Adjustable Module Spacer on the back of the Steel Studs while installing the first Element to space the Steel Studs correctly.

6.20 If Adjustable Module Spacer were used to space the Steel Studs then these can now be removed.

**Note:** For sound insulation, quilt can now be used within the cavity before installing the second Steel Element. Refer to Komfort Summary of Performance Documentation for detailed information.

6.21 Using Triple Glass Suckers position the second Element on the floor in front of where it is about to be installed (behind the first Element). Lift the Element against the Steel Studs nominally 100mm from the floor (or 50mm from the ceiling) - it should now be touching the hook-lugs; then lift the Element until it pushes back over the hook-lugs to hit the Steel Stud face. The Element can now be pulled down over the hook-lugs and should align with its mating Element.

6.22 A joint gap between two adjacent Steel Elements is the standard 4mm.

## Fire Resistance

6.23 Where fire resistant partitions are required the Steel Element (NESL\_F: with pre-fitted intumescent), although installed in the same manner, requires intumescent within the 4mm inter-element joint gap. Refer to Komfort Summary of Performance Documentation for detailed information.

## Veneer, Painted and Laminate

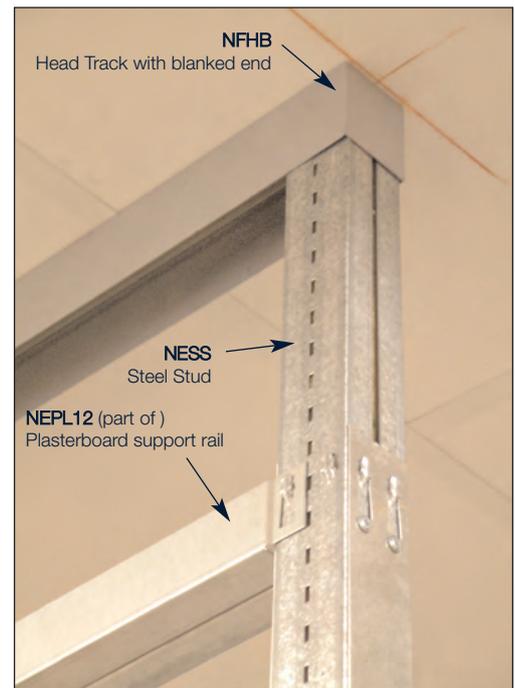
- 6.24 The prefabricated Veneer/Painted/Laminate Elements are nominally 17mm thick, balanced and lipped (or painted) on all edges, with stiffener rails - as necessary dependant on Element width. The vertical edges have locking strips with key slots to hook onto the hook-lugs of the Steel Stud.
- 6.25 The Veneer/Painted/Laminate Elements are Ceiling Height minus 150mm, where the base recess is 100mm (plus or minus 15mm) and head recess is 50mm (plus or minus 10mm).
- 6.26 Using two Triple Glass Suckers position the Element on the floor in front of where it is about to be installed. Lift the Element and sit it against the Steel Studs nominally 100mm from the floor (or 50mm from the ceiling) - it should now be touching the hook-lugs; then lift the Element until it pushes back over the hook-lugs to hit the Steel Stud face. The Element can now be pulled down over the hook-lugs.
- Note:** It is vital the Veneer/Painted/Laminate Element is pulled down fully onto the hook-lugs. A simple check is that the distance from the bottom of the Steel Stud to the bottom of the Veneer / Painted / Laminate Element is 35mm (measured accurately).
- Note:** Use Adjustable Module Spacer on the back of the Steel Studs while installing the first Element to space the Steel Studs correctly.
- 6.27 If Adjustable Module Spacer were used to space the Steel Studs then these can now be removed.
- Note:** For sound insulation, quilt can now be used within the cavity before installing the second Veneer / Painted / Laminate Element. Refer to Komfort Summary of Performance Documentation for detailed information.
- 6.28 Using Triple Glass Suckers position the second Element on the floor in front of the Studs nominally 100mm from the floor (or 50mm from the ceiling) - it should now be touching the hook-lugs; then lift the Element until it pushes back over the hook-lugs to hit the Steel Stud face. The Element can now be pulled down over the hook-lugs and should align with its mating Element.
- 6.29 A joint gap between two adjacent Veneer/Painted/Laminate Elements is the standard 4mm.

## Fire Resistance

- 6.30 Where fire resistant partitions are required the Veneer Element (NEML\_F), although installed in the same manner, requires intumescent to be applied on-site. Refer to Komfort Summary of Performance Documentation for detailed information.

## Plasterboard

- 6.31 The Plasterboard Elements are nominally 12.5mm plasterboard with vinyl finish wrapped around all four edges. The top and bottom edges have protective steel angles behind the vinyl finish. Pre-fitted Plasterboard Clips (Code: M05) are used in the back of the Element in-conjunction with Plasterboard Support Rails hooked onto the hook-lugs on the Steel Stud.
- 6.32 The Plasterboard Elements are Ceiling Height minus 150mm, where the base recess is 100mm (plus or minus 15mm) and head recess is 50mm (plus or minus 10mm).
- 6.33 Hook the Plasterboard Support Rails onto the hook-lugs on the Steel Stud, starting at the bottom on the lowest hook-lugs, at 600mm centres up the height of the Steel Stud. Depending on the Ceiling Height the top Plasterboard Support Rail may require special spacing (not at 600mm centres). There are two options:
- 6.33.1 If the top of the highest hook-lugs on the Steel Stud are between 75mm and 150mm from the bottom of the Head Track then a Plasterboard Support Rail can be hooked onto those highest hook-lugs.
- 6.33.2 If the top of the highest hook-lugs on the Steel Stud are less than 75mm or greater than 150mm from the bottom of the Head Track then a Plasterboard Support Rail must be screw fixed to the Steel Studs using 13mm No.8 Wafer Head Jack Point Screws (Code: DF21013). The position of this Plasterboard Support Rail is determined by the position of the Plasterboard Clips on the back of the Plasterboard Element. Measure the vertical centres of the two Plasterboard Clips at the top of the Plasterboard Element; the highest Plasterboard Support Rail must be positioned (accurately) and fixed using this measurement from the second highest Plasterboard Support Rail.
- 6.34 Insert two Plasterboard Support Saddles onto the bottom Plasterboard Support Rail. These should be approximately 100mm from each Steel Stud so as not to interfere with the Plasterboard Clips. These will align the bottom edge of the Plasterboard Element with adjacent Elements.
- 6.35 Stick a strip of 12mm x 6mm Foam (Code: 342) offset (edge of foam along centre of racking slots) along the centre of the front face of the Steel Stud, from top to bottom between the Head and Base Tracks, on each side of the Module.
- 6.36 Stick a strip of 12mm x 6mm Foam (Code: 342) along the back face of the top and bottom edges for the width of the panel.



- 6.37 Position the Element on suitable timber floor blocks in front of where it is about to be installed. Using Toe Lift Shoes (Code: M97) lift the Element and sit it against the Plasterboard Support Rails nominally 100mm from the floor (or 50mm from the ceiling); then lift the Element until it pushes back over the Plasterboard Support Rails. The Element can now be pulled down so that the Plasterboard Clips hook over the Plasterboard Support Rails, and so that the bottom of the Plasterboard Element is seated on the Plasterboard Support Saddles.

**Note:** For sound insulation, quilt can now be used within the cavity before installing the second Plasterboard Element. Refer to Komfort Summary of Performance Documentation for detailed information.

- 6.38 Position the second Element on suitable timber floor block in front of where it is about to be installed. Using Toe Lift Shoes (Code: M97) lift the Element and sit it against the Plasterboard Support Rails nominally 100mm from the floor (or 50mm from the ceiling); then lift the Element until it pushes back over the Plasterboard Support Rails. The Element can now be pulled down so that the Plasterboard Clips hook over the Plasterboard Support Rails, and so that the bottom of the Plasterboard Element is seated on the Plasterboard Support Saddles.

- 6.39 A joint between two adjacent Plasterboard Elements is a V butt joint.

**Note:** The hooking arrangement of the Plasterboard Element allows them to be slid along the partition (a few millimetres) to ensure a good V butt joint.

## Fire Resistance

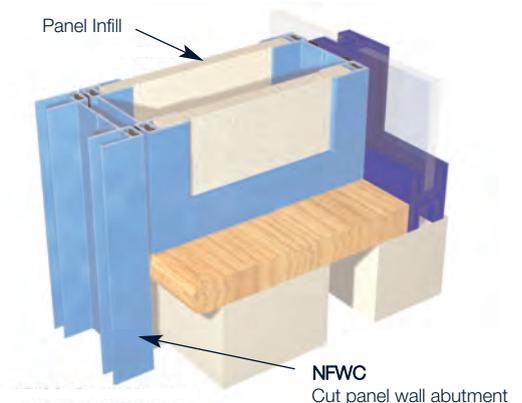
- 6.40 Where fire resistant partitions are required the Plasterboard Element (NEPL\_F), although installed in the same manner, requires intumescent to be applied on-site. Refer to Komfort Summary of Performance Documentation for detailed information.

## 7.0 Window Sills

- 7.1 To accommodate abutments to exterior windows Ls90 offers two window infill details.

### Panel Infill.

- 7.2 Mitre cut the Abutment Channel (N90A2) and Abutment Trims (N90A3) to the size of the aperture, allowing for thickness of foam.
- 7.3 Using the mitre brackets (806) and No.6 Pan Head Screws (301), fix the four mitred Abutment Channel section together. You should now have a complete frame.
- 7.4 Fit the 6 x 2mm Foam (175) to the back edges of the completed frame.



7.5 Place the frame into the aperture and fix into position.

**Note:** The edge that abuts the partition must be fixed into the abutment condition of the partition.

7.6 Cut the panels to size (aperture: height less 30mm; width less 30mm).

7.7 Screw fix the panels to the Abutment Channel frame, through the face of the panel, ensuring the fixing goes through the aluminium leg of the Abutment Channel. Use 25mm No.6 Drywall Screws.

**Note:** There is a recess in the back face of the Abutment Trim to allow for the screw head to project slightly from the face of the panel. The screws need to be 25mm (CTR) from the edge of the aperture for the screw head to be within this recess.

7.8 Push the small plastic Klick Fasteners into the Abutment Trims, spacing at about 300mm CTRS.

7.9 Snap the Abutment Trims onto the Abutment Channel frame.

**Note:** The Window Infill can be installed after the partition has been installed up to the window sill.

**Note:** See drawing number: N90FB254 for 3D assembly.

## Glazed Infill

7.10 **Option One:**

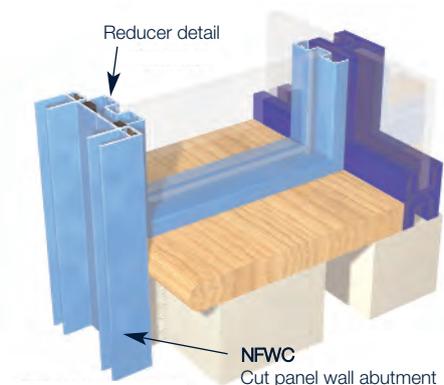
7.11 Use the Scribe Reducer Channel profile with single glazing pocket around the required way.

7.12 Mitre cut the Scribe Reducer Channel to suit the height and depth of the window sill recess (i.e. two vertical and two horizontal sections). Apply self-adhesive Foam to the back of the four sections.

7.13 Screw fix one (vertical) section to the window mullion and the two horizontal sections to the head and base of the recess.

7.14 Prior to offering the Wall Abutment into position, slide the glass into position, then fit and fix the Wall Abutment.

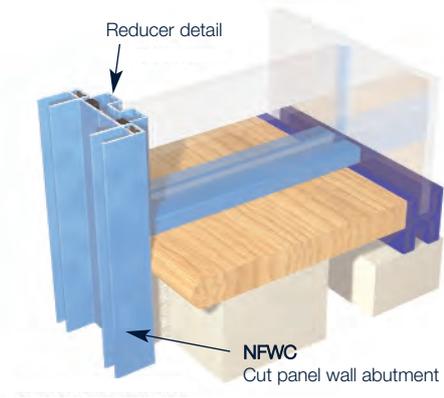
7.15 To complete the glass framing utilise the appropriate uPVC Rod Bead to locate glass and avoid rattle.



### 7.16 Option Two:

7.17 In certain situations, Glass Infills can be installed as Option One but omitting a vertical Scribe Reducer Channel if external window mullions do not occur at this abutment.

7.18 The head and base Scribe Reducer Channel is square cut to abut the external glazing pane. The glass being pre-sized to allow a 5mm nominal space to accept silicone filler.



## General Notes

### 8.0 Inter-Element Joint Infill

- 8.1 Upon installation of Panel, Glass and Doorset Elements (including Junctions and Wall Abutments) a vertical 4mm joint feature will be expressed (except Plasterboard Elements), which is filled with a grey polypropylene seal.
- 8.2 This polypropylene Joint Infill is cut to Element height, and occurs at all inter-element joints (except Plasterboard to Plasterboard).
- 8.3 The Joint Infill is pushed into the 4mm nominal joint gap, and is continuous except where Working Wall or Venetian Blind control knobs occur.
- 8.4 If the Joint Infill appears squashed, reducing the grip within the joint gap, use a cloth and run your thumb along the section to restore the shape of the V to ensure a tight fit within the joint gap.

### Acoustic Seal

- 8.5 Upon finishing installation of Panel, Glass and Doorset Elements (including Junctions and Wall Abutments) a horizontal gap remains between the Elements and the Head and Base Tracks (except Plasterboard Elements), which is filled with a white rubber seal (NERS).
- 8.6 This rubber seal must be run along the gap between the Elements and the Head Track (except Plasterboard and MDF Elements) continuously for a straight run of Ls90 partition.
- 8.7 This rubber seal must be run along the gap between the Elements and the Base Track (except Plasterboard, Glazed and MDF Elements) continuously for a straight run of Ls90 partition.
- 8.8 Where studs occur the gap between the Elements and the tracks will be tighter. Use a small instrument such as a flat head screwdriver to compress the rubber seal to aid installation.

**Note:** This rubber seal is necessary for Acoustic performance. Refer to Komfort Summary of Performance Documentation for detailed information.

## Working Wall

8.9 The Steel Studs incorporate centrally punched racking slots to receive 3mm thick cantilever bracketry for hanging selected furniture items. The bracketry sleeves within the 4mm inter-element joint interrupting the Joint Infill. The racking slots are levelled by virtue of the Steel Stud sitting on the Levelling Platform.

## Services

- 8.10 Services can be easily accommodated throughout the system by virtue of the bi-bloc system construction. The Ls90 framework allows for single side installation, facilitating easy co-ordination with integrated services by leaving one side open in specified areas that are to receive the integral services.
- 8.11 Releasable service panels adjacent to Doorsets can be factory prepared for lighting and / or power sockets and mounting boxes.
- 8.12 The whole of the associated site work must be co-ordinated with the installation contractor - and other trades - to ensure continuity of work and to minimise interference with site installation progress.

## Distribution of Materials

8.13 First check all materials and distribute to their identified levels. Sort each individual type of Element into separate lots, for use in the area of construction. In addition, distribute the required quantities to the requisite floor area(s) that are needed for imminent installation.

## Tool List (per team)

- 8.14 Electrical Cropper Saw  
Portable Electrical Band Saw with Mild Steel Cutting Blades  
Cordless Rechargeable Screwdriver  
Plumb Line  
Chalk Line  
3 Feet Spirit Level (accuracy to be checked by authorised body regularly)  
Electrical 3/8" or 1/2" Chuck Drill  
Electrical Hammer Drill  
12" Tin Snips  
60" Straight Edge  
Variable Set Square  
24oz Claw Hammer  
Rubber Hammer  
Hacksaw and spare blades  
Stanley Knife and spare blades  
15 feet Tape reading mm and inches  
Panel Saw  
No.2 Pozi Screwdriver  
No.3 Pozi Screwdriver  
8" x 3/16" Flat Blade Screwdriver  
6mm Carpenters Wood Chisel  
12mm Carpenters Wood Chisel  
25mm Carpenters Wood Chisel  
Selection of sharp high speed Twist Drills  
Selection of sharp high speed Hammer Drills  
Selection of sharp high speed Timber Drills  
5mm Allen Key  
10mm Spanner or Socket  
Laser Line  
Triple Glass Suckers  
Ladders  
Cleaning Materials  
Electrical Extension Leads  
Pencils

## Element List

Element:	Description:	Fire Rated:
NEDF	Doorframe (Full-Height Leaf machining)(Handed)	NEDFF
NEDS	Doorframe (Standard Leaf and o/p machining)(Handed)	NEDSF
NEDDF	Double Doorframe (Full-Height Leaf machining)(Handed)	
NEDDS	Double Doorframe (Standard Leaf and o/p machining)(Handed)	
NEDVF	Full-Height Veneer Door Leaf	
NEDVS	Standard Veneer Door Leaf with over-panel	
NEDDVF	Double Full-Height Veneer Door Leaf	
NEDDVS	Double Standard Veneer Door Leaf with over-panel	
NEGB06	Glazing for Blind (600 wide)	NEGB06F
NEGB12	Glazing for Blind (1200 wide)	NEGB12F
NEGB15	Glazing for Blind (1500 wide)	NEGB15F
NEGL06	Glazed (600 wide)	NEGL06F
NEGL12	Glazed (1200 wide)	NEGL12F
NEGL15	Glazed (1500 wide)	NEGL15F
NEGV06	Venetian Blind (600 wide)	
NEGV12	Venetian Blind (1200 wide)	
NEGV15	Venetian Blind (1500 wide)	
NEGT06	Triple Glazed (600 wide)	NEGT06
NEGT12	Triple Glazed (1200 wide)	NEGT12
NEGC06F	Central Glazed (600 wide)	NEGC06F
NEGC12F	Central Glazed (1200 wide)	NEGC12F
NESL06	Steel Panel (600 wide)	NESL06F
NESL12	Steel Panel (1200 wide)	NESL12F
NESL15	Steel Panel (1500 wide)	NESL15F
NEPL06	Plasterboard (600 wide)	NEPL06F
NEPL12	Plasterboard (1200 wide)	NEPL12F
NEML06	MDF Panel (Veneered)(600 wide)	NEML06F
NEML12	MDF Panel (Veneered)(1200 wide)	NEML12F
NEML15	MDF Panel (Veneered)(1500 wide)	NEML15F
NELL06	MDF Panel (Laminate)(600 wide)	NELL06F
NELL12	MDF Panel (Laminate)(1200 wide)	NELL12F
NELL15	MDF Panel (Laminate)(1500 wide)	NELL15F

Element:	Description:	Fire Rated:
NENL06	MDF Panel (Painted)(600 wide)	NENL06F
NENL12	MDF Panel (Painted)(1200 wide)	NENL12F
NENL15	MDF Panel (Painted)(1500 wide)	NENL15F
NEYL06	MDF Panel (Vinyl)(600 wide)	NEYL06F
NEYL12	MDF Panel (Vinyl)(1200 wide)	NEYL12F
NEYL15	MDF Panel (Vinyl)(1500 wide)	NEYL15F
NFBA	Base Assembly (Doorset on Abutment)	
NFBB	Base Assembly with Blanked End	
NFBD	Base Assembly with Door Junction End	
NFBJ	Base Assembly with Notched End	
NFBT	Base Assembly	
NFBE	Base Assembly (Pre-formed Elbow)	
NFBY	Base Assembly (Pre-formed Y Junction)	
NFHB	Head Track with Blanked End	
NFHJ	Head Track with Notched End	
NFHT	Head Track	
NFHE	Head Track (Pre-formed Elbow)	
NFHY	Head Track (Pre-formed Y Junction)	
NJSE	Stop End	
NJSF	Full Stop End (front fix)	
NJSS	Full Stop End (side fix)	
NJTJ	T Junction	
NJEC	135° Corner	
NJYJ	Y Junction	
NJWT	Tolerance Wall Abutment	
NJWC	Cut-Panel Wall Abutment	
NESS	Steel Stud	
NEJI	Joint Infill	
NERA	Rubber Seal	
NFAMS15	Adjustable Module Spacer (850mm to 1500mm)	
NFAMS08	Adjustable Module Spacer (500mm to 850mm)	
NFELD	Element Locking Device	
NFJPJ	Junction Post Jig	
NFDCB	Door Closer Bracket	



Certificate No FM25967