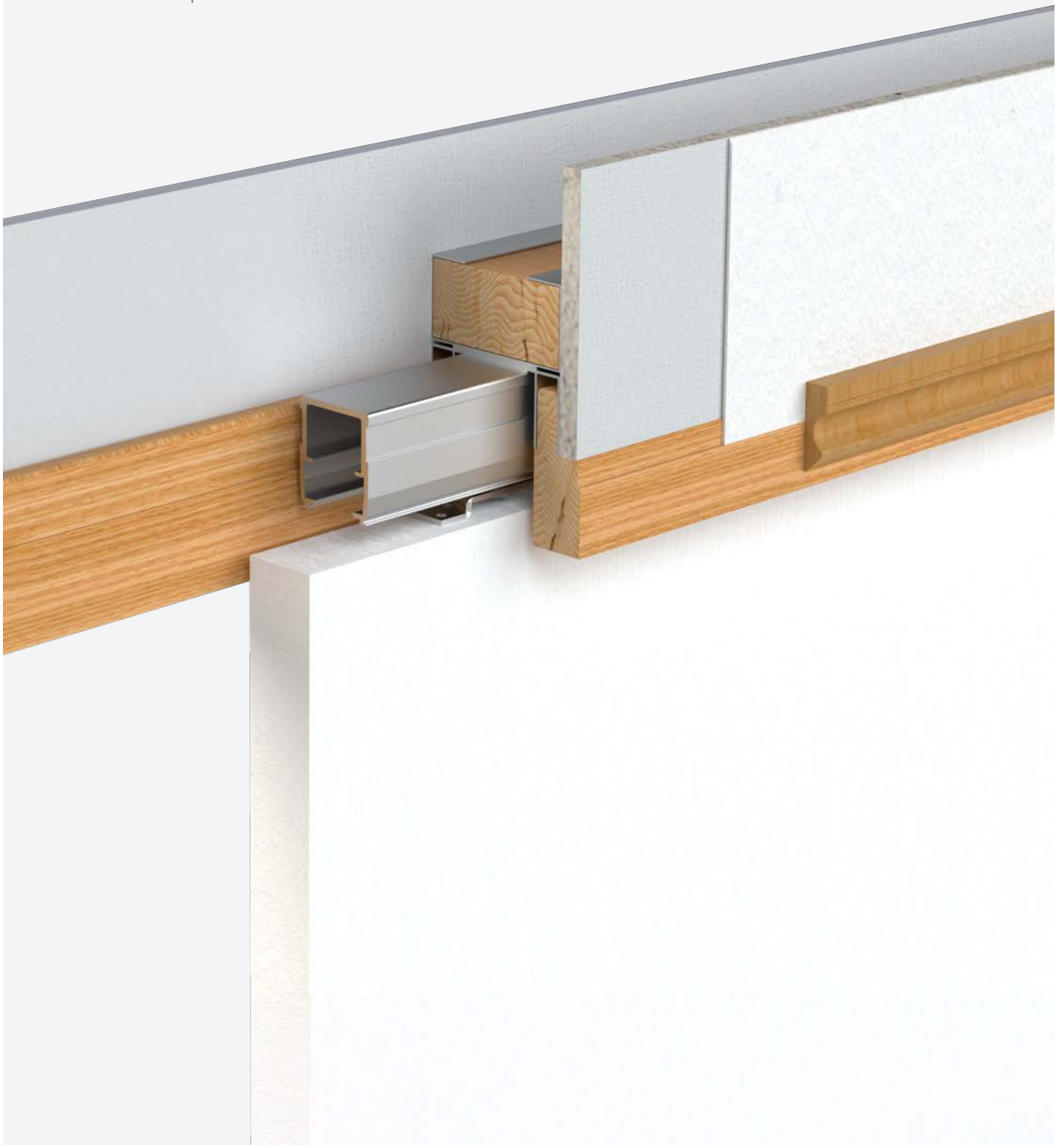


**ENIGMA**<sup>®</sup>  
POCKET DOORS

# **Motus**<sup>®</sup> Kit Visible Trim

## Installation Guide

SEL-PRT-00776 | Rev. 5



# Thank you for choosing Enigma

To ensure the installation process is simple and efficient, we recommended you read this guide in full first.

Specific tools are also required to complete the installation:



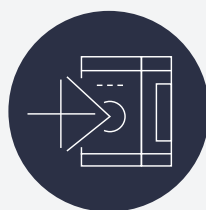
Pencil



Tape Measure



Knife



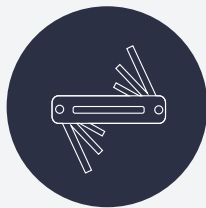
Laser Level



Cordless Drill Driver



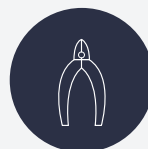
Powered  
Chop Saw



Hex Keys  
(Metric)



Flathead Screwdrivers  
(Medium & Small)



Cable Stripper  
& Cutters



Long-nose  
Pliers

## Sync Unit Wiring Tools For Double Doors

# Getting started

Before you start installation ensure you have read and understood the instructions.

## DELIVERY

The Motus Enigma pocket Door system will be delivered in at least three boxes:

1. Pocket Frame
2. Trim Surround
3. Track

If a Door leaf has been ordered this will come separately.



## POWER REQUIREMENTS

The Motus Enigma pocket Door system requires a low-voltage electrical connection. Wiring for the system can vary based on the type of connection:

### Hardwired (Optional)

1. **13amp Fused Spur** Isolation Switch
2. **1.5mm Twin & Earth Cable** feed to the top of the Pocket enclosure

### 'Kettle-lead' Wiring (Standard)

1. **13amp** Single Socket



### IMPORTANT SAFETY INFORMATION

The unit should be installed and commissioned by a trained and qualified personnel.

The unit may only be opened and repaired by the manufacturer.

This unit may only be operated from a protective low-voltage with safe electrical isolation.

Always consider the safety functions of your application as a whole, never just in relation to one individual component of the system.

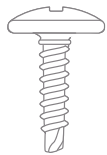
The installed is responsible for carrying out a risk assessment and installing correctly.

Avoid touching any electronic components.

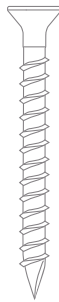
# Motus® Frame kit NFR V

Familiarise yourself with components included. All fixings will come pre-packaged to suit your specific project requirements.

## MOTUS FRAME FIXINGS



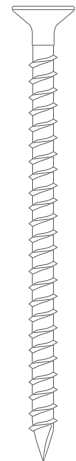
**Type-01 - B.x13.5mm**  
Wafer Head  
Self Drilling  
SEL-PRT-00685



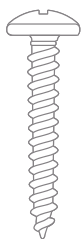
**Type-02 - 4.5x40mm**  
Countersunk Pozi Single Slash  
Wood Screws  
SEL-PRT-00686



**Type-03 - 4x50mm**  
Countersunk Pozi  
Wood Screws  
SEL-PRT-00687



**Type-06 - 4.5x60mm**  
Countersunk Pozi Single Slash  
Wood Screws  
SEL-PRT-00690



**Type-04 - 4x30mm**  
Cross Round Head Pozi  
Wood Screws  
SEL-PRT-00688



**Type-05 - 3.5x25mm**  
Bugle Head Phillips  
Self Drilling  
SEL-PRT-00689



**Type-09 - 5x50mm**  
Countersunk Pozi Single Slash  
Wood Screws  
SEL-PRT-00693



**Type-15 - 6.0x80mm**  
Countersunk Pozi 3  
Wood Screws  
SEL-PRT-00770

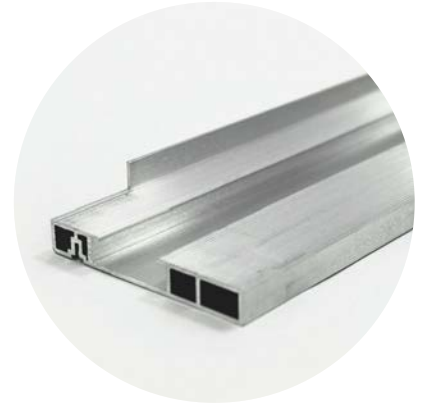
## MOTUS FRAME COMPONENTS



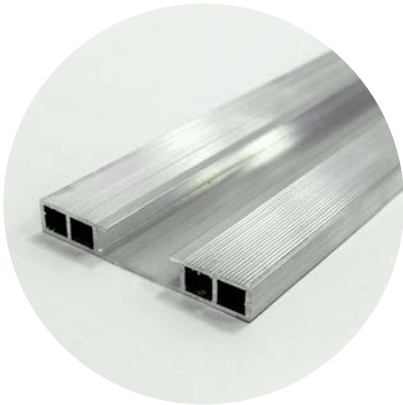
**Base Channel**



**Head Channel**



**Leading Edge Jamb**



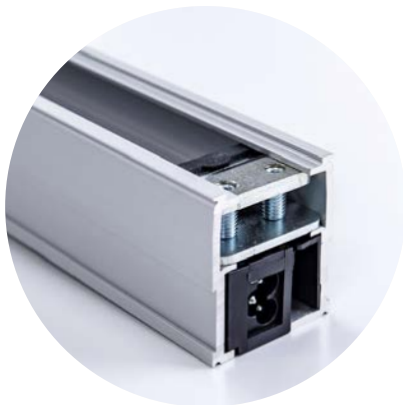
**Intermediate Jamb**



**Timber Insert**



**Door Guide Pin & Channel**



**Motus Sliding Track**



**Brush Strip**

# Wall construction preparation

The Motus Enigma system can be fitted to steel or timber studwork partitions. You must ensure the Head stud is strong enough to take the Door weight.

## IMPORTANT INSTALLATION NOTES

### 1. Studwork size

The studwork size required is **94mm**.

If using steel studs a 94mm Head and base Track and 92mm uprights should be used.

### 2. Steel studs

If using steel studs, timber inserts are required within the studs to provide additional strength and purchase for 60mm Track Screws.

### 3. Doors above 2300mm

If the Door height you are installing is above 2300mm then using 2 layers of plasterboard is recommended.

To order kits to suite two layers of plasterboard add 'Double Board' to the product code.

### 4. Self-supporting Head

For situations in high rise buildings where you cannot fix to the ceiling or soffit then use the Enigma Self-supporting Head installation detail.

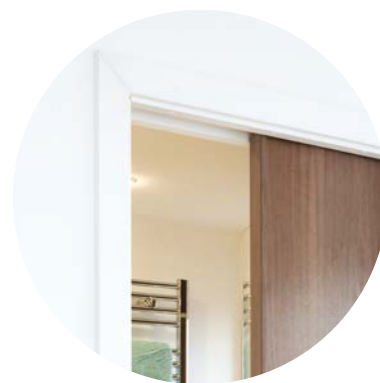
Follow standard Enigma instructions to calculate your studwork structural opening and add the following dimensions: **Width +94mm** and **Height +220mm**. Refer to the specific Self-supporting Head installation instructions for further details.

### Bespoke requirements?

Enigma can be customised to suit bespoke projects. In principle, the installation process remains the same, however certain installation dimensions may differ. Please contact the Selo team to discuss your bespoke requirements.

# Dimensions

## Motus Visible



### SELF-SUPPORTING HEAD

Follow the standard Enigma instructions to calculate your studwork structural opening and add the following dimensions: **Width +94mm** and **Height +220mm**

### IMPORTANT

If installing Self-supporting Head please refer to the specific installation instructions for further details.

MOTUS TRACK SIZE

| ITEM                                  |              | 1750mm     | 2000mm     | 2250mm     |
|---------------------------------------|--------------|------------|------------|------------|
| Door sizes (mm)<br>Height = S/O -95mm | Width        | 875        | 1000       | 1125       |
|                                       | Min. Height  | 1500       | 1500       | 1500       |
|                                       | Max. Height  | 2815       | 2815       | 2815       |
|                                       |              |            |            |            |
| Clear openings (mm)                   | Min. Single  | 600        | 845        | 970        |
|                                       | Max. Single  | 844        | 969        | 1094       |
|                                       | Min. Double  | 1000       | 1711       | 1961       |
|                                       | Max. Double  | 1710       | 1960       | 2210       |
| Structural openings (mm)              | Width Single | 1870       | 2120       | 2370       |
|                                       | Width Double | 3700       | 4200       | 4700       |
|                                       | Height       | Door +95mm | Door +95mm | Door +95mm |
|                                       |              |            |            |            |

### Base Channel Calculations

Please refer to Step 4 of the Frame Installation instructions shown on page 12.



### STRENGTHEN HEAD

When constructing your stud partition, please ensure the Head is strong enough to take the weight of the sliding Door that will hang from it.

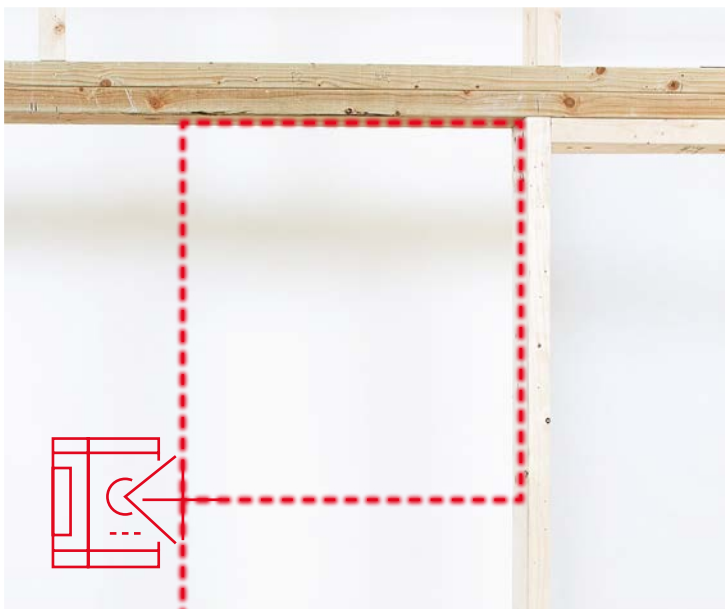
#### IMPORTANT

If using a Self-supporting Head please refer to those specific installation instructions.



### CHECK SIZE WITH SCHEDULE

When forming the structural opening, please ensure you are working to the correct opening size provided on the Door schedule.



### LEVEL-UP

Ensure the opening is square and plumb.

#### IMPORTANT

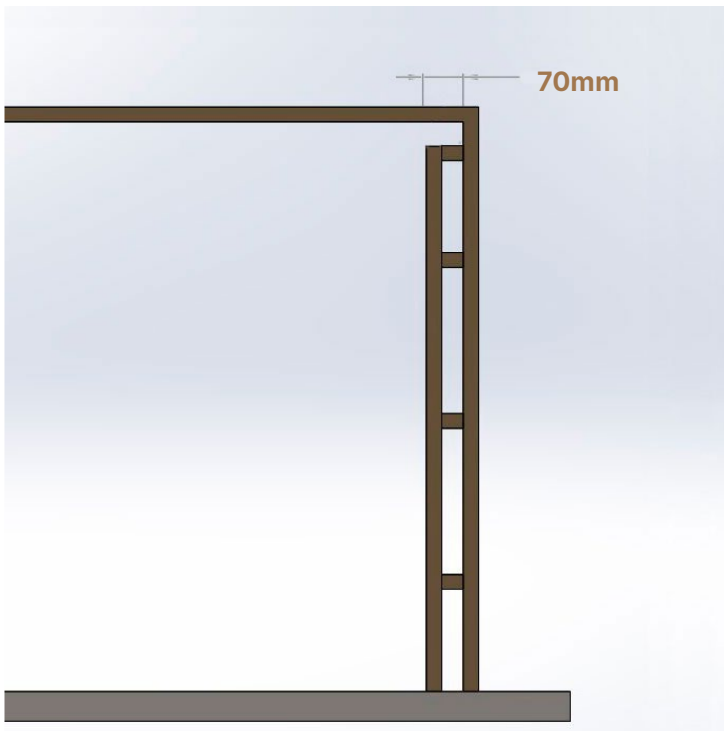
We strongly recommend using a laser level for setting out.



# Frame installation

## IMPORTANT

If installing Self-supporting Head please refer to the specific installation instructions for further details.



## PREPARE THE STRIKE JAMB

### IMPORTANT

If installing double Doors skip this step.

Cut some C16 timber stud (**70mm x 45mm**) to the height of the structural opening.

Cut noggins at **26mm thick**. Space at a maximum of 500mm centres and fix to the Strike as per the drawing.



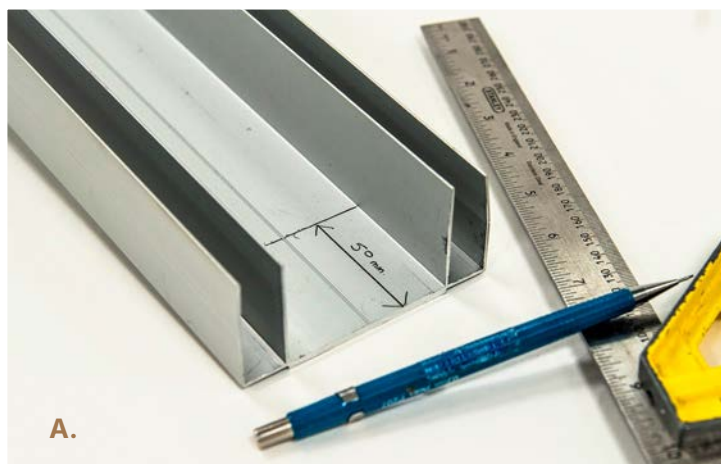
## PREPARE HEAD CHANNEL & SLIDING TRACK

### Single Doors

Cut the Head Channel to S/O width.

### Double Doors

Cut the **Head Channels** equally to take up the whole S/O. It is important to ensure that where the two Channels meet is in the centre of the opening.



## HEAD CHANNEL PREPARATION

### Single Doors

**A.** Mark **50mm** from the rear end of the **Head Channel** and **70mm** from the Strike/front end.

**B.** The Kettle Lead port is at the front of the Track and will be installed at the Strike end of the pocket. Place the **Track** on the **Head Channel** and line-up the Kettle Lead entry point with the **70mm** mark. Align the centre lines of the **Track** and the **Head Channel** together, pilot drill the screw holes.

### Double Doors

Mark **50mm** from each end. The **Tracks** will be installed with the Kettle Lead ports in the middle to aid wiring. Place the two **Head Channels** together with the Tracks inside lining up the centre lines. Ensure there is **100mm** gap between the Tracks for the wire box and then pilot drill the screw holes.

## FIT THE HEAD CHANNEL

Using a laser level, fit the Head Channel to the top stud with **Head Channel Screws** using **Type-02** Screws provided.

### IMPORTANT

It is important to ensure the Head Channel is level with no bends or bows. If the top stud is not straight then pack the Head Channel out with packers to maintain level.

### Single Doors

The 70mm gap and the Kettle Lead port should be at the Strike end of the pocket.

### Double Doors

For double ensure the Kettle Lead ports are facing each other in the centre of the opening and with 100mm gap between the Tracks.

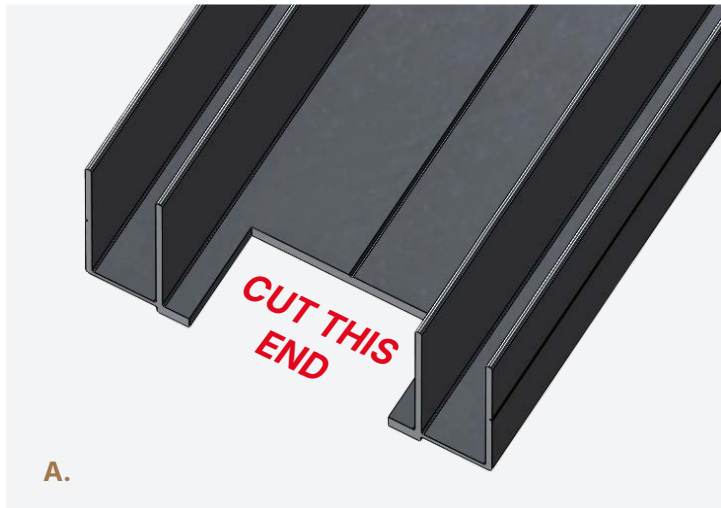
## Base Channel length

### Single Doors NFR V

Structural Opening (minus) - **Clear Opening (minus)**  
-130mm

### Double Doors NFR V

Structural Opening (minus) - **Clear Opening (minus)** -64mm



## System calculations

### Structural opening examples\*

#### 1750mm wide

|                     |                          |
|---------------------|--------------------------|
| Single S/O          | 1820mm (Track +70mm)     |
| Double S/O          | 3600mm (Track x2 +100mm) |
| Max. movement range | 875mm                    |

#### 2000mm wide

|                     |                          |
|---------------------|--------------------------|
| Single S/O          | 2070mm (Track +70mm)     |
| Double S/O          | 4100mm (Track x2 +100mm) |
| Max. movement range | 1000mm                   |

#### 2250mm wide

|                     |                          |
|---------------------|--------------------------|
| Single S/O          | 2070mm (Track +70mm)     |
| Double S/O          | 4100mm (Track x2 +100mm) |
| Max. movement range | 1125mm                   |

\*S/O height Door leaf +95mm

### Permitted Door leaf sizes

|             |        |
|-------------|--------|
| Min. height | 1500mm |
| Max. height | 2815mm |
| Min. width  | 875mm  |
| Max. width  | 1125mm |

Travel for unit = The amount which goes into the Strike Jamb.

## CALCULATE BASE CHANNEL & FIX

### Single/Double Doors

To accurately determine the length of the **Base Channel**, refer to the calculations on the left. Cut the **Base Channel** to this dimension. *Image A.*

### Base Channel fitting

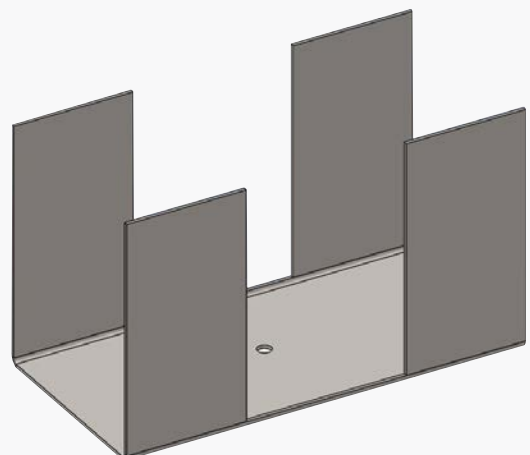
Place the **Base Channel** on the floor against the rear stud.

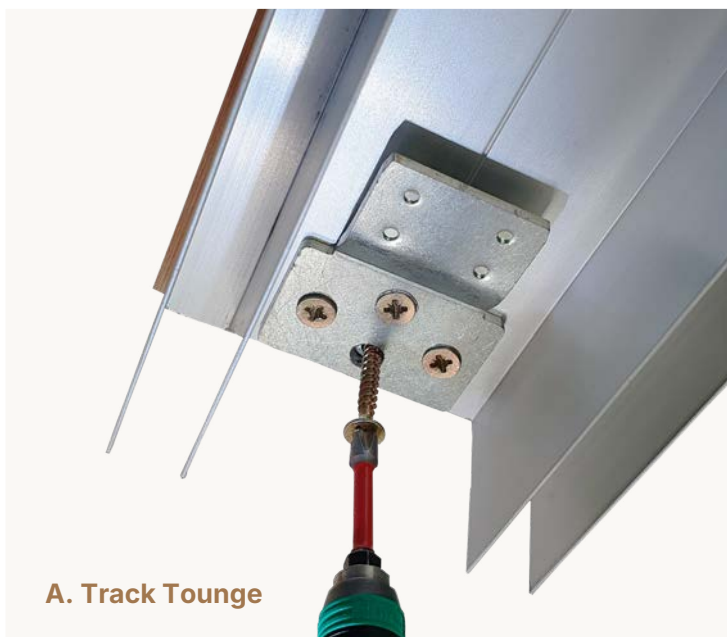
If provided with a 'cut-to-size' system position the notched end tight against the rear stud.

At this stage it is vital that to ensure that the centre line of the **Base Channel** is secured directly underneath the centre line of the Track above. Any deviation will result in misaligned Doors and Trims. Secure to the ground with fixings suitable for substrate.

### Cover-plate (Non- Sync)

If the Sync unit is not used, screw the Cover-plate provided between the Tracks to Cover the cable.





**A. Track Tounge**



**B. Track**

## FIT TOP TRACK

**A.** Using **x4 Type-09 Screws** fix the **Track Tongue** in place ensuring it is central inside the Head Channel and up against the **rear Stud**, as shown.

**B.** Slide the **rear of the Track** into the **Track Tongue**, then, using the **Type-15 Screws**; fix the remaining x2 screw holes located at the **Front** and **Middle** of the Track (**NOT the Rear**).

Once fixed in place, the **front of the Track** should be lined-up with the **70mm** mark for a **Single Door**, or **50mm** mark for **Double Doors**. (Detailed in **Step 2**).

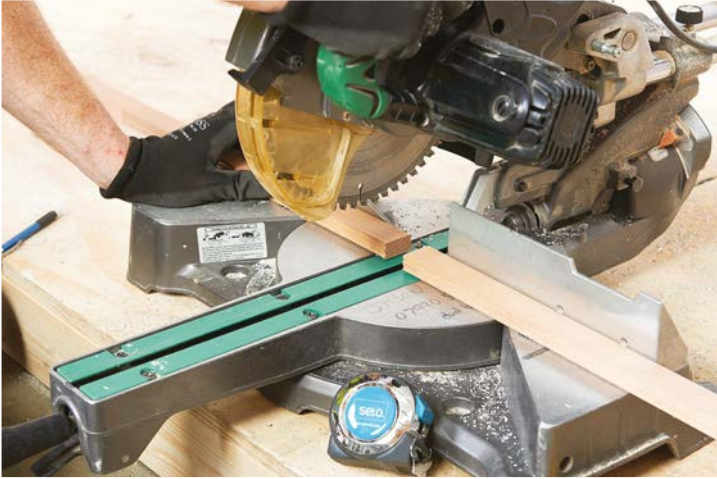
### IMPORTANT

**Do not fix the rear of the Track (where the tongue is holding the Track in place) This is to ensure that the Track can be removed if required for servicing.**



## CUT LEADING EDGE & INTERMEDIATE JAMB

Cut the **Leading Edge Jamb** and **Intermediate Jamb** 15mm less than the structural opening height.



### CUT & FIT INTERMEDIATE TIMBER INSERT

Cut the Intermediate **Timber insert** 100mm shorter than the Aluminium Jamb and slide the insert into the **Intermediate Jamb** so it sits 50mm from each end.

#### IMPORTANT

When using Door leafs wider than 926mm the kit will be supplied with extra Intermediate Jambbs to be fitted equally space within the pocket width.

### CONNECTING THE TRACK

#### Single Doors

Push the Kettle Lead in the Strike end of the Track. Run the excess cable behind the Strike Trim packer to the Plug. **DO NOT power on at this point.**

#### Double Doors

Remove the Kettle Lead ports on both Tracks. As standard; Motus Double Doors utilise a **Sync unit** to open both Doors at the same time, additional wiring is required - See **p18**.

For **Hardwired Power Supply** please see **p32**.





## FIT POCKET SIDES & FIX THE JAMB

**A.** Slide the **Intermediate Jamb** into the **Head Channel** and **Base Channel** with the **Timber inserts** facing out so it sits centrally in the pocket. Fix using **Type-01** Screws.

**B.** Slide the **Leading Edge Jamb** into **Base Channel** with notched end at the top, so the flange sits hard against the end of the **Base Channel**.

Plumb the Jamb and fix into place using one **Type-01** screw top and bottom as shown in the image. Must be posited furthest from the opening.



## FIT BRUSH STRIP

Cut the **Brush Strip** to length and fit to the **Leading Edge Aluminium profile**.

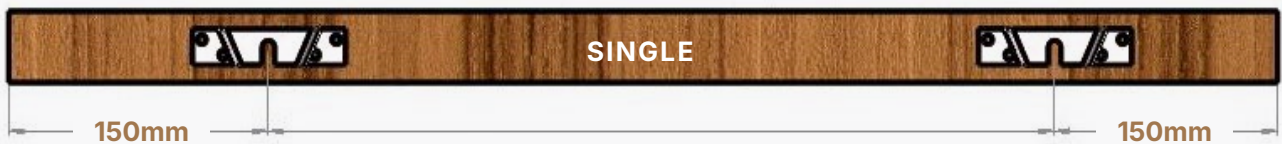
### IMPORTANT

If using simultaneous opening ensure that the **Door leafs** and **Head Trims** have been fitted. Refer to the **simultaneous opening instructions** for more.

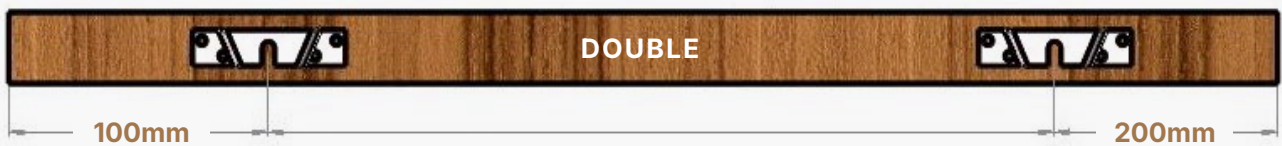
# Door leaf installation

The Door leaf needs to be hung before the trim is fitted.

## FIT HEAD BRACKETS



**Single Door** Position the Brackets equally to the edges of the Door, spaced to **150mm** centres.



**Double Doors** Fit Brackets **100mm from the back** edge and **200mm from the front** so the two Doors meet in the centre over the 100mm Sync unit. (Instead of hanging equally as per the singles.)

## FIT THE GUIDE CHANNEL

Apply a thin bead of adhesive into the groove in the bottom of the Door and then tap the Plastic Channel into position.





## ASSEMBLE GEAR

Adjust the Bolts to achieve a gap approximately **15mm** between the underside of the Track and the top of the Bolt.



## HANG THE DOOR

**A.** The Bracket fits onto the Bolt as shown.

**B.** Feed the rest of the Door at least halfway into the pocket and hang the front Bracket onto the Trolley Bolt.

**C.** With spanners provided, wind the Bolts up or down to plumb the Leading Edge of the Door and to achieve the required gap under the Door (Door undercut).

Tighten the Locking Nuts to secure the Door to the Brackets. They may need to be slacked-off later, to true the Door to the Trims once they are fitted.





### FIT THE DOOR STOPS

Slide the **Door Stop** into the Track, fix into place by tightening the grub Screws. This can be finally adjusted once the Trims are installed. To set the rear stop, slide the Door back into the pocket until the Door will be flush with the Leading Edge Trims, then tighten the stop up against the carriages.

#### IMPORTANT

It is important to set the rear stop at this point as once plasterboard is installed there is no access to rear stop.

### SYNC FOR DOUBLE DOORS ONLY



### DRILL HEAD CHANNEL

#### IMPORTANT

The next steps A-E refer to the installation of a Sync unit and is used with Double Doors ONLY. For Single Door installation please skip the following steps.

Work out in relation to your current internal wall cabling as to the route to the centre of the Tracks, then drill a hole **no smaller than 8mm** in the **Head Channel** as shown.

### SYNC FOR DOUBLE DOORS ONLY



### REMOVE KETTLE-LEAD PORTS

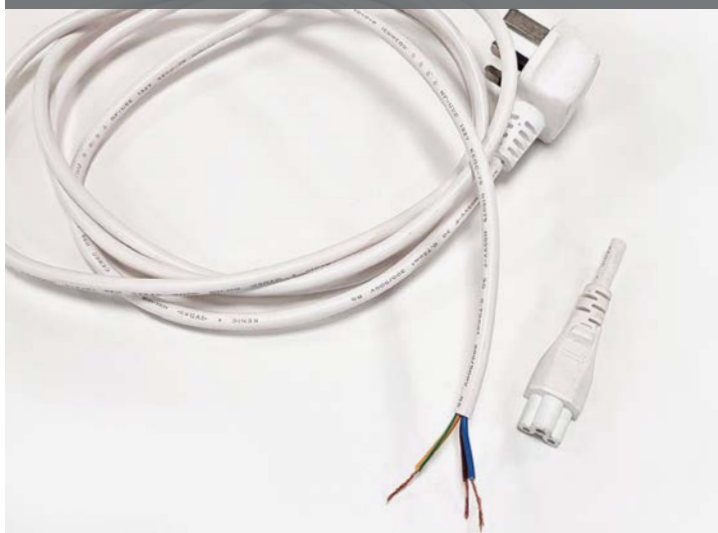
Remove the fascias on both Tracks to expose the Kettle Lead port and Connection Terminals.

**Remove x2 Screws** before removing port. Ports need to be removed from **both Tracks**.

#### IMPORTANT

Do not bend-down switchboard when removing the ports.

### SYNC FOR DOUBLE DOORS ONLY



### PREPARE CABLE

Cut the **Kettle-lead Plug** off the Power Cable supplied and thread through the **Head Channel** hole drilled previously.

Strip the cable approximately **30mm** from the ends.

### SYNC FOR DOUBLE DOORS ONLY

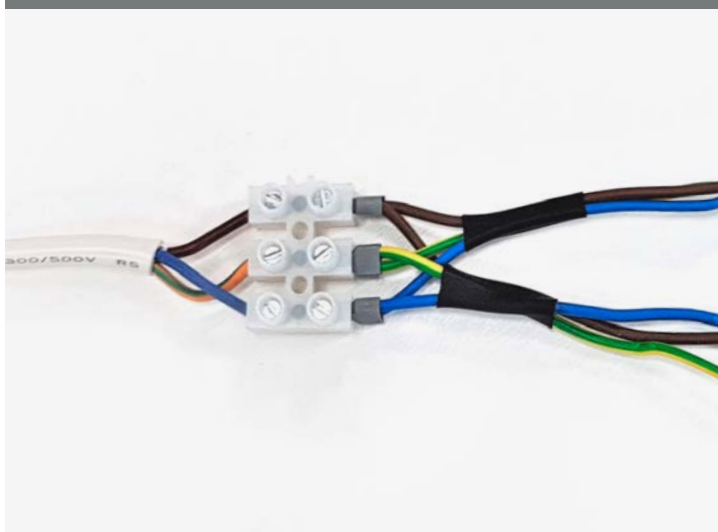


### CONNECT TRACKS

Wire the block to the Tracks as shown.

Connect the two Tracks together with the **Sync-cable** provided in the plugs shown.

### SYNC FOR DOUBLE DOORS ONLY



### WIRE POWER CABLE

Wire the Power Cable to the Connector Block as shown then 'power-up' the Track.



## CALIBRATE TRACKS

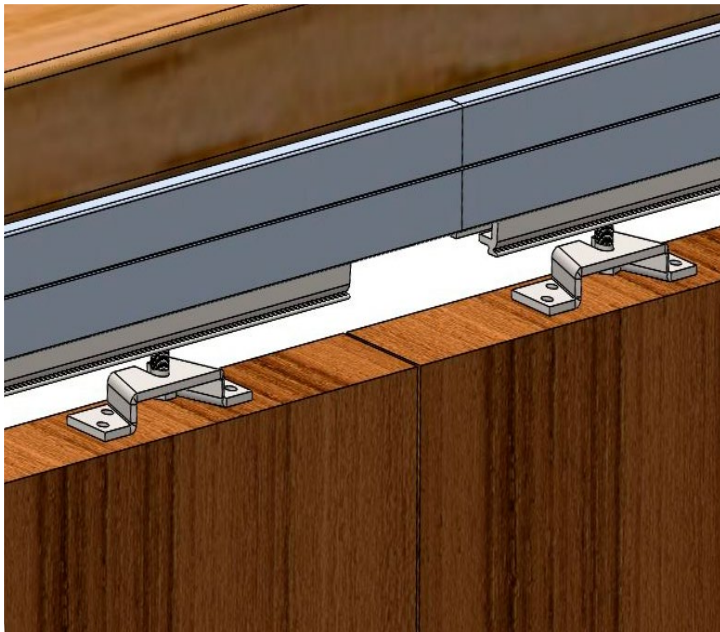
Prior to configuration ensure Doorstops are correctly fitted to avoid any potential damage.

Power-up the Motus. **Press-and-hold** the **'reset'** button (both Tracks if installing a Double Door) for **3 seconds** - The LED light will flash, let go and stand clear of the Door(s) while it self calibrates. Usually the Door will open/close 2-3 times during the process. Adjust the Door levels if needed so it closes straight against the Strike Jamb.

### IMPORTANT

The Tracks must have the same Speed/Delay times to Sync correctly. These can be adjusted with the plastic screwdriver (enclosed). Do not over turn the adjustment Screws; only turn between Min and Max indicators.

Use the provided plastic screwdriver **ONLY**.



## SYNC FOR DOUBLE DOORS ONLY



Test the Doors to ensure correct movement/function. Attached the **Cover Plate** to Cover the gap and screw into place.



### FIT DOOR GUIDE PIN

Fit the Door Guide Pin at the finished floor level with fixings suitable for substrate. The Pin offset needs to be facing the Strike stud and aligned centrally with the centre line on the Base Channel.

If your installation requires the Door Guide Pin to be raised up use suitable packers.

#### IMPORTANT

**The Pin needs to be fitted at FFL (finished floor level). If the finished floor is not yet installed, fitment of the Floor Pin can be delayed until the flooring is completed.**



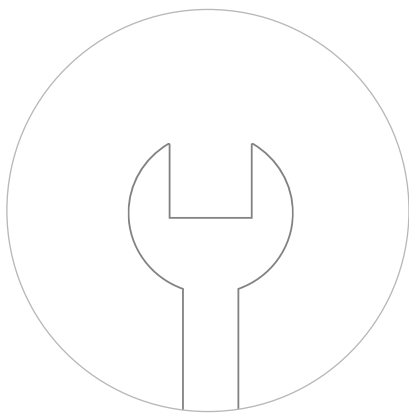
### PLASTERBOARD ONE SIDE

Plasterboard over one side of the pocket along with the rest of the wall using the **Type-05** self drilling Screws provided. It is vital to ensure the Leading Edge Jamb's remain completely vertical and plumb once boarded. It is essential to clear any swarf or debris that may be in the top Track and Bottom Channel at this stage.

# Motus<sup>®</sup> Trim kit NFR V

All fixings will come pre-packaged to suit your specific project requirements.

## SUPPLIED TOOLS



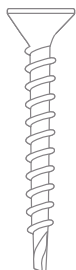
Spanner

## VISIBLE TRIM FIXINGS

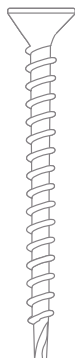


**Type-05 - 3.5×25mm**  
Bugle Head Phillips  
Self Drilling  
SEL-PRT-00689

## VISIBLE TRIM FIXINGS (cont.)



**Type-07 - 3.5×32mm**  
Bugle Head Phillips  
Self Drilling  
SEL-PRT-00691



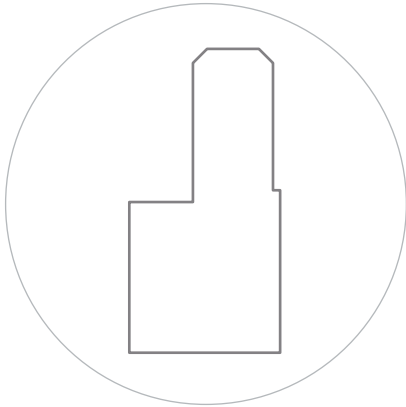
**Type-08 - 3.5×42mm**  
Bugle Head Phillips  
Self Drilling  
SEL-PRT-00692



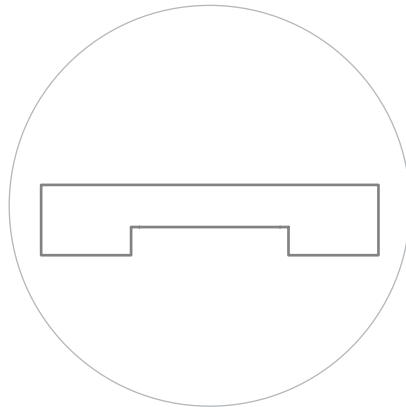
**Type-09 - 5×50mm**  
Countersunk Pozi Single Slash  
Wood Screws  
SEL-PRT-00693



**Type-13 - 1.4×25mm**  
Panel Pin  
Nails  
SEL-PRT-00531

**VISIBLE TRIM COMPONENTS****Head Trim**

Single Door x1 / Double Door x2

**Strike Trim**

Single Door x1 / Double Door n/a

**Leading Edge Trim**

Single Door x2 / Double Door x4

**Strike Jamb Seals**

# Visible trim installation

Now the Door leaf is hung you are ready to install the trim.



## INSTALL LEADING EDGE TRIM

Cut the **Leading Edge Trims** to the height of the opening and slot them over the flange on the Leading Edge Aluminium Jamb, with the grooves for the Intumescent Seal facing in towards the Door.

They must be secured into position with the **Type-05 Screws** at **300mm** intervals. Please note that the timber will need to be pilot-holed first.



## LINE THE DOOR UP

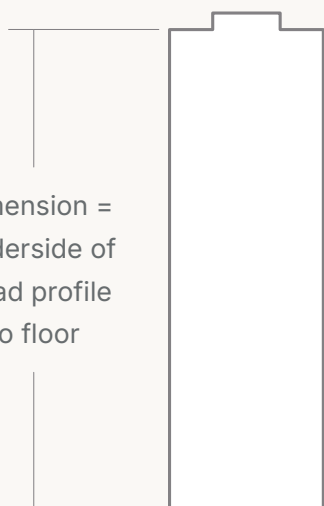
If required, the Door can now be trued into alignment with the Leading Edge Trims by adjusting the hanger Bolts up or down as necessary.

When you're happy that everything is aligned and the gaps between the Door and Trims are equal, lock the Bolts firmly into position by winding down the Locknuts.

### IMPORTANT

**Maximum undercut must not exceed 8mm.**

Dimension =  
Underside of  
Head profile  
to floor



## INSTALL STRIKE TRIM

Cut the **Strike Trim** as per the drawing measuring **from** the notch to the end that is not notch. Cut the end that is **not notched**.

Then fit the notched end centrally in the **Head Channel**. Plumb the Strike Trim using a level so it is aligned centrally with the **Head Channel** and fix into place using the **Type-09** Screws.

### IMPORTANT

When installing double Doors the Strike Jamb is not required to be used.



## SET CLOSER STOP

Adjust the metal clip, so the Door leaf closes and is held in place, against the Strike Jamb. The closer stop must be inside by the maximum dimensions shown below:

875mm operator = **200mm** (max.)

1000mm operator = **250mm** (max.)

1125mm operator = **300mm** (max.)



## INSTALL THE HEAD TRIM

Cut the **Head Trim** the distance between the two timber side Jamb. Slot into place in the Head and fix using **Type-05** Screws.



## FINISHING

Now the wall can be tape and jointed and wall and Trims painted.

### IMPORTANT

**We recommend tape and jointing not plastering.**



## FIT STRIKE SEALS

Fit the Rubber Seals to the corners of the Strike Trim as shown in the illustration.







# Troubleshooting

Technical support helpline **020 3880 0339**



| MALFUNCTION   | POSSIBLE CAUSES   | REMEDY  |
|---|---|---|
| Door is switched on<br>Door is not responding<br>Green LED is off | No power supply available   | Check power supply  |
|   | Power cable connection not firmly plugged in                                      | Plug in the power cable connection firmly                                       |
|   | Power cable defective   | Replace power cable   |
|   | Mains plug defective  | Replace drive   |
| Door not responding<br>Green LED lights up                        | Program switch in position [0]<br>(OFF)   | Switch program switch to the desired position                                   |
|   | Program switch in position [II]<br>(PERMANENTLY OPEN)                             | Switch program switch to the desired position                                   |
|   | Door was opened by double-clicking<br>PERMANENTLY OPEN switched on                | Close the door by double-clicking again   |
|   | Safety sensor on the door is active (obstacles in<br>the sensor's detection area) | Remove obstacles and adjust safety sensors if<br>necessary                      |
|   | Cable to sensor defective   | Check cable and replace if necessary  |
|   | No safety sensors connected   | Check jumpers and replace if necessary<br>Terminals must be jumpered            |
|   | Drive defective   | Replace drive   |
| LED flashes green   | Learning cycle was not completed  | Restart learning cycle  |
|   | Drive defective   | Replace drive   |
| Door stops while<br>moving  | Door moves stiffly  | Check the door's area of movement and eliminate<br>any reason for the stiffness |
|   |   | Check track and floor guide for dirt or wear and<br>clean if necessary          |
| Door moves past the<br>set OPEN<br>or Closed position             | Corresponding end stop has shifted  | Readjust and retighten end stop<br>Carry out a learning cycle                   |
| Red LED lit up<br>constantly                                      | Control defective   | Turn the power switch off and then on again                                     |
|   |   | Replace drive   |

|                                     |  |   |
|-------------------------------------|--|---|
| Red LED flashes cyclically 2 times  | Control defective  | Turn the power switch off and then on again   |
|                                     |  | Replace drive   |
| Red LED flashes cyclically 3 times  | Power range switch has been switched over                  | Turn the power switch off and then on again   |
| Red LED flashes cyclically 4 times  | Testable safety sensors defective                          | Check safety sensor and replace if necessary  |
|                                     | Sensor's cable defective                                   | Check cable and replace if necessary  |
|                                     | DIP switches 1 to 3 set incorrectly                        | Check and reset DIP switch settings   |
| Red LED flashes cyclically 5 times  | Incremental encoder or incremental encoder cable defective | Turn the power switch off and then on again   |
|                                     |  | Replace drive   |
|                                     | Opening width set incorrectly                              | Reset opening width (end stops)<br>Carry out a learning cycle   |
| Red LED flashes cyclically 6 times  | Door's area of movement is blocked                         | Clear the area of movement  |
|                                     | Opening width set incorrectly                              | Reset opening width (end stops)<br>Carry out a learning cycle   |
| Red LED flashes cyclically 10 times | Stator or stator cable defective                           | Turn the power switch off and then on again   |
|                                     |  | Replace drive   |
|                                     | Short circuit at the connection terminal                   | 1. Eliminate short circuit<br>2. Turn the drive off and then on again using the power switch                    |
| Hum in final position               | Unfavourable end position of the door leaf                 | Move end stop by at least 2 mm<br>Carry out a learning cycle  |
| Door leaf vibrates while moving     | Guide mechanism is tight                                   | If necessary, readjust the door leaf connection and floor guide<br>Rotate nuts several times to fix door leaves |

## Dip Switch Settings

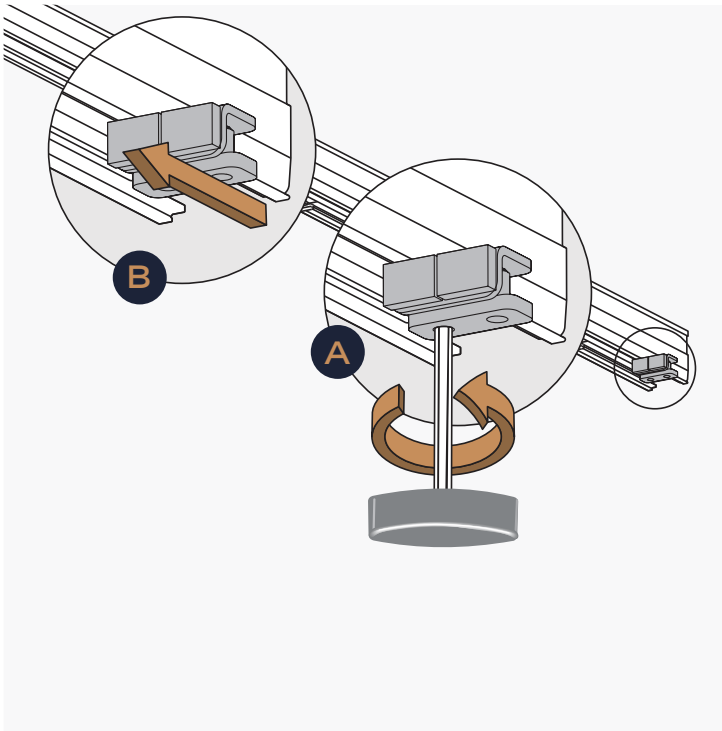
Activate different inputs at the Connection Terminals via the Dip Switches to adjust operation modes.

- |  |  |
|--|--|
| <b>8</b> OFF = No locking function                               | ON = Locking function                                |
| <b>7</b> OFF = Reduced closing force                             | ON = Enhanced closing force                          |
| <b>6</b> OFF = Automatic Function activated                      | ON = Permanent Open Function activated               |
| <b>5</b> OFF = External motion detector activated                | ON = External pushbutton activated                   |
| <b>4</b> OFF = Internal motion detector activated                | ON = Internal pushbutton activated                   |
| <b>3</b> OFF = Test low active                                   | ON = Test high active                                |
| <b>2</b> OFF = Sensor test at secondary closing edge deactivated | ON = Sensor test at secondary closing edge activated |
| <b>1</b> OFF = Sensor test at main closing edge deactivated      | ON = Sensor test at main closing edge activated      |



# Hardwired Power Supply

How to hard-wire a permanent Power Supply to your Motus powered Enigma pocket Door system.



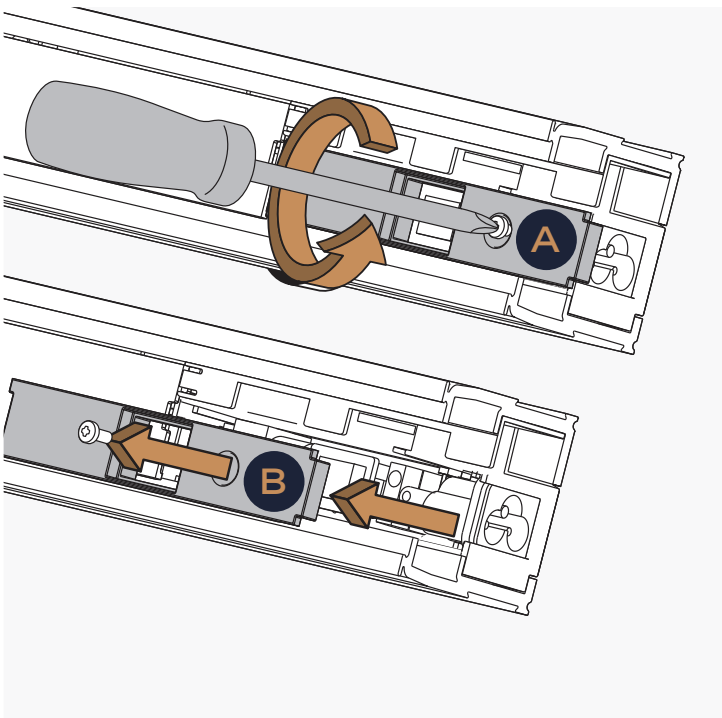
## MOVE END STOP

When the system is installed with permanent Power Supply, the internal Power Supply socket has to be removed.

Loosen the Screws at the End Stop and move the End Stop to the centre of the system.

### IMPORTANT

Do not remove or screw down the End Stop.

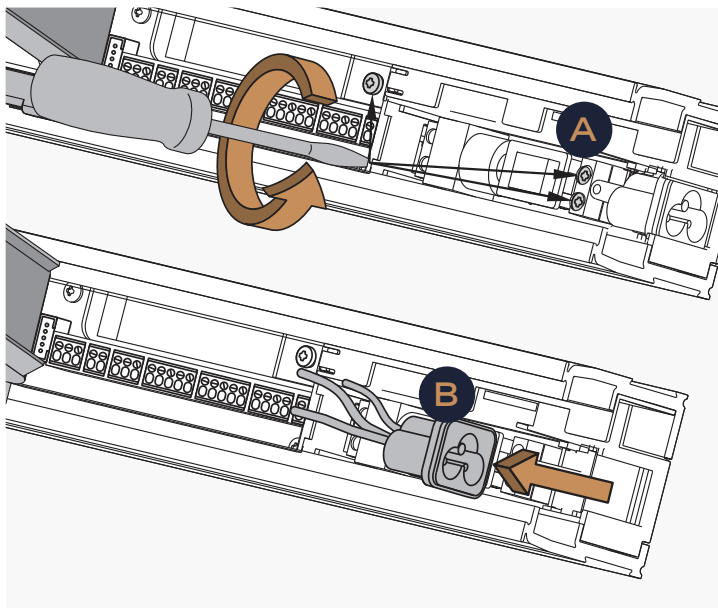


## REMOVE POWER SUPPLY COVER

Loosen the screw in the Cover of the Power Supply housing and remove the Cover (on the side where the connections are located).

### IMPORTANT

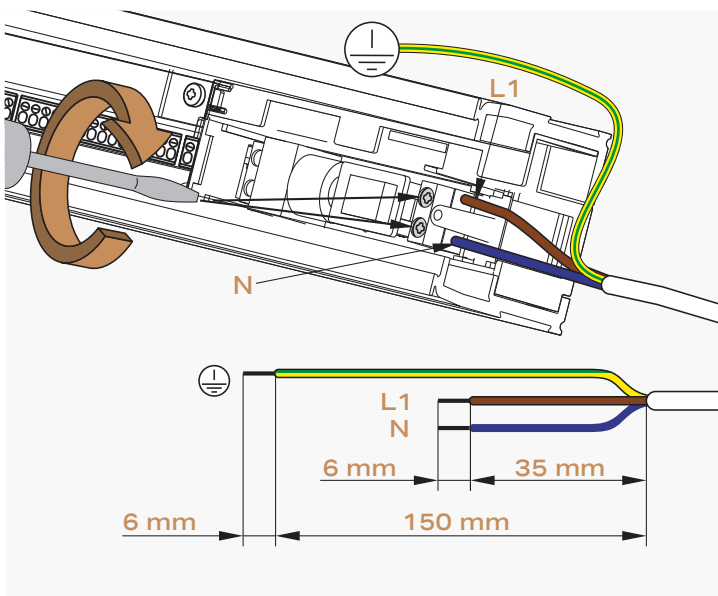
Keep the Cover and the screw in a safe place as you will require it later.



### REMOVE INTERNAL SOCKET

Carefully open the Cover of the Control Unit housing by levering it out with the tip of a flat-bladed screwdriver.

Relax the Screws of the Connection Terminals and remove the internal shockproof socket.

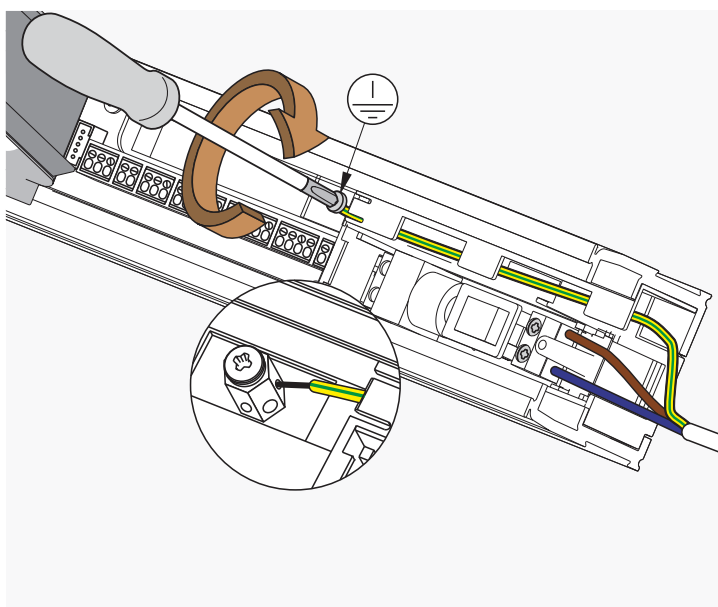


### LIVE & NEUTRAL CONNECTIONS

Cut the Leads to length, dismantle them and connect **L1** and **N** to the Connection Terminals of the Power Supply as shown.

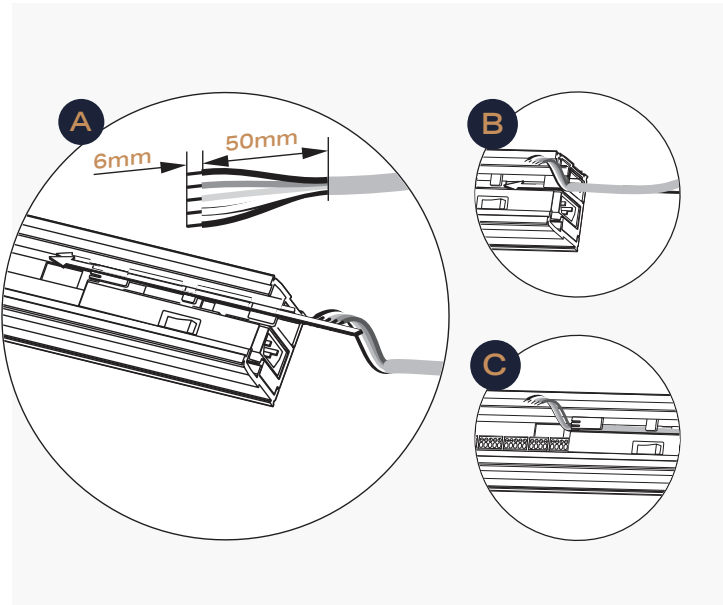
#### IMPORTANT

Before starting with the installation, make sure that the Power Supply line is dead (de-energized).



### EARTH CONNECTION

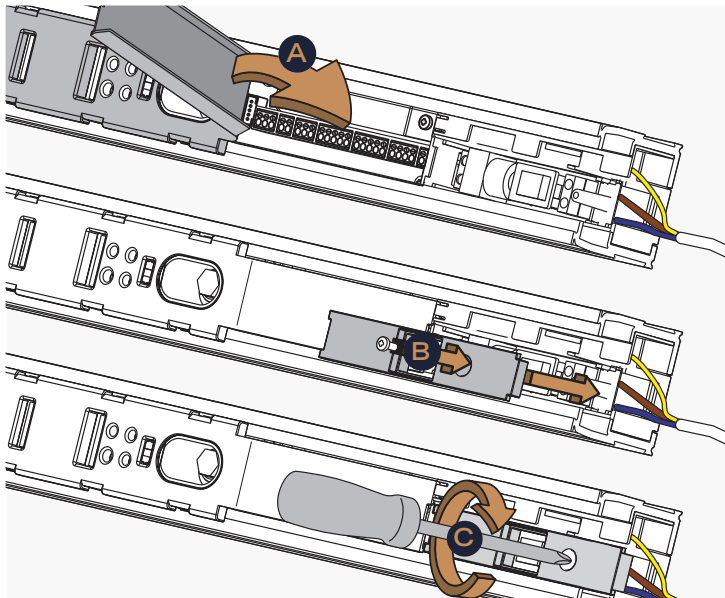
Lay the grounding line through the housing of the operator as shown in the picture and connect it to the Grounding Terminal (PE).



### CONNECT EXTERNAL ACCESSORIES

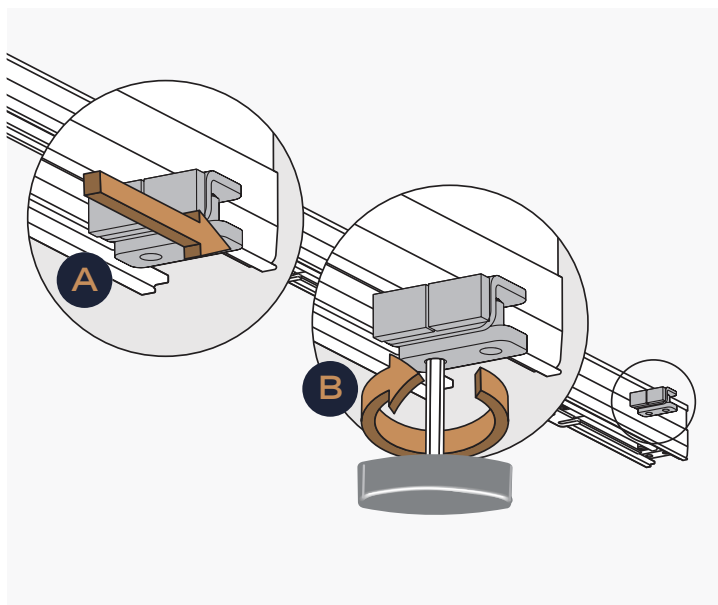
Connect all external accessories, except Safety Sensors. The cables for Sensors, Push-buttons etc have to be laid inside a Cable Channel as indicated in the picture.

If additional Accessories are not required move to next Step.



### CLOSE AND SCREW-DOWN COVERS

Close the Cover of the Control Unit housing. Fix and screw down the Cover of the Power Supply housing.



### RETURN END STOP

Move the End Stop to the end of the Channel and screw it down thoroughly.

#### IMPORTANT

The End Stop must not overlap.

# Commissioning and inspection

These checks should be carried out on a routine basis to be determined based on risk assessment.

## RISK ASSESSMENT GUIDANCE

Low energy movement of the doorset is generally not protected with additional protective devices because the kinetic energy levels are not considered to be hazardous. However, use of low energy doorset movement should only be considered when the risk assessment has taken account of elderly, frail and disabled users and indicates that the risk to these users is low.

The result of the final verification and operational tests should be recorded in a log book. The log book shall refer to applicable instruction for use and shall have space available to record:

1. All maintenance and repairs carried out, including recommendations (Improvements, replacements etc)
2. All significant changes or upgrading carried out
3. Any work undertaken to the doorset
4. Name, date, signature of designated responsible person
5. Include copies of the 'Check Details' table below, filled out at periods defined in the risk assessment

| INSPECTION RECORD   |                          | Name                 | Signed   | Date / /                 |                      |
|---|--------------------------|----------------------|--|--------------------------|----------------------|
|   | ✓ or ✗                   | Initials             |  | ✓ or ✗                   | Initials             |
| Risk assessment carried out within the last 12 months.  | <input type="checkbox"/> | <input type="text"/> | Test Door closing time (see Table F.2 Min Time for 90% Travel Distance).                       | <input type="checkbox"/> | <input type="text"/> |
| Check Door and pocket condition ensuring no sharp edges* or other hazards. Check all essential components are fitted and in serviceable condition.<br><small>*If flush handles are fitted then the Doors stop should be set so the handle remains out of the pocket when open to mitigate risk of injury.</small> | <input type="checkbox"/> | <input type="text"/> | Test auto reverse function works when the Door contacts an obstruction.                        | <input type="checkbox"/> | <input type="text"/> |
| Isolate the power to the doorset and check to ensure manual operation is achievable.  | <input type="checkbox"/> | <input type="text"/> | If auto close is enabled ensure users are aware of this function.                              | <input type="checkbox"/> | <input type="text"/> |
| Restore power and check Door cycles twice whilst initiating, led lamp should remain green when finished.  | <input type="checkbox"/> | <input type="text"/> | If switches are present, check condition and function.   | <input type="checkbox"/> | <input type="text"/> |
|   |                          |                      | If additional sensors have been fitted following risk assessment check condition and function. | <input type="checkbox"/> | <input type="text"/> |

Table F.2 - Minimum Travelling Time per Doorset vs. Mass of Door Leaf

| Mass of Door Leaf (Kilogram)       | 80kg                                 | 70kg                              | 60kg                                | 50kg                               | 40kg                                | 30kg                               | 20kg                                | 10kg                                | 90% Travel Distance Per Leaf (Meters) |
|------------------------------------|--------------------------------------|-----------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|
| Max. Travelling Speed (Meters/Sec) | 0.21mps                              | 0.22mps                           | 0.24mps                             | 0.26mps                            | 0.29mps                             | 0.34mps                            | 0.41mps                             | 0.58mps                             |                                       |
| Min. Travelling Time (Seconds)     | 3.5s<br>3.9s<br>4.4s<br>4.9s<br>5.4s | B.s<br>3.7s<br>A.s<br>4.6s<br>A.s | 3.0s<br>3.4s<br>3.8s<br>C.s<br>4.7s | 2.7s<br>A.s<br>3.5s<br>3.9s<br>C.s | 2.5s<br>2.8s<br>A.s<br>3.5s<br>3.8s | A.s<br>2.4s<br>2.7s<br>3.0s<br>C.s | 1.8s<br>2.0s<br>B.s<br>2.5s<br>2.7s | C.s<br>1.4s<br>1.6s<br>1.8s<br>1.9s | 0.7m<br>0.8m<br>0.9m<br>1.0m<br>A.m   |

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