STEEL-LINE
GARAGE DOORS

NO BRACE WIND RATED SECTIONAL DOOR

INSTALLATION GUIDE

THESE INSTRUCTIONS ARE FOR USE BY EXPERIENCED INSTALLERS OF GARAGE DOORS

By undertaking the installation of this door, the installer understands the dangers associated with the installation.

Steel-Line Garage Doors is not responsible for any and all liability resulting in the injury and or death derived from an improper installation.

Revised September 2015

GENERAL WARNING

To install this door safely, a number of precautions must be taken. For safety of all concerned, pay heed to the warnings and instructions given below.

SPECIAL SAFETY WARNINGS OR REMARKS IN THIS MANUAL ARE INDICATED WITH THIS SYMBOL. PLEASE READ WARNINGS CAREFULLY.

- Please read this installation manual completely prior to installation. It is very important to install this door correctly in order to achieve proper and safe operation, as well as ensure the door performs to specification in cyclonic conditions.
- ***These doors are much heavier than non wind rated doors and care should be taken in terms of manual handling and ensuring all the tracks and track fittings are fixed securely to carry this additional weight.***
- All the components which have been supplied are designed for this specific sectional overhead door. Replacement or adding additional components may have an adverse effect on the performance, safety and the guarantee of the door.
- Springs, cables and bottom brackets are under strong tension. Do not attempt to loosen any fasteners on these components while under tension, otherwise the sudden release of the spring forces will result in severe risk of injury.
- All instructions are given as if viewing the door from **inside looking out**.

General Note

It is recognised that experienced installers may carry out the installation in a different manner, or vary the sequence of installation that is contained in this manual. Also the use of different horizontal track hangers and/or fixings (taking into account the warnings noted above) may occur, or different techniques and/or varying dimensions that are contained in this manual may be used to achieve the same outcome, except where noted for the door to achieve its rated wind performance. This manual is only intended to be a general guide on how to install a Steel-Line sectional overhead door and is not intended to be presented as the only way to install this door.

CONTENTS

July 2015 – Revised Noggin Diagram & Centre Bracket & loose bearing replaces Centre Bearing Bracket.
Sept 2015 – LHR headroom was 270. Operator was “Forza”. Revised drawing with width extended to 5100mm wide.
April 2016 – Noggin diagram was revised to suit horizontal track sizes.

Parts Check List

Before installation, check that the following list of parts have been provided. If anything is missing from this list please contact your nearest Steel-Line branch or Steel-Line distributor/reseller.

- Pack of door panels, one fitted with bottom rail with weatherseal.
- One pair of vertical tracks (straight). Low Headroom Doors (LHR) will have 2 pairs of straight tracks – the vertical track is the one with 'C' profile.
- One pair of horizontal tracks (curved).
- One shaft (usually a galvanised steel tube).
- Pack of spring/s (Red cone designating L/H spring; Black cone designating R/H spring).
- One hardware box
- 2 @ 2300 LG bracing angles for horizontal track.
- Reinforcing top hat struts, one for each panel for door widths up to 3000 wide & two for each panel for door widths greater than 3000 wide.

The hardware box should contain:

- Packing List of door details ***(do not throw this away as it contains information that helps in the installation of the door)*** affixed to box.
- 2 End Bearing Brackets.
- 2 Centre Bearing Bracket (2 required for 3 or 4 spring doors).
- Pair of Flag Brackets (L/H & R/H).
- 2 pairs of pressed metal Horizontal Track Hanger Brackets
- Track Brackets – 14 off
- 2 Cable Drums – Red for L/H; Black for R/H.
- 2 Cables.
- Pair of Bottom Bracket Assemblies (L/H & R/H) complete with long axle roller with roll pin fitted.
- 2 Adjustable Top Brackets for Top Panel
- Long Axle Rollers with axle holder & roll pin fitted as an assembly (L/H & R/H assemblies) – 4 pairs (4 panel doors); 5 pairs (5 panel doors).
- Metal Side & Centre/Intermediate Hinges (number dependant on door size).
- Bags of various fasteners.

Low Headroom Front Spring Doors should also contain:

- Pair of LHR Support Plates (L/H & R/H).
- Pair of Plastic Curves (L/H & R/H).
- 6 Dual Track Joiners.
- Additional Fasteners for above.

SECTION 1: Pre-Installation Checks

A Sectional Overhead Door is designed to be fitted behind the opening so the following dimensions need to be checked before fully unpacking the door for installation.

1. **Opening Width:** Check that the panels supplied overlap the daylight opening width by a minimum 50mm each side.

   ***NB:* It is important that this is confirmed as door performance in cyclonic conditions requires this clearance.**

2. **Side Clearance:** The minimum side clearances are (based on 50mm overlap per side):

Door Type	**Minimum Side Clearance (per side)**
Standard Headroom	150mm
Low Headroom	175mm

3. **Opening Height:** The maximum opening height for the supplied door is the specified door height (refer packing list for door size supplied) less 50mm.

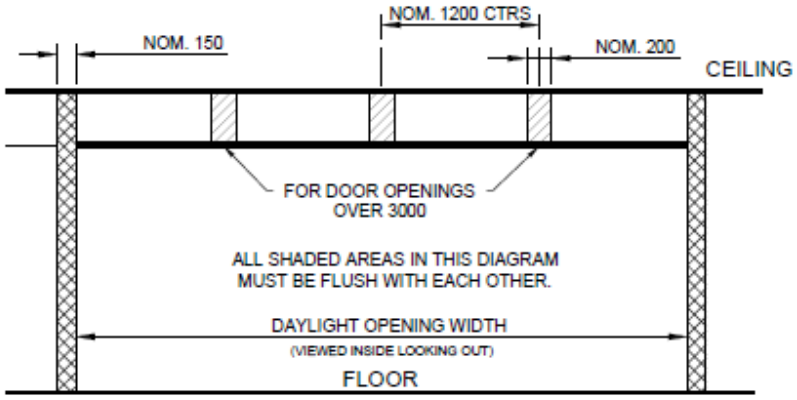
4. **Headroom:** A minimum clearance between the supplied door height and the ceiling and clear opening distance from lintel back into garage. See Chart below:

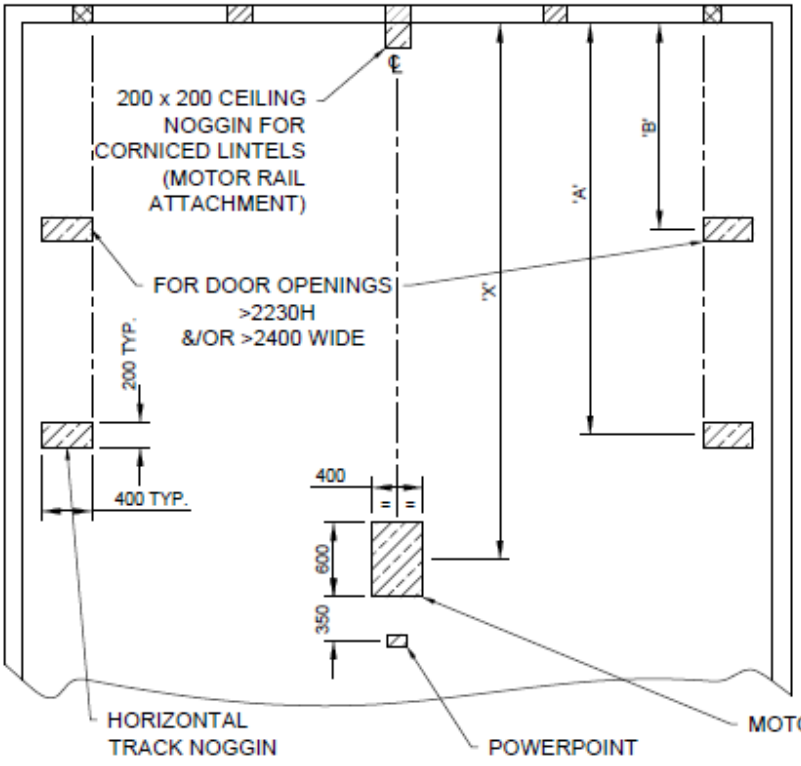
Door Type	**Standard Headroom**	**Low Headroom – Front Spring Mount**
Motorised		
Minimum Headroom (mm)	340	250
Minimum Clear Opening Distance *	3430mm OR 4440mm (Doors ≤ 3.4m high) *	

***** This clearance is for Steel-Line Cyclonic Door operators and is a general guide only. Motor and drive track can be measured on site to confirm minimum clear opening distance.

5. Structural Condition of Opening: ***THESE DOORS HAVE A MAXIMUM WIND RATING OF C2 (as per Table 5.2 in AS/NZS 4505:2012). THE SUITABILITY OF DOOR JAMBS TO CARRY THE LOADS IMPOSED BY THE DOOR WHEN SUBJECT TO WIND LOADS SHALL BE DETERMINED BY A SUITABILY QUALIFIED PERSON.***

Below are the recommended nogging details for all No Wind Brace (Post-less) Sectional Doors.





TRACK NOGGINS		
OPENING HT.	DIM 'A'	DIM 'B'
TO 2580H	2400	1200

MOTOR NOGGIN		
	OPENING HT.	DIM 'X'
MERLIN CYCLONE-PRO	TO 2400	3030
	2405 TO 2580	4040

NOTE: FOR OTHER OPERATORS PLEASE CHECK MANUFACTURER'S MANUALS.

THESE DOORS HAVE A MAXIMUM WIND RATING OF C2 (as per Table 5.2 in AS/NZS 4505:2012). THE SUITABILITY OF DOOR LINTEL AND JAMBS TO CARRY THE LOADS IMPOSED BY THE DOOR WHEN SUBJECT TO WIND LOADS SHALL BE DETERMINED BY A SUITABILY QUALIFIED PERSON.

Revised: APRIL 2016

SECTION 2: Installation

1. **Assemble Bottom Panel:** Select bottom panel (fitted with bottom rail & weatherseal) and fit the 2 bottom bracket assemblies to bottom corners of panel using a minimum of 8 self-drilling metal screws provided as shown in Figure 1. The small temporary stile mounting screws need to be removed first, before aligning the bottom corner hole of outer bracket with corner stile hole and corresponding hole in panel and should be fixed first, ensuring that screw goes through panel and stile reinforcement. Screw the remaining 3 screws into this bracket (refer Figure 1) before fixing inner bracket. Ensure location of inner bracket allows the wheel axle to slide freely from side to side and fix it to the inner stile as shown.

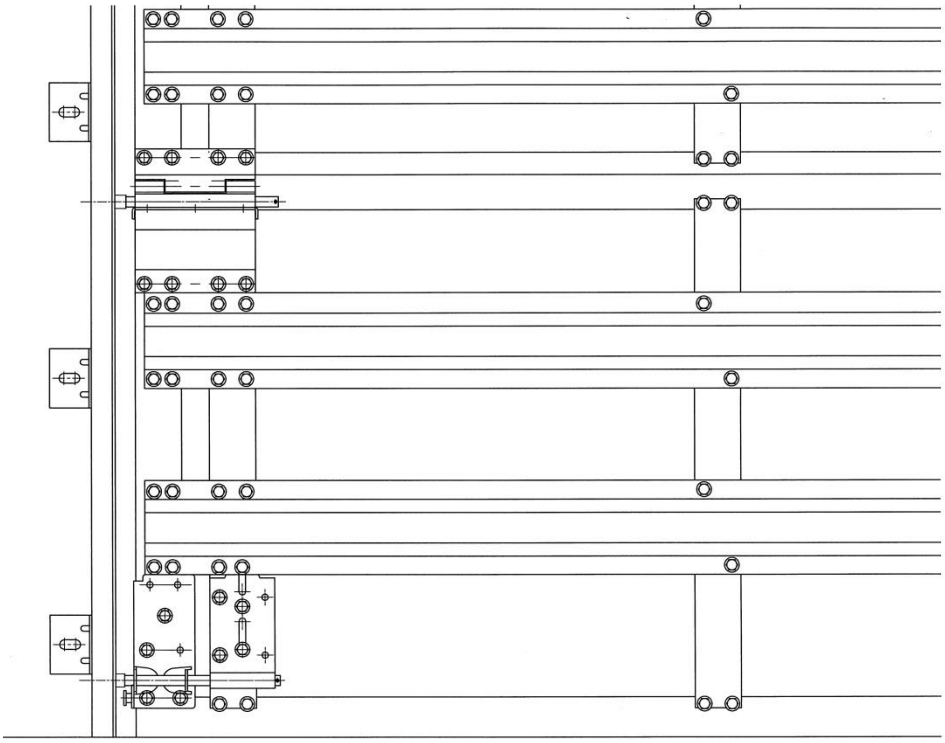


Figure 1 – Bottom Brackets, Adjustable Side Hinge & Strut Fixing Positions (Bottom Panel shown).

Next attach the bottom half (the biggest half, or adjustable wheel height half) of metal Adjustable Side Hinges to the top corners of bottom panel, again fixing through the stile mounting holes after removal of temporary holding screw/s. The first hole adjacent hinge edge on edge of panel should be fixed first, ensuring the screw engages through panel into the stile reinforcement, followed by mounting hole on opposite end of hinge on adjacent stile. Fit screws to the remaining holes through stile and into panel and stile reinforcement (refer Figure 1).

Where 2 struts are required for each panel (door widths greater than 3000 wide) fit bottom strut to bottom panel just above each corner bracket fixing the ends first and use 4 screws into each of the 2 end stiles (on inner stile fix one screw through the vertical slot of inner bracket with second screw straight into stile – refer Figure 1). For door widths 3000 or less (1 strut per panel) strut should be fitted to middle of panel. This strut can then be fixed to the intermediate stiles using 2 screws per stile in a diagonal pattern as shown in Figure 1. The top strut should be fixed hard up against metal hinge at top of panel, again with 4 screws for the 2 outer stiles, followed by 2 screws in diagonal pattern per stile for the intermediate stiles. For panels at lower end of

face height range, it may be necessary to fix upper leg of lower strut and lower leg of upper strut together into stiles in fixing pattern noted above.

NB: It is important that strut is fixed to the outer 2 stiles with 4 screws per stile and the intermediate stiles in this diagonal pattern to ensure the door can achieve its rated wind performance.

The Centre/Intermediate hinges are also fixed through the stile mounting holes (again after removing temporary screws) to top of every second intermediate stile (do not count inner stile adjacent to end stile) in panel using 2 self-drilling sheet metal screws screwing through the punched holes in stiles plus third screw at end of hinge as shown in Figure 2 below.

Figure 2 – Typical Centre/Intermediate Hinge Fixing

Table 1 below can be used as a reference to aid in location of the correct position of these hinges.

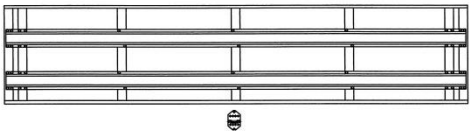
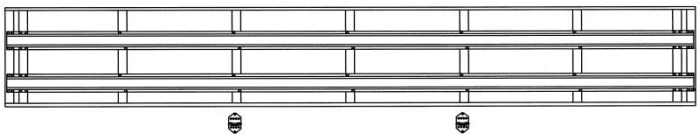
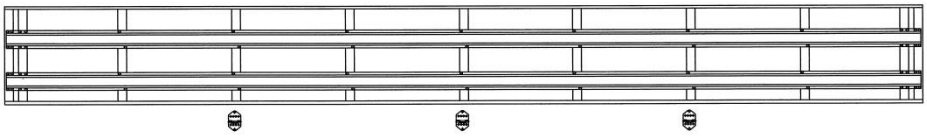
Door Width	Hinge Location (indicated by hinge symbol below panel)
Up to 2650	
>2650; ≤ 3950	
>3950; ≤ 5100	

Table 1 – Centre/Intermediate Hinge Locations

Once all hinges are all fixed to the bottom panel, all the remaining stiles of panel need to have the temporary screws removed and each stile fixed with 2 screws top & bottom with the self-drilling screws provided (refer Figure 1).

NB: It is important that all the temporary screws that secure stile to panel for transport are replaced with screws provided to ensure the door can achieve its rated wind performance.

Trim weatherseal with a knife so about 10 – 15mm protrudes out each end. Centralise bottom panel in the door opening so that overlap is even on both sides. Check level of panel with a spirit level and shim one end of panel, if required. Temporarily fix or hold panel to jamb for the next step.

2. Fix Vertical Tracks: Using table below measure and cut the vertical tracks (straight lengths of track) to correct size, removing any surplus from the bottom of the track to make a LH & RH track (top of each track should have the 2 horizontal holes that line up with bottom of flag bracket when curved portion of track is facing the inside of garage).

Door Type	**Vertical Track Length**
Standard Headroom	Door Height***** less 250mm (min)
Low Headroom	Door Height***** less 380mm (min)

****** Note: This is **NOT** the opening height*.

Fit the correct hand flag bracket (mounting flange facing outwards away from door) to the top of the vertical track so that the dimension from back of flag bracket mounting flange to the back of the track measures 65mm for 4 panel doors and 70mm for 5 panel doors. Use the ribbed mushroom head bolts, but only tighten the flanged nuts just enough to hold track at this stage. See Figures 3 & 4.

Attach track brackets to tracks, using the same fixings and tightening flanged nuts as above.

NB: Tracks are provided with mounting holes every 300mm. It is important that track lugs/cleats being fixed every 300mm to ensure the door can achieve its rated wind performance.

With a gap of 5–10mm between roller axle step and outside edge of bottom bracket, slide a track down over wheels, ensure track is vertical, the rollers are sitting in the centre and just touching the vee groove of the track. Mark flag & bracket position onto jamb/lintel (mark centre of slot in bracket to allow later adjustment if required).

Fix to jamb/lintel using the following choice of fixings:

Substrate	Fixing Size & Type
Timber	M8 x 75 Coach Screws with M8 flat washers *OR* 2 @ #14 Type 17 x 75 Tek Screws (one each end of slotted hole) & Flat Washers
Steel	M8 Bolts, Nut & Flat Washers ***OR*** M8 'TAPTITE II' Bolts & Flat Washers (or equivalent) ***OR*** 2 @ #14-20 Tek Screws(one each end of slotted hole) & Flat Washers
Concrete/Masonry	M8 Trubolts (Ramset #T08090 or equivalent).

Flag bracket should be fixed using minimum of 3 of the appropriate fasteners to suit jamb/lintel material as noted above. Do the same for opposite hand track.

The top of both tracks should be checked that they are level with each other. If not level, either trim bottom of one track, or lift one track up. Do not leave gap larger than 10–15mm off floor. Tighten all fixings just enough to hold track at this stage.

3. **Mount Horizontal Tracks:** Fit the horizontal track bracing angle to horizontal track (with one leg facing away from door opening) again using the ribbed mushroom head bolts, so that the multi-holed end sits above the curved portion of track (this end fits to flag bracket). Fit assembly to flag bracket using one cuphead bolt as provided. Fit curved end of horizontal track to bottom of flag bracket as shown in Figure 7 using the ribbed mushroom head bolts leaving the nuts finger tight. Aim for 1–3mm gap between tracks, as too much gap will cause rollers to drop into gap making door operation noisy.

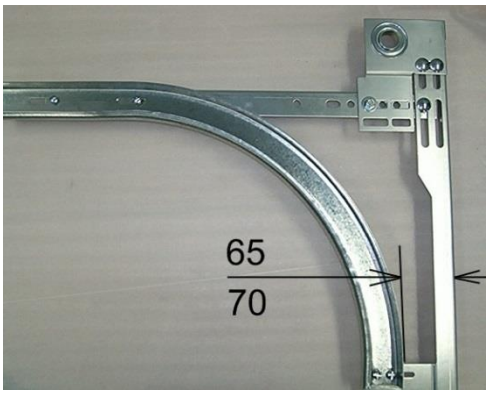


Figure 3 – Mounting Horizontal Track/Bracing Angle & End Bracket

The other end of horizontal track should be supported by a suitable stand, a ladder or rope initially, or fixed loosely by the hanger brackets supplied. NB: Bracing angle leg will need to be notched out to clear middle track hanger brackets. Due to weight of door it is strongly recommended that all 4 hanger brackets supplied (or a suitable equivalent) be used when fitting the horizontal track to ceiling ***(Steel-line will not accept any liability for door falling out of horizontal tracks where the 4 mountings are not used).*** When fitting the hanger/s to the horizontal tracks, ensure that tracks are level and square to the opening (measure across diagonals and adjust as necessary). Refer Figure 5 for typical rear track hanger/s. Figure 6 shows a suitable track support stand.

The track hangers can be mounted off the wall in situations of tight side room, supporting track from underneath and fixing with small length of angle, or track bracket for LHR doors. The horizontal leg of hanger should not protrude more than 30mm past track otherwise it may interfere with door operation. Ideally the hangers should be mounted off wall, or off ceiling, but there may be some situations where it is necessary to mount one side off wall, the other off the ceiling.

All hangers need to be fixed securely as it supports weight of door when fully open.

For low head room (LHR) doors the LH & RH support plates from LHR kit should be used in conjunction with the bracing angle above. The plastic curve and LHR horizontal top track (the longer of the 2 pairs of straight lengths provided) and standard horizontal track are fitted to this plate. Refer Figure 4 for LHR mount. Past the support plate the dual horizontal tracks are held together by track connecting plates contained in LHR kits. Fasten with the ribbed mushroom head bolts.

Figure 4 – Low Head Room Rear Track Assembly (Top Horizontal Track not shown)

Figure 5 – Typical Rear Track Hangers for End of Horizontal Track

Figure 6 – Typical Support Stand

4. **Shaft Assembly:** If necessary cut shaft to suit door and side room (Rule of Thumb: Shaft Length = Door Width + 300mm). Slide the loose centre bearing, springs, cable drums and end bearing brackets in that order onto each shaft end as required. The LH spring & cable drum are painted RED, while RH versions are painted BLACK to aid assembly. The end bearing bracket tab (& protruding bearing) for lintel attachment should face outwards away from door.

   For 3 or 4 spring doors the two inner LH & RH springs need to be slid on first, followed by centre brackets, outer springs, cable drums & end bearing brackets as noted above.

Using assistance if necessary, place shaft assembly on top of each bracing angle (or support plates for LHR front doors) and fit to flag brackets/support angle/plate using the cuphead bolts supplied (refer Figure 7 for standard headroom or Figures 8 for LHR rear doors). End bracket should also be fixed to lintel unless height restrictions prevent this occurring, in which case the bent up tab for lintel fixing should be removed from end bearing bracket to facilitate lowering of this bracket, but lintel to shaft dimension must match centre bracket. Shaft should be centred so equal amount of shaft protrudes from each end bearing bracket.

The centre bracket/s can now be fixed to lintel. Mark position of bracket by pushing shaft up level with end brackets and mark the mounting holes on lintel (around centre of door for 2 springs, or for 3 or 4 spring doors the centre brackets will be fixed roughly around 25% & 75% width of the door opening) ensuring that there is sufficient side room for springs. Fix bracket/s to lintel opening using two fasteners that suit lintel material.

It is important that centre bearing brackets are securely fastened to lintel as these brackets support the full spring force (roughly equivalent to weight of the door).

5. **Assemble & Fit Intermediate Panels:** Fit bottom halves of intermediate hinges to top of intermediate stile of next panel following same procedure as per bottom panel (refer Table 1). Fit the side hinges to top of second panel as per bottom panel procedure above. Where 2 struts per panel are provided the lower strut should be fitted just above intermediate hinges while the upper strut is fitted hard up against side hinge fixed to panel as for bottom panel instructions above. For single strut per panel (door widths up to 3000wide) strut should be fixed to middle of panel.

   Place panel on top of bottom panel and temporarily fix to jamb/track, or with an assistant holding panel, line second panel edge up with bottom panel and fix the top half of side hinge/s into bottom corner of second panel using self-drilling screws and aligning holes in hinge with mounting holes in end stiles (removing the temporary screws first). Follow the same fixing procedure as described for bottom panel ensuring that screw engages the stile reinforcement. Do the same for opposite end and then fix all the top halves of intermediate hinges between both panels. Slide the roller wheel assembly down into vertical track onto side hinge and fix (finger tight only) to hinge with 3 cup-head bolts & nuts provided (roller wheel assembly is handed, so depending on final position of axle assembly i.e. holder fixed above, or below, roller, will determine orientation of this assembly). Do the same for the opposite end of panel.

   Repeat above for all the intermediate panels.

6. **Adjust & Tighten Tracks:** Fully tighten the fixings between track & track lug/cleat. Starting from side hinge closest to ground adjust roller wheel assembly so that the panel faces have the smallest consistent gap to ensure door operation without rubbing against jamb. Ensure axles are parallel to ground and when tightened ensure axle can readily move sideways between its constraints. On inconsistent surfaces such as brick work adjust panel face so it just clears highest protrusion and panels are vertical.

   The horizontal track fittings can be tightened ensuring a continuous channel for wheels to travel from vertical track to horizontal track and horizontal track is square with opening, parallel and level.

7. **Assemble Top Panel:** Fit both ‘V’ adjustable top brackets as per the procedure for fitting the bottom halves of side hinges with the slots for adjustable axle holder facing up with top holes lining up with stile mounting holes into panel, while fixing bottom holes either end of stile (refer Figure 7). This bracket orientation is important as the aim is to get top wheel as far into curve of horizontal track as possible to minimise load (and potential activation of obstruction safety system) on motorised doors, while ensuring top panel is vertical in the closed position.

   Fit the one, or both struts to panel as per the intermediate panels & fix as per previous panels.

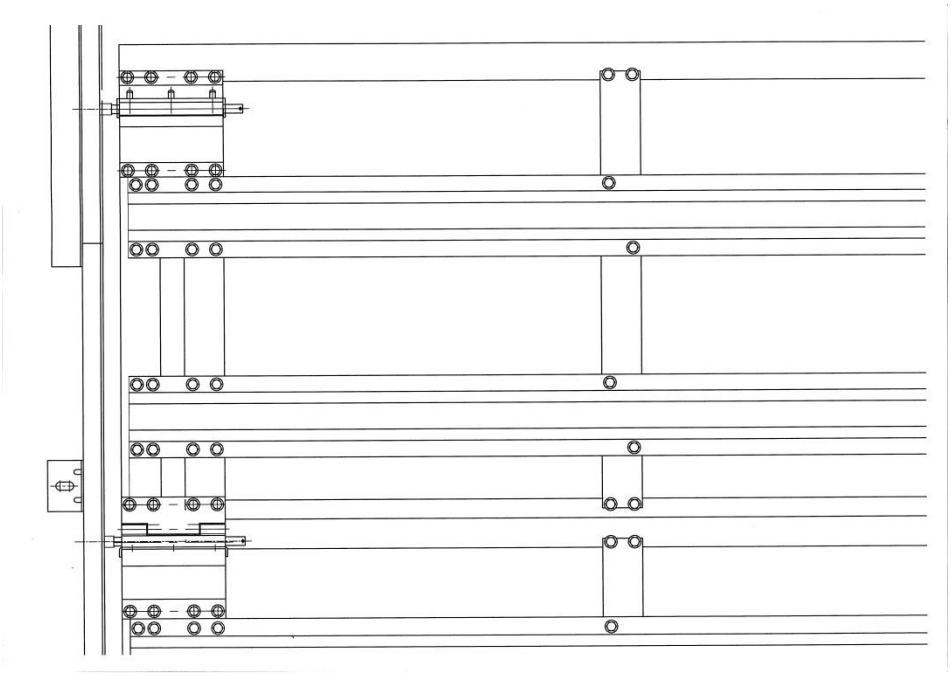


Figure 7 – Top Bracket & Strut Fixing Positions (Top Panel shown)

Place top panel on top of other panels and temporarily fix, or get an assistant to hold, while fitting the roller wheel assembly and holder to the top panel adjustable bracket. Adjust roller axle holder up or down bracket to get top panel face vertical with rest of panels, then tighten holders into position, again ensuring axle is parallel to ground and axle can readily move between its constraints.

For LHR doors the roller wheel axle assembly should be adjusted to suit plastic curve with roller up into curve as much as possible to aid door operation, while ensuring top panel is vertical in closed position.

8. **Assemble Springs and Cable Drums:** Fit cable loop over bottom bracket pin and feed cable up behind rollers to cable drum, putting cable end into slot on outside face (away from door) of cable drum. Ensure cable has a straight run with no interference.

   Take up slack in cable by winding drum up and over away from lintel, ensuring cable lays correctly into grooves on drum. Once cable is taut, push the drum up against end bearing and continue to hold cable taut while tightening the square-head set screws to secure cable drum to shaft.

   Repeat for the opposite hand cable & cable drum ensuring both cables have equal tension. If not adjust one cable drum until tension in both cables is the same. Tighten cable drum screws securely (Rule of Thumb – once screw has engaged shaft tighten a further 1½ turns).

   Fix spring/s to centre bearing using hex bolts & nuts supplied and ensure they are fully tightened

9. Tensioning the Springs

Assume the spring could break or the winding bar could slip from the spring fitting whenever you wind or unwind a spring.

While tensioning keep face, hands and body wherever possible clear of spring, spring cone and winding bars.

Never use screwdrivers. Only use winding bars of the correct size.

Winding Bars

Use two winding bars 400–500mm long. The winding bars should be made from solid cold rolled steel bar.

There are two acceptable designs for winding bars. The sizes given below suit spring winding plug sizes of 50.8mm (2”) and 66.7mm (2 $^{5}/_{8}$”).

Straight Bar Design

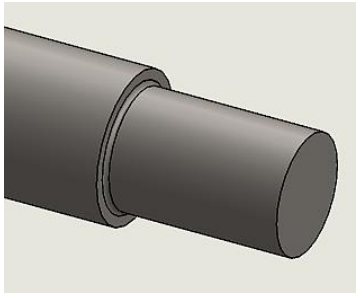
For a straight bar design the whole bar should be Ø12.7mm. Add tape to show when the bar is fully inserted into the spring fitting.

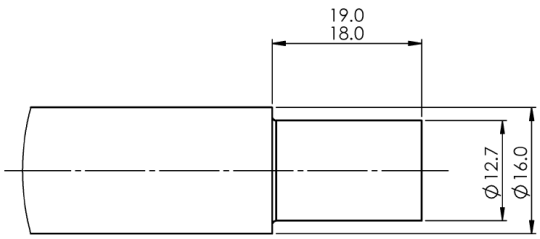
The ends that insert into the spring fitting should be cut off square and sharp – not rounded.

Stepped-Down Design

In a stepped-down design, the bar is bigger in diameter (e.g. Ø16mm) and stepped-down only on the end 18–19mm to diameter Ø12.7mm.

The ends that insert into the spring fitting should be cut off square and sharp – not rounded.





Place vice-grips or a G-clamp in the vertical track on one side above a roller to prevent door from lifting during tensioning.

Firmly attach a pair of vice-grips over the top of spring shaft so that handles of vice-grips are wedged up against the lintel or ceiling. This prevents the shaft turning during tensioning of springs. Refer Figure 8.

Figure 8 – Clamping Shaft Prior to Spring Tensioning
(vice-grips resting against ceiling in this case)

The springs may have a horizontal line marked on them to make it easy to count spring revolutions. If not, mark a horizontal line from one end of each spring to the other with chalk or paint.

Use two winding bars. ***(NB: Never use screwdrivers!)*** Insert first bar into the spring winding cone and rotate up towards the ceiling and hold until second bar is inserted. See Figure 9.

Figure 9 – Tensioning Springs

Repeat this operation until the number of turns of springs matches the specified number of turns marked on packing list attached to hardware box.

It is good practise to stretch the spring outwards about 5mm (push it out too far and spring will ‘snake’ – reduce stretch until ‘snake’ disappears) to provide a small gap between coils. This minimises potential binding and spring noise as the door operates. Do this by securely holding a winding bar in the spring cone and tapping it outwards with a hammer.

Hold the spring winding cone in final position while securely tightening the two square-head set screws onto shaft (Rule of Thumb – once screw has engaged shaft tighten a further 1½ turns).

Repeat for each spring. All springs should have same number of turns.

10. Checking Spring Tension: Carefully release vice-grips on shaft, then remove vice-grips/clamps from track and check balance of door for ease of operation. Lubricate the springs with grease or spray-on lubricant.

Check alignment of horizontal tracks as door is being raised. The door should operate as follows:

- Door should rest on floor and not begin to open until lifted. If the door is difficult to lift, first check door is not too tight against jamb.
- A small lifting force is all that should be required to start opening door.
- At halfway opening point door should remain stationary by itself. A little movement either way is acceptable, but door should not take off in either direction.
- Door should roll smoothly and slowly to rest slightly under bottom edge of lintel and stay there. It should not move down by itself, or be hard to pull down from fully open position.
- Closing the door should require a small pull force away from fully open position, it should stay by itself around halfway position and stay down when it has reached the floor.

If door does not display the above, first check all tracks to ensure door rolls smoothly without binding in track and cable is not rubbing against anything. If OK then reduce or increase tension in all springs by maximum ¼ to ½ turn until happy median is achieved.

Never touch a spring set screw without first inserting a winding bar and holding it steady while un-doing set screw.

Test door several times to ensure its operation is correct. Check that all fastenings are fully tightened.

If door still doesn't perform as expected consult your Steel-Line supplier.

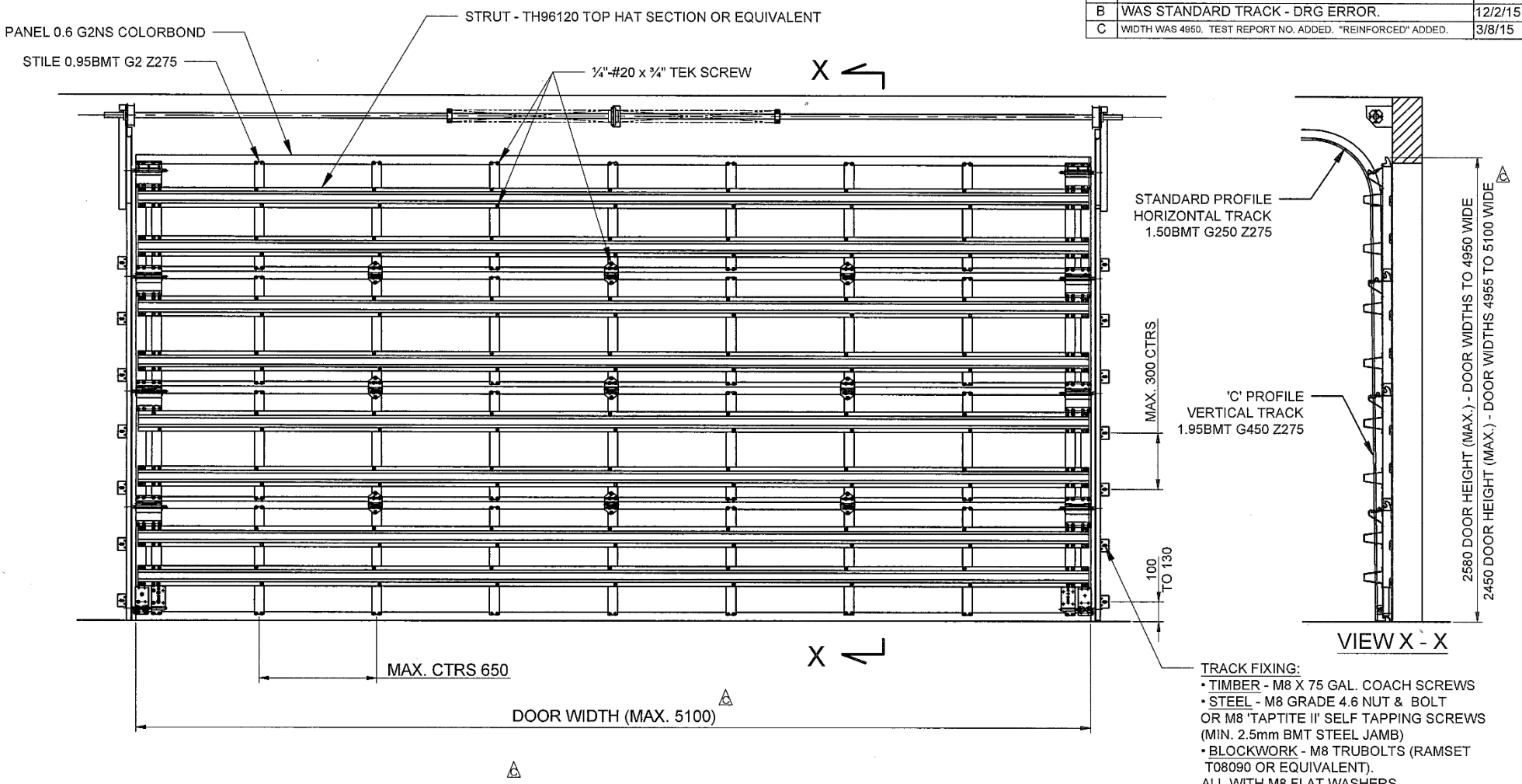
11. Fitting Accessories: With door in fully open position fit the door stops into position in the tracks.

If door came with motorised operator or jamb seals, these can be fitted now.

SECTION 3: Drawings

No Brace Wind Rated Sectional Door – General Assembly Sheet – Rev C

REV.	DESCRIPTION	DATE	CKD.
A	WAS 2 PER PANEL ALL WIDTHS	12/9/14	
B	WAS STANDARD TRACK - DRG ERROR.	12/2/15	
C	WIDTH WAS 4950. TEST REPORT NO. ADDED. "REINFORCED" ADDED.	3/8/15	



NOTES:
1. ALL PANELS TO BE FITTED WITH DOUBLE END (REINFORCED) STILES AND CENTRE STILE. BALANCE OF INTERMEDIATE STILES AT MAX. 650 CENTRES.
2. ALL INTERMEDIATE & SIDE HINGES & TOP/BOTTOM BRACKETS TO BE METAL. USE EXTENDED AXLE NYLON DOOR ROLLERS WITH Ø3 ROLL PIN FITTED AT END OF AXLE.
3. STRUTS ARE TO DOOR WIDTH (+0, -20mm), ONE PER PANEL FOR DOOR WIDTHS TO 3000 WIDE & TWO PER PANEL FOR DOOR WIDTHS OVER 3000. FIX WITH 2 SCREWS ON CENTRE & INTERMEDIATE STILES; 4 SCREWS ON THE 2 END STILES AS SHOWN.
4. USE "C" PROFILE VERTICAL TRACK WITH ADDITIONAL TRACK BRACKETS AS NOTED.
5. DOOR OVERLAP WITH OPENING IS 50mm MINIMUM ALL THE WAY AROUND.
6. THE DOOR HAS MAX. WIND RATING OF C2, AS PER TABLE 5.2 OF AS/NZS 4505:2012 (REFER JCU CTS TEST REPORT #T1020). SUITABILITY OF DOOR JAMBS TO CARRY LOADS IMPOSED BY DOOR WHEN SUBJECT TO WIND LOADS SHALL BE DETERMINED BY A SUITABLY QUALIFIED PERSON.

U.O.S. DIMENSIONS IN MILLIMETRES

ENGINEER'S CERTIFICATION

Name: DARREN McDONALD Date:
Registration Number: 24619ES (NT) RPEQ5453 (QLD) Signature:

ITEM	QUANTITY	DESCRIPTION OR MATERIAL	REF. DRAWING NO.

STEEL-LINE GARAGE DOORS

PROJECT: C2 RATED NO BRACE SECTIONAL DOOR

TITLE: GENERAL ASSEMBLY

DATE	7/1/2014	SCALE	NTS
DRAWN	BS	CHECKED	
APPROVED & DATE			
FILE	S-L/Projects/SD/SD Windlock		

SIZE	DRAWING NO.	REV.	SHEET
A3	SDWindNoBraceAssy	C	1/1