

KWIK STAIRS

< 900mm WIDE

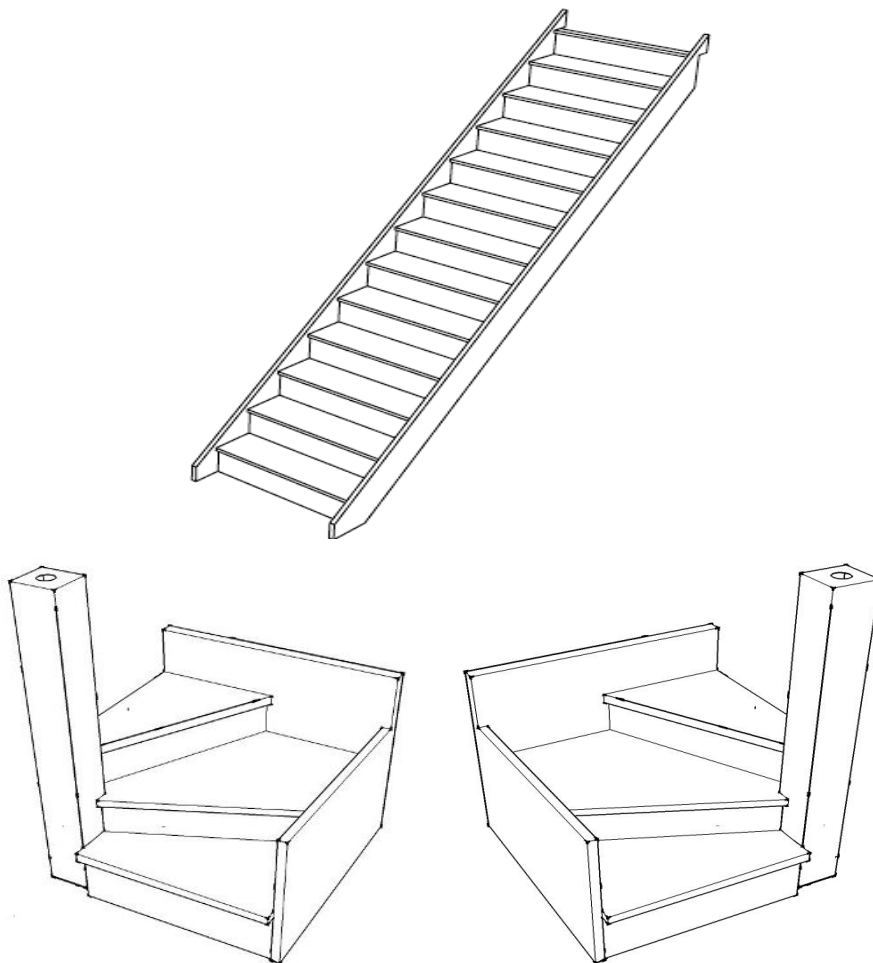
1781mm – 3520mm Floor To Floor

Use your finished floor to finished floor measurement to find the relevant template letter that you require for your staircase.

The template will help you to ensure that all the risers are the same which is essential to be compliant to current building regulations for domestic/private stairs as detailed in The English Building Regulations 1991 Part K. You are responsible for ensuring the correct assembly of your staircase to be compliant with the current Building Regulations.

If for any reason your floor to floor does not appear in the Template Requirement section then please use the calculator supplied or visit the Web Site for your unique Template reference letter.

Follow all of the instructions precisely to ensure a well built, safe, accurate staircase. If any further information is required then visit the web site www.kwikstairs.co.uk



CONTENTS

TEMPLATE REQUIREMENT	3
DIY STRINGS	5
STRAIGHT FLIGHT STAIRCASE ONLY	7
RIGHT HAND STRAIGHT / WINDER STAIRCASE	10
LEFT HAND STRAIGHT / WINDER STAIRCASE	19
ADDITIONAL INFORMATION	28
GLOSSARY	29

TEMPLATE REQUIREMENT

9 TREADS INCLUDING THE NOSING			
FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
1781	-	1790	A
1791	-	1800	A
1801	-	1810	B
1811	-	1820	C
1821	-	1830	D
1831	-	1840	E
1841	-	1850	G
1851	-	1860	H
1861	-	1870	I
1871	-	1880	J
1881	-	1890	K
1891	-	1900	L
1901	-	1910	M
1911	-	1920	N
1921	-	1930	O
1931	-	1940	Q
1941	-	1950	R
1951	-	1960	S
1961	-	1970	T
1971	-	1980	U

10 TREADS INCLUDING THE NOSING			
FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
1981	-	1990	A
1991	-	2000	A
2001	-	2010	B
2011	-	2020	C
2021	-	2030	D
2031	-	2040	E
2041	-	2050	F
2051	-	2060	G
2061	-	2070	H
2071	-	2080	I
2081	-	2090	J
2091	-	2100	K
2101	-	2110	L
2111	-	2120	M
2121	-	2130	N
2131	-	2140	O
2141	-	2150	P
2151	-	2160	Q
2161	-	2170	R
2171	-	2180	S
2181		2190	T
2191		2200	U

11 TREADS INCLUDING THE NOSING			
FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
2201	-	2210	B
2211	-	2220	C
2221	-	2230	D
2231	-	2240	E
2241	-	2250	F

11 TREADS INCLUDING THE NOSING			
FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
2311	-	2320	L
2321	-	2330	M
2331	-	2340	N
2341	-	2350	O
2351	-	2360	P

2251	-	2260	F
2261	-	2270	G
2271	-	2280	H
2281	-	2290	I
2291	-	2300	J
2301	-	2310	K

2361	-	2370	P
2371	-	2380	Q
2381	-	2390	R
2391	-	2400	S
2401	-	2410	T
2411	-	2420	U

TEMPLATE REQUIREMENT

12 TREADS INCLUDING THE NOSING			
FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
2421	-	2430	D
2431	-	2440	D
2441	-	2450	E
2451	-	2460	F
2461	-	2470	G
2471	-	2480	H
2481	-	2490	I
2491	-	2500	I
2501	-	2510	J
2511	-	2520	K
2521	-	2530	L
2531	-	2540	M
2541	-	2550	N
2551	-	2560	N
2561	-	2570	O
2571	-	2580	P
2581	-	2590	Q
2591	-	2600	R
2601	-	2610	S
2611	-	2620	S
2621	-	2630	T
2631	-	2640	U

13 TREADS INCLUDING THE NOSING			
FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
2641	-	2650	E
2651	-	2660	F
2661	-	2670	F
2671	-	2680	G
2681	-	2690	H
2691	-	2700	I
2701	-	2710	I
2711	-	2720	J
2721	-	2730	K
2731	-	2740	L
2741	-	2750	M
2751	-	2760	M
2761	-	2770	N
2771	-	2780	O
2781	-	2790	P
2791	-	2800	P
2801	-	2810	Q
2811	-	2820	R
2821	-	2830	S
2831	-	2840	S
2841	-	2850	T
2851	-	2860	U

14 TREADS INCLUDING THE NOSING
MUST NOW INCLUDE A WINDER BOX

14 TREADS INCLUDING THE NOSING
MUST NOW INCLUDE A WINDER BOX

FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
2861	-	2870	E
2871	-	2880	F
2881	-	2890	G
2891	-	2900	G
2901	-	2910	H
2911	-	2920	I
2921	-	2930	I
2931	-	2940	J
2941	-	2950	K
2951	-	2960	L
2961	-	2970	L

FLOOR TO FLOOR mm			TEMPLATE
FROM		TO	LETTER
2971	-	2980	M
2981	-	2990	N
2991	-	3000	O
3001	-	3010	O
3011	-	3020	P
3021	-	3030	Q
3031	-	3040	R
3041	-	3050	R
3051	-	3060	S
3061	-	3070	T
3071	-	3080	U

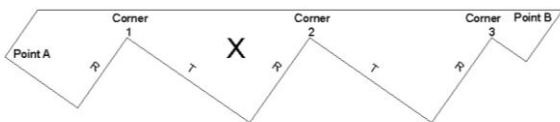
STRAIGHT FLIGHT ONLY

< 900mm WIDE

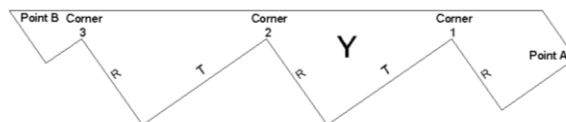
1781mm – 2860mm Floor To Floor

STARTING THE STRAIGHT FLIGHT

- 1) You are responsible for ensuring that you are correctly and accurately constructing your staircase to conform to the current stair/building regulations as set out in the glossary.
- 2) If you are intending to join a winder box to a straight flight then please see the right hand or left hand winder instructions; **do not** use the following instructions as they are for a standalone straight flight staircase only.
- 3) Using your 'on-site' finished floor to finished floor measurement you need to look on the template requirement sheets for the nearest measurement, this will inform you of two details; how many treads you require (including top tread/nosing) and your appropriate Template Letter.
- 4) Now that you know your Template Letter you need to cut it from the printed card. Carefully cut out your required template following your chosen letter, label the template as below and discard the redundant section.



- 1) Label this side X
- 2) Point A far left
- 3) Point B far right
- 4) Corners 1, 2, 3 left to right from first full cut out
- 5) R = riser position
- 6) T = tread position



- Label this side Y
 Point A far right
 Point B far left
 Corners 1, 2, 3 right to left from first full cut out
 R = riser position
 T = tread position

STRINGS

- 5) Lay one string on the floor. Have face up side X of your chosen template and lay the template on the string as shown in fig A. The template must be exactly flush with both the edge and the end of the string at point A. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs. Draw around the two lengths of your template that forms point A as shown in fig B. Glue, drill and screw 2 support blocks to the string in the positions corner 1 and corner 2 ensuring the long edge faces away from the template as shown in fig C. Do not drill too close to the edge of the support blocks or too close to any knots as it may split when you screw to fix, use at least 3 screws per block.

Fig A

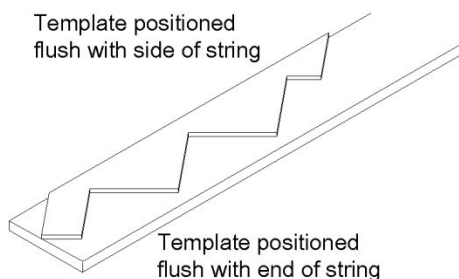
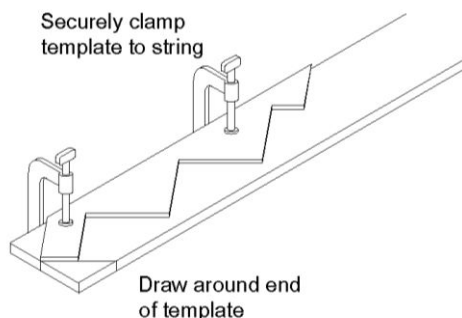


Fig B



- 6) Remove the template and cut to the line drawn and extend the cut through the whole string as shown in fig D. This new shape of the end of your string becomes the bottom/lowest part of the string.
- 7) Using your chosen template again lay the template on the string as shown in fig D. You only move the template up by one support block at a time. The template must be exactly flush with the edge of the string and must fit tight against the last support block you have fixed. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs. Glue, drill and screw 1 support block in position corner 2 to the string as shown in fig D.

Fig C

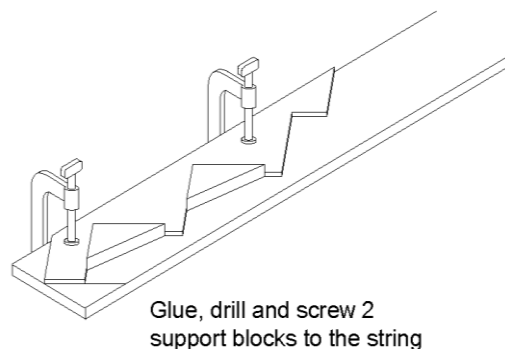
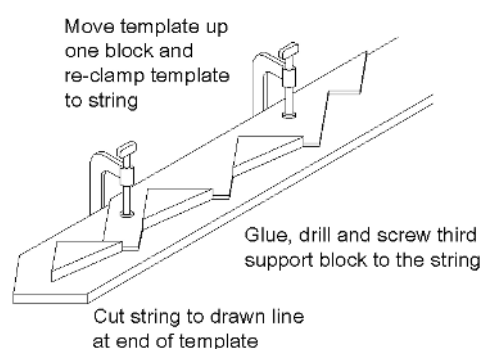


Fig D



- 8) Repeat this process until you have fixed the supports for all bar one of your total number of treads required.
- 9) For your last tread/nosing you need to lay the template exactly flush with the edge of the string and corner 3 must fit tight against the last support block you have fixed. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs. Draw around the three lengths of your template that form point B and corner 3 as shown in fig E. Remove the template and cut to the line drawn, extending the cut through the whole string as shown in fig F. This new shape of the end of your string becomes the top/highest part of the string.

Fig E

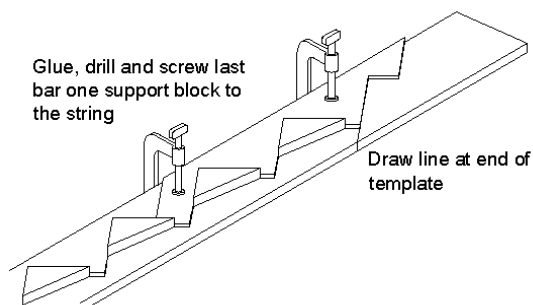
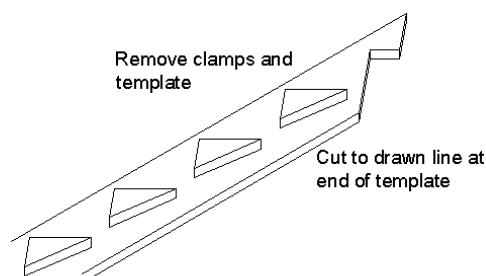
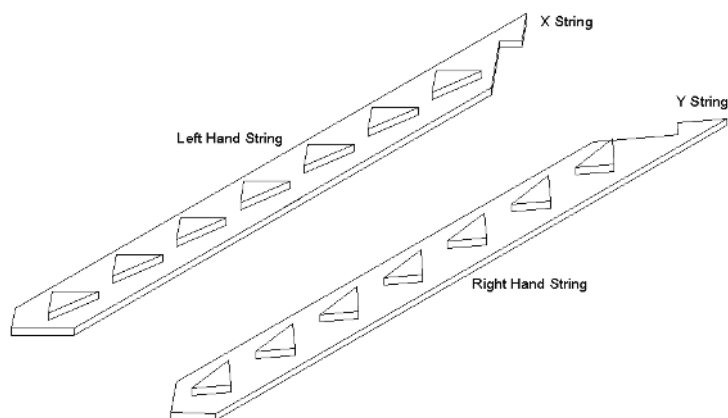


Fig F

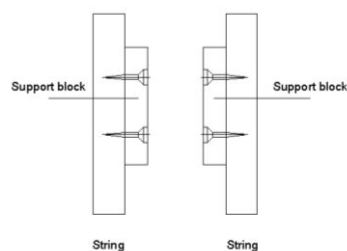


- 10) Lay the other string on the floor and this time have face up side Y of your template, repeat points 5 – 9. This will give you a left handed (side X) and a right handed (side Y) string for your stairs as shown in fig G.

Fig G



Section



TREADS

- 11) The overall width of your stairs is currently 900mm. Should you want your staircase to be smaller than 900mm wide then you must alter the width of the treads accordingly. Example, 900mm width of stair, less 27mm left hand string and less 27mm right hand string equals 846mm therefore width of tread. If your staircase is to be less than 900mm (the standard size supplied to you) then you must cut all your treads to the exact width that **you** require them to be.
- 12) Take one string and place it on a solid level surface. The tread is to be fixed to the support block, if you are unsure of this position then refer to point T on your template. Fix one side of the tread with glue then drill and screw through the tread into the support block ensuring that the back edge of the groove is flush with the front face of the support block and tight against the string as shown in fig I. Then fix each required tread in the same way to every fixed support block on your string.
- 13) Place the opposite handed string on the unfixed ends of the treads and repeat point 12.

Fig I

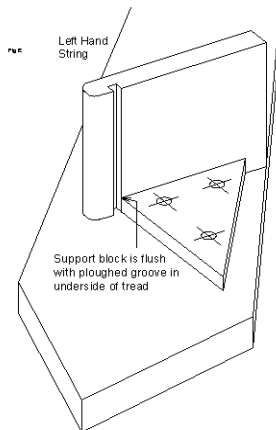
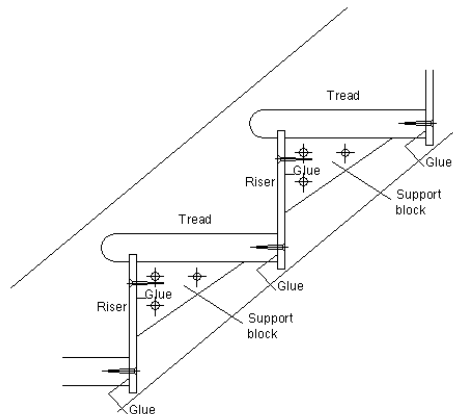


Fig L



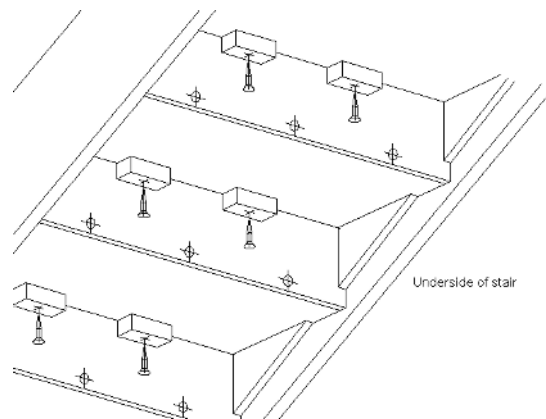
RISERS

- 14) If you are not using the standard 900mm staircase then cut all of your risers to the same width as your treads shown in point 11.
- 15) The first/lowest riser has to be cut to height to be level with the bottom of the string and is fixed by slotting into the groove in the underside of the tread and glued to the front of the support block then drilled and screwed through the front riser face into the support block.
- 16) The other risers are to be slotted into the groove in the underside of the treads and glued to the front of the support block and the back of the tread below then drilled and screwed through the front riser face into the support block and the back of the riser into the back of the lower tread as shown in fig L.

GLUE BLOCKS

- 17) You will need to cut to size your glue blocks with a minimum of two glue blocks per tread using a minimum length of 100mm per glue block.
- 18) Glue two long faces of the glue blocks and place them on the underside of the stair into the corner between each tread and riser. Drill and screw the glue block into the tread only ensuring that the other glued face is tight up against the riser as shown in fig M.

Fig M



- 19) Your stairs are now ready to fix into place. Remember to keep to hand a riser and nosing/tread for use when fitting.

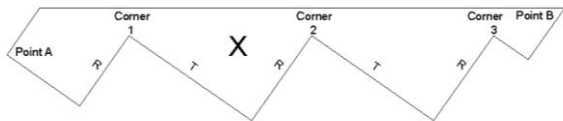
RIGHT HAND STRAIGHT/WINDER FLIGHT

650mm, 700mm, 750mm, 800mm, 850mm, 900mm WIDE

1781mm – 3520mm Floor To Floor

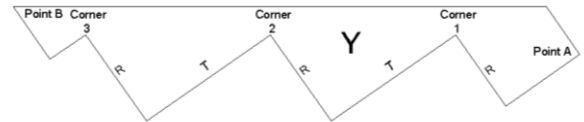
STARTING THE STRAIGHT FLIGHT SECTION

- 1) You are responsible for ensuring that you are correctly and accurately constructing your staircase to conform to the current stair/building regulations as set out in the glossary.
- 2) Using your 'on-site' finished floor to finished floor measurement you need to look on the template requirement sheets for the nearest measurement, this will inform you of two details; how many treads you require (including top tread/nosing) and your appropriate Template Letter.
- 3) Now you know your Template Letter you need to cut it from the printed card. You will need to do this now for both the Straight Flight Template as located in your straight flight pack and the Joining Template located within your winder box pack. Carefully cut out your required template following your chosen letter, label as below and discard the redundant section.



As shown above

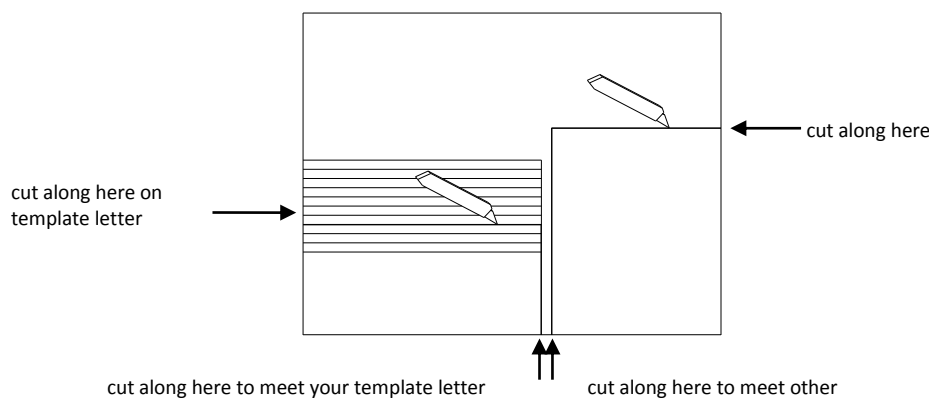
- 7) Label this side X
- 8) Point A far left
- 9) Point B far right
- 10) Corners 1, 2, 3 left to right from first full cut out
- 11) R = riser position
- 12) T = tread position



Label this side Y

- Point A far right
- Point B far left
- Corners 1, 2, 3 right to left from first full cut out
- R = riser position
- T = tread position

JOINING TEMPLATE



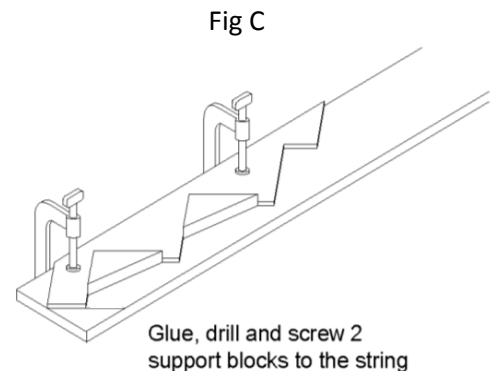
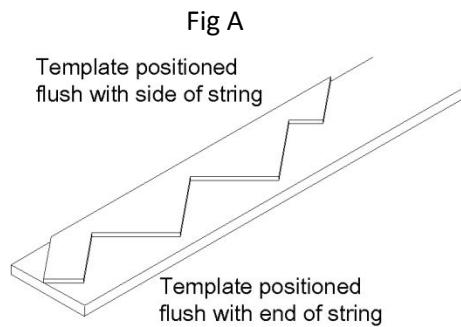
DESIGN

- 4) You should have by now decided on the design of your staircase, i.e. straight flight to winder, winder to straight flight, straight flight to winder then back to straight flight, etc. You will need to remember when building your stairs that if for example you require 12 treads in total (including the top tread/nosing) and are building a single winder that you will only need to build 8 straight flight treads as a winder box automatically has 3 treads within it and your top nosing is always separate. (8 straight + 3 winder + 1 nosing = 12 treads in total)

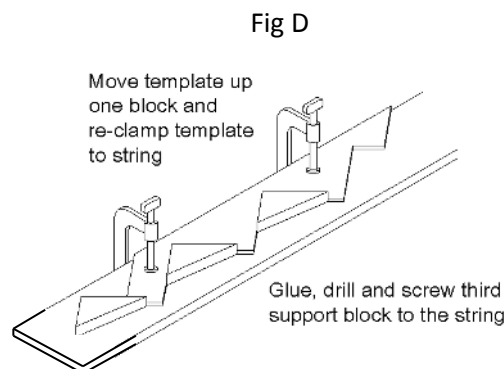
STRINGS

- 5) Lay one string on the floor. Have face up side X of your chosen template and lay the template on the string as shown in fig A. The template must be exactly flush with both the edge and the end of the string at point

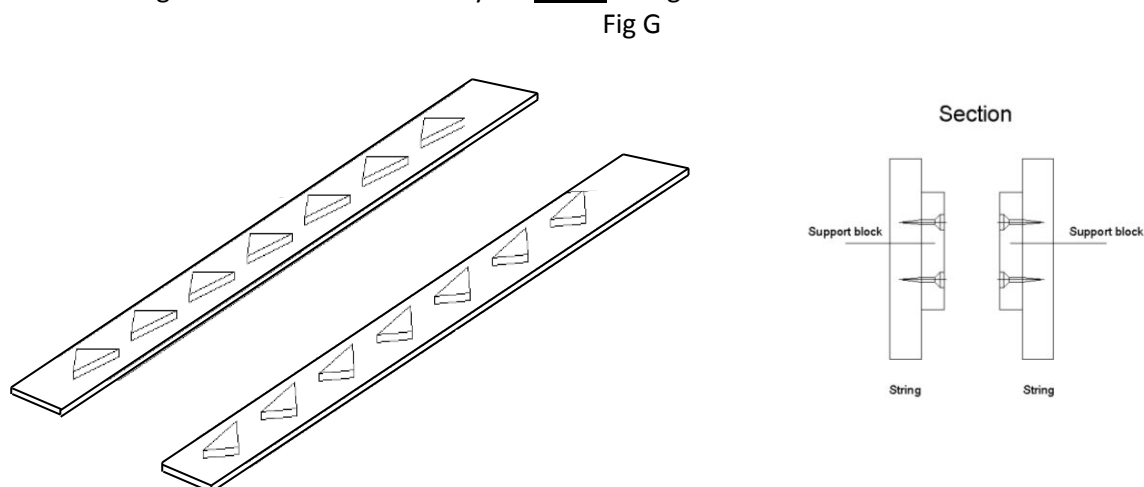
A. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs. Glue, drill and screw 2 support blocks to the string in the positions corner 1 and corner 2 ensuring the long edge faces away from the template as shown in fig C. Do not drill too close to the edge of the support blocks or too close to any knots as it may split when you screw to fix, use at least 3 screws per block.



- 6) Again lay the template on the string as shown in fig D. You only move the template up by one support block at a time. The template must be exactly flush with the edge of the string and must fit tight against the last support block you have fixed. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs. Glue, drill and screw 1 support block in position corner 2 to the string as shown in fig D.

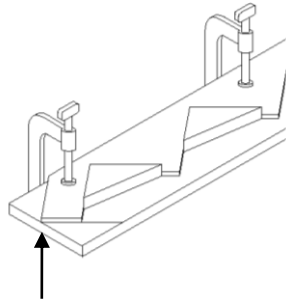


- 7) Repeat this process until you have fixed the correct amount of support blocks for your straight flight section of your stairs. This is now known as your outside string.
- 8) Lay the other string on the floor and this time have face up side Y of your template, repeat points 5 – 7 as shown in fig G. This is now known as your inside string.



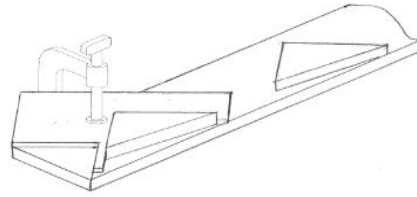
- 9) Now you have all of your straight flight support blocks fitted you need to construct the end design to suit the style of your stairs. Using your outside string if the bottom of this flight sits on the floor lay your straight flight template on your lowest set of blocks and draw around and cut to point A as shown in figure C. If your outside string sits on a winder box then you need to use the joining template which sits on the lowest block and draw and cut around the birds mouth cut out as shown in fig CC.

Fig C



Cut along the lines at point A

Fig CC



- 10) For the other end of the outside string if this joins to the finished upper floor then use your straight flight template and sit it on the very top set of blocks so the last block is on corner 2 on the template then draw around the 3 lengths of your template that form point B and corner 3, as shown in figs E & F. If the other end joins to a winder box then assemble the stairs as normal and plumb cut to the back of the last full tread which is 90 degrees to the tread as shown in fig V.

Fig E

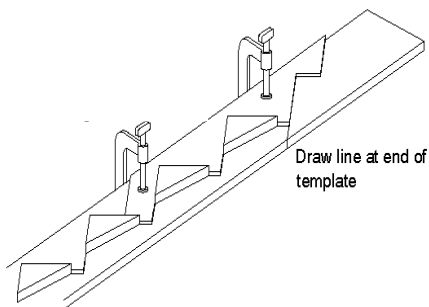


Fig F

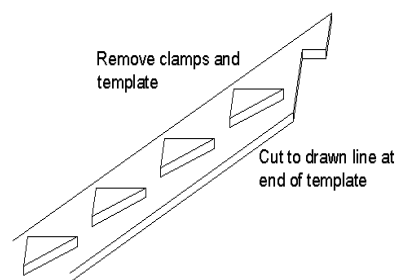
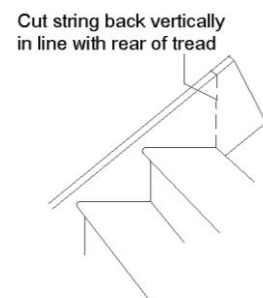


Fig V



- 11) Now for your inside string; if the bottom of this flight sits on the floor lay your straight flight template on your lowest set of blocks and draw around and cut to point A, as shown in fig C.r. If your inside string sits on a winder box then you need to place a riser against the front face of the first support block and mark along the front face of the riser on to the string. This will give you your plumb line as to where to make your plumb cut for your inside straight string so as to accurately join your winder box newel as shown in figure DD.

Fig C.r

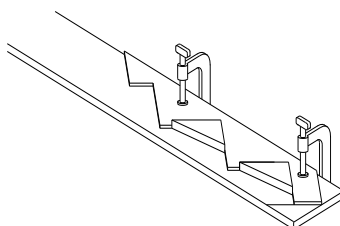
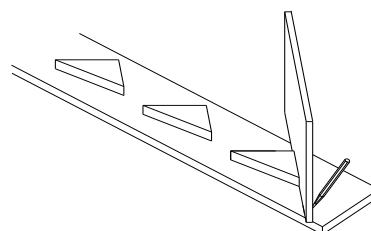


Fig DD

Use riser as spacer to mark cut line



- 12) For the other end of the inside string if this joins to the finished upper floor then use your straight flight template and sit it on the very top set of blocks so the last block is on corner 2 on the template then draw around the 3 lengths of your template that form point B and corner 3, as shown in figs E.r & F.r. If the other end joins to a winder box then assemble the stairs as normal and plumb cut to the back of the last full tread which is 90 degrees to the tread as shown in fig V.r.

Fig F.r

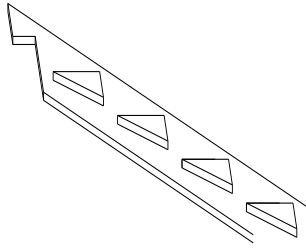


Fig E.r

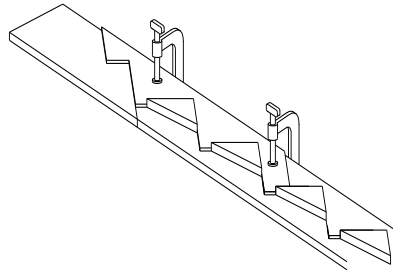
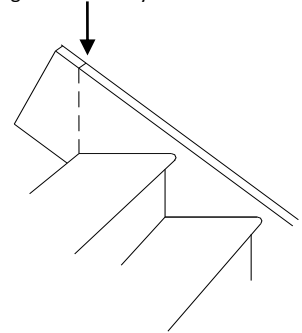


Fig V.r

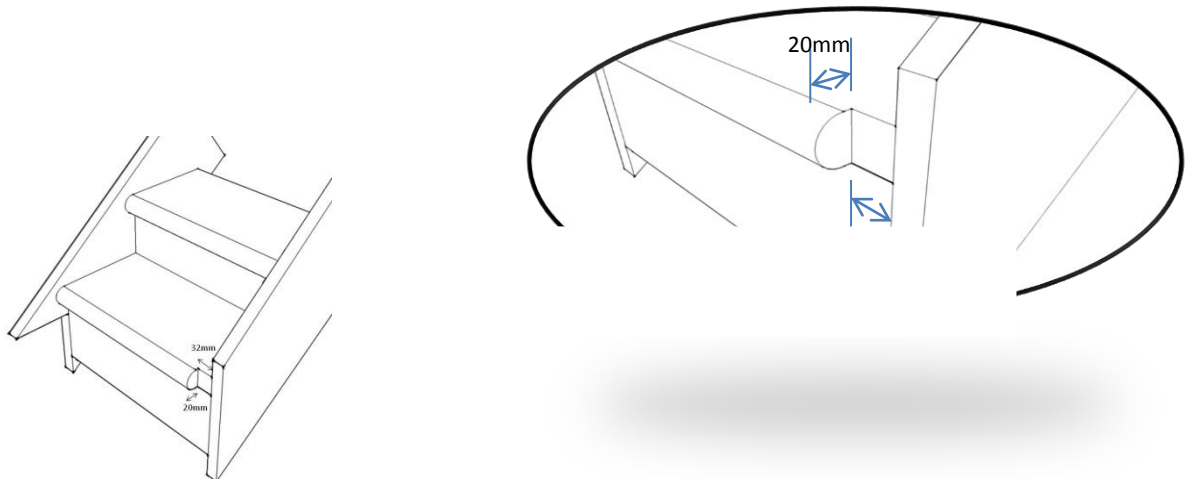
Cut string back vertically in line with rear of tread



TREADS

- 13) The overall width of your stairs is currently 900mm to join to a winder box you can only have 650mm, 700mm, 750mm, 800mm, 850mm or 900mm wide. Should you want your staircase to be smaller than 900mm wide then you must alter the width of the treads accordingly. If your staircase is to be 800mm total width then you need to cut your treads to 746mm wide or if your staircase is to be 700mm total width then you need to cut your treads to 646mm wide. If the bottom of your straight flight section is to be joined to a winder box then you will also need to make a small notch to the bottom straight tread. This will always be on the inside edge of the first tread to a measurement of 32mm wide and 20mm deep. This just allows for the newel post to sit in the middle of your string as shown in fig EE.

Fig EE



- 14) Take one string and place it on a solid level surface. The tread is to be fixed to the support block, if you are unsure of this position then refer to point T on your template. Fix one side of the tread with glue then drill and screw through the tread into the support block ensuring that the back edge of the groove is flush with the front face of the support block and tight against the string as shown in fig I. Then fix each required tread in the same way to every fixed support block on your string.

- 15) Place the opposite handed string on the unfixed ends of the treads and fix as described in point 14.

Fig I

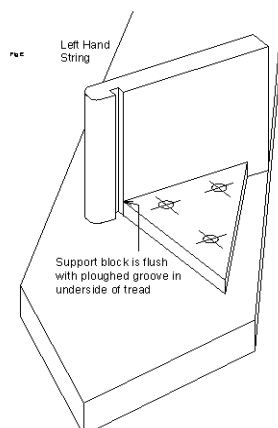
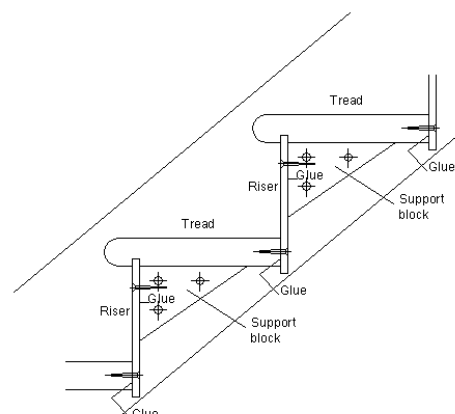


Fig L



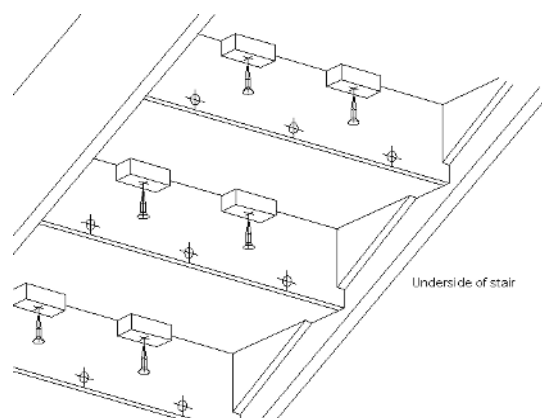
RISERS

- 16) If you are not using the standard 900mm staircase then cut all of your risers to the same width as your treads shown in point 13.
- 17) Only if your straight flight is to sit on the floor then the first/lowest riser has to be cut to height to be level with the bottom of the string and is fixed by slotting into the groove in the underside of the tread and glued to the front of the support block then drilled and screwed through the front riser face into the support block. If your straight flight is to be joined to a winder box then leave the full height of the riser as you will need to fix through it at a later stage.
- 18) The other risers are to be slotted into the grove in the underside of the treads and glued to the front of the support block and the back of the tread below, then drilled and screwed through the front riser face into the support block and the back of the riser into the back of the lower tread as shown in fig L.

GLUE BLOCKS

- 19) You will need to cut to size your glue blocks with a minimum of two glue blocks per tread using a minimum length of 100mm per glue block.
- 20) Glue two long faces of the glue blocks and place them on the underside of the stair into the corner between each tread and riser. Drill and screw the glue block into the tread only ensuring that the other glued face is tight up against the riser as shown in fig M.

Fig M



- 21) Now your stairs are assembled if the other end joins to a winder box then now plumb cut to the back of the last full tread which is 90 degrees to the tread as shown in instruction 10, fig V and instruction 12, fig Vr. Your straight flight section is now ready to be joined to the winder box.

STARTING THE RIGHT HAND WINDER BOX SECTION

DESIGN

- 22) If you have reduced the width of your straight flight that you have just constructed you will need to do the same to your winder kit treads and risers from the 900mm supplied. The treads are marked with a 'V' groove on the underside to whichever width you need as to where to cut them down. To cut the risers to length sit them in the groove of the appropriate tread flush on one end and then mark and cut to length, do this to all 3 risers before you continue. You will also need to reduce the strings in length these are currently 932mm and 905mm which are for a 900 winder box, you need to reduce this by 100mm for a 800mm box or 200mm for a 700mm box and so on.

WINDER TEMPLATE

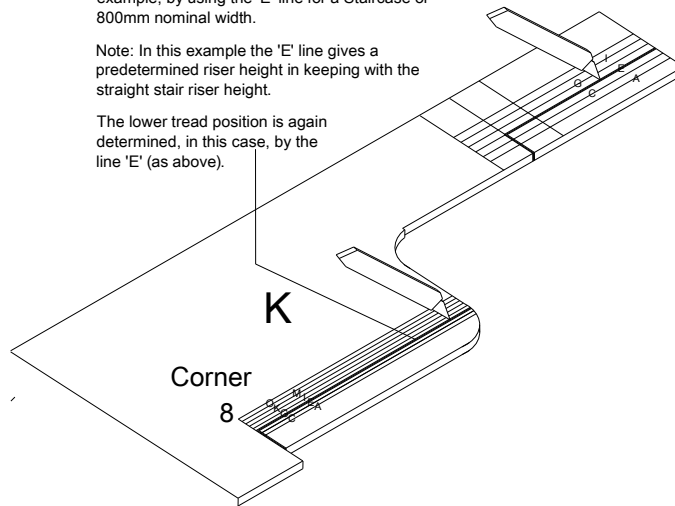
- 23) Using your chosen Template Letter as used for your straight flight section you need to cut the template to your letter and also to the appropriate width that you require, this will be the same width as your straight flight section just constructed. Example; if you need template 'E' and you are making your stairs 800mm wide you will need find letter 'E' on either side of your template and then cut along the line 'E' remembering to stop at the 800mm marker and then follow that line as per fig U.

Fig U

The required profile is being created, in this example, by using the 'E' line for a Staircase of 800mm nominal width.

Note: In this example the 'E' line gives a predetermined riser height in keeping with the straight stair riser height.

The lower tread position is again determined, in this case, by the line 'E' (as above).

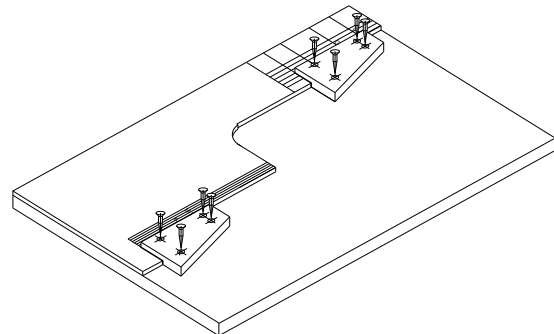
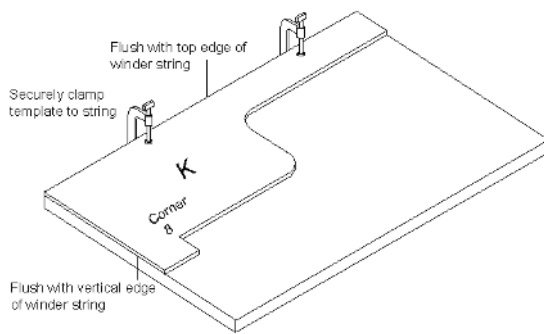


WINDER STRING

- 24) Place your larger corner string on a solid level surface with the grain going horizontally and place your template with side K face up on top of the string flush with the top edge and the left hand side as per fig N. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs.

Fig N

Fig O

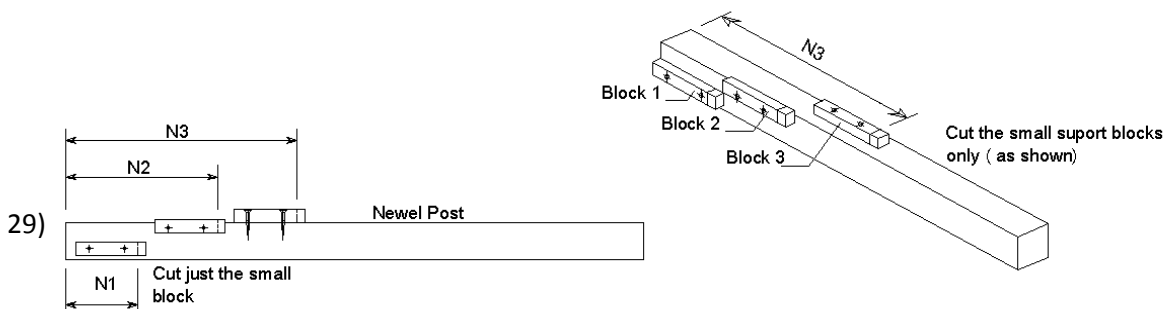


- 25) Glue, drill and screw the smaller of the 4 support blocks into corner 8 as shown in fig O. If you are looking to reduce the width of your winder box to less than 850mm then you will need to shorten the length of the tread support blocks. To reduce the length of the tread support blocks always cut the required amount from the end of the narrowest point. For 800mm reduce by 20mm, for 750mm reduce by 40mm, for 700mm reduce by 60mm and for 650mm reduce by 80mm.
- 26) Glue, drill and screw one of the remaining 3 support blocks into position in relation to the corner you have cut in the template depending of the width previously determined.
- 27) Now repeat 24-26 using your template with side J face up on the smaller corner string using the two remaining support blocks.

NEWEL AND PRE-FIXED SUPPORTS

- 28) The Newel Tread Support Measurement Chart has 3 x N measurements based on your template letter, this relates to the 3 no. support blocks already fixed to the newel. Lay the newel on its side with the blocks on the left-hand end as shown in fig Q.

Fig Q



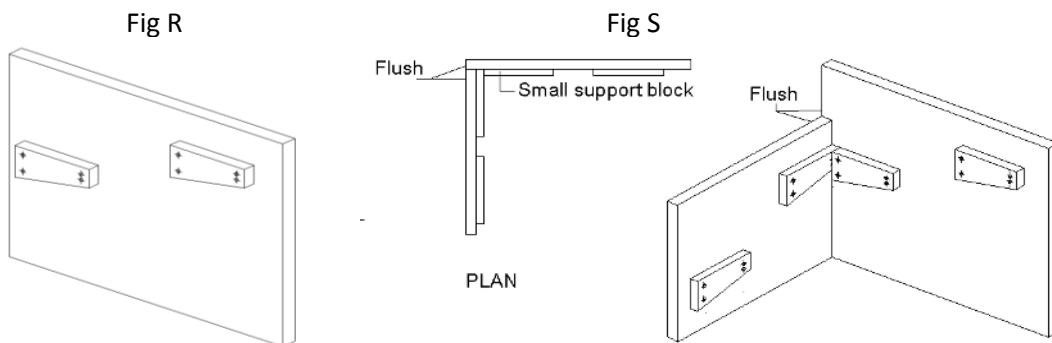
29)

NEWEL TREAD SUPPORT MEASUREMENTS

TEMPLATE	N1	N2	N3
A	178	378	578
B	179	380	581
C	180	382	584
D	181	384	587
E	182	386	590
F	183	388	593
G	184	390	596
H	185	392	599
I	186	394	602
J	187	396	605
K	188	398	608
L	189	400	611
M	190	402	614
N	191	404	617
O	192	406	620
P	193	408	623
Q	194	410	626
R	195	412	629
S	196	414	632
T	197	416	635
U	198	418	638

ASSEMBLY OF THE RIGHT HAND WINDER

30) Stand the larger string on its edge, top uppermost, as shown in fig R.

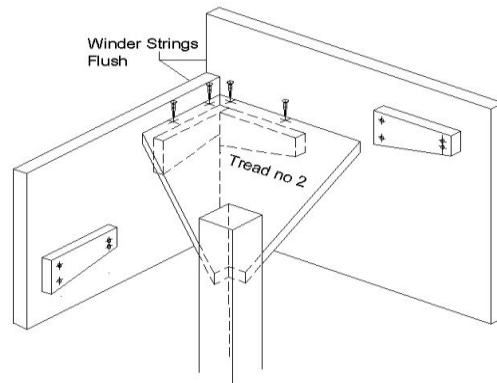


31) Stand the smaller string on its edge, top uppermost, and hold it flush with the left hand edge and on the face of the larger string, all supports face inwards, as shown in fig S. Glue, drill and screw together.

32) Stand the newel up with the supports on them at the bottom.

- 33) Fix the middle tread no. 2 (shaped like a kite) into position you may need to clean the corner of the tread to a right angle to ensure a snug fit against the newel post. It fits into the corner of both the winder strings on top of the two stair supports that are already fixed in place and against the newel on top of block N2, ensure the groove is facing downwards. Glue, drill and screw down through the tread into all the supports, including N2, as shown in fig T.

Fig T



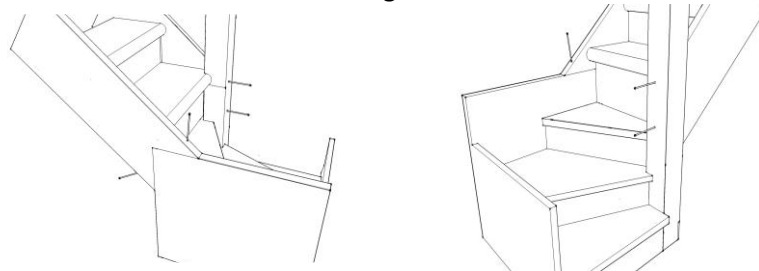
- 34) Now fix tread 1 and 3 as set out above but relating to blocks N1 and N3.
- 35) To fix the risers into place, start with the riser for tread 1, this is the shortest of your risers. If your winder box is to sit on the floor when fitted then you will need to cut the riser to height so it is flush with the bottom of the newel. If your winder box is to be in the middle or at the end of the stair design then leave the riser as this will be screwed to the back of a lower tread later on. The riser is to be slotted into the groove in the underside of the tread and glued to the front of the support block and the back of the tread below and drilled and screwed through the front riser face into the support block and the back of the riser into the back of the lower tread.
- 36) Fix riser 2 and 3 as above.
- 37) You will need to cut to size your glue blocks with a minimum of two glue blocks per tread using a minimum length of 100mm per glue block.
- 38) Glue two long faces of the glue blocks and place them on the underside of the stair into the corner between each tread and riser. Drill and screw the glue block into the tread only ensuring that the other glued face is tight up against the riser as you did with your straight flight as shown in figure M.

THE JOINING OF THE STAIRS

WINDER BOX TO BOTTOM OF STRIAGHT FLIGHT

- 39) Your straight flight stairs have already been suitably cut to fit straight on top of your winder box. For the outside string use the long screws through the top edge of string through into the winder box string, remembering to pre-drill first, for the inside string pre-drill through the newel into your plumb cut face on the straight string twice, as shown in figure Z.

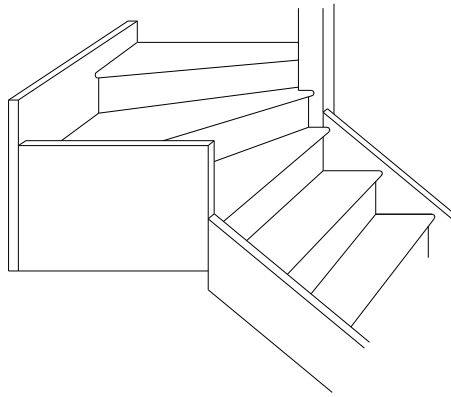
Fig Z



TOP OF STRAIGHT FLIGHT TO WINDER BOX

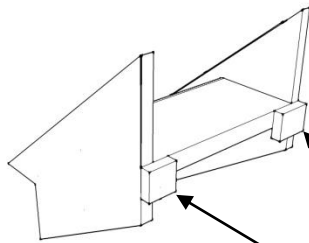
- 40) Your straight flight stairs have already been suitably cut to join to your winder box as shown in figure W.

Fig W



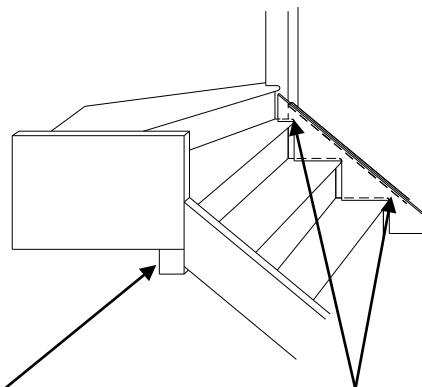
- 41) Temporary fix a support block to both strings on the plumb cut face that has been cut ensuring that the top of the support block is level with the top of the last/highest tread as shown in fig FF. This will ensure that the rise is consistent throughout the staircase. For the correct rise on the inside string place your straight flight template on your stairs making sure that template sits tight on the top of the treads and use the last rise on that template as your measurement, i.e. use labelled corners 2 and 3 on your template, do not use corner 1, as shown in fig BB.

Fig FF



Temporary support for string

Fig BB



Template tight to all treads

- 42) To fix the inside string pre drill through the newel into your cut face on the straight string, twice, as shown in fig ZZ. For the outside string pre drill through the edge of the string on the straight flight into the winder box and also on an angle up through the underside of the winder box into the straight flight string as shown in fig AA.

Fig ZZ

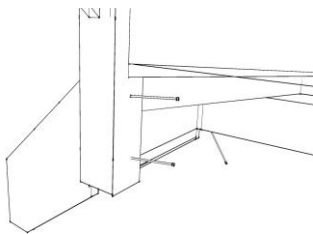
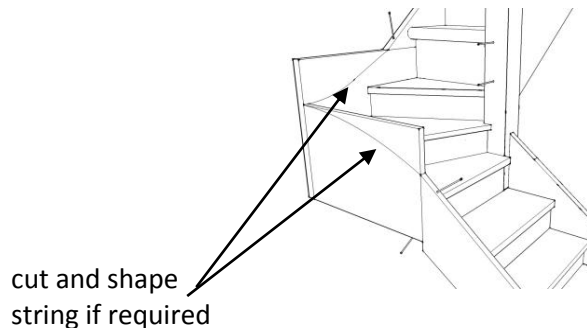


Fig AA



cut and shape
string if required

- 43) When fixing together your straight flight to your winder box you will need the 4 long screws supplied to fit into your predrilled holes.
- 44) Should you wish you may now cut the string up stand on the winder box to a suitable pattern to meet your requirements as shown in Figure AA.

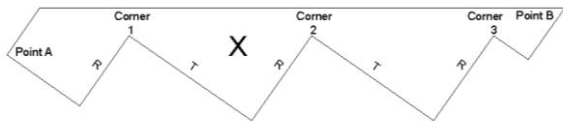
LEFT HAND STRAIGHT/WINDER FLIGHT

650mm, 700mm, 750mm, 800mm, 850mm, 900mm WIDE

1781mm – 3520mm Floor To Floor

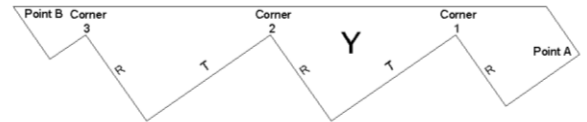
STARTING THE STRAIGHT FLIGHT SECTION

- 1) You are responsible for ensuring that you are correctly and accurately constructing your staircase to conform to the current stair/building regulations as set out in the glossary.
- 2) Using your 'on-site' finished floor to finished floor measurement you need to look on the template requirement sheets for the nearest measurement, this will inform you of two details; how many treads you require (including top tread/nosing) and your appropriate Template Letter.
- 3) Now you know your Template Letter you need to cut it from the printed card. You will need to do this now for both the Straight Flight Template as located in your straight flight pack and the Joining Template located within your winder box pack. Carefully cut out your required template following your chosen letter, label as below and discard the redundant section.



As shown above

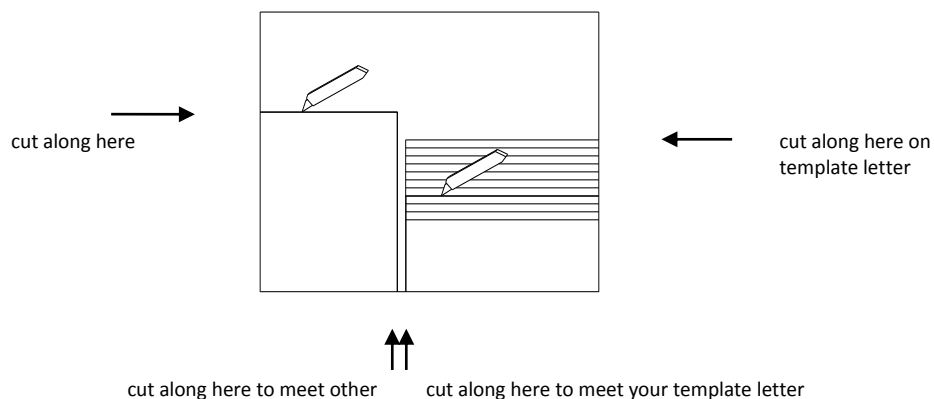
- 13) Label this side X
- 14) Point A far left
- 15) Point B far right
- 16) Corners 1, 2, 3 left to right from first full cut out
- 17) R = riser position
- 18) T = tread position



Label this side Y

- Point A far right
- Point B far left
- Corners 1, 2, 3 right to left from first full cut out
- R = riser position
- T = tread position

JOINING TEMPLATE



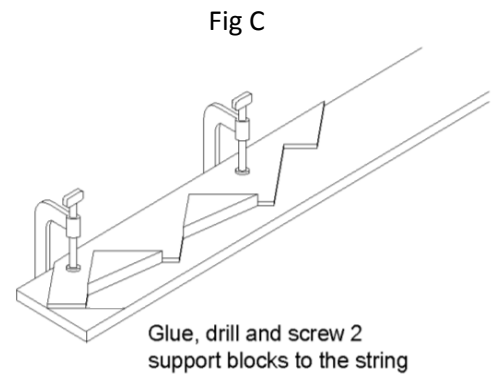
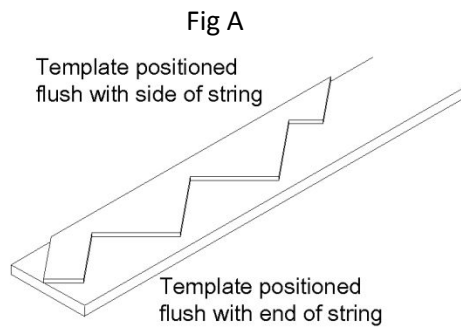
DESIGN

- 4) You should have by now decided on the design of your staircase, i.e. straight flight to winder, winder to straight flight, straight flight to winder then back to straight flight, etc. You will need to remember when building your stairs that if for example you require 12 treads in total (including the top tread/nosing) and are building a single winder that you will only need to build 8 straight flight treads as a winder box automatically has 3 treads within it and your top nosing is always separate. (8 straight + 3 winder + 1 nosing = 12 treads in total)

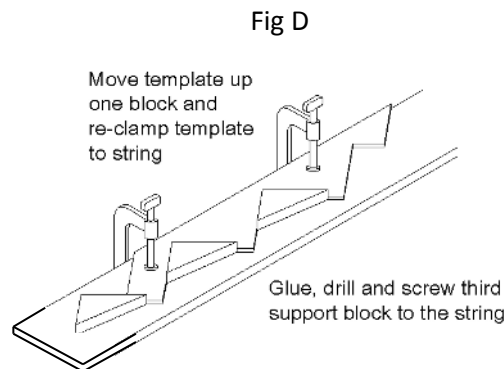
STRINGS

- 5) Lay one string on the floor. Have face up side X of your chosen template and lay the template on the string as shown in fig A. The template must be exactly flush with both the edge and the end of the string at point

A. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs. Glue, drill and screw 2 support blocks to the string in the positions corner 1 and corner 2 ensuring the long edge faces away from the template as shown in fig C. Do not drill too close to the edge of the support blocks or too close to any knots as it may split when you screw to fix, use at least 3 screws per block.

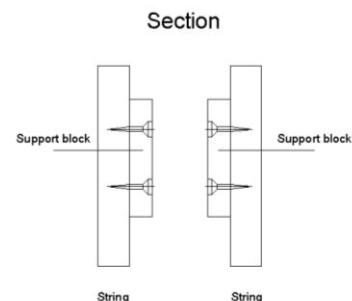
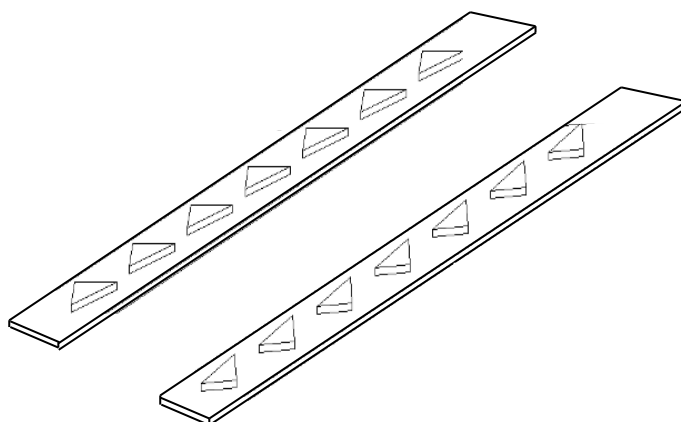


- 6) Again lay the template on the string as shown in fig D. You only move the template up by one support block at a time. The template must be exactly flush with the edge of the string and must fit tight against the last support block you have fixed. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs. Glue, drill and screw 1 support block in position corner 2 to the string as shown in fig D.



- 7) Repeat this process until you have fixed the correct amount of support blocks for your straight flight section of your stairs. This is now known as your inside string.
- 8) Lay the other string on the floor and this time have face up side Y of your template, repeat points 5 – 7 as shown in fig G. This is now known as your outside string.

Fig G



- 9) Now you have all of your straight flight support blocks fitted you need to construct the end design to suit the style of your stairs. Using your outside string if the bottom of this flight sits on the floor lay your straight flight template on your lowest set of blocks and draw around and cut to point A as shown in figure C.r. If

your outside string sits on a winder box then you need to use the joining template which sits on the lowest block and draw and cut around the birds mouth cut out as shown in fig CCr.

Fig C.r

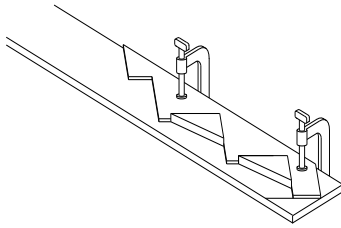
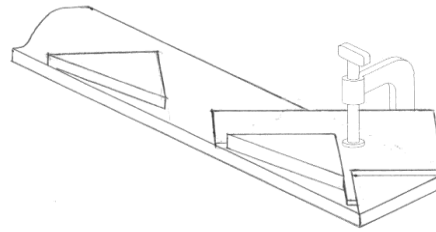


Fig CCr



- 10) For the other end of the outside string if this joins to the finished upper floor then use your straight flight template and sit it on the very top set of blocks so the last block is on corner 2 on the template then draw around the 3 lengths of your template that form point B and corner 3, as shown in figs E.r & F.r. If the other end joins to a winder box then assemble the stairs as normal and plumb cut to the back of the last full tread which is 90 degrees to the tread as shown in fig V.r.

Fig F.r

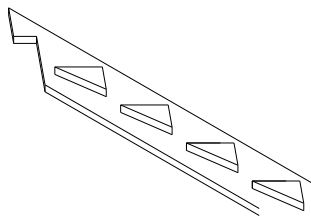


Fig E.r

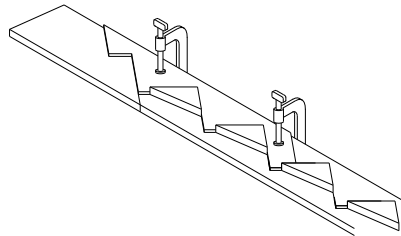
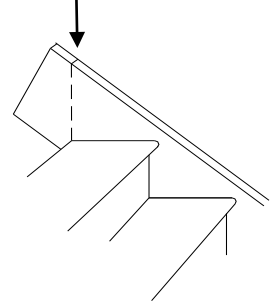


Fig V.r

Cut string back vertically in line with rear of tread



- 11) Now for your inside string; if the bottom of this flight sits on the floor lay your straight flight template on your lowest set of blocks and draw around and cut to point A, as shown in fig C. If your inside string sits on a winder box then you need to place a riser against the front face of the first support block and mark along the front face of the riser on to the string. This will give you your plumb line as to where to make your plumb cut for your inside straight string so as to accurately join your winder box newel as shown in figure DD.r.

Fig C

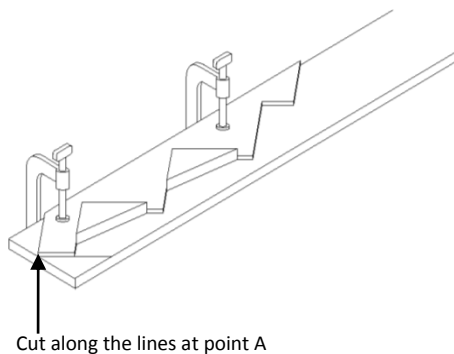
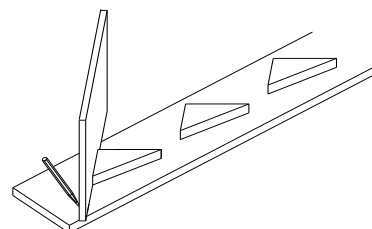


Fig DD.r

Use riser as spacer to mark cut line



- 12) For the other end of the inside string if this joins to the finished upper floor then use your straight flight template and sit it on the very top set of blocks so the last block is on corner 2 on the template then draw around the 3 lengths of your template that form point B and corner 3, as shown in figs E & F. If the other

end joins to a winder box then assemble the stairs as normal and plumb cut to the back of the last full tread which is 90 degrees to the tread as shown in fig V.

Fig F

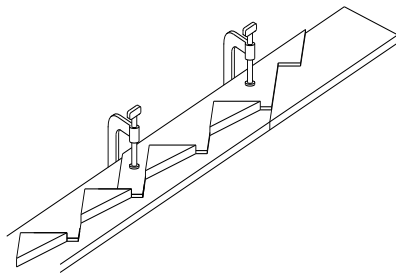


Fig E

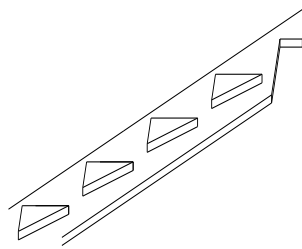
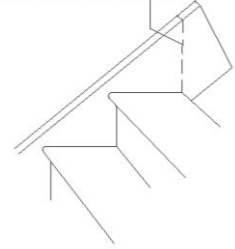


Fig V

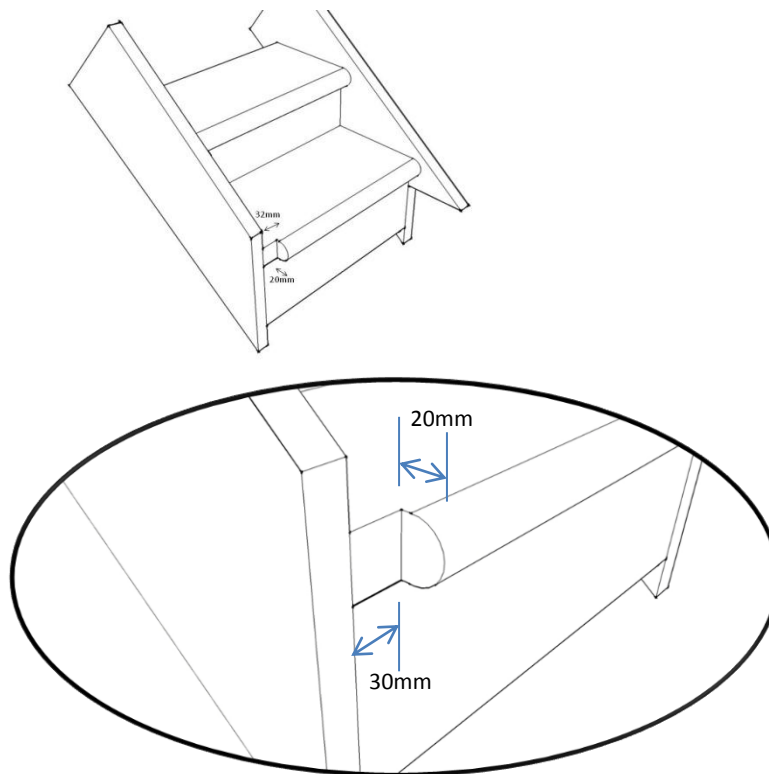
Cut string back vertically
in line with rear of tread



TREADS

- 13) The overall width of your stairs is currently 900mm to join to a winder box you can only have 650mm, 700mm, 750mm, 800mm, 850mm or 900mm wide. Should you want your staircase to be smaller than 900mm wide then you must alter the width of the treads accordingly. If your staircase is to be 800mm total width then you need to cut your treads to 746mm wide or if your staircase is to be 700mm total width then you need to cut your treads to 646mm wide. If your staircase is to be 800mm total width then you need to cut your treads to 746mm wide or if your staircase is to be 700mm total width then you need to cut your treads to 646mm wide. If the bottom of your straight flight section is to be joined to a winder box then you will also need to make a small notch to the bottom straight tread. This will always be on the inside edge of the first tread to a measurement of 32mm wide and 20mm deep. This just allows for the newel post to sit in the middle of your string as shown in fig EE.

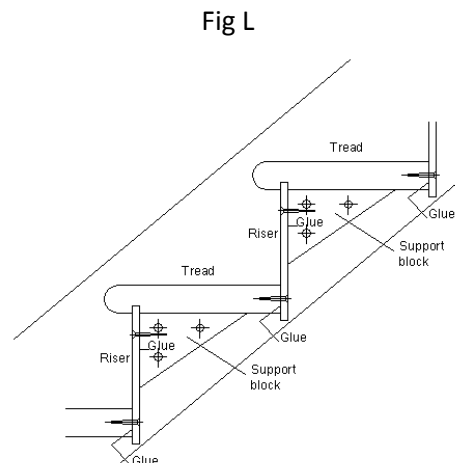
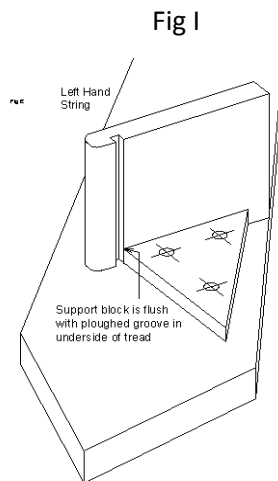
Fig EE



- 14) Take one string and place it on a solid level surface. The tread is to be fixed to the support block, if you are unsure of this position then refer to point T on your template. Fix one side of the tread with glue then drill and screw through the tread into the support block ensuring that the back edge of the groove is flush with

the front face of the support block and tight against the string as shown in fig I. Then fix each required tread in the same way to every fixed support block on your string.

15) Place the opposite handed string on the unfixed ends of the treads and fix as described in point 14.

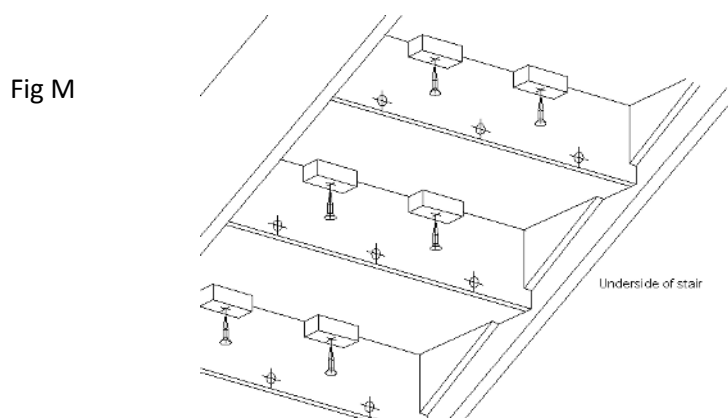


RISERS

- 16) If you are not using the standard 900mm staircase then cut all of your risers to the same width as your treads shown in point 13.
- 17) Only if your straight flight is to sit on the floor then the first/lowest riser has to be cut to height to be level with the bottom of the string and is fixed by slotting into the groove in the underside of the tread and glued to the front of the support block then drilled and screwed through the front riser face into the support block. If your straight flight is to be joined to a winder box then leave the full height of the riser as you will need to fix through it at a later stage.
- 18) The other risers are to be slotted into the groove in the underside of the treads and glued to the front of the support block and the back of the tread below, then drilled and screwed through the front riser face into the support block and the back of the riser into the back of the lower tread as shown in fig L.

GLUE BLOCKS

- 19) You will need to cut to size your glue blocks with a minimum of two glue blocks per tread using a minimum length of 100mm per glue block.
- 20) Glue two long faces of the glue blocks and place them on the underside of the stair into the corner between each tread and riser. Drill and screw the glue block into the tread only ensuring that the other glued face is tight up against the riser as shown in fig M.



- 21) Now your stairs are assembled if the other end joins to a winder box then now plumb cut to the back of the last full tread which is 90 degrees to the tread as shown in instruction 10, fig Vr and instruction 12, fig V. Your straight flight section is now ready to be joined to the winder box.

STARTING THE LEFT HAND WINDER BOX SECTION

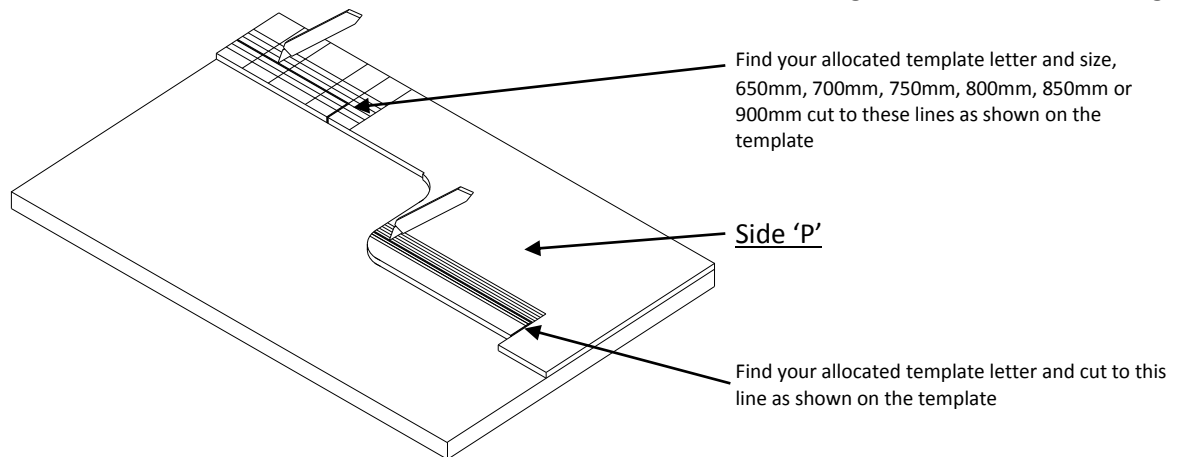
DESIGN

- 22) If you have reduced the width of your straight flight that you have just constructed you will need to do the same to your winder kit treads and risers from the 900mm supplied. The treads are marked with a 'V' groove on the underside to whichever width you need as to where to cut them down. To cut the risers to length sit them in the groove of the appropriate tread flush on one end and then mark and cut to length, do this to all 3 risers before you continue. You will also need to reduce the strings in length these are currently 932mm and 905mm which are for a 900 winder box, you need to reduce this by 100mm for a 800mm box or 200mm for a 700mm box and so on.

WINDER TEMPLATE

- 23) Using your chosen Template Letter as used for your straight flight section you need to cut the template to your letter and also to the appropriate width that you require, this will be the same width as your straight flight section just constructed. Example; if you need template 'E' and you are making your stairs 800mm wide you will need find letter 'E' on either side of your template and then cut along the line 'E' remembering to stop at

Fig U



WINDER STRING

- 24) Place your larger corner string on a solid level surface with the grain going horizontally and place your template with side P face up on top of the string flush with the top edge and the right hand side as per fig N. Cramp the template in place to eliminate any movement, this is essential for the accuracy of your stairs.

Fig N

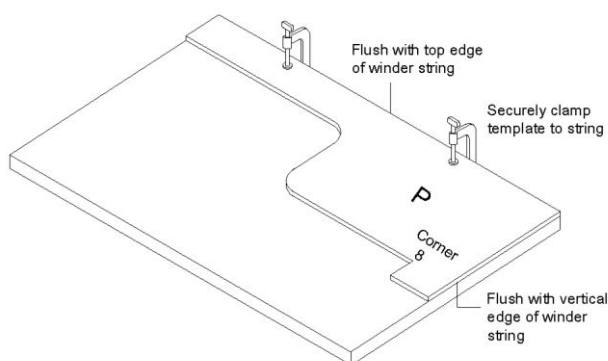
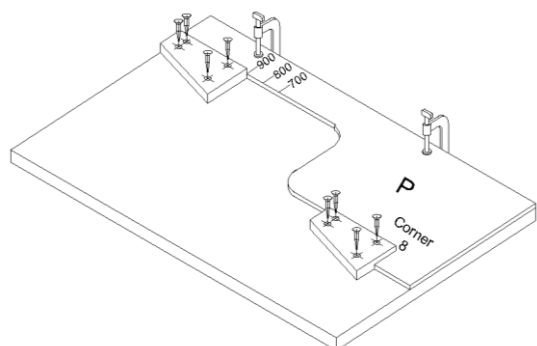


Fig O

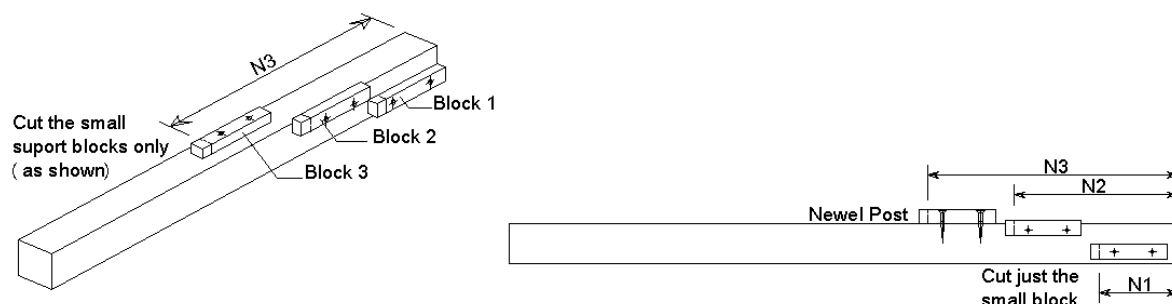


- 25) Glue, drill and screw the smaller of the 4 support blocks into corner 8 as shown in fig O. If you are looking to reduce the width of your winder box to less than 850mm then you will need to shorten the length of the tread support blocks. To reduce the length of the tread support blocks always cut the required amount from the end of the narrowest point. For 800mm reduce by 20mm, for 750mm reduce by 40mm, for 700mm reduce by 60mm and for 650mm reduce by 80mm.
- 26) Glue, drill and screw one of the remaining 3 support blocks into position in relation to the corner you have cut in the template depending of the width previously determined.
- 27) Now repeat 24-26 using your template with side H face up on the smaller corner string using the two remaining support blocks.

NEWEL AND PRE-FIXED SUPPORTS

- 28) The Newel Tread Support Measurement Chart has 3 x N measurements based on your template letter, this relates to the 3 no. support blocks already fixed to the newel. Lay the newel on its side with the blocks on the right-hand end as shown in fig Q.

Fig Q



- 29) From the Newel Tread Support Measurement Chart find your appropriate template letter and the corresponding measurements. N1 relates to the measurement in mm needed to cut the number 1 support block to. The same applies to N2, support block 2 and N3, support block 3.

NEWEL TREAD SUPPORT MEASUREMENTS

TEMPLATE	N1	N2	N3
A	178	378	578
B	179	380	581
C	180	382	584
D	181	384	587
E	182	386	590
F	183	388	593
G	184	390	596
H	185	392	599
I	186	394	602
J	187	396	605
K	188	398	608
L	189	400	611
M	190	402	614
N	191	404	617
O	192	406	620
P	193	408	623
Q	194	410	626
R	195	412	629
S	196	414	632
T	197	416	635

ASSEMBLY OF THE LEFT HAND WINDER

30) Stand the larger string on its edge, top uppermost, as shown in fig R.

Fig R

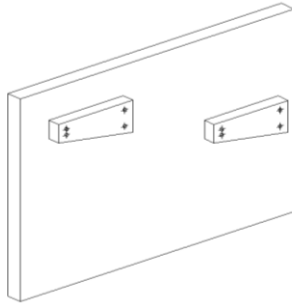
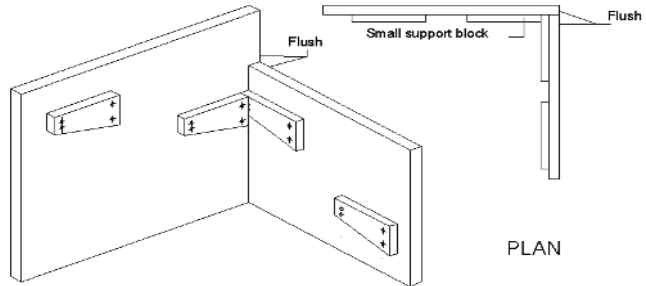
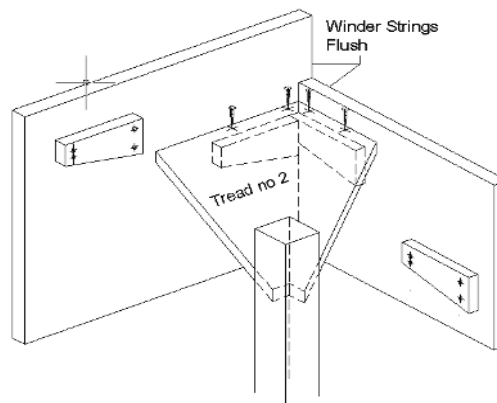


Fig S



- 31) Stand the smaller string on its edge, top uppermost, and hold it flush with the right hand edge and on the face of the larger string, all supports face inwards, as shown in fig S. Glue, drill and screw together.
- 32) Stand the newel up with the supports on them at the bottom.
- 33) Fix the middle tread no. 2 (shaped like a kite) into position, you may need to clean the corner of the tread to a right angle to ensure a snug fit against the newel post. It fits into the corner of both the winder strings on top of the two stair supports that are already fixed in place and against the newel on top of block N2, ensure the groove is facing downwards. Glue, drill and screw down through the tread into all the supports, including N2, as shown in fig T.

Fig T



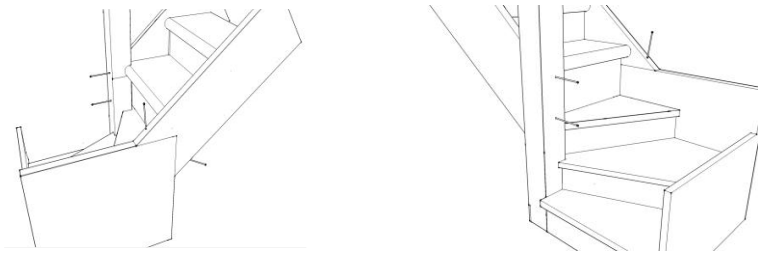
- 34) Now fix tread 1 and 3 as set out above but relating to blocks N1 and N3.
- 35) To fix the risers into place, start with the riser for tread 1, this is the shortest of your risers. If your winder box is to sit on the floor when fitted then you will need to cut the riser to height so it is flush with the bottom of the newel. If your winder box is to be in the middle or at the end of the stair design then leave the riser as this will be screwed to the back of a lower tread later on. The riser is to be slotted into the groove in the underside of the tread and glued to the front of the support block and the back of the tread below and drilled and screwed through the front riser face into the support block and the back of the riser into the back of the lower tread.
- 36) Fix riser 2 and 3 as above.
- 37) You will need to cut to size your glue blocks with a minimum of two glue blocks per tread using a minimum length of 100mm per glue block.
- 38) Glue two long faces of the glue blocks and place them on the underside of the stair into the corner between each tread and riser. Drill and screw the glue block into the tread only ensuring that the other glued face is tight up against the riser as you did with your straight flight as shown in figure M.

THE JOINING OF THE STAIRS

WINDER BOX TO BOTTOM OF STRIAGHT FLIGHT

- 39) Your straight flight stairs have already been suitably cut to fit straight on top of your winder box. For the outside string use the long screws through the top edge of string through into the winder box string, remembering to pre-drill first, for the inside string pre-drill through the newel into your plumb cut face on the straight string twice, as shown in figure Z.

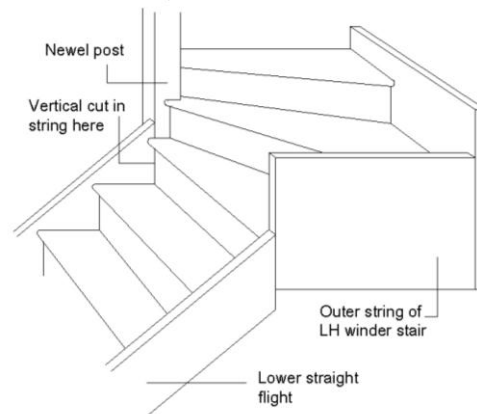
Fig Z



TOP OF STRAIGHT FLIGHT TO WINDER BOX

- 40) Your straight flight stairs have already been suitably cut to join to your winder box as shown in figure W.

Fig W



- 41) Temporary fix a support block to both strings on the plumb cut face that has been cut ensuring that the top of the support block is level with the top of the last/highest tread as shown in fig FF. This will ensure that the rise is consistent throughout the staircase. For the correct rise on the inside string place your straight flight template on your stairs making sure that template sits tight on the top of the treads and use the last rise on that template as your measurement, i.e. use labelled corners 2 and 3 on your template, do not use corner 1, as shown in fig BB.

Fig FF

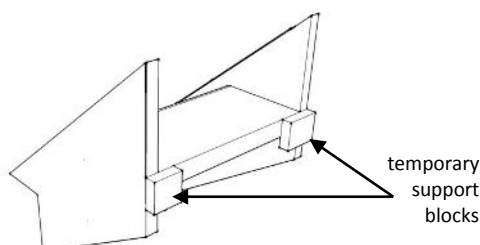
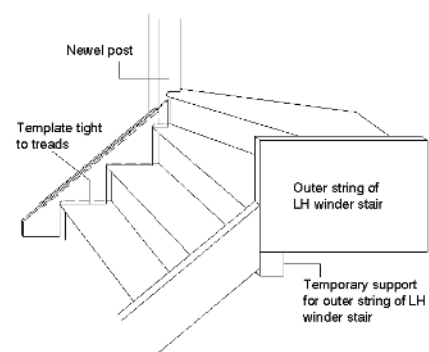


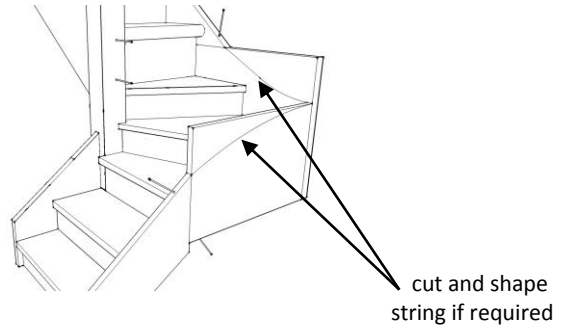
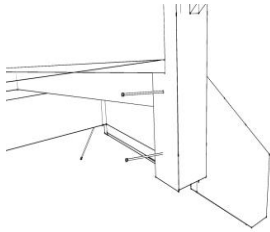
Fig BB



- 42) To fix the inside string pre drill through the newel into your cut face on the straight string, twice, as shown in fig ZZ. For the outside string pre drill through the edge of the string on the straight flight into the winder box and also on an angle up through the underside of the winder box into the straight flight string as shown in fig AA.

Fig ZZ

Fig AA



- 43) When fixing together your straight flight to your winder box you will need the 4 long screws supplied to fit into your predrilled holes.
- 44) Should you wish you may now cut the string up stand on the winder box to a suitable pattern to meet your requirements as shown in figure AA.

ADDITIONAL KWIK STAIRS INFORMATION

If you cannot find your finished floor to finished floor measurement in the chart provided then use the following calculation to obtain it:

Finished floor to finished floor measurement in mm	=	1650mm
Divide by 220mm, to give you the number of treads	=	7.50
If a partial figure then always round up to the next whole figure to show the number of treads including the nosing that you will need	=	8
Divide floor to floor by number of treads needed (1650mm / 8)	=	206.25mm
Correspond to the nearest whole number to obtain your template letter from the chart below	=	206mm
	=	G

200mm = A	205mm = F	210mm = K	215mm = P	220mm = U
201mm = B	206mm = G	211mm = L	216mm = Q	
202mm = C	207mm = H	212mm = M	217mm = R	
203mm = D	208mm = I	213mm = N	218mm = S	
204 mm = E	209mm = J	214mm = O	219mm = T	

GLOSSARY

BASERAIL

A bottom rail that sits on top of the string to support the spindles.

BIRDS MOUTH CUT/SEAT CUT

An L shaped cut designed to be able to sit on another component.

COMMERCIAL/COMMON

A stairway used by two or more dwellings.

FINISHED FLOOR TO FLOOR

The measurement needed for the height of the stairs. From the finished surface of the floor where the stair (lower floor) is to start to the finished surface of the next floor where the stair is to end (upper floor).

DOMESTIC/PRIVATE

A stairway used only by one dwelling.

GLUE

An adhesive substance used for sticking objects or materials together.

GLUE BLOCKS

These are glued and screwed to the underside of the **treads** and also just glued to the back of the risers.

GOING

The measurement between the front of the riser on the lower tread to the front of the riser on the upper tread.

HALF LANDING

A level area within your staircase that forms a 180 degree turn.

HANDRAIL

A rail fixed to posts or a wall for people to hold onto for support.

INSIDE STRING

If your staircase turns to the right then the inside string is on your right alternatively if your staircase turns to the left then the inside string is on your left.

LEFT-HAND WINDER

The climbing left hand turn consisting of three treads somewhere within a staircase.

NEWEL

Can be either the supporting post of a staircase, a fixture point for winding treads or a fixture point for handrail.

NOSING

This is the very top tread that forms part of the upper floor. It is not used in the construction of the stairs, only the fitting.

OUTSIDE STRING

If your staircase turns to the right then the outside string is on your left alternatively if your staircase turns to the left then the outside string is on your right.

PLUMB CUT

A vertical cut on an upright surface.

PLUMB LINE

A vertical line on an upright surface.

QUARTER LANDING

A level area within your staircase that forms a 90 degree turn.

RIGHT-HAND WINDER

The climbing right hand turn consisting of three treads somewhere within a staircase.

RISE

The measurement between the top face of the lower tread to the top face of the upper tread.

RISERS

These are 9mm MDF panels that fit vertically to the staircase. The top fits into the groove on the underside of the tread and is screwed to the back of the lower tread.

SCREWS

Sharp pointed metal pin with a raised helical thread running around it, used to join members together by being rotated in under pressure.

SEAT CUT/BIRDS MOUTH CUT

An L shaped cut designed to be able to sit on another item.

SPINDLE

The decorative vertical members that fit between the handrail and base rail alongside a staircase and landing.

STAIR REGULATIONS (within building regulations)

The measurements that you must ensure your stairs must conform to so as to ensure a safe suitable legal staircase. Please see www.lbhf.gov.uk/Images/Part_K_tcm21-19845.pdf

STAIRS

Set of fixed steps leading from one floor of a building to another.

STRING OF THE WINDER BOX

The two large panels to which the support blocks are fixed and the treads and risers sit against.

STRINGS

Two main structural timbers on each side of the staircase. There will always be a left hand and right hand version.

SUPPORT BLOCKS

These are the main support for the treads and risers. They are glued and screwed onto the inside of both strings. The treads and risers are then screwed to the support blocks.

TEMPLATE

A shaped piece of rigid material used as a pattern for processes such as cutting out, shaping, drilling and fixing.

TOTAL GOING

The horizontal measurement from the front face of the lowest riser to the back face of the highest riser.

TREADS

These are 22mm MDF panels that fit horizontally to the staircase. They have a rounded front and a groove on the **underside**.

TRIMMER

The beam on the upper floor to which your stairs will be sat on and fixed to for support.

WIDTH OF STAIRS

The overall measurement from the outside face of one string to the outside face of the opposite string.

WINDER BOX

A three tread staircase incorporating a 90 degree turn.