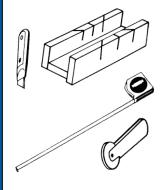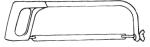## MIGHTY TOOLS FOR YOUR MITREPLAN

Tape measure

Mitre box

Hacksaw

Spline roller

Utility knife

Hammer

Timber offcut

✓ MIGHTY HELPFUL CHECKLIST

	ORDER
Aluminium framing – available in white, primrose, beige or natural	
Corner stakes	
Screen mesh – available in aluminium or fibreglass in various widths.	
Spline – specially designed PVC stripping	
Hinges, flush buttons or offset security buttons – depending on screen style.	
Other materials	

Verbal quotes are indicative only. Written quotes on materials are available upon request from your Mitre 10 store.

MIGHTY HELPFUL HINTS TO MAKE THE JOB EASIER

■ A mitre box will help you cut accurate joints everytime, whether square or mitred cuts.

■ Lay a small piece of plywood inside the mitre box on the bottom to prevent you from accidentally sawing into the box.

■ Use pieces of thin wood – about matchbox size, to wedge the aluminium frame in the mitre box. This prevents it from slipping and gives more accurate, cleaner cuts.

■ Cut the longest lengths first so that if you make a mistake, that length won't be wasted. You'll still be able to use it for one of the shorter lengths.

■ When marking aluminium, the sharp point of a thin nail can give you a more accurate mark than a pencil.

■ Placing a couple of heavy books on the mesh inside the frame when fitting can help prevent you from pulling too tight and distorting the frame.

■ When turning corners with the spline roller, keep a Phillips head screwdriver handle to gently push in the spline for a neater corner finish.

■ Make sure the spline groove is always to the inside of the frame – it must always be on the shortest side.

■ If using aluminium screen mesh, first fold it into the spline groove to make fitting the spline easier.

■ Warming the spline in hot water will also make the job easier.

Make your own flyscreens

IMPORTANT: This project planner has been produced to provide basic information and our experienced staff are available to answer any questions you may have. However, this information is provided for use on the understanding that Mitre 10 is not liable for any loss or damage which is suffered or incurred (including but not limited to indirect or consequential loss), for any personal injury or damage to property suffered or sustained as a result of using the information contained in this MitrePlan Project Planner. Mitre 10 advises you to call in a qualified tradesperson, such as an electrician or plumber, where expert services are required, and to independently assess any safety precautions that will need to be followed prior to using the information in this MitrePlan Project Planner.

WARNING: There may be by laws or regulations of councils or other statutory bodies that you must comply with when following this MitrePlan Project Planner.
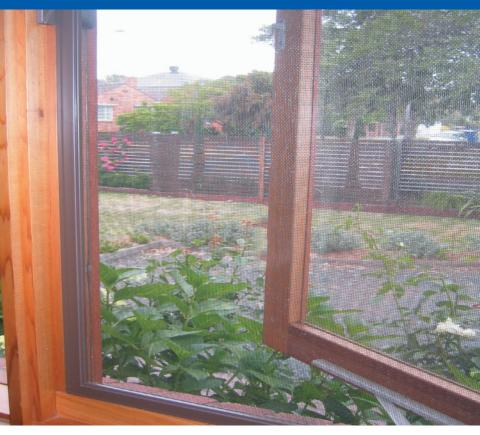
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Your local MITRE 10 Store is:

MITREPLAN PROJECT PLANNER

Make your own flyscreens

• **An easy-to-follow guide to achieving a perfect result.**

• **Outlines all the tools you will need for the job.**

• **Includes a materials checklist.**

PLEASE NOTE:
Before starting this project or buying any materials, it is worth your time to read all steps thoroughly first to be sure you understand what is required.
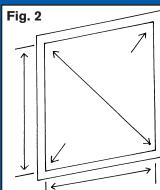
Mitre 10 is proudly Australian owned.

#12

mitre10.com.au

Australia is famous for many things – including a huge fly population and other insects. If you haven't yet fitted flyscreens, or if the ones you have are damaged, you'll probably find your home invaded by hoards of tiny uninvited guests at the slightest hint of warm weather.

Of course, you can have screens custom made especially for your windows. But why go to that expense when it's such a simple matter to make and install your own aluminium flyscreens. It requires no special skills, and all the components and advice you need are available right now from your Mitre 10 store. Just ask. You'll not only save money – you'll get satisfaction out of doing the job yourself.

Fig. 1A   **Fig. 1**

Fig. 2

Step 1: Planning

There are three ways of mounting your screens, so before you buy materials, decide which style of screen you want to make. Your choice will determine the height and width of your screen frame and how you fit it to the window frame.

One way is to mount the screen against the window frame, or to rest it on the window sill. It can then be either hinged or fixed. If fixed, you'll need offset buttons (Fig. 1). If it is to be flush mounted (set in the window recess), it can be hinged or fixed using flush buttons (Fig 1A). For sliding screens, you'll also need to buy and fix the sliding track.

Step 2: Measuring up

Whichever style you choose, first measure the size of the window opening between the inside edges of the window frame. Measure the height each side and width top and bottom (Fig. 2). If the opening is not square, you'll have to make allowances for your flyscreen to fit.

If your screen is to be face mounted, add at least 25mm to your window opening measurements to allow for overlap on height and width (Fig. 3)

If you plan to rest the screen on the window sill, add only 12mm to the height and 25mm to the width.

With flush-mounted screens, deduct 3mm from the window opening measurements for clearance on all sides (Fig. 4).
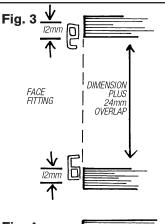
For sliding screens, first fix the sliding track in place then measure the distance between the top and bottom tracks, making clearance allowances detailed within the track fitting instructions. For width, add 12mm to each side.
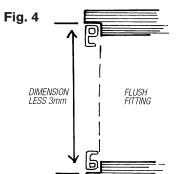
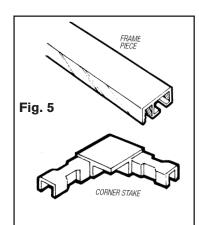## Step 3: Cutting the frame to size

Various manufacturers have different ways of fitting screen frame corners together. Both square and mitred (45° angle) corner stakes are available and depend on the make of aluminium framing you've bought (Fig. 5). Your Mitre 10 store will help you select the right corner stakes.
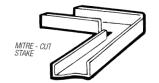
If using square corner stakes, all pieces are cut square. Be sure to deduct the size of the corner stakes from your overall height and width measurements, usually about 41mm less.
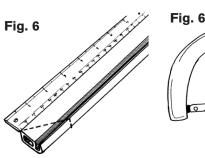
For mitred corners, cut to the exact measurements you made in Step 2. Start with the longest pieces first so if you do make a mistake, you'll be able to use that piece for one of the shorter lengths. Measure your frame pieces along the outside edge and mark the top of the 45° angle (Fig. 6). Use your mitre box to ensure the joints are at the correct 45° angle, and cut with your hacksaw. Cut the other end to length with a second mitre cut. Always ensure that the spline groove is to the inside of the frame so that it is always on the shortest side. Any cut ends that are slightly burred should be carefully filed smooth, avoiding any damage to the finished outside surface.
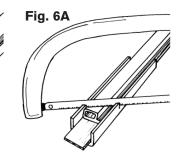
Fig. 3

12mm

FACE FITTING

DIMENSION PLUS 24mm OVERLAP

12mm

Fig. 4

DIMENSION LESS 3mm

FLUSH FITTING

Fig. 5

FRAME PIECE

CORNER STAKE

MITRE - CUT STAKE

Fig. 6   **Fig. 6A**

Step 4: Putting the frame together

Having cut all four sides to size, lay the shorter lengths on a flat surface and insert the corner stakes at the end of each length. Make certain the spline groove is on the inside of the frame.

When both shorter lengths are made up with corner stakes, fit the longer sides into the stakes (Fig. 7). The corner stakes are designed to fit tightly, so it may be necessary to gently but firmly tap them in with a hammer. Use a scrap piece of timber to protect the surface finish (Fig. 7). Then complete the frame by fitting the remaining short length in the same way.

Step 5: Cut to size

Ensuring that the frame is square, lay the insect screening over the frame, with the spline groove facing up. Cut the screening approximately 2cm wider than the frame.

Step 6: Cut corner at 45° angle

With a pair of scissors, trim one corner of the screening at a 45° handle. (Do not cut all 4 corners at one time.) Line up the centre of the cut with the corner of the spline groove. This prevents buckling. (Fig. 9)
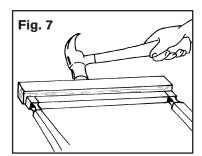
Step 7: Wedge screening into groove

Starting at the cut corner, gently crease the insect screening into the spline groove using the convex wheel roller. Use several light strokes to avoid damage. Holding the roller at a slight angle and folding in a section of the screening at a time, will make the process easier and prevent tearing. Continue until it is completely wedged down into the groove. (Fig. 10)

Step 8: Push spline into corner

Using screwdriver, gently push the end of the spline down into a corner. (Fig. 11)

Step 9: Roll in spline

Using the concave wheel of the spline roller, press the remainder into the groove. Working around the frame in a clockwise direction gives a better, flatter result. (Fig. 12)
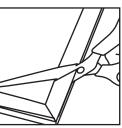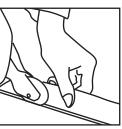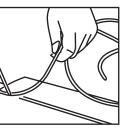
Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Step 10: Cut spline and trim excess

Cut the loose end of the spline to meet the start with a pair of scissors. Trim excess screening close to the edge of the spline with a utility knife. Your new insect screening has now been fitted. (Fig. 13)

Step 11: Fitting your new screen

Place the screen in position and mark where the hinges and security buttons are to be located. Drill small holes to start the screws and fix the fittings into the window frame, ensuring that they are evenly spaced (Fig. 14).

Fig. 12

Fig. 13

Fig. 14