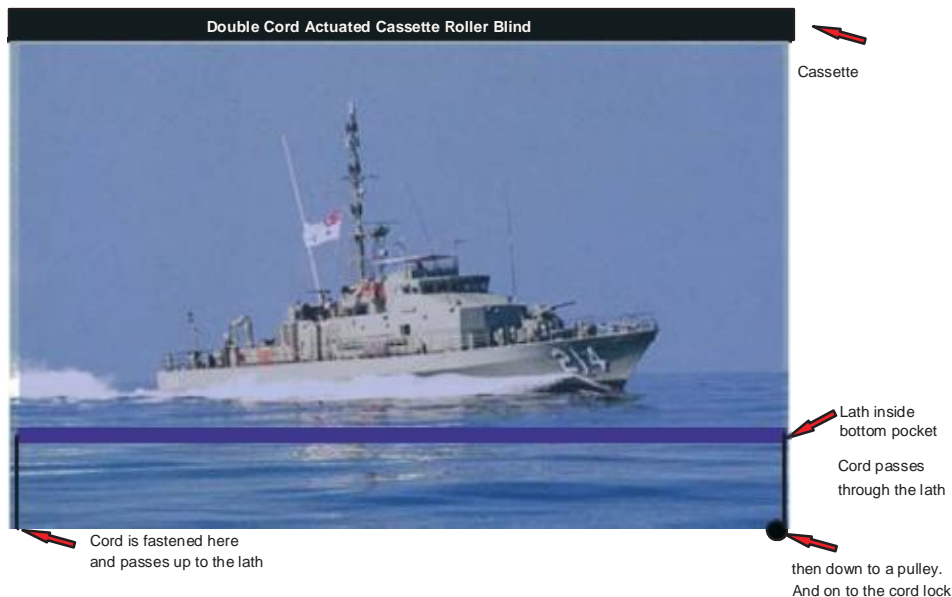


Double Cord Actuated Blinds for Ships



For many years the makers of Reflective Blinds have supplied blinds to ship owners and builders for use on bridges and other vital sun affected windows. Ship's crews have to cope with both the direct rays of the sun as well as reflection off the water. GLARE is their primary problem, yet they need to be able to see clearly at all times. Ships are seldom still, hence the need for blinds that are held reasonably in place. Reflective Cassette Cord Actuated Blinds are transparent sun control blinds which can reduce the HEAT, GLARE and FADE of the sun while preserving a clear VIEW during daylight hours. At night or after the sun has left a window they can be just rolled up out of the way. They are spring loaded roller blinds in cassettes that are held in tension against the spring, so that they do not move around.

People often ask: "How can Reflective Blinds be so effective when they are inside the window?"

The answer is found in the fact that they are reflective. Light comes from the sun and we know that it can be reflected by a mirrored surface. Likewise the other electro-magnetic wave groups that are given off by the sun are also reflected. These other wave groups are the Ultra-violet Group which does most fading furnishings and skin damage, and the Infra-red Group which contributes most to making us feel hot. Therefore, if we fit a Reflective Blind to a window, we fit it in such a way that it gets the full blast of the sun. There it can do its job of reflecting those electro-magnetic rays back out, just as fast as they came in (300,000 Km.sec.).

The film from which these blinds are made is either : SSLW 400 Grey/Si/Grey-UV. or SSLW 400 Bronze/si/Bronze
This film will reduce solar heat gain by about 50%, glare by about 94% and UV transmission by more than 99%.

(Inexactness of performance claims is due to the fact that we would need detailed information on the window frame and glass specifications before we could run the computer simulation to get exact performance, and this exercise would need to be done for each window as the size of the window is also important .
The above results are a close approximation of what would be expected.)

Reflective Cord Actuated Cassette Roller Blinds in the Marine Environment:

Our product is well suited to the Marine Environment. The film (fabric) is polyester. It does not mind getting wet, and is washable. The only precaution we would take is to try not to roll it up wet, as if there is any acid in solution on the blind, it could track through the film and chemically react with the reflective aluminium layer.

The hardware: bracket clips are stainless steel; cassette, roller tube, lath, roller end brackets are all aluminium.
The spring is greased galvanized steel, and all the other components of the spring assembly are high wear plastic.
The only other steel components are the little zinc coated screws which hold the roller to the roller brackets and the mandrels of any rivets used, but it is not expected that any of these will shorten the life of the blind.

Fire Rating of Reflective Blinds:

Reflective Blind films have been rated by the CSIRO in accordance with Australian/New Zealand Standard 3837:1998.
All films in the range have an average specific extinction area significantly less than 250 m²/kg.

Photo of HMAS Dubbo courtesy of Commonwealth of Australia - Department of Defence

Care and Maintenance:

Installation Notes:

1. Blind must be installed with the roller horizontal at the top of the reveal.
2. Fit the two clips to the head of the reveal, about 35 to 50 mm from the corner of the frame.
Note : ensure that the position of the release tab is accessible, it should face into the room.
3. Snap the blind into the brackets.
4. Cord on left hand side needs to be fastened to the window frame
Because of variations between windows, fastenings are not supplied.
5. The pulley is installed so that the cord enters it a 90 degrees to the lath.
6. The cord lock (cleat) is installed:
 - a. in a location where it is easy to operate,
 - b. with the stainless steel hoop, or cord guide, facing the last pulley.
7. Tie the white plastic ring to the end of the cord in such a way that when the blind is fully rolled up, the plastic ring comes to rest against the stainless steel hoop.
Cut off the unwanted cord and melt to prevent fraying.

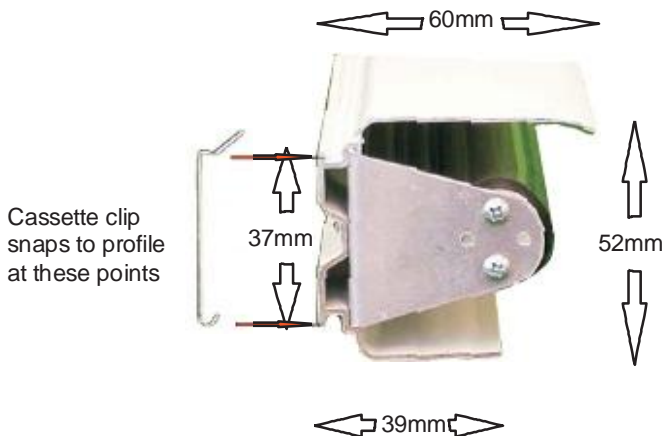


End fix base mounted block
(Plain Bearing)

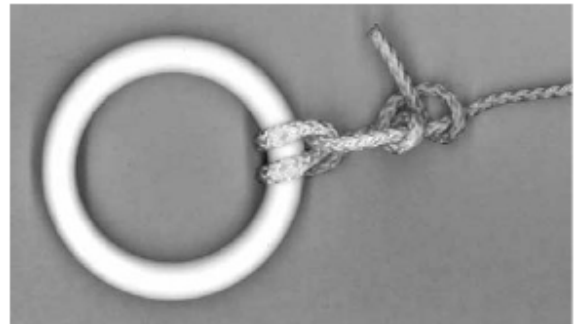


Cord Lock

Dimensions of Cassette Cord Actuated Reflective Blinds:



Tying cord to plastic ring:



Cleaning Instructions

Do's

1. Clean your Reflective Blind while it is still in the frame.
2. Dust lightly with a feather duster to remove loose dust.
3. Thoroughly wet by spraying the surface with warm water.
4. Gently wipe off with a soft damp cloth.
Detergent may be used provided the detergent contains no ammonia or abrasive.
5. When clean, rinse with clean water and dry off with a chamois.
6. Methylated spirits may be used to dissolve greasy marks.
7. Roll up your Reflective Blind only when completely dry.

Dont's

1. Don't use an abrasive cleaner or dirty cloth.
2. Don't use ammonium based detergents.
3. Don't clean your Reflective Blind when the sun is on the window, as it may streak.
Streaking can be removed by sponging with warm clean water.
4. Don't roll your blind up while still wet.

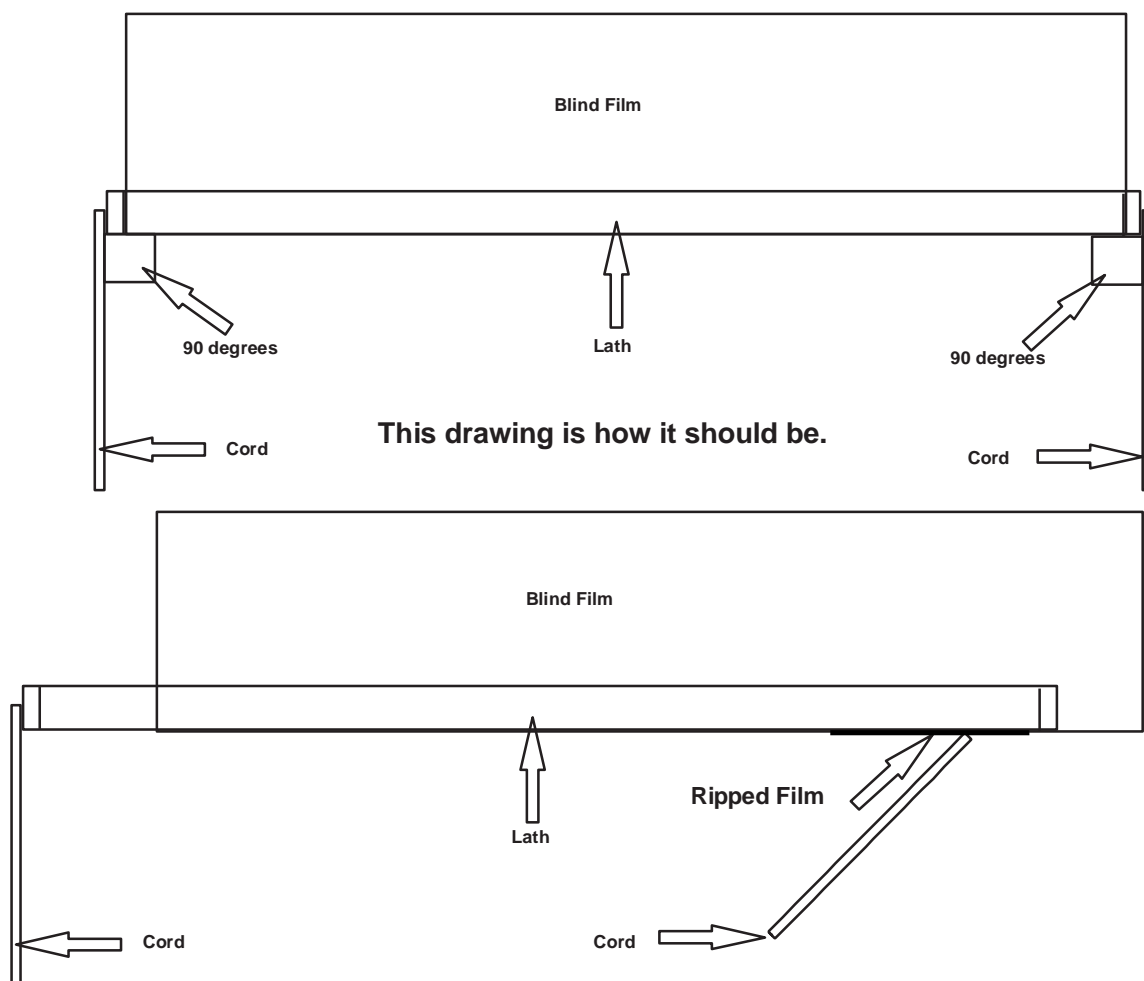
Precautionary Notes on the Installation of Double Cord Actuated Reflective Blinds

If the cord, as it emerges from the lath does not make a right angle to the lath, 90 degrees, then it is very likely, through operation, that the cord will cause the lath to slip sideways and tear the film.

These photos will illustrate the point:



Which is shown more graphically in these drawings:



But if the cord is installed at an angle, the lath will slide sideways to relieve the pressure and in doing so, tear the bottom of the lath pocket.

You will notice in the photos on page 3, that the cord goes straight to the cord lock or a horn cleat.

We recommend that the cord go first to a pulley, then to a cord lock.

This will reduce effort required to operate the blinds as well as wear and tear on the cords. The horn cleat should only be used to wrap cord around and get it out of the way.

We have developed a number of solutions to these problems, and they are illustrated in the following photos.



Pulley and cord lock on a plate.

LH photo has the cord coming straight down from the blind.

The middle photo has the cord coming down to a pulley then sideways from the assembly.

The RH photo shows the pulley and cord lock mounted straight onto a bench.

We have other assemblies, these two have been designed for Air Traffic Control Towers. While they may not be suited to your application the idea could be helpful.



These sorts of assemblies are designed to fix a particular need on a particular site. We then find that they are of use on other sites so we make them again.