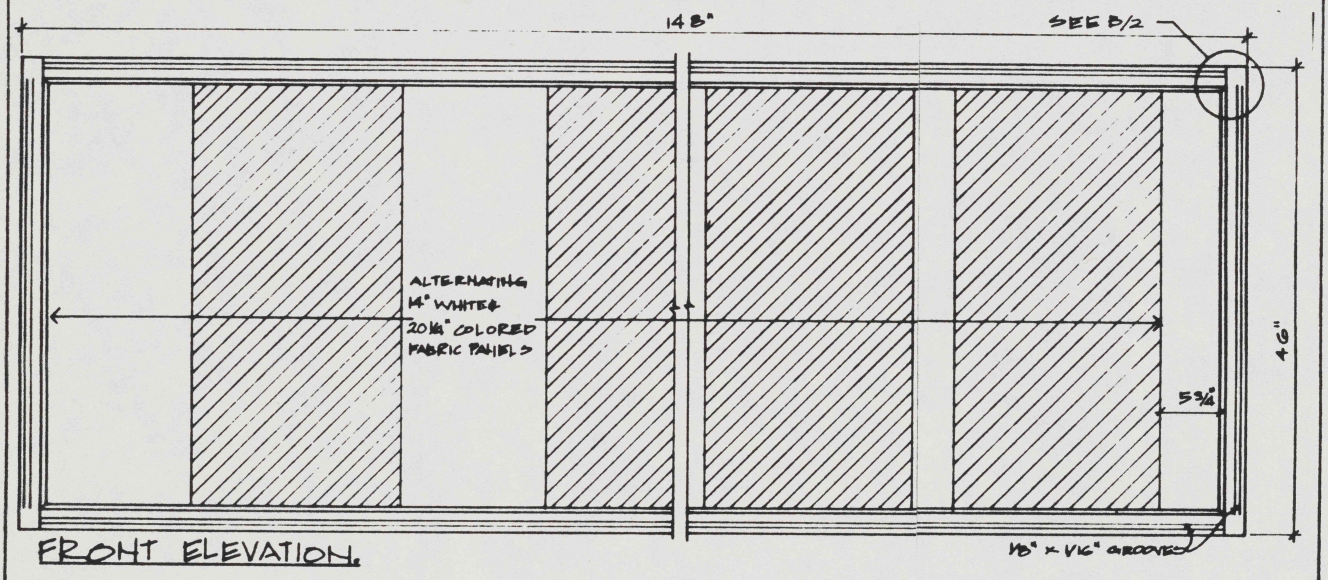
HERMAN MILLER FURNITURE SYSTEMS

JAPANESE SILK PANEL



FRONT ELEVATION.

The Japanese silk panel has a surface of brightly colored fabrics. It is used as a pin-up board for tacking up notes, reminders, sketches etc. The panel is surrounded by a high gloss, lacquer finished, wooden frame.

The Japanese Silk Panel is available in three standard heights, and in an infinite range of lengths starting at 3 ft to a maximum length of 12 ft. The customer can specify the "exact" length to the nearest 1/16 of an inch.

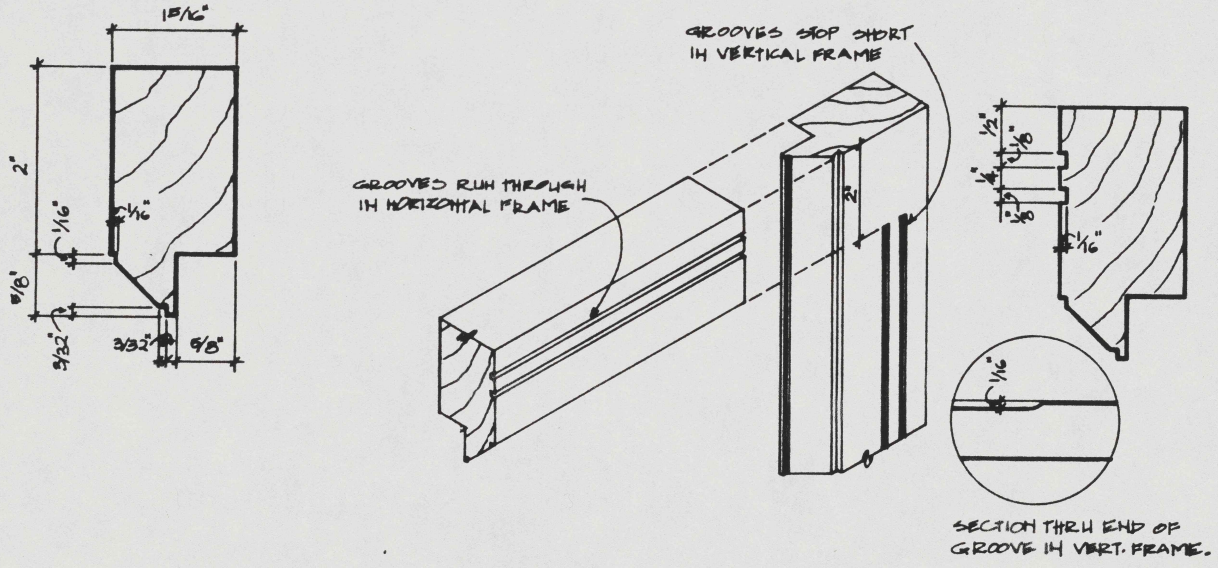
The process for making the Silk Panel is described as a series of sub-assemblies:

1. The Frame
2. The Panel
3. Hangers and Cleats
4. Final Assembly.

I. THE FRAME

The horizontal and vertical pieces of the frame are milled from 12% moisture solid Birch. It is important to prepare the pieces by stress releaving so that the final milled sections are straight and true. Since the panel is available in three standard widths but an infinite range of lengths, the frame is designed such that the exact length can be specified and the frame can then be assembled without additional cost to the customer.

1. Mill the standard section for the frame. The vertical pieces should be cut to length as per the standard panel widths, but the horizontal pieces should be left uncut.

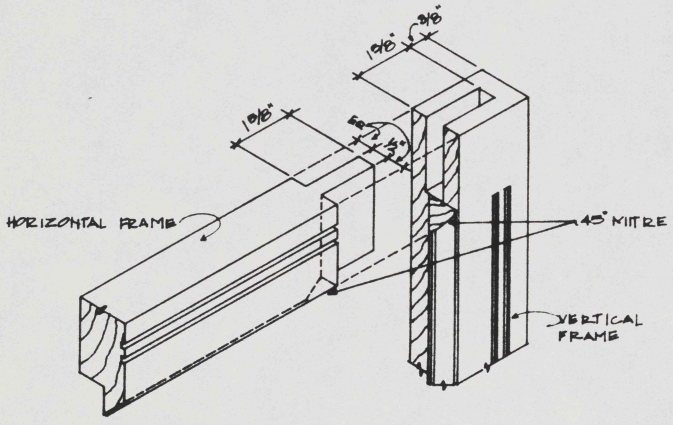


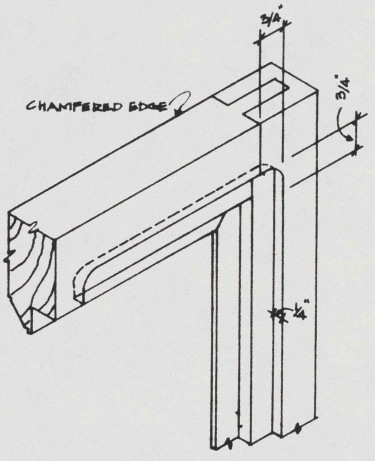
2. Run the grooves in the vertical and horizontal pieces as shown. The groove in the vertical piece has a square end in elevation and a radiused end in section. To achieve this result the grooves must be cut using either a table saw or a shaper. A router will give the wrong shape to the end of the groove.

3. Cut the end mortises and rout the pockets for the hangers in the vertical members.

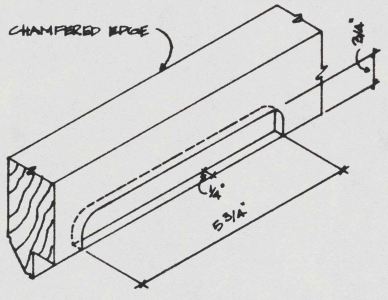
4. Slightly chamfer the front edge of the vertical and horizontal members with #150 sand paper.

5. Prime vertical and horizontal members with 2 coats of primer/surfacer and sand with #220 sand paper.





ROUTING FOR END HANGERS.



ROUTING FOR INTERNAL HANGERS.

6. When an order is placed perform the following steps for the longitudinal members.

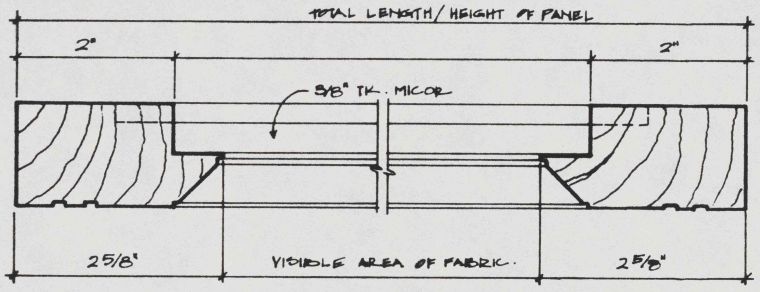
A) Cut the longitudinal members to length using the tenon detail and 45 degree miter shown.

B) Evenly space the hanger pockets for the hangers and rout out the pockets in the longitudinal members. Hangers should never be spaced greater than 48 inches on center.

II. THE PANEL

The frame with hangers (Refer to Pg) assumes the structural role for carrying the weight of the panel. The actual panel itself, therefore does not have to be structural. This feature allows one to select the backing panel material on the basis of its resistance to push-pins and on its holding power once a pin is inserted. Of all the backing panels tested at CES (five different brand names) U.S. gypsum's Micor CV230 proved to be the best in this regard.

1. Use 3/8" Micor CV230 to make the backing panel. The panels can be prepared, or possibly manufactured in the three different standard widths. Leave the length uncut.



2. When an order is placed cut the Micor to length and perform the following sequence of steps for the fabric.

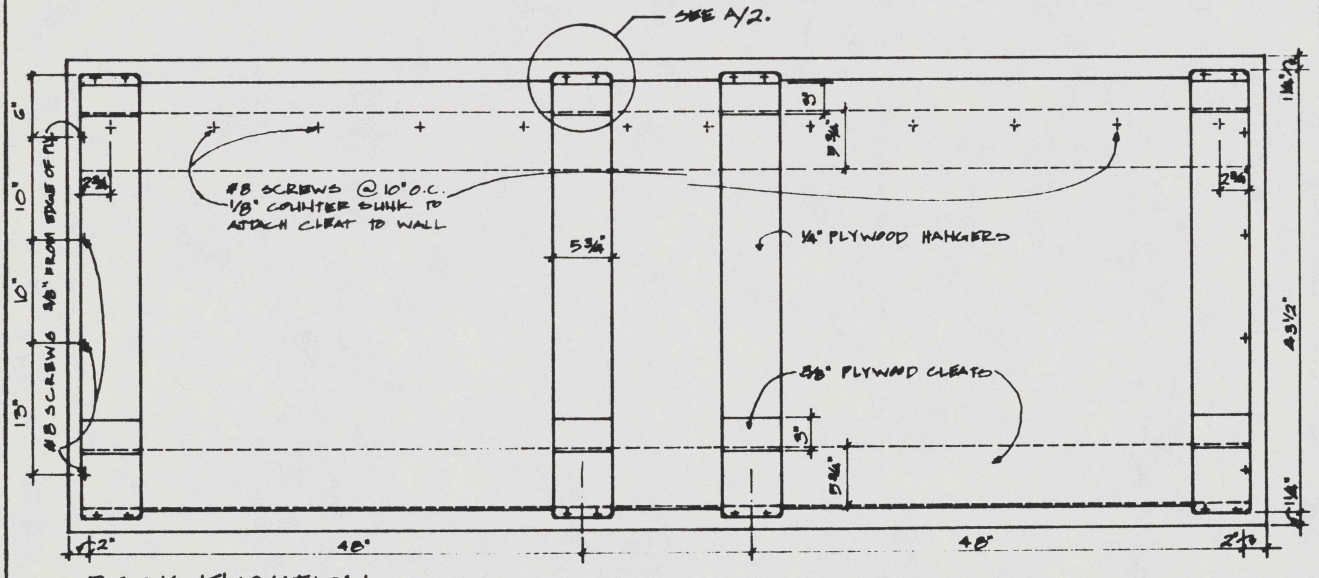
A) Sew the material in alternating bands as per the customers specifications. Oversize the material by 3" in both directions to allow for attachment to the back of the Micor.

B) Line the sewn fabric with iron-on fusible backing for light to heavy weight fabrics.

C) Lay 1/2" iron-on fusible tape on the Micor panel such that it will align with the seams in the fabric, and run perpendicular to the length of the frame. Place the material on the Micor and iron each seam one by one gradually pushing the wrinkles to the outside edges. Staple the edges of the fabric to the back of the Micor panel.

III. HANGERS AND CLEATS

The hanger and cleat assembly is designed to hold the panel section to the wall and at the same time allow easy installation to any wall surface. The design of this assembly also makes the dismounting and moving of the panel extremely simple. The plywood hangers attached to the back of the frame perform the dual function of holding the Micor panel in place and stabilizing the frame. The closure strip that runs between the hangers essentially pushes the Micor panel against the inside of the frame to ensure a tight fit. The cleats by which the panel is hung, are attached to the hangers instead of the frame itself so that the frame is not stressed unevenly.

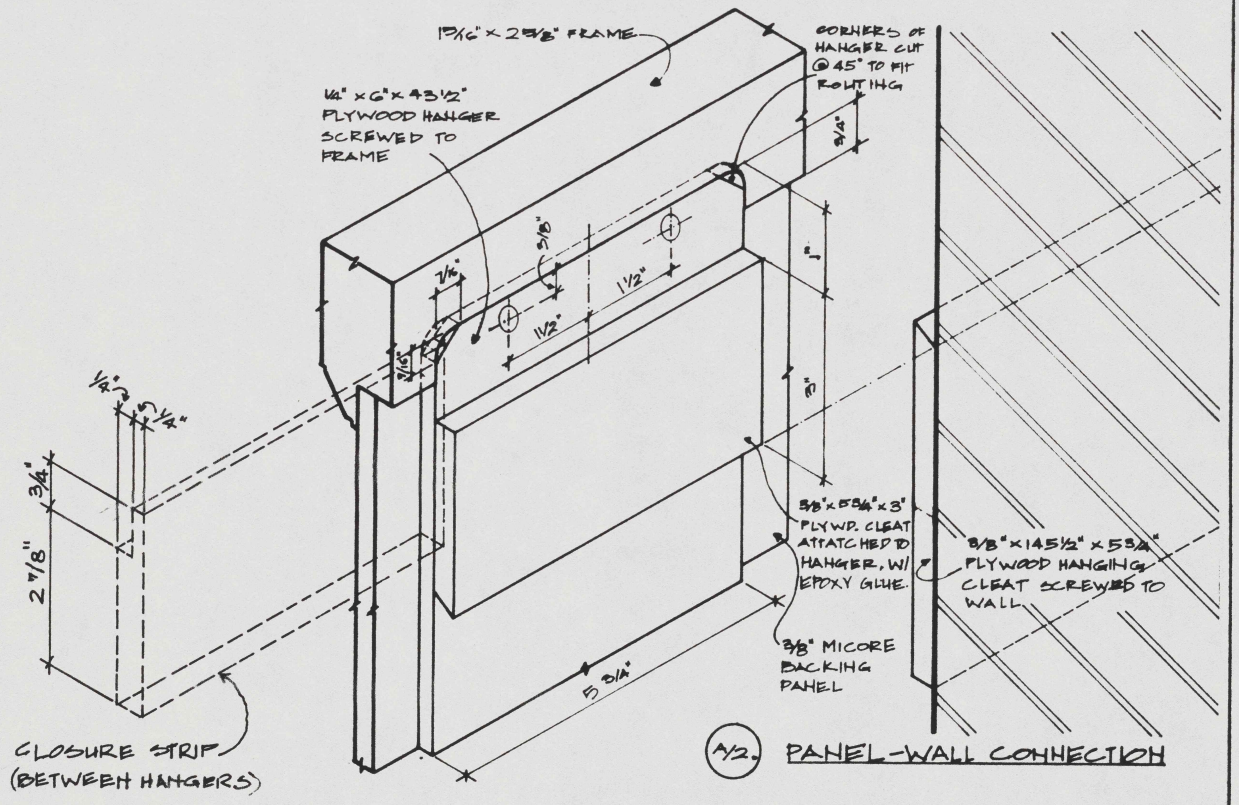


BACK ELEVATION

1. Cut the hangers out of 1/4" plywood to fit each of the standard heights. Cut off the corners of each hanger at 45 degrees so that they will fit into the rounded corners of the routed pockets. Pre-drill the holes for #8 wood screws at the ends of each hanger.

2. Rip the section for the cleats out of 3/8" plywood. Cut some of the cleats to 5 3/4" length and attach them to the hangers as shown with epoxy glue. The remaining cleat stock should be left in long length to be cut when an order is placed.

3. Rip the closure strip out of 1/2" plywood.



A/2. PANEL-WALL CONNECTION

IV FINAL ASSEMBLY

Prior to final assembly all of the horizontal pieces must be cut to the correct length, the frame pieces primed and the Micor panel prepared with fabric attached.

1. Assemble the frame pieces and glue the corner joints with epoxy.

2. Paint the frame with Dupont Acrylic lacquer white, 3 to 4 coats.

3. Place the panel into the frame

4. Attach the plywood hangers to the frame with #8 x 3/4" Phillips flathead tapping screws.

5. Attach the closure strip to the frame with #8 screws.

6. Cut the wall cleats to length and pre-drill holes for attachment to the wall.