

# Richelieu

## Kerfkore Technical Guide

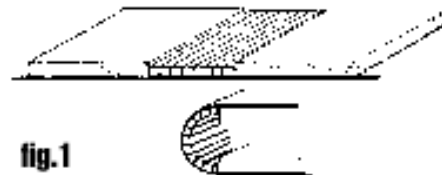
***A patented bendable substrate material that can be laminated flat and then cold formed into virtually any shape***

Patent #5,618,601; #5,232,762; #5,824,382

### Laminating Flat

*Allowing for Thickness Differences*

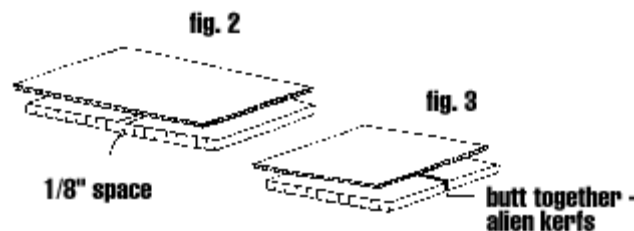
Decorative surfaces are laminated flat to Kerfkore and the adjoining areas PRIOR TO ATTACHMENT to the remaining portion of the structure. It is NOT necessary to use the same thickness Kerfkore as the rest of the structure. All differences in thickness show up on the inside of most structures not the outside. (Fig. 1)



### Splicing Kerfkore With out Fasteners

*Don't Throw Any of Your Kerfkore Scraps Away — You Can Always Piece Them Together*

For additional WIDTH, place the Kerfkore panels side by side leaving 1/8" gap between them. It's easiest to use a piece of scrap 1/8" hardboard as a temporary spacer to butt up against to be certain panels are evenly spaced and parallel. (Fig. 2)



*For additional HEIGHT, butt pieces together end-to-end. Make certain grooves are aligned. NO NEED to glue. (Fig. 3)*

### Allowing for Offsets

*Space must be built in that permits the depth of the rabbet or butt joint to recess into the top and bottom or side pieces.*

Because Kerfkore, with the decorative facing material after laminated is attached using rabbet or butt joints, allowance must be made for the offset. (Fig. 4 and 5)

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Space must be built in that permits the depth of the rabbet or butt joint to recess into the top and bottom or side pieces. (Fig. 4 and 5)

## Transitions

Always allow 3 ribs of Kerfkore (unopened if using standard two-sided Kerfkore) when joining to a flat section.

This will allow for a smoother transition into the radiused area. (Fig. 6) For an outside radius, first rib must be glued to the adjoining straight section with carpenter's glue prior to bending.

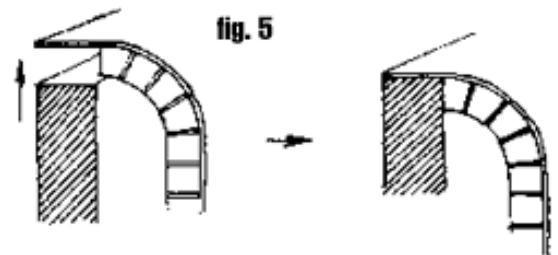
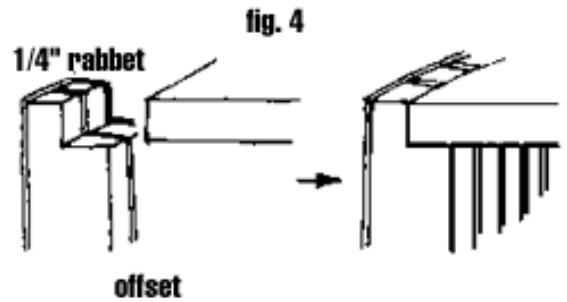
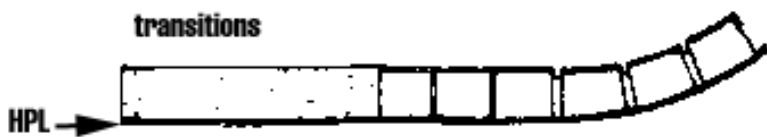
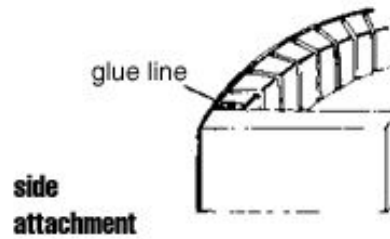
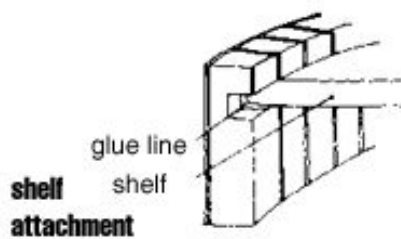
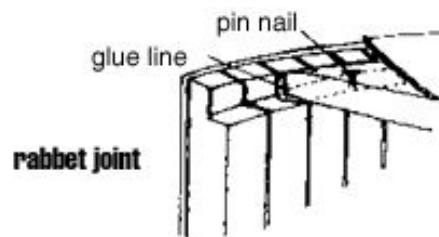
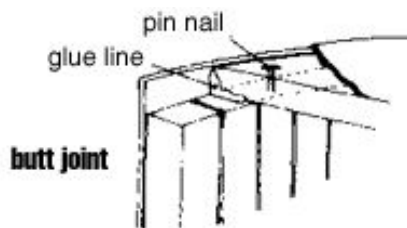


fig. 6



## Attachment Methods

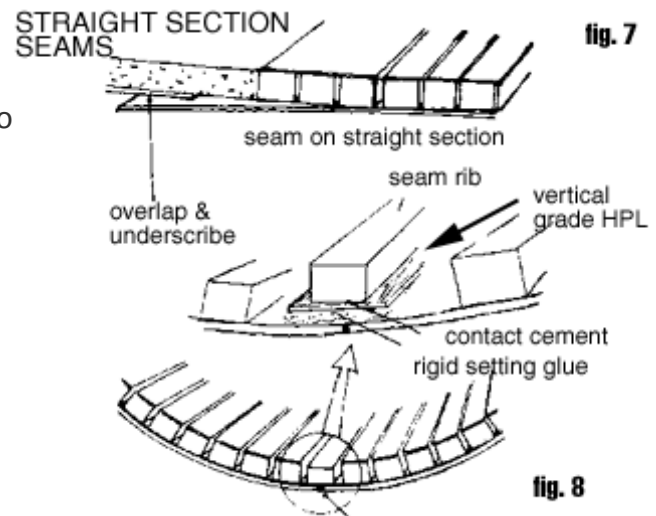


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## Seaming Methods

### On Flat Areas (FIG. 7)

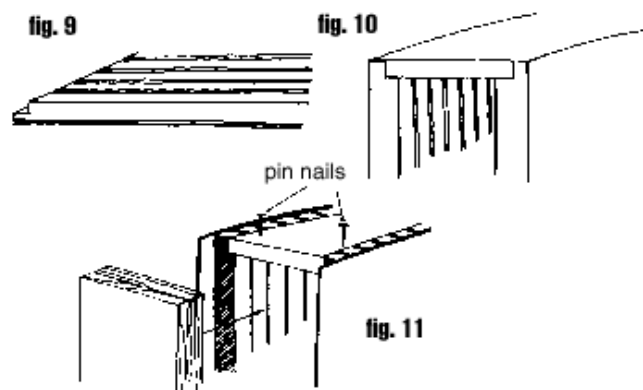
1. Allow at least three ribs of Kerfkore prior to beginning of curved area.
2. Allow laminate to extend 2" to 3" beyond Kerfkore.
3. Butt or overlap and underscribe laminate seam.



### On Curved Areas (FIG. 8)

1. Allow approximately 5/8" of facing material to extend beyond both pieces of Kerfkore.
2. Trim laminate to 1/2" with router to obtain a good seam edge.
3. Butt laminate together and clamp in place.
4. Adhere a strip of vertical grade HPL over seam using a rigid setting adhesive such as epoxy.
5. Cut seam rib 3/4" wide from solid wood or particle board.
6. Apply contact cement to seam rib and adhere to back of vertical HPL strip as applied in step 4 above.

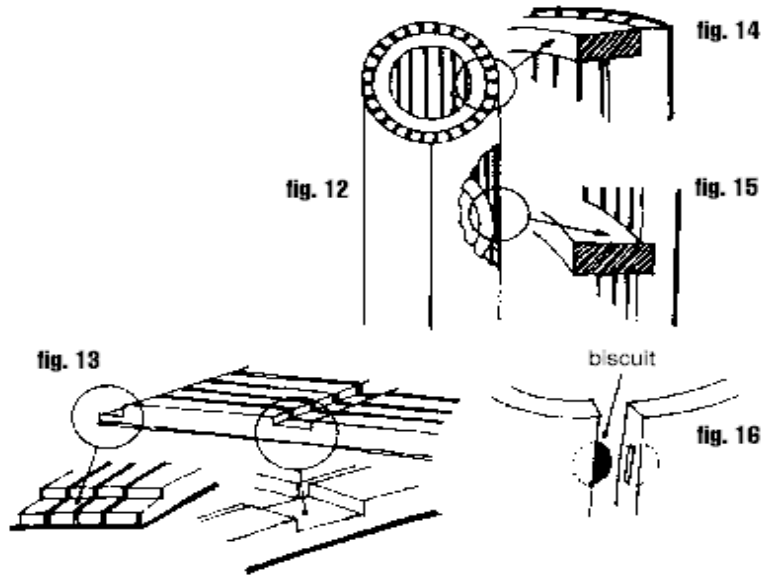
## Open Chase Construction



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## Columns

For any decorative surfacing material on any radius within the bending capabilities of 1/2" and 3/4" Kerfkore.



1. Cut top and bottom rails and internal supports as may be needed.
2. Cut pieces of Kerfkore to size of outside circumference. Cut in half so you have two pieces equal to the outside circumference.
3. Laminate surface material to both pieces of Kerfkore so that it overhangs all sides. Trim laminate.
4. Use a rigid setting adhesive to adhere a vertical rib on each laminate overhang.
5. Cut rabbet cut into top and bottom of both laminated panels. Also, cut any dado for horizontal support required. (See Fig. 13)
6. Cut biscuit slots into side ribs and align with opposite half. (Fig. 16)
7. Attach laminated Kerfkore panels to top and bottom rails using white glue and occasional pin nails or hot melt glue to temporarily hold in place. (Fig.14)
8. Insert biscuits with white glue and strap two column cover halves in place.

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## Doors

1. Using contact cement, adhere inside laminate to black side of Kerfkore.

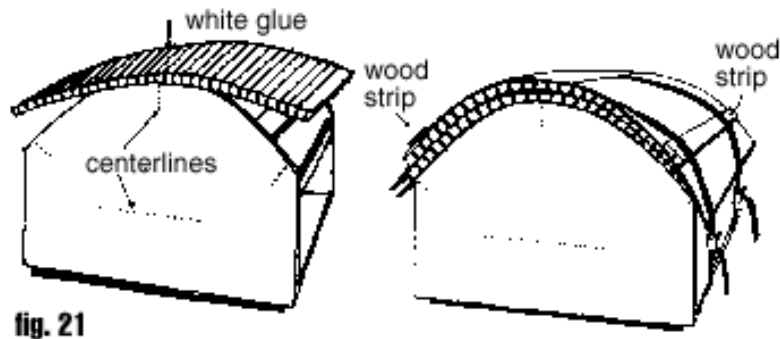
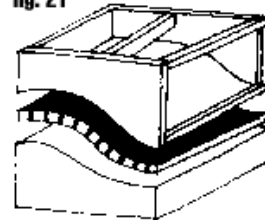


fig. 21

fig. 21



Note: for a compound door, a matching top form should be used.

2. Position Kerfkore/laminate assembly on form, making sure Kerfs are parallel to centerline, (Fig. 21) mark door edges, shifting as needed to make sure hinge attachment holes fall as close to the center of a rib as possible.

3. Carefully trim Kerfkore/laminate to correct width and length, allowing for edge trim.

4. Cut piece of laminate 1" larger in length and width than finished door measurement.

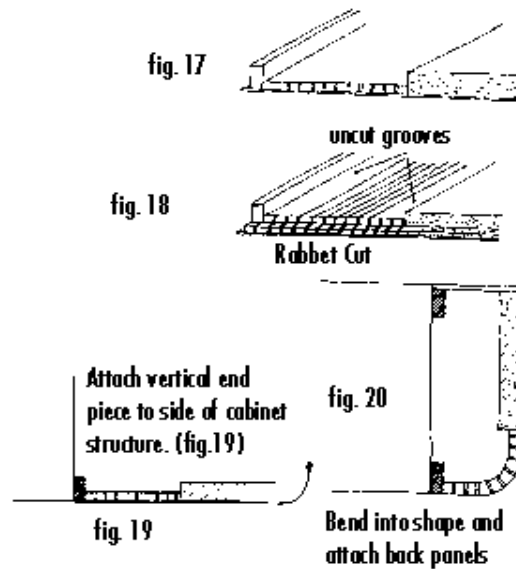
5. Spread a moderate coat of white glue on the rib side of Kerfkore and on the back of the facing material. Position facing material so that it overhangs all edges.

6. Use a piece of Kerfkore with a piece of scrap laminate adhered to it and place it over the face laminate being applied to the door. Strap in place with 1-1/2" x 1/2" wood strips positioned under straps. The wood strips will help distribute the laminating pressure evenly to assure proper adhesion and a smooth surface. Allow glue to cure.

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## J-Panels (Radiused Side Panels)

Laminate precut parts to HPL with contact cement. (fig 17)



## Kerfkore Specifications

### Product Description

Single-sided Kerfkore is a flexible product that can be formed into curves and radii as required. Single-sided Kerfkore consist of a core of kerfed particleboard with a very flexible latex impregnated face paper.

### Product Characteristics

Single-sided Kerfkore is designed to be laminated flat with a HPL or phenolic-backed veneer on to the black face and then formed by the use of ribs or other supports. This method produces a smooth finished surface without any telegraphing.

After laminating, Kerfkore can be made rigid by laminating another piece of laminate to the open side while the part is formed to shape. With the appropriate contact or PVA adhesive, the rigid part can be edge banded. Flexible T-molding can also be used.

### Bending Capabilities

Normally a vertical grade laminate or a phenolic-backed veneer will allow an outside radius of 3 1/2" to be obtained on 3/4" Kerfkore. It is best to pre-test any materials before proceeding.

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## Handling

Single-sided Kerfkore panels can be rolled into a coil for ease of handling. Keep the black face side out when rolling and be careful to keep fingers from getting pinched.

## Temperature Conditioning

Single-sided Kerfkore should be acclimated the same as the decorative facing material to be applied to it. If available, use the guidelines recommended by the face material manufacturer.

## Adhesives

The black latex face paper will accept any contact cement recommended for use with decorative laminates. Use of a PVA glue is also acceptable provided they will result in a somewhat flexible glue line. It is recommended to do a test on a small sample to determine compatibility.

Care should be taken to only coat the necessary area. A test piece should be used to ensure the selected adhesive will be compatible with the foam core.

## Laminating Pressure

Kerfkore - When using contact adhesive, light to moderate pressure is adequate. Firm hand pressure or moderate pressure with a J-roller works well. The use of a pinch roller is not recommended. When using a PVA glue, 35-50 PSI is adequate. Too much pressure will affect the flexibility of the black paper and could cause the product to telegraph.

Note: Due to broad variations in both adhesives and laminates, it is always recommended that a test strip be made to determine the amount of pressure and adhesive coat necessary to achieve the desired results.

## Storage

All products should be stored flat with the face material side facing up. Keep in a dry area and away from direct contact with the floor to allow for air circulation.

## Ratings and Test Data

Kerfkore is not recommended for wet applications. Kerfkore has approximately the same impact resistance as similar core materials that have not been kerfed.