

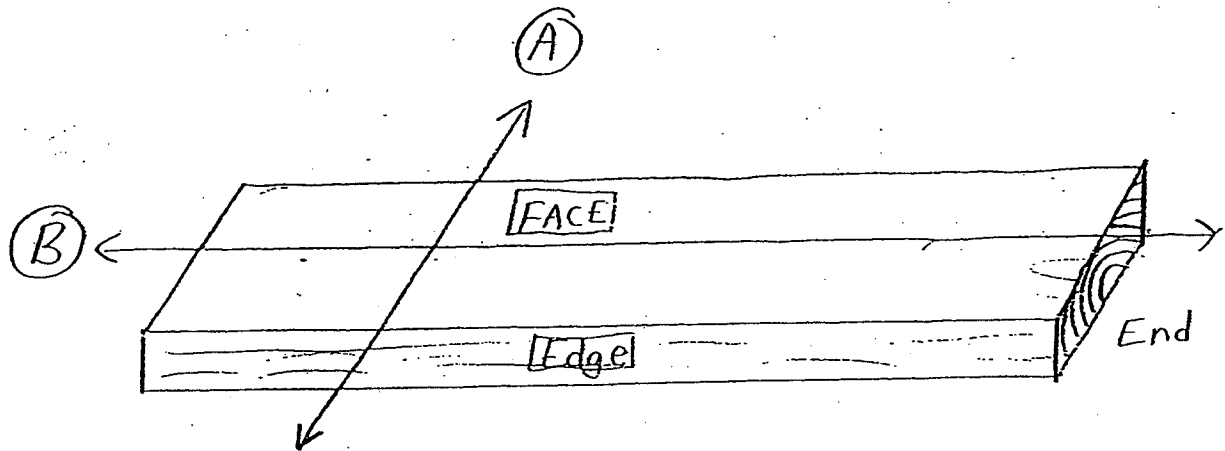
Procedure List

How to Start a Wood Project

1. Obtain a drawing and material list or create your own.
2. Cut and label all pieces to rough lengths and widths.
3. Prepare all pieces that have to be glued to a width, of over 5".
4. Glue pieces needed that are wider than 5". (store while glue dries)
5. Cut all smaller pieces to finished lengths and widths.
6. On pieces that were glued----- scrape glue
 ----- plane and smooth to finish thickness
 ----- cut to finish lengths and widths
7. Make any special joint cuts (dados, rabbets, laps, etc.)
8. Cut any design's or shape any edges that can not be cut after assembly.
9. Rough sand lightly to remove pencil lines scratched , dents, etc.
10. Assembly— Put project together with glue, nails, screws.
11. Add any hardware
12. Prepare for finishing, putty any nail or screw holes
13. Remove hardware and finish according to pre-planed methods.
14. Replace hardware — sit back and enjoy the rewards of your efforts!!

Steps in Squaring a Board

- | | | |
|-----|---|----------------------|
| 1.) | Joint best edge of board | |
| 2.) | Rip to finished width plus 1/16" | jointer table saw |
| 3.) | Joint to finish width | jointer |
| 4.) | Crosscut best end — make sure its square to the edge, check with square | radial arm saw |
| 5.) | Crosscut to finished length | radial arm saw |



- A) ~~Crosscut~~ - a saw cut across the grain of the board.
- B) Rip - a saw cut with the grain of the board.

GENERAL WOODWORKING PLANNING INFORMATION

**** FIGURING OUR AMOUNT OF MATERIALS ****

Solid lumber is bought and sold in the board foot. One board foot equals 1 board, 12" wide and 12" long.

(BOARD FOOT FORMULA)

$$\frac{N \times T \times W \times L}{144}$$

N = number of pieces
T = thickness of the board
W = width of the board
L = length of the board

When figuring the amount of Board feet you need to use the ROUGH sizes. The rough dimensions allow you a little extra material for the squaring process.

Guidelines for finding (rough sizes)

Thickness-- is never less than 1", if it is over 1" add 1/4" to it

Width-- For boards 5" or over in width add 1". For boards under 5" wide add 1/4".

Length-- Add at least 1/2" but round up to the next whole number, (no fractions)

Square Feet

Square Feet is how plywoods and sheet stocks are bought and sold. They are already square and you don't need to figure in rough sizes. You can figure out the square feet with the following formula:

$$\frac{N \times W \times L}{144}$$

examples

| | Finish Dimensions | | | | | Rough Dimensions | | | |
|---|-------------------|-----|----|--------|--|------------------|---|-------|----|
| | N | T | W | L | | N | T | W | L |
| A | 2 | 3/4 | 5 | 18 | | 2 | 1 | 5 1/4 | 19 |
| B | 1 | 3/4 | 12 | 30 1/2 | | 1 | 1 | 13 | 31 |
| | | | | | | | | | |

[A]

[B]

$$\frac{2 \times 1 \times 5.25 \times 19}{144}$$

$$\frac{1 \times 1 \times 13 \times 31}{144}$$

$$2 \times 1 = 2$$

$$1 \times 1 = 1$$

$$2 \times 5.25 = 10.5$$

$$1 \times 13 = 13$$

$$10.5 \times 19 = 199.5$$

$$13 \times 31 = 403$$

$$\frac{403}{144}$$

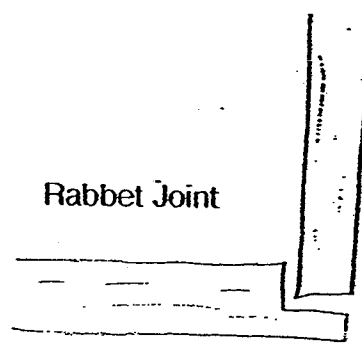
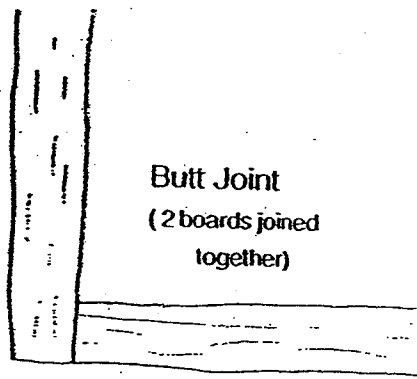
$$\frac{199.5}{144}$$

$$144 \overline{) 199.50} \begin{array}{r} 1.38 \\ 144 \\ \hline 555 \\ 432 \\ \hline 1230 \\ 1152 \\ \hline \end{array} = 1.46 \text{ bd. Ft}$$

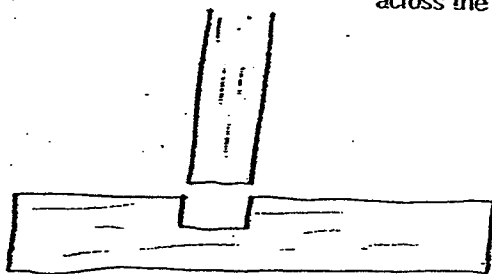
$$144 \overline{) 403.00} \begin{array}{r} 2.79 \\ 288 \\ \hline 1150 \\ 1008 \\ \hline 1420 \end{array} = 2.8 \text{ bd. Ft}$$

2.8 bd Ft

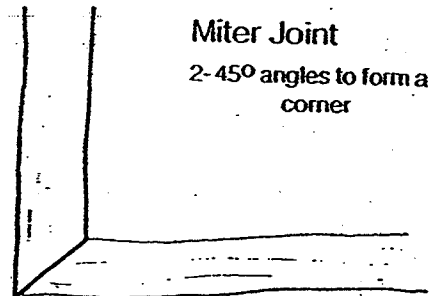
Basic Common Wood Joints



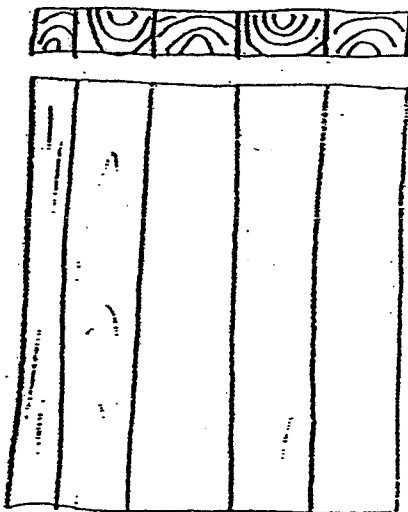
Dado Joint



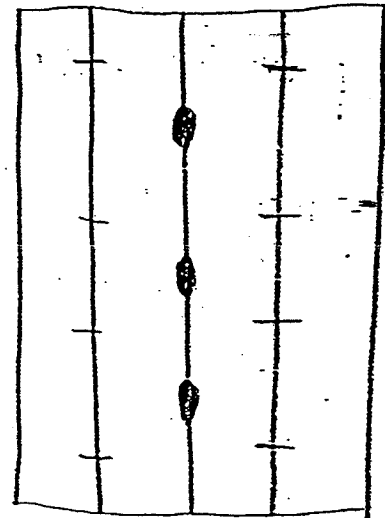
Rectangle cut across the board



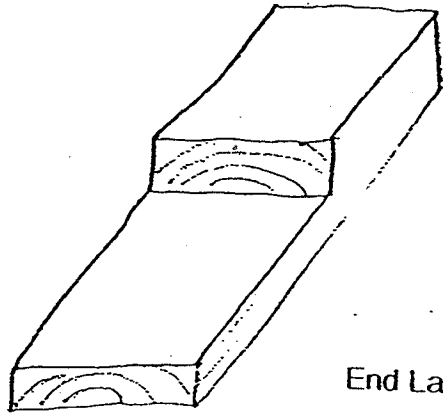
Miter Joint
2- 45° angles to form a corner



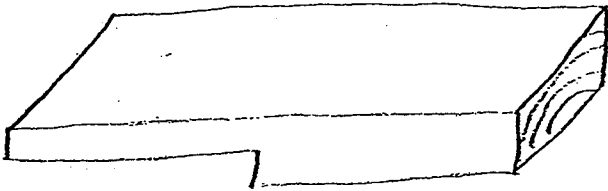
Edge Butt Glue Joint
Used for gluing boards together to increase the width of a solid surface



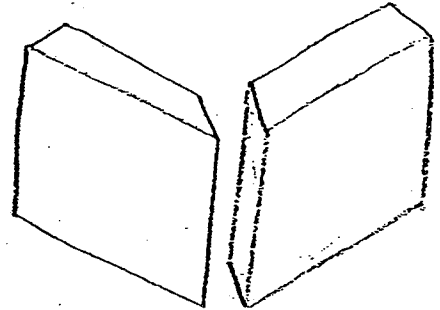
Edge Butt Glue Joint reinforced with wood fasteners This makes the piece stronger— dowels or biscuits are used to do this—



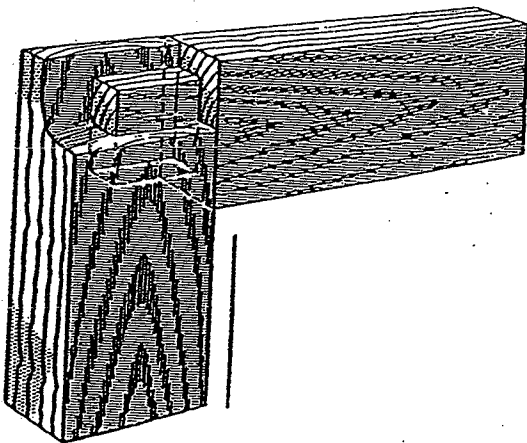
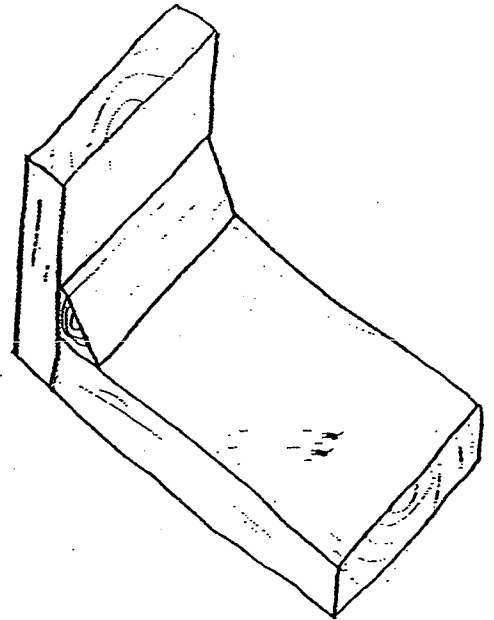
End Lap Joint



Edge Miter Joint



But Joint with a Glue Block
Adds strength to the joint



Blind Mortise - Tenon
used in table leg
construction

**** Basic Rule ****
Choose the simplest joint that will
do the job!

Bill of MATERIALS SHEET

NAME: _____

PROJECT: _____

TOTAL COST \$ _____

| NAME OF PART | NUMBER OF PIECES | KIND OF MATERIAL | FINISH SIZE | | | ROUGH SIZE | | | NUMBER OF BD. FT. OR SQ. FT. | COST PER BD. FT. OR SQ. FT. | COST OF MATERIALS |
|--------------------|------------------------|------------------------|-------------|-------|--------|------------|-------|--------|------------------------------------|-----------------------------------|----------------------|
| | | | THICK | WIDTH | LENGTH | THICK | WIDTH | LENGTH | | | |
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* * 10% Will be added to your cost for supplies