

JOB NAME Square

BLUE PRINT NUMBER: 01-A-1

INFORMATION: A square is a precision tool which is used to check the relationship of sides which are to be at right angles to each other.

PRIMARY SKILL LEARNED: The making of this tool will provide the student with experience in hacksawing and filing work flat and square.

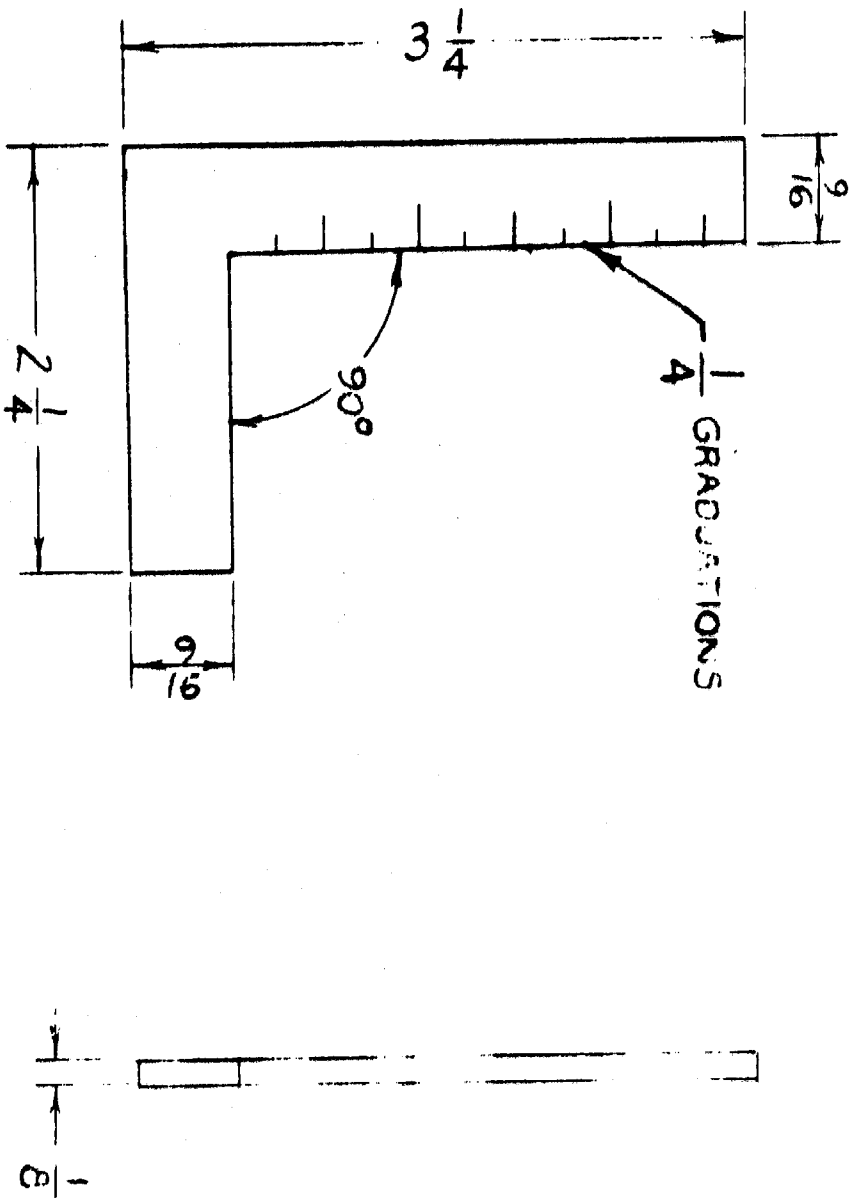
PRECAUTIONS:

1. File all burrs immediately after piece is cut off.
2. Hold piece low in vise while filing.
3. Raise file on return stroke.
4. Have stop on drill press table to prevent work from spinning.
5. Do not stamp name near edge of square. (It will cause metal to bulge.)

STOCK: 1/8" x 2 1/4" Cold Rolled Steel.

OPERATIONS:

1. Cut off stock 3 3/8" long.
2. File burrs.
3. Draw file one side of 3 1/4" length.
4. Apply layout fluid.
5. Layout end with square.
6. File end square.
7. Layout inside of square. (use hermaphrodite calipers)
8. Prickpunch.
9. Drill 3/16" holes.
10. Hacksaw through holes.
11. File long inside edge parallel to outside.
12. File inside end square.
13. Stamp name and date.



BREAK ALL UNNECESSARY CORNERS

DO NOT SCALE THIS DRAWING

ELLI WHITNEY REGIONAL VOCATIONAL TECHNICAL SCHOOL

DIMENSIONAL TOLERANCES FRACTION $\pm \frac{1}{64}$ DECIMAL $\pm .002$
 UNLESS OTHERWISE SPECIFIED: ANGULAR $\pm 1^\circ$ CONCENTRICITY $\pm .001$

MATERIAL
Cold Rolled Steel

HEAT TREAT

PART NAME

SQUARE

DATE:

D W G. No.

SCALE:

01-A-1

SQUARE

Consult your blueprint at all times.

Select and cut the proper material $1/8"$ X $2"$ X $3 3/8"$
Cold Roll Steel - use 8" Mill File.

1. Remove burrs with file.
2. Draw file $3 3/8"$ side flat. Check with Square. Light should not show through. Fig. 1

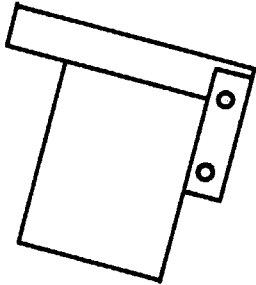


Fig. 2

3. File $2 1/4"$ end square with first side. Check with Square. Fig. 2
4. Apply layout dye and layout from print. Use hermaphrodite calipers set at $9/16"$ Fig. 3

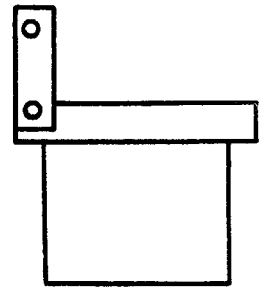


Fig. 1

5. Layout to remove excess metal Fig. 4. Set Calipers to $23/32"$ scribe line. Use Dividers and locate marks for $3/16"$ diameter holes. The marks will be $1/4"$ apart.

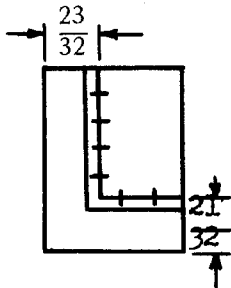


Fig. 4

6. Secure project to a large flat piece of wood and drill $3/16"$ holes on location. Fig. 5
7. Remove project from wood support and file burrs.
8. At the Bench Vise, Hacksaw through the holes and remove the excess metal.

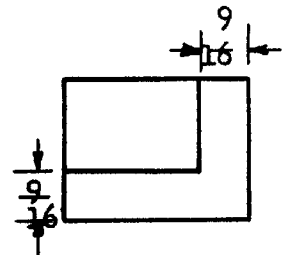


Fig. 3

9. File the long inside edge parallel to the outside. Fig. 6
10. File the short inside edge square.
11. Stamp your name and date.

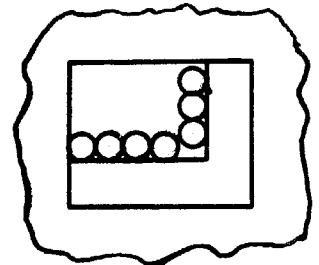


Fig. 5

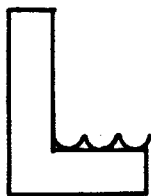


Fig. 6

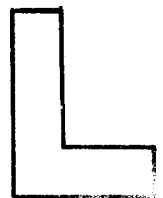


Fig. 7