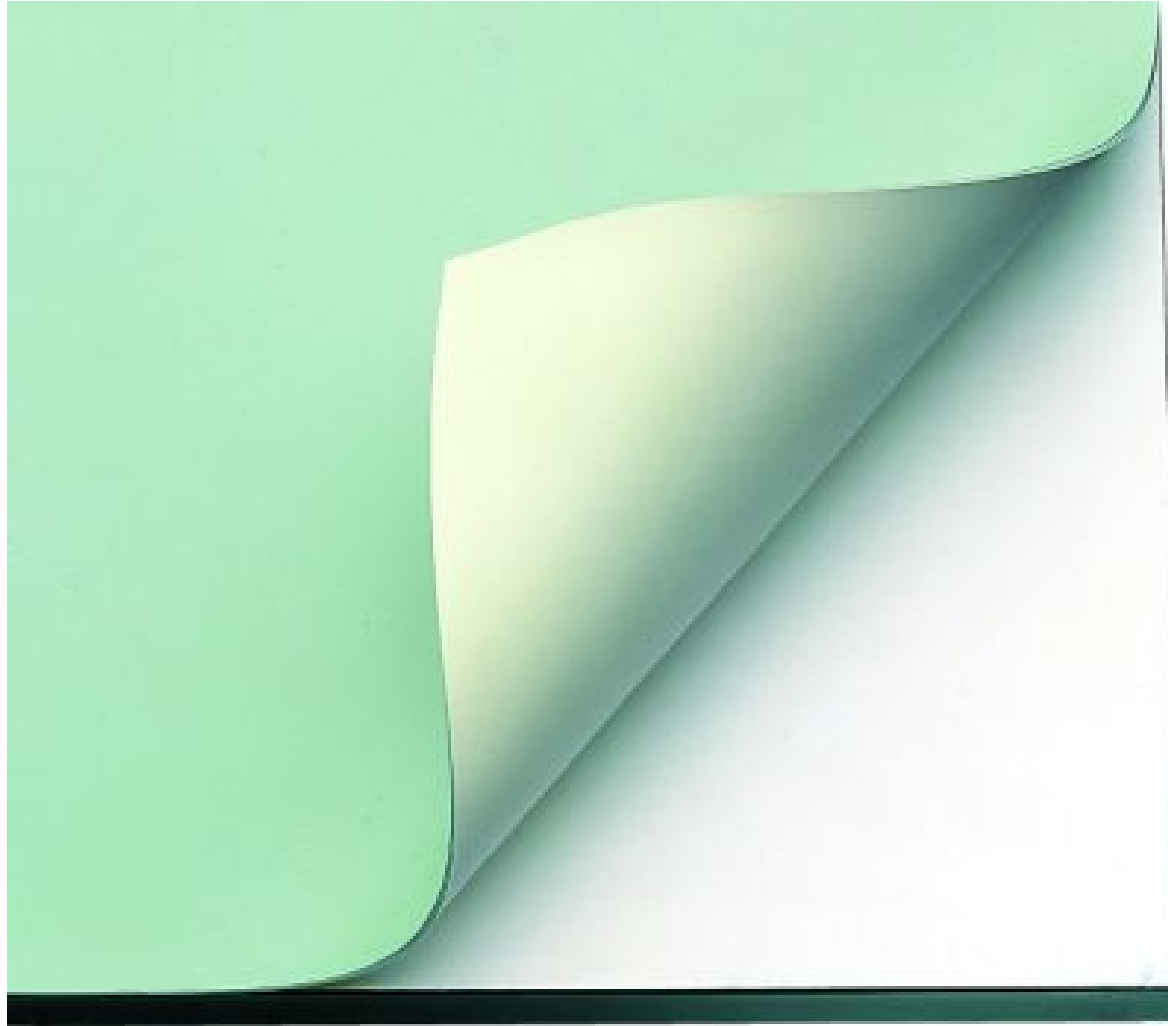


2D Drawing and Orthographic Projection



TOOLS

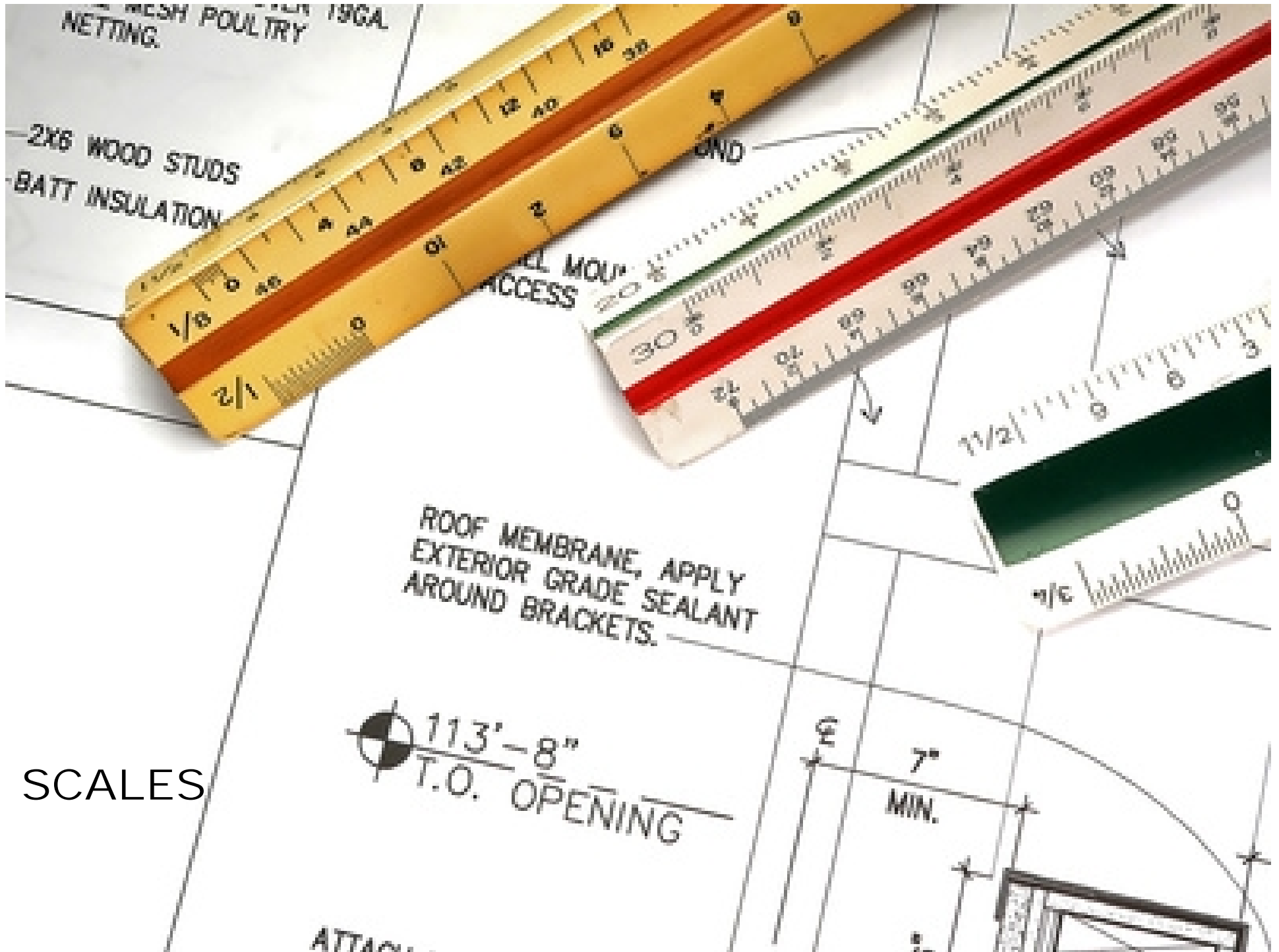
KEEP IT CLEAN ! DON'T CUT ON IT !



BORCO : VINYL COVERING

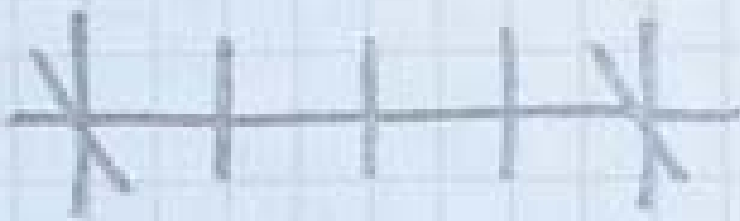
TOOLS





SCALES

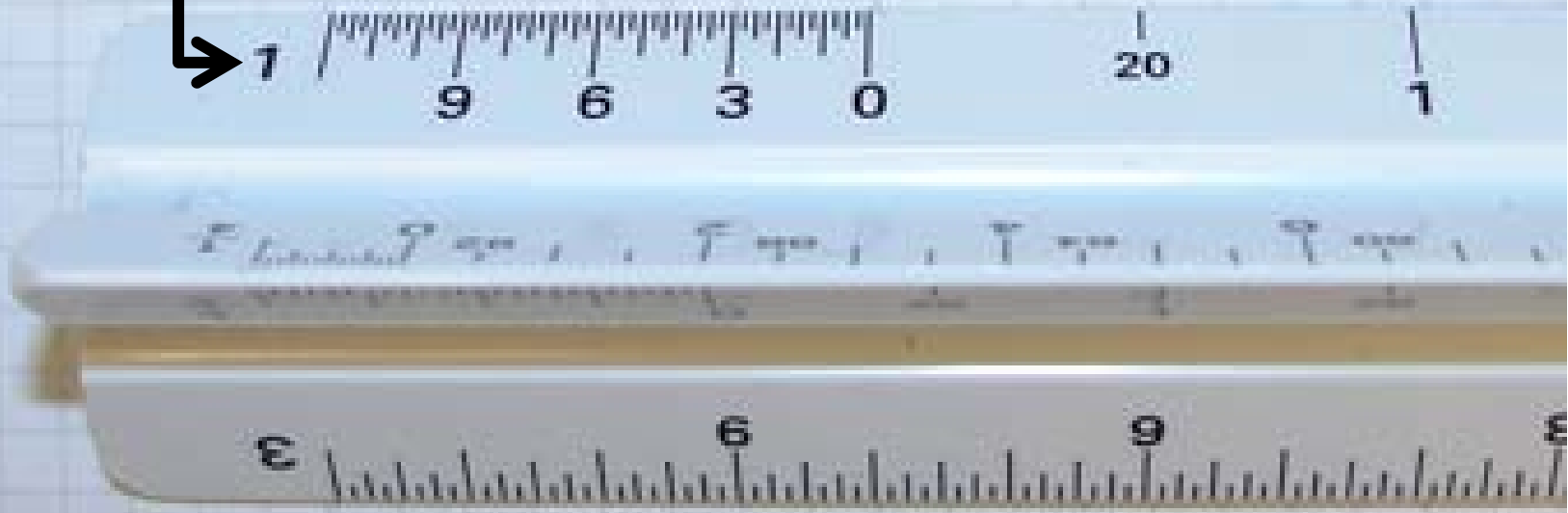
1" = 1' - 0"



12" 9" 6" 3" 0"

6"
20

1'
1



SCALES



BOND



VELLUM



MYLAR

PAPERS

WC ART & DRAFTING SUPPLY CO
351 JAY ST, BROOKLYN, NY 11201
(718) 855-8078

LEE'S ARTSHOP
220 WEST 57TH ST.
NEW YORK, NY 10019
(212) 247-0110

PEARL PAINT
308 CANAL STREET
NEW YORK, NY
(212) 431-7932

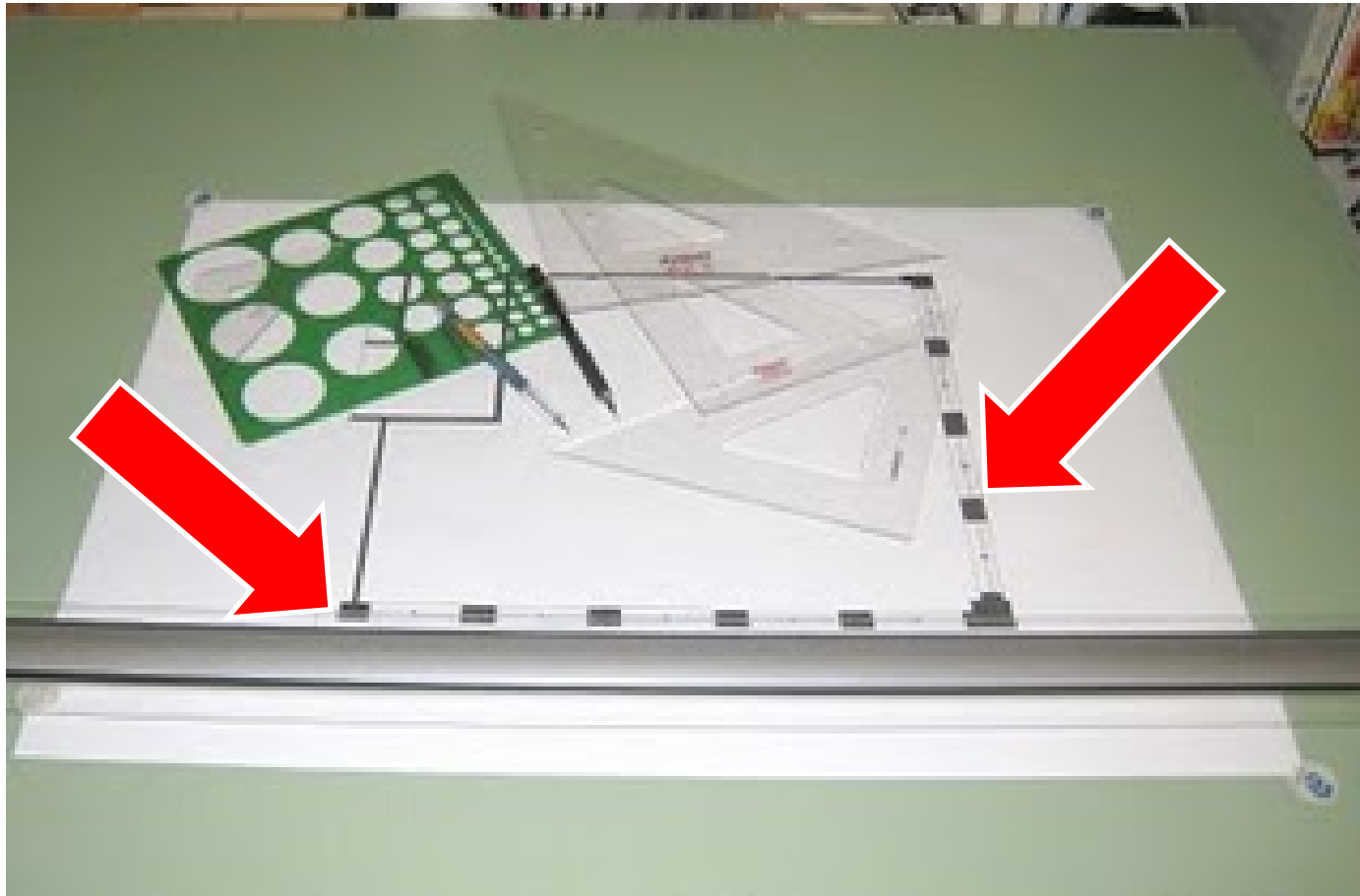
DICK BLICK
1-5 BOND STREET
NEW YORK, NY 10012
(212) 533-2444

SUPPLIES

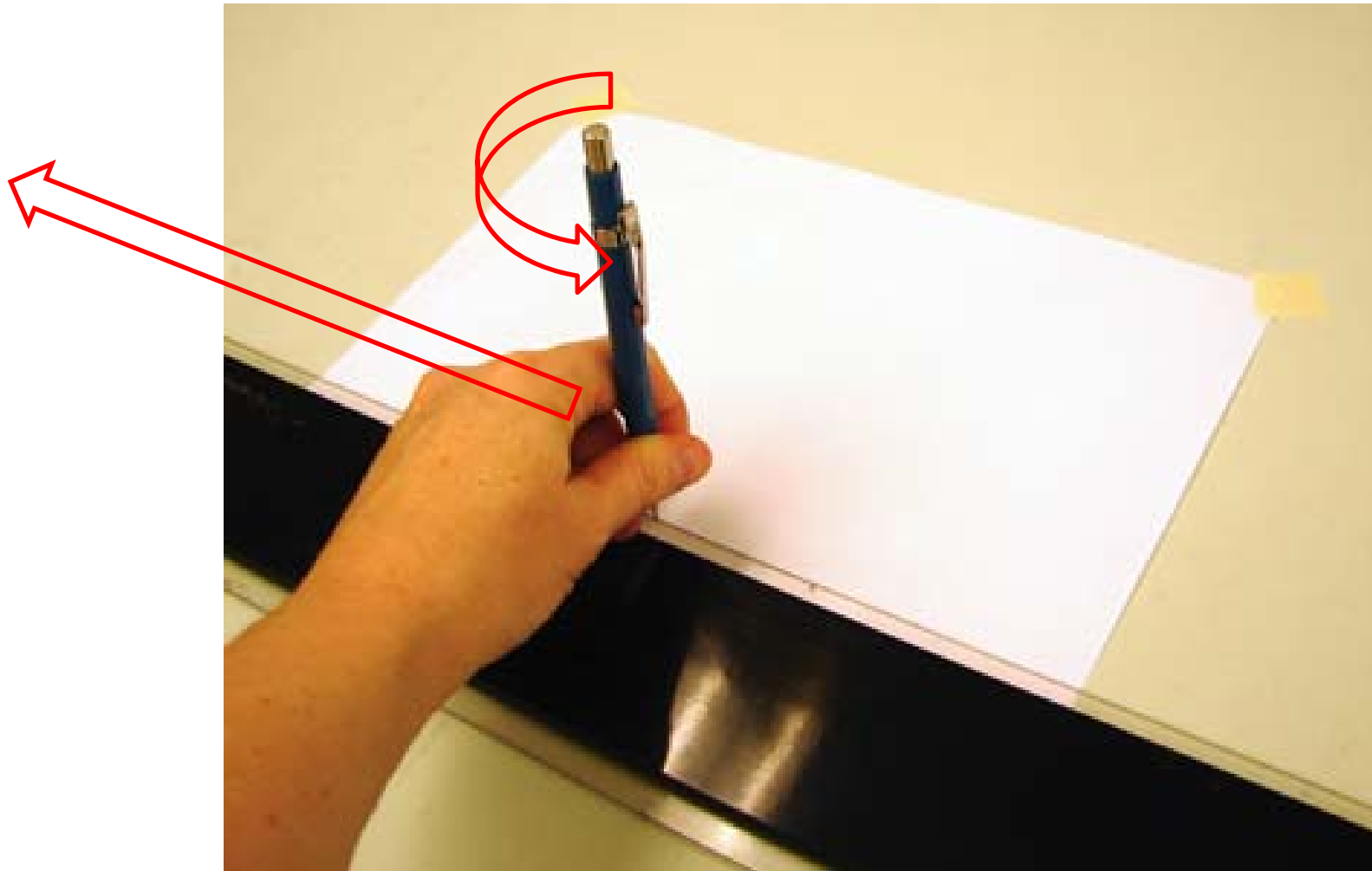


KEEP YOUR HANDS CLEAN

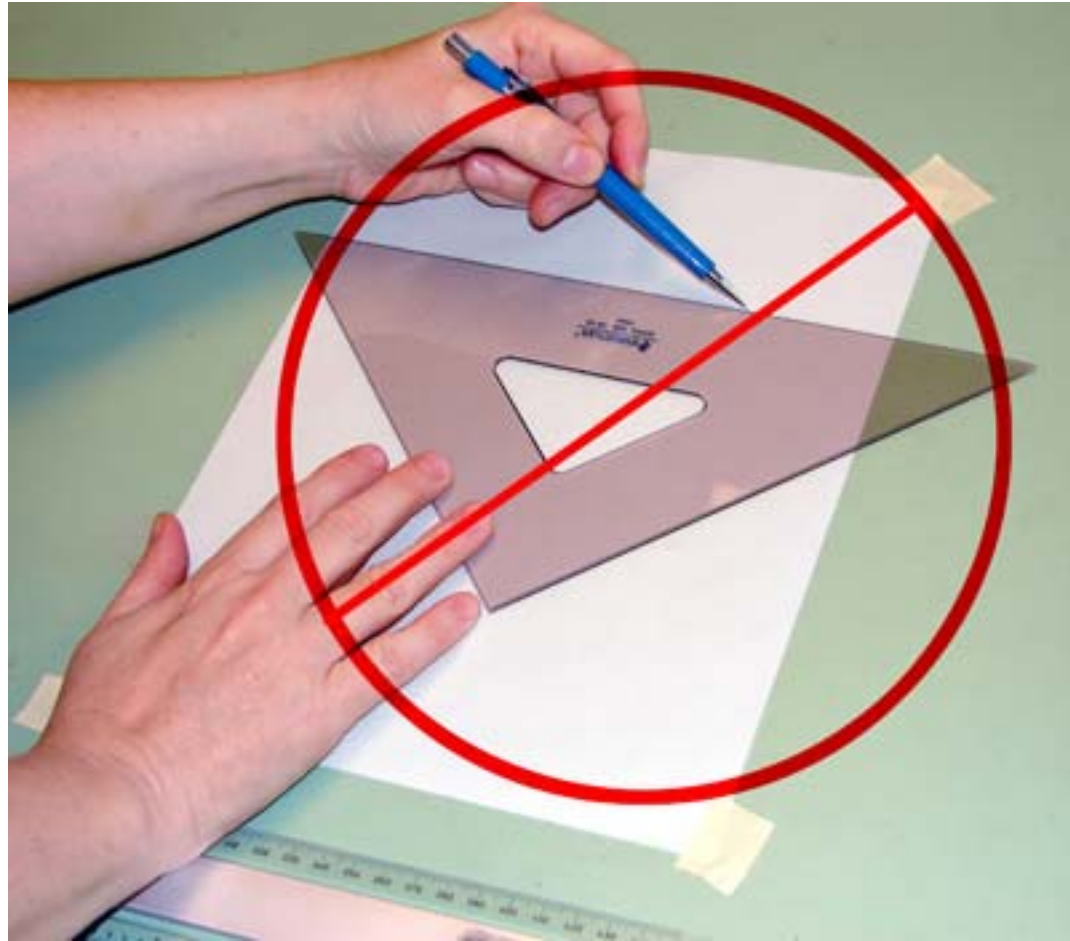
USE DRAFTING TAPE TO
SECURE DRAWING TO BOARD



USE CONSTRUCTION LINES TO
LOCATE PAPER AGAINST PARALLEL
BAR AND TRIANGLE (VERTICAL +
HORIZONTAL)

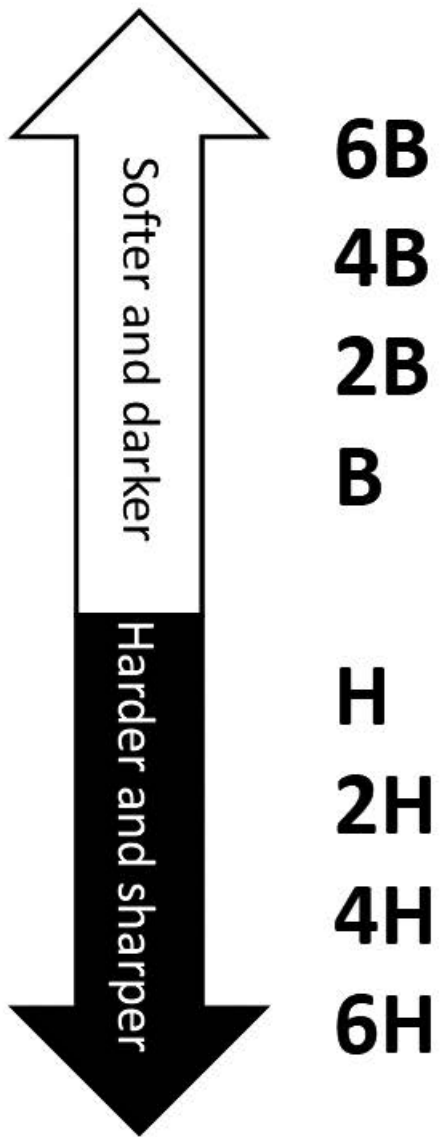


TWIRL YOUR PENCIL TO
MAKE CONSISTENT LINES !

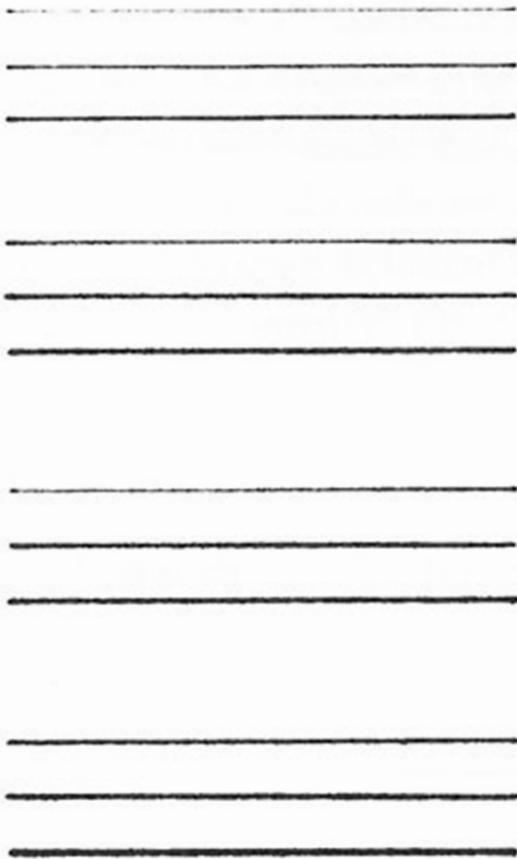


ALWAYS USE YOUR PARALLEL
BAR TO MAKE YOUR VERTICAL
AND HORIZONTAL LINES

LEADS



RECOMMENDED LEAD WEIGHTS:

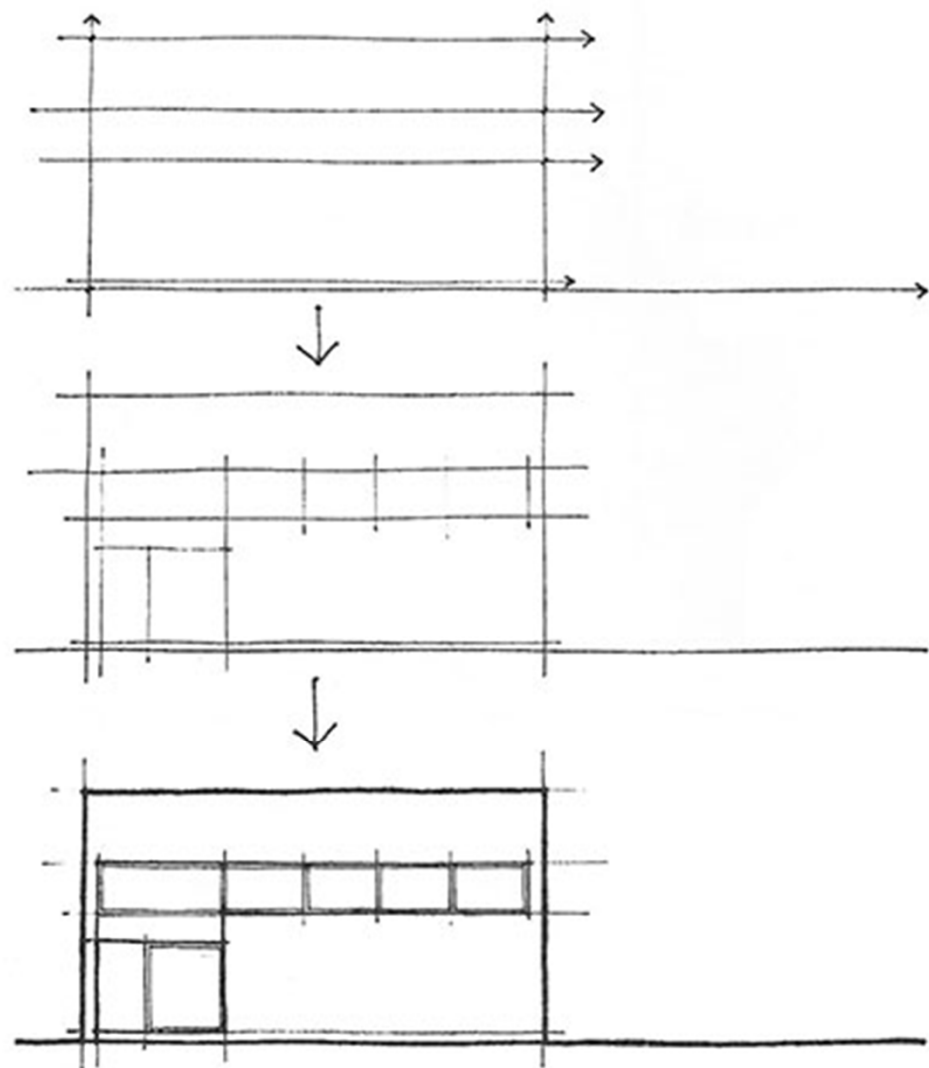


- 4H**
- **hard and dense**
 - for accurate layouts
 - not for finished drawings
 - do not use with a heavy hand; grooves drawing paper and may not erase easily
 - doesn't print well

- 2H**
- **medium-hard**
 - hardest grade feasible for finished drawings
 - doesn't erase easily if used heavily

- F and H**
- **medium**
 - excellent general-purpose lead weight
 - for layouts, finished drawings, and lettering

- HB**
- **soft**
 - for dense, bold linework and lettering
 - requires control for fine linework
 - erases easily
 - prints well
 - tends to smear easily



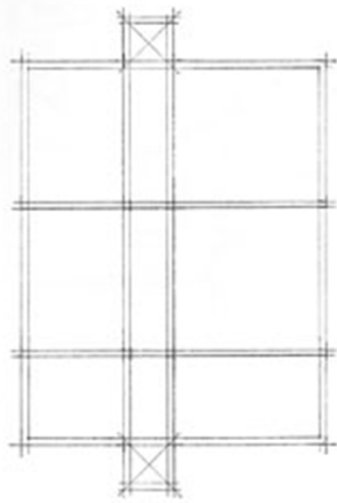
The order in which you should lay out a drawing is:

1. Lightly block out the major horizontal and vertical lines;
2. Fill in the secondary lines; and
3. Heavy up the final lines, keeping in mind the proper line weight of each line (see also pages 20–21).

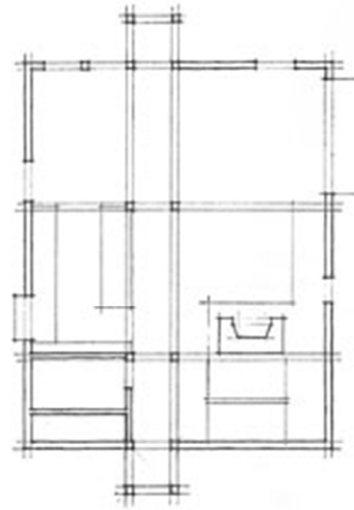
Do not scrub your lines in; strive for single-stroke lines.



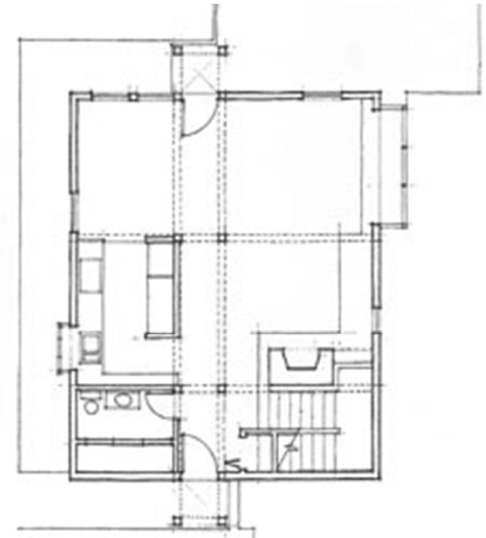
1. Major Outlines & Structural Grid



2. Major Walls & Structural Elements



3. Built-in Elements
(windows, doorways, stairways)



4. Detailing & Clean-up
(fixtures, door swings, furniture)