DCA

THEORETICAL SUPPORT NO. 01:

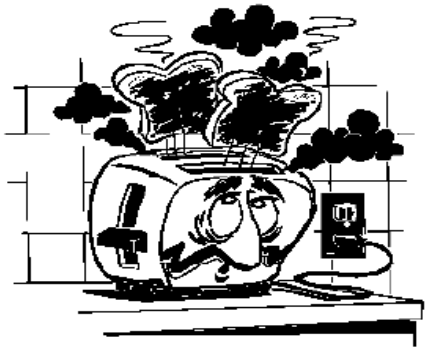
PRELIMINARIES TO DRAWING

1 What is architectural drawing.

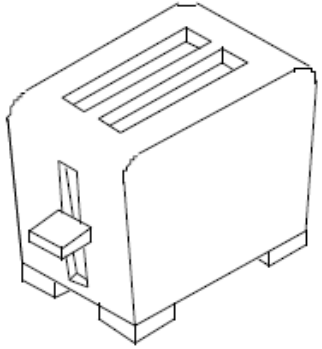
Technical drawing is a tool for graphic expression and technical communication.

There are two ways to execute a drawing:

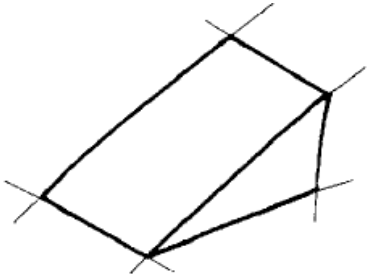
1. drawing **without instruments,** we call it **sketching**
2. drawing **with instruments** is called **final plan.**



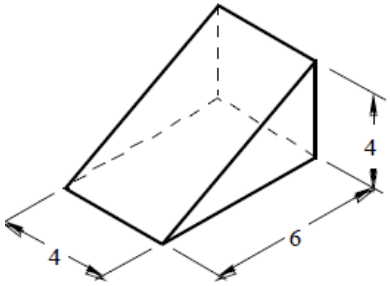
Artistic drawing expresses an idea, a feeling, a climate or situation.



Technical drawing expresses the exact shape, precise dimensions and constitution of an object with a view to its manufacture



sketching



final plan

2. Drawing tools and materials

Materials to be used throughout the year for DCA

- Pencils(B, 2B, 3B, 6H, 2H, H, HB)
- Mechanical pencil + Leads : 0.5mm 0.7mm 2mm
- White gum
- Pencil sharpener (metallic)
- 2 Brackets (large format) 45°45° and 60°30°
- Rulers 30cm, 50cm, 80cm
- T-ruler 80cm
- Ketch
- Compass (prefer professionals, with extension)
- Torchant or drawing brush
- A2 document holder for architect
- Canson paper A4 and A3 format (1 pack)
- A4 and A3 size tracing paper (1 pack)
- Sketchbook (Canson A5)
- Adhesive tape (paper tape)
- Sharpener (Affutoir)

2. Drawing tools and materials

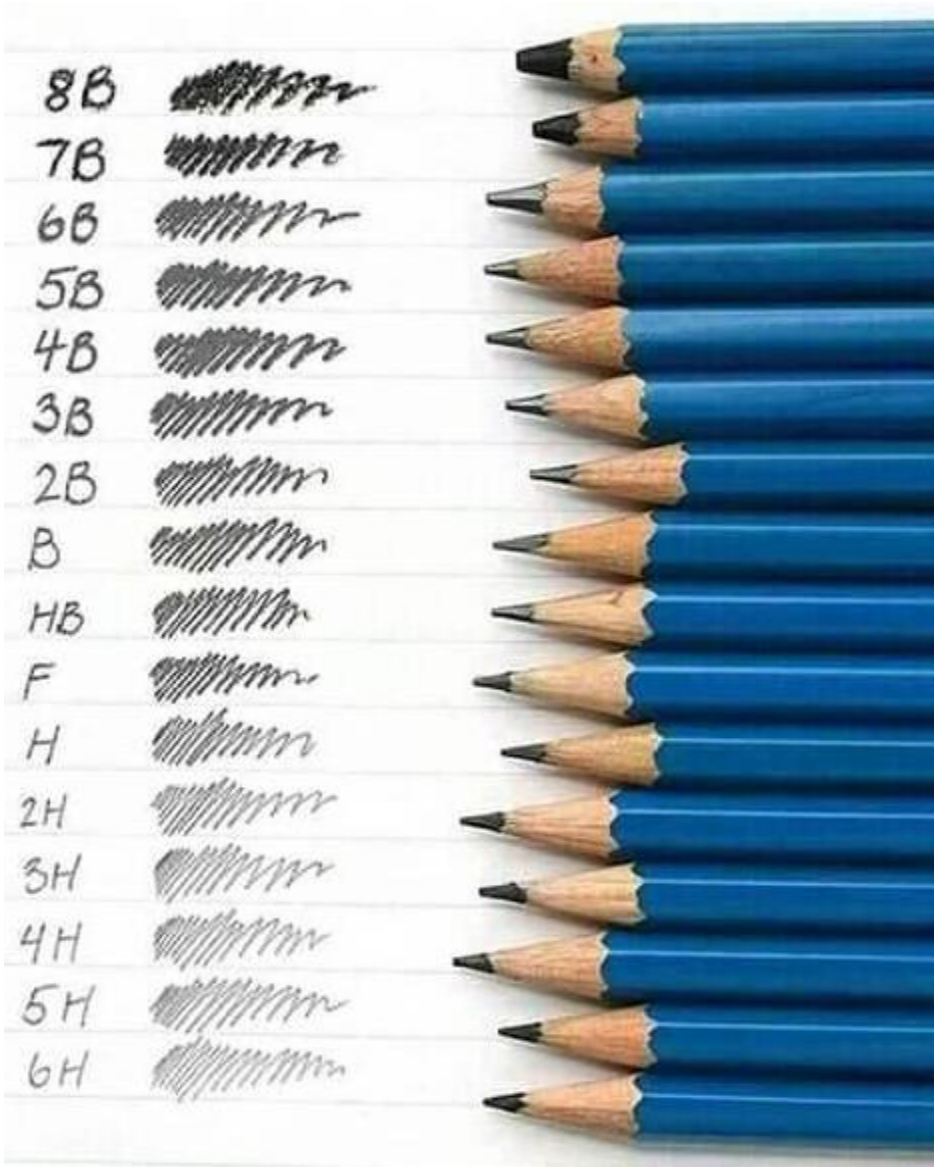
. pencil work:

-**soft graduations** are used for artistic drawings = 6B- 5B – 4B – 3B.

-**the average graduations** are used for writing = ZB – B – HB – F.

-- **extra-hard graduations** are used for drawing = 6H – 7H – 8H – 9H.

-**hard graduations** are used for other ex lithography. = H – ZH – 3H – 4H – 5H.



Instruments to correct:

-for the pencil it’s the eraser.

-for the ink: the razor blade – scraper – a nylon fiber eraser.

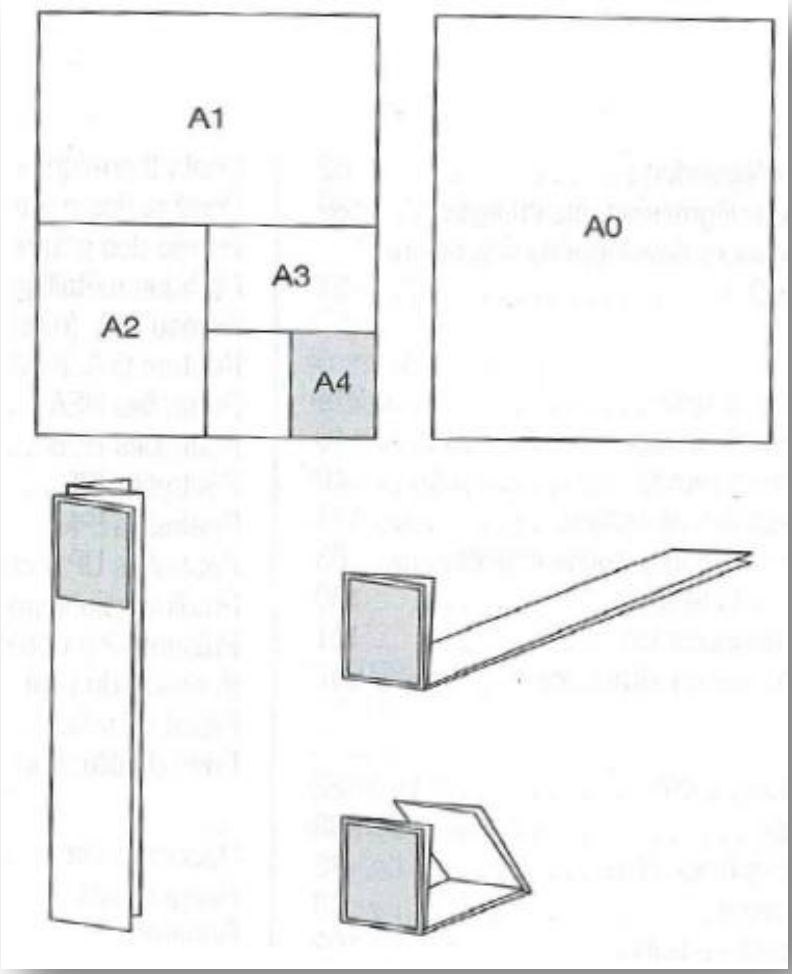
-To remove the scraping dust or the rest of the gum, use a small soft brush.

3. Format

The documents must have a unified format to facilitate their consultation, filing and shipping. For this, we adopt a folding format of **210mm x297mm**, known as **A4** format. the other standardized formats are deduced from each other from the basic A4 format by multiplying the smaller of the two dimensions by two.

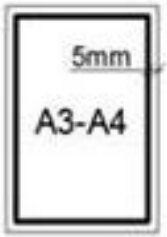
standardized formats

- A4 = 210 x 297
- A3 = 297 x 420
- A2 = 420 x 594
- A1 = 594 x 840
- A0 = 840 x 1188



margin of 10 mm all around the sheet

landscape

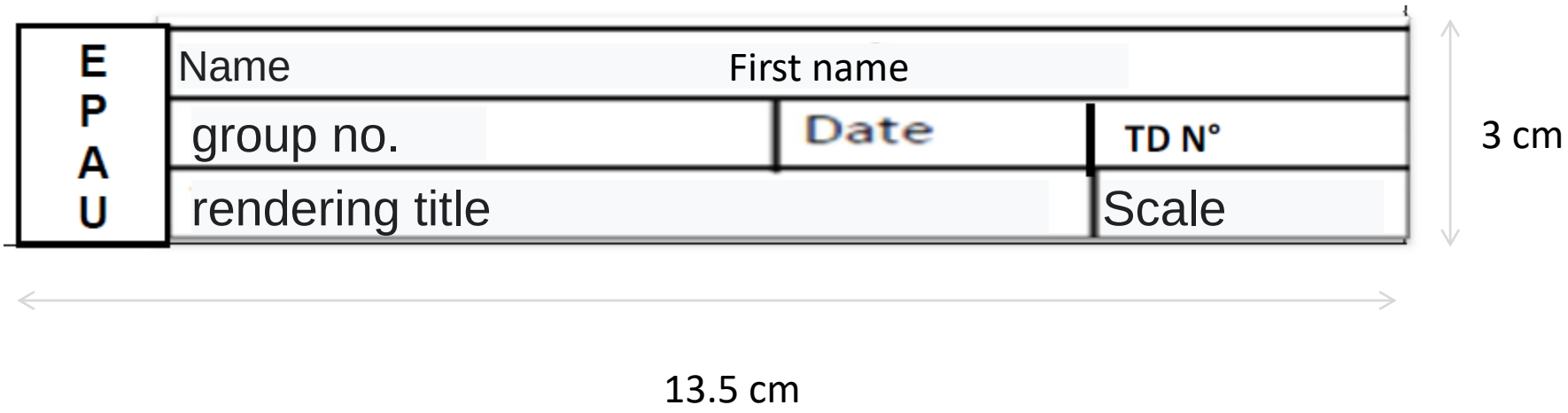


portrait

4. The cartridge

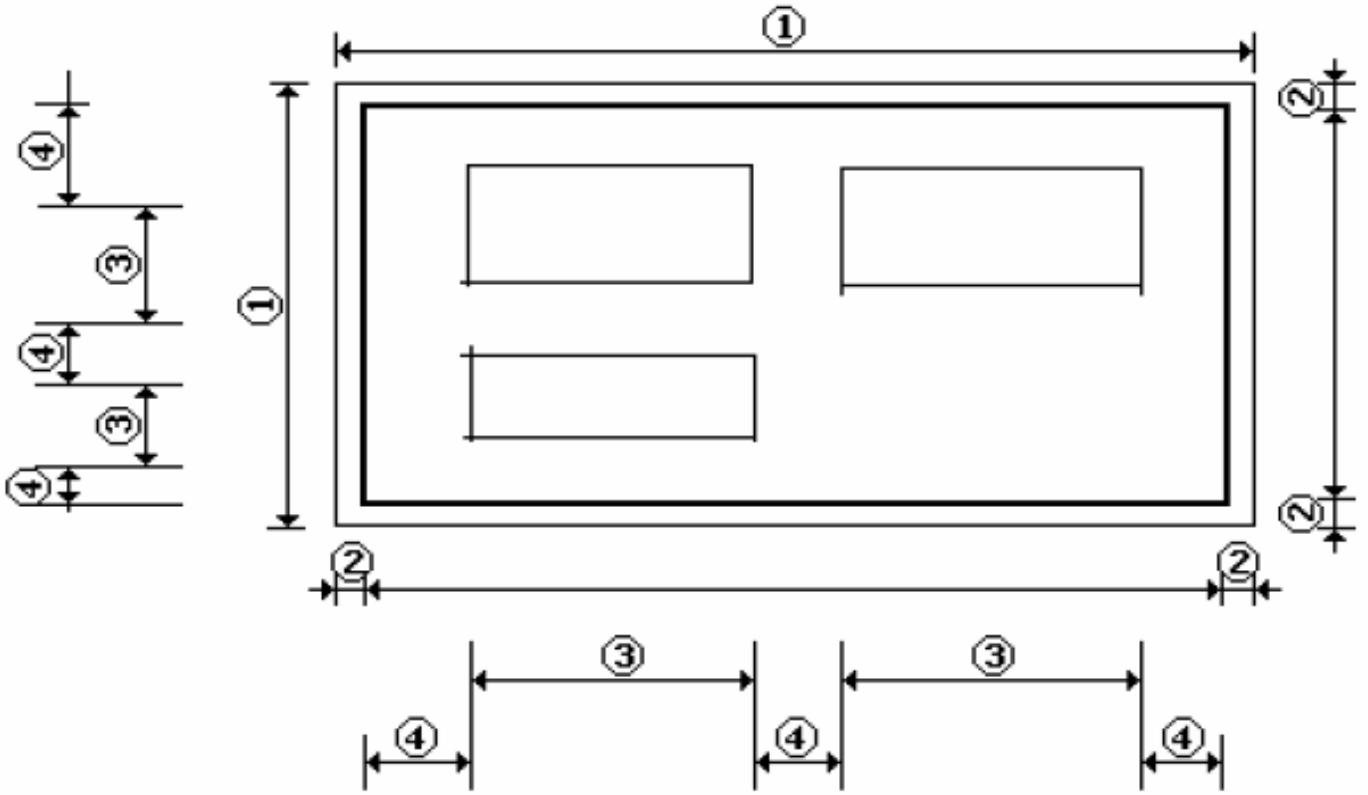
The title block is the identity of a drawing. This is the space reserved in a corner of the drawing and in which all the information relating to the project appears:

-Name and address of the owner (designer),
- - Designation of drawings (façade, section, etc.)
- - The scale - Date of drawing
- - Classification number (group)



5. Layout or disposition

The layout consists of distributing the views in a standardized format, after having drawn a frame within the format 5 mm from the edge of the format (A4).

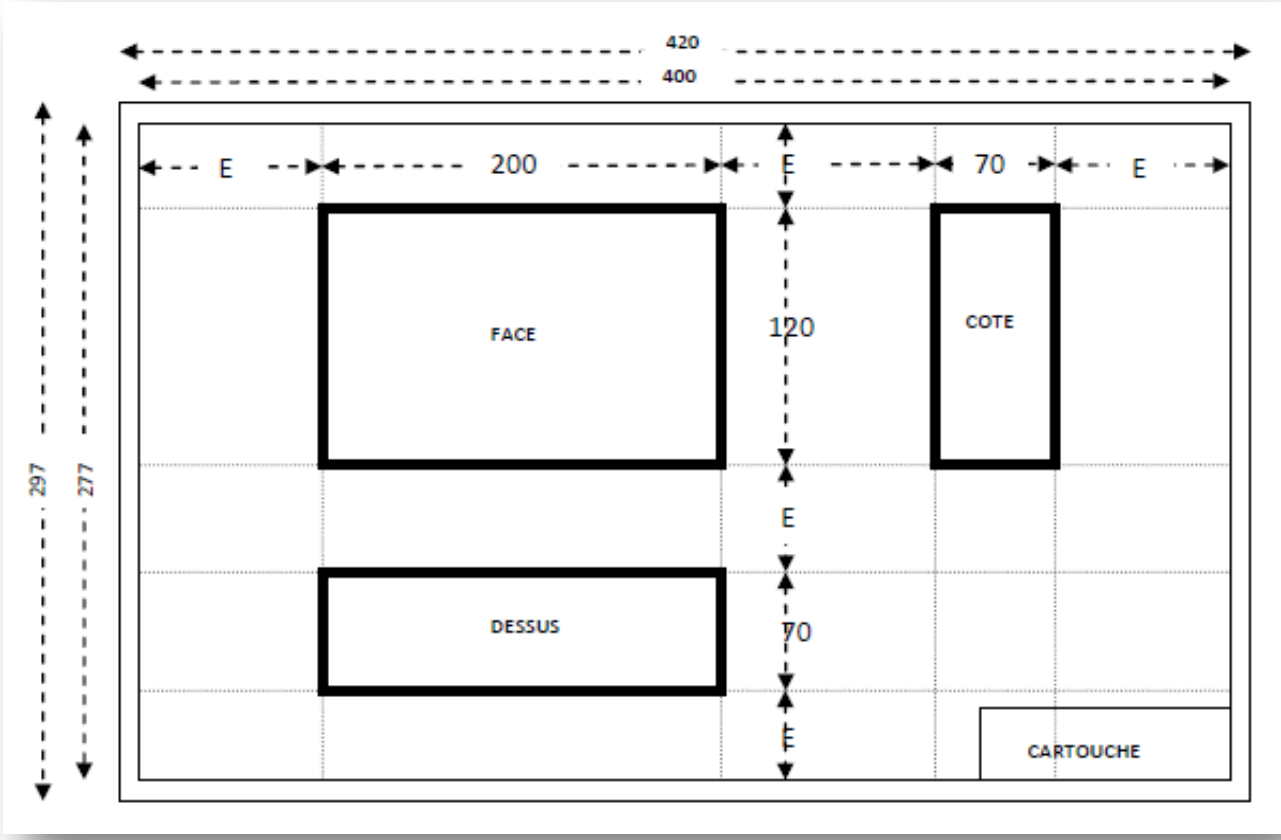


1- Format size
2- Frame 5 mm or 10 mm from the edge
3- Calculation of the embarrassment of views
4- Calculation of intervals between views

5. Layout

Example :

A3 format sheet: 297 x 420mm
10mm frame
Element to draw: 200 X 70 X 120
3 views = 3 capable rectangles and 3 spaces (E)



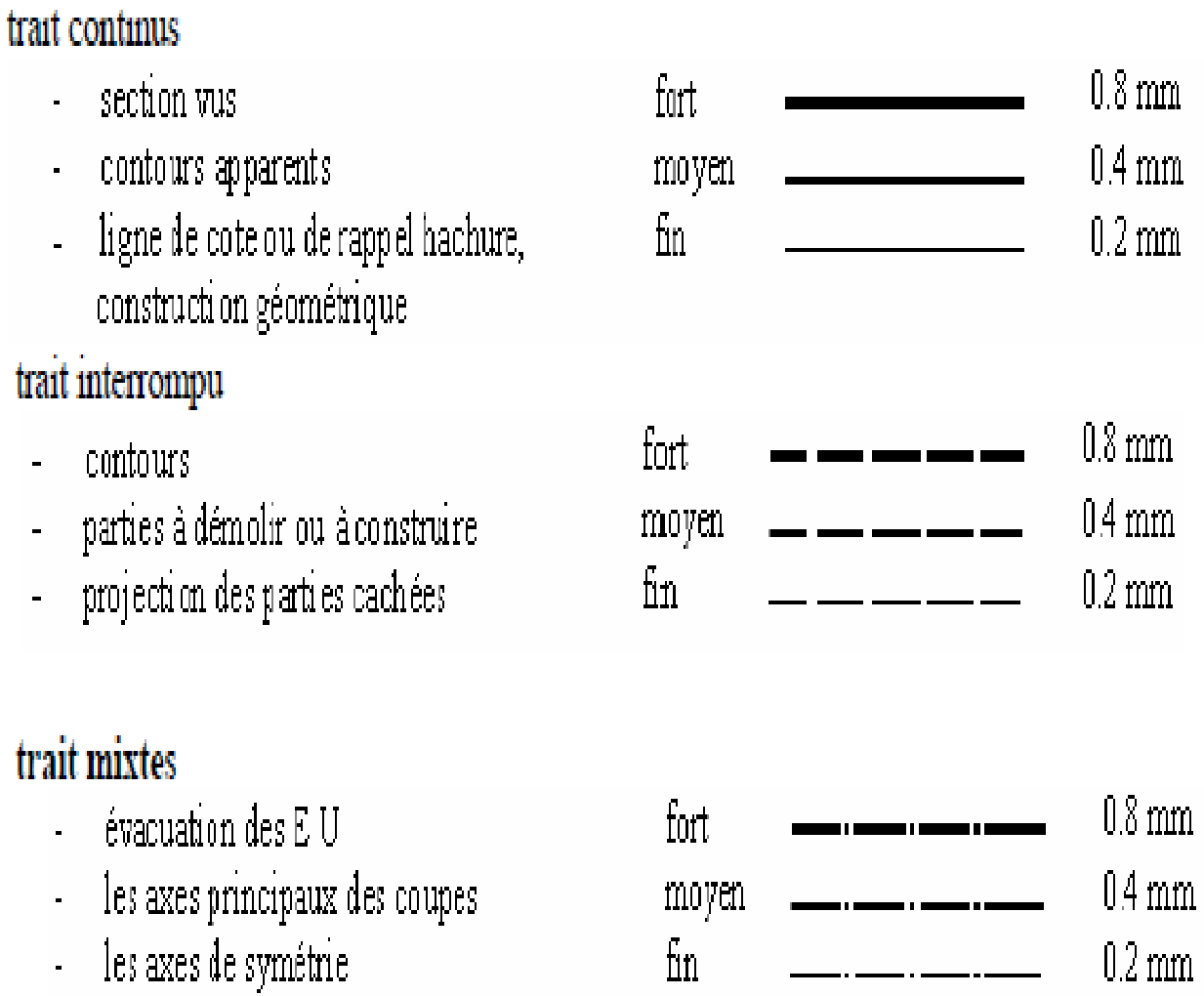
Calculation to find spaces:

Length: 420 – 20 = 400
400 – 200 – 70 /3= 43.3
Width: 297 – 20 = 277 277 – 120 – 70 /3= 29

6. Thickness, nature and use of lines.

In drawing, there are 3 main categories of lines:
continuous, discontinuous and mixed.

The strong line must be legible.
The width of the strong line should be at least twice (double) the width of the medium line.



7. Thickness, nature and use of lines.

The line widths for an ink drawing are:
0.5 mm for a strong line,
0.3 mm for a medium line
0.1 mm for a fine line
0.3 mm for writing and dimension lines

For drawing with a mechanical pencil, we use:
a lead with a width of 0.5 mm (strong and medium line) and a lead of 0.3 mm (thin line).

For pencil drawing, we use: a N°2 HB pencil that you must master perfectly to mark the intensity of the different traits.

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Thank you