

Paper

Substrates

- What you will print on
 - Depends on the process
- Paper
 - Thin to heavy
- Plastic
- Whatever

Paper Terminology

- Web
 - A roll
- Sheets
 - Ream
 - 500 sheets

Paper Manufacture

- Chipping
- Pulping
- Bleaching
- The paper machine
 - Fourdrinier
 - 98% water at the head box

Paper Manufacture

- Grain
 - Fibers align on the wire in the direction of movement
 - Water flows through the wire

Paper Manufacture

- Grain determination
 - Tear
 - Fold
 - Wet

Paper Manufacture

- Water mark
 - Inserted while the paper is still wet
 - Dandy roll
- Drying
- Coating

Types of Paper

- Basic Size
 - The standard size for a type of paper
- Bond 17x22"
- Cover 20x26"
- Book, offset, text 25x38"

Paper Terminology

- Basis weight
 - The weight of one ream at the basic size
 - 20# bond
 - 500 sheets of bond, 17x22" weighs 20#

Paper Calculations

- Stock or parent sheet
 - The size of the paper off the shelf or as ordered
- Press sheet
 - The size you want to cut

Paper Calculations

- Write the stock size over the press sheet size
- Draw two diagrams
- Divide the press sheet size into the stock sheet size
- DO NOT FORGET FRACTIONS

Paper Calculations

- Draw the cut on the diagram
- Divide length into length and width into width
- Complete the diagram, check your work
- Switch the division, length into width and width into length
- Draw another diagram

Paper Calculations

- How many stock sheets are needed to get X number of press sheets?
 - Divide the BEST cut (# of press sheets out of one stock sheet) into the number of press sheets required
 - Round up