

Papers and Boards

You need to know the performance characteristics of papers and boards, this includes:

- the ability to be scored
- cutting
- folding
- surface qualities for printing
- impact resistance
- recyclability and/or biodegradability

Drawing Papers:

Layout Paper (thin white semi-transparent paper, 50gsm):

| <i>Advantages</i> | <i>Disadvantages</i> |
|---|---|
| <ul style="list-style-type: none">• Lightweight• Can be used with most pens/markers• Low cost• Takes colour well | <ul style="list-style-type: none">• Weak• Will tear easily• Hard to store |

Uses: For initial ideas/designs of products/architectural drawings

Tracing Paper (transparent paper 60gsm):

| <i>Advantages</i> | <i>Disadvantages</i> |
|---|---|
| <ul style="list-style-type: none">• Easy to use• Allows copying of design onto another page• Strong• Hard (easy to remove mistakes)• Thin | <ul style="list-style-type: none">• Flimsy• More expensive than normal paper |

Uses: Working drawings, copying, design

Copier paper (multiuse 80gsm):

| <i>Advantages</i> | <i>Disadvantages</i> |
|--|---|
| <ul style="list-style-type: none">• Cheap• Range of colours• Opaque• Good quality surface (many different drawing techniques can be used on this paper) | <ul style="list-style-type: none">• Prone to jamming printers• Low quality paper |

Uses: Watercolours, printing, Paints, Inks, photocopying

Commercial printing papers:

Bond paper (white paper 75gsm):

| <i>Advantages</i> | <i>Disadvantages</i> |
|--|---|
| <ul style="list-style-type: none">• High quality• Durable• Multiple uses | <ul style="list-style-type: none">• More expensive than regular paper |

Uses: Letterheads, Graphic work, Electronic printers

Coated paper (paper coated in compound/polymer to gain certain properties 80 gsm):

| <i>Advantages</i> | <i>Disadvantages</i> |
|--|---|
| <ul style="list-style-type: none">• Properties can be altered through finish• Scuff resistant• Can be waterproof | <ul style="list-style-type: none">• Heavy• Hard to store• Discolours after time |

Uses: Photographs, Magazines

Producing mechanical pulp:

1. Coniferous logs are saturated in water

2. Timber is debarked
3. Cut into chips
4. Logs are ground down into pulp
5. The pulp is screened to 1-2mm
6. Larger pieces are recirculated and grounded further
7. Pulp is bleached

Boards:

Mounting board:

| <i>Advantages</i> | <i>Disadvantages</i> |
|--|---|
| <ul style="list-style-type: none"> • Lightweight • Strong • Easy to cut | <ul style="list-style-type: none"> • Difficult to bend |

Uses: Stiffens/preserves artwork, prints, photographs, watercolour

Corrugated board:

| <i>Advantages</i> | <i>Disadvantages</i> |
|---|---|
| <ul style="list-style-type: none"> • Strong • Impact resistant • Recyclable • Cheap | <ul style="list-style-type: none"> • Can become deformed • Not waterproof |

Uses: Packaging, Box making, For fragile goods

Foam board:

| <i>Advantages</i> | <i>Disadvantages</i> |
|---|---|
| <ul style="list-style-type: none"> • Impact resistant • Strong • Multiuse • Easy to cut | <ul style="list-style-type: none"> • Layers can split • Can become deformed |

Uses: Model making, mounting of prints, Backing photo frames

Folding box board:

| <i>Advantages</i> | <i>Disadvantages</i> |
|---|---|
| <ul style="list-style-type: none">• Low density• Good printing surface• High stiffness• Easy to work | <ul style="list-style-type: none">• Can't withstand medium-heavy loads• Not aesthetically pleasing |

Uses: Frozen/chilled foods, beauty products

Foil-lined board:

| <i>Advantages</i> | <i>Disadvantages</i> |
|---|--|
| <ul style="list-style-type: none">• Keeps food flavour• Keeps food warm• Easy to work• Good barrier against moisture | <ul style="list-style-type: none">• Weak• Expensive |

Uses: Food packaging, takeaway food, keeping food warm

Social and ecological issues:

- Great number of trees cut down for 'virgin' paper
- Paper can be recycled 7 times before it needs to be mixed with new fibres
- Deforestation can affect ecosystems and biodiversity
- Companies try to reduce their impact by replanting trees