

1. Wood



Description: a hard material often used for furniture or small structures. Wood is characterised in one of two types, hardwood and softwood. Hardwoods tend to be stiffer, and tougher as well as being more expensive such as: mahogany & maple. While softwood tends to be more bendable and have more give to it, all while being cheaper due to their quick growth rate, softwood trees include: pine & cedar

Where to buy:

- Gamma

Tools needed:

- Saw (various types)
- Drill
- Sand paper
- Carving tools
- Dremel

Techniques:

- Wood bending
- Vacuum wood bending
- Polishing

Pros:

- easy to shape
- looks nice

Cons:

- cracks under extreme stress (depending on wood type)

2. Metal



Description: a hard material often used for large structures and other situations a material will withstand a lot of stress. There is a large variety of metals each better at performing certain tasks than others. However they all have three things in common, metals are good conductors of heat and electricity, they are shiny when cut, polished or scratched, they are malleable and easy to bend when heated.

Where to buy:

- Metaal winkel

Tools needed:

- Metal saw
- Drill
- Shear bench
- Welding equipment

Techniques:

- Metal bending
- Welding
- Soldering

Pros:

- Flat
- Shiny
- can withstand heavy load
- Easy to shape
- Can be joined by heat

Cons:

- Can not be shaped into complex shapes
- Sharp edges

3. Clay



Description: a sort of dirt that can maintain a structure, it can be molded using water and it can set permanently when heated

Where to buy:

- Harolds
- Underground

Tools needed:

- Wire clay cutter
- Loop tool
- Ribbon tool
- Scraper
- Pottery wheel

Techniques:

- Throwing
- Slip castings
- Hand molding

Pros:

- Easy to mold when wet

Cons:

- Breakable after the process of being heated

4. Paper mache



Description: a process of drenching paper in glue and then adding layers to ensure a relatively hard structure.

Where to buy:

- glue from hardware stores
- paper can be newspaper or any thin absorbent paper

Tools needed:

- Paper
- a bowl to hold the glue

Techniques:

- continuous layering

Pros:

- Easy to paint afterwards
- Easy to do

Cons:

- Flammable
- Can not support heavy load
- Messy process

5. Rope



Description: a thick form of string that is made up of thinner woven string, it is used for pulling objects or for hanging objects.

Where to buy:

- Praxis

Tools needed:

- scissors

Techniques:

Pros:

- very effective at a pulling motion

Cons:

- does not maintain a structure

6. Foam



Description: a soft material capable of being compressed and expanded back to its original shape, due to this property it is often used as a packing material. Foam is also effective at storing heat which is why it is also used for insulation within homes.

Where to buy:

- Praxis

Tools needed:

- Knife
- Hot knife

Techniques:

Pros:

- great insulator

Cons:

- Flammable
- Toxic when inhaled

7. Paint



Description: a liquid often used to add a finish or an exterior layer to a material like wood or metal.

Where to buy:

- paint store
- Harrolds

Tools needed:

- Paint brush
- Water cup
- Pallet

Techniques:

- long smooth strokes
- Spray paint
- Building up texture

Pros:

- Looks nice
- Comes in a variety of colours

Cons:

- Some are flammable
- Takes time to dry

8. Metal wire



Description: metal wire is a thin form of metal used to wind things together or to create its own structure by winding it through itself. Metal wire is sold in a variety of thicknesses which get more difficult to bend as they get thicker.

Where to buy:

- Praxis
- Gamma
- Metaal winkel

Tools needed:

- Wire cutter

Techniques:

- Hand bending

Pros:

- Can be used to make clay/wax figures

Cons:

- Ends tend to be sharp

9. Plastic



Description: Plastic is often a clear substance that allows the user to see through an object without interacting with it. There are two types: thermoset and thermoplastic, thermoset plastic hardens when heated, while thermoplastic can be reheated, remolded, and cooled without causing any chemical changes.

Where to buy:

- Can be recycled

Tools needed:

- Scissors
- Heat gun

Techniques:

- Heating

Pros:

- Bendable
- Has structure

Cons:

- Contributes to plastic waste
- Plastic is toxic when burned

10. Rubber



Description: rubber is a material harvested from tropical plants and trees. Rubber can either be made soft or hard, soft rubber is found in pencil erasers and birthday balloons while hard rubber is found in electrical insulation.

Where to buy:

Tools needed:

- Box knife

Techniques:

- Score your cuts

Pros:

- Has good grip
- Elastic

Cons:

- Harmful for the environment
- Burned rubber is toxic

11. Cardboard



Description: A cheap material made of layered paper, it is light and sturdy however will tear when dealing with heavy loads. Cardboard can also be recycled to make more cardboard.

Where to buy:

- Gamma
- Coolblue

Tools needed:

- Scissors
- Box knife
- Cutting board

Techniques:

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Pros:

- Often recycled paper

Cons:

- loses its structure when wet

12. Styrofoam



Description: extruded polystyrene foam is made from polystyrene, it is very light due to it having pockets of air inside it which allows it to also be buoyant in certain situations. It is often used for packaging, surfboards and bean bags.

Where to buy:

- Gamma

Tools needed:

- Knife
- Hot knife

Techniques:

- Foam cutting

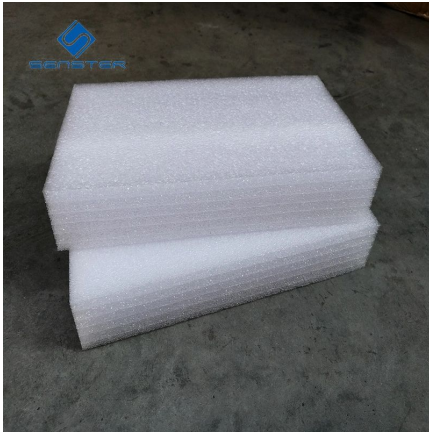
Pros:

- Insulator
- Good for packing objects

Cons:

- Crumbles
- Can catch fire
- Toxic when burned

13. Epe foam



Description: Expanded polyethylene is a material often used in packaging objects. It's used for its ability to be compressed and retain its shape.

Where to buy:

- Gamma

Tools needed:

- Knife
- Hot knife

Techniques:

Pros:

- Elasticity
- Light
- Insulator

Cons:

- Toxic when burned

14. Acrylic



Description: A type of plastic that is also sold in a variety of colours. Acrylic, while it is very hard and stiff can easily be bent when applying the right amount of heat. Acrylic is see through like glass while having a much higher impact strength than glass, it also does not shatter when exposed to high strains.

Where to buy:

- Art supply stores
- Gamma

Tools needed:

- Band saw
- Heat gun

Techniques:

- Heat and bend

Pros:

- Bendable
- See through
- Gives light ability to travel through

Cons:

- Contributes to global warming

15. Glue



Description: A substance used to bind multiple things together. Many different types of glue vary in their strength, how quickly they dry, and how they are applied. Be aware not to use glue that is too weak as the materials won't stick, but definitely don't use glue that is too strong as it could ruin the visual aspect of the material.

Where to buy:

- In most places, but stronger glue is found in hardware and art stores
- Harolds

Tools needed:

- Nailpolish remover (acetone)
- Or any type of oil based substance

Techniques:

- Avoid getting it on yourself

Pros:

- Looks better than nails in wood

Cons:

- Does not create a strong link