

# **Ergonomics**

# **Of Furniture Design**

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# Designing Furniture

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- ✘ There are a couple of stages in the designing process
- ✘ The brief or analysis of the idea : identifies the intended use and function of the item, conforms to standards sizes, type of materials and finishes, joints or fittings to be used.
- ✘ Furniture sizes are based on the average person – If dealing directly with client some adjustments to standard sizes may be required. (May be sole reason for client wanting a particular item made)
- ✘ Sketch drawings
- ✘ Scaled drawings
- ✘ Full size drawings
- ✘ A cutting list is then produced

# Standard Sizes

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## The chair

Chairs Seat Height	450mm max
Seat depth	400 – 460mm
Arm rests	200mm above seat
Seat width	450mm (carver 500)
Back Height	800 – 900mm high

## Computer work stations

Desk height	700mm
Typing height	650mm
Max. reach above while sitting	1.450M
Legroom	600mm
Knee clearance	250mm

# Storage Unit Construction: Wardrobes

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The central zone for storing items most frequently used or heavier items requiring two hands to lift is between 700mm and 1.300m

Longer term or lighter weight storage should be stored above or below these levels

The average eye level for an adult when standing is between 1.550 – 1.750m

When designing allow sufficient area for the opening of doors & drawers

Wardrobe	1M short hang 1.40 – 1.6M long hang
Min. inside depth	500mm
Bookcases shelves	900mm max
Bed Lockers	600 – 700mm high

# Storage Unit Construction: Kitchens

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## Cramped kitchens cause accidents

Safe passing space	900mm
Worktop depth	600mm
Worktop height	900 – 910mm
Wall cabinet depth	300mm
Eye level shelf	1.5-1.7m
Max. shelf-height	1.8 – 2m

## Tables

Dining room	710 – 760 high
Kitchen Tables	600 per person
Occasional Table	300 – 600 high

**Note: Clients should have final say.**