

# Chapter 8.

## Adaptability

8.1 Adapatable building form

8.2 Change and change about

'When we build let us think that we build for ever.'

JOHN RUSKIN



*A Glasgow office block after conversion to flats.*



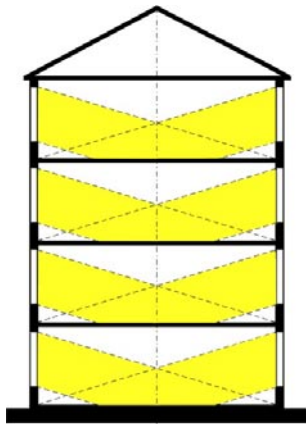
*This Melbourne office block was adaptable enough to be converted to residential use. The period housing on the right of the picture has been converted to offices!*

## 8.0 ADAPTABILITY

### Objective

To promote adaptability through development that can respond to changing social, technological and economic conditions.

The Local Plan requires that buildings are designed to be capable of being adapted for a variety of other uses (SDP 13iv) and needs, such as the needs of elderly and disabled people (H4).

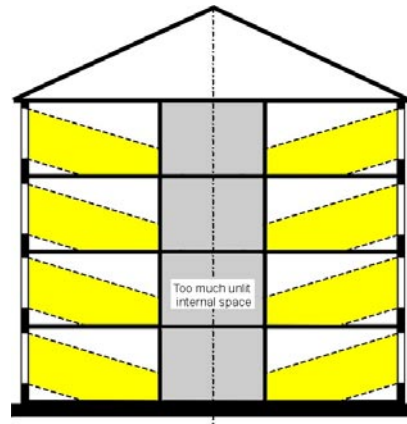


**Building depth less than 9m.**

*Layout permutations reduced and too narrow for a central corridor.*

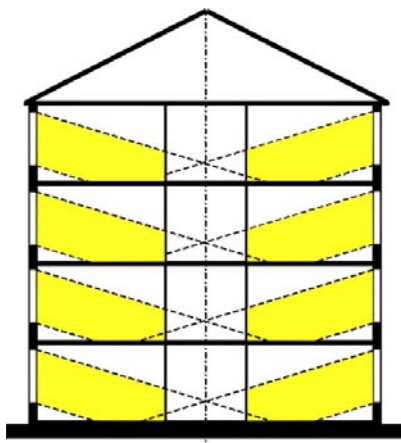
### 8.1 Adaptable building form

Building expends enormous amounts of energy and materials, which are wasted in demolition. Adaptable buildings have an extended life because they are easily converted to suit different users and uses. Because they support many uses adaptable buildings also foster mixed use. The diagrams below provide an assessment of the relationship between building depth and adaptability.



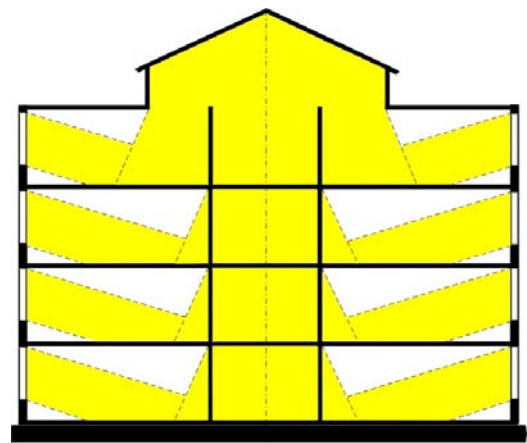
**Building depth between 14 - 15m.**

*Some artificial ventilation and more artificial lighting is required but subdivision is possible.*



**Building depth between 9 and 13m.**

*Maximum flexibility of use because it allows for natural lighting and ventilation.*

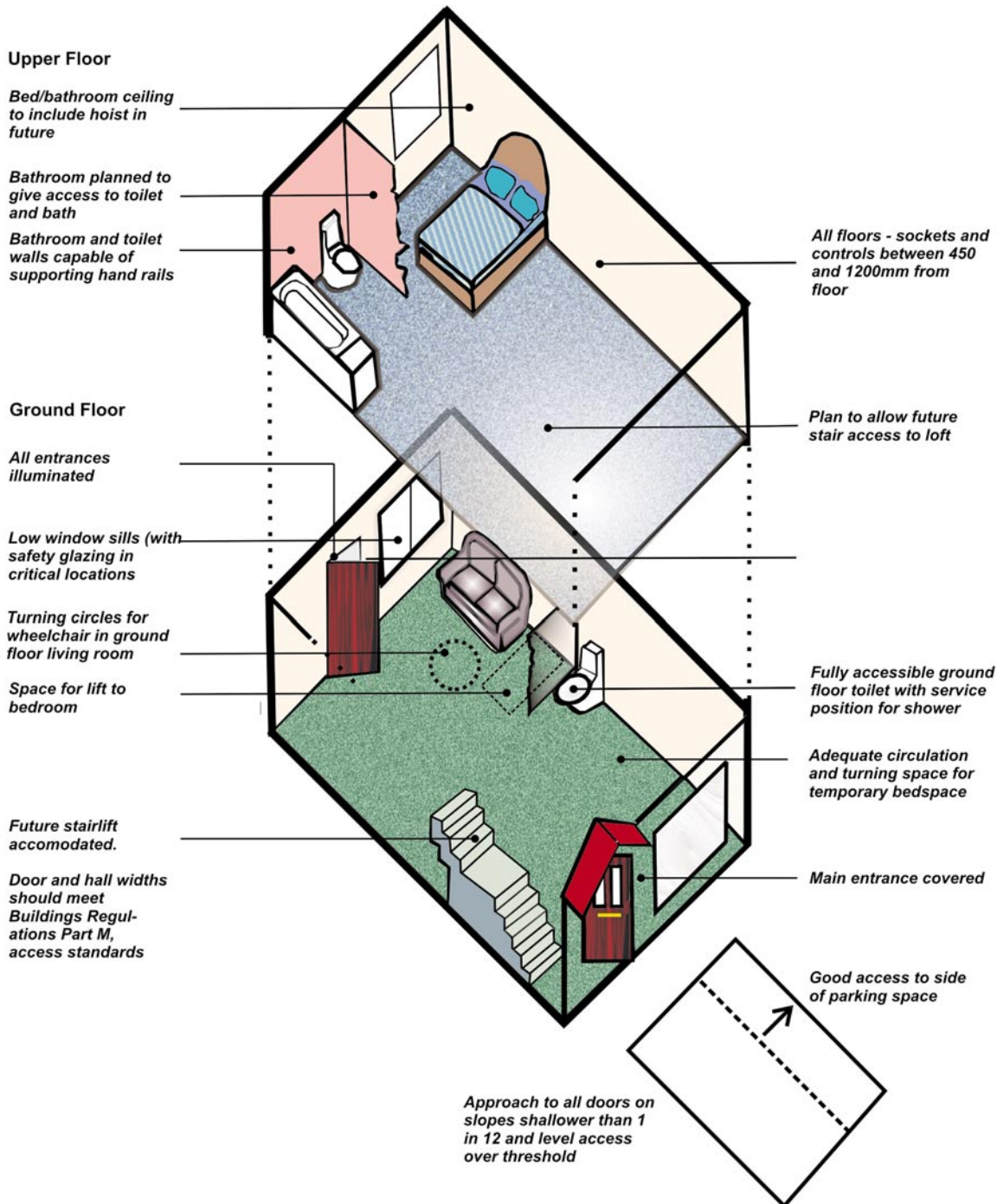


**Building depth 16 to 22m.**

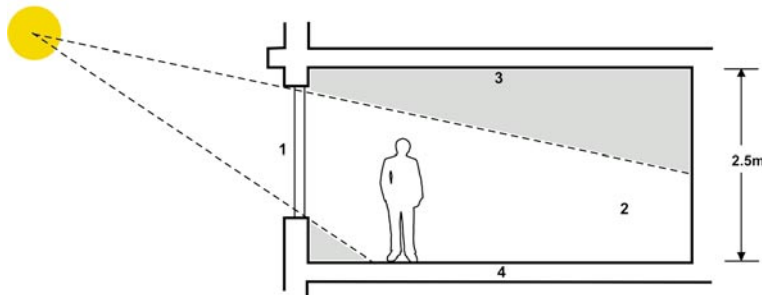
*Requires the most energy to light and ventilate though with the introduction of a light well a double aspect form is possible of width up to 40m.*

Lifetime home criteria

These standards are aimed at creating adaptable houses and apartments. However, some will also apply to other buildings such as office and leisure developments. Homes with living rooms above ground floor should meet whichever standards are appropriate of those shown here at ground floor.



Differentiate critical surfaces to aid navigation through buildings by visually impaired people. For example door colour should contrast with wall colour which, in turn, should contrast with floor and ceiling colour. Where space allows, plan for possible rear extension.



1. Taller stories allow taller windows and improved natural light.

2. Taller windows improve natural light in deep plan buildings.

3. Improved air quality and reduced need for extractor fans to avoid condensation.

4. Increased floor depth provides better sound insulation and more space for services in floor voids. Advice on sound insulation may be obtained from the City Council's Building Control service.

### The benefits of taller stories

Building depth (measured perpendicular to the street) is an important determinant of adaptable buildings. An increase in building depth usually increases the need for artificial lighting and ventilation which in turn decreases the variety of suitable uses.

prove the potential for recycling the building for alternative uses. Advice on sound insulation may be obtained from the City Council's Building Control service.

Buildings should be designed to facilitate recycling of consumables such as paper, glass and organic kitchen waste.

## 8.2 Change and change about

The detailed layout of buildings should allow for their reuse. The Georgian terrace allows for changing uses by providing generously proportioned circulation and room spaces. The sensitive adaptation of listed buildings can result in imaginative design solutions. The design statement should address the extent to which the development is adaptable.

**Design Principle 8.i: Buildings should be long-life, flexible and capable of being adapted for a variety of other uses and needs with the minimum of disruption.**

Residential buildings in particular should be able to accommodate all the different requirements placed on a house during the lifetime of the occupants without requiring expensive alterations. Residential development schemes should address the Lifetime Homes criteria. This involves anticipating likely future needs and ensuring that the fabric of the building is designed to facilitate adaptations later on. The detailed design of buildings should facilitate the easy reuse of materials when the building is demolished.

Although a matter for building control rather than planning control, sound insulation to party walls and floors should be of high quality. This may im-

