

## HOTEL LAYOUT AND AREA REQUIREMENTS

### Layout and area requirements

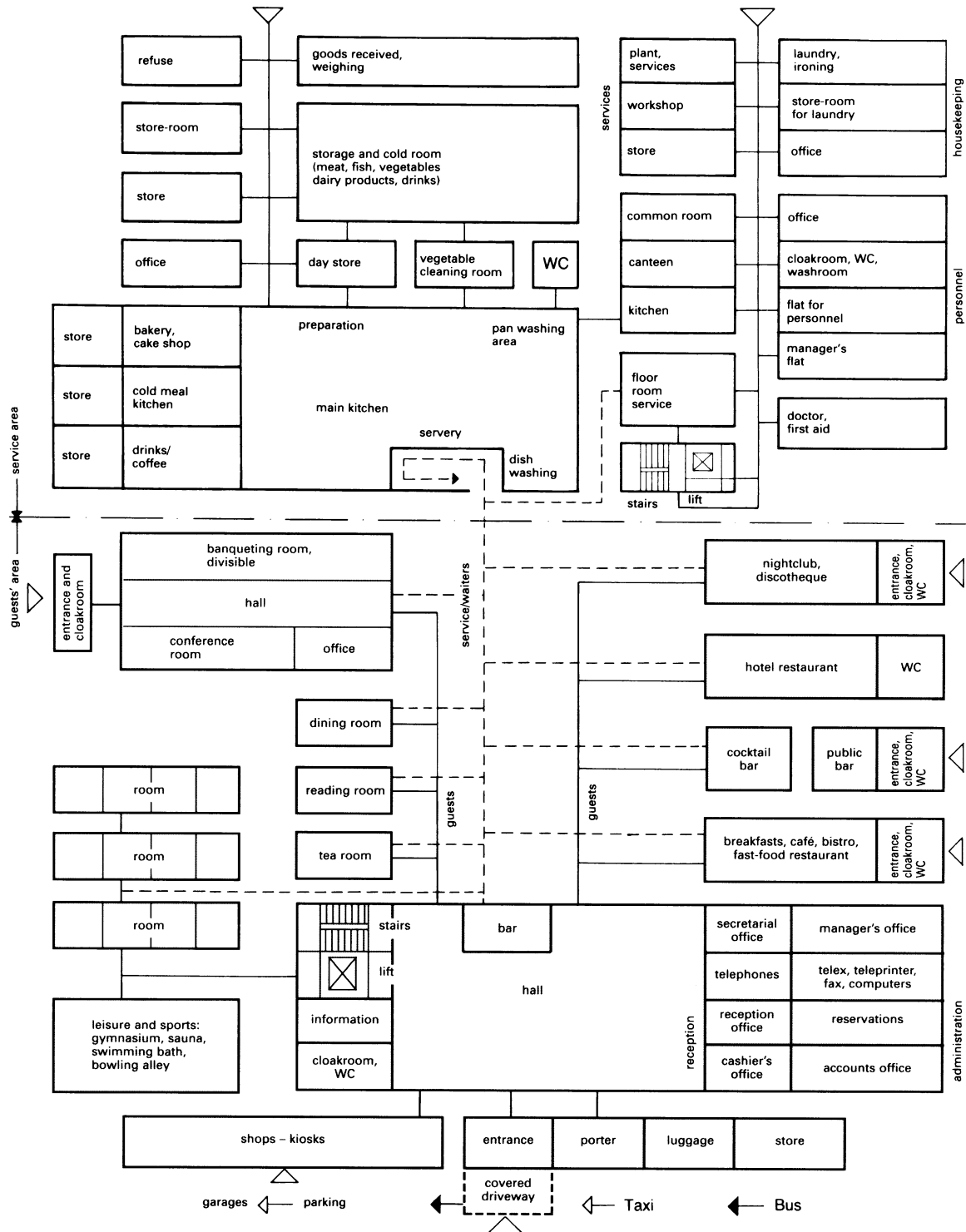
Different types of hotel offer varying standards of quality and facilities. Hotels may be part of a chain or independent. Where hotels do form part of a chain, special design requirements may be imposed. Hotel types include town hotels, holiday hotels, clubs, hotels with apartments and motels.

Accommodation facilities, including rooms, toilets, bathrooms, shower rooms, etc., hallways and floor service, should occupy 50–60% of the floor area. Public guest rooms, a reception area, hall and lounges require 4–7%, and hospitality areas, restaurants, and bars for guests and visitors 4–8%. A banqueting area with meeting and conference rooms needs 4–12%, domestic areas, kitchens, personnel rooms and stores

9–14%, administration, management and secretarial 1–2%, maintenance and repair 4–7%, and leisure, sport, shops and a hairdressing salon 2–10%.

Special areas for seminars, health centres and outdoor facilities, for which the space required can vary tremendously, may also be needed.

National systems of classification, compulsory or voluntary, vary in range of categories and method of designation (letters, figures, stars, crowns etc.). Over 100 classification systems are in use, most based on the World Tourism Organisation (WTO) model but customised to suit local conditions.



① Typical interrelationships between rooms on hotel ground floor

## HOTEL LAYOUT AND AREA REQUIREMENTS

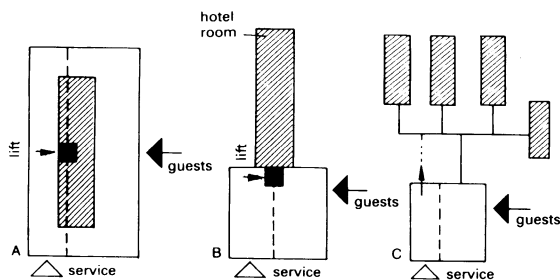
Hotels offer different types of accommodation, including bedrooms, suites, self-catering units and apartments using the hotel services → ⑥ – ⑪. The size and number of beds largely dictates dimensions and layout of rooms, e.g. twin 100/200cm, double 150/200cm, queen-size 165/200cm, or king-size 200/200cm. Rooms may include a sitting area with chairs, a desk, TV, self-service drinks refrigerator and suitcase stand.

Corridor space should be about 6m<sup>2</sup> per room, and normally at least 1.5–1.80m wide. Separate routes should be provided for guests, staff and goods → ① – ②.

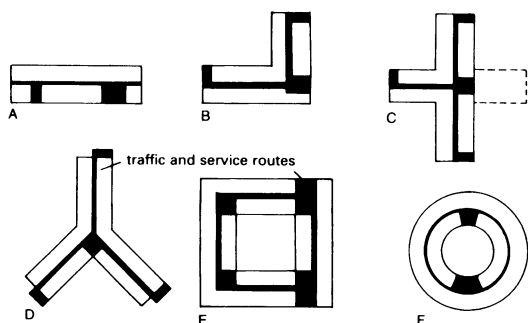
There is always movement in and near a hotel. Customers move from parking areas, through the entrance and reception, and then to lifts, staircases or corridors leading to bedrooms or public rooms. In most hotels, customers are not allowed to go from bedrooms direct to the car park without passing through reception. Suitable fire escape routes must be provided to meet legislation. Staff move from staff housing, via their own entrance and changing rooms, to kitchens, service areas, bars, workshops, etc. All deliveries must be taken to the correct department or storage area, perhaps using special lifts. Disposals should be from special roofed-over areas (to limit night-time noise), with a clearance height of 4.35m.

Hotels usually have a restaurant and/or breakfast area and one or more bars. Hotels with conference facilities may include a multifunctional central hall, meeting rooms, exhibition areas and buffet facilities. Storage for extra furniture and additional parking space may be necessary. Specialist facilities may include audio-visual media rooms, projection equipment, simultaneous translation facilities, copying machines, fax machines and telephones.

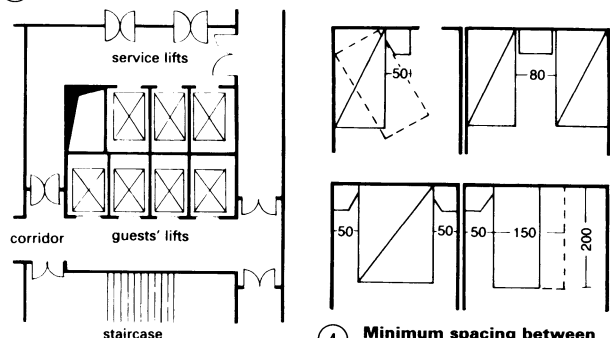
Hotels should provide facilities for the handicapped and disabled in at least 1–2% of rooms, preferably on the ground floor, and with the following minimum criteria: ramps 1:20, corridors 915mm wide, doors 815mm clear opening, lobbies 460mm wider than the door on the latch side, closet doors either narrow or sliding, shelves 1.37m high. Bathrooms: central turning space 1.52m, width 2.75m, vanity tops 860mm high, 685mm knee space, mirrors extending down to 1.0m, compromise toilet seat height usually 430mm. Grab bars are needed on the headwall and sides of the bath and toilet. Standard bedrooms, 3.65m wide, can be adapted to the following criteria: switches 1.2m high, space between beds and furniture 910mm, beds 450–500mm high with toe space below. Eye level from a wheelchair is 1.07–1.37m; dressing tables should allow for this and have 685mm knee space. Low window sills are also preferable.



① Relationship between services and guest rooms

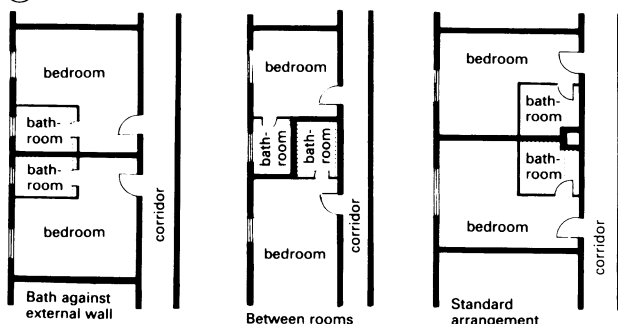


② Plan views of hotels

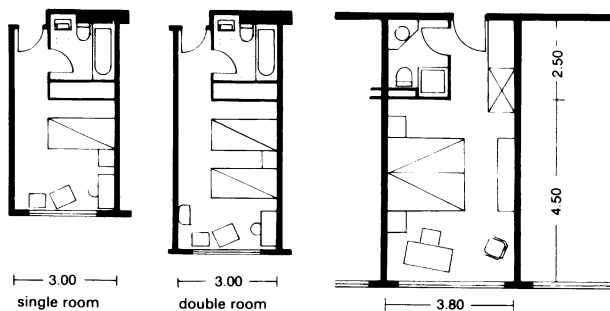


③ Vertical circulation in hotel

④ Minimum spacing between hotel beds

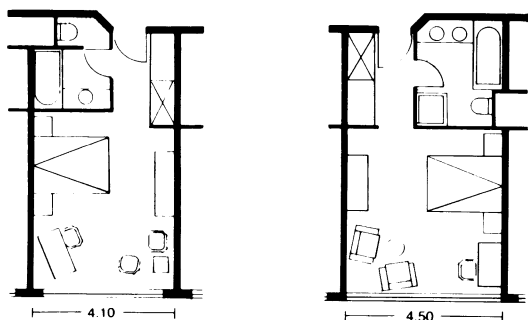


⑤ Bathroom arrangement



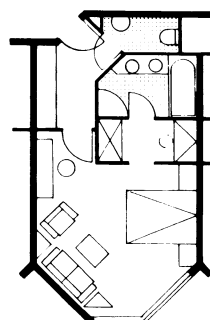
⑥ Narrow hotel room

⑦ Double bed in economy hotel

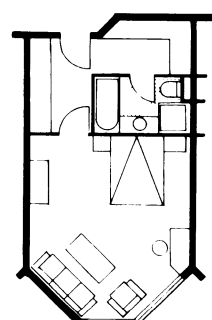


⑧ Standard room

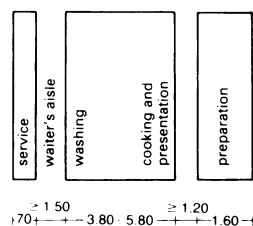
⑨ Executive room



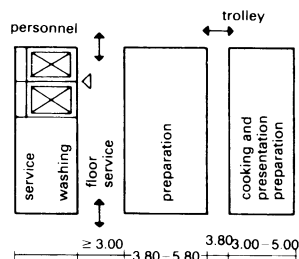
⑩ Luxury room (>5.0m wide)



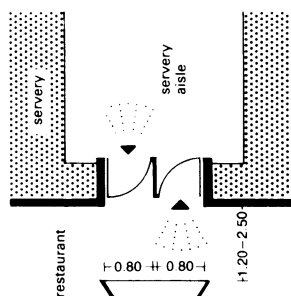
⑪ A variant of ⑩



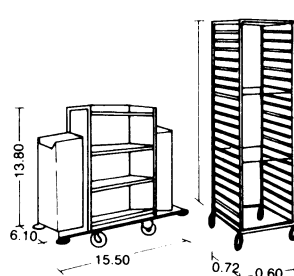
① Layout for small business



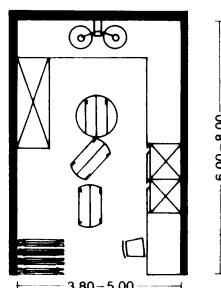
② Layout for medium-size/large businesses



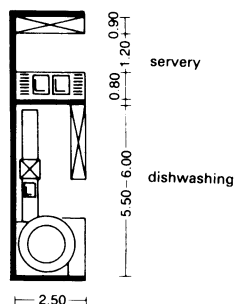
③ Waiters' door arrangement



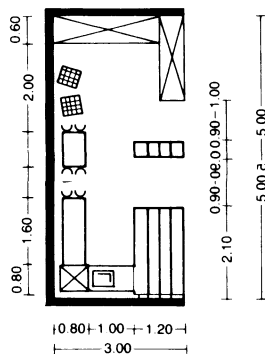
④ Service and tray trolleys



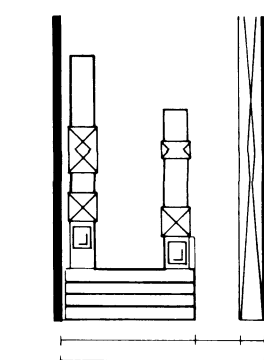
⑤ Floor servery



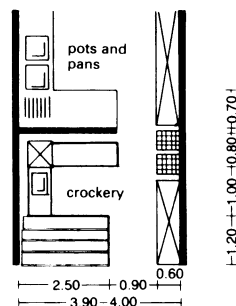
⑥ Servery/dishwashing area



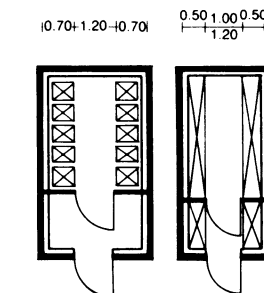
⑦ Dishwashing (1-2 people)



⑧ Crockery and glasses



⑨ Crockery and pan washing



⑩ Cold store Shelving Metal trolleys

## HOTEL LAYOUT AND AREA REQUIREMENTS

### Restaurants/catering

Care should be exercised when sizing restaurants on the basis of people per square metre since circulation requirements and table layouts, etc., vary considerably. The following table gives some basic guidelines.

| hotel size (rooms)                 | coffee shop, café <sup>a)</sup> , brasserie (seats) | main or speciality restaurant (seats) | ethnic or gourmet restaurant (seats) |
|------------------------------------|---|---------------------------------------|--------------------------------------|
| 50                                 | 50-75   | -                                     | -                                    |
| 150                                | 80  | 60                                    | -                                    |
| 250                                | 100   | 60                                    | 50                                   |
| space provision/seat <sup>b)</sup> | 1.6m <sup>2</sup>                                   | 2.0m <sup>2</sup>                     | 2.0m <sup>2</sup>                    |

<sup>a)</sup> excluding poolside, café-bar and other club facilities; area also usable for breakfast meals with buffet or table service  
<sup>b)</sup> the area required per seat, dictated mainly by size and spacing of furniture, proportion of tables seating two persons and arrangements for food service (buffet, table service, etc.)

| Hotel type   | m <sup>2</sup> per room |
|--|-------------------------|
| Standard hotel with large conference room, night club, shops                     | 55-65                   |
| City-centre hotel  | 45-55                   |
| Motel  | 35-45                   |
| Holiday hotel  | 40-55                   |
| Low-medium class hotel with separate bathrooms and small range of meals on offer | 18-20                   |

### ⑪ Gross areas per room for different types of hotel

| Area/department   | 200 rooms, in suburban setting m <sup>2</sup> per room | 500 rooms in central location m <sup>2</sup> per room |
|---|--|---|
| Hotel room  | 24   | 26.5  |
| Corridors, lifts, stairs  | 3.2  | 9.3   |
| Service   | 0.6  | 0.7   |
| Total per room  | 27.8   | 36.5  |
| Entrance area including lifts for personnel and service                   | 1.6  | 1.8   |
| Reception, WC, reservations, telephones, luggage, cloakroom               | 0.4  | 0.4   |
| Administration  | 0.3  | 0.4   |
| Restaurant  | 1.1  | 0.6   |
| Coffee bar  | 0.6  | 0.5   |
| Coffee bar  | 0.6  | 0.5   |
| Bar 1, plus counter   | 0.9  | 0.4   |
| Bar 2, plus counter   | 0.5  | 0.3   |
| Lounge  | 0.5  | 0.3   |
| Toilets   | 0.4  | 0.3   |
| Conference/lecture rooms  | 1.1  | 1.3   |
| Ancillary rooms   |  | 0.5   |
| Furniture store   | 0.1  | 0.2   |
| Private bedrooms and living rooms   | 0.4  | 0.9   |
| Shops   |  | 0.2   |
| Total entrance/guest area   | 7.8  | 8.2   |
| Kitchen, provisions   | 3.8  | 2.5   |
| General stores  | 0.9  | 0.9   |
| Workshops, maintenance  | 0.8  | 0.4   |
| Laundry, linen store  | 0.3  | 0.7   |
| Staff dining room, WC, changing rooms                                     | 1.0  | 1.1   |
| Personnel rooms, accounts, supervision, caretaker                         | 0.3  | 0.5   |
| Circulation areas, service lifts  | 0.8  | 0.9   |
| Total rear hotel service area   | 7.9  | 7.7   |
| Total area, without heating services or inside/outside parking facilities | 43.5   | 51.7  |

### ⑫ Area requirement per hotel room → ⑪

## HOTEL KITCHENS

Kitchen size is determined by the number of workstations, the space required for equipment, the range of meals and the extent of food preparation. Therefore number of covers or number of seats are not adequate guides. The following table provides an approximate basis for initial estimates of space requirements.

| area per seat                         | high-grade hotels (m <sup>2</sup> ) | mid-grade hotels (m <sup>2</sup> ) | economy hotels (m <sup>2</sup> ) |
|---------------------------------------|-------------------------------------|------------------------------------|----------------------------------|
| main kitchen and stores <sup>a)</sup> | 1.2                                 | 1.0                                | 0.7 <sup>d)</sup>                |
| satellite kitchen <sup>b)</sup>       | 0.3                                 |                                    |                                  |
| banquet kitchens <sup>c)</sup>        | 0.2                                 |                                    |                                  |

<sup>a)</sup> storage requirements depend on frequency of deliveries

<sup>b)</sup> storage requirements depend on frequency of deliveries

<sup>a)</sup> storage requirements depend on frequency of deliveries

<sup>b)</sup> including local dish-washing

<sup>c)</sup> 0.15 m<sup>2</sup> increase in main kitchen; 0.05 m<sup>2</sup> banquet pantry

<sup>d)</sup> using some convenience foods

Kitchen planning requires four stages of development:

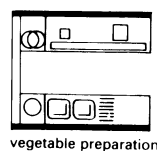
- determine a process plan covering all major areas;
- check maximum and minimum personnel needs per area;
- determine the equipment needed for each area;
- space allocation.

List the activities and functions of each of the three main areas: kitchen, stores and service. The central interface between guest, stores and service areas is the waiters' servery. Around this point are grouped the facilities for serving food and drinks as well as for disposal of soiled utensils and waste. Floor service is orientated toward the routes leading to the guests' rooms. However, for maximum efficiency it is important that routes between the kitchen, servery and restaurant are as short as possible.

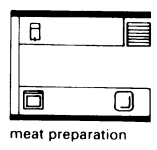
Hotel food preparation and beverage services fall broadly into three groups. (1) A choice of restaurants and bars, including banqueting areas and room service. This needs a main kitchen and stores area, with satellite kitchens near each restaurant and banqueting room, and service pantries on each guest-room floor. (2) One or two restaurants and function rooms on the same floor. Needs one main kitchen serving restaurants and function rooms direct. (3) Minimal food service in the hotel, but separate restaurant(s) available (for budget hotels and holiday villages). Central vending machines and/or individual cooking facilities may be provided.

Laundry services for a hotel may be provided by:

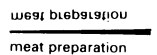
- linen rental or contracts with outside laundries;
- centralised services operated by the hotel group;
- hotel-operated laundry on the premises.



vegetable preparation



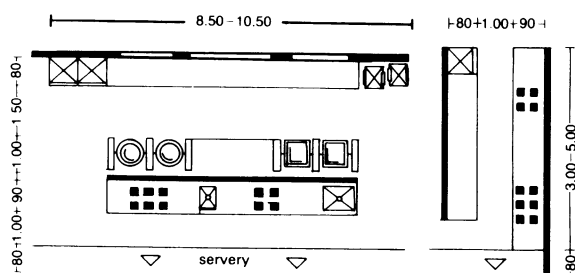
meat preparation



meat preparation

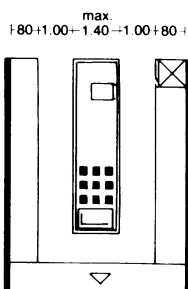
① Vegetable/meat preparation

② Kitchen for banquets

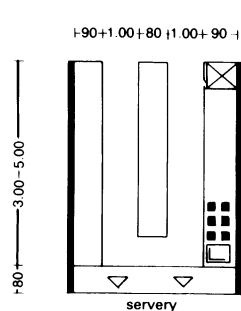


③ Hot meals kitchen (American line, 1-2 cooks)

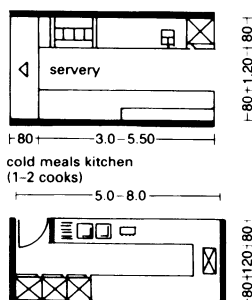
④ European line (1-2 cooks)



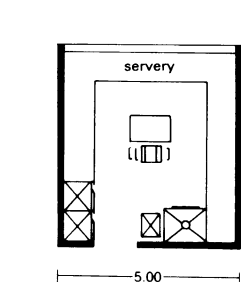
⑤ Hot meals kitchen (French block arrangement)



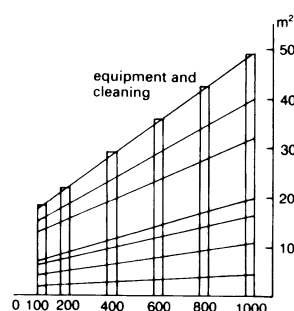
⑥ Mixed meals kitchen (1-4 cooks)



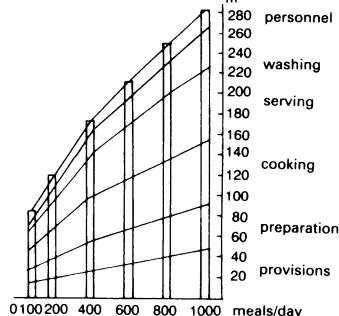
⑦ Patisserie (1-3 pastry cooks)



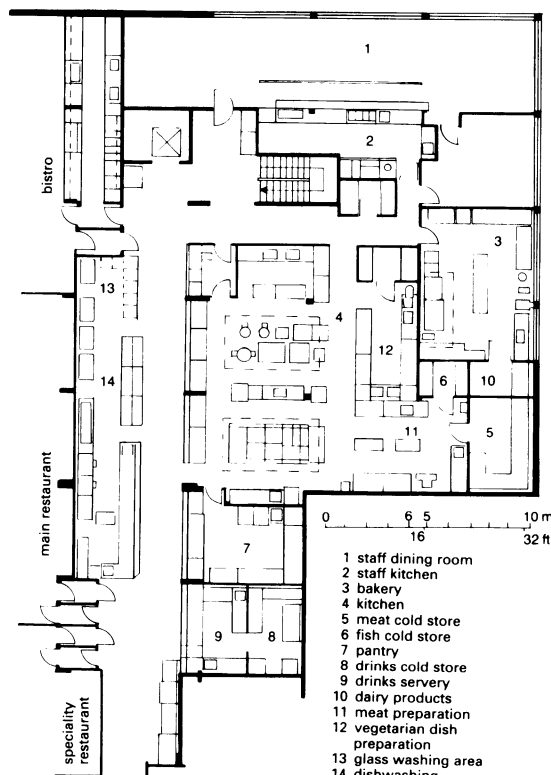
⑧ Drinks counter



⑨ Meals/day: base kitchen size in m<sup>2</sup>



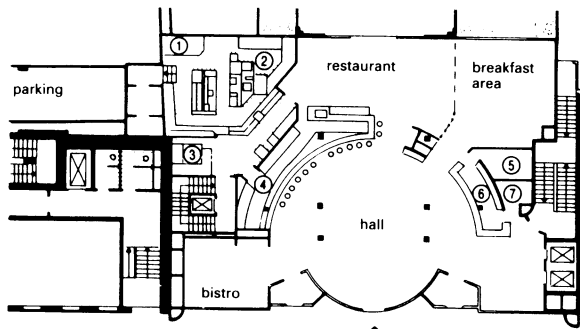
⑩ Meals/day: areas for different service types



⑪ Kitchen for 100 standard meals, 100 speciality meals, 120 bistro covers and 80 staff meals

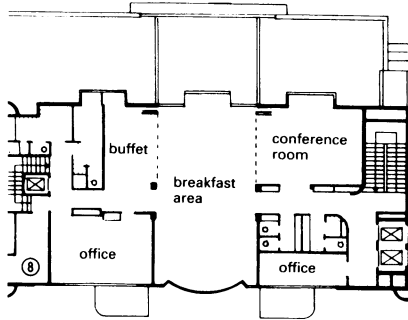
## HOTELS: EXAMPLES

Nowadays, modern hotels often provide extra facilities such as swimming pools, fitness rooms, saunas etc. → ⑤.

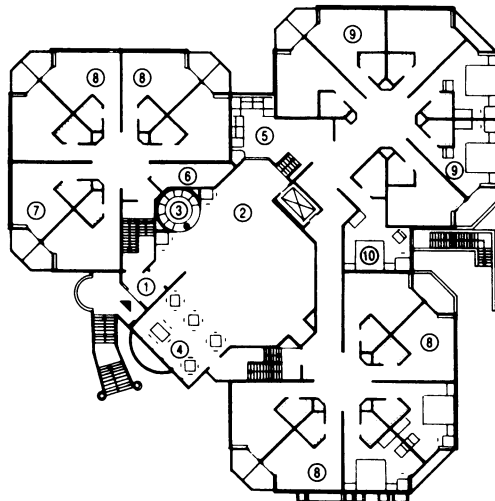


① Hotel Spitz in Urfahr, Austria → ② – ③

Architect: Perotti, Greifender and Partner

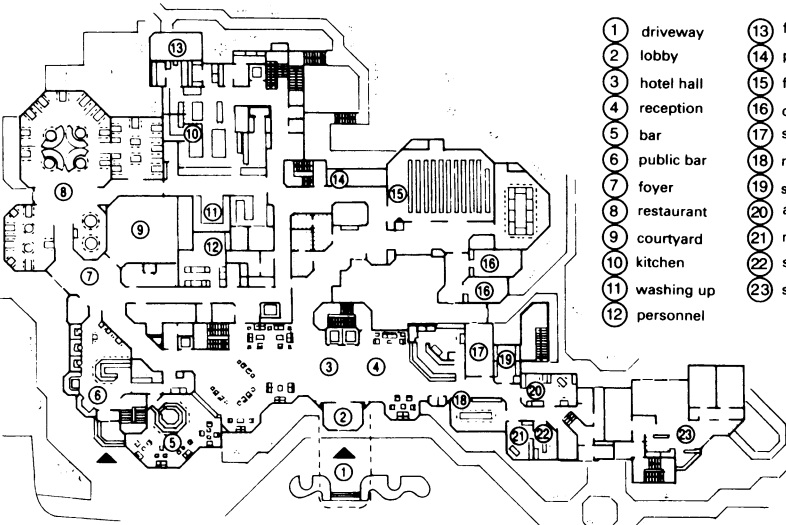


② First floor



④ Hotel Lottental in Bochum, Germany

Architect: F. Gehse

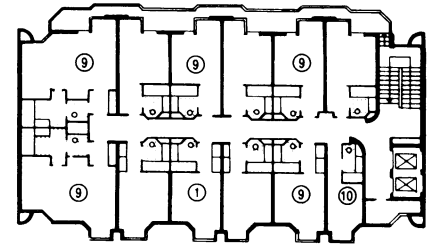


⑥ Parkhotel in Gütersloh, Germany

Architect: Fischer, Krüder, Rathe

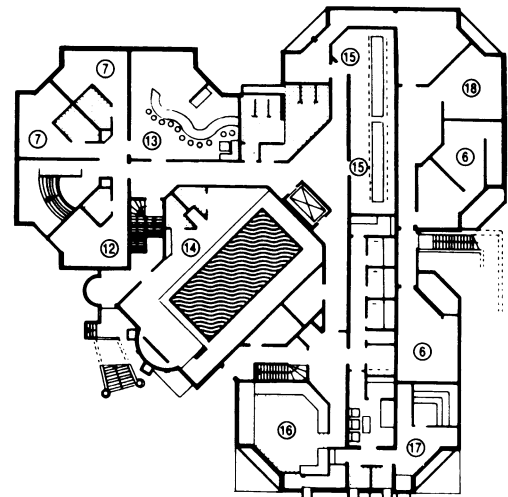
- ① office
- ② kitchen
- ③ dishwashing
- ④ snack bar
- ⑤ office
- ⑥ reception
- ⑦ luggage
- ⑧ lounge
- ⑨ double room
- ⑩ single room

→ ① – ③



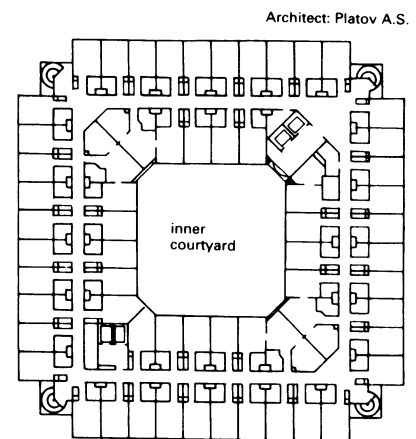
③ Floors two to four

- ① lobby
- ② hall
- ③ reception
- ④ restaurant
- ⑤ lounge
- ⑥ utilities
- ⑦ personnel
- ⑧ type 'A' room
- ⑨ type 'B' room
- ⑩ type 'C' room
- ⑪ conference room
- ⑫ office
- ⑬ bar
- ⑭ swimming pool
- ⑮ function suite
- ⑯ kitchen
- ⑰ sauna area
- ⑱ linen store



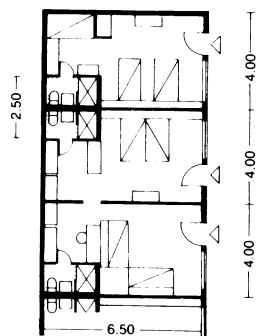
⑤ Ground floor of ④

- ① driveway
- ② lobby
- ③ hotel hall
- ④ reception
- ⑤ bar
- ⑥ public bar
- ⑦ foyer
- ⑧ restaurant
- ⑨ courtyard
- ⑩ kitchen
- ⑪ washing up
- ⑫ personnel
- ⑬ furniture
- ⑭ patio
- ⑮ functions
- ⑯ conferences
- ⑰ store
- ⑱ meetings
- ⑲ supervisor
- ⑳ accounts
- ㉑ manager
- ㉒ secretarial
- ㉓ staff flat



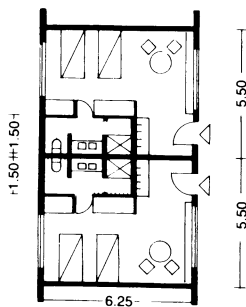
⑦ Standard floor in the Sheraton hotel, Oslofjord

Architect: Platov A.S.



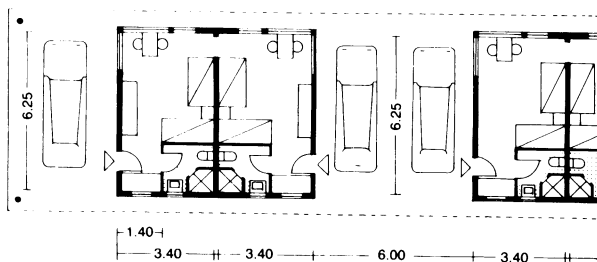
Architect: Polivnick

① Rooms open to one side only: furnishing options



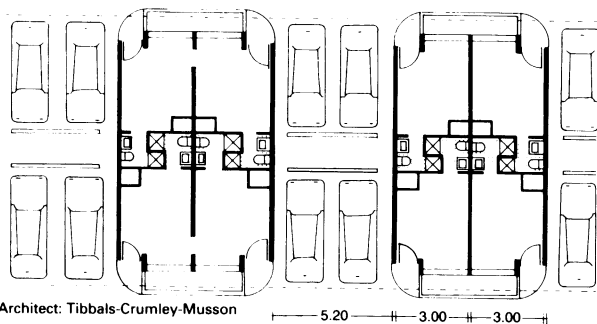
Architect: Roberto

② Rooms lit from two sides: supervision more difficult



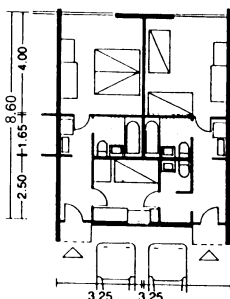
Architect: Durcan

③ Covered parking between units (3-6 units combined into one group)

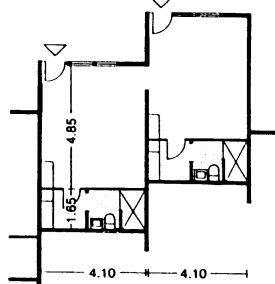


Architect: Tibbals-Crumley-Musson

④ Rooms with covered parking as in ③ but in blocks of four

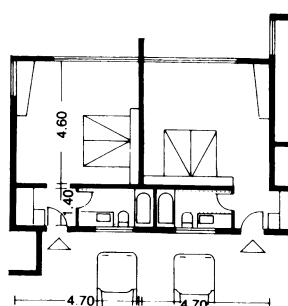


⑤ Two double rooms with lobby, for cold climates, with sleeping cubicles in single and double layout



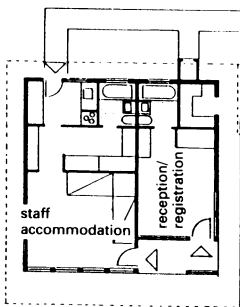
Architect: Thompson

⑦ Staggered arrangement: access from one side only



Architect: Hornbostel

⑥ Bathroom/WC between cars and bedrooms, for sound insulation



⑧ Staggered arrangement with reception and flat

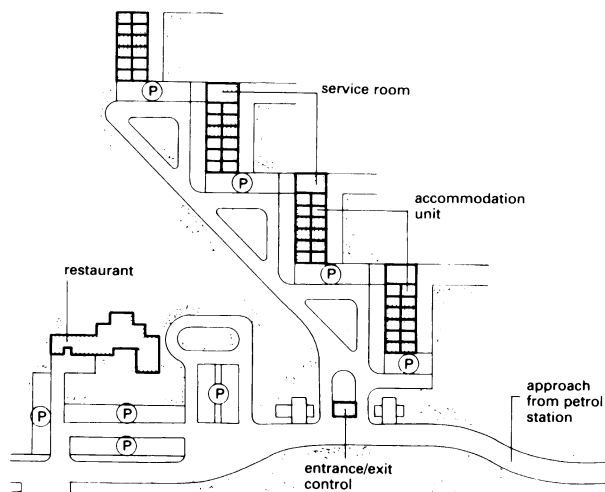
Motels are located on motorways and arterial roads near large towns, and tourist and holiday areas. Ideally, restaurants, petrol station(s) and car servicing should be available in the immediate locality. A motel should be positioned so that car headlights do not affect the residents.

The reception area should be close to the rooms, with short-term parking and one entry/exit point only.

Motels are generally one or two storeys and widely spaced out → ⑨, ⑩. Room sizes are between 4m × 4m and 5m × 5m, plus bathrooms and cooking facilities if provided → ⑧. Repetitive units may be arranged in pairs or clusters around a central service core, or in blocks with continuous or stepped facades, in courtyards or in other combinations to suit site contours, parking arrangements and boundaries. Parking is communal or immediately adjacent to the rooms. Motel units often provide convertible double/family rooms and sometimes self-catering kitchenettes. Access to rooms may be direct (ground floor) or via corridors or stairs.

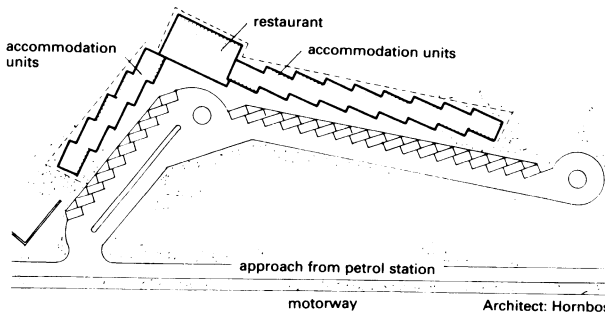
Since about 90% of guests stay only one night, wardrobes often have no doors so that the contents can easily be seen and are less likely to be forgotten.

A well-equipped common room for guests is often provided, as well as a central laundry. Playgrounds should be well away from the motel so as not to disturb those wishing to sleep.



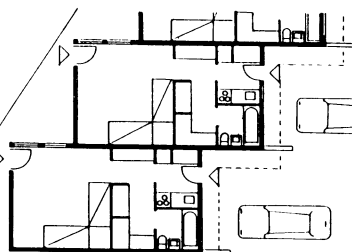
Architect: Fried

⑨ Motel layout with car-parks for each block and restaurant as separate business



Architect: Hornbostel

⑩ Layout plan for ⑥ with restaurant



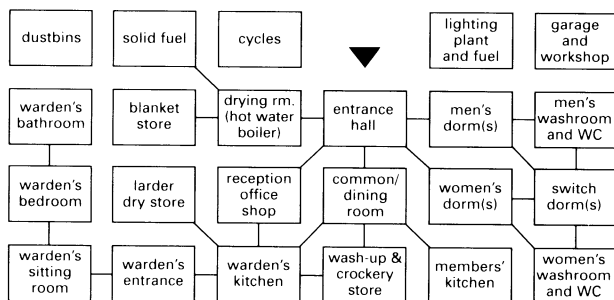
Architect: Williams

## YOUTH HOSTELS

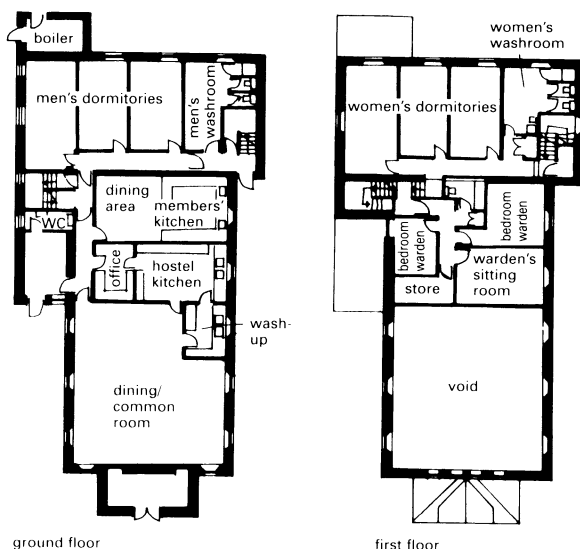
| room                  | area (m <sup>2</sup> ) | comments  |
|-----------------------|------------------------|---|
| entrance hall         | 14                     | with bench and shoe rack  |
| office/reception/shop | 11                     | hatch to entrance hall; close to warden's kitchen   |
| drying room           | 14                     | preferably accessed via entrance hall without passing through principal rooms; with racks or hangers; heated  |
| luggage room          | 14                     | if combined with drying room, laundry and WC, 14–18.5m <sup>2</sup> each  |
| common room           | 18.5–23                |   |
| dining room           | 46.5                   | or 0.7m <sup>2</sup> /person  |
| members' kitchen      | 16                     | direct access to dining room  |
| warden's kitchen      | 16–23                  | if possible with combined door and hatch for direct service to dining room; sink in kitchen preferred to separate scullery; access to dustbins each |
| larder                | 9.3                    |   |
| wash-up               | 11                     | with 1 or 2 sinks; table space for dirty crockery; easy access from dining room and to warden's kitchen (for crockery return) if possible           |
| warden's lounge       | 14                     | layout of these will usually depend on balance of convenience, privacy, aspect  |
| warden's bedroom 1    | 11                     |   |
| warden's bedroom 2    | 9.3                    |   |
| warden's bathroom     | 3.25                   |   |
| dormitories           | 158–167                | i.e. 3.16m <sup>2</sup> /person   |
| WCs                   |                        | for hostellers not less than 5; 1 for warden  |
| washing facilities    |                        | for each sex 1 washroom with bath (partitioned off) or shower, footbath and basins to DES standards   |
| airing cupboard       | 1                      | for warden's use  |
| blanket store         | 3.75                   | warmed  |
| cycle store           | 28                     | for about 30 cycles, preferably in racks  |

note: floor areas are intended as minimum desirable but in alterations much will depend on the existing building

### 1 YHA schedule of accommodation for 50 bed hostel



### 2 Schematic layout for single-storey youth hostel



### 3 Youth hostel converted from existing house by YHA

Youth hostels are often conversions of existing buildings partly because of a shortage of money and also because they are often located in aesthetically sensitive surroundings. The Youth Hostels Association (YHA) in the UK is therefore reluctant to lay down definitive plans for typical hostels. Nevertheless, there are specifications and requirements to be considered, particularly relating to fire safety, and the Department for Education and Employment (DFEE) in the UK also has requirements, governing space in particular, for the hostels to which it allocates funds.

#### Fire safety

The YHA is increasingly concerned with the application of more stringent standards of fire safety to both new and existing hostels. Principal sources of danger have been identified as interference with stoves or heaters, particularly in the drying room, electrical or gas faults and misuse of cooking stoves. Provision of means of escape in old buildings can be problematic and protected stairs are difficult to provide where there are timber floors. The distances to be covered on fire escape routes to reach safety are usually set out in fire regulations. Generally, 18m to a place of safety is considered the maximum in buildings with timbered floors; where floors are non-combustible this distance is 30m. In small hostels, akin to houses, the distances very rarely contravene the regulations. In larger hostels a minimum of two staircases are normally required in such positions that no person on any floor has to go further than the maximum travel distance to reach a point of safety.

#### Bed spaces

The following guidelines can be applied:

- 3.1m<sup>2</sup> dormitory floor area per person
- 1 WC per 10 bed spaces
- 1 hand basin per 6 bed spaces
- 1 bath/shower per 20 bed spaces

For the purposes of calculating floor areas DFEE disallows any floor space over which the ceiling is less than 2.10m.

The YHA has lower standards, depending on the grade of the hostel: simple or standard. For simple hostels (which need not have a resident warden) the minimum area per bed is 2.04m<sup>2</sup>; for standard hostels (which must have a resident warden living within the curtilage of the hostel at all times when open to members) dormitories should have a minimum of 2.32m<sup>2</sup> per bed space (2.78m<sup>2</sup> is recommended). As double bunks are normally used this means 6.31m<sup>2</sup> per bunk must be allowed if DFEE standards are to be met.

#### Dormitories

The YHA lays down that all hostels must have separate dormitories for men and women, with separate access, and the layout should allow them to be used by either sex as bookings demand. This means either sex must be able to reach the appropriate lavatory. The most compact solution is to have a block of interconnecting rooms and lock the appropriate doors to segregate the sexes. The YHA has been switching to the four-bed dormitory arrangement used in many Continental hostels, with sanitary facilities accessed via a common corridor, motel style. DFEE has been pressing for improved degrees of privacy for women's washing arrangements. This can be achieved by arranging wash basins in cubicles with curtained entrances.

#### Amenities

As hostels are generally closed during the day, a secure luggage room without access to the rest of the hostel must be provided so arriving members can store their gear. This could be part of the drying room, where hostellers remove their outer clothing before booking in at the reception desk.

To allow visitors to cook their own meals a members' kitchen should be provided in all hostels in addition to the kitchen for the warden, who will also cook for hostellers. These kitchens should be equipped with double cooking rings and grill units, fuelled by propane if no mains service is available. Lockers and washing-up space are also required.

#### Warden's quarters

Large hostels (40 beds or more) are often administered by married couples, possibly with children who will also need living quarters. The largest hostels can have assistant wardens, who could potentially need their own recreation rooms and a staff kitchen and dining room.

In large hostels, the chief warden's quarters should be in the form of self-contained houses or flats, with three bedrooms, a bathroom, kitchen, dining room and sitting room. In these circumstances hostellers' accommodation should never be above or below the warden's.

## YOUTH HOSTELS

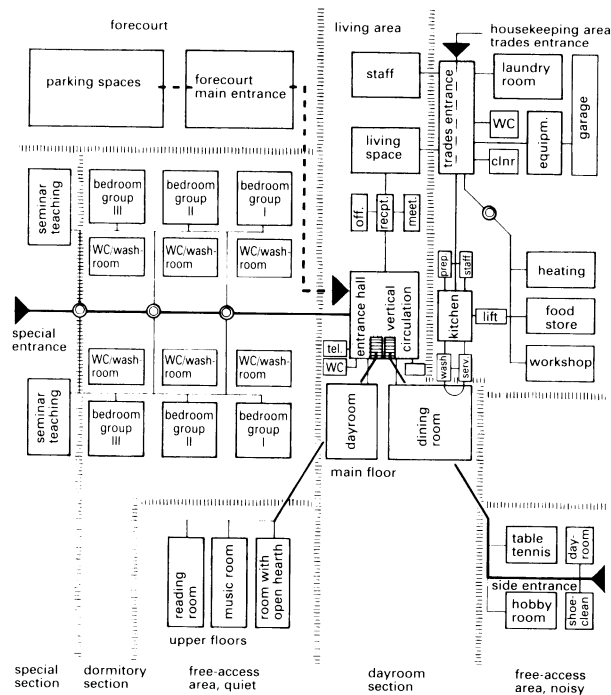
A distinction is made by the German Youth Hostel Association between youth hostels and youth hotels. The former are usually in the country and include children's hostels for children up to 13 and youth hostels for 13–17-year-olds, although there is usually an age overlap. Youth hotels are in towns and cities with tourist and cultural attractions, and there is an international trend towards a 3-star hotel standard with 120–160 beds.

Youth hostels and hotels have a variety of purposes: accommodation and meeting point for conferences, courses, seminars, educational courses for young people and adults, recreation, school trips, individual and family hiking.

The functional areas required include common rooms and dayrooms (one per 20–25 beds), several dining rooms (some of which can also be used for meetings and functions), multi-use circulation spaces with more secluded bays, cafeteria, lecture rooms, entrance hall/reception and office for youth hostel warden. The areas required are dependent on the number of bed spaces. Outside, there may be requirements for a camp site (with doors to sanitary facilities), sports and games pitches, parking for buses and cars, and a garden for the hostel warden.

There is a trend to reduce the numbers of beds in the hostel rooms to between four and six (eight maximum) and to have separate rooms for parents and children. In youth hotels there are usually two to four beds and single rooms are available for group leaders and visiting speakers.

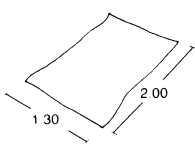
Showers and washrooms must be near to all rooms and separate WCs provided. All should be accessible to the disabled. A lockable luggage store and cleaning rooms are desirable on each floor.



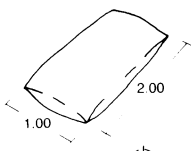
1 Schematic diagram of functions



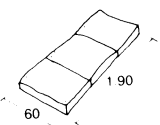
2 Rucksack



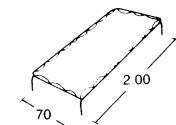
3 Blanket



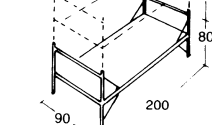
4 Palliasse



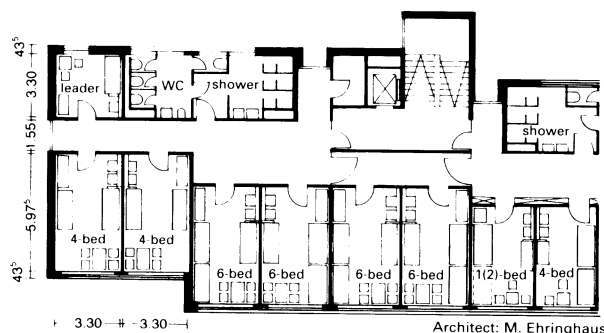
5 Spare mattress



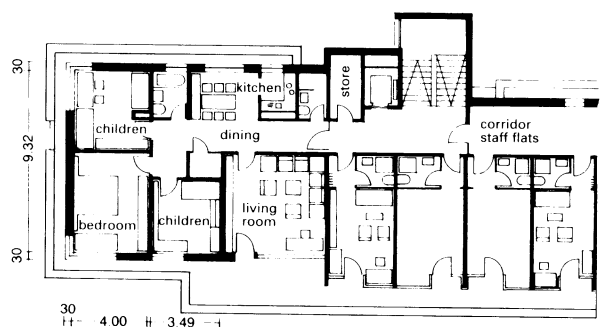
6 Camp bed



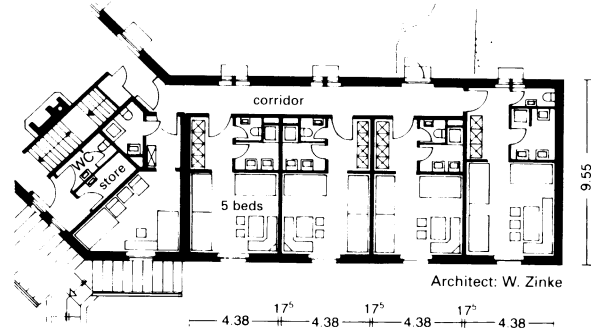
7 Beds



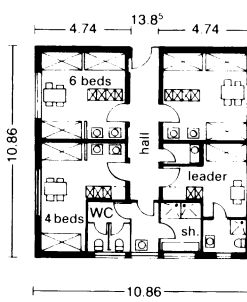
8 Youth hotel with youth hostel in Cologne-Riehl; 4- and 6-bed rooms



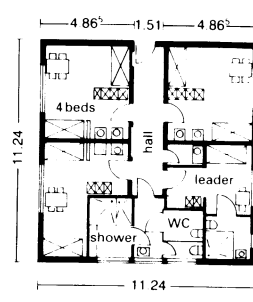
9 Warden's flat and accommodation for other staff → 8



10 Habischried rural school hostel; 5-bed rooms

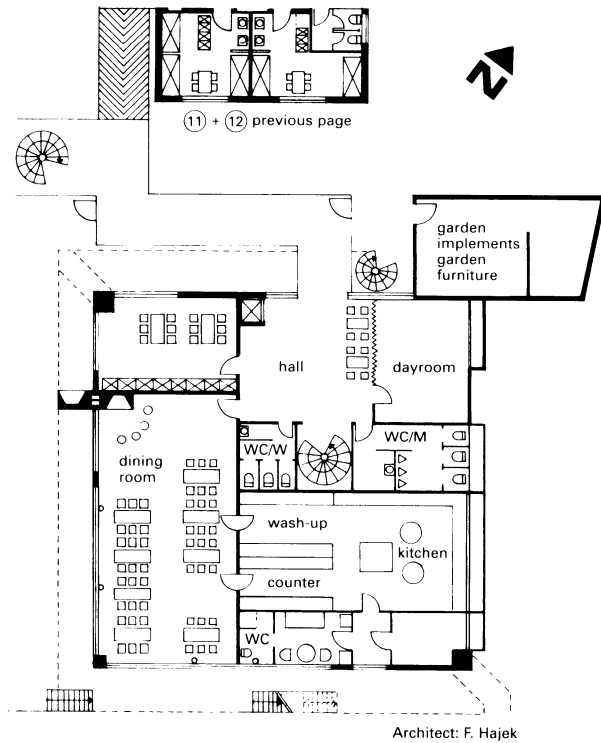


11 Uslar youth hostel; pavilion with 18 beds



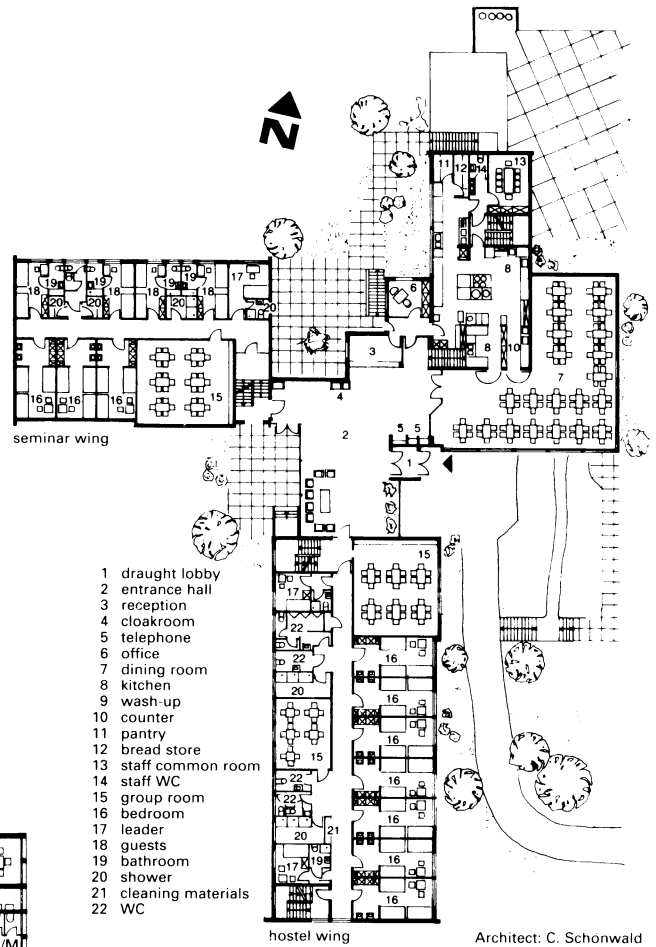
12 Pavilion with 14 beds





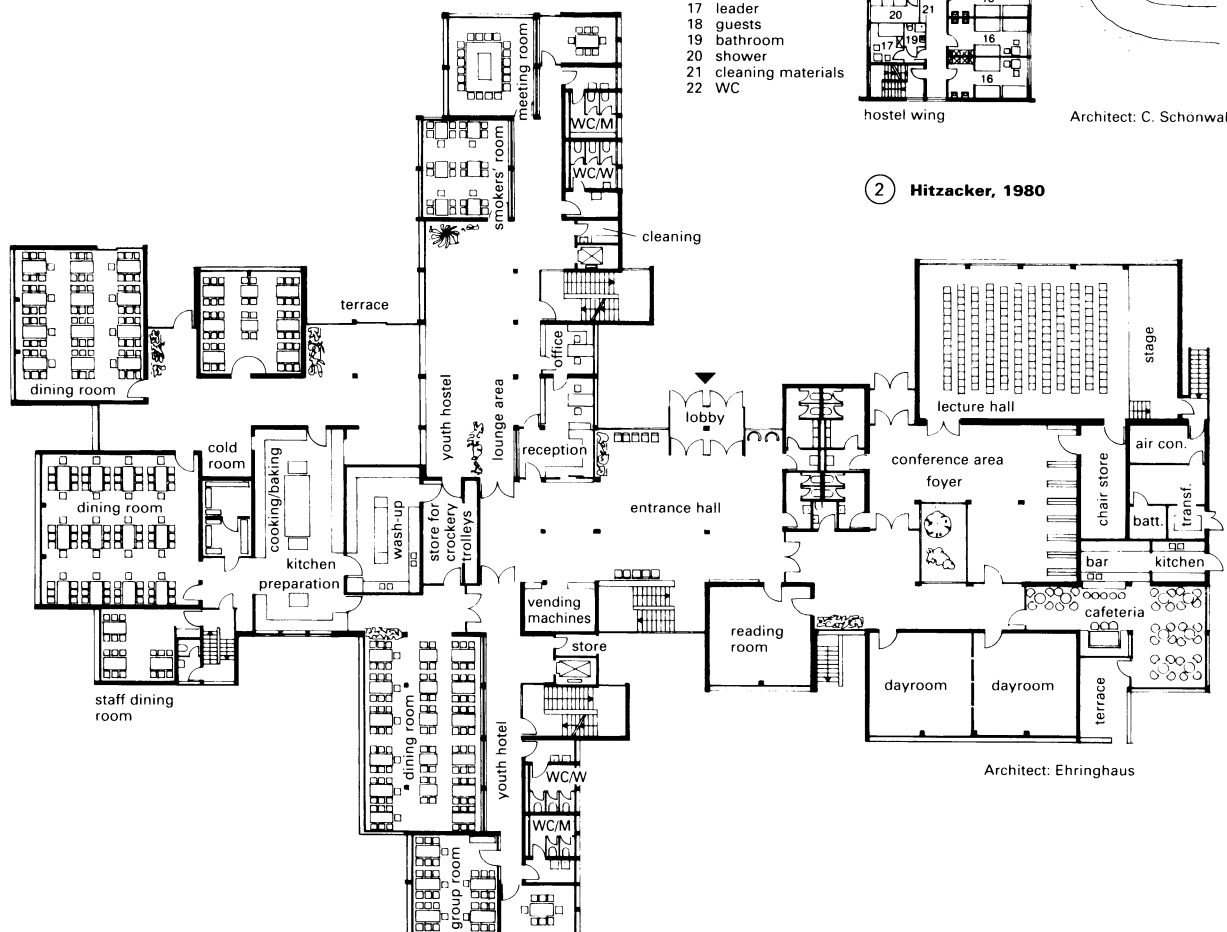
1 Ground floor of Ulsar Youth Hostel

Architect: F. Hajek



2 Hitzacker, 1980

Architect: C. Schonwald



3 Youth hostel and youth hotel in Cologne-Riehl

Architect: Ehringhaus