6. **Housing types and paddocks**

The best way of housing horses depends on climate conditions, and on the planned use of the horses. Breeding farms do not have the same requirements as small stables or professional training centres. Horses tied up in stalls or individually housed in loose boxes are easy to control; however, they have substantially restricted possibilities of social contacts and movement. The types of housing range from simple open-front buildings to large professional stables (Fig. 6.1). Space requirements for horses are dictated by the height at withers: the taller the horse the larger space it requires. In practice, space allocation also depends on the way of stabling: horses are either stabled in tie-stalls, loose boxes or they are housed in groups.

![Figure 6.1 Advantages and disadvantages of different housing types for horses. (Ventorp and Michanek, 1995).](image)

### 6.1 Housing dimensions for different kinds of horses

Stables and fittings for horses should be designed in accordance with the size of horses and ponies. Therefore space required by horses while standing or lying down should always be considered. It is also very important to consider space required for the horse's natural position while standing and feeding. Horse behaviour while lying down and raising has been described in Chapter 2.3. Space requirements for horses are determined by the height at withers as well as the length and width of the horse body, as shown in Figures 6.2 and 6.3.
In practice, space allocation also depends on the way of stabling: horses are either stabled in tie-stalls, loose boxes or they are housed in groups.

### 6.2 Single loose boxes

One way of stabling is to provide single loose boxes within the stable. Each horse has its own box in the building. Horses can also be placed outdoors, so that each box opens directly outwards and possibly to an external service pass, which provides the same climate as it is outdoors. In most cases the roof of an outdoor loose box is constructed with an overhang in order to protect the horse and to cover the passageway. Exercise paddocks can be directly connected to each individual box, both for single loose boxes in stables and for outdoor single loose boxes.
Figure 6.4 Stables with outdoor loose boxes. (Drawing: Danish Agricultural Advisory Service).

Figure 6.5 Single loose boxes. (Drawing: Danish Agricultural Advisory Service).
An advantage of single loose boxes is that horses can be housed there without restraints. It is possible to construct and place single loose boxes so that horses can watch the surroundings and they can also touch neighbouring horses. Horses stabled this way can also see one another and this way they have company. If the loose box provides direct access to an individual exercise paddock, most of the horse’s natural needs are satisfied. Stabling horses under one roof makes work more convenient, as everything can be easily reached. The staff and horses are protected from adverse weather conditions. It can be the economical way of stabling, especially if the existing buildings can still be used. A disadvantage of stabling horses in the same building is a possibility of easy spread of infectious diseases as well as dust raising from moved straw bedding. The loose boxes are less work consuming than the tie stalls, but they give the horse more freedom.

**Recommended dimensions (box area):**

Based on a horse weighing 550 kg:

- **General:** \((2 \times \text{height at withers})^2\)
- **Foaling mares and stallions:** \((2.5 \times \text{height at withers})^2\)

*The shortest side should be at least 1.5 x height at withers.*

### 6.3 Tie-stalls

Tie-stalls make it easy to monitor and control horses, but they substantially restrict the opportunity of movement and social contact.

Horses getting regular daily exercise suffer no ill effects from being housed in tie-stalls as opposed to loose boxes. However, if they are not exercised enough every day, foot and leg problems grow more common and the horses are more prone to colic. It is easier to fulfil the requirements for health and fitness in a well-designed loose box. In terms of space, tie-stalls are more economical than loose boxes and they require less bedding.

**Recommended measurements:**

Based on a horse weighing 550 kg:

- **Tie-stalls should be at least 1.0 – 1.1 x height at withers wide and 2 x height at withers long (approximately 3.1 metres).**
- **Horses stabled in tie-stalls should always have plenty of daily exercise.**
- **Horses stabled individually should always have access to social contacts with other horses on the paddock.**
6.4 Open front stables

They are usually constructed in the form of three-wall shelters. Horses feel well in traditional barns and in open-front stables with free access to paddocks and pastures; however, the functionality of such stables in practice depends on climate, landscape, soil conditions, etc. These stables are inexpensive to build and maintain and they alleviate major problems regarding horse stabling, such as labour, ventilation and fire. One of the disadvantages is that it is difficult to control horses, especially in terms of exercise and diet. Water supply, particularly in cold weather conditions, can create another problem. Remember that horses that are not kept in buildings must have access to shelter and shade.

**Recommended measurements:**

Based on a horse weighing 550 kg:
- A shed used as shelter should have at least two doors if the front part can not be opened and its minimum area should be 2 m² per 100 kg of bodyweight.

6.5 Loose housing in groups

This form of housing has all the advantages of single loose boxes plus better possibilities for more social contacts and movement. It is the form of horse housing that gives the best possibilities for meeting the natural needs of the animals, especially if direct access to paddocks or pastures is provided. Its additional benefit often entails lower costs, smaller amounts of labour and smaller quantities of bedding.

Loose housing in groups is particularly suitable for young horses, as it provides a possibility of adequate exercise and social contact needed for the proper development of young horses. The biggest disadvantage of loose housing in groups is that it can be difficult to control exercise and diet individually and therefore horses are more prone to injury and it is easier to overlook their illnesses. Moreover, a group of horses kept in loose stable should rather be constant, as it is difficult to introduce new horses into the herd.

It is important that all horses can be tied up for feeding and grooming. Facilities for loose housing in groups should be constructed so that the low ranking animals can escape aggression from higher ranking ones.