

Choosing the right door

For as long as funding institutions, designers and builders have been supplying a western style of housing to Indigenous communities, doors and door hardware have proven to be a continual cost to both tenants and housing organisations. Doors are the gateways between the outside and the inside, between living rooms and bedrooms, between public space and private space.

The purpose of this BUSHTECH is to give you a better idea of what to look for when purchasing and installing a new door. This will be done by examining practical and safety aspects, and describing the components that make up a door.

Doors and door failure

The purpose of doors is to provide access between adjoining spaces whilst maintaining both security and weather protection. They can also be used to control dogs and other animals and contribute to dust control in the house. A report entitled Living Spaces¹ lists the most common reasons for door breakage as:

- forced entry due to lost keys
- forced entry for illegal purposes
- violent behaviour.

A national program – ‘Fixing Houses for Better Health’² – conducted by HEALTHHABITAT showed that of 787 houses surveyed, 235 (or 30%) of houses had all of their doors in working order. On average, houses have six internal doors and three external doors. The survey also found that an average of six doors per house were in working order. ‘Fixing Houses for Better Health’ is being conducted in 22 communities across four States and the Northern Territory.

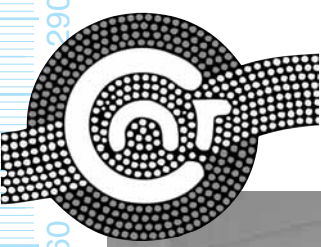
Safety and security

The most basic reason for having a door on your house is security. With a solid door and secure locking system, the right door can provide the best protection for family members. All doors and



locks can be broken. However, the design and quality of materials can greatly increase the amount of time required to force entry. The down side of door locks is that every locking system needs a ‘key’. This ‘key’ can be what we know as a key (a small metallic tool) but it also can be a number/combination lock or some form of electronic lock. In remote communities the most cost effective is the traditional lock and key system. However, this system has its problems. A major percentage of damage to doors is caused by residents re-gaining entry after having lost their keys.³

However secure you make them, it must be remembered that doors are the primary exit for escape during a fire. This is a requirement of the Building Code of Australia. It is important that doors swing freely and cannot be locked from the outside unless they can be easily unlocked from the inside. There is evidence that some communities are putting padlocks on the inside of bedroom doors for reasons of personal safety. This places the person inside the room at a higher risk during a fire, as they cannot be rescued if they become unconscious. In other communities, padlocks have been placed on the outside of doors –



Choosing the right door (continued)

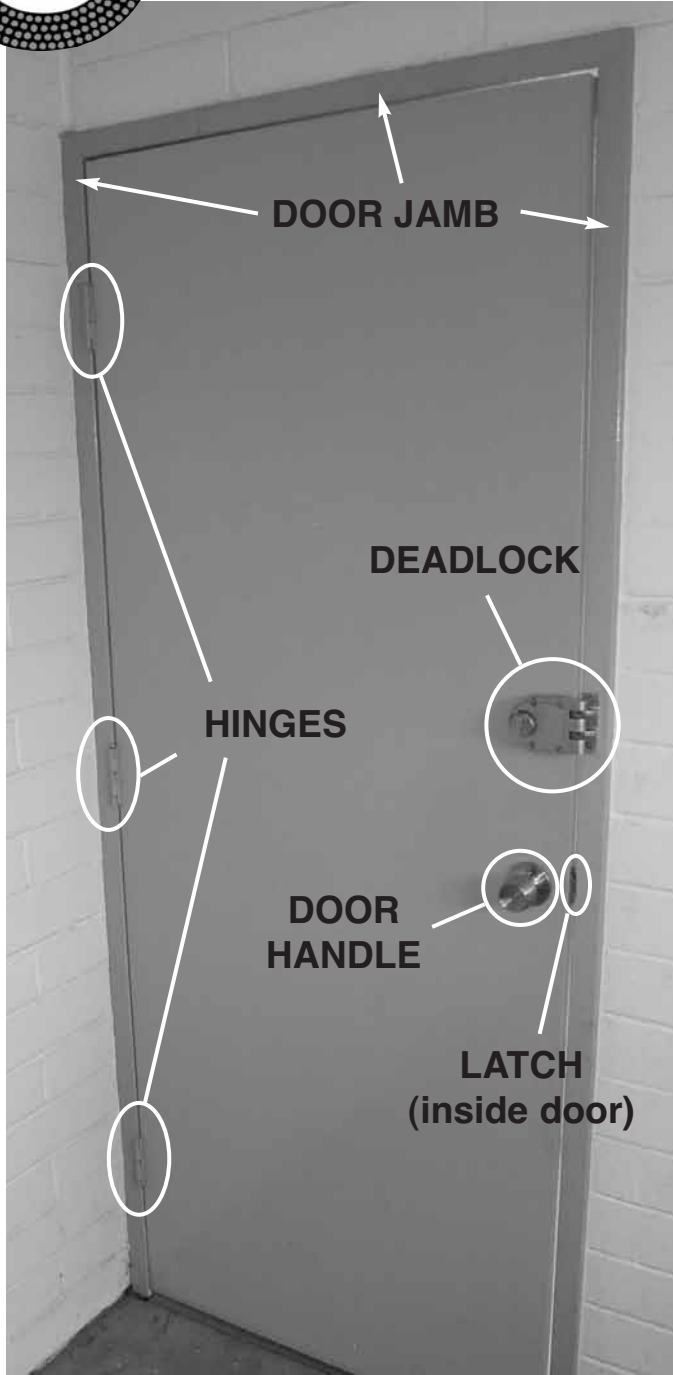


FIGURE 1.

probably to secure belongings inside. The National Indigenous Housing Guide⁴ recommends against this as people can be locked inside the room and would be unable to free themselves in the event of a fire. It is recommended that padbolts and padlocks never be fitted to any door due to the increased personal risk during a fire.

Components of a door

The door that we walk through is made up of a number of components. These components make up either the door or the door hardware. The 'door' includes the door frame (door jamb), hinges and the door panel. Your door jamb should be steel. The door hardware includes the door handle, latch and door lock (see figure 1).

Door panels come in a variety of styles but can be summarised as being either a solid core or hollow core door. A solid core door has timber throughout the entire door whilst a hollow core door has a cardboard centre surrounded by a solid timber frame and



LEVER HANDLE WITH LOCK.



KNOB HANDLE AND DEADLOCK.

two thin timber sheets. Hollow core doors have the advantage of being lighter and cheaper than solid core doors. All external doors (doors that lead to the outside of the house) need to be solid core panels. Solid core panels also are recommended for internal doors (doors that lead from one internal room to another). Regardless of whether the door is an internal or external door, it is recommended that you use three hinges per door.

There are a many different types of handles but they generally fall into one of two categories – knob handles and lever handles (see diagram). Each type has its advantages and disadvantages. The knob type is the most commonly used and is suitable for use by most people. However, older people or those with arthritis can find knob handles difficult to operate. Lever handles are easier to use as you don't need to grip the handle to make it turn. This mechanical advantage is also however its main disadvantage. The lever handle gives possible intruders an advantage in trying to break the lock. A solution under trial on a house for the old people at one Central Australian community is to use a knob handle on the outside of the door and a lever handle on the inside.

The most common form of lock system is the key and barrel. The barrel is the part of the lock that your key goes into. The turning of the barrel makes the latch come back into the door, allowing the door to open. The key system is popular because it is cheap, most people know how they work and one key can be made to fit many different locks in the same house. Keypad systems eliminate the chance of losing your keys but the tenants are required to remember their access code. Also, if a code needs to be changed, the process can be confusing to a lot of people. Management of the codes would be near impossible for a housing organisation (especially if the tenants are able to change the codes themselves), whereas spare keys can be kept with the Housing Officer and made available if a tenant loses theirs.

Keypad systems are available in robust models but questions remain about the durability of some systems in the environments in which Indigenous houses are found. External doors can be exposed to extremes of weather – from dust storms in Central Australia to monsoonal rains in Northern Australia. This, combined with the added expense of an electronic system, makes these systems impractical in remote communities.

References

- 1 The Architect's Studio (2000) Living Spaces – an evaluation of housing in remote Aboriginal Communities, ATSIC, Northern Territory.
- 2 Pholeros, Paul, Explanation of survey data, HEALTHABITAT, Newport Beach, NSW.
- 3 The Architect's Studio, Living Spaces.
- 4 Commonwealth Dept. Family and Community Services (1999) The National Indigenous Housing Guide, Canberra.

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