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Purpose

To ensure that each residential care building to which it applies provides an adequate level of fire safety for residents and provides for the safe evacuation of those residents in the event of a fire threatening the building.

Commencement

This mandatory part (MP) 2.3 of the Queensland Development Code (QDC) commences on 1 September 2011.

Application

This mandatory part applies to a residential care building referred to in section 231AA of the Act.

Note:

This mandatory part applies in addition to statutory requirements that applied at the time the building was constructed or at the time of the relevant building development approval.

Referral Agency

Under Schedule 7 of the Sustainable Planning Regulation 2009, the Queensland Fire and Rescue Service is an advice agency for:

(a) special fire services; and
(b) alternative solutions for the relevant performance criteria set out in this mandatory part and the performance requirements of the Building Code of Australia; and
(c) fire and evacuation plans assessed against schedule 2 of this mandatory part.

Compliance with the QDC

Under section 14 of the Act, compliance with this part can be achieved only by:

(a) complying with the relevant acceptable solution for the performance criterion; or
(b) formulating an alternative solution that complies with the performance criteria or is shown to be at least equivalent to the relevant criteria; or
(c) a combination of (a) and (b).

Associated Requirements

- Building Act 1975
- Building Regulation 2006
- Sustainable Planning Act 2009
- Sustainable Planning Regulation 2009
- Fire and Rescue Service Act 1990
- Building Fire Safety Regulation 2008
- Building Code of Australia (BCA)
Referenced Standards

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS 1288, as amended by Amendment No. 1</td>
<td>2006</td>
<td>Glass in Buildings – Selection and installation.</td>
</tr>
<tr>
<td>AS 1670.4</td>
<td>2004</td>
<td>Fire detection, warning, control and intercom systems – System design, installation and commissioning – Part 4: Sound systems and intercom systems for emergency purposes.</td>
</tr>
<tr>
<td>AS 2118.1, as amended by Amendment No. 1</td>
<td>1999</td>
<td>Automatic fire sprinkler systems – Part 1: General requirements.</td>
</tr>
<tr>
<td>AS 2293.1</td>
<td>1998</td>
<td>Emergency escape lighting and exit signs for buildings – Part 1: System design, installation and operation.</td>
</tr>
<tr>
<td>AS 2293.1</td>
<td>2005</td>
<td>Emergency escape lighting and exit signs for buildings – Part 1: System design, installation and operation.</td>
</tr>
<tr>
<td>AS 2220.2</td>
<td>1989</td>
<td>Emergency warning and intercommunication systems in buildings – Part 2: System design, installation and commissioning.</td>
</tr>
<tr>
<td>AS 2419.1, as amended by Amendment No. 1</td>
<td>2005</td>
<td>Fire Hydrant installations – Part 1. System design, installation and commissioning.</td>
</tr>
<tr>
<td>AS 2441</td>
<td>2005</td>
<td>Installation of fire hose reels.</td>
</tr>
<tr>
<td>AS 2444</td>
<td>2001</td>
<td>Portable fire extinguishers and fire blankets – Selection and location.</td>
</tr>
<tr>
<td>AS 3786, as amended by Amendments No. 1 - 4</td>
<td>1993</td>
<td>Smoke alarms.</td>
</tr>
</tbody>
</table>
Definitions

Note: *Italicised* words within the body of the text, other than legislation titles, are defined below.

**acceptable solution** means solutions which are deemed to satisfy the *performance criteria*.

**Act** means the *Building Act 1975*.

**aged care building** has the meaning given by the *BCA*.

**alternative solution** has the meaning given by the *BCA*.

**automatic** has the meaning given by the *BCA*.


**bedroom** means a room occupied by a maximum of four persons, used for sleeping purposes excluding corridors, passageways and *evacuation routes*.

**building** has the meaning given by the *Act*.

**class** for a *building* means the classification of the *building*, as determined by the *BCA*, A3.

**commencement day** means the day when this mandatory part commences.

**building occupant warning system** means a system that complies with AS 1670.4 or AS 2220.2.

**evacuation impairment** means an impairment or a combination of impairments which reduces the capacity of a person to evacuate in an emergency to the extent that the person requires *physical assistance* to safely evacuate the *building* in an emergency and includes any impairment that restricts mobility or the ability to understand or independently respond to an emergency evacuation as indicated by an assessment using the form in Schedule 1 of this part.

**evacuation route** has the meaning given by the *BCA*.

**exit** has the meaning given by the *BCA*.

**fire and evacuation plan** means the *fire and evacuation plan* required for the *building* by s104E of the *Fire and Rescue Service Act 1990* with the elements listed in Schedule 2.

**fire brigade** has the meaning given by the *BCA*.

**fire-resistance level (FRL)** has the meaning given by the *BCA*.

**fire safety system** has the meaning given by the *BCA*.

**floor area** has the meaning given by the *BCA*.

**high risk fire area**, for a *residential care building*, means an area connected to, or adjoining, an *evacuation route* for the *building* that contains materials that:

(a) are highly flammable; or
(b) have a high fire load; or
(c) have an increased risk associated with ignition, including materials used in a kitchen, garage, internal gas hot water storage unit, and laundry or storage facility.
Note:

1. Examples of materials with an increased risk associated with ignition include cleaning products, records, stationery or linen.
2. Installations mentioned in BCA Part D2.7 need to comply with that part.

**minimum support ratio** means the ratio obtained by comparing the lowest number of on-site responsible persons to the number of persons with an evacuation impairment accommodated in a smoke compartment (refer Schedule 3).

**on-site** means:

(a) For a residential care building with sprinklers in accordance with A1(1)(a)
   
   (i) for a responsible person employed to work in a residential care building—the person is located no more than 60 metres travel distance from an entrance of the part of the building used to provide residential care; or
   
   (ii) for a responsible person who is a resident—the person is located and immediately available in the part of the building used to provided residential care.

(b) For an unsprinklered residential care building
   
   (i) for a responsible person employed to work in a residential care building—the person is working in an area the furthest point of which is located no more than 60 metres travel distance from an entrance of the smoke compartment in the building where residential care is provided (the relevant part); or
   
   (ii) for a responsible person who is a resident of the relevant part—the person is present in the relevant part.

**performance criteria** means the outcome that must be achieved for an element of the building.

**physical assistance** means with respect to assisting a person to evacuate the building in an emergency includes leading or monitoring a person, other than a child without an evacuation impairment, who would otherwise be unable to reliably and safely evacuate the building.

**public corridor** has the meaning given by the BCA.

**residential care building** has the meaning given by the Act.

**responsible person** for a residential care building means a person without an evacuation impairment nominated by the owner, manager or service provider of a residential care building to provide evacuation support to the building’s occupants and who is:

(a) on-site, alert and able to hear or otherwise immediately respond to an activation of the building’s fire alarm at all times; and

(b) if asleep and on duty in the part of the building used to provide residential care, able to hear and immediately respond to an evacuation of the building’s fire alarm at all times.

**rise in storeys** has the meaning given by the BCA.

**safe place** has the meaning given in the BCA.

**smoke alarm system** means a combination of smoke alarms complying with AS 3786 that are hard wired to a power supply and have battery back-up.

**smoke compartment** means a space within a residential care building where people usually sleep for the night, that is separated from the remainder of the building by smoke-proof walls in accordance with BCA Specification C2.5 clause 3 incorporating smoke doors in accordance with BCA Specification C3.4.
**smoke detection system** means a system that complies with AS 1670.1.

**sprinkler system** means a fire suppression system, with fast response sprinkler heads designed for life safety applications, that complies with:

(a) if the system is a combined sprinkler and fire hydrant system—AS 2118.6; or

(b) otherwise:

(i) AS 2118.1; or

(ii) AS 2118.4.

**storey** has the meaning given by the **BCA**.

**support** has the meaning for the purposes of **minimum support ratio**, immediate and effective **on-site evacuation assistance**, provided by a **responsible person** to a person with an **evacuation impairment**,

**travel distance** means the distance a **responsible person** can walk from the area they are working or occupying to the **smoke compartment (unsprinklered building)** or entrance of that part of the **building** used to provide residential care (sprinklered building), without using mechanical assistance (e.g. lift).

**type A construction** means the type of construction referred to as **type A construction** in the **BCA**, part C1.

**type B construction** means the type of construction referred to as **type B construction** in the **BCA**, part C1.

**type C construction** means the type of construction referred to as **type C construction** in the **BCA**, part C1, or any **building** that does not meet the requirements for **type A construction** or **type B construction**.

**unsprinklered residential care building** means a **building** without an **automatic sprinkler system** that complies with A1(1)(a) of this part.
PERFORMANCE CRITERIA

Fire suppression, smoke compartmentation and evacuation support

P1 A residential care building has adequate fire suppression provided to control the development and spread of fire, or measures to prevent the spread of smoke from fire to maintain tenable conditions in evacuation routes during a fire, appropriate to:

(a) the size and height of the building; and

(b) high risk fire areas in the building; and

(c) the number, mobility and any other characteristics of the occupants that may affect their ability to evacuate the building in an emergency; and

(d) the number of responsible persons available to assist with occupant evacuation.

ACCEPTABLE SOLUTIONS

A1 (1) In a residential care building that is a type A construction:

(a) a management procedure is included in the building’s fire and evacuation plan indicating that the minimum support ratio for the building is 1:10, and an automatic sprinkler system;

(i) is installed in the building in accordance with:

(A) if the building is not more than 4 storeys or the floor area protected is not more than 5000m²—AS 2118.4; or

(B) otherwise—AS 2118.1 or AS 2118.6; and

(ii) is provided with a monitored main stop valve in accordance with AS 2118.1 that is permanently connected with a direct data link to a fire brigade, or fire dispatch centre, except if the building:

(A) has a floor area of 300m² or less; and

(B) has less than 13 residents; and

(C) is not an aged care building; or

(b) a management procedure is included in the building’s fire and evacuation plan (refer Schedule 3) indicating:

(A) that the minimum support ratio for the building is 1:5; and

(B) who is responsible to
### PERFORMANCE CRITERIA

- assess and record this resident information; and
- (C) who is responsible to ensure this ratio is maintained; or

### ACCEPTABLE SOLUTIONS

Note:

Owner/operator to identify the appropriate person (excluding residents) to complete the ‘Evacuation impairment assessment form’

(c) a management procedure is included in the building’s fire and evacuation plan (refer Schedule 3) utilising the bedroom as a smoke compartment when:

(ii) the doors to a bedroom for:

(A) a Class 3 building comply with BCA C3.11(d)(i) (except for the self closing provision); and

(B) a Class 9 building comply with BCA Specification C3.4, clause 3; and

(iii) internal walls between and bounding a bedroom for:

(A) a building which is single storey, the walls are constructed of building elements which achieve a minimum FRL of --/30/30 and comply with BCA Specification C1.1, clause 3.1(c); and

(B) a building with a rise in storeys of 2 or more, the walls are constructed of building elements which achieve a minimum FRL of --/60/60 and comply with BCA Specification C1.1, clause 3.1(c); and
PERFORMANCE CRITERIA

ACCEPTABLE SOLUTIONS

(iii) the management procedure indicates that;

(A) each door to a bedroom in the building is closed (manually or automatically) so that the bedroom forms a smoke compartment upon the activation of the smoke detection system; and

(B) each bedroom door is closed at 7.00pm and kept continuously closed, when the door is not in use, from 7.00pm to 7.00am; and

(iv) responsible persons are to be instructed on activities (iii) (A) and (B) upon commencing employment and otherwise yearly; and

(v) the personnel responsible for activities (iii) and (iv).

(2) In a residential care building that is type B or C construction and has a rise in storey of one storey, fire safety measures are implemented in accordance with A1(1)(a) or (b).

(3) In a residential care building that is type B or C construction and has a rise in storey of 2 or more storeys, fire safety measures are implemented in accordance with A1(1)(a).

Early warning system

P2 A residential care building’s occupants are provided with appropriate automatic warning on the detection of smoke so that they may evacuate in the event of a fire to a safe place, having regard to:

A2 In a residential care building:

(a) a smoke alarm system is installed and

(i) an alarm is located in every room, public corridor and other internal public space; and
## Performance Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) the height of the building; and</td>
</tr>
<tr>
<td>(b) the type of construction of the building; and</td>
</tr>
<tr>
<td>(c) the number, mobility and other characteristics of the building’s occupants; and</td>
</tr>
<tr>
<td>(d) the power supply available to the building.</td>
</tr>
</tbody>
</table>

## Acceptable Solutions

<table>
<thead>
<tr>
<th>Solution</th>
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<tbody>
<tr>
<td>(ii) the system is located in accordance with the installation requirements for smoke detectors in AS 1670.1 (except for the provision of clause 3.26F); and</td>
</tr>
<tr>
<td>(iii) all of the alarms in the system are interconnected; and</td>
</tr>
<tr>
<td>(iv) in an unsprinklered residential care building;</td>
</tr>
</tbody>
</table>

(A) a system of manual call points is installed in nurses’ stations or other similar secure areas so that no point on the floor is more than 30 metres from a manual call point; and

(B) the system is monitored in accordance with BCA specification E2.2a, clause 7, where a fire brigade with a structural fire fighting capacity is available to attend a building fire within 30 minutes of being notified; or

(b) a smoke detection and a building occupant warning system is installed; and

(c) In an unsprinklered residential building the smoke detection system is monitored in accordance with BCA specification E2.2a, clause 7, where a fire brigade with a structural fire fighting capacity is available to attend a building fire within 30 minutes of being notified.

### Emergency Escape

An unsprinklered residential care building, has exits provided to facilitate the safe evacuation of the occupants from the building with their number, location and dimensions being appropriate to:

- [P3](#) In an unsprinklered residential care building built before 1 January 1992 and unless it is a building of one storey, whose only access to the bedroom opens directly to an external access way allowing individual or multiple evacuation routes for each storey there are
PERFORMANCE CRITERIA

(e) the number, mobility and other characteristics of the occupants; and

(f) the function or use of the building; and

(g) the height of the building; and

(h) whether the exit allows egress from above or below ground level.

ACCEPTABLE SOLUTIONS

two exits:

(a) that are:

(i) distributed;

(A) as uniformly as practicable within or around the storey served; and

(B) at least 9m apart; and

(C) not more than 45m apart; and

(iii) located:

(A) in positions where unobstructed access to them is readily available from all points on a storey, including lift lobby areas; and

(B) so that alternative paths of travel do not converge such that the paths of travel are at least 6m apart at any time; or

(b) that are distributed and located in accordance with the BCA, Part D1.4 that is applicable to the classification of the building.

Note:

On 1 January 1992 the Building Code of Australia 1990 was adopted in Queensland and Part D prescribes applicable access and egress provisions for buildings constructed after that date.

High risk fire areas

P4 An unsprinklered residential care building has evacuation routes that are adequately protected from the high risk fire areas to provide for the safety of the occupants.

A4 In an unsprinklered residential care building, a high risk fire area that is over 30m² in floor area must be separated from an evacuation route by a construction of building elements which achieve a minimum FRL --/60/30.
### Smoke hazard management

**P5** A *residential care building* that has an air-handling system that provides conditioned air to more than one *smoke compartment*, has adequate protection against the spread of smoke across *smoke compartments* and *evacuation routes* in the event of a fire.

**A5** In a *residential care building* with an air-handling system that provides conditioned air to more than one *smoke compartment* the air handling system:

- (a) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the *smoke compartments* served; and
- (b) shuts down and *automatically* closes its smoke dampers when the system is triggered by the *building’s smoke detection* or *smoke alarm system*.

### Portable fire extinguishers

**P6** A *residential care building* has fire extinguishers provided to the degree necessary to allow occupants to undertake initial attack on a fire, appropriate to:

- (a) the function or use of the *building*; and
- (b) any other *fire safety systems* installed in the *building*; and
- (c) *high risk fire areas*.

**A6** In a *residential care building* with a floor area greater than 300m²:

- (a) if fire extinguishers were installed in the *building* before the *commencement day*—the extinguishers were selected, located and installed in accordance with the Australian Standard or legislation that applied at the time of the building development approval for the *building* or part of the *building*; or
- (b) otherwise—extinguishers are selected, located and installed in the *building* in accordance with AS 2444.

### Fire fighting water supply

**P7** An *unsprinklered residential care building* has a fire fighting water supply provided to the degree necessary to facilitate the needs of the *fire brigade* appropriate to:

- (a) fire-fighting and rescue operations; and
- (b) the fire hazard.

For an *unsprinklered residential care building*, a fire hydrant is available for use within 90m of the most distant point of the *building*:

- (a) if the *building’s floor area* is greater than 500m²; and
- (b) a *fire brigade* with a structural fire fighting capacity is available to attend a *building* fire within 30 minutes of being notified.
PERFORMANCE CRITERIA

Emergency lighting

P8  A residential care building has a system of suitable lighting for safe evacuation in the event of fire or emergency, provided to the degree necessary, appropriate to:

(a) the function or use of the building; and

(b) the floor area of the building; and

(c) the travel distance to an exit; and

(d) the mobility and other characteristics of the occupants.

Exit signage

P9  A residential care building has a system of suitable signs or other means of identification for safe evacuation in the event of a fire or emergency, provided to the degree necessary to:

(a) identify the locations of the exits; and

(b) provide guidance to the exits for the occupants; and

(c) be clearly visible to occupants; and

(d) operate in the event of a power failure of the main lighting system for a sufficient time to allow the occupants to safely evacuate.

ACCEPTABLE SOLUTIONS

In a residential care building:

A8  

(a) if an emergency lighting system was installed in the building before the commencement day—the system is in accordance with the Australian Standard or legislation that applied at the time of the building development approval for the building or part of the building; or

(b) otherwise—emergency lighting is installed in accordance with BCA, E4.2, E4.3 and E4.4.

A9  

(a) if an exit signage system was installed in the building before the commencement day, the system was installed in accordance with either AS/NZS 2293.1-1998 or AS/NZ 2293.3-1995; and

(b) otherwise—an exit signage system is installed in accordance with BCA, Parts E4.5, E4.6 and E4.8.
Building Code of Australia performance requirement

**P10** A *residential care building* provides an adequate level of fire safety for residents including the safe evacuation of those residents in the event of a fire threatening the building to the degree necessary, appropriate to:

(a) fire suppression, smoke compartmentation and evacuation; and

(b) early warning systems; and

(c) emergency escape; and

(d) *high risk fire areas*; and

(e) smoke hazard management; and

(f) portable fire extinguishers; and

(g) fire fighting water supply; and

(h) emergency lighting; and

(i) exit signage.

**A10** For *residential care buildings*:

(a) *performance criteria* P1 – P9 of this part are satisfied by complying with A1 – A9; or

(b) where the *building* does not comply with *acceptable solutions* of this part and a current certificate of classification for the whole *building* was issued in relation to:

(i) an application for change of classification; or

(ii) a development approval for *building* work, other than *building* work required to ensure the building conforms with this part;

the *performance criteria* of this mandatory part may be satisfied by a building development approval assessed against the performance requirements of the *BCA* applicable at the time of a building development application including QDC MP2.2, P1 – P3.
## Schedule 1 - Evacuation impairment assessment form

<table>
<thead>
<tr>
<th>Residential care building</th>
</tr>
</thead>
</table>

### Evacuation impairment assessment form

This form may be used to assess whether a person who is a resident of the building has an evacuation impairment.

Use this form for the purposes of compliance with A1(1)(b) of QDC MP 2.3 Fire safety in existing residential care buildings (Pre 1 June 2007) only.

<table>
<thead>
<tr>
<th>Date of practice:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of occupant:</th>
<th>Room number:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of building/address of building:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of residential care facility:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of owner or operator of facility:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Assessed by:</th>
<th>(name)</th>
<th>(signature)</th>
</tr>
</thead>
</table>

### During an evacuation practice, has the resident demonstrated the ability to:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
</tr>
</thead>
</table>

1. Hear and recognise the fire evacuation alarms?

2. Safely evacuate from the building without the assistance of another person?

3. Follow the fire and evacuation plan and evacuate to the assembly point identified in the plan?

4. Observe the fire and evacuation plan in a calm and timely manner in a practice situation?

5. Understand that he/she must comply with the directions of emergency personnel?

<table>
<thead>
<tr>
<th>Result</th>
</tr>
</thead>
</table>

### Does the occupant have an evacuation impairment?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
</tr>
</thead>
</table>

**Note 1:** An occupant does not have an evacuation impairment when ALL answers on the form are ticked with Yes. Do not answer ‘Yes’ to any question unless the occupant is able to meet the criterion at all times of the day or night.

**Note 2:** If this form is being used to exclude occupants from the need for evacuation support, the excluded person must be reassessed when the person’s evacuation ability changes. Evacuation practice should be used to determine the ability of a person to safely evacuate the building in the event of fire and conducted in accordance with the provisions of the Building Fire Safety Regulations 2008.

**Note 3:** If the occupant has an evacuation impairment, you MUST include him/her in your minimum support ratio calculations. If the occupant does not have an evacuation impairment, you do not need to include him/her in your minimum support ratio calculations.
Schedule 2 – Required elements of a residential care building’s fire and evacuation plan

1. Building identification.

2. Allowable occupant numbers.

3. The proposed maintenance schedule for the building’s prescribed fire safety installations.

4. A plan of action to be taken in the event of fire or activation of the building’s fire alarm including:

   (a) written instructions with the following priorities:

   i. investigate and raise the alarm as soon as a fire is suspected.

   ii. begin a thorough evacuation, beginning from the point of greatest risk.

   iii. summon the fire service.

   iv. contain or control the fire if safe to do so, and as long as the evacuation is not affected, and only if the evacuation has adequate supervision.

   v. assemble and account for persons.

   vi. occupants to be directed not to re-enter the building; and

   (b) a simple and legible diagram of the building, drawn to a reasonable scale, indicating the building’s evacuation routes, required exits and assembly points; and

   (c) arrangements for monitoring and training to ensure the minimum support ratio required by Section A1(1)(b) of this standard is maintained at all times; and

   (d) arrangements for monitoring and training to ensure the management procedure required by Section A1(1)(c) of this standard is maintained at all times; and

   (e) a list of persons (described by reference to the positions they hold or in another suitable way) responsible for administering the building’s fire and evacuation plan.

5. The proposed instruction schedule to ensure the building’s workers and residents are adequately instructed concerning the actions to be taken by them in the event of fire threatening the building to ensure their own and other persons’ safety.
Schedule 3 - Minimum support ratio

Note: see definition of minimum support ratio.

Section A1(1)(b) provides that, at all times, a minimum support ratio (of 1:5) must be maintained in a residential care building. The minimum support ratio for the building is calculated with reference to support required for residents accommodated with an evacuation impairment in the smoke compartment in the building that accommodates the highest number of residents with an evacuation impairment.

If, for example, the smoke compartment in a building that accommodates the highest number of residents accommodates 40 residents, at least 8 responsible persons would be required to be onsite at any given time to service all smoke compartments on the basis that 1 responsible person would need to be onsite for every 5 residents accommodated with an evacuation impairment in the smoke compartment. The following diagrams represent how the 1:5 minimum support ratio applies in 2 scenarios.

Scenario A – 1 responsible person required

<table>
<thead>
<tr>
<th>smoke compartment 1</th>
<th>smoke compartment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 residents with an evacuation impairment</td>
<td>5 residents with an evacuation impairment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>smoke compartment 3</th>
<th>smoke compartment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 residents with an evacuation impairment</td>
<td>5 residents with an evacuation impairment</td>
</tr>
</tbody>
</table>

In scenario A, the facility is required to have a minimum of 1 responsible person on-site available to assist the residents with an evacuation impairment in all of the smoke compartments. The ratio does not require a responsible person to be available for each smoke compartment. (If a fire occurred within 1 of the smoke compartments, the responsible person would be able to transfer the 5 residents into an adjoining smoke compartment as part of a staged evacuation).
Scenario B – 4 responsible persons required

<table>
<thead>
<tr>
<th>smoke compartment 1</th>
<th>smoke compartment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 residents with an evacuation impairment.</td>
<td>10 residents with an evacuation impairment.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>smoke compartment 3</th>
<th>smoke compartment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 residents with an evacuation impairment.</td>
<td>15 residents with an evacuation impairment.</td>
</tr>
</tbody>
</table>

In scenario B, the facility is required to have a minimum of 4 responsible persons on-site at all times, to assist the residents with an evacuation impairment in all of the smoke compartments to evacuate. This is the case because the smoke compartment that accommodates the highest number of residents is smoke compartment 3, which accommodates 20 residents and for the building’s minimum support ratio to be maintained, 4 responsible persons must be on-site at any given time. The facility is not required to ensure that additional responsible persons are on-site at all times. (If a fire occurred within 1 of the smoke compartments, the 4 responsible persons required to be on-site would be able to transfer the residents with an evacuation impairment in smoke compartment 3 into an adjoining smoke compartment, as part of a staged evacuation process).