



Maintenance of Essential Safety Measures

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Welcome

- Stakeholders
- Lodge managers
- James Wong CFA
- Georgie Gavin FCARMB
- Phil Davern FCARMB

What?

What is an ESM?

Why?

Why is it required?

How?

How do we comply?

What is an ESM

- Essential Safety Measure
- Protects life and contributes to safe evacuation
- Protects property
- Listed in Schedule 8 of the Building Regulations 2018
- Passive and active systems

How an ESM is identified?

- 1. Should be listed on a Certificate of Occupancy (CoO) or Occupancy Permit (OP) for the building**
- 2. Can be via a Maintenance Determination (MD) issued by a registered building surveyor**
- 3. The CoO, OP and MD should specify the frequency of testing and level of performance**
- 4. The Falls Creek ARMB's Triennial Building Standards of Occupancy Reports (BSR) will identify the building's relevant ESM's and Frequency of Testing in the Appendix**

Essential safety measure to be inspected or tested	Installation standard or level of performance	Nature of inspection or test frequency
Building elements required to satisfy prescribed fire resistance levels	BCA Section C, D1.12	Annual inspection for damage, deterioration or unauthorised alteration.
Emergency lighting	BCA E4.2, E4.4, G4.4	Every six months to AS 2293 - 2005
Exit doors	BCA Section D	Inspection every three months to ensure doors are intact, operational and fitted with conforming hardware.
Exit signs	BCA D1.12, E4.5, E4.6, E4.8, G4.4	Every six months to AS 2293 - 2005
Smoke and heat alarm system	Clause 3 of Specification E2.2a	Monthly as prescribed in AS 1851 – 2012, Section 6
Fire extinguishers	BCA E1.6	Every six months to AS 1851 – 2012, Section 15.4
Fire hose reels	BCA E1.4	Every six months to AS 1851 – 2012, Section 14
Materials and assemblies required to satisfy fire hazard properties	BCA C1.10	Annual inspection for damage, deterioration or unauthorised alteration.
Paths of travel to an exit	BCA D1.6	Inspection every three months to ensure there are no obstructions and no alterations.
Solid core doors and self-closing mechanisms to bedroom entry doors	BCA C3.11	Annual inspection for damage, deterioration and check operation of closers.
Fire orders	G4.9	Annual inspection to ensure warning sign is in place and legible.
Signs on doors alerting people that they open inwards	G4.9	Annual inspection to ensure warning sign is in place and legible.

An aerial photograph of a residential area built on a hillside. The houses are clustered together, and the surrounding landscape is hilly and wooded. The image is semi-transparent, allowing the text to be clearly visible over it.

Why is it required?

**For the Safety of People in the event of
a fire**

**Secondary – protecting property including
adjoining property**

Legislation and obligations

National Construction Code

Building Regulations 2018 (Victoria)

- Direct Responsibility on Owner/Lessee
- Completion of annual ESM report

“Occupiers” have a responsibility to ensure exits and paths of travel to an exit are readily accessible

Legislation and Obligations



Annual Inspections/Testing

- Building elements required to satisfy prescribed fire resistance levels
- Materials and assemblies required to satisfy fire hazard properties
- Solid core doors and self-closing mechanisms
- Sign on doors
- Fire Orders

Legislation and Obligations

Six Monthly Inspections/Testing

- Emergency Lighting
- Exit Signs
- Fire Hose Reels
- Portable Fire Extinguishers & Fire Blankets



Legislation and Obligations

Quarterly Inspections/Testing

- **Exit Doors**
- **Paths of travel to an exit**

Legislation and Obligations



Monthly Testing

- Smoke and heat alarm system
- Fire sprinkler systems

Legislation and Obligations

Performing Testing/Inspections

- ▶ **Who can carry out maintenance?**
- ▶ **Competent person**
 - ▶ A competent person can be defined as: “A person who has acquired through training, qualification, experience, or a combination of these, the knowledge and skill enabling them to correctly perform the required task.”
- **Depends on the ESM concerned**
- **Insurance implications**



Building elements required to satisfy prescribed fire resistance levels





Materials and assemblies required to satisfy fire hazard properties





Solid core doors and self-closing mechanisms





Exit doors



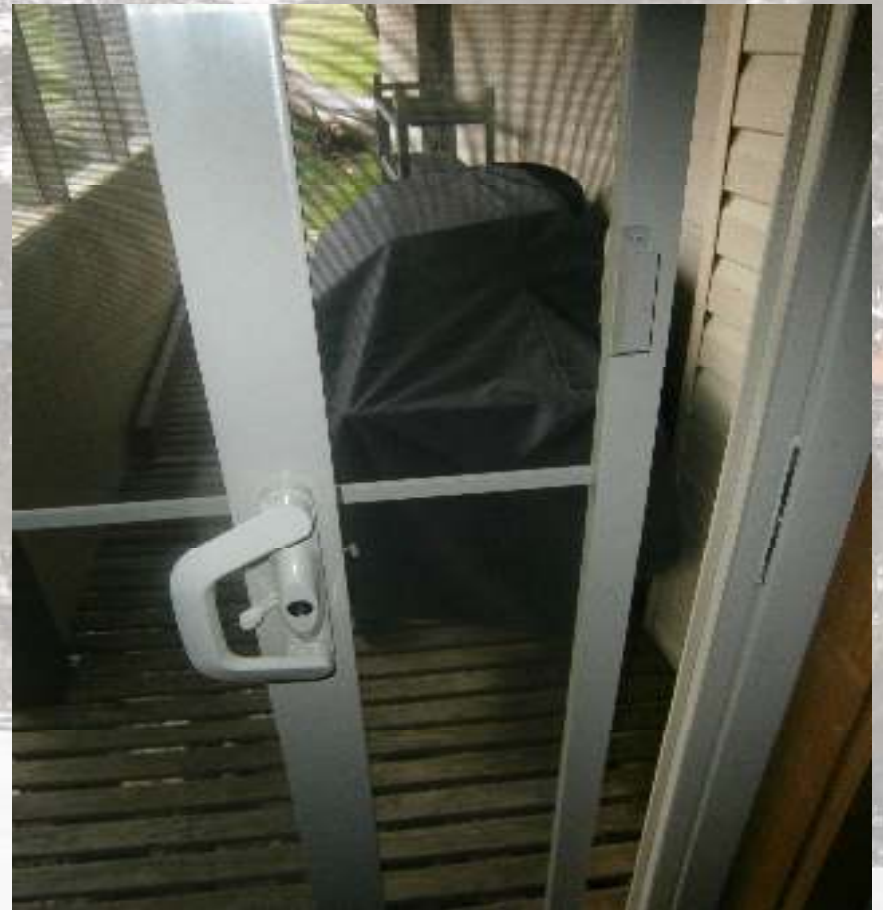


Exit doors





Exit doors





Monthly testing – smoke alarms





Record keeping

Maintenance Log Books

Smoke Detection and alarm System

Log Book

Emergency and Exit Lighting Log Book

Maintenance Tags – Log Book

Annual ESM report (copy to RMB)



What happens if you **don't** comply?

- 
- **Criminal prosecution**
 - **Civil litigation**
 - **Insurance liability**
 - **Business Risk**

Common Mistakes

- Yearly tagging of fire hose reels, portable fire extinguishers
- Yearly maintenance of smoke detection system and exit lighting
- No maintenance records kept on the premises
- Failure to prepare an annual ESM report
- Using domestic floor coverings in a commercial application
- Installation of deadlocks and snibs to designated exit doors
- Installation of curtains to designated exit doors
- Disconnection of self-closing door mechanisms
- No record of 'critical' tests being undertaken

Resources

- **Victorian Building Authority ESM Manual and Practice Note 23**
- **FCARMB website for annual ESM report example, template and typical ESM listing in alpine buildings**
<https://corporate.fallscreen.com.au/property/>
- **Several commercially available software packages**
- **FCARMB MBS**

Thank you for your contribution

