





# **Accessible Exit Sign Solutions**

# Fact Sheet No. 1 The Use of the 'Accessible Means of Egress Icon'

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### **Background**

Egress Group is an Australian owned company and the owners of the 'Accessible Means of Egress Icon'. Egress Group has developed the Accessible Exit Sign Project. The intention of the Project is to promote universal access and egress for all building occupants. Everyone deserves a safe means of egress from a building during an emergency, including those that may face some extra challenges negotiating an egress route.

### A Redesign of Exit Signs

At Egress Group we believe it's time for a change. A change in attitudes, perceptions and legislation regarding exit signs in commercial spaces. We believe all buildings, facilities and modes of transport need to show the accessible egress route, with clear, unambiguous signage showing the path to safety for all occupants. This includes adopting the use of the 'Accessible Means of Egress Icon' as part of the certified design.

## Use of Signage using the 'Accessible Means of Egress Icon' Images

The introduction of the 'Accessible Means of Egress Icon' on exit signage changes the current discriminatory approach to exit signs in buildings and present a fully inclusive design. However, there are two important issues to consider when using these images:

- 1. The design of the 'Accessible Means of Egress Icon' is not currently referenced within any technical standard or building code: and
- 2. Emergency exit signage using the 'Accessible Means of Egress Icon' must be considered as part of the overall exit signage solution for any public facility (which could include a building, open space, transportation hub, airplane, train or ship). This may require approval from the relevant authority to permit the adoption of this new form of signage.

### **Current Technical Standards**

The use of the 'Accessible Means of Egress Icon' is an inclusive exit sign design, but as it is a new concept it is not adopted or referenced within any current International or National Standard.

The 'Accessible Means of Egress Icon' design is nevertheless consistent with the graphical symbols and methodology outlined within International (or ISO) Standards:

- ISO 7001:2007 Graphical symbols -- Public information symbols.
- <u>ISO 7010:2011 Graphical symbols -- Safety colours and safety signs -- Registered safety signs,</u> which includes the use of the 'Running Man' exit sign design.
- <u>ISO International Language of Graphical Symbols Booklet</u>, which also includes the 'Running Man' exit sign design and an Accessible Lift pictogram.
- <u>ISO 21542:2011 Building construction -- Accessibility and usability of the built environment,</u> which includes the 'Running Man' in conjunction with the International Symbol of Access.
- The design is also consistent with the 'Running Man' design currently referenced within many countries technical standards (such as the Australia Standard AS2293).

#### **Performance-Based Design Solutions**

Many countries now have 'performance-based' building codes and facilities are getting more and more reliant on fire engineering to satisfy building code Performance Requirements under 'Alternative Solutions'. For example, recent advances in lift and building technology have allowed the use of passenger lifts to provide a form of evacuation under a 'performance-based' solution.

An 'Alternative Solution' has been defined as a building solution which complies with the Performance Requirements other than by satisfying the 'Deemed-to-Satisfy' provisions.

The Australian Building Codes Board has been quoted as stating that the use of a performance-based approach to compliance "provides practitioners with a strong degree of flexibility to determine the most appropriate means for demonstrating compliance with the relevant Performance Requirements". This therefore allows some level of creativity in how compliance (or a compliant building solution) can be achieved.



This performance-based approach could be extended to the use of enhanced exit signs under a fire engineered solution. Such a solution could be used to show an accessible means of egress to a safe place outside the building, a safe refuge within the building or locations of evacuation lifts (or elevators).

This approach has to be a better solution that what would be provided under a 'Deemed-to-Satisfy' design solution.

When considering the use of an 'Alternative Solution' as part of an overall egress solution to a building, ISO 21542 says that a fundamental objective of any fire engineered solution for evacuation is that there shall be "alternative, safe and intuitive evacuation routes away from the scene of a fire". ISO 21542 therefore be considered when developing 'Alternative Solutions', which provides additional guidance with the following principles:

- The building should support successful evacuation for every occupant whatever their own abilities, to be able to evacuate to the maximum degree possible. It is however acknowledged that in existing buildings or those with a vertical degree path it may not be possible to independently evacuate and assistance may be required to exit the building.
- The concept of protection and evacuation of all occupants should be incorporated at an early stage of design development.
- A vertical evacuation path is more stressful for occupants, particularly those with mobility impairments.
- The fire engineered solution must consider which occupants (based on characteristics and abilities) can be evacuation from the building and which occupants would need to be moved to a safe refuge.
- The fire engineered solution must consider the ability for any staged or partial evacuation, dependant of fire characteristics and the triggers for a vertical evacuation.
- The ability to use all passengers lifts in new buildings to evacuate occupants.
- The ability to upgrade passengers lifts in existing buildings to evacuate occupants.

Accessible <u>exit signage</u>, showing <u>refuge areas</u>, locations of <u>evacuation chairs</u>, if <u>evacuation lifts</u> are available and accessible <u>exit doors</u> can be part of this solution.

#### Disclaimer

When using any design solution that varies from that which is specified within specific countries building code or technical standards it must be approved by the relevant authority.

**Further Information** - Please contact us at <a href="mailto:info@egressgroup.com.au">info@egressgroup.com.au</a> for more information on the use of the 'Accessible Means of Egress Icon'.