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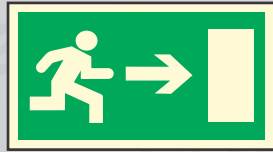
SAFETY SIGN SELECTION AND MOUNTING

SELECTION OF SIGNS

Escape route signing systems should provide clear instructions for the means of escape, allowing people to escape without assistance under situations of stress.

To be effective, signing systems must be complete and all ambiguity avoided.

People escaping should have clear directions from any point in a building. To achieve this, it is vital that there is total consistency in the signage until a place of safety is reached.



In case of a fire, Fire Fighting Equipment is essential as a first aid response. For this reason such equipment needs to be quickly located. Permanent signs must be used at all times and placed at the location of each equipment, guaranteeing easy identification and the best use in emergency situations.



When identifying the different levels of the risk, Danger, Warning or Caution, the signs must be placed to permanently identify the nature and location of the hazard.



Obstacles in the course of escape routes, e.g. pillars, that may cause a risk of collision, are to be marked with warning strips.

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SELECTION OF SIGNS

In all situations where certain actions or behaviors can be dangerous or cause risks, prohibition signs must be used to forbid these actions or behaviors to reduce the risks.



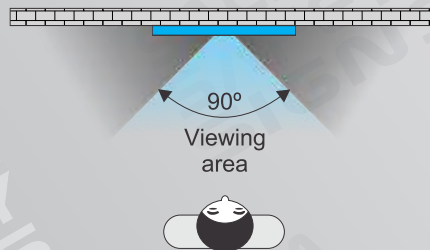
To ensure the use of protective wear, or to indicate that a specific course of action is to be taken, mandatory signs must be used.



For the correct functioning of the signs, they must be mounted according to the correct viewing angle.

Type 1:

Parallel wall mounted sign. Surface printed.

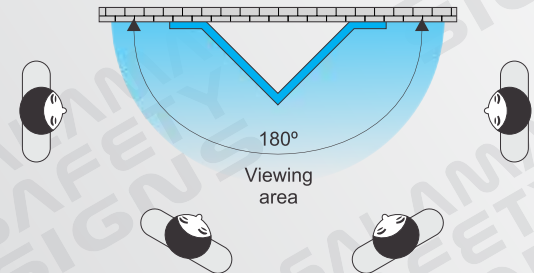


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ALTERNATIVES FOR MOUNTING SIGNS

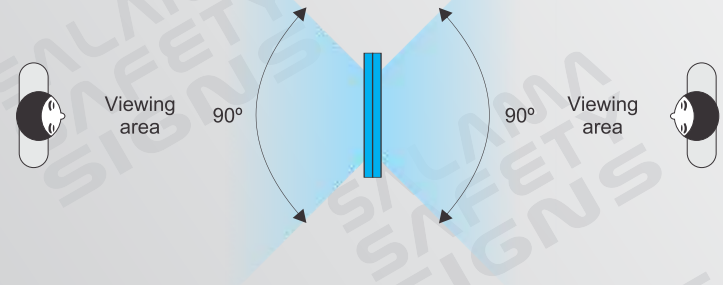
Type 2:

Panoramic signs. The sign with the greatest visibility. These signs are printed on both exterior surfaces and guarantee a viewing angle of 180°.



Type 3:

Suspended double-sided signs, to be hung from the ceiling. The sign is supplied with holes on the top corners allowing appropriate fixings to be used

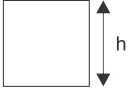

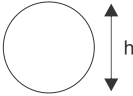



The size of the signs is defined by the maximum viewing distance, from which the sign is comprehensible.

The table on the next page shows the maximum viewing distances of safety signs, for escape route signs and for signs other than escape routes. The viewing distance at which a sign of a particular size is conspicuous and legible depends on the illumination of the sign.




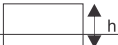

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SIZES AND VIEWING DISTANCES

Signs	Geometric Shapes	Meaning	Z Distance factor	h Sign height not including supplementary texts (mm)	Safety sign sizes including borders (mm)	D Viewing distances (m)	
Escape route signs		Escape route signs	170	80	100 x 100	13.6	
				130	150 x 150	22.1	
				180	200 x 200	30.6	
				280	300 x 300	47.6	
				380	400 x 400	64.6	
				570	600 x 600	96.9	
				80	300 x 100	13.6	
				130	300 x 150	22.1	
				80	400 x 100	13.6	
				100	400 x 120	17.0	
				180	400 x 200	30.6	
				130	450 x 150	22.1	
				130	600 x 150	22.1	
				180	600 x 200	30.6	
				280	600 x 300	47.6	
				180	800 x 200	30.6	
				280	900 x 300	47.6	
				380	1200 x 400	64.6	
570	1200 x 600	96.9					
Signs other than escape route signs		Prohibition signs or Mandatory action signs	120	80	100 x 100	9.6	
				130	150 x 150	15.6	
				180	200 x 200	21.6	
				280	300 x 300	33.6	
				380	400 x 400	45.6	
				70	100 x 100	8.4	
				Hazard Signs	113	150 x 150	13.6
					156	200 x 200	18.7
					242	300 x 300	29.0
					329	400 x 400	39.5

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SIZES AND VIEWING DISTANCES

Signs	Geometric Shapes	Meaning	Z Distance factor	h Sign height not including supplementary texts (mm)	Safety sign sizes including borders (mm)	D Viewing distances (m)
Signs other than escape route signs		Safety equipment signs and fire fighting equipment signs	120	60	80 x 80	7.2
				80	100 x 100	9.6
				130	150 x 150	15.6
				180	200 x 200	21.6
				280	300 x 300	33.6
				380	400 x 400	45.6
				32	150 x 50	3.8
				32	200 x 50	3.8
				52	200 x 70	6.2
				57	200 x 70	6.2
				52	200 x 70	6.2
				80	200 x 100	9.6
				52	300 x 70	6.2
				80	300 x 100	9.6
				130	300 x 150	15.6
				80	400 x 100	9.6
				100	400 x 120	12.0
				180	400 x 200	21.6
Low Location Lighting system - LLL signs (ISO 16069/TC145) March 2003		Safety Way Guidance signs	170	50	57 x 57	8.5
				75	83 x 83	12.8
				50	107 x 57	8.5
				75	158 x 83	12.8
		Safety equipment signs and Fire fighting equipment signs	120	50	57 x 57	6.0
				75	83 x 83	9.0
				50	107 x 107	6.0
				75	158 x 83	9.0

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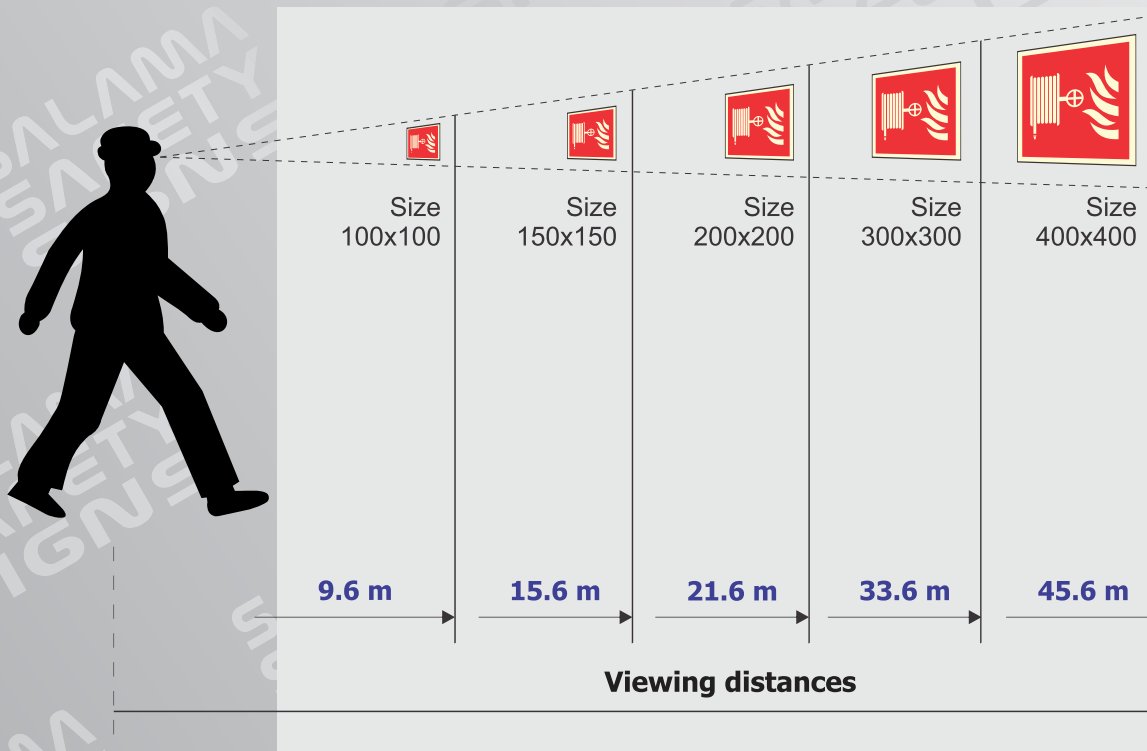
SIZES AND VIEWING DISTANCES

$h = D/Z$
where
Z - is a distance factor taking into account the illumination of the sign and the amount of detail it contains.
h - is the overall height (printed area) of the signboard in millimetres (mm).
D - is the maximum viewing distance in metres (m).

The appropriate value Z for “Escape route signs” based on photoluminescent materials is 170 corresponding on 100 lux of vertical illuminance at sign.

For signs other than escape route signs, the appropriate value for Z is 120 corresponding on 52 lux of vertical illuminance at sign.

The size of the signs is chosen according to the maximum viewing distance, and the layout of the premises.



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MOUNTING AREAS

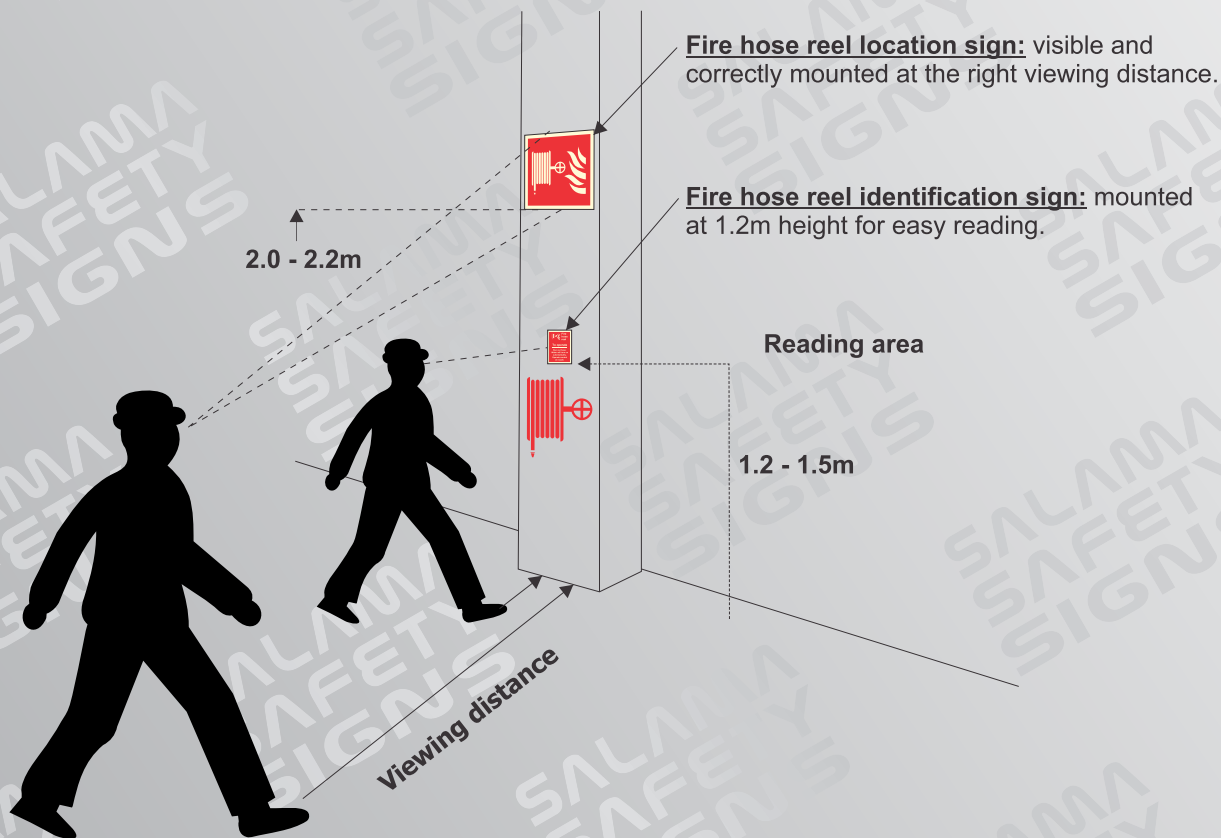
Mounting areas

Signifying fire fighting equipment

The pictorial fire hose reel location sign, should be mounted between 2.0 to 2.2m from floor level to the base of the sign, order to be visible in all the area involved and easily identified.

The fire hose reel identification sign, should be mounted immediately above the fire hose reel, approximately 1.2m from floor level, for an appropriate reading viewing distance.

All other fire fighting equipment signs should always be mounted correctly in order to identify the location of the equipment that they mean to locate, e.g



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MOUNTING AREAS

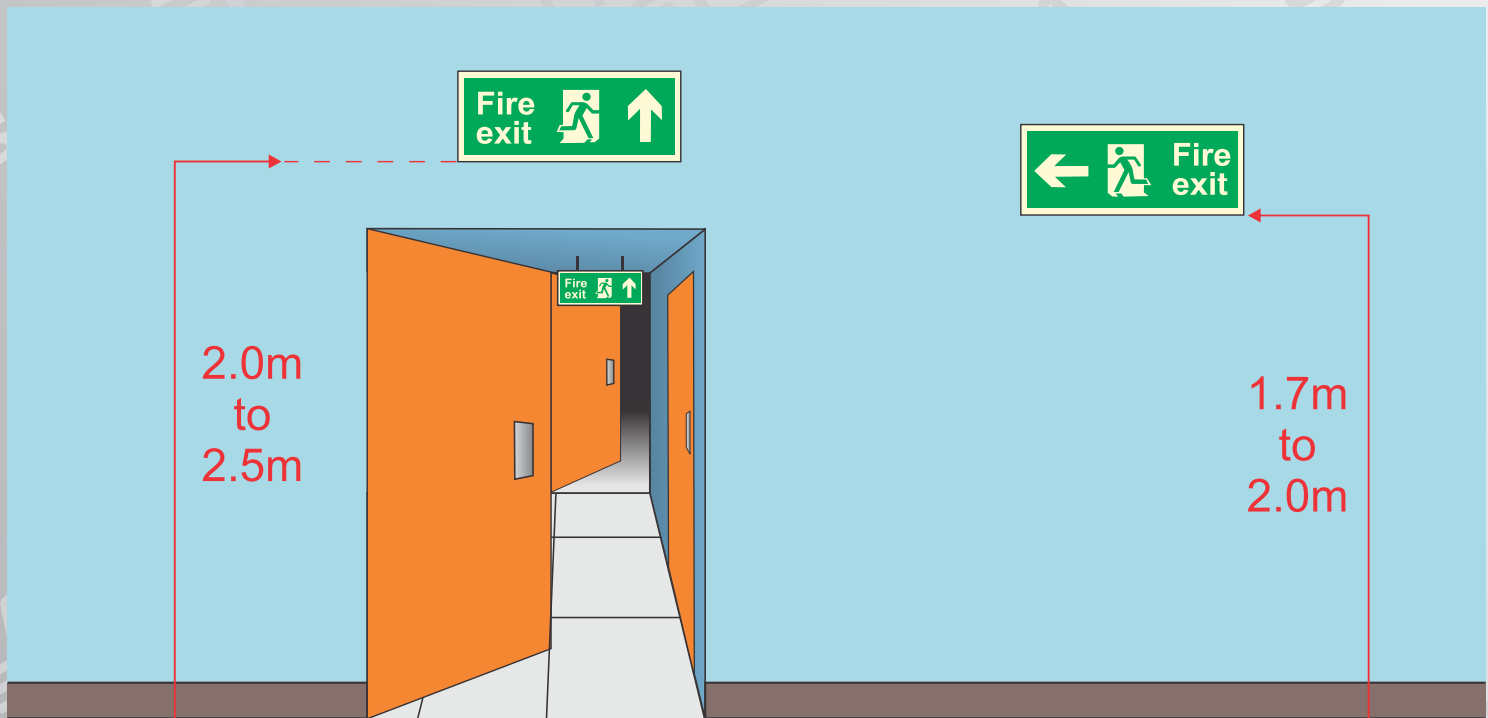
To obtain the optimum photoluminescent intensity, place signs as close as possible to an existing light source, preferably under direct light, e.g. lamps, spot lights, etc.

The mounting height of the signs varies in accordance with the characteristics of the building and it's usage

Escape route signs

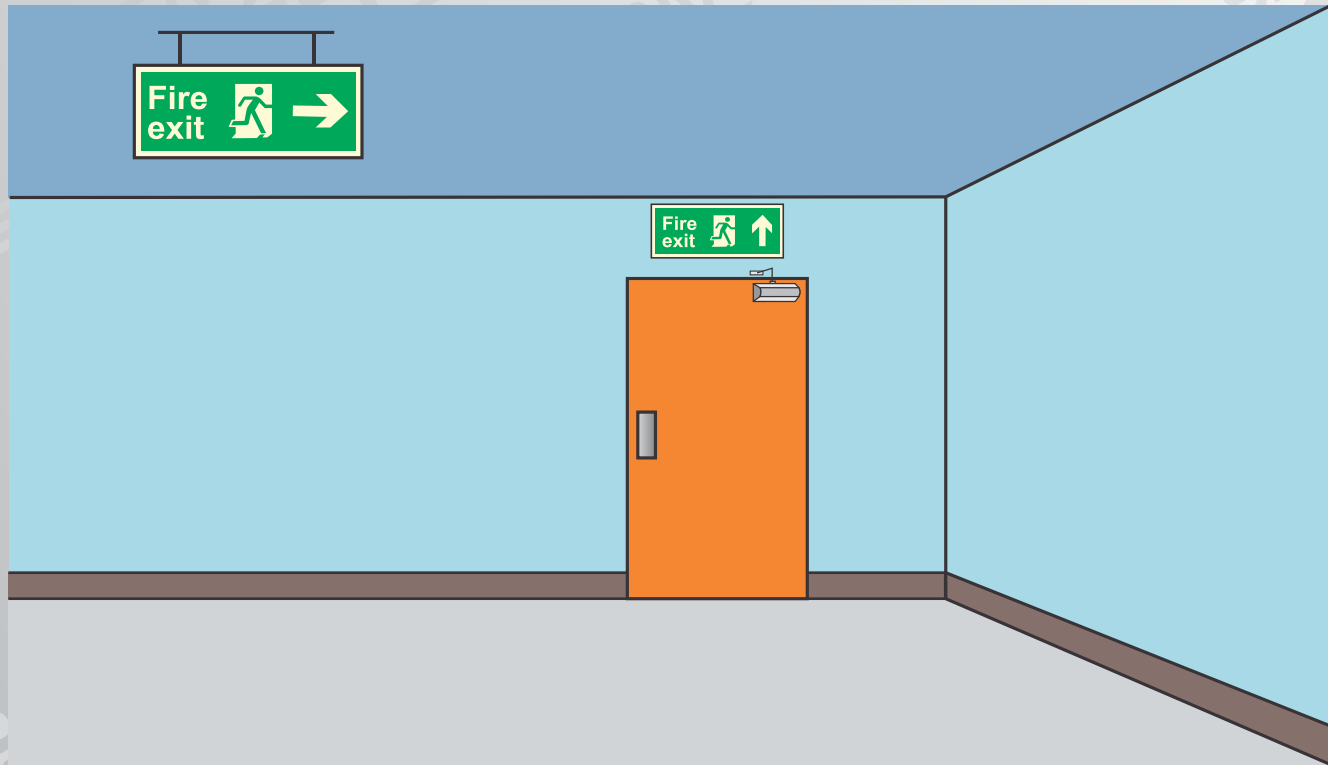
Above doors - from 2.0 to 2.5m from floor level to the base of the sign.

Evacuation routes - between 1.7 and 2.0m from the floor level to the base of the sign.



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MOUNTING AREAS



Prohibition, warning and mandatory signs

They shall be mounted as nearly as possible to the risk areas, given special consideration to their permanent visibility.

In industrial areas

For large buildings, and/or with a difficult layout, we need to access the viewing distances in order to take into consideration any temporary obstructions of the signs, looking at it from different angles, corners, etc. Therefore a thorough means of escape survey shall be done, in order to sign every area of the building accordingly.

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