

CABIN SYSTEMS

EMERGENCY LIGHTING SYSTEM - LOCATION

EMERGENCY LIGHTING SYSTEM - SUBSYSTEMS

Applicable to: ALL

EASA OSD

The emergency lighting system includes:

- CABIN EMERGENCY LIGHTS
 - There are cabin emergency lights in the cabin ceiling and in the door sills.
- EMERGENCY FLOOR PATH MARKING SYSTEM (EFPMS)
 Floor-mounted light strips show the escape path along the aisles to the emergency exits. The photo-luminescent light strips lead to the exit identifiers in the exit door frame.
- LAVATORY EMERGENCY LIGHTS
 The lavatories have a LAVATORY EMERGENCY light to provide low level light inside the lavatory in an emergency.

Note: This light will only come ON automatically in an emergency, if the flight crew has switched the EMER EXIT LT sw in the cockpit to the ARM position. The light will come ON. when:

- The flight crew switches the EMER EXIT LT sw to the ON position
- The cabin crew pushes the EMER hardkey at the Flight Attendant Panel (FAP).
- EMERGENCY EXIT SIGNS

EXIT-LOCATORS. EXIT-MARKERS, and additional exit signs indicate the location of the exits.

- SLIDE EMERGENCY LIGHTS

An evacuation slide light is part of each slide. It provides sufficient light to show the evacuation path and ground threshold of each slide.

Note: The slide emergency lights come ON only when the slides deploy.

- EVACUATION AREA LIGHTS

Evacuation area lights provide light to the area where the deployed evacuation slides will hit the ground. The lights help the cabin crew to estimate if the exit is available for evacuation or not.

- CREW REST COMPARTMENT (CRC) EMERGENCY LIGHTS

When the aircraft has an optional Crew Rest Compartment (Flight Crew Rest Compartment (FCRC) or Cabin Crew Rest Compartment (CCRC)), it is has emergency lighting units to provide light to the compartment in an emergency.

<u>Note:</u> This light will only come ON automatically in an emergency, if the flight crew has switched the EMER EXIT LT sw in the cockpit to the ARM position. The light will come ON, when:

- The flight crew switches the EMER EXIT LT sw to the ON position
- The cabin crew pushes the EMER hardkey at the Flight Attendant Panel (FAP).



CABIN SYSTEMS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

EMERGENCY LIGHTING - EXIT SIGNS

EASA OSD
Applicable to: ALL

The purpose of the exit signs is to point out clearly the next exit to the passenger. The exit signs are ON when the emergency lighting system is activated.

Green letters and arrows are used on lenses with light emitting surfaces.

EXIT LOCATOR

EXIT LOCATORS are in the cross-aisles, visible from every spot of the aisles. EXIT LOCATORS indicate the location of the exit areas.





EXIT MARKER

EXIT MARKERS indicate the position of the doors and are installed right above the exits.

Typical Exit Marker





CABIN SYSTEMS

LIGHTS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

DOOR SILL LIGHTS

Door sill lights are in the door frame close to the floor. Door sill lights provide light to the door sills when emergency lighting system is turned ON.

ADDITIONAL EXIT SIGNS

Additional exit signs are necessary to guide passengers when obstacles (e.g. curtain rails between 2 zones) obscure the view from door to door to an exit locator sign or exit marker sign. In such a case, additional exit signs are in front of the obstacle.

The design of additional exit signs is similar to the "standard" exit marker sign design.

EMERGENCY LIGHTING - CABIN EMERGENCY LIGHTS

EASA OSD

Applicable to: ALL

The cabin emergency lights provide light to the cabin sufficiently to identify the emergency exit areas.

There are the different types of cabin emergency lights:

- Ceiling Emergency Light Emitting Diode (LED) lights
- Emergency LED spotlights.

CEILING EMERGENCY LED LIGHTS

The Ceiling Emergency LED Lights (CELLI) are between two ceiling panels in the main aisles in longitudinal direction. The CELLI provide light to the aisles when the emergency lighting system is active



CABIN SYSTEMS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

Example of Ceiling Emergency LED Lights



EMERGENCY LED SPOTLIGHTS

There are LED spotlights in the entry areas, cross aisles, and special areas. Most of the spotlights have integrated emergency lights to provide light to entry areas, cross aisles, etc. when the emergency lighting system is active.

EMERGENCY LIGHTING - EMERGENCY FLOOR PATH MARKING SYSTEM

Applicable to: ALL

The emergency floor path marking system on the aircraft is a floor proximity emergency floor path marking system.



CABIN SYSTEMS

LIGHTS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

FLOOR PROXIMITY EMERGENCY FLOOR PATH MARKING SYSTEM

Under smoke condition, the floor path marking system will guide the passenger to the next exit.

The system consists of:

- Floor mounted photo luminescent strips provided on both sides of the main and cross aisles. The strips do not need electrical power supply for its activation.
- Light Emitting Diode (LED) exit identifiers, mounted in the door frame lining in the immediate vicinity of each exit.

FLOOR MOUNTED PHOTO-LUMINESCENT STRIPS

The photo-luminescent strips are charged by incident light provided by the normal passenger cabin lighting, including sunlight which enters the cabin when the cabin window shades are open during daylight hours.

<u>Note:</u> The photo-luminescent strips need a sufficient charging time, e.g. during preflight check (Refer to 12-40-20 Emergency Lighting System Preflight Check).

The strips can be made of different colors. The strips are on the floor, embedded in the carpet on both sides of each aisle and cross aisles. The photo-luminescent strips indicate the shortest way to the next emergency exit if there is no cabin light.







CABIN SYSTEMS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

EXIT IDENTIFIERS

At each side of the aircraft doors (except for door 1) there are exit identifiers, mounted flush in the lower part of the door frame.

At door 1 there is only one exit identifier on the side towards the aft of the aircraft.

An exit identifier consists of a housing with white LEDs and a lens with a light emitting surface:

- The lower part of the lens consists of a clear area which provides low level light for the floor in the emergency exit area.
- The upper part of the lens displays a green pictogram to identify the exit.







CABIN SYSTEMS LIGHTS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

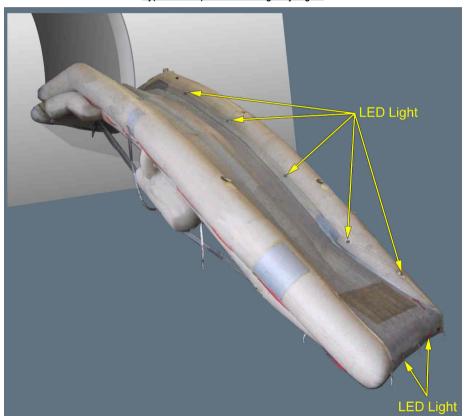
EMERGENCY LIGHTING - ESCAPE SLIDE EMERGENCY LIGHTS

EASA OSD
Applicable to: ALL

The escape slide emergency lights provide light for the escape slides of all doors and the area in front of the slides when they are deployed.

The emergency slide lights are part of the slides.

Typical Escape Slide Emergency Lights





CABIN SYSTEMS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

EMERGENCY LIGHTING - EVACUATION AREA LIGHTS

EASA OSD
Applicable to: ALL

One EVacuation Area (EVA) light is installed at each door, outside the Aircraft.

EVA lights provide lighting for the area where the deployed evacuation slides will hit the ground so that cabin attendants can estimate if the exit is available or not for evacuation.

☑ EVA lights consist of white Light Emitting Diode (LED) lights and are powered in 28 V DC by the Emergency Power Supply Unit (EPSU).

EMERGENCY LIGHTING - LAVATORY EMERGENCY LIGHTS

EASA OSD

Applicable to: ALL

The lavatory emergency light is inside the lavatories ceiling panel and provides a low level light inside the lavatory when emergency lighting system is ON.

It is a wall-mounted emergency light which consists of a a clear lens and a housing, identical to the housing of the exit identifiers.

EMERGENCY LIGHTING - CREW REST COMPARTMENTS EMERGENCY LIGHTS

EASA OSD

Applicable to: ALL

When the aircraft has an optional Crew Rest Compartment (Flight Crew Rest Compartment (FCRC) or Cabin Crew Rest Compartment (CCRC)), it is has emergency lighting units to provide light for the compartment when the emergency lighting system comes ON.

FLIGHT CREW REST COMPARTMENT (FCRC) EMERGENCY LIGHTING

The FCRC emergency lighting consists of:

- One wall-mounted emergency light to provide light for the compartment and the door handle in case of total loss of general lighting
- Two auxiliary lights (one inside each bunk) to help to find the oxygen masks and to provide light for orientation in case of an emergency
- An edge-mounted light to provide light for the exit opening means and instruction placard for the emergency hatch.

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CABIN SYSTEMS

LIGHTS

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

EASA OSD

CABIN CREW REST COMPARTMENT (CCRC) EMERGENCY LIGHTING

The CCRC emergency lighting consists of:

- Two wall-mounted emergency lights to provide light for the compartment in case of total loss of general lighting
- Two additional exit signs to indicate the way out of the compartment
- One auxiliary light inside each bunk to help to find the oxygen masks and to provide light for orientation in case of an emergency.

EMERGENCY LIGHTING - SYSTEM CONTROL

Applicable to: ALL

The controls for the emergency lighting system are in the:

- Cabin
- Cockpit.

Normally, the emergency lighting control is via the EMER EXIT LT sw on the overhead panel in the cockpit. However the Flight Attendant Panel (FAP) has an EMER hardkey to activate the emergency lighting system manually.

The cabin crew can activate the emergency lighting system during all phases of flight.

EMERGENCY LIGHTING SYSTEM CONTROL FROM THE COCKPIT

The flight crew activates and controls the emergency lighting system via the EMER EXIT LT sw on the overhead panel in the cockpit. For more information about the cockpit controls: *Refer to 02-100-30-33 EMER EXIT LT sw.*

EMERGENCY LIGHTING SYSTEM CONTROL FROM THE CABIN

A manual activation of the system is also possible from the EMER hardkey, which is a hardkey on the FAP