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EZS1511-30AS

Concept

EZSHUTTLE

Destination Floor Guidance System

As cities are becoming urbanized and building proportions are increasing, reducing passenger crowding and shortening riding time are strongly expected. Fujitec's EZSHUTTLE fulfills these expectations.

EZSHUTTLE optimizes elevator operation control by obtaining passengers' destinations at elevator floors instead of inside the car. This special feature of EZSHUTTLE enables elevator control to provide uncongested elevator service to passengers.

EZSHUTTLE is a new-generation Destination Floor Guidance System.

Typical examples are shown here.

Pedestal Model
(DP TYPE)

Wall-Mounded
(CW TYPE)

Speed & Efficiency

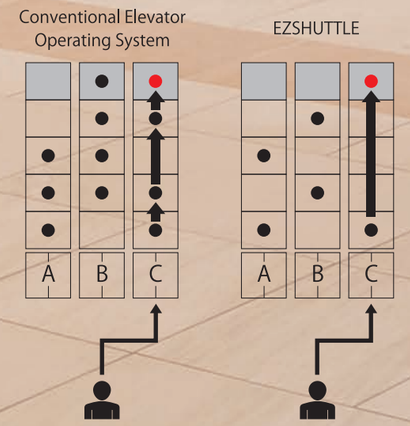
Riding Time Reduction by 50%* and Uncongested Elevator Service

During rush hours in urban office buildings, many passengers occupy the lobby in a short period of time and then, rush to the elevators responding to their up / down hall call registrations.

Currently, a fully occupied elevator receives many car call registrations and must stop at many floors in order to complete all passenger service in its traveling direction. This elevator operation process causes a long riding time for passengers.

In an elevator operating system with EZSHUTTLE, passengers are required to register their destinations at the elevator floors rather than conventionally registering them inside the elevator. The EZSHUTTLE system then guides passengers to their assigned elevators, which will have been selected to minimize the number of destination stops based on the registered destinations. This passenger guidance and elevator assignment provides passengers with uncongested elevator service and a reduction in passenger riding time by 50%* at peak travel periods.

* Based on comparisons of passenger riding time obtained under a conventional elevator operating system and that under a simulated EZSHUTTLE-equipped elevator operating system.



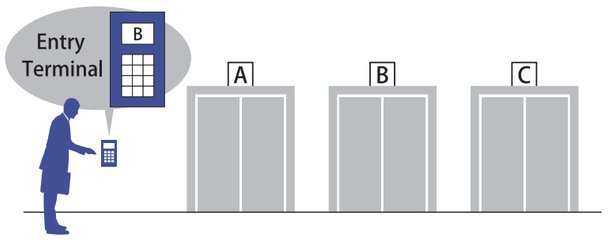
Typical examples are shown here.

Functions

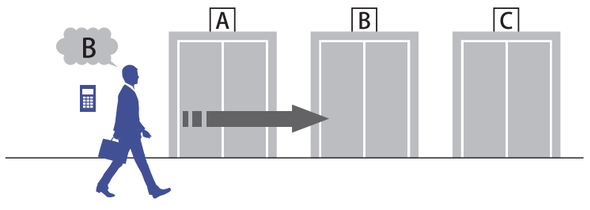
Using EZSHUTTLE

1 Upon registration of your destination, your assigned elevator will be indicated on the entry terminal.

2 Walk to and wait for the elevator that the entry terminal has assigned for you.



3 Make sure that you are waiting for the right elevator by checking the Destination Confirmation Display.



Notes:

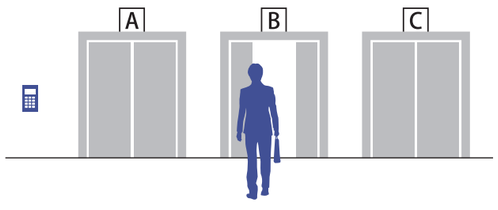
i. While waiting for your assigned elevator, any other early arriving elevator will not be suitable for your destination. You are advised to only take the elevator that the entry terminal had indicated.

ii. Depending on elevator specifications, there may not be Destination Confirmation Displays adjacent to elevator entrances.

Remarks:

i. For EZSHUTTLE All-Floor Type systems, elevator cars have no car operating boards. If a passenger has mistakenly entered the wrong car, the person is required to leave the car at the next destination floor and register his or her destination again at the entry terminal.

ii. For EZSHUTTLE Selected-Floor Type systems, elevator cars have car operating boards. However, the registration of a car call can be made only when the elevator has landed at a floor without entry terminals.



Predictive Control

- Predictive Control predicts and assesses the waiting and riding time of all passengers. This prediction and assessment will be reflected in the elevator operating system.
- Regarding the waiting time, the predictions and assessments are made based on both already registered destinations and possible future registrations.

Energy-Saving Control

- Before an assigned elevator responds to a passenger's registration, this control calculates the distance between the location of elevators and the floor where the registration was made. The elevator closest to that floor will be automatically selected to save energy.

Minimizing Long Waiting Time

- Assuming that newly registered destinations are applied to the current operation of elevators, all future passenger waiting time will be assessed. Based on this assessment, any future passenger waiting time will be minimized.

Traffic Analysis Service

- Over a month or more, elevator traffic data is stored inside a group control panel. As the need arises, it can be checked and analyzed.
- With the use of Fujitec's independently designed simulator, an analysis of the stored data and recommendations will be made by Fujitec for the optimal performance of the elevators. This will be done at the customer's request and at an additional charge.

Uncongested Elevator Service

- During the morning rush hours or other up-peak periods, elevators dispatched from the lobby are 30% less congested than conventionally controlled elevators.
- Less congestion allows riding / waiting passengers to smoothly get in /out of elevators at floors.
- In addition, less congestion leads to a decrease in the number of elevator stops, which will reduce riding stress.

Decrease of Floor Bypasses

- Based on the number of registered destinations on the entry terminals at each floor, the number of passengers who can ride in the same elevator will be calculated with a high degree of accuracy. Based on this calculated data, elevators bypassing waiting passengers will be reduced to a large degree.

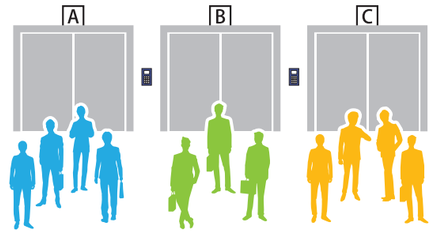
Priority User Functions

- EZSHUTTLE provides VIP exclusive service to those carrying special ID cards. When a special ID card has been used to register a destination, the elevator that can respond the fastest will be assigned. The elevator will take the VIP(s) directly to their destination, while rejecting any incoming hall calls.
- For passengers requiring extra time to get in/off, pressing the wheel-chair-user button will extend elevator operation time; exclusive service will be provided to those in need.
- Audio guidance can be provided by EZSHUTTLE.

Elevator Operating System with EZSHUTTLE

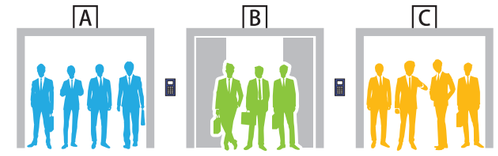
Before Elevator's Arrival

Passengers wait in front of their assigned elevators as indicated on the entry terminals.



Riding the Elevator

Each group of passengers takes the elevator bound for their zoned destinations.



Conventional Elevator Operating System

Before Elevator's Arrival

After registering hall calls, passengers wait in front of the first responding elevator.

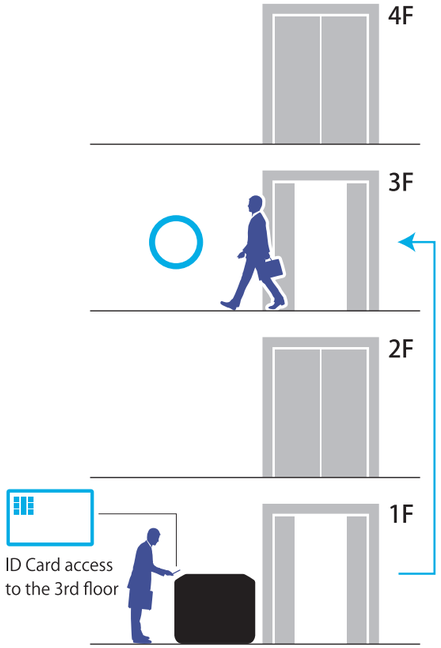
Riding the Elevator

Passengers going to different zones ride in the same elevator. Some passengers are left behind by the overcrowded elevator.

Specifications

Typical examples are shown here.

Synchronization with Building Security Management System



Provision for Entry Terminals at High-Traffic Floors

- At the customer's request, entry terminals can be installed only at the main floor (or another high-traffic floor); other floors will have conventional up and down hall call buttons. This provision helps increase the efficiency of passenger transportation.

Prioritized Elevator Operation for Special Floors

- At a pre-determined special floor such as the director's floor, etc., when a passenger has registered a destination floor, EZSHUTTLE promptly assigns an elevator that can respond quickly in order to minimize the wait time at that floor.
- At a regular floor, when a passenger has registered a special floor as their destination, EZSHUTTLE promptly assigns an elevator that can transport them to that floor as fast as possible.

Synchronization with Building Security Management System

- EZSHUTTLE can be linked to a building security management system. EZSHUTTLE's passenger ID authentication synchronizes with the building security system and restricts access to specific floors. When a passenger presents their ID card at a security gate equipped with an EZSHUTTLE entry terminal, their destination will be registered automatically both in EZSHUTTLE and the building security system.

Flexible Building Layout

- Customers and architects can freely plan elevator-served floors in buildings, because they don't need to connect elevator-served floors in the same service zone and are not constrained by the building's structure and allocation of public floors. Therefore, no transit floors are required.
- No connection of elevator-served floors increases rentable space in buildings. The reduction of extra parts and labor for elevator hoistway installation results in a reduction of building construction costs.

List of Specifications

● : Standard Specifications ■ : Optional Specifications (with additional charge) — : Not Available

System Functions	All-Floor Type	Selected-Floor Type
Predictive Control	●	— *1
Energy-Saving Control	●	—
Minimizing Long Waiting Time	●	—
Traffic Analysis Service	● *2	● *2
Uncongested Elevator Service	●	●
Decrease of Floor Bypasses	●	—
Priority User Functions	■	■
Provision for Entry Terminals at High-Traffic Floors	■	—
Prioritized Elevator Operation for Special Floors	■	—
Synchronization with Building Security Management System	■	■

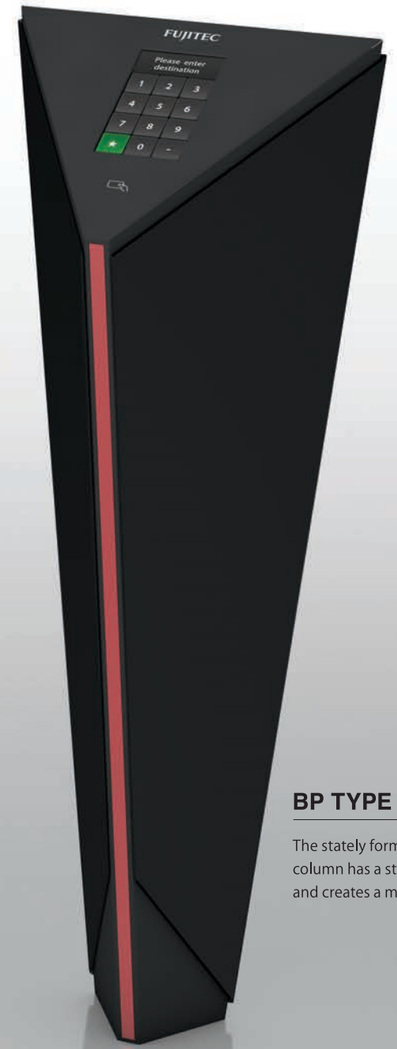
Fixture`s Locations		Fixtures	All-Floor Type	Selected-Floor Type
For Floors		Entry Terminals	● *3	● *3
		Destination Confirmation Display	■	■
		Elevator Indication Panel	●	●
	Main Floor	Hall Lanterns	■	■
	Typical Floors	Hall Lanterns	■	● *4
On Car-Side Entrance Column		Destination Confirmation Display	●	—
Inside Car		Destination Buttons	— *5	●

*1 Predictive control is made by the corresponding group control system.
*2 Traffic analysis service is made at the customer's request and at an additional charge.
*3 The wheel-chair-user buttons will be provided at an additional charge.
*4 Hall lanterns will not be provided in the floors with entry terminals.
*5 Destination (Registration) buttons are concealed inside the cabinet of a car operating board.

Fixtures Pedestal Model

AP TYPE

The elegant and organic form accentuates a building floor.



BP TYPE

The stately form of a triangular column has a strong presence and creates a modern atmosphere.

CP TYPE

This entry terminal surrounded on three sides with transparent guards is very stylish in appearance.

Typical examples are shown here.

Fixtures Pedestal Model

DP TYPE

The curved form provides a comfortable feeling and creates a calm atmosphere.

EP TYPE

The slim appearance of this form consisting of multiple semi-translucent surfaces builds a sense of openness.

FP TYPE

The Origami (Japanese Paper Folding) - shaped motif has a silent presence and creates a high-quality mood.

Typical examples are shown here.

Fixtures Wall-Mounted Model

AW TYPE

BW TYPE

CW TYPE

DW TYPE

EW TYPE

FW TYPE

Others

Destination Confirmation Display
(adjacent to Elevator Entrance)

Elevator Indication Panel

Typical examples are shown here.