

ECLA EUROPEAN CLASSIFICATION

B66B

ELEVATORS; ESCALATORS OR MOVING WALKWAYS ([N: apparatus for raising or lowering persons on theatrical stages or the like [A63J5/12](#)]; funicular railbound systems with rigid ground-supported tracks and cable traction, e.g. cliff railways, [B61B9/00](#); arrangements of ammunition handlers in vessels [B63G3/00](#); hoists, lifts, or conveyers for loading or unloading in general B65G; braking or detent devices controlling normal movements of winding drums or barrels B66D; ship-lifting devices E02C; garages for many vehicles with mechanical means for lifting vehicles [E04H6/12](#); hoists for feeding ammunition or projectiles to launching apparatus or to loading mechanisms [F41A9/00](#)) [C9409]

Note

In this subclass, the following term is used with the meaning indicated:

- "elevator" covers the term "lift", and the two terms are interchangeable

Guide heading: **Common features of elevators**

B66B1/00

Control systems of elevators in general (safety devices [B66B5/00](#); controlling door or gate operation [B66B13/00](#); systems of general application [G05](#))

- B66B1/02 . Control systems without regulation, i.e. without retroactive action
- B66B1/04 . . hydraulic
- B66B1/06 . . electric
- B66B1/08 . . . with devices, e.g. handles or levers, in the cars or cages for direct control of movements
- B66B1/10 specially adapted for mining hoists
- B66B1/12 . . . with devices, e.g. handles or levers, located at a control station for direct control movements, e.g. electric mining-hoist control systems
- B66B1/14 . . . with devices, e.g. push-buttons, for indirect control of movements
- B66B1/16 with means for storing pulses controlling the movements of a single car or cage [N: ([B66B1/24B4](#) takes precedence)] [C0804]
- B66B1/18 with means for storing pulses controlling the movements of several cars or cages [N: ([B66B1/24B6](#) takes precedence)] [C0804]
- B66B1/20 and for varying the manner of operation to suit particular traffic conditions, e.g. "one-way rush-hour traffic", [N: ([B66B1/24B8](#) takes precedence)] [C0804]
- B66B1/22 with means for taking account of delayed calls
- B66B1/24 . Control systems with regulation, i.e. with retroactive action, for influencing travelling speed, acceleration, or deceleration
- B66B1/24B . . [N: where the allocation of a call to an elevator car is of importance, i.e. by means of a supervisory or group controller] [N0707] [C1207]
- B66B1/24B2 . . . [N: For single car elevator systems] [N0707] [C1207]

- B66B1/24B4 . . . [N: For elevator systems with a single shaft and multiple cars] [N0707] [C1207]
- B66B1/24B6 . . . [N: For elevator systems with multiple shafts and a single car per shaft] [N0707] [C1207]
- B66B1/24B8 . . . [N: For elevator systems with multiple shafts and multiple cars per shaft] [N0707] [C1207]
- B66B1/24B10 . . . [N: For elevator systems with lateral transfers of cars or cabins between hoistways] [N1204]
- B66B1/26 . . mechanical
- B66B1/28 . . electrical (detecting excessive speed B66B5/04); [N: (control of electrical motor H02P)] [C0707]
- B66B1/28B . . . [N: with the use of a speed pattern generator] [N1203]
- [N: **WARNING**
[N1207] This group is not complete due to reorganisation in progress, see also [B66B1/28](#)]
- B66B1/30 . . . effective on driving gear, [N: e.g. acting on power electronics, on inverter or rectifier controlled motor] [M1107]
- B66B1/30B [N: for energy saving] [N0707]
- B66B1/30D [N: with starting torque control] [N0707]
- B66B1/30F [N: with DC powered elevator drive] [N0707]
- B66B1/30H [N: with AC powered elevator drive] [N0707]
- B66B1/32 . . . effective on braking devices, [N: e.g. acting on electrically controlled brakes (brake control H02P, lift brakes per se [B66B5/02](#))] [M1107]
- B66B1/34 . Details, [N: e.g. call counting devices, data transmission from car to control system, devices giving information to the control system] [C0707]
- B66B1/34A . . [N: Setting or modification of parameters of the control system] [N1204]
- B66B1/34B . . [N: Control system configuration and the data transmission or communication within the control system] [N1204]
- B66B1/34B2 . . . [N: Control system configuration, i.e. lay-out] [N1204]
- B66B1/34B2B [N: Fault-tolerant or redundant control system configuration] [N1204]
- B66B1/34B2D [N: Master-slave control system configuration] [N1204]
- B66B1/34B4 . . . [N: Data transmission or communication within the control system] [N1204]
- B66B1/34B4B [N: Procedure or protocol for the data transmission or communication] [N1204]
- B66B1/34B4D [N: between the elevator control system and remote or mobile stations] [N1204]
- B66B1/34C . . [N: mechanical]
- B66B1/34D . . [N: Load weighing or car passenger counting devices ([B66B5/14](#) takes precedence)]
- B66B1/34D2 . . . [N: using load cells] [N0809]
- B66B1/34F . . [N: Position or motion detectors or driving means for the detector ([B66B1/40](#), [B66B1/50](#) take precedence; length measuring [G01B](#); speed measuring [G01P](#))]
- B66B1/36 . . Means for stopping the cars, cages, or skips at predetermined levels
- B66B1/36C . . . [N: mechanical]
- B66B1/38 . . . and for returning the controlling handle or lever to its neutral position [C0707]

- B66B1/40 . . . and for correct levelling at landings
- B66B1/40B [N: for hydraulically actuated elevators] [N1204]
- B66B1/42 separate from the main drive
- B66B1/42B [N: adapted for multi-deck cars in a single car frame] [N1009]
- B66B1/44 . . . and for taking account of disturbance factors, e.g. variation of load weight
- B66B1/46 . . Adaptations of switches or switchgear (switches or switchgear in general, applications of switches or switchgear for floor-levelling purpose [H01H](#); panels for boards or switching arrangements [H02B1/015](#)) [C9601]
- B66B1/46B [N: characterised by their shape or profile] [N0707]
- B66B1/46B2 [N: Mechanical or piezoelectric input devices] [N1204]
- B66B1/46B4 [N: Touch sensitive input devices] [N1204]
- B66B1/46B6 [N: being resistant to damage] [N1204]
- B66B1/46B8 [N: facilitating maintenance, installation, removal, replacement or repair] [N1204]
- B66B1/46C [N: characterised by their mounting position] [N0707]
- B66B1/46D [N: Call registering systems]
- B66B1/48 . . . Adaptations of mechanically-operated limit switches (for cranes [B66C13/50](#); for winding mechanisms [B66D1/56](#))
- B66B1/50 . . . with operating or control mechanisms mounted in the car or cage or in the lift well or hoistway
- B66B1/52 . . . Floor selectors

B66B3/00 Applications of devices for indicating or signalling operating conditions of elevators [M1107]

- B66B3/00B . . [N: Indicators] [N1203]
- B66B3/00B2 . . . [N: Mechanical devices that can be illuminated] [N1203]
- B66B3/00B4 . . . [N: for guiding passengers to their assigned elevator car] [N1203]
- B66B3/00B6 . . . [N: Displaying information not related to the elevator, e.g. weather, publicity, internet or TV] [N1203]
- B66B3/02 . . Position or depth indicators
- B66B3/02B . . . [N: characterised by their mounting position] [N0707]
- B66B3/02C . . . [N: Mechanical devices that can be illuminated] [C0707]

B66B5/00 Application of checking, fault-correcting, or safety devices in elevators [M1107]

- B66B5/00B . . [N: Monitoring devices or performance analysers ([B66B5/02](#) takes precedence)] [C1203]
- B66B5/00B2 . . . [N: Devices monitoring the users of the elevator system] [N0603] [C1203]
- B66B5/00B3 . . . [N: Devices monitoring the operating condition of the elevator system] [N1203]
- B66B5/00B3B [N: for maintenance or repair] [N1203]
- B66B5/00B3D [N: for safety reasons] [N1203]
- B66B5/00B4 . . . [N: Performance analysers] [N0603]
- B66B5/00C . . [N: Devices enhancing safety during maintenance] [N0603]

- B66B5/00C2 . . [N: Safety of maintenance personnel] [N0603] [M1110]
- B66B5/00C2B . . . [N: by preventing crushing] [N0603] [M1110]
- B66B5/00C2B2 [N: by devices, being operable or not, mounted on the elevator car] [N1110]
- B66B5/00C2B4 [N: by activating the safety brakes when the elevator car exceeds a certain upper or lower position in the elevator shaft] [N1110]
- B66B5/00C2B6 [N: by anchoring the elevator car or counterweight] [N1110]
- B66B5/00C2C . . . [N: by preventing falling by means of safety fences or handrails, being operable or not, mounted on top of the elevator car] [N0603] [M1110]

- B66B5/00D . [N: Devices facilitating maintenance, repair or inspection tasks (devices incorporated in the buffer B66B5/28F; railings on top of the car B66B11/02C)] [N0603] [C0710]
- B66B5/00D2 . . [N: Testing of safety devices] [N0603]

- B66B5/02 . responsive to abnormal operating conditions
- B66B5/02A . . [N: the abnormal operating conditions being independent of the system (alarm systems in general G08B)] [M1110]
- B66B5/02A2 . . . [N: where the abnormal operating condition is caused by a natural event, e.g. earthquake] [N1110]
- B66B5/02A4 . . . [N: where the abnormal operating condition is caused by an accident, e.g. fire] [N1110]
- B66B5/02A6 . . . [N: where the abnormal operating condition is caused by human behaviour or misbehaviour, e.g. forcing the doors] [N1110]
- B66B5/02B . . [N: to permit passengers to leave an elevator car in case of failure, e.g. moving the car to a reference floor or unlocking the door]
- B66B5/02C . . [N: Safety devices separate from control system in case of power failure, for hydraulic lifts, e.g. braking the hydraulic jack ([B66B5/16](#) takes precedence)]
- B66B5/04 . . for detecting excessive speed
- B66B5/04A . . . [N: with characteristic location of the governor cable] [N1204]
- B66B5/04B . . . [N: Overspeed governors] [N0710]
- B66B5/04B2 [N: of the pendulum or rocker arm type] [N1204]
- B66B5/04T . . . [N: Testing of overspeed governor] [N9603]
- B66B5/06 . . . electrical
- B66B5/08 . . for preventing overwinding
- B66B5/10 . . . electrical
- B66B5/12 . . in case of rope or cable slack
- B66B5/12B . . . [N: electrical]
- B66B5/14 . . in case of excessive loads
- B66B5/14B . . . [N: electrical]
- B66B5/16 . . Braking or catch devices operating between cars, cages, or skips and fixed guide elements or surfaces in hoistway or well
- B66B5/18 . . . and applying frictional retarding forces
- B66B5/18B [N: by acting on main ropes or main cables] [N0811]
- B66B5/20 by means of rotatable eccentrically-mounted members ([B66B5/24](#) takes precedence)
- B66B5/22 by means of linearly-movable wedges ([B66B5/24](#) takes precedence)
- B66B5/24 by acting on guide ropes or cables

- B66B5/26 . . . Positively-acting devices, e.g. latches, knives
- B66B5/28 . Buffer-stops for cars, cages, or skips
- B66B5/28B . . [N: Structure thereof] [N0710]
- B66B5/28D . . [N: mounted on cars or counterweights] [N0710]
- B66B5/28D2 . . . [N: between two cars or two counterweights] [N0710] [C1203]
- B66B5/28F . . [N: with maintenance features (if not incorporated in the buffer B66B5/00D)] [N0710]

- B66B7/00** **Other common features of elevators [M1107]**

- B66B7/02 . Guideways; Guides ([arrangements in mine shafts E21D7/02](#))
- B66B7/02B . . [N: with a particular position in the shaft] [N0710]
- B66B7/02D . . [N: with a special shape] [N0710]
- B66B7/02F . . [N: Mounting means therefor] [N0710]
- B66B7/02F2 . . . [N: Lateral supports] [N0710]
- B66B7/02F4 . . . [N: End supports, i.e. at top or bottom] [N0710]
- B66B7/02F6 . . . [N: Interconnections] [N0710]
- B66B7/02F8 . . . [N: for mounting auxiliary devices] [N0710]
- B66B7/02H . . [N: with earthquake protection devices] [N0710]
- B66B7/04 . . [N: Riding means, e.g.] Shoes, Rollers, [N: between car and guiding means, e.g. rails, ropes ([rollers adapted to match the shape of a special guiding means B66B7/02](#); [vibration attenuation systems acting between car and its supporting frame B66B11/02V](#))] [M1107]
- B66B7/04A . . . [N: including active attenuation system for shocks, vibrations] [N9802]
- B66B7/04A1 [N: with rollers, shoes] [N9802]
- B66B7/04A1L [N: using learning] [N9802]
- B66B7/04A2 [N: with magnetic or electromagnetic means] [N9802]
- B66B7/04A2L [N: using learning] [N9802]
- B66B7/04B . . . [N: Rollers] [N0804]
- B66B7/04D . . . [N: Shoes, sliders] [N0804]
- B66B7/04P . . . [N: including passive attenuation system for shocks, vibrations] [N9802]

- B66B7/06 . Arrangements of ropes or cables
- B66B7/06A . . [N: Belts] [N0603]
- B66B7/06B . . [N: Power supply or signal cables] [N0603]
- B66B7/06C . . [N: Chains] [N0603]
- B66B7/06D . . [N: Cable weight compensating devices]
- B66B7/08 . . for connection to the cars or cages, e.g. couplings
- B66B7/08B . . . [N: Belt termination devices] [N0710]
- B66B7/10 . . for equalising rope or cable tension

- B66B7/12 . Checking, lubricating, or cleaning means for ropes, cables or guides
- B66B7/12B . . [N: Checking means] [N1110]
- B66B7/12B2 . . . [N: specially adapted for ropes or cables] [N1110]

- B66B7/12B2B [N: by analysing electric variables] [N1110]
- B66B7/12B2D [N: by analysing magnetic variables] [N1110]
- B66B7/12B2F [N: by optical techniques] [N1110]
- B66B7/12B4 [N: specially adapted for guides] [N1110]
- B66B7/12D . . . [N: Lubricating means] [N1110]
- B66B7/12D2 [N: specially adapted for ropes or cables] [N1110]
- B66B7/12D4 [N: specially adapted for guides] [N1110]
- B66B7/12F . . . [N: Cleaning means] [N1110]
- B66B7/12F2 [N: specially adapted for ropes or cables] [N1110]
- B66B7/12F4 [N: specially adapted for guides] [N1110]

Guide heading: **Lifts in, or associated with, buildings**

- B66B9/00** **Kinds or types of lifts in, or associated with, buildings or other structures**
(characterised by control systems [B66B1/00](#); apparatus for raising or lowering persons on stages of theatres [A63J5/12](#))
- B66B9/00A . . . [N: for lateral transfer of car or frame, e.g. between vertical hoistways or to/from a parking position] [N1204]
 - B66B9/02 . . . actuated mechanically otherwise than by rope or cable
 - B66B9/02B . . . [N: by rack and pinion drives] [N0710] [M1107]
 - B66B9/02D . . . [N: by screw-nut drives] [N0710] [M1107]
 - B66B9/02F . . . [N: by rope climbing devices] [N0710] [M1107]
 - B66B9/04 . . . actuated pneumatically or hydraulically (platforms for lifting or lowering through short distances [B66F7/00](#))
 - B66B9/06 . . . inclined, e.g. serving blast furnaces
 - B66B9/08 associated with stairways, e.g. for transporting disabled persons [N: (facilitating access of invalids to vehicles [A61G3/02](#))] [C9807]
 - B66B9/08B [N: Driving mechanisms] [N9807]
 - B66B9/08B1 [N: Rack and pinion, friction rollers] [N9807]
 - B66B9/08B2 [N: Screw and nut] [N9807]
 - B66B9/08B3 [N: Pull cable, pull chain] [N9807]
 - B66B9/08C [N: Levelling gears] [N9807]
 - B66B9/08D [N: Guide rail ([B66B9/08B](#) takes precedence)] [N9807]
 - B66B9/08E [N: Lifting platforms, e.g. constructional features] [N9807]
 - B66B9/08F [N: Hanging lifts, e.g. rope suspended seat or platform] [N9807]
 - B66B9/08G [N: Collapsible stairways, e.g. operable between a lower level and an upper level] [N9807]
 - B66B9/10 . . . Paternoster type (with devices for transferring goods into, or out of, the compartments [B65G17/00](#))
 - B66B9/16 . . . Mobile or transportable lifts specially adapted to be shifted from one part of a building or other structure to another part or to another building or structure (devices for lifting

or lowering bulky or heavy goods for loading or unloading purposes [B66F9/00](#), e.g. fork-lift trucks [B66B9/06](#) [C9601]

- B66B9/187 . . with a liftway specially adapted for temporary connection to a building or other structure ([B66B9/193](#) takes precedence) [N9601]
 - B66B9/193 . . with inclined liftways [N9601]
- B66B11/00 Main component parts of lifts in, or associated with, buildings or other structures**
- B66B11/00A . [N: Constructional features of hoistways] [N0603]
 - B66B11/00B . [N: Arrangement of controller, e.g. location] [N0603]
 - B66B11/00B2 . . [N: in the machine room] [N0603]
 - B66B11/00B4 . . [N: in the hoistway] [N0603]
 - B66B11/00B4B . . . [N: on the car] [N0603]
 - B66B11/00B4C . . . [N: on the counterweight] [N0603]
 - B66B11/00C . [N: Arrangement of driving gear, e.g. location or support] [N0603] [M1107]
 - B66B11/00C2 . . [N: in the machine room] [N0603]
 - B66B11/00C4 . . [N: in the hoistway] [N0603]
 - B66B11/00C4B . . . [N: on the car] [N0603]
 - B66B11/00C4C . . . [N: on the counterweight] [N0603]
 - B66B11/00D . [N: Applications of loading and unloading equipment for lifts associated with buildings (of general application [B65G](#); for paternoster lifts [B65G17/00](#); for mine lifts [B66B17/14](#))] [C1207]
 - B66B11/00R . [N: Roping ([Mining hoist B66B15/08](#))] [N9904]
 - B66B11/00R4 . . [N: for counterweightless elevators] [N1203]
 - B66B11/00R6 . . [N: with hoisting rope or cable positively attached to a winding drum] [N9904]
 - B66B11/00R8 . . [N: with hoisting rope or cable operated by frictional engagement with a winding drum or sheave] [N9904]
 - B66B11/00R8A . . . [N: of rucksack elevators] [N1204]
 - B66B11/00R8B . . . [N: with separate traction and suspension ropes] [N0804]
 - B66B11/00R8D . . . [N: where multiple cars drive in the same hoist way] [N0804]
 - B66B11/02 . Cages, [N: i.e. cars] (doors, gates or other apparatus controlling access to, or exit from, cages [B66B13/00](#)) [C1009]
 - B66B11/02B . . [N: Car frames] [N0710] [C1009]
 - B66B11/02B1 . . . [N: for multi-deck cars] [N1009]
 - B66B11/02B1B [N: with changeable inter-deck distances] [N1009]
 - B66B11/02C . . [N: Constructional features, e.g. walls assembly, decorative panels, comfort equipment, thermal or sound insulation] [N9802]
 - B66B11/02C1 . . . [N: Lighting systems] [N9802]
 - B66B11/02C2 . . . [N: Ventilation systems] [N9802]
 - B66B11/02C3 . . . [N: Maintenance features (devices facilitating maintenance in general [B66B5/00D](#))] [N0710] [C1009]

- B66B11/02C4 . . . [N: Fixation of wall panels] [N0710] [C1009]
- B66B11/02V . . [N: Attenuation system for shocks, vibrations, imbalance, e.g. passengers on the same side (acting between car or supporting frame and guides [B66B7/04](#); acting between car and ropes, cables [B66B7/08](#); correcting levelling between car and floor [B66B1/40](#))] [N9802]
- B66B11/02V1 . . . [N: Passive systems (aerodynamic structure [B66B11/02C](#))] [N9802] [C1009]
- B66B11/02V1F [N: acting between car and supporting frame] [N9802]
- B66B11/02V2 [N: Active systems] [N9802] [C1009]
- B66B11/02V2F [N: acting between car and supporting frame] [N9802]
- B66B11/02V3 [N: Suspension locking or inhibiting means to avoid movement when car is stopped at a floor (locking car to building while loading to avoid movement [B66B17/34](#))] [N9802]

- B66B11/04 . . Driving gear; [N: Details thereof, e.g. seals (braking devices acting on the driving gear [B66B5/02](#); of mining-hoist winding devices [B66B15/08](#))] [M1107]
- B66B11/04L . . [N: actuated by an electrical linear motor (in the counterweight [B66B17/12](#))] [N9904]
- B66B11/04M . . [N: actuated manually, e.g. additional safety system] [N9904]
- B66B11/04P . . [N: actuated pneumatically or hydraulically] [N9904]
- B66B11/04R . . [N: actuated by rotating motor; Details, e.g. ventilation (Roping on drum, sheave, winch or pulley [B66B11/00R](#); Power supply or control [B66B1/28](#), [H02P](#); Motor construction [H02K](#))] [N9904]
- B66B11/04R1 . . . [N: with a gearless driving, e.g. integrated sheave, drum or winch in the stator or rotor of the cage motor] [N9904]
- B66B11/04R2 . . . [N: with screw-nut or worm-screw gear] [N9904]
- B66B11/04R3 . . . [N: with planetary or epicycloidal gear, e.g. differential gear] [N9904]
- B66B11/04R4 . . . [N: with rack and pinion gear] [N9904]
- B66B11/04R5 . . . [N: with chain, pinion gear] [N9904]
- B66B11/04R6 . . . [N: with friction gear, e.g. belt linking motor to sheave] [N9904]
- B66B11/04R7 . . . [N: with a clutch or a coupling system between several motors, e.g. switching different speeds, progressive starting, torque limitation, flywheel (control [B66B1/28](#))] [N9904]
- B66B11/04Z . . [N: actuated by other systems, e.g. combustion engines] [N9904] [M1107]
- B66B11/06 . . with hoisting rope or cable positively attached to a winding drum [N: [B66B11/00R6](#) takes precedence] [C9904]
- B66B11/08 . . with hoisting rope or cable operated by frictional engagement with a winding drum or sheave [N: [B66B11/00R8](#) takes precedence] [C9904]

- B66B13/00** **Doors, gates, or other apparatus controlling access to, or exit from, cages or lift well landings (door fittings, locks [E05](#))**

- B66B13/02 . . Door or gate operation (of general application [E05F](#))
- B66B13/04 . . of swinging doors
- B66B13/06 . . of sliding doors
- B66B13/08 . . . guided for horizontal movement
- B66B13/10 . . . by car or cage movement
- B66B13/12 . . Arrangements for effecting simultaneous opening or closing of cage and landing

- doors
- B66B13/12B . . . [N: electrical]
- B66B13/14 . . Control systems or devices
- B66B13/14B . . . [N: electrical]
- B66B13/14B2 [N: method or algorithm for controlling doors] [N0710]
- B66B13/16 . . . Door or gate locking devices controlled or primarily controlled by condition of cage, e.g. movement or position
- B66B13/16B [N: electrical]
- B66B13/18 without manually-operable devices for completing locking or unlocking of doors
- B66B13/18B [N: electrical]
- B66B13/20 Lock mechanisms actuated mechanically by abutments or projections on the cages

- B66B13/22 . Operation of door or gate contacts
- B66B13/24 . Safety devices in passenger lifts, not otherwise provided for, for preventing trapping of passengers
- B66B13/24C . . [N: mechanical]
- B66B13/26 . . between closing doors
- B66B13/28 . . between car or cage and wells
- B66B13/28B . . . [N: Toe guards or apron devices] [N0710]

- B66B13/30 . Constructional features of doors or gates (of interest apart from this application [E06B](#))
- B66B13/30B . . [N: Details of door sills] [N0710]
- B66B13/30D . . [N: Details of door panels] [N0710]
- B66B13/30D2 . . . [N: Slat doors for elevators] [N1203]
- B66B13/30F . . [N: Details of door jambs] [N0710]
- B66B13/30H . . [N: Details of seals and joints] [N0710]

Guide heading: **Lifts in hoistways of mines [M1107]**

B66B15/00 Main component parts of mining-hoist winding devices

- B66B15/02 . Rope or cable carriers
- B66B15/04 . . Friction sheaves; "Koepe" pulleys
- B66B15/06 . . Drums

- B66B15/08 . Driving gear

B66B17/00 Hoistway equipment

- B66B17/02 . mounted in head-frames ([winding towers for mines E04H12/26](#))

- B66B17/04 . Mining-hoist cars or cages

- B66B17/06 . . . with tiltable platforms
- B66B17/08 . Mining skips
- B66B17/10 . . . adapted for passenger transport
- B66B17/12 . Counterpoises
- B66B17/14 . Applications of loading and unloading equipment (of general application [B65G](#))
- B66B17/16 . . . for loading and unloading mining-hoist cars or cages
- B66B17/18 Swinging bridges, e.g. for compensating for differences in level between car or cage and landing
- B66B17/20 by moving vehicles into, or out of, the cars or cages [M1107]
- B66B17/22 Securing vehicles in cars or cages
- B66B17/24 mounted on the car or cage
- B66B17/26 . . . for loading or unloading mining-hoist skips
- B66B17/28 . . . electrically controlled (for elevators in general [B66B1/06](#))
- B66B17/30 for cars or cages
- B66B17/32 for skips

B66B17/34 . Safe lift clips; Keps

B66B17/36 . Gates or other apparatus controlling access to, or exit from, cars, cages, or hoistway landings

B66B19/00 Mining-hoist operation

B66B19/00B . [N: installing or exchanging guide rails (details of rails [B66B7/02](#))] [[N0710](#)]

B66B19/00C . [[N: installing or exchanging the elevator drive](#)] [[N1203](#)]

B66B19/00D . [N: method for modernisation of elevators] [[N0710](#)]

B66B19/02 . installing or exchanging ropes or cables

B66B19/04 . installing or removing mining-hoist cars, cages, or skips

B66B19/06 . Applications of signalling devices (depth indicators [B66B3/02](#); order telegraphs [G08B](#))

B66B20/00 Elevators not provided for in groups B66B1/00 to B66B19/00 [[N0704](#)]

Guide heading: Escalators or moving walkways

B66B21/00 Kinds or types of escalators or moving walkways

B66B21/02 . Escalators

B66B21/02B . . [N: of variable speed type] [[N0710](#)]

- B66B21/04 . . Linear type
- B66B21/06 . . Spiral type
- B66B21/08 . . Paternoster type, i.e. the escalator being used simultaneously for climbing and descending ([B66B21/06](#) takes precedence)

- B66B21/10 . Moving walkways
- B66B21/12 . . of variable speed type

- B66B23/00** **Component parts of escalators or moving walkways**

- B66B23/02 . Driving gear
- B66B23/02B . . [N: with polygon effect reduction means] [N0710]
- B66B23/02D . . [N: Chains therefor] [N0710]
- B66B23/02F . . [N: with a drive or carrying sprocket wheel located at end portions] [N0809] [M1107]
- B66B23/02H . . [N: with separate drive chain or belt that engages directly the carrying surface chain] [N0809] [M1107]
- B66B23/04 . . for handrails
- B66B23/06 . . . with means synchronising the operation of the steps or the carrying belts and the handrails [M1107]

- B66B23/08 . Carrying surfaces
- B66B23/10 . . Carrying belts
- B66B23/12 . . Steps

- B66B23/14 . Guiding means for carrying surfaces
- B66B23/14B . . [N: Roller assemblies] [N0710]
- B66B23/14D . . N: End portions, i.e. means for changing the direction of the carrying surface] [N0710] [M1107]

- B66B23/16 . Means allowing tensioning of the endless member
- B66B23/18 . . for carrying surfaces
- B66B23/20 . . for handrails

- B66B23/22 . Balustrades
- B66B23/22B . . [N: Lighting systems therefor] [N0710]
- B66B23/24 . . Handrails (driving gear therefor [B66B23/02](#); tensioning means therefor [B66B23/16](#); preventing jamming thereof by foreign objects [B66B29/04](#); accessories therefor [B66B31/02](#))
- B66B23/26 . . . of variable speed type

- B66B25/00** **Control of escalators or moving walkways** (walkways of variable speed type [B66B21/12](#); handrails of variable speed type [B66B23/26](#); of general application [G05](#))

- B66B25/00B . [N: Methods or algorithms therefor] [N0710]
- B66B25/00D . [N: Monitoring for maintenance or repair (for security reasons [B66B29/00B](#))] [N0710]

- B66B27/00** **Indicating operating conditions of escalators or moving walkways (of general application [G08](#))**
- B66B29/00** **Safety devices of escalators or moving walkways (walkways of variable speed type [B66B21/12](#); handrails of variable speed type [B66B23/26](#))**
- B66B29/00B . **[N: Applications of security monitors] [N0710] [M1107]**
- B66B29/02 . responsive to, or preventing, jamming by foreign objects
- B66B29/04 . . for balustrades or handrails
- B66B29/06 . . Combplates
- B66B29/08 . Means to facilitate passenger entry or exit ([moving handrails \[B66B23/24\]\(#\)](#))
- B66B31/00** **Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety [B66B29/00](#)) [M1107]**
- B66B31/00B . [N: for cleaning steps or pallets] [N0710]
- B66B31/00C . **[N: for conveying hand carts, e.g. shopping carts (hand carts per se [B62B1/00](#), [B62B3/00](#))]**
- B66B31/02 . for handrails