Claims

1. System (1) for controlling access to a restricted area (22) in a building, wherein the system (1) comprises a sliding door system (5) and a controller (8) for the sliding door system (5),

wherein the sliding door system (5) comprises a door frame (2) and a sliding door (4) which can be displaced in the door frame (2) between a closed position and an open position by means of a drive unit (6) actuated by the controller (8), wherein the door frame (2) has a passage region (24) and a wall shell region (18) which at least partially accommodates the sliding door (4) in the open position, and wherein the sliding door (4) has an end face (30) which points toward the passage region (24) in the open position;

wherein the controller (8) has a processor unit (8) and a sensor unit (10), wherein the sensor unit (10) is arranged on the end face (30) of the sliding door (4) and wherein the processor unit (8) is arranged in an inner space of the sliding door (4) and is electrically connected to the sensor unit (10) and the drive unit (6), and wherein the controller (8) is designed to generate an alarm signal if a height (H) of an object (20) in the passage region (24), as determined by the sensor unit (10), deviates from a height range stored for said object (20);

additionally having a recognition device (14) which is arranged on the sliding door system (5) or in the vicinity thereof and is communicatively connected to the controller (8), wherein the recognition device (14) is designed to capture and check credentials presented by the object (20), wherein the processor unit (8) is designed to determine a record in a storage device (36) if the credentials are valid for the object (20), in which storage device the credentials are assigned to an opening width (W) of the sliding door (4) and the height range.

2. System (1) according to claim 1, wherein the recognition device (14) comprises a transceiver (16) for radio signals, a device for capturing a biometric feature, a device for capturing an optical code, a reader for a magnetic stripe card or a chip card, or a keypad or a touch-sensitive screen for manually entering a password, or a mechanical or electronic door lock.

3. System (1) according to any of the preceding claims, additionally having an interface device (7) which is arranged on the sliding door (4) and is designed to send data to and/or receive data from a building management system (12).

4. System (1) according to any of the preceding claims, wherein the drive unit (6) is arranged on the sliding door (4).

5. System (1) according to any of the preceding claims, wherein the processor unit (8) is designed to determine a dwell time for the object (20) in the passage region (24) and to compare it

with a defined dwell time in order to generate the alarm signal if the defined dwell time is exceeded.

6. System (1) according to any of the preceding claims, wherein the processor unit (8) is designed to determine a length of the object (20) and to compare said length with a stored object length range in order to generate the alarm signal if the determined length of the object (20) deviates from the object length range stored for the object (20).

7. System (1) according to any of the preceding claims, wherein the sliding door (4) comprises an actuator (9) which is designed to position door leaves (26) of the sliding door (4) in a first position with a first leaf spacing (d1) when the sliding door (4) is in the closed position and in a second position with a second leaf spacing (d2) when the sliding door (4) is in the open position, the first leaf spacing (d1) being greater than the second leaf spacing (d2).

8. Method for operating a system (1) for controlling access to a restricted area (22) in a building according to any of claims 1–7, wherein the system (1) comprises a sliding door system (5) and a controller (8) for the sliding door system (5), the method comprising:

actuating a drive unit (6) of the sliding door system (5) by means of the controller (8) in order to open a passage region (24) of a door frame (2) for an object (20) by moving a sliding door (4) from a substantially closed position to an open position, wherein part of the sliding door (4) slides into a wall shell region (18) of the door frame (2) and wherein the sliding door (4) has an end face (30) which points toward the passage region (24) in the open position;

activating a sensor unit (10) arranged on the end face (30) by means of a processor unit (8) of the controller (8), wherein the sensor unit (10) is designed to determine a height (H) of an object (20) in the passage region (24); and

generating an alarm signal by means of the controller (8) if the height (H) of the object (20) in the passage region (24), as determined by the sensor unit (10), deviates from a height range stored for said object (20),

which also comprises the recognition device (14) capturing and checking credentials presented by the object (20),

which also comprises, if the credentials are valid for the object (20), the processor unit (8) determining a record in which the credentials are assigned to an opening width (W) of the sliding door (4) and the height range.

9. Method according to claim 8, which also comprises the processor unit (8) determining a dwell time for the object (20) in the passage region (24), comparing the determined dwell time with a defined dwell time and generating the alarm signal if the defined dwell time is exceeded.

10. Method according to claim 8 or claim 9, which also comprises the processor unit (8) determining a length of the object (20), comparing the determined length with a stored object length range and generating the alarm signal if the determined length of the object (20) deviates from the object length range stored for the object (20).