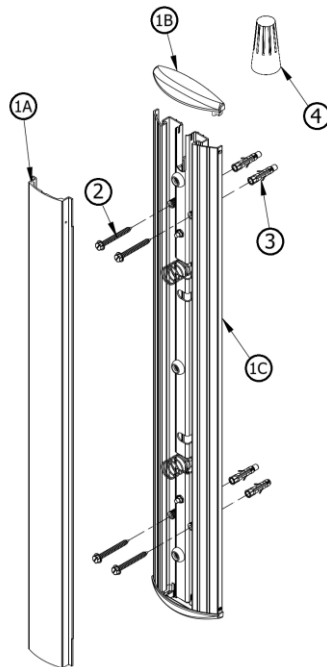


Hager 8228-04 switches offer a rugged and attractive ADA compliant switch design that is easy to activate from any angle, providing years of trouble-free operation. The 8228-04 utilizes 2 fully redundant 15 amp Form-C contact switches, and molded impact and flame resistant end caps which provide easy snap-in installation of the 82TX. The 8228-04 may be mounted to any flat wall surface or mounting post. All necessary mounting hardware are provided.

The 8228-04 uses two switches and can be hard wired or fitted with either the Kinetic or 82TX wireless transmitters. In the hardwired layout, they will be wired in parallel. The wireless versions can be paired with the Hager 82RX.

Contents:



ITEM NUMBER	COMPONENT DESCRIPTION	8228-04 HRDWRD QTY:	8228-04 KNTC QTY:	8228-04 WRLS QTY:
1A	Faceplate	1	1	1
1B	End Cap	1	1	1
1C	Base	1	1	1
2A	#14 x 1-1/2" Flanged Slotted Hex Head Wood Screws	4	4	4
2B	1/4"-20 x 1" Round Phillips Head Machine Screws (Not Shown)	4	4	4
3	#14 Drywall/Concrete Anchor	4	4	4
4	Grey Plastic Wire Nut C/W Spring	2	2	2
5	82TX (Not Shown)	0	0	1

1 8228-04 36" TL Front, Side and Back View

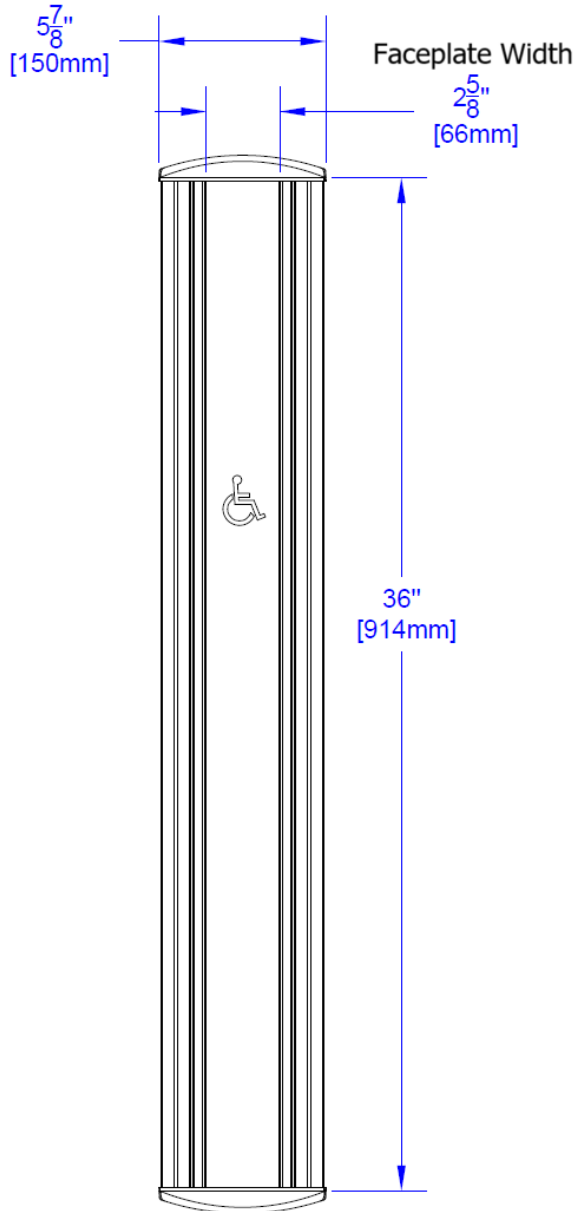


Figure 1: Front View

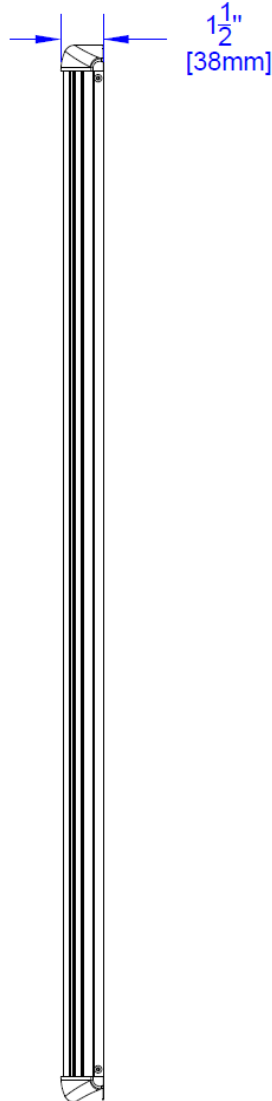


Figure 2: Side View

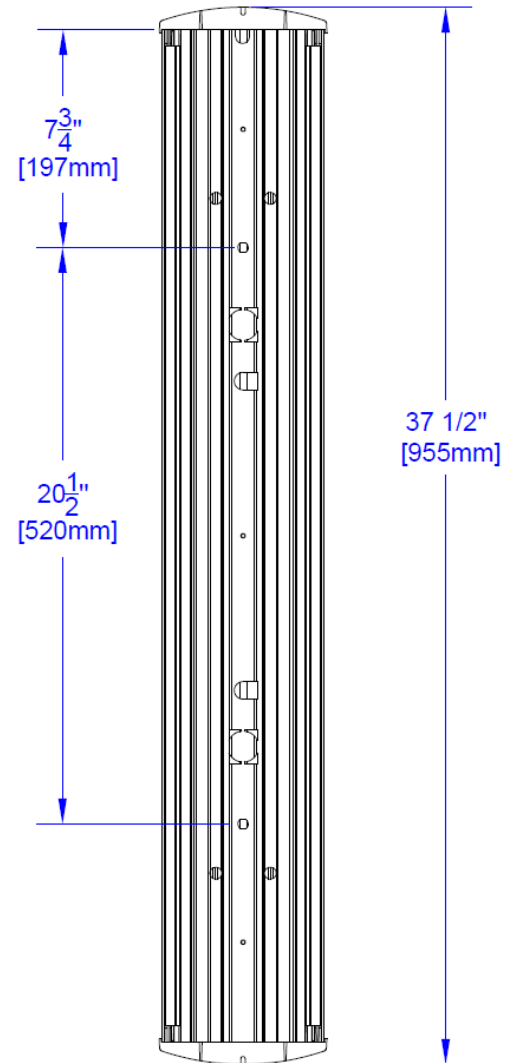


Figure 3: Back View

2 Specifications

Hardwired	
Contact Type	2 x SPDT FORM C
Switch Type	Momentary
Contact Rating	15A @ 30V DC
Temperature Range	-40°F to 140°F (-40°C to 60°C)
Standard Finish	US32D/630
Kinetic	
Wireless Frequency	900 MHz. Fixed Frequency
Open Air Range	Up to 300ft
Temperature Range	-40°F to 185°F (-40°C to 85°C)
Standard Finish	US32D/630
Wireless	
Wireless Frequency	905.25 / 915.25 / 925.25 MHz. Spread Spectrum
Open Air Range	Up to 500ft
Temperature Range (Alkaline Battery)	32°F to 122°F (0°C to 50°C)
Temperature Range (Lithium Battery)	-40°F to 122°F (-40°C to 50°C)
Standard Finish	US32D/630

3 Installation

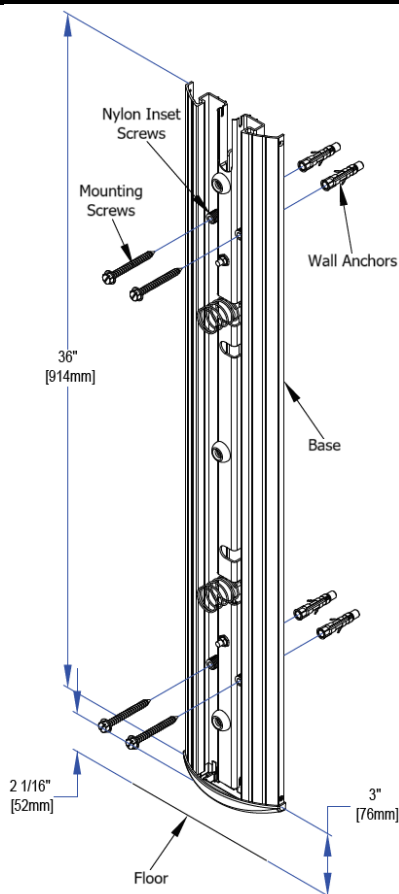


Figure 4: Mounting Diagram

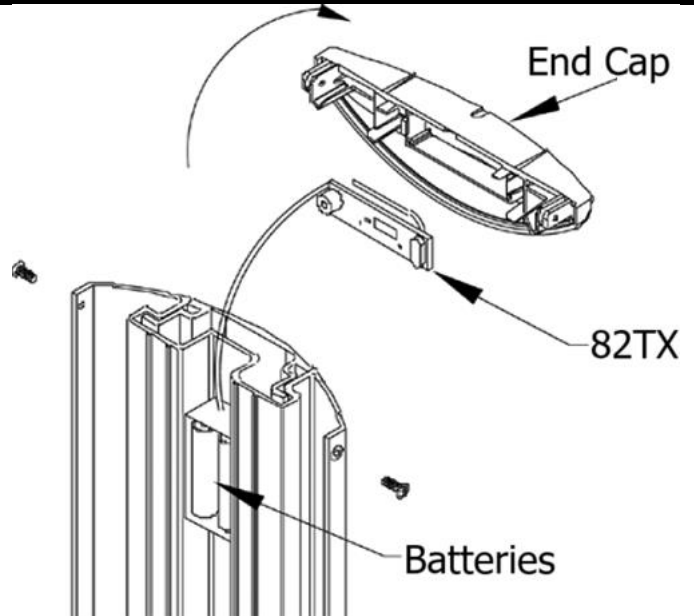


Figure 5: 82TX Installation Diagram

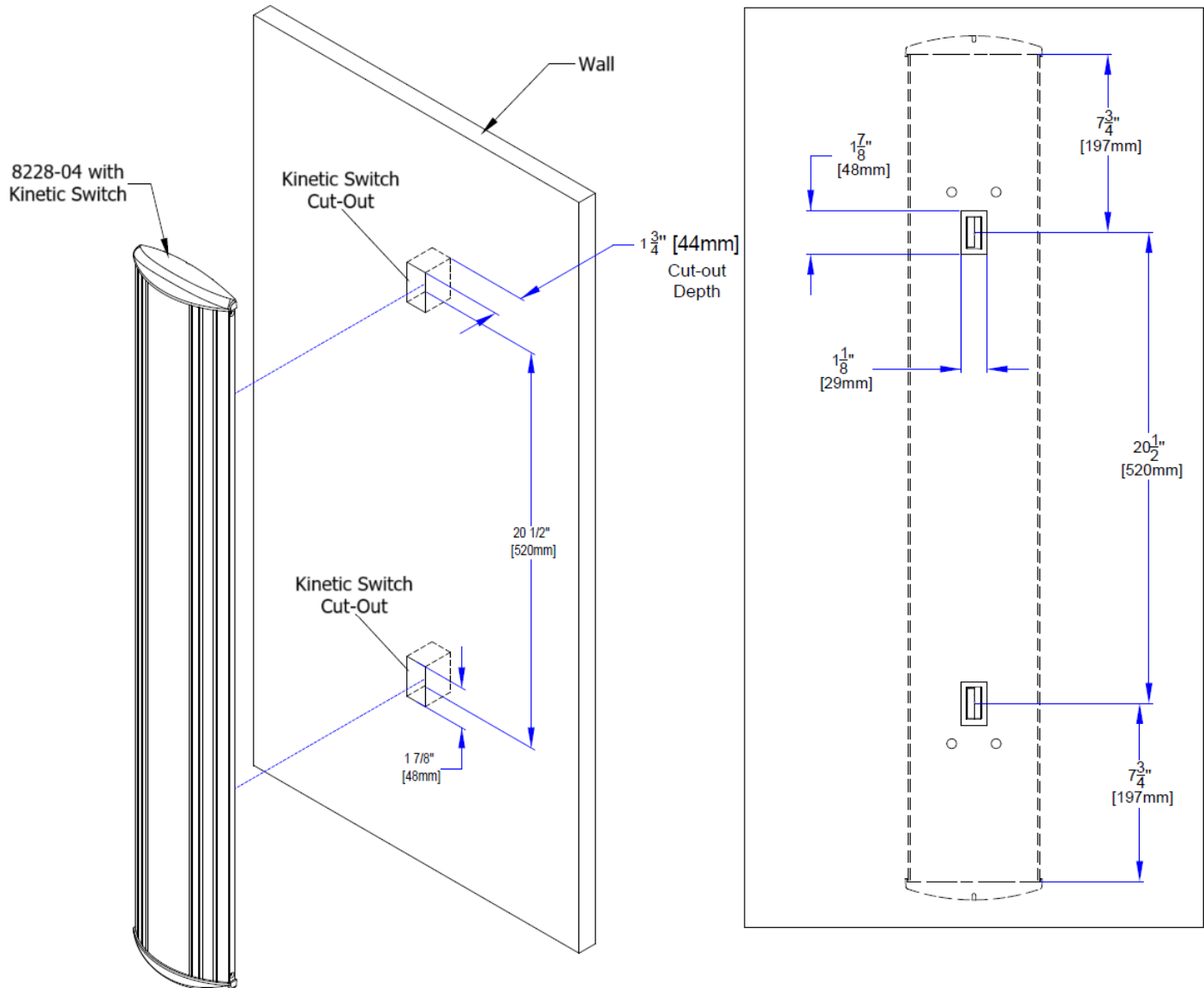


Figure 6: Mounting Diagram for 8228-04 Kinetic Switch

Code Requirements: If installed according to these instructions the 8228-04 switch will meet the requirements of the California Building Code (Section 1117B.6, Date: 2009), and Section 3.8.3.3.17(b) of the Ontario Building Code.

1. Remove the assembled unit from packaging. The unit must be disassembled to be installed. To do this, remove the two small screws holding the top end cap in place. Remove the end cap. Then, while grasping the faceplate, pull vertically until the faceplate is removed from the base unit. Set the faceplate aside and protect it from surface damage.
2. Determine and mark the optimum top edge height from the finished floor. See Figure 4 for common height. If utilizing an inwall electrical box, center the backplate over the box, while lining up the top edge with the height marked earlier.

3. Using a level, ensure the base unit is plumb and level. Using the base unit as a template, mark the four mounting holes through the adjustable nylon inset screws onto the wall surface or mounting post.
4. Drill the four mounting holes:
 - a. Drill the wall at the four marked locations and insert the appropriate wall anchors. Both drywall and concrete anchors for #14 X 1-1/2" Flanged Slotted Hex Head Wood Screws are included
 - b. If mounting the 8228-04 to a mounting post, drill and tap the four mounting holes for the included 1/4"-20 X 1" Round Phillips Head Machine Screws
5. **For Kinetic Switches Only.** If mounting directly to a wall or mounting post, additional wall or mounting post prep is required. See Figure 6.
6. Prepare the switch for signal transmission:
 - a. **Hardwired:** Use the supplied wire nuts to make the wire connections. Push excess wire into the back box. Ensure the wire is not exposed to the moving parts of the switch or pinched between the back of the base unit and the wall or mounting post surface. The four nylon inset screws may be turned in or out to help plump up 8228-04 and adjust for wall irregularities. Check with a level. When satisfied, install the 4 mounting screws and tighten.
 - b. **Kinetic:** The 8228-04K uses two Kinetic RF switches installed near the top and the bottom of the actuator. When pairing this switch with a receiver, both the top and the bottom switches must be paired. Please refer to the 82RX installation instructions to pair the Kinetic transmitters to the 82RX receiver.
 - c. **Wireless:** See Figure 5. The top end cap includes a snap-in compartment for the 82TX transmitter. Place the transmitter in the top end cap, with the wires hanging down and to the front of the top end cap. Using the supplied wire nuts, connect the two activating wires to the 8228-04 lead wires. Slide the battery and the extra wiring into the back center channel of the base unit. Do not slide all the wire into the channel so that the top end cap can hang off on one side while the next step is performed.
 - d. **Using Other RF Transmitters:** Using the supplied wire nuts, make the wire connections to the RF transmitter. Tuck the transmitter and excess wire into the back box or wall/mounting post cavity. Ensure the cable is not exposed to the moving parts of the switch, or pinched between the back of the base unit and the surface of the wall or mounting post.
7. Reinsert the faceplate into the base unit. This is done by holding the hanger (located at the top center) vertically 'up', then carefully sliding the faceplate bar down the length of the base unit. Be careful not to bend or break the springs or internal switches. When the bottom edge of the faceplate reaches the height of the springs, tuck in the springs and switches as the faceplate slides over them. When the faceplate is approximately 2" from bottom, position hanger so it falls into the slots provided at the top of the base unit. Slide the faceplate down until it rests on the hanger. The faceplate should now move freely within the base unit. Test the operation of the switch before mounting the end cap.

8. When satisfied with the switch operation, place top end cap back and screw in the two small self-tapping Phillips screws

4 System Inspection

After the Installation and operational check of the system:

1. Place any applicable labels on the door (as per ANSI A156.10 or A156.19 guidelines)
2. Instruct the owner on door system operation and how to test it. This should be checked daily.
3. Strongly recommend to the owner that the complete entry be inspected twice a year as part of the service agreement.