

**OVERVIEW**

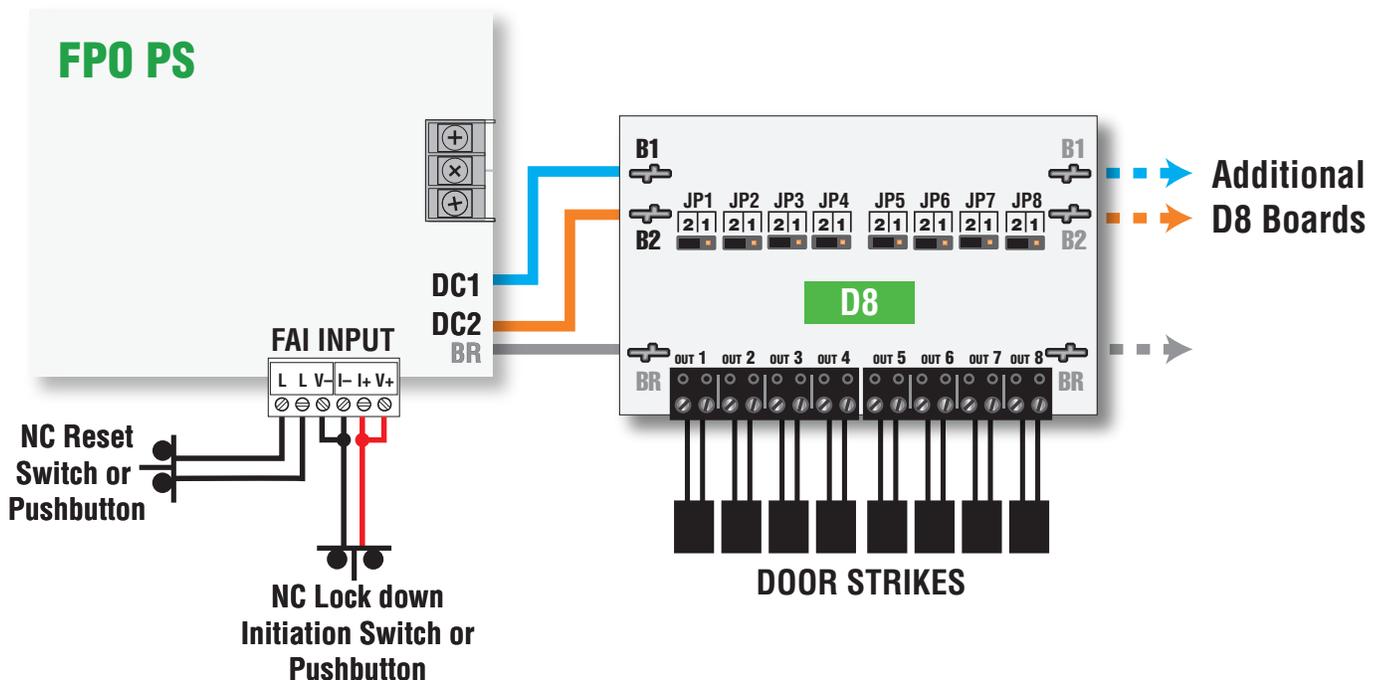
An increasingly common application in the life safety industry is for emergency lockdown of buildings such as schools and hospitals. This application note will cover several variations of solutions to this application using **FLEXPOWER** standard products.



**Basic Lockdown System #1**

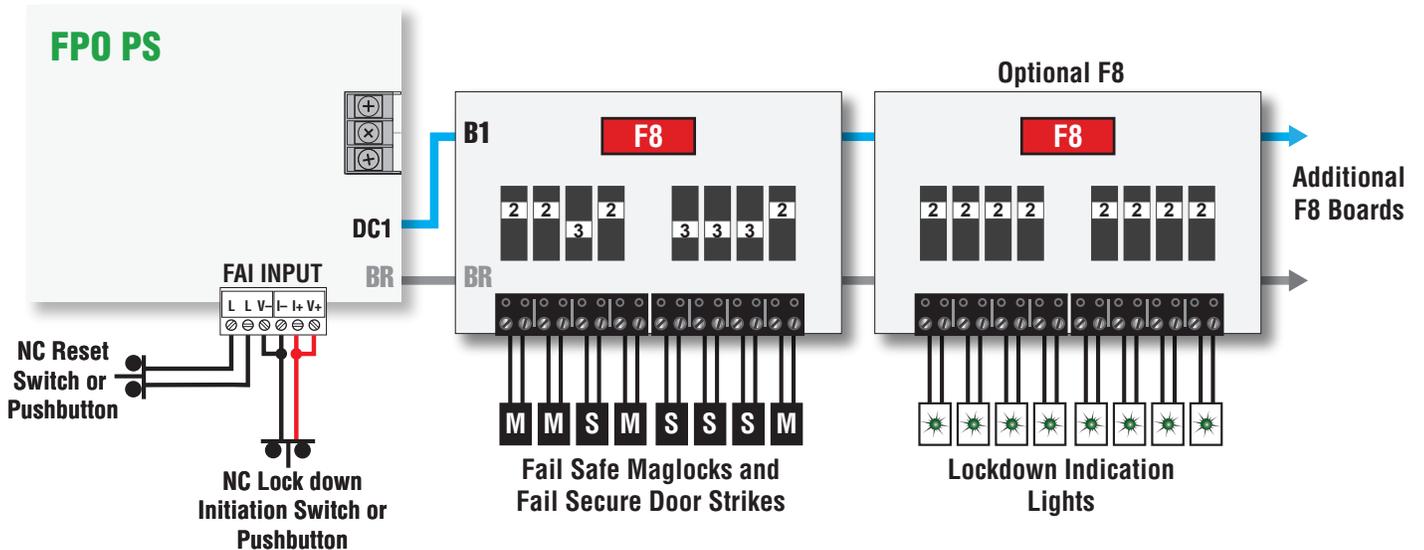
This solution uses an FPO power supply and one or more D8 boards. The FAI input is used to activate the lockdown condition with the reset switch latching the lockdown until manually reset. Note that although this example shows FAI activation via a NC contact, any valid FAI activation method may be used to initiate a lockdown (See the FPO manual for more information on the FAI input). The reset contact **MUST** be a NC contact for proper operation. Momentarily opening this reset contact will deactivate the lockdown.

The switched DC2 voltage on buss 2 of the D8 provides power to the locking devices. All locking devices must be fail-secure for this method, and no provision for fire alarm release is provided.



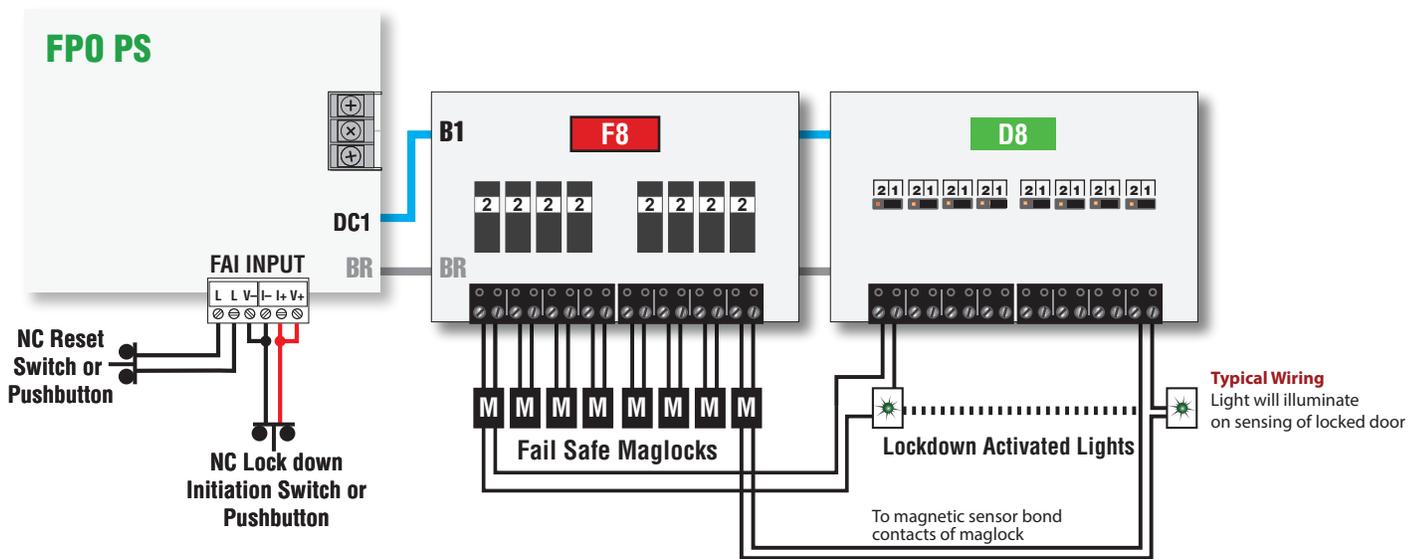
**Basic Lockdown System #2**

This solution uses an FPO power supply and one or more F8 boards to provide selection for fail-safe or fail-secure locking devices by output. Additional F8 outputs may be added for visual indication in the classrooms of the lockdown condition. As in the previous example, the FAI input of the FPO power supply is used to initiate the lockdown and the L/L terminals are used with a reset switch to latch the lockdown condition. Locking devices may be mixed fail-safe/fail-secure, but no provision for fire alarm release is provided.



### Basic Lockdown System #3

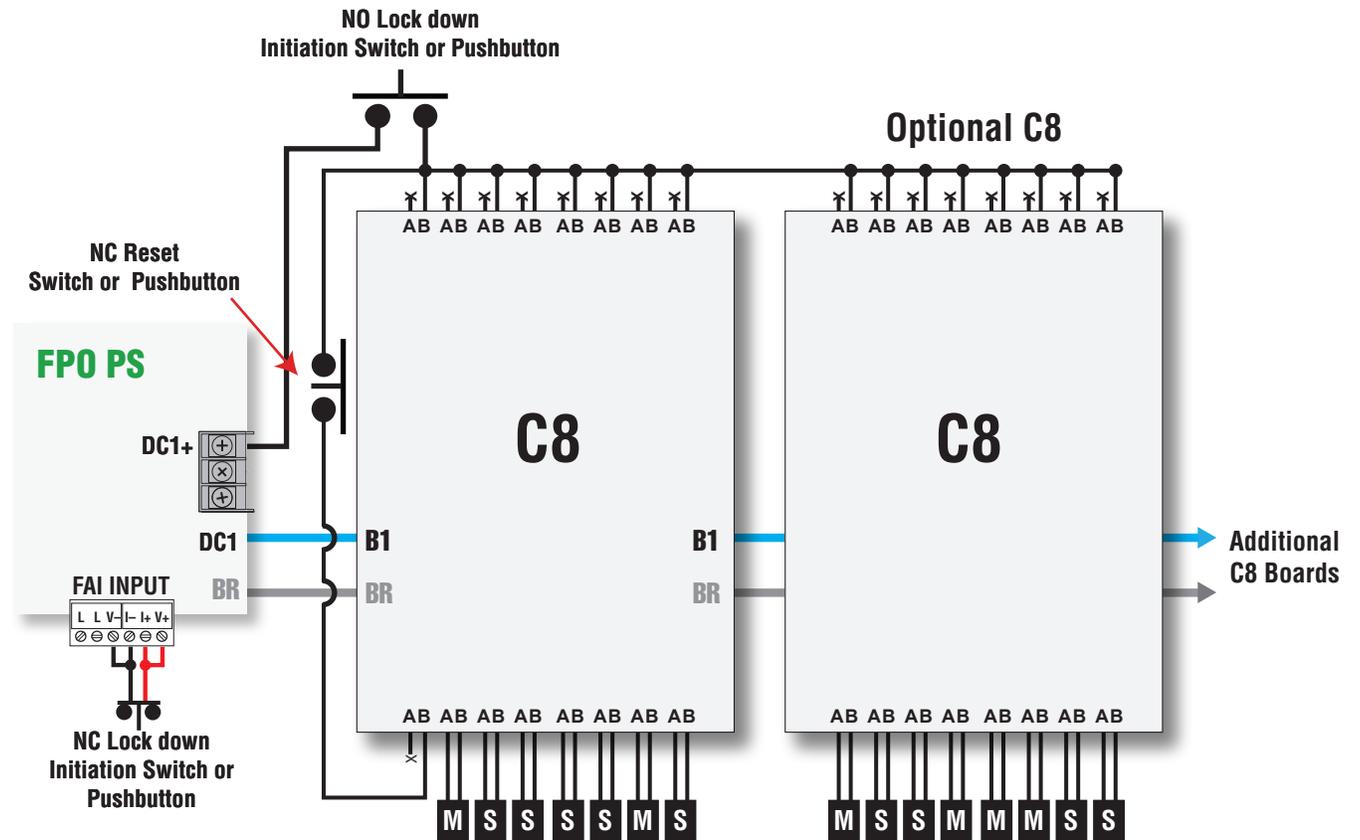
This solution uses an FPO power supply, one F8, and one D8 to provide activation for multiple maglocks with lock status sensing. Visual indication of lock status is provided via feedback from the lock bond sensor. As in the previous example, the FAI input of the FPO power supply is used to initiate the lockdown and the L/L terminals are used with a reset switch to latch the lockdown condition. No provision for fire alarm release is provided.



**Lockdown with FAI Release #4**

This solution allows FAI release of locks during a fire alarm condition. **Since an intruder could simply pull a fire alarm pull-station to effectively cancel the lockdown on FAI doors, the FAI tie should be used with caution.** The fire release may be selected by output, so specific doors may be excluded from fire alarm release as required.

In order to provide independent lockdown and fire alarm controls, an FPO is used with a C8 board. **Unlike the previous solutions, the FAI input of the FPO PS is used for the fire alarm release, rather than lockdown initiation.** The L terminals are not used, unless latching of the fire alarm release is required (such as in Canada). Lockdown is initiated by applying a voltage to the C8 inputs and latching that voltage via a dedicated output on the C8 board. Manual reset of the lockdown is achieved by momentarily removing the latching voltage. Jumper settings are critical for proper operation. Note jumper settings at the bottom of the example image. This solution will work with fail-safe, fail-secure, or mixed locks.



**Jumper**

<b>C8 JUMPER SETTINGS</b>	<b>xA (red)</b>	<b>xB (blue)</b>	<b>xC (black)</b>	<b>xD (yellow)</b>	<b>xE (black)</b>	<b>xF (white)</b>
<b>Zone 1 - Initiation Zone</b>	2	1	2	1	2	1
FAI Fail Safe Maglock	Note 1	1	2	1	2	2
FAI Fail Secure Strike	Note 1	1	2	1	2	1

**NOTE 1**

- Set the RED Jumper to position **1** to unlock on Fire Alarm during lockdown
- Set the RED Jumper to position **2** to ignore Fire Alarm during lockdown

**LifeSafety Power**  
 10027 S. 51st Street, Suite 102  
 Phoenix, AZ 85044 USA  
 Tel 888-577-2898  
 info1@lifesafetypower.com

*Important: All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their particular application. LifeSafety Power makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. LifeSafety Power's only obligations are those in the LifeSafety Power Standard Terms and Conditions of Sale for this product, and in no case will LifeSafety Power or its distributors be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Specifications are subject to change without notice. In addition, LifeSafety Power reserves the right to make changes—without notification to Buyer—to processing or materials that do not affect compliance with any applicable specification.*