

## Application: Mantraps/Interlocks

Mantraps, or interlocks, are a common application in high-security environments, such as banks, prisons, art galleries or clean rooms. Most commonly, they are a small space with an entry door on one wall and an exit door on the opposite wall.

Generally, one door cannot be unlocked and opened until the opposite door has been closed and locked. Their purpose is to separate non-secure areas from secure areas and prevent unauthorized access. They can include larger spaces with multiple doors into the space.

“Mantraps are used to create “if-then” scenarios,” says TJ Gottwalt, Strategic Architectural Account Manager for Allegion. “If this door is opened or unlocked, then all others are locked. Or, if this overhead door is up, perhaps in the loading dock area of an art gallery, then no other door is accessible.”

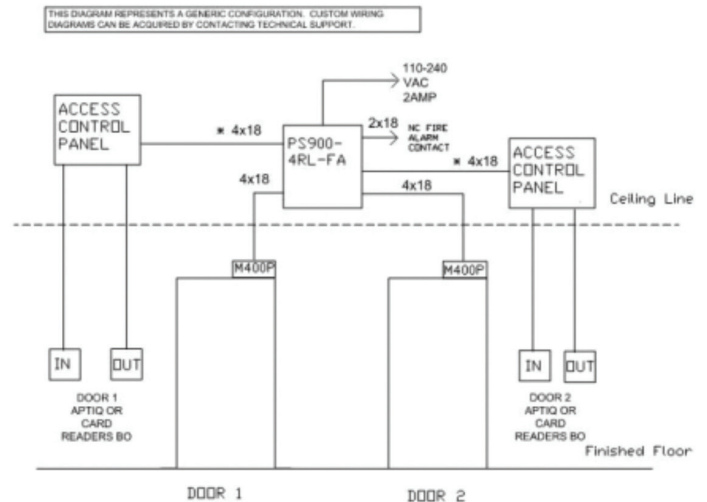
Gottwalt explains that mantraps can be passive or active.

- **Passive:** No door can be opened, or equipment operated, unless the other doors are closed.
- **Active:** No door can be opened unless the other doors are closed and locked.

When architects specify a mantrap, Gottwalt says they should receive the following from their hardware specialist:

- 1 **Riser or wire elevation diagram** that shows all the electrical components

### Elevation Diagram: Security Interlock



**NOTES:**

SET SW2 SWITCHES 1 ON AND 2 OFF TO CONFIG 900-4RL AS SL.  
SET SW1 SWITCHES AS REQUIRED FOR PARTICULAR INSTALLATION.

\* ADDITIONAL CONDUCTORS MAY BE REQUIRED. CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

CONFIRM HARDWARE AND OPERATION ACCEPTABLE TO LOCAL AHJ.



**2 Operational description** that describes in detail how the door is to operate when normally closed and locked and when opened and unlocked

**3 Hardware set**

Allegion’s hardware consultants are available to assist clients who want to integrate mantraps or other high security measures into their facilities.

Learn more by calling 877-929-4350 or [contacting an Allegion spec writer](#).

**Suggested hardware set – Secure mantrap**

Provide each SGL door with the following:

Qty	Description	Catalog Number	Finish	Mfr
1 EA	CONT HINGE	700 X TW8	630	IVE
1 EA	ELEC STOREROOM LOCK	L9082REU X 07A	626	SCE
1 EA	SURFACE CLOSER	4211 MC	689	LCN
1 EA	KICK PLATE	8400 8" X 2" LDW B4E	630	IVE
1 EA	WALL STOP	WS401CVX	626	IVE
1 SET	SEALS	188S 17'	BLK	ZER
1 EA	POWER SUPPLY	PS902 900-BBK 900-4RL KL900	LGR	SCE
1 EA	DOOR CONTACT	679-05HM	BLK	SCE
2 EA	CARD READER	MTK15	GRY	APT

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