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TOPIC: Movable Electric Partitions - Safety Alert

- **BACKGROUND**: This exposure has the potential to exist in any school in any state. It is strongly recommended that schools check with their state education departments and any other codes agencies having jurisdiction over school facilities in their particular state in order to determine whether any specific legislation or requirements for electrically operated partitions exist in that state. The guidance contained in this risk management alert is for informational purposes only. Each school district should follow their own state specific guidance relative to this hazard if any is in effect. In the absence of any state specific regulations or requirements, the recommendations in this alert should be considered. Information in this Risk Management Alert was adapted from guidance set forth in "Safety Requirements for Electrically Operated Partitions", part of the New York State Education Laws.
- Electrically operated partitions are often used to divide gymnasiums and auditoriums in schools. In other, albeit less frequent instances they may be used to separate classrooms. In the past decade alone there have been several documented incidents where children were seriously injured or even killed when they attempted to cross the path between a moving partition and a stationary wall. The injuries and fatalities were the result of the child victims becoming trapped or in some instances crushed between the partition and the adjoining wall.
- Lack of supervision, inadequate safety equipment/features and lack of awareness of the hazards play a role in these types of unfortunate incidents. Compounding the problem is the often-tragic discovery that safety features or protocols are by-passed by school employees.
- To limit the potential for this type of tragic incident, measures should be taken that will ensure electrically operated movable/folding partitions stop when they encounter resistance either in the forward closing motion or in the reverse stacking motion. This would require either retrofitting existing doors with safety equipment or installing new doors that come with safety features already built in. In addition, an awareness campaign to educate staff members of the hazards associated with these partitions should occur, regardless of whether the school retrofits existing partitions or purchases new ones. If the school does not retrofit existing partitions or install new ones, consideration should be given to instituting a policy that requires the partitions only to be operated by adults and only during non-school hours.
- The following equipment and/or features are available on new installations however, it should be noted that all features are not necessarily available from every manufacturer.
- Electric motor that is reversible at any point in the travel cycle
- Two key-operated, constant pressure control stations. Control stations should be located on opposite sides and at opposite ends of the partition run, and wired in series, so that simultaneous activation of both control stations is necessary to operate the partition. Additional control stations may be necessary for intersecting partition arrangements
- Limit switches at both extremes of partition travel to prevent damage due to over travel
- Emergency release mechanism to disengage the electric motor drive system and permit manual operation in the event of a power failure or emergency
- Leading edge detectors that stop the partition when an obstruction is encountered
- Pressure sensitive mats in the partition pocket area, that stop the partition when a person steps on the mat



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- At a minimum, new installations should include the two remotely located, key- operated, constant pressure control stations. This is a basic industry standard. Any other controls should be in addition to this feature.
- **For existing installations, school officials should contact partition manufacturers to determine what equipment can be retrofitted onto existing partitions. It is strongly recommended that at least one key-operated, constant pressure control station be provided for all existing partitions.

Human error or mis-guided judgment must be taken into account. Safety equipment and features may still not be enough to prevent a tragedy if staff are not trained to recognize the hazards and adequately supervise the area at all times the partitions are being operated.

The following is a list of basic safe rules of operation that should be implemented and vigorously enforced by school officials:

- Safety features must never be tampered with.
- Staff should be aware of safety features and trained in the safe operation of movable partitions.
- Students must be under direct staff supervision while the partitions are being operated. Students should stand away from and not be allowed to cross between adjacent rooms while the partition is in motion.
- Maintain all equipment in accordance with manufacturer's instructions.