CASE STUDY

SWING GATE AT PRIMARY SCHOOL

Setting: Commercial

Type of Gate: Double leaf swing gates constructed of box section steel and palisade. One leaf automated with a 24 volt cranked arm operator. These were originally manual gates which were automated recently by an electrician 'friend' of the school (representing a classic example of the 'accidental installer')

Site Details: Gates situated across entrance way to school office and classrooms.

Rationale for gates: Security and ease of use. A busy entrance with high usage. Used by small children, their parents and school staff.

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Safety issues identified:

1. Risk of impact and crushing. Gate leaf opens up towards a wall. Gate operator opens towards the same wall leaving a very small gap when open at child's head height!

2. Risk of impact, crushing and trapping. Stud stop fitted at hang stile to final open position. Dangerous 'pinch point" at the area of the gate with the highest force.

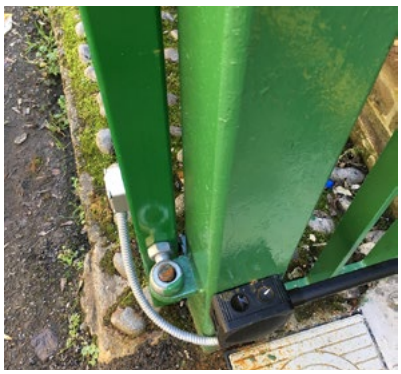
3. Risk of crushing and trapping. Reducing gap at the hinge against the hang stile.

4. Risk of impact and crushing. The pushbutton enabling access is accessible from the wrong side of the gate, near the high force hinge area.

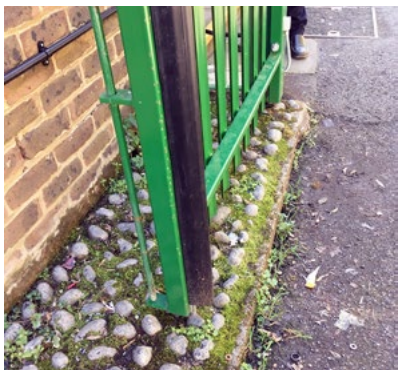
5. Risk of impact and crushing. No safety edges fitted horizontally to either side of the gate leaf. System relies on inherent obstacle detection which would not provide sufficient protection, especially towards the hinge area.

Serious crushing risk with the operator and wall

Crushing risk at ground level



Crushing risk from reducing gap around the hinge



Risk of impact and crushing as the gate moves

Action taken: Gate Safe informed the headmaster who immediately took the gate out of automatic operation. Quotes were then obtained to make the system safe and the appropriate remedial works were carried out.