

# Safety First

## Those Changes May Have Safety Implications

### Inside this issue:

Simple Safety Checks you can do yourself	2
Free Risk Assessment	3
Affordable Safety	4
Enhancement options	4
Key Benefits	4

**A** lot has been written in the media recently about the need to perform a Risk Analysis on automated access installations. But ensuring their safe operation is just a matter of common sense.

If properly used and maintained automatic gates or parking barriers need not present a hazard. However, injuries and even deaths do occur from time to time and often involve young children. Precautions should be taken

therefore to reduce the level of risk.

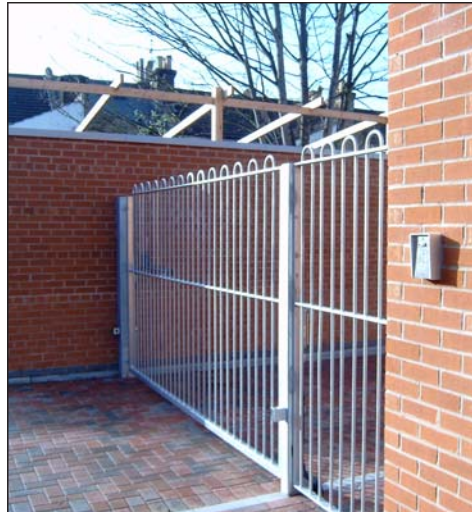
Any change in the profile of users may affect the

required level of safety provision. Children and the elderly require special safety measures.

regulations have been tightened following several serious accidents involving other residential automatic gate systems. Recently installed systems should meet or exceed all the current safety standards. However, some earlier installations may not comply.

Our Self-help Risk Analysis chart inside incorporates the latest regulations drawn up to protect the public and users from accidents caused by automatically operating entrance equipment. It only takes a

few minutes to complete and will help identify any areas of risk that are not properly protected.



### The Facts:

- **Automatic entry system accidents do occur, but most go unreported.**
- **A 9 year old was killed last year by a residential gate that had been badly installed.**

## When Was Your Installation Last Tested?

**A**ll organisations are required by law to ensure their access control systems are safe. If your installation is more than a year old or has been installed by a company that is not a member of one of the industry's recognised professional bodies then it may be unsafe. The HSE

advises risk assessment reviews and updates on an ongoing basis. To comply with regulations automation systems must also be properly maintained.

Although modern safety systems are self checking and more reliable than their earlier counterparts, regular inspection and testing is

indispensable to the provision of a system that is safe for use and will not pose a threat to users, visitors or members of the public who may approach.

For free impartial advice, call our safety team on: 01753 550660 or call the HSE on: 0845 345 0055

**Relevant Regulations:**

- Machinery Directives*
- Part P of Building Regs.*
- Wiring Regulations*
- European Standards*
- BS-EN 12453 and 12445*

**Unprotected closing gaps present a serious safety hazard**

## Hazard Identification

### What is risk assessment?

A risk assessment is simply a careful examination of what could cause harm to people, so that you can weigh up whether you have taken enough precautions or should do more to prevent an accident occurring.

We offer here one method for making a general assessment of risk pertaining to your automation system. Don't overcomplicate the process. If you are confident you understand what's involved, you can do the assessment yourself, you don't have to be a health and safety expert. If you are not confident, call our experts.

In all cases, you should make sure that you involve other users in the process. They will have useful information that will make your assessment of the risk more thorough and effective. But remember, you are responsible for seeing that the assessment is carried out properly.

Advising on a definitive assessment is beyond the scope of this news sheet. You can obtain copies of BS EN12453

and BS EN12445 (test methods) from:  
BSI British Standards  
389 Chiswick High Road  
London W4 4A  
Tel: 020 8996 9001



**This 'closing gap' between gate and wall is a potential trapping point.**

## Hazard resolution

### How to assess the risks

*Do not expose yourself to risk when making this assessment. Contact us if you are unsure.*

**Step 1** Identify the hazards— a hazard is anything that may cause harm by shearing, impact, conveyor (dragging), crushing, electric shock, collision trapping, over-run, safety device failure, etc.

**Step 2** Decide who might be harmed and how— a family member, postman, tradesman, etc. may be harmed by one of the above hazards.

**Step 3** Evaluate the risk and decide on precautions— the risk is the chance, high or low, that somebody could be harmed by an identified hazard, together with an indication of how serious the harm could be. Have particular regard to the needs of the elderly, the infirm or the very

young. The risk increases when children and elderly people use the system or when it is not possible to select who has access to the system.

experts for advice.

**Step 5** Review your assessment on a regular basis and update if necessary.



**This gate can crush if the closing force is not correctly adjusted and each vertical bar passing the pillar is a potential shearing edge.**

During the year, if there is a significant change, don't wait. Check your risk assessment and, where necessary, amend it. If possible, it is best to think about the risk assessment when you're planning your change – that way you leave yourself more flexibility.

**Step 4** Record your findings and implement them— if you identify a hazard you can prevent access (e.g. fit a guard) or add a start-up inhibition sensor. If no other option is practical consider signing the hazard. If you believe the risk is serious contact our safety

Improving health and safety need not cost a lot. For instance, placing a mirror on a dangerous blind corner to help prevent accidents is a low-cost precaution considering the risks. Failure to take simple precautions can cost you a lot more if an accident does happen.

**Check it out  
with our  
simple  
do-it-yourself  
assessment\***

\*Not a definitive document

1. Significant Hazards Identification	2. Who May be Harmed	3. Risk	4. Protected By/Action Req'd.
<b>General inspection:</b>		LOW <input type="checkbox"/> HIGH <input type="checkbox"/>	
Supporting structures, hinges, bearings etc. are sound and secure	<input type="checkbox"/> Household members	<input type="checkbox"/>	
Electric cables are in conduit, properly routed and undamaged	<input type="checkbox"/>	<input type="checkbox"/>	
Positions of manual actuators are outside of risk zones	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency manual release provides free running operation	<input type="checkbox"/>	<input type="checkbox"/>	
Start-up, stop and emergency stop devices are functional	<input type="checkbox"/>	<input type="checkbox"/>	
Users have been shown hazards and instructed in use of controls	<input type="checkbox"/> Neighbours	<input type="checkbox"/>	
The location of the mains isolator is identified and signed	<input type="checkbox"/>	<input type="checkbox"/>	
CE Conformity plate is attached to the system	<input type="checkbox"/> Friends, relatives, visitors etc.	<input type="checkbox"/>	
<b>Risk points—should be protected by safety systems:</b>			
Impact or Conveyor (anywhere in the path of a gate/barrier arm)	<input type="checkbox"/> Employees (gardener, maid etc.)	<input type="checkbox"/>	
Trapping points (where a moving part travels into a corner etc.)	<input type="checkbox"/>	<input type="checkbox"/>	
Shearing points (where any two or more parts cross one another)	<input type="checkbox"/> Milkman, postman, bin men	<input type="checkbox"/>	
Crushing points (usually the leading edge of a gate or barrier arm)	<input type="checkbox"/>	<input type="checkbox"/>	
Other risk(s) noted .....	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Safety systems check out—apply while operating system:</b>			
Infra-red photocell beam protection (hold postcard over lens)	<input type="checkbox"/>	<input type="checkbox"/>	
Safety edge protection against crushing (depress cushion)	<input type="checkbox"/> Delivery trades people	<input type="checkbox"/>	
Drive pressure protection against crushing/dragging (Place object in path; gate/barrier arm should stop and reverse movement. Check torque limit with force gauge to BS EN12543)	<input type="checkbox"/> Members of the public	<input type="checkbox"/>	
Guard rail and/or warning signs to shield unprotected areas		<input type="checkbox"/>	
Physical stop preventing over-run (particularly on a sliding gate)	<input type="checkbox"/>	<input type="checkbox"/>	

**To complete this assessment:**

Do not expose yourself to risk when making this assessment. Draw a line linking any hazard you have noted to each person who may be harmed. Tick the level of risk and what action has been or will be taken. Then arrange for the item to be done.

