Guidance Note for Home Builders on Electrically Powered Gates

May 2012

SUMMARY

- After the death of two children in 2010 HSE issued three safety notices about electrically powered gates.
- These gates are classed as high risk gates: where children use them, it is not possible to instruct users as they are used by the public in high numbers.
- Home builders should obtain a declaration of conformity from the installers of any gates.
- Managing Agents appointed by home builders should not accept handover of gates on new developments without a declaration of conformity.
- Regular risk assessments of existing gates by competent persons are required.
- Planned preventative maintenance of gates by competent person should be in place for electrically powered gates.
- Failure to risk assess gates may affect the insurance cover held in the event of accidents.
- This guidance concentrates on gates but roller shutter doors and barrier arms also need risk assessments and declarations of conformity according to their standards.

NEW DEVELOPMENTS WITH GATES

The legal position is that powered gate systems are considered to be "machinery". This means that, by law, every new powered gate, when it is put into service, must comply with the European Machinery Directive (2006/42/EC), especially the Directive's Essential Health and Safety Requirements, be CE marked and accompanied by a Declaration of Conformity. An example of what this declaration should look like is attached as an appendix.

The Health and Safety Executive has lead responsibility for enforcement of this legislation, which has been transposed into UK law as the Supply of Machinery (Safety) Regulations 2008. The responsibility for complying with the law rests with the responsible person who will be either the manufacturer, supplier or installer, depending on the circumstances.

The key to compliance with the law is risk assessment.

Gates that are in general use by the public and residents are considered high risk and the HSE advises that in addition to limiting the force of the gates that additional safety measures are required as follows.

- All designers and installers of electrically powered gates should ensure that the forces generated by a gate when meeting a person or an obstacle are limited and that they do not exceed the values specified in Annex A of BS EN 12453:2001.

- These forces should be measured in accordance with BS EN 12445:2001. "Industrial commercial and garage doors and gates. Safety in use of power operated doors. Test methods" and the performance of the system validated before the gate is put into use.
- Forces should be periodically re-measured and checked as part of the planned preventative maintenance schedule for the gates.
- In addition to force limitation, additional safeguards, such as pressure sensitive strips on the closing edge and photoelectric sensing devices, should be fitted where the risk assessment identifies the gate as high risk, in that it is operating automatically in a public place where children and other members of the public may be present.

Home builders should ask that the installers of gates have complied with these requirements.
Home builders should insist that the installers provide them with a Declaration of Conformity as required by the Machinery Directive.

Managing agents should always ask for confirmation that the above checks have been made on any new gates on schemes that they take over. If agents do not obtain a declaration of conformity on new developments they should ensure that the power to the gates is switched off until it is received; otherwise the agent will be open to the risk of prosecution.

The home builder should hand over the declaration of conformity with the required information under Building Regulations and CDM Safety File.

RISK ASSESSMENT OF EXISTING GATES

All existing gates should be risk assessed periodically which should include a force test. Failure to have such a risk assessment carried out by a competent person will leave the managing agent and the landlord/freeholder open to the risk of prosecution and may prejudice any insurance cover held.

A risk assessment at handover of a new development when residents move in is advisable. Thereafter there is no designated frequency of review although it is considered good practice to review the risk assessment annually undertaken as part of the annual gate service contract].

- Persons or organisations in control of powered gates should periodically review their risk assessments to ensure that they identify any changes to the environment or operating conditions and that they have taken appropriate steps to address them. This is particularly important when the responsibility for management of the gate passes from one person or organisation to another.
- Other hazards associated with the opening and closing of the gate should also be addressed - these will include crushing, shearing, impact and drawing-in hazards. Examples of other hazard points are described in BS EN 12453: 2001 and include: the opening edge; gaps in the gate where they pass fixed structures; and at the drive mechanism. (Note: force limitation on its own is also unlikely to be sufficient for these hazards).
- All safety devices and features should be checked on a regular basis and in accordance with the manufacturer's instructions to ensure they continue to function as designed to ensure that safety is maintained. This should be specified in a planned preventative maintenance schedule agreed by persons responsible for the gate's management and their appointed maintenance company.

PLANNED MAINTENANCE

HSE guidance about planned maintenance is as follows:

"Action to take:

- Check your gate is being maintained by a reputable company who regularly test the safety features of the gate to ensure they are set and working correctly - they should use measuring equipment to test closing forces. Keep a record of the maintenance.
- Ask the gate maintenance company to show you how to release the gate in an emergency - this should be easy and quick to do. You may need to inform your staff or other users how to do this.
- Also ask them to show you the safety features including:-
  - any safety edges (usually rubber "buffer" strips running the full height of the gate);
  - light beams to detect a person or object in the way of the closing gate;
  - the operation of the force limitation device (although this is unlikely to be enough to stop injury on its own);
  - fixed guards at other areas e.g. where the vertical bars of a gate slide close to the vertical bars of a fence.
- If you are purchasing a new gate, check that the installer can show you the features explained above, and that they will CE mark the gate and issue you a Declaration of Conformity. If they are unsure about how to do this it may be a reason to doubt their competence.

WHAT SHOULD RESIDENTS BE TOLD ABOUT EMERGENCY RELEASE OF ELECTRICALLY POWERED GATES?

Should some or all residents know how to operate the emergency release of gates? It depends upon the circumstances. Here are some factors to consider.

- If there are manned estates then staff including cleaners can be briefed. Keep a written record of briefings.
- It depends upon the type and age of gate. Some require access to power supplies which cannot be given to residents; some modern gates have push buttons to release.
- Is access through the gates a means of escape in case of fire?
- Does the scheme have a history of vandalism of gates?

WHAT IF WORK IS NEEDED TO UPGRADE EXISTING GATES?

If existing gates need remedial work to meet the requirements of a risk assessment, the power to gates should be disconnected because they are deemed to be unsafe. The insurer for the scheme should also be notified because the security of the scheme may be affected.

If the client landlord will not authorise necessary works then a managing agent should consider its position as their agent

COMPETENT PERSONS TO MAINTAIN GATES

You should satisfy yourself that any company used is competent.

REFERENCES

HSE safety notice FOD WSW 1-2010 26/2/10 Risks to pedestrians from crushing zones on electrically powered gates-1
http://www.hse.gov.uk/safetybulletins/electricgates.htm

HSE safety notice FOD7-2010 2/9/10 Risks to pedestrians from crushing zones on electrically powered gates-2
http://www.hse.gov.uk/safetybulletins/electricgates2.htm

HSE general safety notice OPSTD 1-2011 21/1/2011 Powered perimeter gates
http://www.hse.gov.uk/safetybulletins/poweredgates.htm

Door and Hardware Federation: Guide to gate safety legislation and standards.
http://www.dhfonline.org.uk/downloads/pub193.pdf

Appendix Example Declaration of Conformity In accordance with EN13241-1

We (name of competent person)

Of

In accordance with the following directive(s)
EN 13241-1 'Umbrella' standard from machinery directive EN954-1 for installation, testing and ongoing compliance of automatic gates and door systems.

EN12453 Defines the crushing points, shear and pull-in areas of automatic gate and door systems and stipulates the allowable impact force on an object or person.

EN 12445 Specifies testing points on gates and doors. Defines the distance and locations that testing of force must be carried out to comply.

EN 12978 Defines the self-test and monitoring characteristics of the transmission system.

EN 1760-2 Defines level of sensitivity, performance characteristics, response time and percentage of sensitive surface areas.

Hereby declare that:
Site Code: 1777 -
Address:
Equipment: Automated Vehicle Entrance Gate System
Model Num: FAAC 415 Motor and FAAC 455D Control Panel
Is in accordance with the applicable requirements of the following documents:
Ref: Title Edition/ Date
MD 2006/42/EC Mechanical Engineering directive on June 2006
Machinery

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The unit complies with all applicable Essential Requirements of the Directives.

Signed:

Name: