Anti-Ligature - Security, Safety, Participant Observation & Appropriate Devices for the Mental Health Sector

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Section 1.0

Executive Summary

Observing and monitoring the security and welfare of care users within institutions or mental healthcare establishments is a difficult and exacting task. Now, using a new class of observation and security device, which is easy to operate and cost effective to install, we believe this is the solution that the market has been looking for. Designed specifically to provide both care users and service providers with an element of all round protection a glazed secure vision panel can assist in the prevention of self harm or attempted suicides.

CCTV may be effective as an overall monitoring system for corridors, communal areas or environments that may require an assessment of potential risk or threat but they offer a detached source of monitoring and can create a “Big Brother” atmosphere alienating care users.

Building trust from a visual relationship can be pivotal in placing at ease users on both sides of the facility. Recognizing a friendly face or acknowledging smiling eyes assists in creating a cohesive bond between those observing and those being observed. It is also an opportunity for the service provider to interact in a therapeutic way with the care user on a one-to-one basis. The importance of observation and assessment cannot be underestimated in the long term recovery of care users. A glazed secure vision panel can assist in this process.

The goal of secure care is to provide intensive treatment for compulsory care users in an environment where any risk to the care user or service provider is managed appropriately; observing by means of natural surveillance within such an environment is crucial. A glazed secure vision panel can assist in this process.

With an increasing focus on the safety and security of those in mental healthcare, the requirement for timely observation without compromising the dignity and privacy of those under supervision has become a real need. In addressing this need potential risks exist to both the care users and service providers; when the care users are unsupervised they are far more susceptible to harming others or causing self harm from the surrounding environment.

In controlling these potential risks and ensuring care users are safe at all time a degree of supervisory observation is required in order for the well being of care users to be maintained.

The rising concern in the mental health sector is that care users are at risk in general and self harm from protuberances such as door mounted furniture, load releasing devices, control mechanisms, and standard hardware that allow the custodial and care environment to operate.
When observation fails care users may die, come to serious harm or cause harm to others. Failure can be due to problems with the individuals or the system itself. The correct installation and operating method of a glazed secure vision panel by service providers can assist in the prevention of such occurrences.

To meet the challenge of providing both the ability to observe and supervise whilst eradicating the risk of harm from door security devices Vistamatic® has sought to provide an overall solution to this real need by designing a new range of Vistamatic® Anti-Ligature Glazed Secure Vision Panels. This White Paper will introduce you to the concept of the Vistamatic® Glazed Secure Vision Panel, the simplicity of its design and the ease of its operation as well as the new features which have been designed to specifically adhere to the concept of anti-ligature.

When specifying glazed secure vision panels ensure that the Vistamatic® brand is specified by name, all Vistamatic® products are branded around the operating mechanism of the product and all Vistamatic® products carry a Lifetime* Warranty.
Section 2.0

Introduction – Vistamatic® the Company

The Vistamatic® Glazed Secure Vision Panel is a well-established security solution used within the healthcare, custodial and education sectors as well as many other applications where the need for controlled visual observation, security and privacy is paramount. The product provides manual visual observation control and is an effective method of enhancing natural surveillance within a segregated environment.

Vistamatic® Glazed Secure Vision Panels are manufactured by Vistamatic Ltd in the UK to exacting standards using the highest quality materials.

The Vistamatic® Glazed Secure Vision Panel is available in two forms:

1. Door application – to be factory or retro-fitted into any internal or external door panel, offering manual vision access control and security to public areas, private rooms and any other area where continuous observation is required.

2. Screen application – a larger format Vistamatic® Glazed Secure Vision Panel, which can be used to form a fully secure and visual glazed screen barrier for situations where the public need to be separated from the subject, such as nurses’ stations on wards, or any other such application where a greater visual presence with built-in security and a more hygienic environment is required.

The Vistamatic® Glazed Secure Vision Panel is internationally recognised by architects worldwide. Vistamatic® is a registered trademark and only Vistamatic® glazed secure vision panels offer a Lifetime* Warranty.

For more information on the entire range of Vistamatic® Glazed Secure Vision Panels, please visit www.vistamatic.com or contact Vistamatic® directly on

+ 44 (0) 20 8500 2200

*Against faulty manufacture.
Section 3.0

The Problem

In the mental health and specialist care arena three basic needs affect the potential well-being of the care user. These are:

- The ability to confine care users in a secured and controlled manner with the safety and well-being of the individual as the most paramount concern.

- The ability to observe and supervise care users in a non intrusive manner, whilst providing them with a level of freedom that does not compromise their dignity, personal space and quality of life.

- To ensure that at all times care users are removed from the likelihood of suffering accidental harm, or being able to self harm through the use of door mounted furniture (eg. handles, thumb-turn operated door locks, catches and hinges), load releasing devices and other such devices that could be surreptitiously manipulated to cause harm by attaching a ligature that may strangle or restrict breathing or blood flow.

To date no official guidelines exist outlining the code of practice or preferred use or installation of such devices or mechanisms to provide participants in mental health care environments with a safe and secure surrounding. Just as with physical illness, where the treatment environments that best meet the needs of patients vary greatly, the environment in which care for mental health is delivered varies too.

In this White Paper Vistamatic® will make several appropriate recommendations that have been drawn from our own extensive academic research combined with over 25 years experience in manufacturing products for the custodial and mental health care sectors.
Section 4.0

Measuring the Problem

In seeking solutions to the problems of creating a safe environment for care users in the mental health arena, it is first necessary to understand the size of the problem. In the UK recent statistics for those affected by mental health issues are limited and at the time of writing this White Paper few current 2011 statistics exist. The most recent study was published on 8 June 2011 commissioned by the NHS. It documents the changing attitudes to mental illness in the UK, particularly from a sociological and demographic perception.

View study at:

To clarify the scope of how mental illness impacts on the UK, the resources that it necessitates and the opportunities that exist for servicing this sector, Vistamatic® has undertaken research into this subject. This subsection will include:

4.1 Key Facts About Mental Health In The UK
4.2 Prevalence of Mental Health Illness
4.3 Mental Health Issues and Young People, including rise of self-harming
4.4 Admission to Institutions
4.5 The Cost of Mental Illness
4.6 Mental Health Trusts in the UK

4.1 Key facts about mental health in the UK

- 1 in 4 people will experience some kind of mental health problem over the course of a year
- Mixed anxiety and depression is the most common mental disorder in Britain
- Women are more likely to have been treated for a mental health problem than men
- About 10% of children under the age of 18 have a mental health problem at any one time
- Depression affects 1 in 5 older people.
- Suicides rates show that British men are three times as likely to die by suicide than British women
• Self-harm statistics for the UK show one of the highest rates in Europe: 400 per 100,000 population

• Only 1 in 10 prisoners has no mental disorder

Source: http://www.mentalhealth.org.uk/help-information/mental-health-statistics/

4.2 The prevalence of mental health illness in the UK

Mental health disorders are extremely common in Britain, with the Office for National Statistics estimating that 1 in 6 adults will have a 'significant' mental health problem each year with between 8% and 12% experiencing depression annually.

Further to this, an additional study has estimated that approximately 300 individuals out of every 1000 in Britain will experience mental health problems each year. Of these, 230 will seek help and advice from their GP, 102 will be diagnosed with a mental health problem, 24 will be referred for specialist psychiatric services and 6 will become in-patients in psychiatric hospitals.

Source: http://www.counselling-directory.org.uk/commonstats.html

4.3 Mental health issues and young people

More than a million children have mental health problems, a doubling of the number in a generation. An epidemic of disorders ranging from depression, anxiety and anorexia to violent delinquency has struck 1 in 10 youngsters.

Experts blame a damaging mix of family breakdown, junk food diets, marketing, binge-drinking, increasing availability of drugs, sexy images projected by magazines and mounting exam pressure for the trend.

A study from the Office of National Statistics, says that 1 in 10 children between the ages of 5 and 16 has a "clinically recognisable" mental disorder.

Levels are higher among children from lone parent families and "reconstituted" families with stepchildren, at 16% and 14% respectively.

The study, based on a survey of nearly 8,000 children, also found that youngsters with serious behavioural problems were twice as likely as classmates to be regular drinkers.

A third of those aged 14 to 16 with "conduct disorders", characterised by aggressive, disruptive or antisocial behaviour, admitted drinking at least once a week compared with 16 per cent who are not affected.
Overall, 4% of children aged from 5 to 16 had emotional disorders such as anxiety or depression while 6% had conduct disorders. In addition, 2% showed hyperactive behaviour or attention problems. 1% had autism, eating disorders or tics, while 2% had more than one type of disorder. This equates to 1.1 million children in the UK.

It is estimated that between 1 in 12 and 1 in 15 young people self-harm in the UK. Some research suggests that the UK has the highest rate of self-harm in Europe. There is relatively little research evidence about the prevalence of self-harm among young people. Hospital records show only part of the picture. The majority of young people who self-harm will either not harm themselves in a way that needs medical treatment or they will deal with it themselves.

- The UK has one of the highest rates of self-harm in Europe, at 400 per 100,000 population. (Self-poisoning and self-injury in adults, Clinical Medicine, 2002)
- People with current mental health problems are 20 times more likely than others to report having harmed themselves in the past. (National Collaborating Centre for Mental Health)

Self-harm affects at least 1 in 15 young people. It can also affect adults and younger children and presents a major challenge to services and organisations that work with children and young people.

Although some very young children and some adults are known to self-harm and it often continues from childhood into adulthood, the majority of people who self-harm are aged between 11 and 25 years.

Source: http://www.mentalhealth.org.uk/help-information/mental-health-a-z/S/self-harm/

4.4 Admission to Institutions

Every year in the UK, more than 250,000 people are admitted to psychiatric hospitals and over 4,000 people commit suicide.

Traditional mental health institutions and psychiatric hospitals have been replaced by care in the community. The vast majority of people diagnosed as mentally ill are not violent and, for the small minority still needing hospital admission, psychiatric wards in general hospitals are taking the place of separate psychiatric hospitals.

4.5 The Cost of Mental Illness

Those problems are likely to be medicated at a total cost of over £600 million a year: £401 million for antidepressants and £219 million for medication to treat psychoses and related disorders (DH, 2005). The full cost of mental illness in England is an estimated £77 billion a year (SCMH, 2003). Some 91% of people with a mental health condition are treated entirely in primary care (Hague & Cohen, 2005). For most, although by no means all, a course of antidepressants combined with counselling is enough to help them recover.
Specialist mental health services work mostly with those who have severe mental health problems. Over the past 10 years the experience of people using those services has changed markedly.

Source: http://www.centreformentalhealth.org.uk/pdfs/mental_health_futures_policy_paper.pdf

4.6 Mental Health Trusts in the UK

There are 58 mental health trusts in England, providing health and social care services for people with mental health problems.

Mental health services can be provided through GPs, other primary care services or through more specialist care. This might include counselling and other psychological therapies, community and family support or general health screening. For example, people experiencing bereavement, depression, stress or anxiety can get help from primary care or informal community support. If they need more involved support they can be referred for specialist care.

More specialist care is normally provided by mental health trusts or social services departments within local councils. Services range from psychological therapy to very specialist medical and training services for people with severe mental health problems. Approximately 2 in every 1,000 people need specialist care for conditions such as severe anxiety problems or psychotic illness.

Mental health diversion services in England and Wales have an annual budget of £20m and are jointly funded by the Department of Health and the Ministry of Justice (MoJ).

Source: http://www.nhs.uk/NHSEngland/thenhs/about/Pages/authoritiesandtrusts.aspx
Section 5.0

Additional Considerations

Whilst suicide in the mental healthcare sector may be an uncomfortable subject to discuss, the reality is that the issue needs facing. New technical and design solutions must be put in place to help reduce the number of deaths.

Consider:

What is observation?

Observation within a Mental Healthcare facility is a process that allows service providers the constant means to monitor and engage with care users, who need (for a period of time) intensive care and support. It is a formal structured process and therefore is fundamentally different from the normal monitoring of patients within a ward or care environment.

Nursing observation can be defined as “regarding the patient attentively” while minimising the extent to which they feel that they are under surveillance. Encouraging communication, listening, and conveying to a patient that they are valued and cared for are important components of skilled observation and impossible to achieve via CCTV. A glazed secure vision panel can assist in this process.

Why observe?

Formal observations should be introduced as a result of a risk assessment system that has identified increased concerns about a care user’s mental state.

Who should observe?

Observation can be carried out by any appropriate person (described as the service provider throughout this White Paper) who has the right skills and training. This would normally be a member of the Mental Health Multi-Disciplinary Team but is not purely a responsibility of the nursing staff. Anyone carrying this responsibility must know exactly what they are being asked to do and have guidance and support in this process.

Methods of Observation in Mental Health inpatient units

As a formal process with policies and procedures, observation has evolved from the age-old practice of nurses checking patients' safety and well-being. The challenges of maintaining the safety of care users who have a disturbed behavioural state are obvious and were no doubt exponentially greater at earlier points in history, particularly before the development of psychopharmacological therapy.

**Acute Wards**

The observation of care users in acute in-patient settings is a fundamental part of the care provided by mental health service providers. Spending time with those who are distressed and vulnerable can provide an opportunity for therapeutic interaction between service providers and care users. However, it seems that in such wards intervention has become primarily a custodial task, with service providers often playing the role of ‘custodian’ rather than ‘carer’. Little research has been done on care user observation and even less focuses upon the care user’s perspective.

The RCN Institute's Mental Health Programme has tried to address this gap by conducting a pilot study exploring the patient experience of being observed ([Jones et al, 2000](#)). The study was conducted in a single mental health care trust.

There were interviews with 28 in-patients (using semi-structured interviews and the repertory grid technique) who had all had the experience of being observed closely by nurses. The main finding of this study is that the patients’ experience of being observed is strongly influenced by the behaviour and attitude of the individual nurses who are observing them. Specifically, patients who are observed by nurses whom they know and who are prepared to talk to and engage with them feel safer, more reassured and more cared for.

Conversely, patients feel less safe and cared for, frustrated and annoyed when observed by nurses they have not met before and who make no attempt to engage with them. Suicidal patients, in particular, found the latter experience to be very negative.

**Staff Cuts**

Staff cuts and poor ward design is thought to be responsible for insufficient observation of care users and therefore a contributing factor to suicide numbers. Would better ward design, or designing-in suitable means of discrete and secure observation reduce rates of self harming and suicide?

**Means of Suicide**

The most common method of suicide for men is hanging or strangulation by ligature, whilst poisoning by overdose is considered the most common cause for women. By removing points of attachment (anti-ligature) would suicide in men can be dramatically reduced? 25% of care user suicides occur in wards where observation is made difficult by the environment. This implies some facilities may be wholly unsuitable for the care of those with mental illness.
Section 6.0

Definitions - Environmental Design, Medium Secure Services

The information regarding the recommendations to medium secure service providers can be found in the Mental Health Act 2011, which can be viewed at:


The Mental Health Act 2011, regarding the design of the environment for patients in ‘Medium Secure Health Settings’ makes the following recommendation regarding security and observation.

Overall

Medium secure health settings provide a safe clinical and therapeutic environment for patients who may present a serious danger to others and to themselves but do not need the physical security arrangements of a high security hospital.

The purpose of medium secure services is to provide effective care and treatment so reducing risk, promoting recovery and supporting patients to move through a care pathway to lower levels of security or to re-establishing themselves successfully in the community.

Buildings can be used to facilitate the treatment model and care pathway, and to promote community engagement and recovery. Maintaining a high standard in building materials and continually improving the design of the environment will help to improve outcomes for patients. The building should also help to ensure the safety of patients, staff and the public, and provide comfortable, secure surroundings for patients many of whom are detained under the Mental Health Act for the duration of their treatment.

Security measures and therapeutic issues are closely linked; neither should be dealt with in isolation. Security provides a positive and supportive framework within which clinical care and therapy are safely delivered. Maintaining an appropriate approach to and level of security is the responsibility of all staff in the service. Good security and effective therapy should be seen as integrated concepts rather than opposite ends of a spectrum.

Security – is defined as:
Security, in the context of mental healthcare, is the ability to provide a safe and secure environment for care users, service providers and visitors which is integral to the provision of clinical care. Whilst the physical security measures in medium secure units are not of the same order as high secure services, the measures taken that support the overall approach to security are similar.

The three domains of security are:

- Physical: the internal and external perimeters, security mechanisms and technologies (e.g. manual/electronic lock systems, CCTV) and other physical barriers (e.g. airlocks) that exist in the unit and the service as a whole.

- Procedural: the timely, correct and consistent application of effective operational procedures and policies.

- Relational: the understanding and use of knowledge about individual patients, the environment and population dynamic

It is essential that the three domains are developed, used and managed jointly, can withstand physical or behavioural challenge and used to inform decisions about individual/population care. The balance in emphasis between each domain will change given the operational needs of the unit as a whole, or the needs of a particular patient and/or group of patients, and the setting in which the service is provided.

This White Paper will focus on the Physical Security aspect of the recommendations to medium secure service providers as contained in the Mental Health Act 2011.

Physical Security – is defined as:

The physical integrity of the secure environment is dependent on the appropriate provision and maintenance of buildings, equipment and technology as well as the clear delineation of internal and external perimeters. Physical security requirements are based on the need to impede breaches of the secure perimeters by care users prevent self-harm and protect staff and members of the public.

*FACT – Vistmatic® Secure Glazed Vision Panels can provide the level of security as dictated by the Mental Health Act 2011.*

Safety – is defined as:

Creating a safe environment for care users, service providers and visitors is essential to building and maintaining a positive experience of care. It is important to recognise that
whilst physical security measures have a part to play in supporting the delivery of a safe service; this is only part of the picture. The environment has a key role in encouraging care users to participate in life on the ward and actively engage with service providers and to treatment. Importantly, the environment also has a part to play in minimising risk and maintaining motivated, confident staff.

**FACT - Vistamatic® Secure Glazed Vision Panels can provide safe environment as dictated by the Mental Health Act 2011.**

The Prevention of Self-Harm and Suicide – is defined as:

Spaces where care users may not be continually supervised or observed by service providers (for example bedrooms and toilets) should be considered high-risk areas and designed, constructed and furnished to minimise the opportunity for self-harm. Lines of sight and access for service providers responding to high-risk incidents and emergencies should be a carefully considered design function in these areas.

**FACT – It has been proven that Vistamatic® Secure Glazed Vision Panels can contribute greatly to the prevention of self harming.**

The Prevention of Injury to Staff and Others – is defined as:

The environment should be designed to allow thorough visual checks to be made in the shortest possible time. Opportunities to create weapons and/or conceal contraband should be eliminated as far as possible.

Rooms, doors and communal spaces should be designed to minimise the opportunity for patients to self-barricade and should allow staff to gain access in case of emergency. All rooms should be designed and furnished to minimise the possibility of patients, staff or visitors becoming isolated, hidden or barricaded in.

**FACT - It has been proven that Secure Glazed Vision Panels can contribute greatly to reducing personal injury to staff and others.**

Privacy in Mental Health – is defined as:

The need to maintain care user privacy whilst allowing for appropriate service provider observation is paramount. Bedroom doors should incorporate a secure observation panel. The panel should be operational from inside the room with an override facility located outside.

**FACT - Vistamatic® Secure Glazed Vision Panels can create the required element of privacy.**

Seclusion Suite – is defined as:

The need for seclusion suites in medium secure services should be considered at an early
stage in the design process. The purpose of seclusion is to manage a highly disturbed or high-risk care user away from communal areas in a room that may be locked. The seclusion suite is a single-function space; it should be en-suite and specifically designed to be low stimulus and ensure the safety and physical well-being of the care user. All fixtures, furniture and fittings should substantially limit the risk and ability of care users to harm themselves or others. Service providers should be able to observe the entire suite. Consideration should be made of how service providers will use the approach to, space within and around the suite to manage, observe and support the secluded care user.

**FACT - Vistamatic® Secure Glazed Vision Panels can provide the elements required for a room to qualify as a seclusion suite.**

**Design of Frames and Door Panels – are defined as:**

The design of doors, frames, hinges and door furniture and observation panels should be considered as part of one structure, the integrity of which is dependent on the weakest element. Careful consideration should be given to their design and installation to ensure they minimise the opportunity for: ligature, escape, breakage, barricade, concealment, dismantling and the removal of parts.

**FACT - Vistamatic® Secure Glazed Vision Panels complies with all of these requirements.**

**Value for money**

A degree of ‘future-proofing’ should be built into development plans to ensure services can meet current and anticipated future need.

**FACT - Vistamatic® Secure Glazed Vision Panels will out perform, out live and out secure any other vision panel currently on the market today.**
Products - Solving the Problem with Vistamatic® Products

The notion that the best idea is quite often the simplest has never been more apt when it comes to the Vistamatic® Glazed Secure Vision Panel. It is a simple device allowing service providers to monitor care users in a controlled manner and can be fitted into any door or other panelled area.

The Vistamatic® Glazed Secure Vision Panel is, as the title implies, a glazed observation window which can be fitted into a door, screen, or panel. It comprises of two outer glass panels (a comprehensive selection of laminated and toughened safety / fire glass is available) and an inner panel of 4mm annealed glass. The glass is either set in a metal U channel or made as a sealed glazed unit depending on the size of the panel. By the use of a simple non-mechanical operating mechanism the inner pane of glass rises/falls to de-align/align the etched pattern on the glass to move from clear to obscure/obscure to clear vision through the panel.

Installing a Vistamatic® Glazed Secure Vision Panel as a means of observation has a number of benefits to the observer and the observed. Namely:

- Installing vision panels is the least distressing monitoring system allowing care users to maintain their dignity and freedom within their environment.
- One element of skilled observation, in relation to protecting oneself and others, is the detection of signs of impending aggression - A vision panel can assist in detecting these signs at an early stage, before that aggression can result in harm to care users, service providers or visitors.

Building structure and observation

The structure of an in-patient ward can greatly affect the way in which observation is undertaken and therefore the care user's experience. Allowing a care user to engage in a normalising interaction with a peer may be possible in a well-designed ward that has internal windows or glazed secure vision panels, whereas on another ward the interaction would have to be regularly disrupted by a service providers appearing in the room. The ward design may mean that observation is easily achieved but this is not without its risks. A ward where one can see from one end to the other may mean that service providers do not move around and therefore stand less chance of engaging with care users. Source: Nursing Times.net

Section 8.0
The Solution – Anti Ligature & the Ability to Observe

Ironmongery products referred to as ‘anti-ligature’ are products designed to deny the user or others the opportunity to use the device as a mounting point to cause (self) harm, whilst still providing the specific functional use that the product was designed for.

This need is increasingly referred to in codes of practice however as of yet there is no official guidance to indicate what level of performance ‘anti-ligature’ products should achieve. Such products are not yet bound by British Standards. The scope ‘anti-ligature’ products include items fitted to the door, the door frame or items mounted adjacent to the door specifically as well as the entire surrounding care user environment.

Consider the following definitions:

**Ligature**

A device which can be used as a mounting point to inflict harm by restricting normal breathing and/or blood flow and/or a flexible device which can be attached to a security device in order to enable its manipulation.

**Anti-Ligature Device**

A device intended to provide a specific function but from which it is not possible for a ligature to remain secured when subjected to loads representative of a person intending to inflict self harm or to manipulate a security device.

**The Solution**

Vistamatic® has devised a solution to the problem of providing a means of observing care users without creating any potential ligature risks by developing a new range of glazed secure vision panels.

The Vistamatic® Anti-Ligature vision panel range has been designed ideally for the mental health sector to help reduce the risks of care users self harming whilst still allowing constant safe and secure observation. The new Vistamatic® range provides these requirements whilst complying with the ‘anti-ligature’ requirement thanks to a new operation mechanism which is unable to be used as a mounting point of any kind.

**Anti Ligature Ironmongery**

The Door & Hardware Federation makes the following recommendations and explanations regarding the specification and use of Anti-Ligature fixed hardware devices in its Technical Specification TS001:

When tested in accordance with Table 2, (from TS001 – visit Door & Hardware Federation website URL listed below) the anti-ligature device and any associated mounting device shall comply with the requirements of clause 6.5.

Clause 6.5 states - The anti-ligature device shall be mounted in a representative manner to include any associated mounting device on a surface which is also of representative orientation to the vertical and horizontal. The ligature test wire shall be either plastic coated...
with a fabric or metal core, or nylon with a breaking strength > 20N at the correct diameter for Test 1.

Clause 6.5 goes on to state – an anti-ligature device shall be subjected to safety testing as shown in Table 1. For devices designed to be mounted on vertical surfaces, the test wire shall be tied around the device as close to the mounting fixture as is possible using a simple slip knot and the required ligature test load shall be applied by a weight, sequentially in five directions, which are: i) Downward, ii) Upward, iii) Horizontal left, iv) Horizontal right, and finally v) Perpendicular to the mounting surface. If the test wire remains attached to the anti-ligature device on any of the five directions, the test will be deemed unsuccessful.

Section 9.0

The Product Design

The unobtrusive design of all Vistamatic® Glazed Secure Vision Panels effortlessly lends itself to be used in a variety of architectural interiors and immediately enhances a space within a given environment.

The etched linear lines on the glass panes within the panel are subtle yet contemporary. The linear design is aesthetically pleasing and introduces an architectural feature to conventional areas such as corridors and hospital rooms.

The installation of a Vistamatic® glazed vision panel within a door can completely transform a space through the introduction of light. Even in the closed position, vision panels reflect light and play an integral part in creating brighter and airier environments which enhance the wellbeing of individuals. In the event that service providers may wish to exclude light the traditional Vistamatic® sandblast finish can be replaced with black vinyl for a total ‘black-out’ effect.

Vistamatic® Glazed Secure Vision Panels are designed to blend in harmoniously with the environment. Leading architects and designers favour them due to their slim stylish profile, clean symmetrical appearance and use of aesthetically-pleasing materials. The product is now available as a fully-flush finished unit making it ideal for sterile areas where ease of cleaning is vital.

Section 10.0
Fit For Purpose – Identifying Inferior Products

10.1 Background

The purpose of this White Paper is to draw attention to the need to regulate and standardise the manufacture and supply of glazed secure vision panels within the mental health sector. Vision panels are used to discreetly observe and monitor and designed to help maintain the well-being and dignity of care users whilst ensuring the environment they are in remains safe and secure.

Vistamatic® has set its own exacting standards because of the consequences at stake should a product destined for the mental health sector be found to be of ‘sub-standard’ quality, and as a result not fit for purpose. The consequences of installing that product will almost certainly hold imminent risk to care users, service providers and visitors to secure mental health establishments.

One of the pre-requisites for the design of glazed secure vision panels for the mental health sector is that they should inherently be ‘anti ligature’, providing no point where a ligature could be secured, or purchase for leverage could be obtained. Furthermore, the physical presence of the panel should offer no threat of injury or self harm and should remain robust enough to withstand physical abuse and vandalism. Of more importance the panel should be strong enough to withstand attempts to dismantle or break down the units where component parts could be used as a dangerous weapon, or a device of self harm.

Due to the standing and reputation that Vistamatic® products have in the market place, Vistamatic® secure glazed vision panels are specified on many projects across the UK. However, in a number of cases, largely due to misspecification and/or the budgetary constraints on buyers, inferior vision panels have been installed. When competitor products fail Vistamatic® is often contacted as the suspected manufacturer for repair, replacement or recompense. In a number of cases the failed product is shipped back to the Vistamatic® factory for inspection, one such recent case has now become the subject of the following case study.

10.2 Competitor Product - Case Study
A glazed secure vision panel was returned to Vistamatic® following its technical failure shortly after installation. Inevitably this panel proved not to have been manufactured by Vistamatic®. The reason it was returned to Vistamatic® was because the original technical specification for the project referred to Vistamatic® glazed secure vision panels by name. Why Vistamatic® panels were substituted for an unbranded product is not known.

Exactly how long the vision panel had been installed before failure is unknown, suffice to say, it was returned to Vistamatic® in all innocence. The client understandably believed the panel had been purchased from Vistamatic®, the manufacturer of the panels requested for in the technical specification.

The vision panel was examined to ascertain why the device had failed. The glass was shattered, exposing the internal operating mechanism, which allowed the mechanism to be removed quite easily raising a number of concerns.

- The glazed element of the device should not have shattered. Considering the environment it was installed in, the glass specified should have been of a high enough integrity to withstand attack. The result could have created a dangerous scenario for the care user and service provider. Once damaged the care user had easy access to the components of the vision panel and loose shards of glass to use as a tool or weapon with which to either self harm or harm a third party.

- The internal working mechanism of the product was of a crude construction and contained elements that had extremely sharp edges which could provide the patient with a weapon with which to either self harm or harm a third party.

On examination the product proved to be manufactured crudely and comprised of poor quality components that superficially operated the moving panel yet offered little element of durable reliability or longevity. In addition the outer panels of the unit comprised of low integrity glass unsuitable for a medium or high secure mental health environment.
Below is a short analysis highlighting just a few of the many points of concern?

- The manual operating mechanism was tested for the ability to attach or support a ligature – it failed.
- The tapered ferule for the ‘key’ operating mechanism for the devise was tested for the ability to attach or support a ligature – it failed.
- The frame housing was tested to see if it could withstand a level of physical abuse it could reasonably be expected to endure in a mental health environment – it failed.
- The frame housing was tested with a blunt instrument to see if it could withstand being prized open to reveal the inner working mechanism – it failed.
- The complete operating mechanism was able to be extracted from the inner cavity of the secure glazed vision panel by prying the frame apart.

The supply of building products to the mental health sector is currently unregulated. In a sector where the safety, well-being and care of individuals is paramount, it is a travesty that products clearly not fit for purpose are being installed and as a result currently be putting lives at risk. The mental health sector is crying out for formal guidelines and standards with regards the products chosen for use within it; our tests prove this point beyond doubt.

300 individuals out of every 1000 in Britain will experience mental health problems each year. Of these, 230 will seek help and advice from their GP, 102 will be diagnosed with a mental health problem, 24 will be referred for specialist psychiatric services and 6 will become in-patients in psychiatric hospitals.

Of a 60,000,000 population, these statistics refer to 180,000 who will receive counselling or treatment and therefore receive help and support in an institution where glazed secure vision panels are installed. The lack of regulation of this sector is not just putting those 180,000 individuals at risk; it also threatens the support mechanism that cares for those individuals. Assuming the carer to patient ratio is 5:1 that adds another 900,000 individuals to the equation, totalling in excess of 1,000,000 people whose lives are at risk through the misspecification of a product that is not fit for purpose. The results of this misspecification increases the opportunities for care users to self harm or, worse still, attempt suicide as well as threaten the welfare and wellbeing of service providers.

Source: http://www.mentalhealth.org.uk/help-information/mental-health-statistics/

Source: http://www.counselling-directory.org.uk/commonstats.html

Note - The failed competitor device was of a known origin, however for this case study, that information will remain confidential. The purpose of this case study is not to highlight the inadequacies of one manufacturer, but to outline the need for regulation of specification and manufacturing standards.
10.3  Vistamatic® - Products That Are Fit For Purpose

Vistamatic® has created a secure glazed vision panel with a new operating mechanism designed to suit the mental health sector that conforms to the concept of being ‘anti-ligature’. In the absence of any universal regulations to guide manufacturing standards, choice of materials, types of operation, and the suitability of a product to perform as prescribed, Vistamatic® self regulates its own products to achieve the highest standard possible.

The operating mechanism for the new Vistamatic® anti-ligature range has been designed and engineered to a standard recommended by the Door & Hardware Federation, as contained in its Technical Specification TS001 with regard to the specification and use of Anti-Ligature fixed hardware devices. That ‘technical specification’ states in Clause 6.5:

- The anti-ligature device shall be mounted in a representative manner to include any associated mounting device on a surface which is also of representative orientation to the vertical and horizontal. The ligature test wire shall be either plastic coated with a fabric or metal core, or nylon with a breaking strength > 20N at the correct diameter for Test 1.

- Clause 6.5 goes on to state – an anti-ligature device shall be subjected to safety testing as shown in Table 1. For devices designed to be mounted on vertical surfaces, the test wire shall be tied around the device as close to the mounting fixture as is possible using a simple slip knot and the required ligature test load shall be applied by a weight, sequentially in five directions, which are: i) Downward, ii) Upward, iii) Horizontal left, iv) Horizontal right, and finally v) Perpendicular to the mounting surface. If the test wire remains attached to the anti-ligature device on any of the five directions, the test will be deemed unsuccessful.


During the last 25 years Vistamatic® has been committed to providing products that are:

- Entirely fit for purpose.
- Manufactured from the very best materials and components to the highest specification using British craftsmanship.
- Producing products that comply with the best of standards, in light of the lack of regulations controlling product for use in the Mental Health arena, Vistamatic® has self regulated its own production.
- Continually part of an ongoing R&D programme, improving on standards and functionality.
- Covered by a Lifetime Warranty* against faulty manufacture.
Section 11.0

Evaluation

The Vistamatic® Glazed Secure Vision Panel is manufactured entirely from recyclable materials, is manufactured in the UK and is made by a traditional British manufacturing company.

The Vistamatic® Glazed Secure Vision Panel is a simple yet revolutionary concept that changes how a door works and what that door can deliver in terms of privacy and security. Its initial introduction within the healthcare and mental health environment has been so successful, that it is now specified for other environments such as schools, banks, prisons, police headquarters and the housing sector. Due to what’s at stake and the growing demand, the research and development of our ‘anti-ligature’ range is ongoing and something we are committed to getting right.

In summary, we can conclude the Vistamatic® Glazed Secure Vision Panel is:

- Highly effective.
- Sustainable.
- Easy to install.
- Even easier to operate.
- Maintenance free.
- Requires no servicing.
- Requires no power supply.
- Can operate 24/7, 365 days of the year.
- Economical.
- A good investment, as the Vistamatic® Glazed Secure Vision Panel carries a lifetime warranty.
Section 12.0

Recommendations

Subject to findings of this case study, research document and the contents of this White Paper, Vistamatic® urges the following action be taken:

1. To establish a board of industry specialists to govern the standards of anti-ligature and observation devices used within the Mental Health sector.

2. The framing of statutory legislation by the Department of Health which will formalise clear guidelines to monitor and regulate the use of such devices

3. To establish through either the BSI or other recognised trading standard bodies a minimum performance level for such products.

4. To ensure that the NHS and other such institutions involved in the mental healthcare sector adopt the recommended standards as common practice.
Section 13.0

Source Material – Mental Health

13.1 Diversity of mental health issues

Although mental disorders are widespread, serious cases are concentrated among a relatively small proportion of people who experience more than one mental health problem.

Source: The British Journal of Psychiatry, 2005

People from manual backgrounds are at somewhat higher risk of developing a mental illness than those from non-manual backgrounds.

The risk of mental illness is similar across all the regions in England, except for Yorkshire & the Humber (where it is lower).


**Schizophrenia**

Though roughly the same number of men and women are diagnosed with schizophrenia, various studies have revealed that men are more likely to be diagnosed at a younger age. Additionally the Diagnostic and Statistical Manual of Mental Disorders (DSM IV) has suggested that men are less likely to make a full recovery.

**Substance misuse**

According to figures taken from the ONS, men are three times more likely than women to be alcohol dependent, which amounts to a five to one male to female ratio.

**Personality disorders**

Men stand a higher chance of being diagnosed with an antisocial, paranoid, schizoid or schizotypal personality disorders than women, all of which are more often than not diagnosed in early life.

Personality disorder such as the ones mentioned above are also extremely common in both sentenced prisoners and those on remand, affecting around 49 per cent and 63 per cent respectively.

Though the National Mental Health Development Unit have found suicide rates in Britain to be the lowest they have ever been (2009), according to the World Health Organisation suicide is still the third largest contributor to premature mortality after heart disease and cancer with an estimated 4000 incidents per year.
As it stands, 94% of the UK prison population is male, a huge number of whom are suffering from some form of mental health problem. One large scale study of men serving prison sentences found that over one third had a significant mental health problem, almost one in ten had experienced psychosis and one in four had attempted suicide in prison.

Source: http://www.counselling-directory.org.uk/menstats.html

In Scotland in 2009 there were 746 suicides (including both events of intentional self-harm and of undetermined intent). This is equivalent to levels in the mid-1990s. Rates of suicide (standardised by age) increased from the early 1980s to a peak in around 2000. Based on three-year rolling averages there was a 7.4% fall in suicide rates between 2000-02 and 2007-09. Around three quarters of suicides each year are completed by males.

There has been a continuous increase in the number of prescriptions for antidepressants - from 1.16 million in 1992/93 to 4.3 million in 2009/10, with a commensurate increase in cost. Estimated daily use of antidepressant drugs by the population aged 15 to 90 increased from 1.9% in 1992/93 to 10.4% in 2009/10.

Source: http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/TrendMentalHealth

**Mental health issues by gender and social status**

Mental health disorders are more common in certain groups, such as:

- People with poor living conditions
- People from ethnic minority groups
- Disabled people
- Homeless people
- Offenders

Anxiety and depression are the most common mental health problems. Often these are a reaction to a difficult life event, for example moving house, bereavement, or problems at work.

Some mental health problems are more common in certain people. For example, women are more likely than men to have anxiety disorders and depression. Drug and alcohol addictions are more common in men, and men are also more likely to commit suicide.

Source: http://www.nhs.uk/Conditions/Mental-health/Pages/Introduction.aspx
13.2 Treating Mental Illness

A patient’s first point of contact with the mental health system is likely to be with their GP. Under the Government’s Care Programme Approach, the GP should make an assessment of the patient’s needs and offer him/her appropriate treatment at the local surgery. This may be advice and information, a prescription for medication, and/or counselling. GPs can also refer patients to specialist mental health services, if necessary. Patients may be referred to a consultant psychiatrist attached to a hospital, or to the Community Mental Health Team (CMHT).

For patients who aren’t able to cope on their own at home, there are other options. Hostels are short-term accommodation, with supervision, to help people until they can live more independently, while residential care homes offer a much higher level of input for people with severe mental health problems. Therapeutic communities are for short stays, and provide group or individual therapy as part of their rehabilitation programmes. Supported housing schemes enable people to live independently, in furnished accommodation, with the back-up of a mental health support worker.

Hospital treatment

Hospital can provide a place of asylum, offering shelter and protection. It can also supply an opportunity for the staff to assess people’s needs and find the best way of helping them. Unfortunately, a stay in hospital can be distressing for some people. A hospital ward may offer little privacy, and it can be frightening to be with other people who are acting in a disturbed way.

Many people go into hospital on a voluntary basis, but there are between 25,000 and 30,000 compulsory admissions, each year, under the Mental Health Act 1983.

What is the most common form of mental distress?

According to figures from the ONS 2000 survey investigating psychiatric morbidity among adults in Great Britain, mixed anxiety and depression has remained the most common form of mental distress for a seven year period. Between 1993 and 2000 the number of affected adults in Britain rose by 1.4 per cent from 7.8 per cent in 1993 to 9.2 per cent in 2000.

Similarly to that of mixed anxiety and depression, many other forms of mental distress have also seen an increase during this period. The second most prevalent form being generalised anxiety, which rose from 4.6 per cent in 1993 to 4.7 per cent in 2000.

What is the least common form of mental distress?

In contrast, the two least common forms, panic disorder and obsessive compulsive disorder respectively are the two types of distress which have seen a decrease in the amount of sufferers. Back in 1993 obsessive compulsive disorder affected around 1.7 per cent of the adult population, a figure which decreased by 0.5 per cent to 0.7 per cent in 2000.

Panic disorder also saw reduced figures, dropping from 1 per cent in 1993 to 0.7 per cent in 2000, which suggests that whilst the awareness and treatment of certain disorders such as these is on the increase, others are becoming more widespread.
Prevalence of mental health problems in individuals aged between 16 to 64 years

All figures are percentages

<table>
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<tr>
<th>Diagnosis and rate (past week)</th>
<th>Female</th>
<th>Male</th>
<th>All</th>
</tr>
</thead>
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<td>5.5 7.2</td>
<td>7.8 9.2</td>
</tr>
<tr>
<td>Generalised anxiety disorder</td>
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<td>4.0 4.6</td>
<td>4.6 4.7</td>
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<tr>
<td>Depressive episode</td>
<td>2.8 3.0</td>
<td>1.9 2.6</td>
<td>0.3 2.8</td>
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<tr>
<td>Phobias</td>
<td>2.6 2.4</td>
<td>1.3 1.5</td>
<td>1.9 1.9</td>
</tr>
<tr>
<td>Obsessive compulsive disorder</td>
<td>2.1 1.5</td>
<td>1.2 1.0</td>
<td>1.7 1.2</td>
</tr>
<tr>
<td>Panic disorder</td>
<td>1.0 0.7</td>
<td>0.9 0.8</td>
<td>1.0 0.7</td>
</tr>
<tr>
<td>Any neurotic disorder</td>
<td>19.9 20.2</td>
<td>12.6 14.4</td>
<td>16.3 17.3</td>
</tr>
</tbody>
</table>


13.3  The Future of Mental Health: A Vision for 2015

A pertinent excerpt from a study published in January 2006. By 2015, mental wellbeing will be a concern of all public services. Undoubtedly there will still be people who live with debilitating mental health conditions, but the focus of public services will be on mental wellbeing rather than on mental ill health. The balance of power will no longer be so much with the system, but instead there will be more of an equal partnership between services and the individual who uses, or even chooses, them.

Schools will include emotional literacy in curricula and will support students experiencing problems. Employers will compete to become ‘Wellbeing Workplaces’ which demonstrate good practice in supporting staff who experience problems and in positively recruiting those who have had mental health conditions. *Mental health services will be integrated into ordinary health and other services: in libraries, GP surgeries and schools.* People seeing their GP with mental health problems will be able to choose from a range of treatment options based on authenticated research evidence without facing long waiting times. For those with the most serious problems, acute care will be available in crisis houses or even ‘hotels’ as well as hospitals. They will receive care that is well planned and that aims to support them in achieving their personal goals for recovery. They will have a comprehensive care plan, with the option to buy their own services through direct payments or an individual budget, and will be advised by an ‘associate’ with expertise in employment, benefits and housing as well as treatment and care.