Patient Safety Standards, Materials and Systems Guidelines

Recommended by the New York State Office of Mental Health

With respect to NYS-OMH operated facilities, these Guidelines apply solely to new construction and major renovation projects. Existing facilities should use these Guidelines as a reference document whenever they make improvements.
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This document offers guidance with respect to patient safety features in the inpatient psychiatric environments throughout New York State. It grows out of the standards of new construction for the New York State Office of Mental Health's (NYS-OMH) inpatient hospitals in order to provide guidance for:

- Existing NYS-OMH state-operated inpatient facilities
- Psychiatric units in NYS-OMH licensed Article 28 general hospitals
- NYS-OMH licensed Article 31 hospitals

This document is not intended to provide guidance for outpatient psychiatric facilities. Generally the risks associated with outpatient facilities may not warrant special environmental precautions.

The purpose of these guidelines is to provide a selection of materials, fixtures, and hardware that the NYS-OMH has reviewed and supports for use within inpatient psychiatric units to further the agency’s goal of reducing the risk of harm to individuals in inpatient settings. Utilization of any of these products is not mandatory.

The NYS-OMH would be pleased to evaluate other products identified by hospitals.

Many of the items in this document represent the current state of the art. It is anticipated that additional or more effective products will continue to be developed. The NYS-OMH intends to periodically update these guidelines to keep current with these changes, but the hospitals also have an obligation to continue to review products that will assist in this goal. Please note that due to the nature of ongoing product developments in the market, manufacturers may make modifications to products at any time, without providing notification to NYS-OMH. Please be aware that such modifications may alter the products’ ligature resistance evaluations and therefore require further testing to assess risks.

The products and systems included in this document have been tested for patient safety in conformance with OMH testing protocols, but the existing or newly-built environment introduces a unique complexity that must be considered prior to incorporating any of these products. Evaluation of programmatic appropriateness and architectural detailing shall not be omitted from the product selection process. In particular, retrofit conditions must be understood before a product is provided for the facility.

The items selected here represent styles and properties of products that help lower patient risk while on an inpatient psychiatric unit. However, installation of these products will not eliminate all risks.
OMH supports a multi-directed approach to the reduction of patient harm on inpatient psychiatric units including the following:

- Completion of a patient risk assessment
- Completion of a physical plant risk assessment
- Ongoing staff training to ensure awareness of potential risks on units
- Installation of products that reduce risk in all patient areas
- Routine inspections of inpatient psychiatric units to ensure safety levels are maintained

Additional and more detailed information on some of the items found in these standards may be available from NYS-OMH.

By providing these guidelines the New York State Office of Mental Health neither endorses nor promotes any product or manufacturer. OMH does not guarantee the performance of any product. OMH recognizes that it is not possible to evaluate all products that are for sale. Under these circumstances it is at NYS-OMH’s discretion which products are selected for review.

The absence of any product from the guidelines does not necessarily mean that the product is unsafe or unacceptable for use (refer to the paragraphs that follow). If a health care facility has installed products that were previously recommended in an earlier edition of the Patient Safety Standards (PSS) but are no longer listed in the PSS, it is the responsibility of the health care facility to reassess that product to determine whether its continued use is consistent with that hospital’s safety risk assessment policies.

It is crucial that hospital managers complete risk assessments that go beyond the selection of the materials, furnishings, and fixtures found in these Patient Safety Standards. The Facilities Guidelines Institute (FGI), “Guidelines for Design and Construction of Healthcare Facilities” provides clear, detailed direction regarding a hospital’s responsibility to be in compliance with patient safety requirements. The sections covering the Safety Risk Assessment (SRA) describe general risk assessment procedures. Refer to the 2018 edition of FGI, which has been adopted by The Joint Commission. Also refer to applicable state regulations which may have adopted alternative editions of the FGI.

Within this larger construct, the selection of products to be used in the built environment is but one component of risk management policies and procedures that every healthcare facility is responsible for developing and maintaining.
Introduction
Conventional Practice prior to NYS-OMH Patient Safety Standards

Focus Above the Waist

The reduction of self harm incidents is often a matter of life or death. Suicide attempts using a ligature (e.g. strangulation) are the most prevalent form of self harm. This was initially addressed in modern hospital design by strongly focusing on the elimination of ligature attachment points that were above the waist line.

Above the Waist Ligature Attachment Points:

- Fasteners
- Door Hinges
- Door Closers
- Windows & Vision Panels
- Access Doors
- Ceiling Systems
- Shower & Privacy Curtains
- Clothes & Towel Hooks
- Closet Bars
- Mirrors
- Toilet Partitions
- Window Treatments
- Bulletin Boards
- Picture Hanging Systems
- Cabinet Hardware
- Sprinklerheads
- Showerheads
- Medical Gas Enclosures
- HVAC Devices & Covers
- Thermostats
- Electrical Receptacles
- Light Fixtures
- Fire Alarm Components
Focus Everywhere

Today, all psychiatric healthcare facilities, whether new or existing, are required to meet comprehensive accreditation standards to ensure that the risks to patient safety are minimized. Principles that support patient safety strategies avoid systems, assemblies and materials that can be weaponized, yield sharp edges, or provide ligature points in all locations accessible to patients.

Additional Ligature Attachment Points to Consider:

- Door Handles
- Door Bumpers
- Wall Base
- Trim Strips between Assemblies
- Toilet Accessories
- Grab Bars
- Fire Extinguisher & Hose Cabinets
- Furniture
- Lavatories
- Lavatory Faucets
- Valves
- Shower Controls & Activators
- Plumbing Traps & Piping
Introduction
Risk Management

Risk Management, Not Risk Elimination

A2.5-1.5 Environment of Care
The majority of persons who attempt suicide suffer from a treatable mental disorder or a substance abuse disorder or both. Patients of inpatient psychiatric treatment facilities are considered at high risk for suicide; therefore, the environment should avoid physical hazards while maintaining a therapeutic environment. However, although a safe environment is critical, no environment can be entirely safe and free of risk. The built environment, no matter how well designed and constructed, cannot be relied upon as an absolute preventive measure. Staff awareness of the environment, the latent risks of that environment, and the behavior risks and needs of the patients served in that environment is absolutely essential. Different organizations and different patient populations will require greater or lesser tolerance for risk.
High Risk approved products are safe for all locations. Though High Risk products may be safe for all areas, they may not be appropriate for all areas. In many cases the High Risk product will look too institutional for the area. Determining an individual room’s risk assignment will depend on a room-by-room Risk Assessment of all areas of the facility which has been conducted specifically for each facility using that hospital or system’s own risk assessment tool. The following are typical groupings of room by risk. Each hospital’s assessment may vary based upon patient profile, staffing, or unit geography.

**Typical High Risk Areas**
Areas with solitary and/or unsupervised patient use.

**Typical Medium Risk Areas**
Patient access is controlled, or use is supervised with no solitary and/or unsupervised use.

**Typical Low Risk Areas**
No patient use or constantly supervised.
Notes like this on each page will identify additional considerations that are applicable, and also will identify alternative products that are acceptable as minimum standards for Article 31 hospitals, Article 28 hospitals, and as existing conditions in state-operated hospitals.

**Accepted by OMH**
Items with this symbol constitute a best practice for all existing facilities and a minimum standard for new construction and renovation projects at NYS-OMH’s state-operated inpatient hospitals. Unless alternatives are identified in the notes section of the page, such items are also minimum standards for Article 31 and Article 28 hospitals.

**Under NYS-OMH Evaluation**
Items with this symbol are currently being assessed by NYS-OMH for suitability in NYS inpatient psychiatric hospitals or units.

**Retrofit**
Items with this symbol are not suitable for use in new construction but are acceptable for renovation in NYS inpatient psychiatric hospitals or units.

**Use with Caution**
Items with this symbol might be suitable for certain inpatient environments; however, they should be used with caution. Some of these items have institutional characteristics that are not appropriate for an environment that is certified by the Joint Commission, which requires non-institutional fittings and fixtures. Others items have inherent risks that must be evaluated for their appropriateness for the intended application. Typically, the associated notes describe why the device is to be used with caution.

**NYS-OMH Rejected**
Items with this symbol are unsuitable for use in new construction or renovation in NYS inpatient psychiatric hospitals or units.

**Paper Clip Resistant**
Items with this symbol have withstood paper clip testing in addition to all other applicable testing methods.
Introduction
Product Evaluation Process

NYS-OMH evaluates products for inclusion into its Patient Safety Standards using a variety of criteria. These criteria fall into two categories; Primary Criteria and Secondary Criteria.

Primary Criteria
- Ligature Resistance: Looping
- Ligature Resistance: Wedging
- Cutting
- Jumping
- Tamper Resistance
- Weaponization
- Contraband Storage
- PICA/Ingestion

Secondary Criteria
- Ligature Resistance by combining a ligature with other readily available objects
- Ligature Resistance that is the result of the configuration in which a product is installed
- Codes & Regulations
- Therapeutic Environment & Appearance
- Constructibility
- Durability
- Maintenance

The presence of paper clips in even the most rigorously monitored inpatient environment is difficult to control. Because paper clips may be available to patients, tests for product inclusion in the OMH Patient Safety Standards include an attempt to utilize paper clips in concert with other objects to develop ligature on tested items. It should be assumed that almost anything in the patient environment can be compromised by a paper clip; for those items that withstand the ligature testing with use of paper clips, a product may be accepted by OMH and receive a special notation indicating that it has withstood such testing methods. The symbol ⚠ indicates a product withstanding paper clip testing in addition to all other applicable methods of testing and is appropriate for use in high risk areas.

As is written on page 4 of this document, a much more comprehensive assessment of risk in the patient environment is always necessary in order to meet the spirit of the Patient Safety Standard recommendations.

The availability of safe products for the inpatient environment is a growing and evolving market. New products are routinely introduced by manufacturers. Products that were once accepted by NYS-OMH in previous versions of the Patient Safety Standard may be rejected or phased out in future versions in light of new products or new knowledge about their risks. For more information about the NYS-OMH Product Evaluation Process, contact NYS-OMH.
Anti-Barricade Strategies

An unintended consequence of providing more patient privacy is the increased opportunity for a patient to use a bedroom or bathroom door as a barricade. Solutions range from direct penetration of the door by force to using advanced door systems that can be opened outward in an emergency situation. The direct solution is more economical at first, but will require replacement of the door. The advanced door technology does not harm the door, but significantly increases the initial construction cost. The ten options listed below span this continuum.

| ANTI-BARRICADE STRATEGIES AT PATIENT ROOMS AND BATHROOMS |
|---------------------------------|-------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| ANTI-BARRICADE STRATEGIES | DESCRIPTION | DOOR TYPE | RELATIVE COST | REVERSABILITY | FIRE/SMOKE RATED | ACOUSTIC & VISUAL PRIVACY | COMMENTS |
|----------------------------|-------------|------------|---------------|--------------|----------------|-----------------|----------------|----------------|
| 1 Standard in-swinging door without additional anti-barricade features | Use of Jaws of Life, wrecking bar or other method to remove door. | All Types | Low | No | Yes/Yes | Yes/Yes | Risk of injury. Requires stock replacement doors and significant labor. This strategy is not acceptable for bathroom doors per FGI. |
| 2 Out-swinging Doors | Door can be opened from outside room. However, it may compromise path of egress. | All Types | Low | Yes | Yes/Yes | Yes/Yes | Risk of injury. Requires wide corridors or deep niches at entries with risk of reduced visibility. Not recommended. |
| 3 Double-Swinging (DS) Doors with propriety emergency stop or continuous swing-away stops with key/toolbar release. | Conventional hospital stops that anyone can override stop to gain access | All Types | Medium | Yes | No/Yes | Yes/Yes | Privacy mitigation is required with use of conventional hospital stops. Use of non-keyed stops is not recommended. Note NFPA tolerances for fire and smoke rating. Door edge strength is critical with the use of emergency stops. Consider multiple stops if not using a continuous stop. |
| 4 Double-Swinging (DS) Doors with Removable Stop | Provide removable hollow metal/aluminum stops fixed to frame with tamper-resistant fasteners. | All Types | Low | Yes | Yes/Yes | Yes/Yes | Requires removal of stops to open door into corridor. |
| 5 In-swinging Door with Removable Frame or Split Frame | Door and split frame can be detached from outside room. | All Types | Medium | Yes | Possible | Yes/Yes | Research needed to develop and test prototype. |
| 6 Door within a Door (Wicket) with Concealed Hinges | Allows secondary access through inset wicket door. | Wood | High | Yes | No/Yes | Yes/Yes | Non-normative. Meets smoke requirements but may not meet fire ratings due to its design. Manufacturing and installation tolerances may result in a wedgelight gap between door leaf and wicket leaf. |
| 7 Secondary Door in Sidelite Frame | Provide secondary access through door in sidelite frame. | All Types | High | Yes | Yes/Yes | Yes/Yes | Requires out-swinging door in adjacent sidelite opening in hollow metal frame. |
| 8 Double Leaf Door with Inactive Leaf | Recessed throw bolts, top and bottom, activator on corridor face of door. | All Types | High | Yes | Yes/Yes | Yes/Yes | Provide keyed bolts at top and bottom of inactive leaf. Privacy mitigation required. Provide compressible material at strike edge. Pay attention to NFPA tolerances for fire and smoke rating. Reinforce bottom of active rescue leaf at recessed floor bolt. |
| 9 Out-swinging or Double-Swinging Bathroom Door with Roller Latch | Recessed pull with roller latch strike. | All Types | Medium | Yes | No/No | Yes/Yes | En-Suite Bathrooms. |
| 10 Swinging, Non-latching Partition Door | PVC or vinyl-clad foam door with continuous or magnetic hinge. | Varies | Low | Yes | No/No | No/Yes | En-Suite Bathrooms. |
Anti-Barricade Strategies

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Accurate Lock & Hardware

www.accuratelockandhardware.com

Keyed Emergency Stop
ADL-CEK, ADL-OEK

Double lip strikes with keyed emergency stop. Designed to restrict and protect against unauthorized outswinging door by using a key to lock stop in projected position.

Accurate Lock & Hardware | Code Notes
For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

Accurate Lock & Hardware | Constructibility Notes
• Add compression seal at jamb and strike edge of doors for privacy. May be omitted on en-suite bathroom doors opening into private bedrooms.
• Coordinate backset of lockset/handle when providing swing/emergency stops.
• Refer to manufacturer’s data when using removable stops in fire rated assemblies.
• Coordination between door opening width, hinge width, and door panel width is required.

Cautions:
• A non-locking emergency stop may allow patients to depress the stop and swing the door in the opposite direction. Overpronation of the door in this direction has, in some instances, resulted in patients breaking the door.
• Small emergency stops that concentrate the door closing pressure on a small surface area have been known to result in breakage of structural composite lumber doors when doors are slammed by patients.
• In-situ evaluation reveals that the use of a single rescue stop in line with the latch is insufficient in acting as a reliable stop when a door is being subjected to abuse (i.e. being repeatedly slammed). It is recommended that at least two stops be used: one at the top 1/3 point along the height of the door and one at the bottom 1/3 point along the height of the door to better distribute the force of the slamming along the door stile.
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Intastop
www.intastop.com

SECURA Stop Multi-lock Removable Doorstop

Kingsway Group
www.kingswaygroupusa.com

Anti-Ligature Swing Stop
KG 205/206 Anti-Barricade Door Stop, Hardwood
KG 207/208 Anti-Barricade Door Stop, Aluminum

Provides emergency outward opening operation of doors that normally open inwards. The door stop is unlocked by a special tool and swings open with an integral grab handle. The stop hinge has a hospital tip.

Anti-Barricade Hardware | Code Notes
For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

Anti-Barricade Hardware | Constructibility Notes
- Add compression seal at jamb and strike edge of doors for privacy. May be omitted on en-suite bathroom doors opening into private bedrooms.
- Coordinate backset of lockset/handle when providing swing/emergency stops.
- Refer to manufacturer’s data when using removable stops in fire rated assemblies.
- Coordination between door opening width, hinge width, and door panel width is required.

Cautions:
- A non-locking emergency stop may allow patients to depress the stop and swing the door in the opposite direction. Overpronation of the door in this direction has, in some instances, resulted in patients breaking the door.
- Small emergency stops that concentrate the door closing pressure on a small surface area have been known to result in breakage of structural composite lumber doors when doors are slammed by patients.
- In-situ evaluation reveals that the use of a single rescue stop in line with the latch is insufficient in acting as a reliable stop when a door is being subjected to abuse (i.e. being repeatedly slammed). It is recommended that at least two stops be used: one at the top 1/3 point along the height of the door and one at the bottom 1/3 point along the height of the door to better distribute the force of the slamming along the door stile.
- All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.
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High Risk Areas: Anti-Barricade Hardware | Code Notes
For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

Medium Risk Areas: Anti-Barricade Hardware | Constructibility Notes
- Add compression seal at jamb and strike edge of doors for privacy. May be omitted on en-suite bathroom doors opening into private bedrooms.
- Coordinate backset of lockset/handle when providing swing/emergency stops.
- Refer to manufacturer’s data when using removable stops in fire rated assemblies.
- Coordination between door opening width, hinge width, and door panel width is required.

Low Risk Areas: Cautions:
- A non-locking emergency stop may allow patients to depress the stop and swing the door in the opposite direction. Overpronation of the door in this direction has, in some instances, resulted in patients breaking the door.
- Small emergency stops that concentrate the door closing pressure on a small surface area have been known to result in breakage of structural composite lumber doors when doors are slammed by patients.
- In-situ evaluation reveals that the use of a single rescue stop in line with the latch is insufficient in acting as a reliable stop when a door is being subjected to abuse (i.e. being repeatedly slammed). It is recommended that at least two stops be used: one at the top 1/3 point along the height of the door and one at the bottom 1/3 point along the height of the door to better distribute the force of the slamming along the door stile.
- All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.

Pemko
www.pemko.com

Emergency Release Stop (ERS)
Pemko Emergency Release Stop provides emergency outward opening operation of doors that normally open inwards. The door stop is unlocked by a special tool and swings open with an integral grab handle. The stop hinge has a hospital tip.

Anti-Barricade Hardware | Constructibility Notes
- Add compression seal at jamb and strike edge of doors for privacy. May be omitted on en-suite bathroom doors opening into private bedrooms.
- Coordinate backset of lockset/handle when providing swing/emergency stops.
- Refer to manufacturer’s data when using removable stops in fire rated assemblies.
- Coordination between door opening width, hinge width, and door panel width is required.

Cautions:
- A non-locking emergency stop may allow patients to depress the stop and swing the door in the opposite direction. Overpronation of the door in this direction has, in some instances, resulted in patients breaking the door.
- Small emergency stops that concentrate the door closing pressure on a small surface area have been known to result in breakage of structural composite lumber doors when doors are slammed by patients.
- In-situ evaluation reveals that the use of a single rescue stop in line with the latch is insufficient in acting as a reliable stop when a door is being subjected to abuse (i.e. being repeatedly slammed). It is recommended that at least two stops be used: one at the top 1/3 point along the height of the door and one at the bottom 1/3 point along the height of the door to better distribute the force of the slamming along the door stile.
- All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.
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ABH Manufacturing Inc.
www.abhmfg.com

A507 Double Swing Hinge (Barrel Style)
Available with and without an alarm at the top of the hinge.

Kingsway Group
www.kingswaygroupusa.com

Swing Hinge KG202

Anti-Barricade Hardware | Code Notes
For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

Anti-Barricade Hardware | Constructibility Notes
- Add compression seal at jamb and strike edge of doors for privacy. May be omitted on en-suite bathroom doors opening into private bedrooms.
- Coordinate backset of lockset/handle when providing swing/emergency stops.
- Refer to manufacturer’s data when using removable stops in fire rated assemblies.
- Coordination between door opening width, hinge width, and door panel width is required.

Cautions:
- A non-locking emergency stop may allow patients to depress the stop and swing the door in the opposite direction. Overpronation of the door in this direction has, in some instances, resulted in patients breaking the door.
- Small emergency stops that concentrate the door closing pressure on a small surface area have been known to result in breakage of structural composite lumber doors when doors are slammed by patients.
- In-situ evaluation reveals that the use of a single rescue stop in line with the latch is insufficient in acting as a reliable stop when a door is being subjected to abuse (i.e. being repeatedly slammed). It is recommended that at least two stops be used: one at the top 1/3 point along the height of the door and one at the bottom 1/3 point along the height of the door to better distribute the force of the slamming along the door stile.
- All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.
Anti-Barricade Strategies

1. Standard in-swinging door without additional anti-barricade features
2. Out-swinging Doors
3. Double-Swinging (DS) Doors with proprietary emergency stop or continuous swing-away stops with keyed/tooled release.
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6. Door within a Door (Wicket) with Concealed Hinges
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10. Swinging, Non-latching Partition Door

Markar Architectural Products
www.markar.com

Double Swing Hinge DSH1000
(Barrel-Style)

Pemko
www.pemko.com

Double Swing Hinge DSHP01
(Geared-Style)

Anti-Barricade Hardware | Code Notes
For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

Anti-Barricade Hardware | Constructibility Notes
- Add compression seal at jamb and strike edge of doors for privacy. May be omitted on en-suite bathroom doors opening into private bedrooms.
- Coordinate backset of lockset/handle when providing swing/emergency stops.
- Refer to manufacturer's data when using removable stops in fire rated assemblies.
- Coordination between door opening width, hinge width, and door panel width is required.

Cautions:
- A non-locking emergency stop may allow patients to depress the stop and swing the door in the opposite direction. Overpronation of the door in this direction has, in some instances, resulted in patients breaking the door.
- Small emergency stops that concentrate the door closing pressure on a small surface area have been known to result in breakage of structural composite lumber doors when doors are slammed by patients.
- In-situ evaluation reveals that the use of a single rescue stop in line with the latch is insufficient in acting as a reliable stop when a door is being subjected to abuse (i.e. being repeatedly slammed). It is recommended that at least two stops be used: one at the top 1/3 point along the height of the door and one at the bottom 1/3 point along the height of the door to better distribute the force of the slamming along the door stile.
- All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.
Anti-Barricade Strategies

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Royde & Tucker Ltd.
www.ratman.co.uk

Emergency Stop H131-105
The release device can be depressed to allow the door to open outward and allow access to the room.

Note: Allows for wedging ligature.

Laidlaw
www.laidlawdirect.com

Swing Away Stop
Note: Potential for looping with this hardware. Stop is not continuous and creates a ligature point.

McKinney
www.mckinneyhinge.com

DS-6 Emergency Stop
The release device can be depressed to allow the door to open outward and allow access to the room.

Note: Allows for wedging ligature.
# Anti-Barricade Strategies

**ANTI-BARRICADE STRATEGIES**

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## Alternate Removable Stop

### Anti-Barricade Hardware | Code Notes
For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

### Anti-Barricade Hardware | Constructibility Notes
- Refer to manufacturer’s data when using removable stops in fire rated assemblies.
- Coordination between door opening width, hinge width, and door panel width is required.

### Caution
All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.
## Anti-Barricade Strategies

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### Anti-Barricade Hardware | General Notes
Primary door requires continuous hinges with hospital tips. Edge bevel may need to be increased. Edge strip shall be securely fastened.

### Anti-Barricade Hardware | Code Notes
- Manufacturer must verify the fire rating of the door.
- For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

### Anti-Barricade Hardware | Constructibility Notes
- Coordination between door opening width, hinge width, and door panel width is required.
- Manufacturing and installation tolerances may result in a wedgeable gap between door leaf and wicket leaf.

### Caution
All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.

---

Ceco Door  
[www.cecodoor.com](http://www.cecodoor.com)  
Behavioral Healthcare Patient Room Access Door  
Hollow metal construction

Curries  
[www.curries.com](http://www.curries.com)  
Behavioral Healthcare Patient Room Access Door  
Hollow metal construction

Fleming Door Products  
[www.flemingdoor.com](http://www.flemingdoor.com)  
Behavioral Healthcare Patient Room Access Door  
Hollow metal construction
Anti-Barricade Strategies

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Construction Specialties

Wicket Door
Acrovyn Barrier Resistant Door
Bonded SCL core 5-ply construction.

Note: OMH does not promote the use of plastic clad laminate doors.

Anti-Barricade Hardware | General Notes
Primary door requires continuous hinges with hospital tips. Edge bevel may need to be increased. Edge strip shall be securely fastened.

Anti-Barricade Hardware | Code Notes
- Manufacturer must verify the fire rating of the door.
- For corridor doors, verify Life Safety Code requirements to limit passage of smoke. Specify appropriate gap tolerances at top and jambs.

Anti-Barricade Hardware | Constructibility Notes
- Coordination between door opening width, hinge width, and door panel width is required.
- Manufacturing and installation tolerances may result in a wedgeable gap between door leaf and wicket leaf.

Caution
All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.
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Wood Wicket Door

Custom Wood Wicket Door
Multiple Manufacturers

Note:
- Manufacturing and Installation tolerances result in a wedgeable gap between door leaf and wicket leaf. The primary door leaf's integrity is inherently compromised with the introduction of a wicket door, making it susceptible to breakage.

Door, Hallway Side  Lock & Handle  Concealed Hinge
Anti-Barricade Strategies

Secondary Door in Sidelite Frame

In-swinging Main Door and Out-swinging Sidelite Door with Center Mullion

Assembly
This assembly uses a hollow metal frame sidelite with an out-swinging panel for anti-barricade. The main door is fitted with ligature-resistant door hardware and has a full hollow metal stop. The sidelite panel can be made of wood or hollow metal and be outfitted with a keyed deadbolt on the corridor side.
Anti-Barricade Strategies

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Double Leaf Door with Inactive Leaf

In-swinging Active Main Door and Out-swinging Inactive Door

Provide keyed flush bolts activated from corridor side on top and bottom of the inactive leaf.

Caution: Door configuration may require special installation requirements when utilizing Door Top Sensor protection.

Anti-Barricade Hardware | Constructibility Notes
- Flush bolts shall be substantial enough to withstand significant impact. Bolts may shear off if embedment is inadequate.
- Installation tolerances are critical to provide patient privacy.
- Solid core wood doors may not offer the required durability with this anti-barricade door solution.
## Anti-Barricade Strategies

### Bathrooms

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<td><img src="http://us.allegion.com" alt="Ives RL32 Roller Latch with ASA Strike" /></td>
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<td><img src="www.rockwoodmfg.com" alt="Rockwood Manufacturing Company" /></td>
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**Norva Plastics, Inc.**

**Toilet Partitions, Sentinel Event Reduction (SER) Door with Sloped Top**

Use only at en-suite or gang bathrooms. Never use in bathrooms shared between two bedrooms. Flexible gasket provides friction stop between partition and frame/wall.

**Cautions:**

- Cannot achieve positive latching (privacy caution)
- Maintain 3” gaps between partition and frame to prevent wedging (at gasket location)

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**Norva Plastics, Inc.**

**Toilet Partitions, Sentinel Event Reduction (SER) Door with Collapsible Top**

Note: OMH has rejected this product as it contains features that may allow injury to patients including pinched fingers, and if the collapsible edge malfunctions, it provides a ligature point. Also, since the top portion of the door is hollow, the design allows for the possibility of contraband to be placed in the top of the door.
Seclusion Room Standards

**General Notes**
Protrusions and outside corners are not permitted in Seclusion Rooms. Use polycarbonate mirrors for visibility in the corners of room adjacent to the door. Installation of padding systems is recommended on vertical and horizontal surfaces including the door, door frame, window jambs and stool; however, the use of padding is not mandatory. Provide hardware with immediate positive latching (Slam Lock Function). Provide Cremone bolts, multi-bolt or multiple face-mounted magnetic locks on exterior of Seclusion Room (frame and angle at edge of door) with uninterruptable power supply.

**Installation Notes**
The shear lock alignment is critical for proper function. Shear locks have a tendency to become misaligned over time.

**Code Notes**
Provide a one hour fire rating at Seclusion Suite perimeter. Refer to FGI Guidelines for other specific requirements.

**Securitech**
www.securitech.com

**Multi-Point Deadbolt Mortise Lock**
Select lock function from options below:
USL-K3-IHB2: (slam) Latches upon closure. Key only projects/retracts bolts and latch. Exterior side of door has freely rotating lever/pull. Interior cylinder optional.

**DuraVision Mirror Systems**
www.correctionsmirror.com

**Polycarbonate Mirror**
Quarter dome polycarbonate mirror. Ligature-resistant connections and tamper-resistant fasteners. Provide tamper-resistant sealant at mirror frame perimeter.

**Marathon Engineering Corporation**
www.goldmedalsafetypadding.com

**Gold Medal Safety Padding**
1” thermoset polyurethane elastomer material bonded to 5/16” OSB backer board. Class A finish. Padding material is uniform and smooth with no cracks or open seams.

**Prime Coat Coating Systems**
www.primecoat.com

**PC Safe Cell 4730 System**
Unified system of high density, high impact rubberized core with bonded polymer topcoats. Padding material is uniform and smooth with no cracks or open seams.
Patient Safety Standards Materials & Systems
Division 01 | General Requirements
Tamper-resistant Fasteners

**General Notes**
Tamper-resistant fasteners are to be used for all fasteners exposed to view on every product and assembly accessible in the inpatient environment, and should be noted explicitly in the construction documents.

**Performance Criteria**
All fasteners accessible to patients shall be tamper-resistant of the hexalobular (6-lobed), pin reject, internal drive system, meeting ISO Standard 10664.

**Alternates**
Minimum standard for facilities other than NYS operated: 2-pin spanner head fasteners.

**Additional Notes**
McGard and Bryce are just two among many acceptable manufacturers of tamper-resistant fasteners relying on limited distribution tools or custom keyed fasteners. Generally custom tooled fasteners like McGard will cost more than stock fasteners.

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**Torx Fastener**
[www.acument.com](http://www.acument.com)

Tamper-resistant Fasteners

ISO Standard 10664 fasteners.

---

**Bryce Fastener**
[www.brycefastener.com](http://www.brycefastener.com)

Tamper-resistant Fasteners

Custom fasteners.
Division 07 | Thermal & Moisture Protection
Security Sealants, Tamper-resistant

General Notes
Picking and Pica behaviors can impact sealant choices. Tamper-resistant sealants are generally flexible, abrasion resistant and highly tenacious. They are typically urethane or silicone-based sealant technology, in both one and two-component formulas. Tamper-resistant sealants are appropriate for use in most inpatient areas.

Acceptance of product in risk areas is determined primarily by the ligature resistance of the sealant. Tamper resistance is secondary to ligature resistance.

Performance Criteria
ASTM C290.

Installation Notes
All sealants must be installed per manufacturer’s recommendations for ventilation, safety and cure times.

Additional Notes
Some sealants may not be suitable for use where contact with food may occur. Some sealants may have VOC or other chemical content that generates odors and fumes during curing. All sealants must be reviewed for potential impact on occupants prior to use.

Pecora Corporation
www.pecora.com
Dynaflex SC
Security grade one part polyurethane
- Resistant to ligature in 1/16” joint and at 3/16” joint
- Medium tamper resistance
- Joints can easily be cut with utility knife
- Medium difficulty in application and tooling
- Available in 2 standard colors

Sika Corporation
www.usa.sika.com
Sikaflex 11FC
Tamper-resistant one part polyurethane
- Resistant to ligature in 1/16” joint, slightly resistant at 3/16” joint
- High tamper resistance
- Joints can easily be cut with utility knife
- Easily applied and tooled
- Available in 3 standard colors (white, black, gray)

Pecora Corporation
Dynaflex SC
- Resistant to ligature in 1/16” joint and at 3/16” joint
- Medium tamper resistance
- Joints can easily be cut with utility knife
- Medium difficulty in application and tooling
- Available in 2 standard colors

Sika Corporation
Sikaflex 11FC
- Resistant to ligature in 1/16” joint, slightly resistant at 3/16” joint
- High tamper resistance
- Joints can easily be cut with utility knife
- Easily applied and tooled
- Available in 3 standard colors (white, black, gray)

Dow Corning
www.dowcorning.com
Dowsil 995
Architectural grade one part silicone
- Resistant to ligature in 1/16” joint, slightly resistant at 3/16” joint
- Medium tamper resistance
- Joints can easily be cut with utility knife
- Easily applied and tooled
- Available in 6 standard colors
Division 07 | Thermal & Moisture Protection

Security Sealants, Tamper-resistant

General Notes
Picking and Pica behaviors can impact sealant choices. Tamper-resistant sealants are generally flexible, abrasion resistant and highly tenacious. They are typically urethane or silicone-based sealant technology, in both one and two-component formulas. Tamper-resistant sealants are appropriate for use in most inpatient areas.

Acceptance of product in risk areas is determined primarily by the ligature resistance of the sealant. Tamper resistance is secondary to ligature resistance.

Performance Criteria
ASTM C290.

Installation Notes
All sealants must be installed per manufacturer’s recommendations for ventilation, safety and cure times.

Additional Notes
Some sealants may not be suitable for use where contact with food may occur. Some sealants may have VOC or other chemical content that generates odors and fumes during curing. All sealants must be reviewed for potential impact on occupants prior to use.

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Master Builders Solutions
www.master-builders-solutions.basf.us

MasterSeal CR 195
Security grade one part polyurethane
- Resistant to ligature in 1/16” joint, not resistant at 3/16” joint
- High tamper resistance
- Joints can easily be cut with utility knife
- Difficult to tool
- Available in 3 standard colors

MasterSeal NP-1
Architectural grade one part silicone
- Slightly Resistant to ligature in 1/16” joint, not resistant at 3/16” joint
- High tamper resistance
- Joints can easily be cut with utility knife
- Difficult to tool
- Available in 11 standard colors
General Notes
Picking and Pica behaviors can impact sealant choices. Tamper-resistant sealants are generally flexible, abrasion resistant and highly tenacious. They are typically urethane or silicone-based sealant technology, in both one and two-component formulas. Tamper-resistant sealants are appropriate for use in most inpatient areas.

Acceptance of product in risk areas is determined primarily by the ligature resistance of the sealant. Tamper resistance is secondary to ligature resistance.

Performance Criteria
ASTM C290.

Installation Notes
All sealants must be installed per manufacturer’s recommendations for ventilation, safety and cure times.

Additional Notes
Some sealants may not be suitable for use where contact with food may occur. Some sealants may have VOC or other chemical content that generates odors and fumes during curing. All sealants must be reviewed for potential impact on occupants prior to use.

Caution
Pick-proof sealant joints cannot be cut. Removal results in damage to substrate.

Sika Corporation
www.usa.sika.com

Sikadur 31 High-Mod Gel
Security grade two part epoxy
- Resistant to ligature in all joints when properly tooled
- Pick Proof
- Joints cannot be cut. Removal results in damage to substrate
- Medium difficulty in application and tooling
- Available in one color (gray)

Pecora Corporation
www.pecora.com

Dynapoxy EP-1200
Security grade two part epoxy
- Resistant to ligature in all joints when properly tooled.
- Pick Proof
- Joints cannot be cut. Removal results in damage to substrate.
- Medium difficulty in application and tooling
- Available in 50 standard colors
Division 07 | Thermal & Moisture Protection
Architectural Grade Sealants

General Notes
Picking and Pica behaviors can impact sealant choices. Tamper-resistant sealants are generally flexible, abrasion resistant and highly tenacious. They are typically urethane or silicone-based sealant technology, in both one and two-component formulas. Tamper-resistant sealants are appropriate for use in most inpatient areas.

Acceptance of product in risk areas is determined primarily by the ligature resistance of the sealant. Tamper resistance is secondary to ligature resistance.

Performance Criteria
ASTM C290.

Installation Notes
All sealants must be installed per manufacturer’s recommendations for ventilation, safety and cure times.

Additional Notes
Some sealants may not be suitable for use where contact with food may occur. Some sealants may have VOC or other chemical content that generates odors and fumes during curing. All sealants must be reviewed for potential impact on occupants prior to use.

Dow Corning
www.dowcorning.com

Dowsil 795
Architectural grade one part silicone
- Resistant to ligature in 1/16” joint, slightly resistant at 3/16” joint
- Does not resist picking
- Joints can easily be cut with utility knife
- Easily applied and tooled
- Available in 14 standard colors

Dow Corning
www.dowcorning.com

Dowsil 786
Architectural grade one part silicone
- Resistant to ligature in 1/16” joint, slightly resistant at 3/16” joint
- Does not resist picking
- Joints can easily be cut with utility knife
- Easily applied and tooled
- Available in 6 standard colors
General Notes
The door can be prepped for anti-barricade. Refer to the anti-barricade strategy section listed at the beginning of this document for additional information.

Ambico
www.ambico.com

Ambico Security Wood Door
High Security non-rated, 14 gauge steel core with wood veneer door.

14 gauge stiffened galvanized steel core with 14 gauge galvanized steel sheets each side, with MDF and wood veneer face sheets applied. Highly vandal, tamper, and impact resistant.

Wood stiles and rails are 3/8” hardwood to match face veneer species.

Doors are insulated for sound attenuation.
Division 08 | Openings
Door Hardware, Door Top Sensors

**General Notes**
An electric transfer hinge is required with the use of door top sensors. Refer to the continuous hinges in this document. Alarm annunciation may be visual and/or audio, and can be provided locally at door and/or remotely at nurse station. Installing alarm resets at the alarmed doors will require staff response to the alarm location.

**Installation Notes**
For the Top Door Alarm, photoelectric sensors are positioned on the door frame and on the door within ligature-resistant casings. This ensures maximum coverage by detecting the presence of any foreign objects interrupting the thru-beams between the transmitters and receivers.

**Additional Notes**
Two configurations of the photoelectric sensor type of system are offered;
Configuration A: Two sets of Alarm Light Sensors for top door detection.
Configuration B: One set of Alarm Light Sensors for bottom door detection.

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**Door Control Services, Inc.**
[www.doorcontrolservices.com](http://www.doorcontrolservices.com)

**Top Door Alarm**
Top Door Alarm is a custom-manufactured alert system that can be installed on new or existing applications. A photoelectric sensor detects ligature ahead of pressure application. This product produces a visible light beam that may be disturbing to patients. It should be noted that beam is continuously visible to patients, especially when bedroom is dark.

**Caution:** Use with caution in a double leaf door configuration with an inactive leaf.

---

**The Door Switch**
[www.thedoorswitch.com](http://www.thedoorswitch.com)

**The Door Switch**
Top of door, weight pressure activated sensor that extends above the door.
Division 08 | Openings
Door Hardware, Door Top Sensors

top

General Notes
An electric transfer hinge is required with the use of door top sensors. Refer to the continuous hinges in this document. Alarm annunciation may be visual and/or audio, and can be provided locally at door and/or remotely at nurse station. Installing alarm resets at the alarmed doors will require staff response to the alarm location.

Installation Notes
For the Top Door Alarm, photoelectric sensors are positioned on the door frame and on the door within ligature-resistant casings. This ensures maximum coverage by detecting the presence of any foreign objects interrupting the thru-beams between the transmitters and receivers.

Additional Notes
Two configurations of the photoelectric sensor type of system are offered; Configuration A: Two sets of Alarm Light Sensors for top door detection. Configuration B: One set of Alarm Light Sensors for bottom door detection.

dormakaba USA
www.bestaccess.com

SEDA (Secure Emergency Door Alarms)
A pressure activated switch, mounted on the face of a door, provides notification when a foreign object passes over the door and a downward pressure is applied. Notification is sent to a console indicating where a response is required.

Grainger Industrial Supply
www.grainger.com

LISA (Ligature Resistant Door Alarm)
A pressure activated switch, mounted on the face of a door, provides notification when a foreign object passes over the door and a downward pressure is applied. Notification is sent to a console indicating where a response is required.
Division 08 | Openings
Door Hardware, Door Top Sensors, Alarm Visual Notifiers

Cooper Industries
www.cooperindustries.com

Cooper Eaton Series RSSB
Multi-color candela, ceiling mount installation only. Notifiers shall be ceiling mounted.

Gentex Corporation
www.gentex.com

Gentex GCSB24PCW Strobe
Multi-color candela, ceiling mount installation only. A mechanical attachment or set screw is required for the cover. Notifiers shall be ceiling mounted.
Division 08 | Openings
Door Hardware, Continuous Hinges

General Notes
Continuous hinges are recommended for all inswinging and outswinging doors within inpatient units.

Performance Criteria
Specify Hospital Tips (HT) to address ligature point at top of hinge.

Installation Notes
Prepare and reinforce door frame in strict compliance with hardware manufacturer’s written instructions and installation templates.

Additional Notes
Architectural steel and stainless steel barrel type continuous hinges distribute door weight and stress along the full length of the door and frame.

Caution: All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.

Architectural Builders Hardware Mfg. Inc.
www.abhmfg.com

AC500-HT
Stainless steel welded hospital tip and hinge leaves with flanges to encase each barrel.

Select Hinges
www.select-hinges.com

SL-57 with Tipit Hinge Top
Full surface geared continuous hinge with Tipit Hinge Top Protectors (wide)

Pemko
www.pemko.com

HS_HD1xSSHT-ALP
Half-surface heavy-duty aluminum geared continuous hinge
General Notes
Continuous hinges are recommended for all inswinging and outswinging doors within inpatient units.

Performance Criteria
Specify Hospital Tips (HT) to address ligature point at top of hinge.

Installation Notes
Prepare and reinforce door frame in strict compliance with hardware manufacturer’s written instructions and installation templates.

Additional Notes
Architectural steel and stainless steel barrel type continuous hinges distribute door weight and stress along the full length of the door and frame.

Caution: All hinges inherently carry risk due to multiple joints between moving parts, and extremely low acceptable tolerances. Consistent quality in manufacturing may be difficult to achieve and should be inspected in the field.

Markar Architectural Products
www.markar.com

FM300-HT
Edge mount stainless steel.

Stanley Security Solutions
www.stanleyhinges.com

LifeSpan 600 Series
641-HT-Standard Duty
Steel for 1/8” inset doors.
651-HT-Standard Duty
Stainless steel for 1/8” inset doors.

Hospital Tip
General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.
Division 08 | Openings
Door Hardware, Locks & Handles

General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

 Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

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Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Accurate Lock & Hardware
www.accuratlockandhardware.com
9100ALP Push Plate Lockset (Mortise)

Corbin Russwin
www.corbinrusswin.com
BHSS Trim (Mortise)

Sargent
www.sargentlock.com
BHW Trim (Mortise)
Caution: Installation tolerances must be tight to ensure proper operation. Adjustments shall be made in the field.

dormakaba USA
www.bestaccess.com
Best, Renew 90F Handle (Mortise)

Securitech
www.securitech.com
Solis Handle (Mortise)
General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

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Installation Notes
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Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.
Division 08 | Openings
Door Hardware, Locks & Handles

General Notes
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Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Accurate Lock & Hardware
www.accuratelockandhardware.com

Deep Detent Safety Knob (CDDSK)
(Cylindrical)

Caution: Cone shaped door knobs and thumb turns do not comply with ADA requirements for graspsability.

Corbin Russwin
www.corbinrusswin.com

Anti-Harm Knob HSS (Mortise)

Caution: Cone shaped door knobs and thumb turns do not comply with ADA requirements for graspsability.

Marks USA
http://marksusa.com

Institutional Life Safety 5SS50 Series Lockset (Mortise)

Caution: Cone shaped door knobs and thumb turns do not comply with ADA requirements for graspsability.

Schlage
http://us.allegion.com

SK1 Ligature Resistant Knob
(Cylindrical)

Caution: Cone shaped door knobs and thumb turns do not comply with ADA requirements for graspsability.

Division 08 | Openings
Door Hardware, Locks & Handles

General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.
General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.
Division 08 | Openings
Door Hardware, Locks & Handles

General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

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Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Sargent
www.sargentlock.com

Anti-Harm Knob BHD (Mortise)

Note: A ligature point can be established between the knob and escutcheon plate.

Corbin Russwin
www.corbinrusswin.com

HPSK Push/Pull Paddle

Sargent
www.sargentlock.com

ALP Push/Pull Paddle

Note: A wedge point can be created in the gap required for operational clearance of the paddle. This wedge point can occur when paddles are mounted in either the up, down or side positions.
Caution: Lever style door trim is not appropriate for high risk areas. It is nearly impossible to completely avoid ligature opportunities with lever style door trim, even if designed to be ligature-resistant. At best, lever style door trim is only appropriate for medium and low risk areas.
Division 08 | Openings
Door Hardware, Lever Handles

General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Best Access Systems
Grainger Industrial Supply
www.bestaccess.com
www.grainger.com

Ligature Resistant Lever Set
SPSL Series| LISL/LISE (Mortise)
The ligature-resistant lever handle “free-wheels” in both directions on both sides of the door whether the door is locked or unlocked. Proprietary finish resists looping by earbuds.

Schlage
http://us.allegion.com

Anti-Ligature Lever SL1 Series & L9000 Locks (Mortise)
Whether locked or unlocked, this lever set “free-wheels” up and down on both the keyed and non-keyed sides of the door. This “free-wheeling” action is standard on double cylinder functions.

Cautions:
● Earbuds can be easily looped around lever handle and remain in place due to friction.
● String can be threaded in the gap between the lever body and escutcheon to establish ligature.

TownSteel Architectural Hardware Manufacturing
www.townsteel.com

Ligature Resistant Lever Set
TRXL Series (Cylindrical)
Whether locked or unlocked, this lever set “free-wheels” up and down on both the keyed and non-keyed sides of the door. This “free-wheeling” action is standard on double cylinder functions.

Cautions:
● Earbuds can be easily looped around lever handle and remain in place due to friction.
● String can be threaded in the gap between the lever body and escutcheon to establish ligature.
● Do not specify with push-button privacy function. Push-button is loopable.

General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.
Division 08 | Openings
Door Hardware, Lever Handles

General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Marks USA
http://marksusa.com

Institutional Life Safety 5SS19 Series Lockset (Mortise)

Cautions:
- Earbuds can be easily looped around lever handle and remain in place due to friction.
- String can be threaded in the gap between the lever body and escutcheon to establish ligature.

Marks USA
http://marksusa.com

Institutional Life Safety 195SS Lockset, Series (Cylindrical)

Cautions:
- Earbuds can be easily looped around lever handle and remain in place due to friction.
- String can be threaded in the gap between the lever body and escutcheon to establish ligature.
- Do not specify with push-button privacy function. Push-button is loopable.
Division 08 | Openings
Door Hardware, Lever Handles

General Notes
Not all door hardware manufacturers provide an institutional privacy function and not all institutional privacy functions are ligature-resistant.

Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Beveled latchbolts can be compromised, permitting access to rooms and therefore should never be used on doors to potentially hazardous locations such as electrical rooms and housekeeping closets.

Specify a 2-piece stainless steel mechanical anti-friction latchbolt for staff-only rooms and other areas identified as low or medium risk.

Installation Notes
Narrower tolerances, required to achieve ligature resistance, necessitate careful installation and more frequent periodic field adjustment than is necessary with traditional lever trim.

Post-installation commissioning of each lockset by the manufacturer is recommended.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Corbin Russwin
www.corbinrusswin.com

BLSS Trim (Mortise)

Note: A variety of ligatures can be looped on lever resulting in downward ligatures.

Corbin Russwin
www.corbinrusswin.com

BLSS Trim (Mortise)

Note: A variety of ligatures can be looped on lever resulting in downward ligatures.

Sargent
www.sargentlock.com

BHL Trim (Mortise)

Note: A variety of ligatures can be looped on lever resulting in downward ligatures.

Sargent
www.sargentlock.com

BHL Trim (Mortise)

Note: A variety of ligatures can be looped on lever resulting in downward ligatures.

TownSteel Architectural Hardware Manufacturing
www.townsteel.com

Ligature Resistant Lever Set MRXL Series (Mortise)

Note: A variety of ligatures can be looped on lever resulting in downward ligatures.
Division 08 | Openings
Door Hardware, Privacy Thumbturns

General Notes
Institutional Privacy lockset functions utilize privacy thumbturns. There are 5 key criteria for a successful assembly. Listed below each product are notes identifying whether each criterion is met. The criteria are as follows:

- Ligature resistance of thumbturn
- Release of lock upon door closure
- Outside key override of thumbturn
- Outside locking of door by key
- ADA compliance

Performance Criteria
Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Accurate Lock & Hardware
www.accuratelockandhardware.com

ALT-ADA Thumbturn
- Ligature-resistant
- Lock releases upon closing door
- Outside key overrides thumbturn
- Outside key locks door
- ADA compliant

Schlage
http://us.allegion.com

Anti-Ligature Thumbturn SL1
- Ligature-resistant
- Lock does NOT release upon closing door
- Outside key overrides thumbturn
- Outside key locks door
- ADA compliant

Caution: Due to manufacturing tolerances, some samples allow for looping behind thumbturn.

TownSteel Architectural Hardware Manufacturing
www.townsteel.com

RXL Thumbturn
- Ligature-resistant
- Lock releases upon use of inner lever
- Outside key overrides thumbturn
- Outside key does NOT lock door
- ADA compliant

Caution: Due to manufacturing tolerances, some samples allow for looping behind thumbturn.
General Notes
Institutional Privacy lockset functions utilize privacy thumbturns. There are 5 key criteria for a successful assembly. Listed below each product are notes identifying whether each criterion is met. The criteria are as follows:

- Ligature resistance of thumbturn
- Release of lock upon door closure
- Outside key override of thumbturn
- Outside locking of door by key
- ADA compliance

Performance Criteria
Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Sargent
www.sargentlock.com

Corbin Russwin
www.corbinrusswin.com

Behavioral Health Thumbturn for use with Sargent Ligature Resistant Trims

- Ligature-resistant
- Lock releases upon use of inner lever
- Outside key does NOT override thumb turn
- Outside key locks door
- ADA compliant

Note: Because outside key does not override thumbturn, an alternative anti-barricade strategy may be warranted.
Division 08 | Openings
Door Hardware, Privacy Thumbturns

General Notes
Institutional Privacy lockset functions utilize privacy thumbturns. There are 5 key criteria for a successful assembly. Listed below each product are notes identifying whether each criterion is met. The criteria are as follows:

- Ligature resistance of thumbturn
- Release of lock upon door closure
- Outside key override of thumbturn
- Outside locking of door by key
- ADA compliance

Performance Criteria
Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Additional Notes
See the Anti-Barricade Strategies section for additional information relative to hardware functions on locksets and deadlatches.

Stanley/Best Access Systems
www.bestaccess.com

Female Patient Privacy Thumbturn
LTF

Note: A shoelace can be easily slid behind the thumbturn to present ligature opportunity.
**Performance Criteria**
Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

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**Accurate Lock & Hardware**  
[Crescent Pull (CP) Rigid Handle](www.accuratelockandhardware.com)

**Architectural Builders Hardware Mfg. Inc.**  
[1930 Fixed Pull](www.abhmfg.com)

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**Accurate Lock & Hardware**  
[Accurate Recessed ADA Pull (U7001AL)](www.accuratelockandhardware.com)
Performance Criteria
Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Kingsway Group
www.kingswaygroupusa.com

KG61 Classic Grip Pull Handle

Kingsway Group
www.kingswaygroupusa.com

KG30 Easy Grip Pull Handle on Back Plate

Kingsway Group
www.kingswaygroupusa.com

KG40 Ergogrip Pull Handle on Back Plate

KG61 Classic Grip Pull Handle

KG30 Easy Grip Pull Handle on Back Plate

KG40 Ergogrip Pull Handle on Back Plate
Performance Criteria
Specify tamper-resistant, flush-mounted set screws. A recessed set screw shaft provides a ligature opportunity for the stiff end of a shoelace.

Kingsway Group
www.kingswaygroupusa.com

KG70 Face Fixed Recessed Pull Handle

Note: Pull handle can be wedged with a knot to create a downward ligature opportunity.

Rockwood Manufacturing Company
www.rockwoodmfg.com

D89 - Heavy Duty Security Flush Pull

Note: Depth and profile of recess does not provide adequate functionality.
LR-SDS Anti-Ligature Sliding Door System

Wall-mounted door stops should be selected based upon door knob/lever type and should be mechanically fastened to resist twist off. Stops should be installed with solid wood blocking behind and with a construction adhesive applied to the backside of the base plate prior to mechanical attachment with tamper-resistant fasteners. Tamper-resistant sealant should be applied around the perimeter of the stop.

Caution: Traditional style door stops do not have concealed fasteners with a clamping ring to secure the stop. These can be removed by hand and ingested.
Division 08 | Openings
Door Hardware, Closers

**General Notes**
Mount closers on public side of doors to rooms with patient access, or on the secure side of doors that need to automatically lock or latch, such as Store Rooms, Soiled Utility Rooms, and doors with card access readers.

Consider use of concealed closers where risk assessment indicates that surface-mounted closers are not acceptable.

**Performance Criteria**
Specify gap tolerance at top to be 1/8” maximum. Doors with concealed closers that are intended to receive door top sensors must use a face-mounted sensor to avoid conflict with the closer arm.

**Additional Notes**
Required use of closers is greatly reduced by NFPA 101: Life Safety Code for sprinklered buildings.

**Caution:** All closers inherently carry risk. Do not use closers unless required by code, or at doors that shall control patient access in supervised spaces.

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**Rixson**
www.rixson.com

**51 Series Offset Floor Closer**
Fully concealed, single acting and handed. Use with top pivot hinge.

**Notes:**
- Fully concealed closers have no readily visible or accessible components.
- Floor closers require special floor preparation and door reinforcement.
- Pivot hinges require special consideration of sight lines into the room.

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**Rixson**
www.rixson.com

**700 Series Overhead Concealed Closer**
Double-acting, non-handed closer concealed in door frame head. Use with bottom pivot hinge.

**Notes:**
- Fully concealed closers have no readily visible or accessible components.
- Pivot Hinges require special consideration of sight lines into the room.

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HIGH RISK AREAS
MEDIUM RISK AREAS
LOW RISK AREAS

Rixson
www.rixson.com

51 Series Offset Floor Closer
Fully concealed, single acting and handed. Use with top pivot hinge.

Notes:
- Fully concealed closers have no readily visible or accessible components.
- Floor closers require special floor preparation and door reinforcement.
- Pivot hinges require special consideration of sight lines into the room.

Rixson
www.rixson.com

700 Series Overhead Concealed Closer
Double-acting, non-handed closer concealed in door frame head. Use with bottom pivot hinge.

Notes:
- Fully concealed closers have no readily visible or accessible components.
- Pivot Hinges require special consideration of sight lines into the room.

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HIGH RISK AREAS
MEDIUM RISK AREAS
LOW RISK AREAS

USE WITH CAUTION
Division 08 | Openings
Door Hardware, Closers

General Notes
Mount closers on public side of doors to rooms with patient access, or on the secure side of doors that need to automatically lock or latch, such as Store Rooms, Soiled Utility Rooms, and doors with card access readers.

Consider use of concealed closers where risk assessment indicates that surface-mounted closers are not acceptable.

Performance Criteria
Specify gap tolerance at top to be 1/8” maximum. Doors with concealed closers that are intended to receive door top sensors must use a face-mounted sensor to avoid conflict with the closer arm.

Additional Notes
Required use of closers is greatly reduced by NFPA 101: Life Safety Code for sprinklered buildings.

Caution: All closers inherently carry risk. Do not use closers unless required by code, or at doors that shall control patient access in supervised spaces.

Sargent
www.sargentlock.com

268/269 Series Overhead Concealed Closer
Fully concealed closer body in door frame head. Fully concealed track in door. Track arm is only visible when door is open.

LCN
http://us.allegion.com

4510T SMOOTHEE Series Closer
Heavy duty track closer.
Division 08 | Openings
Door Hardware, Gasketing

General Notes
NYS-OMH discourages the use of perforated ligature-resistant gasketing because it can easily be torn off, creating an ongoing maintenance concern and reducing the life safety compliance of the physical buildings.

Pemko
www.pemko.com

290AV Perimeter Gasketing
Aluminum with Vinyl Insert
Fasteners to be installed 1” from ends and at 6” on center, maximum.

303AV Perimeter Gasketing
Aluminum with Vinyl Insert
Fasteners to be installed 1” from ends and at 6” on center, maximum.

303APK Perimeter Gasketing
Aluminum with Thermal Plastic Elastomer Insert
Fasteners to be installed 1” from ends and at 6” on center, maximum.

316AV Perimeter Gasketing
Aluminum with Vinyl Insert
Fasteners to be installed 1” from ends and at 6” on center, maximum.
Division 08 | Openings
Door Hardware, Gasketing

General Notes
NYS-OMH discourages the use of perforated ligature-resistant gasketing because it can easily be torn off, creating an ongoing maintenance concern and reducing the life safety compliance of the physical buildings.

Pemko
www.pemko.com

2891AV Perimeter Gasketing
Aluminum with Vinyl Insert
Fasteners to be installed 1” from ends and at 6” on center, maximum.

HIGH RISK AREAS
MEDIUM RISK AREAS
LOW RISK AREAS
Division 08 | Openings
Glazing, General

General Notes

Following are risks and performance criteria to consider when specifying glazing in all areas that are accessible to patients, whether unsupervised or supervised. All windows and glazing in areas accessible to patients shall be evaluated as part of the Facility Risk Assessment. Windows and glazing in areas that are not routinely accessible to patients, but may occasionally become accessible to patients (e.g. a staff office that is left unlocked, or an office that is later converted to a Consult Room or Bedroom) should also be considered in the Facility Risk Assessment. Windows and glazing that are identified as a risk to patients for the behaviors listed below should be constructed in accordance with this standard and applicable NYS-OMH specification guidelines. The design and installation of the entire window and glazing system must be considered.

Polycarbonate glazing generally provides the best protection for patients against the various risks listed below. Laminated safety glazing, including the safety film covered laminate products identified in this standard, should be used with caution. Glazing products other than polycarbonate or safety film covered laminated safety glazing should never be used in patient areas. The NYS-OMH does not permit the use of wire glass in its facilities.

Elopement

Exterior windows, interior windows, and glazing are a primary target for patients trying to elope. Windows and glazing in both supervised and unsupervised areas provide potential opportunities for patients to elope. It is critical to consider the design of the entire window, together with the installation in wall openings, when designing to prevent elopement. Interior windows must not be discounted as potential targets; patients may perceive such windows as potentially leading to elopement opportunities even where that is not the case.

Jumping

Patients may jump in order to hurt themselves, or may attempt to push others through window openings in order to harm them. Jumping is a concern for all spaces above grade level, that are accessible to patients, whether unsupervised or supervised.

Ingestion

Patients may eat things for a variety of reasons, including a wish to cause themselves personal harm. Polycarbonate or laminated glazing protected with a surface film should always be used in patient accessible areas. Even small fragments that can come from tempered or laminated glazing can cause severe internal injuries or death. When considering using laminated glazing, care must be taken to select glazing that meets the following criteria:

- The safety film covered laminated glazing should wholly resist penetration of the glazing panel.
- The safety film covered laminated glazing should wholly retain broken glass to prevent dislodging from the interlayer, and to prevent all off-sharding of fragments.

Laceration

Patients will cut themselves. Glass presents an obvious opportunity for such behavior. When considering using laminated glazing, care must be taken to select glazing that meets the following criteria:

- The safety film covered laminated glazing should wholly resist the penetration of the glazing panel.
- The safety film covered laminated glazing should wholly retain broken glass to prevent dislodging from the interlayer, and to prevent all off-sharding of fragments.
- The safety film covered laminated glazing should prevent access to the sharp edges of broken glass, even if they are retained on the interlayer.

(continued on the next page)
Weaponization

Patients may use objects in their environment to harm others. Glass presents an obvious opportunity for such behavior. When considering using laminated glazing, care must be taken to select glazing that meets the following criteria:

- The safety film covered laminated glazing should wholly resist the penetration of the glazing panel.
- The safety film covered laminated glazing should wholly retain broken glass to prevent dislodging from the interlayer, and to prevent all off-sharding of fragments.
- The safety film covered laminated glazing should prevent access to the sharp edges of broken glass, even if they are retained on the interlayer.

The glass industry’s standard test for penetration and impact resistance for laminated glass is conducted on a very small unit (approximately 24” square), and is designed to approximate potential for incidental harm from accidental impact. Similar performance to the test sample should not be expected on a 4'-0'' x 6'-0'' window. The NYS-OMH requires the use of the AAMA A501.8-14 Standard Test Method for Determination of Resistance to Human Impact of Window Systems Intended for Use in Psychiatric Applications.

Note: Before specifying laminated glazing in a window unit, confirm that the selected window system has passed the aforementioned impact testing with the specified laminated glazing.
Division 08 | Openings
Glazing, Exterior Windows, Polycarbonate Glazing

General Notes
Glazing products other than polycarbonate or laminated safety glazing should never be used in patient areas.

Polycarbonate glazing provides the best protection for the patient against the previously listed risks in all patient areas, where the applicable codes and regulatory authority permit the use of polycarbonate glazing.

For applications that require fire rated assemblies, see Fire Protective Rated and Fire Resistive Rated glazing product pages.

Sabic Innovative Plastics
www.sabic-ip.com
FOR USE AS INNERMOST PANE OF EXTERIOR WINDOWS
Lexan SL-4855 Polycarbonate Glazing
1/2” thick with Marguard II-UV coating. Specify MR10 with 10 year warranty.

Plaskolite, LLC
www.plaskolite.com
FOR USE AS INNERMOST SURFACE OF EXTERIOR WINDOWS
Tuffak 15 Polycarbonate Glazing
1/2” thick with abrasion and UV resistant coating. Use with NYS-OMH 15 year warranty.
General Notes
Glazing products other than polycarbonate or laminated safety glazing should never be used in patient areas.

Polycarbonate glazing provides the best protection for the patient against the previously listed risks in all patient areas, where the applicable codes and regulatory authority permit the use of polycarbonate glazing.

For applications that require fire rated assemblies, see Fire Protective Rated and Fire Resistive Rated glazing product pages.

Oldcastle Building Envelope
www.oldcastlebe.com

FOR USE AS INNERMOST SURFACE OF EXTERIOR WINDOWS

ArmorProtect Plus 161000
Laminated Security Glazing
3/8” thick. 3M film is scratchable and may be removed from the laminated glass panel and new film installed by trained maintenance staff. Curing time for the film installation is two weeks minimum. Maintenance staff should be advised to keep spare stock that is fully cured to eliminate down time. Install in frames with a 1” continuous edge bite if dry glazed or 1/2” continuous edge bite if silicone glazed.

Outer Layer:
5/32” heat-strengthened glass
Interlayer:
0.090” Dupont SentryGlas Plus
Inner Layer:
5/32” heat-strengthened glass
Film over Inner Layer:
3M Ultra S600 anti-spall film installed to edge of glass (see Film Pages for equivalents)

Caution: Wet-glazing compounds and cleaning agents have been known to compromise the integrity of the interlayer, and care should be taken with their use. Care should be taken to properly identify the inside face of the glazing and to handle it according to manufacturers’ instructions.

Oldcastle Building Envelope
www.oldcastlebe.com

FOR USE AS OUTERMOST SURFACE OF EXTERIOR WINDOWS

Laminated Security Glazing
3/8” thick. Intended for use at grade, courtyards or porches with supervised patient access as an exterior lite in an insulated glazing unit where either 1/2” polycarbonate or 3/8” ArmorProtect Plus 161000 already provides primary patient safety from inside the building.

Outer Layer:
3/16” heat-strengthened glass
Interlayer:
0.060” PVB interlayer
Inner Layer:
3/16” heat-strengthened glass

Caution: Do not use in any area where patients may be left unsupervised.
Division 08 | Openings
Glazing, Exterior Windows, Security Film

General Notes
Films are used on the interior face of exterior glazing, and only when the use of polycarbonate is impractical or where its use is prohibited by Code when a fire resistance rating is required.

Anti-spall films are intended to be applied to conventional glazing materials to prevent release of shards in the event of breakage or other failure. Films may help prevent off-sharding, laceration, weaponizing, and ingestion. Anti-spall films may provide a cost-effective safety improvement for pre-existing conventional glazing materials.

Each facility shall conduct their own Facility Risk Assessment to determine the appropriateness of film applications for use in their specific situations.

Performance Criteria
Extend film to edge of glazing beyond and under the face of the glazing bead/stop.

General Cautions:
● Films shall not be used in NYS-OMH facilities to prevent elopement,
● Films shall not be used in NYS-OMH facilities to prevent jumping from upper stories,
● Films shall not be used in NYS-OMH facilities for security use at exterior glazing facing non-secure open spaces.

Ace Security Laminates
www.usace.com

200 Series - Standard Security
0.009" thick, 2-ply laminate, 99% UV blocking for use on exterior windows. Lifetime warranty.

Madico
www.safetyshield.com

Safetyshield 1500 Film
High strength glazing film applied to the exposed surface of glass reduces glass breakage and holds broken glass in place until glazing can be replaced.
Division 08 | Openings
Glazing, Interior Windows, Polycarbonate

General Notes
Glazing products other than polycarbonate or laminated safety glazing should never be used in patient areas.

Laminated safety glazing should be used with caution.

1/2” polycarbonate is recommended where elopement or jumping are the risks to be mitigated.

3/8” polycarbonate is recommended where ingesting, laceration, and weaponization are the risks to be mitigated.

Sabic Innovative Plastics
www.sabic-ip.com
Lexan SL-4855 Polycarbonate Glazing
3/8” or 1/2” thick with Marguard II-UV coating. Specify MR10 with a 10 year warranty. Install in hollow metal frames with a 1” continuous edge bite.

Plaskolite, LLC
www.plaskolite.com
Tuffak 15 Polycarbonate Glazing
1/2” thick. Use with NYS-OMH 15 year warranty. Install in hollow metal frames with a 1” continuous edge bite.
General Notes
Glazing products other than polycarbonate or laminated safety glazing should never be used in patient areas.

Laminated safety glazing should be used with caution.

1/2” polycarbonate is recommended where elopement or jumping are the risks to be mitigated.

3/8” polycarbonate is recommended where ingesting, laceration, and weaponization are the risks to be mitigated.

Oldcastle Building Envelope
www.oldcastlebe.com

ArmorProtect Plus 161000
Laminated Security Glazing
3/8” thick. 3M film is scratchable and may be removed from the laminated glass panel and new film installed by trained maintenance staff. Curing time for the film installation is two weeks minimum. Maintenance staff should be advised to keep spare stock that is fully cured to eliminate down time. Install in hollow metal frames with a 1” continuous edge bite if dry glazed or 1/2” continuous edge bite if silicone glazed.

Film over Outer Layer:
3M Ultra S800 anti-spall film installed to edge of glass, or equivalent.

Outer Layer:
5/32” heat-strengthened glass

Interlayer:
0.090” DuPont SentryGlas

Inner Layer:
5/32” heat-strengthened glass

Film over Inner Layer:
3M Ultra S800 anti-spall film installed to edge of glass, or equivalent.

Caution: Wet-glazing compounds and cleaning agents have been known to compromise the integrity of the interlayer, and care should be taken with their use. Care should be taken to properly identify the inside of the glass and to handle it according to manufacturers’ instructions.
Division 08 | Openings
Glazing, Interior Windows, Safety Film

General Notes
Films are used on interior glazing between spaces on the same floor level, and only when the use of polycarbonate is impractical or where its use is prohibited by Code when a fire resistance rating is required.

Safety films are intended to be applied to conventional glazing materials to prevent release of shards in the event of breakage or other failure. Films may help prevent off-sharding, laceration, weaponizing, and ingestion. Safety films may provide a cost-effective safety improvement for pre-existing conventional glazing materials.

Each facility shall conduct their own Facility Risk Assessment to determine the appropriateness of film applications for use in their specific situations.

Performance Criteria
Extend film to edge of glazing beyond and under the face of the glazing bead/stop

General Cautions:
- Safety Films shall not be used in NYS OMH facilities to prevent elopement of jumping
- Safety Films are not for use at interior glazing one or more stories above the adjacent floor space,
- Safety Films are not for use at any upper story exterior glazing,
- Safety Films are not for use at exterior glazing facing non-secure open spaces.

3M
www.3m.com

Ultra S600 Film
3M film is scratchable. When damaged, it may be removed from the glass panel and new film installed by trained maintenance staff. Curing time for the film installation is two weeks minimum. Exact curing time should be verified with the manufacturer. Maintenance staff should be advised to keep spare stock that is fully cured to eliminate down time.

DuPont
www.dupont.com

Spallshield CPET Film
Hard-coated PET film helps stop the showering of small glass particles (called “spall”) that can occur when conventional glass fails.
General Notes
Films are used on interior glazing between spaces on the same floor level, and only when the use of polycarbonate is impractical or where its use is prohibited by Code when a fire resistance rating is required.

Safety films are intended to be applied to conventional glazing materials to prevent release of shards in the event of breakage or other failure. Films may help prevent off-sharding, laceration, weaponizing, and ingestion. Safety films may provide a cost-effective safety improvement for pre-existing conventional glazing materials.

Each facility shall conduct their own Facility Risk Assessment to determine the appropriateness of film applications for use in their specific situations.

Performance Criteria
Extend film to edge of glazing beyond and under the face of the glazing bead/stop

General Cautions:
- Safety Films shall not be used in NYS OMH facilities to prevent elopement of jumping
- Safety Films are not for use at interior glazing one or more stories above the adjacent floor space,
- Safety Films are not for use at any upper story exterior glazing,
- Safety Films are not for use at exterior glazing facing non-secure open spaces.
Division 08 | Openings
Glazing, Interior Windows, Fire Protective Rated

General Notes
Do not use wire glazing in new applications.

Existing wire glazing should be removed and replaced with polycarbonate or laminated safety glazing wherever possible, or it should be protected with an applied safety film.

Code Notes:
Fire protective glazing is tested per NFPA 252, NFPA 257, UL 9, UL 10B, UL 10C.

Verify usage compliant with applicable Codes.

Technical Glass Products
www.fireglass.com

FireLite NT2
3/16" thick fire protection and impact safety rated glazing. Listed for use in doors, sidelites, and transoms with fire rating requirements ranging from 20 minutes to 3 hours.

<table>
<thead>
<tr>
<th>RATING</th>
<th>ASSEMBLY</th>
<th>MAX. EXPOSED AREA</th>
<th>MAX. WIDTH OF EXPOSED GLAZING</th>
<th>MAX. HEIGHT OF EXPOSED GLAZING</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 60 min.</td>
<td>DOORS (non-temp rise)</td>
<td>3,204 sq.in./22.25 sq.ft.</td>
<td>3&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td></td>
<td>DOORS (temp rise)</td>
<td>100 sq.in./0.69 sq.ft.</td>
<td>12&quot;</td>
<td>33&quot;</td>
</tr>
<tr>
<td></td>
<td>OTHER THAN DOORS</td>
<td>3/25 sq.in./0.20 sq.ft.</td>
<td>12&quot;</td>
<td>9/&quot;</td>
</tr>
<tr>
<td>90 min.</td>
<td>DOORS (non-temp rise)</td>
<td>2,034 sq.in./14.13 sq.ft.</td>
<td>3&quot;</td>
<td>56-1/2&quot;</td>
</tr>
<tr>
<td></td>
<td>DOORS (temp rise)</td>
<td>100 sq.in./0.69 sq.ft.</td>
<td>12&quot;</td>
<td>33&quot;</td>
</tr>
<tr>
<td></td>
<td>OTHER THAN DOORS</td>
<td>2,627 sq.in./18.24 sq.ft.</td>
<td>56-1/2&quot;</td>
<td>56-1/2&quot;</td>
</tr>
<tr>
<td>3 hours</td>
<td>DOORS</td>
<td>100 sq.in./0.69 sq.ft.</td>
<td>12&quot;</td>
<td>33&quot;</td>
</tr>
</tbody>
</table>

Check with frame manufacturer for maximum tested glass sizes and required stop height.
NOTE: Individual life sizes cannot exceed “Max. Exposed Area” listed above.
Division 08 | Openings
Glazing, Interior Windows, Fire Protective Rated

**General Notes**
Do not use wire glazing in new applications.

Existing wire glazing should be removed and replaced with polycarbonate or laminated safety glazing wherever possible, or it should be protected with an applied safety film.

**Code Notes:**
Fire protective glazing is tested per NFPA 252, NFPA 257, UL 9, UL 10B, UL 10C.

Verify usage compliant with applicable Codes.

**SaftiFirst**
www.safti.com

**SuperLite Fire Rated Glazing**
1/4” monolithic safety and positive pressure fire rated glazing. For use in wood, hollow metal, aluminum or any equally fire rated framing systems.

Traditional fire rated glass with a tough, durable fire rated safety film applied to meet the highest impact safety standard, CPSC 16CFR 1201 Cat. II, which requires withstanding 400 ft. lbs. due to accidental impact.

**Notes:**
● These products are rejected because of breakage and shard production.
● These products are not tested per ASTM F1233 and therefore are not considered Security Glazing.
● Impact safety ratings do not equal security ratings.
● While these products have many applications as Safety Impact Glazing, such as in schools and public buildings, they are not intended for special populations where security is also required.
Division 08 | Openings
Glazing, Interior Windows, Fire Resistive Rated

General Notes
Do not use wire glazing in new applications.

Existing wire glazing should be removed and replaced with approved safety glazing wherever possible, or it should be protected with either an applied safety film or 1/8” polycarbonate over face of glazing.

Code Notes
Fire resistive glazing is tested per ASTM E-119, NFPA 251, UL 263

Verify usage compliant with applicable Codes.

Technical Glass Products
www.fireglass.com

Pilkington Pyrostop
3/4” Pyrostop fire rated, impact safety rated
glass sandwiched between two layers of
1/8” polycarbonate.
General Notes
This Performance Based System may be applicable and acceptable in certain situations. Verify Code requirements and verify System acceptability with AHJ prior to executing design:

where the authority having jurisdiction will accept NYS-OMH’s Southwest Research Institute test (SwRI 01-4779) (not tested per ASTM F1233)

Polycarbonate Protected by Closely Spaced Sprinklers
For up to 120 minute opening protection:
• 3/8” polycarbonate
• Closely spaced (6’ O.C. max) sprinklerheads on both sides of glazing.
• Rated HM frame with 5/8” stops
Installation Notes
Install glazing in a hollow metal frame with glazing stops that provide a 5/8" continuous edge bite.

Plaskolite, Inc.
www.plaskolite.com

See-Thru Mirror
Two-way observation polycarbonate mirror, 0.236" thick. Product allows a percentage of incident light to pass through while reflecting the remainder. When illuminated, the side with the light source will be reflective and the opposite (darkened) side will be transparent.
Division 08 | Openings

Exterior Windows

General Notes
See the NYS-OMH Specification Guideline for 085653 Security Windows for additional information.

Performance Criteria
Alternate minimum standard for facilities other than the newly constructed NYS-OMH operated: Provide detention screen, or windows with sash, frame, and glazing capable of withstanding 2,000 ft-lb impact loads from a 1 foot diameter impact object without breach, dislodging or breakage. The use of alternative window treatments identified elsewhere in this document are an option to integral blinds.

Some manufacturers limit polycarbonate sheet width to 4'-0". Confirm with manufacturer before specifying glazing that exceeds 4'-0" in either direction.

Note:
- Structural and architectural detailing of psychiatric windows is critical.

Britplas
www.britplas.com

Safevent Windows

New Exterior Window Applications

- Provide 4" opening restriction for operable windows.
- Provide 1/2" polycarbonate with 1" continuous edge bite, dry glazed for interior glazing.
- Provide ligature-resistant manual window operator or electric operator.
- Provide integral operable blinds with ligature-resistant operator.
Division 08 | Openings
Exterior Windows

General Notes
See the NYS-OMH Specification Guideline for 085653 Security Windows for additional information.

Performance Criteria
Alternate minimum standard for facilities other than the newly constructed NYS-OMH operated: Provide detention screen, or windows with sash, frame, and glazing capable of withstanding 2,000 ft-lb impact loads from a 1 foot diameter impact object without breach, dislodging or breakage. The use of alternative window treatments identified elsewhere in this document are an option to integral blinds.

Some manufacturers limit polycarbonate sheet width to 4'-0". Confirm with manufacturer before specifying glazing that exceeds 4'-0" in either direction.

Cautions:
● Windows with casement sashes can be easily looped.

Note:
● Structural and architectural detailing of psychiatric windows is critical.

Graham Architectural Products
www.grahamwindows.com

S6300 Series Human Impact Window

New Exterior Window Applications
● Provide 4" opening restriction for operable windows.
● Provide 1/2" polycarbonate with 1" continuous edge bite, dry glazed for interior glazing.
● Provide integral operable blinds with ligature-resistant operator.

Caution: Do not use low profile, side mount angled or vertical mount angled operators for concealed operable blinds because they create ligature points.
Division 08 | Openings
Exterior Windows

General Notes
See the NYS-OMH Specification Guideline for 085653 Security Windows for additional information.

Performance Criteria
Alternate minimum standard for facilities other than the newly constructed NYS-OMH operated: Provide detention screen, or windows with sash, frame, and glazing capable of withstanding 2,000 ft-lb impact loads from a 1 foot diameter impact object without breach, dislodging or breakage. The use of alternative window treatments identified elsewhere in this document are an option to integral blinds.

Some manufacturers limit polycarbonate sheet width to 4'-0". Confirm with manufacturer before specifying glazing that exceeds 4'-0" in either direction.

Cautions:
- Windows with casement sashes can be easily looped.

Note:
- Structural and architectural detailing of psychiatric windows is critical.

Oldcastle Building Envelope
www.oldcastlebe.com

Pinnacle Series 66P Windows

New Exterior Window Applications

- Provide 4” opening restriction for operable windows.
- Provide 1/2” polycarbonate with 1” continuous edge bite, dry glazed for interior glazing.
- Provide integral operable blinds with ligature-resistant operator (e.g. blind tilt control knob or 1/8” vertical thumb wheel tilter).

Caution: Do not use low profile, side mount angled or vertical mount angled operators for concealed operable blinds because they create ligature points.

Blind Operators
Tilt Control Knob  Vertical Thumb Wheel
General Notes
See the NYS-OMH Specification Guideline for 085653 Security Windows for additional information.

Performance Criteria
Alternate minimum standard for facilities other than the newly constructed NYS-OMH operated: Provide detention screen, or windows with sash, frame, and glazing capable of withstanding 2,000 ft-lb impact loads from a 1 foot diameter impact object without breach, dislodging or breakage. The use of alternative window treatments identified elsewhere in this document are an option to integral blinds.

Some manufacturers limit polycarbonate sheet width to 4'-0". Confirm with manufacturer before specifying glazing that exceeds 4'-0" in either direction.

Cautions:
- Windows with casement sashes can be easily looped.

Note:
- Structural and architectural detailing of psychiatric windows is critical.

Wausau Window & Wall Systems
www.wausauwindow.com

4000i-DT Psychiatric Windows

New Exterior Window Applications
4000i-DT in-projected casement and fixed units.
- No security screens required.
- External insect screens are available.

New Exterior Window Applications
- Provide 4" opening restriction for operable windows.
- Provide 1/2" polycarbonate with 1" continuous edge bite, dry glazed for interior glazing.
- Provide integral operable blinds with ligature-resistant operator (e.g. blind tilt control knob).

Caution: Do not use low profile, side mount angled or vertical mount angled operators for concealed operable blinds because they create ligature points.
Division 08 | Openings

Exterior Windows

General Notes
See the NYS-OMH Specification Guideline for 085653 Security Windows for additional information.

Performance Criteria
Alternate minimum standard for facilities other than the newly constructed NYS-OMH operated: Provide detention screen, or windows with sash, frame, and glazing capable of withstanding 2,000 ft-lb impact loads from a 1 foot diameter impact object without breach, dislodging or breakage. The use of alternative window treatments identified elsewhere in this document are an option to integral blinds.

Some manufacturers limit polycarbonate sheet width to 4'-0". Confirm with manufacturer before specifying glazing that exceeds 4'-0" in either direction.

Cautions:
- Windows with casement sashes can be easily looped.

Note:
- Structural and architectural detailing of psychiatric windows is critical.

Wausau Window & Wall Systems
www.wausauwindow.com

2187-DT SEAL TM Windows

Retrofit Exterior Window Applications
2187-DT SEAL TM can be installed over existing in-place windows, or as part of aluminum storefront or curtain wall installation.

Retrofit Exterior Window Applications

- Provide 4” opening restriction for operable windows.
- Provide 1/2” polycarbonate with 1” continuous edge bite, dry glazed for interior glazing.
- Provide integral operable blinds with ligature-resistant operator (e.g. blind tilt control knob).

Caution: Do not use low profile, side mount angled or vertical mount angled operators for concealed operable blinds because they create ligature points.
Division 08 | Openings
Access Doors

General Notes
Avoid the use of access doors in patient areas to the greatest extent possible, particularly in unsupervised areas such as patient bedrooms and bathrooms.

Installation Notes
Access door frames shall be 16 gauge steel. Access door shall be 20 gauge steel, welded pan type. Door flange shall be 1” wide minimum, for embedment in drywall compound. Hinges shall be continuous. Base metal shall be steel with primer coat of rust inhibitive electrostatic powder baked gray enamel or stainless steel.

The access door may be filled with fire rated insulation. The door shall be automatic closing, self-latching and contain an interior latch release.

Locks shall be mortise slam latch with keyed cylinder. All locks shall be keyed alike.

Cendrex
www.cendrex.com
PFI Series Fire Rated Access Doors
Caution: Corners of door panel are not fully mitered. Provide tamper-resistant sealant bead to close the corner.

J. L. Industries
www.jlindustries.com
FDWB Fire Rated Access Panel
Wall Assemblies

The Designer should determine walls that are required to have an STC rating by the applicable codes, regulations, and the Joint Commission. See OMH Design Standards for application of OMH Wall Assemblies.

OMH Wall Assembly 1a: 3-5/8” 25 ga. steel studs @ 16” oc. with 1 layer 5/8” gypsum board. Refer to other wall assemblies for opposite side wall materials.

- Provide Type-X or Type-C gypsum board where part of a rated assembly (UL U419).
- Provide water-resistant (Green board or Type-M) gypsum board at locations exposed to moisture (bathrooms, showers, kitchens, dish washing, pools).
- Provide 3-1/2” fiberglass batt insulation where required for acoustical separation.
- Provide fire treated wood blocking where required for anchoring items to wall.
- Designer to specify height of wall (to above ceiling or underside of deck) based on code requirement, security, structure, and ceiling type.

OMH Wall Assembly 1b: 3-5/8” 20 ga. (0.0329 inch) steel studs @ 16” oc with 1 layer 5/8” very high impact gypsum board. Refer to other wall assemblies for opposite side wall materials.

- Provide Type-X or Type-C gypsum board where part of a rated assembly (UL U419).
- Provide 3-1/2” fiberglass batt insulation where required for acoustical separation.
- Provide fire treated wood blocking where required for anchoring items to wall.
- Designer to specify height of wall (to above ceiling or underside of deck) based on code requirement, security, structure, and ceiling type.

OMH Wall Assembly 2: 3-5/8” 20 ga. (0.0329 inch) steel studs @ 16” oc with 1 layer 5/8” very high impact gypsum board (floor to 4’-0” a.f.f.) and 5/8” gypsum board (4’-0” a.f.f to above ceiling) plus one layer 5/8” very high impact gypsum board (full wall height). See OMH Gypsum Board Assemblies Specification Guideline Section 09 21 16. Refer to other wall assemblies for opposite side wall materials.

- Provide Type-X or Type-C gypsum board where part of a rated assembly (UL U419).
- Provide 3-1/2” fiberglass batt insulation where required for acoustical separation.
- Provide fire treated wood blocking where required for anchoring items to wall.
- Designer to specify height of wall (to above ceiling or underside of deck) based on code requirement, security, structure, and ceiling type.

OMH Wall Assembly 3: Protection padding system (see OMH Specification Guideline Section 13 99 99). 3-5/8” 16 ga. (0.0538 inch) steel studs @ 16” oc with 3-1/2” fiberglass batt insulation. Refer to other wall assemblies for opposite side wall materials.

- Provide additional layer(s) of Type-X or Type-C gypsum board between padding system and studs where part of a rated assembly.

OMH Wall Assembly 4: 3-5/8” 20 ga. steel studs @ 16” oc with 1 layer 5/8” DensShield tile guard glass mat water-resistant backing board (see OMH Specification Guideline Section 09 30 13). Refer to other wall assemblies for opposite side wall materials.

- Provide additional layer(s) of Type-X or Type-C gypsum board between backer board and studs where part of a rated assembly (UL U419).
- Provide 3-1/2” fiberglass batt insulation where required for acoustical separation.
- Provide fire treated wood blocking where required for anchoring items to wall.
- Designer to specify height of wall (to above ceiling or underside of deck) based on code requirement, security, structure, and ceiling type.

OMH Wall Assembly 5: Concrete masonry

- CMU type, thickness, and reinforcing selected by Designer.
- Refer to UL U-Series designs where fire resistance ratings are required.
Ceiling Assemblies

The Designer should determine ceilings that are required to have an STC rating or Special Acoustic properties. Ceiling heights should be evaluated based on patient population and risk levels. Frequent accessibility to MEP items above the ceiling and vulnerability to access door should be considered when selecting a ceiling system. See OMH Design Standards for application of OMH Ceiling Assemblies.

OMH Ceiling Assembly 1: 1 layer 1/2” or 5/8” gypsum board with metal framing/suspension system.
- Provide Type-X or Type-C gypsum board where part of a rated assembly.
- Provide water resistant gypsum board at locations exposed to moisture.
- Provide perforated acoustical gypsum board at locations requiring additional acoustical control.

OMH Ceiling Assembly 2: 1 layer 5/8” abuse resistant gypsum board with metal framing/suspension system.
- Provide additional layers as required of Type-X or Type-C gypsum board between VH1 gypsum board and metal support system where part of a rated assembly.

OMH Ceiling Assembly 3: 3/4” suspended acoustic tile on intermediate duty suspension system.
- Hold down clips are not recommended for use with this ceiling assembly. They can become dislodged over time and used as weapons.

OMH Ceiling Assembly 4: Class A FRP (Kemlite) Ceiling Panel with FRP suspension system and 12 gauge stainless steel wire.
- Hold down clips are not recommended for use with this ceiling assembly.

OMH Ceiling Assembly 5a: Metal Panel Ceiling System
- 22 gauge steel minimum thickness perforated metal tiles secured to suspension grid.

OMH Ceiling Assembly 5b: Secure Metal Panel Ceiling System
- 18 gauge steel or 0.050 aluminum minimum thickness perforated metal tiles held in place with secure suspension grid. Compatible access doors are required for access.

OMH Ceiling Assembly 6: Metal Plank Ceiling System
- 14 gauge steel perforated metal planks captured in wall channels.
- Various methods for locking planks and for acoustical control are provided by different manufacturers.
Division 09 | Finishes
Wall Base

General Notes
Use only heat welded integral cove base, solid wood or pre-finished rubber/PVC base. 

Installation Notes
Integral Cove Base: Adhere base to wall. Provide tamper-resistant sealant along the top edge of base.

Wood and rubber Wall Base: Adhere and mechanically fasten base to wall. Fasteners shall be screwed into wood blocking, countersunk and filled.

Caution: Do not specify conventional commercial vinyl or rubber wall base in patient areas. These products are easily removable, presenting risk of weaponization.

Custom Wood Base

Custom Designed Wood Base
Solid 3/4" hardwood with eased or bullnose top and corners. Provide tamper-resistant sealant at joint between floor and base, base and wall surface. Finish six sides of all wood base prior to installation.

Millwork Contoured Wall Base
Thermoplastic solid rubber base. Various profiles range in height from 2-1/2" to 6" high, 1/4" to 3/8" thick.

Johnstonite
www.johnsonite.com
General Notes
Use only heat welded integral cove base, solid wood or pre-finished rubber/PVC base.

Installation Notes
Integral Cove Base: Adhere base to wall. Provide tamper-resistant sealant along the top edge of base.

Wood and rubber Wall Base: Adhere and mechanically fasten base to wall. Fasteners shall be screwed into wood blocking, countersunk and filled.

Caution: Do not specify conventional commercial vinyl or rubber wall base in patient areas. These products are easily removable, presenting risk of weaponization.

Flexco
www.flexcofloors.com

Health Design Wall Base
Thermoplastic rubber base tapers from 1/8” thick to adjacent floor thickness. All seams are heat welded.

Johnsonite
www.johnsonite.com

SCC-XX-A Cove Cap Moulding
Vinyl cove cap molding accessory for 1/8” cove base material.

Note: Material can be pulled out of place in installation and weaponized.
Division 09 | Finishes

Ceilings

General Notes
Security ceiling panels are removable with use of special tools to remove ceiling panels.

Installation Notes
Specifier shall select steel or aluminum gauge or aluminum based on finished ceiling heights and risk levels of installation areas.

Gordon Incorporated
www.gordon-inc.com

WinLok Accessible Soffit System

0.050" aluminum 30" x 30" panels (perforation pattern R564-732DG10 with 1/2" non-perforated borders at each panel) and manufacturer's standard system suspension grid and WA-20 2" x 2" extruded perimeter angle and AV3 panel hold-down angle at perimeter. All exposed finishes powder-coated after perforations.

OMH Ceiling Assembly: 5b (page 86)

Gordon Incorporated
www.gordon-inc.com

Cel Line Metal Plank Security Ceilings

14 GA. 2’ wide galvanized steel panels (perforation pattern R18-1132DG11) and manufacturer's 14 GA galvanized steel perimeter angle. Panels surface-screwed to perimeter angle @ 6” o.c. All exposed finishes powder-coated after all perforations. Back side of panels powder-coated. 2’ x 2’ access door installed in ceiling.

OMH Ceiling Assembly: 6 (page 86)
Division 09 | Finishes
Ceilings

General Notes
Ceiling panels are removable with use of special tools to remove ceiling panels.

Installation Notes
Specifier shall select steel or aluminum gauge based on finished ceiling heights and risk levels of installation areas.

Gordon Incorporated
www.gordon-inc.com

Lockdown Metal Panel Security Ceiling
18 GA. 2’ x 2” galvanized steel "lockdown" panels (perforation pattern R564-732DG10) and manufacturer’s perimeter channel with 24 GA z-hold down. Grid system comprised of main tees at 12'-0" o.c. with cross tees at 4'-0" and 2'-0" o.c. Lockdown infill panels pressure fit into grid. All exposed finishes powder-coated after all perforations are cut into panel.

Access door options include hinged door and 2’ x 2’ access door surface mounted to grid with tamper resistant screws. Frequent removal of tamper resistant screws may compromise the installed ceiling assembly due to wear on the screw threads and to the ceiling grid. Project team should review access requirements w/ owner to determine frequency of access door use and the best method for access.

OMH Ceiling Assembly: 5b (page 86)

Carrittec
www.carrittec.com

Series CO Clip-On Panel System
Division 10 | Specialties
Shower & Privacy Curtain Track System

General Notes
Users shall perform a risk assessment to determine their options for shower and privacy curtains.

Specify breathable fabric material for shower and privacy curtains.

Installation Notes
Recessed ceiling track shall run continuously between walls. Surface-mounted ceiling track shall run continuously between walls, or be installed with secure end caps. Fill all joints between sections of track with tamper-resistant sealant to reduce opportunities for ligature.

Cautions:
● End caps can create opportunity for a wedge ligature.
● A looping point can be created in curtain tracks when an object, such as a penny, is inserted into the track.
● The breakaway weight for curtain carriers may exceed the limits at which self-harm can be induced. Carriers can be ganged together to increase the release weight.

InPro Corporation
www.inprocorp.com

Clickeze Ultra Cubicle Track
Extruded aluminum track provides heavy duty strength. For use with Clickeze accessories.

Clickeze Whisper Cubicle Track
Extruded PVC track allows for noise reduction during curtain movement. For use with Clickeze accessories.

Caution: Potential looping point at curtain tracks.

InPro Corporation
www.inprocorp.com

Clickeze Pop Out Carrier
Hook on carrier releases, allowing the curtain to fall, and disengages at approximately 10 lbs. of pressure. For use with both Clickeze Ultra and Whisper Curtain Tracks.
Division 10 | Specialties
Shower & Privacy Curtain Track System

General Notes
Users shall perform a risk assessment to determine their options for shower and privacy curtains.

Specify breathable fabric material for shower and privacy curtains.

Installation Notes
Recessed ceiling track shall run continuously between walls. Surface-mounted ceiling track shall run continuously between walls, or be installed with secure end caps. Fill all joints between sections of track with tamper-resistant sealant to reduce opportunities for ligature.

Cautions:
● End caps can create opportunity for a wedge ligature.
● A looping point can be created in curtain tracks when an object, such as a penny, is inserted into the track.
● The breakaway weight for curtain carriers may exceed the limits at which self-harm can be induced. Carriers can be ganged together to increase the release weight.

Oddball Industries
www.oddballindustries.com

HealSafe Interiors J-Trac Curtain Rail SP-2 (Wall Mount or Ceiling Mount)
Hook on carrier is designed to clip onto the J-Trac curtain rail and releases from track when downward pressure is applied. The curtain rail can be ceiling or wall-mounted.

Caution: A wall-mounted installation can hold a downward ligature of 20lbs. when several hooks are ganged together.

Construction Specialties, Inc.
www.c-sgroup.com

Breakaway Carrier #975P
Hook on carrier is designed to pop out of the axle when approximately 22 lbs. of pressure is applied to the hook, and can be reused.
Division 10 | Specialties
Shower & Privacy Curtain Track System

**General Notes**
Users shall perform a risk assessment to determine their options for shower and privacy curtains.

Specify breathable fabric material for shower and privacy curtains.

**Installation Notes**
Recessed ceiling track shall run continuously between walls. Surface-mounted ceiling track shall run continuously between walls, or be installed with secure end caps. Fill all joints between sections of track with tamper-resistant sealant to reduce opportunities for ligature.

**Cautions:**
- End caps can create opportunity for a wedge ligature.
- A looping point can be created in curtain tracks when an object, such as a penny, is inserted into the track.
- The breakaway weight for curtain carriers may exceed the limits at which self-harm can be induced. Carriers can be ganged together to increase the release weight.

**AFS Security**
www.afs-zerexpert.com

**Kestrel Movatrace**
Movatrace curtain suspension system utilizes magnetic wall brackets where the track meets the wall, and ceilings brackets with suspension hangers at ceilings. Under excess loads, the suspension hangers separate from the ceiling brackets.

Note: Loose parts can be ingested and ease of disassembly is likely to be a nuisance to staff.

**Imperial Fastener Company**
www.imperialfastener.com

The IFC-69 ceiling mounted and IFC-79 wall-mounted tracks are used with “Safety Tabs” that attach to box pleated window draperies or shower curtains.

Notes:
- Velcro on “Safety Tabs” creates a tie off ligature point.
- IFC-79 wall-mounted curtain track can be continuously looped end to end.
Division 10 | Specialties
Closet Rods, Clothes & Towel Hooks

Code Notes
2018 FGI “Guidelines for the Construction of Hospitals and Outpatient Facilities” requires that; “Shelves for folded garments shall be used instead of arrangements for hanging garments.”

Kingsway Group
www.kingswaygroupusa.com

KG180 Coat Hook
Stainless steel surround. Rubber hook releases under downward applied load.

Whitehall Manufacturing
www.whitehallmfg.com

WH1830A-SLPT Single Hook
Adjustable auto release clothes hook.

Note: Adjust tension in ball joint to ensure release of hook.

Norva Plastics, Inc.
www.norvaplastics.com

Suicide Reduction Clothes Hook
Polyethylene Hook

Caution: Hook can be tied off to form a side ligature point. Installation location should be considered to prevent a second point of ligature.
Division 10 | Specialties
Closet Rods, Clothes & Towel Hooks

Code Notes
2018 FGI “Guidelines for the Construction of Hospitals and Outpatient Facilities” requires that; “Shelves for folded garments shall be used instead of arrangements for hanging garments.”

AFS Security
www.afs-securitysystems.com
K507 Coat Hook
Note: Loose parts can be ingested and ease of disassembly is likely to be a nuisance to staff.

American Specialties, Inc.
www.americanspecialties.com
123 Square Clothes Hook

Oddball Industries
www.oddballindustries.com
SP-6 Clothes/Towel Hook
SP-6A Clothes/Towel Hook with adjustable tension release
Note: Hook can be tied off to form a ligature point.

Bradley Corporation
www.bradleycorp.com
Model SA36 Tension Towel Hook
Note: Hook can be tied off to form a ligature point.

HenkelHook
www.henkelhook.com
HenkelHook
Note: Hook can be wedged to create a ligature point.
Code Notes
2018 FGI “Guidelines for the Construction of Hospitals and Outpatient Facilities” requires that; “Shelves for folded garments shall be used instead of arrangements for hanging garments.”

Laidlaw
www.laidlawdirect.com

Orbis Coat Hook 81.AL8.03
Ligature-resistant spherical casing. Hook can support the weight of a small coat but releases under downward applied load.

Note: Hook can be tied off to form a ligature point.

Norix
www.norix.com

Towel Hook
Note: Hook can be tied off with a loop to form a ligature point.

Oddball Industries
www.oddballindustries.com

SP-1 Closet “Bar”
Note: Hangers may be ganged together to increase breakaway weight.

Laidlaw
www.laidlawdirect.com

Orbis Coat Hook 81.AL8.03
Ligature-resistant spherical casing. Hook can support the weight of a small coat but releases under downward applied load.

Note: Hook can be tied off to form a ligature point.

Norix
www.norix.com

Towel Hook
Note: Hook can be tied off with a loop to form a ligature point.

Whitehall Manufacturing
www.whitehallmfg.com

BestCare Clothing & Towel Holder
WH1830
Note: Hook can be tied off to form a ligature point.
Code Notes
2018 FGI “Guidelines for the Construction of Hospitals and Outpatient Facilities” requires that; “Shelves for folded garments shall be used instead of arrangements for hanging garments.”

Willoughby Industries, Inc.
www.willoughby-ind.com

CTH-4 Clasp Type Towel Hook

Notes:
- Hooks can be tied off of to form a ganged ligature point
- Clasp style hook allow for wedging opportunities
Division 10 | Specialties
Handrails & Grab Bars, General

General Notes
Nearly all handrails and grab bars are subject to possible wedge ligature with a shoe or other object.

Grab bars should only be installed where required by code.

Installation Notes
Verify that all handrails and grab bars are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Sealant may be required to fill voids around the perimeter of handrails and grab bars depending on installation substrate.

Caution: Traditional code compliant handrails and grab bars create obvious ligature opportunities.
Division 10 | Specialties
Handrails

General Notes
All handrails are subject to possible wedge ligature with a shoe or other object.

Installation Notes
Verify that all handrails are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Sealant may be required to fill voids around the perimeter of handrails and grab bars depending on installation substrate.

Additional Notes
The inside of handrails with continuous mounting brackets are susceptible to the collection of debris.

Caution: Traditional code compliant handrails create obvious ligature opportunities.

InPro Corporation
www.inprocorp.com

1000BH Handrail
Continuous aluminum retainer bracket and specially designed molded returns reduce the gap between the handrail and substrate.

Notes:
- Cover shall be installed using tamper-resistant sealant, as recommended by manufacturer, to reduce risk of removal.
Division 10 | Specialties
Handrails

General Notes
All handrails are subject to possible wedge ligature with a shoe or other object.

Installation Notes
Verify that all handrails are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Sealant may be required to fill voids around the perimeter of handrails and grab bars depending on installation substrate.

Additional Notes
The inside of handrails with continuous mounting brackets are susceptible to the collection of debris

Caution: Traditional code compliant handrails create obvious ligature opportunities.

Pawling Corporation
www.pawling.com

BR-400CS Series Handrail
6-1/4” high vinyl handrail. Ligature-resistant design to minimize leverage and looping with radius corners. Aluminum tube with laser cut 1/8” aluminum closure plates. Continuous secure bracket.

Caution: Cover is easily removable and can be broken or weaponized.

Pawling Corporation
www.pawling.com

BR-500 Series Handrail
5-1/2” high vinyl handrail. Ligature-resistant design to minimize leverage and looping with radius corners. Aluminum tube with laser cut 1/8” aluminum closure plates. Continuous secure bracket.

Caution: Cover is easily removable and can be broken or weaponized.
Division 10 | Specialties
Handrails

General Notes
All handrails are subject to possible wedge ligature with a shoe or other object.

Installation Notes
Verify that all handrails are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Sealant may be required to fill voids around the perimeter of handrails and grab bars depending on installation substrate.

Additional Notes
The inside of handrails with continuous mounting brackets are susceptible to the collection of debris.

Caution: Traditional code compliant handrails create obvious ligature opportunities.

Wallguard
www.wallguard.com

2021S Handrail
5-1/2" high, 12'-0" continuous security bracket and mounting system. Class A fire rating and ADA compliant. Provide manufacturer’s continuous aluminum tube with laser cut 1/8" thick aluminum closure plates at corners and mechanically fastened. Colored cover shall be installed with 3M Fastbond 30 water based contact adhesive to prevent removal.

Caution: Cover is easily removable and can be broken or weaponized.
Division 10 | Specialties
Toilet Accessories, Grab Bars

General Notes
Many grab bars are subject to possible wedge ligature with a shoe or other object. Grab bars should only be installed where required by code.

Performance Criteria
Specify SS Type 316 stainless steel for wet locations when available.

Installation Notes
Verify that all grab bars are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Provide continuous blocking. Be attentive to potential moment arm issues on existing installations without continuous blocking.

Sealant may be required to fill voids around the perimeter of grab bars depending on the installation substrate.

Additional Notes
Specialty grab bars may be handed in only one direction when installed vertically.

Cautions:
- Traditional code compliant grab bars create obvious ligature opportunities.
- ICRA notes potential infection control problem at end closure plates.
- Drainage holes at end caps create potential ligature opportunities with paper clips.

Behavioral Safety Products
www.besafeprod.com

GB730 Ligature Resistant Grab Bar
Symmetrical (non-handed) design allows for mounting the grab bar in any direction; vertical, horizontal, or pitched installations.

Notes:
- Careful specification is required. Water drains off one end and will result in water on the bathroom floor if configured incorrectly.

Kingsway Group
www.kingswaygroupusa.com

Grab Rail 270 Series
Horizontal and vertical mounting. Painted extruded aluminum, 600 mm long. Provide sealant at the full perimeter to prevent end to end looping.

Notes:
- Graspable surface on this grab bar is shorter in length than overall unit length.
- Careful specification is required. Water drains off one end and will result in water on the bathroom floor if configured incorrectly.
Division 10 | Specialties
Toilet Accessories, Grab Bars

General Notes
Many grab bars are subject to possible wedge ligature with a shoe or other object. Grab bars should only be installed where required by code.

Performance Criteria
Specify SS Type 316 stainless steel for wet locations when available.

Installation Notes
Verify that all grab bars are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Provide continuous blocking. Be attentive to potential moment arm issues on existing installations without continuous blocking.

Sealant may be required to fill voids around the perimeter of grab bars depending on the installation substrate.

Additional Notes
Specialty grab bars may be handed in only one direction when installed vertically.

Cautions:
- Traditional code compliant grab bars create obvious ligature opportunities.
- ICRA notes potential infection control problem at end closure plates.
- Drainage holes at end caps create potential ligature opportunities with paper clips.

Northwest Specialty Hardware
www.northwestsh.com

NW Security Bar

Cascade Specialty Hardware
www.cascadesh.com

Safebar Grab Bar

Securing Cosmos
www.securingcosmos.com

811-S03 SafeSupport SR Safe-T Grab Bar
Specialty self-draining end caps are available from manufacturers and should be specified. Provide sealant at the full perimeter to prevent end to end looping.

Caution: Horizontal and vertical mounting are acceptable but may permit wedge ligature with a shoe or other object.

Willoughby Industries, Inc.
www.willoughby-ind.com

LRGB-X-ADA Series Ligature Resistant Grab Bar
Specialty self-draining end caps are available from manufacturers and should be specified. Provide sealant at the full perimeter to prevent end to end looping.

Caution: Horizontal and vertical mounting are acceptable but may permit wedge ligature with a shoe or other object.
Division 10 | Specialties
Toilet Accessories, Grab Bars

General Notes
Many grab bars are subject to possible wedge ligature with a shoe or other object. Grab bars should only be installed where required by code.

Performance Criteria
Specify SS Type 316 stainless steel for wet locations when available.

Installation Notes
Verify that all grab bars are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Provide continuous blocking. Be attentive to potential moment arm issues on existing installations without continuous blocking.

Sealant may be required to fill voids around the perimeter of grab bars depending on the installation substrate.

Additional Notes
Specialty grab bars may be handed in only one direction when installed vertically.

Cautions:
● Traditional code compliant grab bars create obvious ligature opportunities.
● ICRA notes potential infection control problem at end closure plates.
● Drainage holes at end caps create potential ligature opportunities with paper clips.

Whitehall Manufacturing
www.whitehallmfg.com
1109-1 24” Ligature Resistant Grab Bar
Note: This product may allow end to end looping ligature.

Whitehall Manufacturing
www.whitehallmfg.com
1110-2 24” Ligature Resistant Grab Bar
Note: This product may allow end to end looping ligature.

Whitehall Manufacturing
www.whitehallmfg.com
Best-Care WH1140 Ligature Resistant ADA Compliant Grab Bar with V-Closure Strip
Note: Drainage holes permit ligatures.
Division 10 | Specialties
Toilet Accessories, Grab Bars

General Notes
Many grab bars are subject to possible wedge ligature with a shoe or other object. Grab bars should only be installed where required by code.

Performance Criteria
Specify SS Type 316 stainless steel for wet locations when available.

Installation Notes
Verify that all grab bars are installed per the manufacturer’s installation instructions. Proper installation is critical in order for tight tolerances between the multiple product pieces.

Provide continuous blocking. Be attentive to potential moment arm issues on existing installations without continuous blocking.

Sealant may be required to fill voids around the perimeter of grab bars depending on the installation substrate.

Additional Notes
Specialty grab bars may be handed in only one direction when installed vertically.

Cautions:
- Traditional code compliant grab bars create obvious ligature opportunities.
- ICRA notes potential infection control problem at end closure plates.
- Drainage holes at end caps create potential ligature opportunities with paper clips.

American Specialties, Inc.
www.americanspecialties.com

0165 Grab Bar with Drain Holes
Note: This product may allow end to end looping ligature.

Securing Cosmos
www.securingcosmos.com

811-S38 SafeSupport SR Draining Grab Bar
Horizontal mounting.

Note: Drainage slot permits ligature.
Division 10 | Specialties
Toilet Accessories, General

General Notes

Some product categories offer few patient safe solutions that have been approved for use in NYS-OMH facilities. One such category is toilet accessories. Many manufacturers of soap dispensers, paper towel dispensers, hand dryers, and toilet tissue dispensers/holders market their products as appropriate for use in high risk environments. Upon testing many products, NYS-OMH has determined that they often present opportunities for self-harm.

Failure Modes

Because these product types dispense disposable products, many of them make use of slots or holes. This allows for wedging and tying, providing opportunities for downward ligature. Hand dryers inherently present risk, as they rely on unobstructed airflow to function. Hand dryers that have been accepted by OMH dispense and exhaust air as inconspicuously as possible, and resist looping over the top of the device.

Infection Control

There exist some inherent problems with options that present a patient safe solution, one of which is risk of infection. Paper towel and toilet tissue shelves and holders which do not secure the disposable products allow it to fall on the floor, rendering it contaminated. Users cannot be prevented from using the contaminated products; this leads many facilities to disallow the use of shelves and holders.

Best In Class

It is the responsibility of each facility to determine, based on their own risk assessment, how best to address these needs. Some options in this Standard will appeal more than others based on past experience and knowledge of a particular patient population. The decision to utilize a product noted as “Rejected” or “Use with Caution” may in fact be the best solution for a facility, provided that it understands the risks involved and has a plan to manage those risks as best as possible.
Division 10 | Specialties
Toilet Accessories, Soap Dispensers

**General Notes**
Best practice advocates the use of recessed toilet accessories.

**Performance Criteria**
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Caution: Soap dispensers with flat tops or push levers provide a loopable ligature.

**Behavioral Safety Products**

**SD750 Ligature Resistant Soap Dispenser**
Powder coated all metal construction with a rounded, smooth-edged design. Accepts Gojo FMX-12 1250ms cartridge.
Caution: Dispenser area allows for wedging opportunities.

Notes:
- Specify stainless steel cam lock for installation in wet areas.

**Gojo Industries**

**LTX Behavioral Health Dispensing System**
Stainless steel Soap dispensing unit specifically designed for behavioral health environments with delayed time output, inhibited access interior, and sloped and rounded exterior.
Caution: Dispenser area allows for wedging opportunities.
Division 10 | Specialties
Toilet Accessories, Soap Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Caution: Soap dispensers with flat tops or push levers provide a loopable ligature.

Kingsway Group
www.kingswaygroupusa.com

KG07 Manual Soap Dispenser
Stainless steel surface mounted liquid soap dispenser. Soap is manually dispensed with a push button mechanism. The soap dispenser has an inner cassette that slides downward and houses a plastic refillable cartridge.

Caution: Dispenser area allows for wedging opportunities.
Division 10 | Specialties
Toilet Accessories, Soap Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Caution: Soap dispensers with flat tops or push levers provide a loopable ligature.

Gojo Industries
www.gojo.com

ADX-12 Security Enclosure
Note: This product provides wedging opportunities.

American Specialties, Inc.
www.americanspecialties.com

5002 Soap Dispenser
Notes:
- Product has sharp components.
- Provides multiple ligature points.
- Projects 1/2” from face of wall.

American Specialties, Inc.
www.americanspecialties.com

9326 Soap Dispenser
Note: This product provides a loopable ligature.

Bobrick
www.bobrick.com

B-26607 Soap Dispenser
Note: This product provides a loopable ligature.

Gojo
www.gojo.com

ADX-12 Security Enclosure
Note: This product provides wedging opportunities.

American Specialties, Inc.
www.americanspecialties.com

9326 Soap Dispenser
Note: This product provides a loopable ligature.
Division 10 | Specialties
Toilet Accessories, Soap Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Caution: Soap dispensers with flat tops or push levers provide a loopable ligature.

Opsbox/Archer Manufacturing
www.vandalproof.org

Ops 1-Touch Dispenser
Vandal Proof Foaming Dispenser

Notes:
● Activator allows for wedging opportunities.
● Provides ligature points.
Division 10 | Specialties
Toilet Accessories, Paper Towel Holders & Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Installation Notes
Recessed paper towel shelves require blocking on sides of shelf at wall studs and shall be mechanically fastened through to blocking.

Specify wall thickness as required.

Whitehall Manufacturing
www.whitehallmfg.com

Best-Care WH1820FA Recessed Shelf
16 gauge type 304 stainless steel with a satin finish or powder coated white finish. Install with tamper-resistant fasteners. Provide tamper-resistant sealant at flange perimeter.

Behavioral Safety Products
www.besafeprod.com

Ligature Resistant Paper Towel Dispenser #PH240

Caution: Dispenser area allows for wedging opportunities.
General Notes
Best practice advocates the use of recessed toilet accessories.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Georgia-Pacific
www.gppro.com

59466A enMotion Semi-Recessed Paper Towel Dispenser
Semi-recessed automated touch-less paper towel dispenser.

Notes:
● Loopable flat top allows ligature.
● Serrated metal strip allows wedging opportunity for downward ligature and potential for weaponization.

Georgia-Pacific
www.gppro.com

56620 Combination Folded Paper Towel Dispenser
Combination C-fold/multi-fold paper towel dispenser.

Notes:
● Loopable flat top allows ligature.
● Slotted dispenser allows wedging opportunity for downward ligature.
General Notes
Best practice advocates the use of recessed toilet accessories.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

American Specialties, Inc.
www.americanspecialties.com

0457 Recessed Paper Towel Dispenser
22 gauge type 304 stainless steel with a satin finish.

Note: Slotted dispenser allows wedging opportunity for downward ligature.

Opsbox/Archer Manufacturing
www.vandalproof.org

Supreme Multi-Purpose Paper Towel Dispenser

Notes:
- Slot allow for wedging opportunities.
- Provides ligature points.
Division 10 | Specialties
Toilet Accessories, Hand Dryers

General Notes
Best practice advocates the use of recessed toilet accessories.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

World Dryer
www.worlddryer.com

SLIMdri Hand Dryer
Surface-mounted ADA compliant hand dryer.

Caution: Vent area allows for looping opportunities.

American Specialties, Inc.
www.americanspecialties.com

0198MH SafeDri Recessed Mounted Sensor Hand Dryer
18 gauge type 304 stainless steel cover and hand dryer chamber over automatic hand dryer with infrared sensor. Air intake pulls from stud space or plenum.
Division 10 | Specialties
Toilet Accessories, Toilet Tissue Holders & Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.

Coordinate toilet tissue roll size with holder.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Installation Notes
Front mounted models should be installed with tamper-resistant fasteners. Back mounted models can only be installed on accessible chase walls.

Cautions:
- Potential hazard with loose toilet tissue rolls which can be lodged in toilets.
- Potential infection control issue with loose toilet tissue rolls which can be easily dropped on the floor.
- Toilet tissue holders with spindles may allow a downward ligature by tying off to the spindles if they don’t release when more than the acceptable amount of force is applied (greater than 11 lbs.).

American Specialties, Inc.
www.americanspecialties.com
110-13 Recessed Toilet Paper Roll Holder (Front Mounted)
14 gauge type 304 stainless steel with a satin finish.

Whitehall Manufacturing
www.whitehallmfg.com
1840-FA Recessed Toilet Paper Roll Holder (Front Mounted)
14 gauge type 304 stainless steel with a satin finish or white enamel finish.
Division 10 | Specialties
Toilet Accessories, Toilet Tissue Holders & Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.
Coordinate toilet tissue roll size with holder.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Installation Notes
Front mounted models should be installed with tamper-resistant fasteners. Back mounted models can only be installed on accessible chase walls.

Cautions:
- Potential hazard with loose toilet tissue rolls which can be lodged in toilets.
- Potential infection control issue with loose toilet tissue rolls which can be easily dropped on the floor.
- Toilet tissue holders with spindles may allow a downward ligature by tying off to the spindles if they don’t release when more than the acceptable amount of force is applied (greater than 11 lbs.).

Cascade Specialty Hardware
www.cascadesh.com
C-400 Safety Toilet Paper Holder
Caution: Break away weight is 18 lbs and exceeds recommended.

Kingsway Group
www.kingswaygroupusa.com
Recessed Toilet Roll Holder KG13
Caution: Break away weight is 16 lbs and exceeds recommended.

Whitehall Manufacturing
www.whitehallmfg.com
Best-Care WH1845B Ligature Resistant Spindle Button Recessed Toilet Paper Holder

Kingsway Group
www.kingswaygroupusa.com
Surface Mount KG03 Toilet Roll Holder
Note: Specify powder coat finish.
Division 10 | Specialties  
Toilet Accessories, Toilet Tissue Holders & Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.

Coordinate toilet tissue roll size with holder.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Installation Notes
Front mounted models should be installed with tamper-resistant fasteners. Back mounted models can only be installed on accessible chase walls.

Cautions:
- Potential hazard with loose toilet tissue rolls which can be lodged in toilets.
- Potential infection control issue with loose toilet tissue rolls which can be easily dropped on the floor.
- Toilet tissue holders with spindles may allow a downward ligature by tying off to the spindles if they don’t release when more than the acceptable amount of force is applied (greater than 11 lbs.).

American Specialties, Inc.
www.americanspecialties.com

0262 Surface Mounted Folded Toilet Tissue Cabinet
Note: Slotted dispenser allows wedging opportunity for downward ligature.

Bobrick
www.bobrick.com

B-5288 Surface Mounted Multi-Roll Toilet Tissue Dispenser
Note: Plastic spindle can create a downward ligature and can be broken into small shards and weaponized.

Bradley Corporation
www.bradleycorp.com

SA12 Recessed Toilet Tissue Roll Holder (Front Mounted)
16 gauge type 304 stainless steel with a satin finish.

Note: Joint between rim and faceplate plate permits looping.

Kingsway Group
www.kingswaygroupusa.com

SA12 Recessed Toilet Tissue Roll Holder (Front Mounted)
16 gauge type 304 stainless steel with a satin finish.

Note: Joint between rim and faceplate plate permits looping.

Kingsway Group
www.kingswaygroupusa.com

Surface Mounted Toilet Tissue Dispenser KG04
Note: Slotted dispenser allows wedging opportunity for downward ligature.
Division 10 | Specialties
Toilet Accessories, Toilet Tissue Holders & Dispensers

General Notes
Best practice advocates the use of recessed toilet accessories.

Coordinate toilet tissue roll size with holder.

Performance Criteria
Quality control of toilet accessories is important and often difficult to control. Samples should be requested as part of the submittal process.

Installation Notes
Front mounted models should be installed with tamper-resistant fasteners. Back mounted models can only be installed on accessible chase walls.

Cautions:
- Potential hazard with loose toilet tissue rolls which can be lodged in toilets.
- Potential infection control issue with loose toilet tissue rolls which can be easily dropped on the floor.
- Toilet tissue holders with spindles may allow a downward ligature by tying off to the spindles if they don’t release when more than the acceptable amount of force is applied (greater than 11 lbs.).

Morcon, Inc.
MO-M1007 Morcon Surface Mounted Metal Dispenser
Note: Frame and spindles create an opportunity for downward ligature.

Northwest Specialty Hardware
NW 611 Toilet Paper Holder
Note: Spindle can be tied off to form a ligature point.

Whitehall Manufacturing
Best-Care WH1845 & WH1845FA Recessed Auto-Release Toilet Paper Holder
Note: Spindles can be tied off to form a ligature point.
Division 10 | Specialties
Toilet Accessories, Mirrors

General Notes
Only polycarbonate glazing is recommended for use in patient bathrooms.

Sabic Innovative Plastics
www.sabic-ip.com
Royal Adhesives & Sealants
www.royaladhesives.com

Frameless Polycarbonate Wall-to-Wall Mirror
Lexan Dura-Mir, 0.25" (6 mm) polycarbonate. Install from wall-to-wall and from top of sink backsplash to ceiling, using adhesive recommended by polycarbonate manufacturer.

Note: Provide tamper-resistant sealant at mirror perimeter. Sealant joint shall not exceed 1/8". At joints that exceed 1/8", provide a metal or solid surface trim piece to conceal the edge of polycarbonate mirror.

Behavioral Safety Products
www.besafeprod.com

Ligature Resistant Stainless Steel Wood Framed Mirror FM160 |
Ligature Resistant Stainless Steel Powder Coated Framed Mirror FM760
Polished stainless steel mirror with #8 finish.

Caution: Provide tamper-resistant sealant at full perimeter of frame.
General Notes
Only polycarbonate glazing is recommended for use in patient bathrooms.

American Specialties, Inc.
www.americanspecialties.com

0600 Angle Frame Mirror
18 gauge type 304 stainless steel with satin finish. Concealed hanging bracket that locks onto top and bottom of frame by tamper-resistant screws.

Note: Ligature point can be established across the top of mirror due to squared edge and finish of stainless steel frame.

Oddball Industries
www.oddballindustries.com

SP-8 Mirror Guard

Note: Mirror guard has sharp edges and does not sit flush to profile of mirror.
General Notes
Users shall perform a risk assessment to determine their options for shower and privacy curtains.

Specify breathable fabric material for shower and privacy curtains.

Installation Notes
Recessed ceiling track shall run continuously between walls. Surface-mounted ceiling track shall run continuously between walls, or be installed with secure end caps. Fill all joints between sections of track with tamper-resistant sealant to reduce opportunities for ligature.

Cautions:
- End caps can create opportunity for a wedge ligature.
- A looping point can be created in curtain tracks when an object, such as a penny, is inserted into the track.
- The breakaway weight for curtain carriers may exceed the limits at which self-harm can be induced. Carriers can be ganged together to increase the release weight.

InPro Corporation
www.inprocorp.com

Clickeze Ultra Cubicle Track
Extruded aluminum track provides heavy-duty strength. For use with Clickeze accessories.

Clickeze Whisper Cubicle Track
Extruded PVC track allows for noise reduction during curtain movement. For use with Clickeze accessories.

Ultra Track
Whisper Track

Caution: Potential looping point at curtain tracks.

InPro Corporation
www.inprocorp.com

Clickeze Pop Out Carrier
Hook on carrier releases, allowing the curtain to fall, and disengages at approximately 10 lbs. of pressure. For use with both Clickeze Ultra and Whisper Curtain Tracks.
**Division 10 | Specialties**

**Window Treatments**

**General Notes**
Users shall perform a risk assessment to determine their options for shower and privacy curtains.

Specify breathable fabric material for shower and privacy curtains.

**Installation Notes**
Recessed ceiling track shall run continuously between walls. Surface-mounted ceiling track shall run continuously between walls, or be installed with secure end caps. Fill all joints between sections of track with tamper-resistant sealant to reduce opportunities for ligature.

**Cautions:**
- End caps can create opportunity for a wedge ligature.
- A looping point can be created in curtain tracks when an object, such as a penny, is inserted into the track.
- The breakaway weight for curtain carriers may exceed the limits at which self-harm can be induced. Carriers can be ganged together to increase the release weight.

**HealSafe Interiors J-Trac Curtain Rail SP-2 (Wall Mount or Ceiling Mount)**
Hook on carrier is designed to clip onto the J-Trac curtain rail and releases from track when downward pressure is applied. The curtain rail can be ceiling or wall-mounted.

**Caution:** A wall-mounted installation can hold a downward ligature of 20lbs. when several hooks are ganged together.

**Oddball Industries**
www.oddballindustries.com

**Construction Specialties, Inc.**
www.c-sgroup.com

**Breakaway Carrier #975P**
Hook on carrier is designed to pop out of the axle when approximately 22 lbs. of pressure is applied to the hook, and can be reused.
General Notes
Users shall perform a risk assessment to determine their options for shower and privacy curtains.

Specify breathable fabric material for shower and privacy curtains.

Installation Notes
Recessed ceiling track shall run continuously between walls. Surface-mounted ceiling track shall run continuously between walls, or be installed with secure end caps. Fill all joints between sections of track with tamper-resistant sealant to reduce opportunities for ligature.

Cautions:
- End caps can create opportunity for a wedge ligature.
- A looping point can be created in curtain tracks when an object, such as a penny, is inserted into the track.
- The breakaway weight for curtain carriers may exceed the limits at which self-harm can be induced. Carriers can be ganged together to increase the release weight.

Imperial Fastener Company
www.imperialfastener.com

The IFC-69 ceiling mounted and IFC-79 wall-mounted tracks are used with “Safety Tabs” that attach to box pleated window draperies or shower curtains.

Notes:
- Velcro on “Safety Tabs” creates a tie off ligature point.
- IFC-79 wall-mounted curtain track can be continuously looped end to end.

WebbShade
www.webbshade.com

WebbLok Shades
The IFC-69 ceiling mounted and IFC-79 wall-mounted tracks are used with “Safety Tabs” that attach to box pleated window draperies or shower curtains.

Note: This product provides many potential ligature points.
**Division 10 | Specialties**

**Artwork Frames**

<table>
<thead>
<tr>
<th>Behavioral Safety Products</th>
<th>Custom Design Frameworks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ligature Resistant Art Frame #AF550</td>
<td>8 1/2 x 11 Custom Wood Frames with Ligature Resistant Profile</td>
</tr>
<tr>
<td>Multiple frame sizes available. Select prints from on-line library of 60 prints, to be matted like a typical picture frame, but positioned behind 1/8&quot; polycarbonate glazing. Follow manufacturer's installation instructions.</td>
<td>Multiple wood types and finishes available. Specify with standard 3/16&quot; polycarbonate glazing.</td>
</tr>
<tr>
<td>Caution: Provide tamper-resistant sealant at full perimeter of frame.</td>
<td>Caution: Provide tamper-resistant sealant at full perimeter of frame.</td>
</tr>
</tbody>
</table>
Division 10 | Specialties
Cabinet Hardware

Performance Criteria
For cabinet and dresser doors and drawers, provide either ligature-resistant pulls or integral recessed flush pulls.

Installation Notes
Provide non-loopable ligature-resistant, tamper-resistant security grade hardware. Ensure cabinet hinge pin is not removable (tack weld or cap).

Caution: Single point fasteners pose twist off hazard. Specify set screw or embed fastener in pick proof sealant.

Accuracy Lock & Hardware
www.accuratelockandhardware.com
CP-CAB Crescent Cabinet Pull

Kingsway Group
www.kingswaygroupusa.com
KG50 Anti-Ligature Small Cupped Pull Handle

Architectural Builders Hardware Mfg. Inc.
www.abhmfg.com
1931 Cabinet Pull

Kingsway Group
www.kingswaygroupusa.com
KG62 Anti-Ligature Classic Grip Cabinet Pull Handle
Division 10 | Specialties
Cabinet Hardware

Performance Criteria
For cabinet and dresser doors and drawers, provide either ligature-resistant pulls or integral recessed flush pulls.

Installation Notes
Provide non-loopable ligature-resistant, tamper-resistant security grade hardware. Ensure cabinet hinge pin is not removable (tack weld or cap).

Caution: Single point fasteners pose twist off hazard. Specify set screw or embed fastener in pick proof sealant.

Hafele
www.hafeleamericas.com
158.80 Flush Pull

Note: Recess creates an opportunity for wedging.

Top Knobs Decor
www.topknobsdecor.com
M495 Somerset Cup Pull

Note: Recess creates an opportunity for wedging.

Sugatsune America, Inc.
www.sugatsune.com
UT-105/S Cabinet Pull

Notes:
- The cabinet pull is installed by pressure fit. Therefore it can be forcibly removed and parts ingested.
- There are also looping ligature opportunities between the pull and the substrate.
Installation Notes
Signage systems should be mechanically fastened to substrate with tamper-resistant fasteners. Double stick tape and Velcro are not acceptable.

2/90 Sign Systems
www.290signs.com

SafeCare Signage
Thermoplastic frame, fully adhered to thermoplastic backpanel; clear polycarbonate insert lens. Mechanically fasten to blocking with tamper-resistant fasteners.

King Architectural Products
www.king-ap.com

KMS Series Signage
Tamper-resistant locking; Top, bottom, panel profiles and copy covers are held in place by manufacturer’s standard concealed locking pin. Specify two locking pins per sign.

Caution: Edges of metal profile pieces can be sharp.
Installation Notes
Signage systems should be mechanically fastened to substrate with tamper-resistant fasteners. Double stick tape and Velcro are not acceptable.

2/90 Sign Systems
www.290signs.com

Flxsigns
Note: The Flxsign is highly susceptible to vandalism and can potentially be used as a weapon.
Division 10 | Specialties
Fire Extinguisher Cabinets

General Notes
Locate only in supervised areas.

Installation Notes
See NYS-OMH Guidelines for strategies to maintain wall assembly fire ratings at recessed cabinets.

Code Notes
NFPA 10 requires locking fire extinguisher cabinets to include a “means of emergency access”. Manufacturers interpret this in various ways, including:

- Full lock with staff assigned keys.
- Break-away latch/lock with resettable tongue.
- Break-away latch/lock with non-resettable tongue.

Carefully review non-resettable products before specifying, as actual damage may be caused to the latch/lock mechanism during emergency access. Repair may be simple or complex depending on the specific product.

Caution:
Fire extinguisher cabinets are tested primarily for abuse-resistance and may be loopable at cabinet/door joint.

Larsen’s Manufacturing Company
www.larsensmfg.com

Architectural Series 2712 Fire Extinguisher Cabinet
Stainless steel tub with a continuous hinge. Specify fully recessed cabinet with flat trim, or semi-recessed cabinet with rolled edge trim & door without handle. Specify mortise lock with keyed cylinder.

Activar Construction Products Group, Inc.
www.activarcpg.com

JL Industries Cosmopolitan Series Fire Extinguisher Cabinet
Note: Cabinet quality is not abuse or tamper-resistant and presents many sharp edges.

Larsen’s Manufacturing Company
www.larsensmfg.com

DECS 2409-R4 Fire Extinguisher Cabinet
Stainless steel tub with a continuous hinge. Specify fully recessed cabinet with flat trim, or semi-recessed cabinet with rolled edge trim & door without handle. Specify mortise lock with keyed cylinder.
Division 10 | Specialties
Wall Device Covers

ARSCO Manufacturing Co.
www.arscomfg.com

Anti-ligature Thermostat Cover
with Lock ACM0001-01A

Caution: Provide tamper-resistant sealant at full perimeter of device.
General Notes

Furniture with doors and drawers, such as wardrobes and dressers, will pose a potential ligature risk. Since there are no viable ligature-resistant solutions, it is highly recommended that doors and drawers are not provided for wardrobes, dressers, closet units, etc. unless their use is regulated by staff controlled locks. When considering if the use of wardrobes, dressers or closet units is desired or appropriate, best practice requires each new facility to complete a risk assessment for all spaces and furnishings. Patient privacy rights may also inform decisions about the need for specific furnishings.

Doors & Drawers Guidelines

- Provide locks for all doors and drawers, allowing staff to control access by at-risk patients when necessary.
- Provide doors with continuous hinges and hospital tips.
- Provide doors with recessed ligature-resistant finger pulls. If available, continuous integral finger pulls can also be provided.
- Provide drawers with recessed ligature-resistant finger pulls, stops, and locks.
- For high risk patients, consider the use of built-in closets with door top ligature sensors.

Wardrobe & Closet Unit Guidelines

- Recess wardrobes and closet units, or make continuous to underside of ceilings or soffits above.
- When it’s not possible to make recessed units or make them continuous to underside of ceilings or soffits above, provide sloped tops.
- Provide collapsible coat hooks. Closet rods and j-bars are not acceptable.
- Requirements of the 2018 FGI Guidelines state: “Shelves for folded garments shall be used instead of arrangements for hanging garments.”

Platform Bed Guidelines

- NYS-OMH has the following platform bed requirements:
- Beds must be platform type with flush side panels, headboards and footboards, with no overlapping lips between members.
- Platform beds shall be six-sided and have an enclosed bottom, or be five-sided and bolted to the floor.
- Provide solid wood or 3/4” plywood panels with veneer. Particleboard and plastic laminate are not acceptable.
- All wood members, both exposed and internal, shall be sealed with three layers of polyurethane.
- Internal construction shall consist of at least two intermediate supports. Acceptable support materials are wood and metal.
- All top and edge joints shall be sealed with tamper-resistant sealant.
- Provide no exposed fasteners, except when fastening bed to the floor.
- Glides and adjustable feet are not acceptable. Felt pads only.
- Exercise caution with platform beds that have restraints. These should be removed in all patient rooms unless one-on-one supervision is provided.
- Each facility must perform their own risk assessment to evaluate all products.

Manufacturers must be able to customize their bed construction to comply with all NYS-OMH platform bed requirements. Beds that do not comply will be rejected by NYS-OMH.
Division 21 | Fire Suppression
Sprinklers

General Notes
Minimize removable parts.

Installation Notes
Specify no accessible parts that activate the sprinkler system when vandalized.

Tyco Fire Protection Products
www.tyco-fire.com

Raven Institutional Sprinklers
Pendant and horizontal sidewall heads. Standard, Quick Response & Extended Coverage. Stainless steel escutcheons available for installation in wet or damp areas.

Tyco Fire Protection Products
www.tyco-fire.com

Model TFP PH2 Sprinklers

Reliable Automatic Sprinkler Co., Inc.
www.reliablesprinkler.com

Model XL Quick Response Institutional Sprinkler

Cautions:
- A portion of the sprinkler head projects below the sprinkler head enclosure and is accessible to patients; tampering may activate sprinkler.
- Removable parts create a potential safety hazard for ingestion and weaponization.
- Break away weight is 50 lbs. and exceeds recommended.
Division 21 | Fire Suppression
Sprinklers

General Notes
Minimize removable parts.

Installation Notes
Specify no accessible parts that activate the sprinkler system when vandalized.

Viking Group Inc.
www.vikinggroupinc.com

VK410 Pendant & VK412 Sidewall Institutional Flush Sprinklers

Note: The heat sensor projects below the sprinkler head enclosure and is accessible to patients. Damage to the heat sensor activates the system.
Division 22 | Plumbing
Lavatory Assemblies, General

General Notes

Lavatories in the following section are specified as systems. Individual components, used either independently of the system they are specified with, or combined with other systems, may not be ligature-resistant. Specifiers should take care to utilize products in concert to create systems that are safe for installation condition (e.g. in a niche as opposed to freestanding) and combinations of components that make a functional and safe system. These components include:

- Activators & Actuators
- Basins
- Countertops
- Faucets
- Fixtures
- Mirrors
- Niche Lavatories
- Pipe Enclosures

Ligature

Only fixed strainers should be used. Do not use pop-up drains. Care should be taken to specify ligature-resistant strainers.

Appearance

Facilities are encouraged to utilize lavatories and toilets made of materials other than stainless steel that support a therapeutic environment. If stainless steel fixtures are preferred by a facility, they should be specified with a powder coated finish.
Code Notes
Provide ADA compliant handicapped accessible lavatory assembly configurations where required.

NYS-OMH Standard Lavatory Assembly

Custom Solid Surface Lavatory with Integral Sink Bowl & Pipe Enclosure
Niche mounted solid surface vanity counter with integral solid surface sink bowl and deck mounted ligature resistant faucet. Removable integral solid surface pipe enclosure below mounted with tamper-resistant fasteners. Provide lavatory basin without overflow.

![Lavatory Assembly Image]
Division 22 | Plumbing
Lavatory Assemblies

American Standard
www.americanstandard-us.com

Lucerne 0355.012

Wall hung, vitreous china sink.

Note: A pipe enclosure, complying with ANSI 117.1, is required with this wall hung sink to conceal exposed plumbing piping.

Caution: A difficult but possible ligature opportunity may exist with this product. A series of shoelaces tied together may be looped over the lavatory and pulled back toward the support wall under the pipe enclosure.

Behavioral Safety Products
www.besafeprod.com

Ligature Resistant Solid Surface Lavatory #ET720

Shown with pipe enclosure, which comes standard, and deck-mounted dual-temp push-button faucet, sold separately.

Caution: A difficult but possible ligature opportunity exists with this product. A series of shoelaces tied together may be looped over the lavatory and pulled back toward the support wall under the pipe enclosure.

Code Notes
Provide ADA compliant handicapped accessible lavatory assembly configurations where required.
Whitehall Manufacturing
www.whitehallmfg.com

WH3775 Solid Surface Wall-Hung Lavatory

Shown with fully accessible powder-coated stainless steel pipe enclosure, deck-mounted dual-temp push-button conical faucet.

Available without overflow hole.

Caution: Provide tamper-resistant sealant at joint between underside of lavatory and top edge of pipe enclosure.

Caution: A difficult but possible ligature opportunity may exist with this product. A series of shoelaces tied together may be looped over the lavatory and pulled back toward the support wall under the pipe enclosure.
General Notes
Solid surface integral, countertop mounted and undermount lavatories are all acceptable when part of an assembly that is itself designed to be non-loopable.

Code Notes
Provide ADA compliant handicapped accessible lavatory assembly configurations where required.

American Standard
www.americanstandard-us.com

Rondalyn Countertop Sink
High gloss stain resistant vitreous china sink. Specify without overflow.

American Standard
www.americanstandard-us.com

Mezzo Semi-Countertop Sink
Self rimming fine fire clay semi-countertop sink. Specify without overflow.
Division 22 | Plumbing
Lavatory Pipe Enclosures

General Notes
Custom fabrications can be viable alternatives and, when properly detailed, may be preferable to pre-manufactured enclosures.

Installation Notes
Specify tamper-resistant fasteners.

IPS Corporation
www.ipscorp.com

Truebro Lav Shield Model #2018

Cautions:
● Pipe enclosure will conceal exposed plumbing piping, but is used with wall-mounted lavatory that poses looping opportunity.
● Careful scribing to underside of lavatory is required for a proper fit and sealant joint.
● Coordinate model of enclosure with model of wall-mounted lavatory.
Division 22 | Plumbing
Lavatory Faucets

General Notes
Faucets must be considered as part of the entire assembly.

Installation Notes
Specify projecting spouts only when the lavatory is positioned so that the lateral ligature hang is not possible (i.e. recessed in a niche).

Behavioral Safety Products
www.besafeprod.com
Ligature Resistant Sensor Faucet #SF390
Deck mounted faucet is a single temperature faucet without controls. It may be specified as hard-wired or with battery power.

Chicago Faucets
www.chicagofaucets.com
ELR Touch Free Ligature Resistant Faucet 4” Center, 8” Center with Escutcheon
Deck mounted faucet is a single temperature faucet without controls.

Whitehall Manufacturing
www.whitehallmfg.com
Best Care Ligature Resistant Sensor Activated Faucet #WH3375-SO
Deck mounted faucet is a single temperature faucet without controls. Designed to retrofit onto existing 4” center-set lavatory decks.
General Notes
Faucets must be considered as part of the entire assembly.

Installation Notes
Specify projecting spouts only when the lavatory is positioned so that the lateral ligature hang is not possible (i.e. recessed in a niche).

Whitehall Manufacturing
www.whitehallmfg.com

Best Care Conical Ligature Resistant Faucets
Deck mounted conical faucet. Specify one of the following, with appropriate control valve assembly.
- WH3376 - Single temperature with pneumatic pushbutton
- WH3377 - Dual temperature with pneumatic pushbutton
- WH3376-PPZ - Single temp with Piezo touch button
- WH3377-PPZ - Dual temp with Piezo touch buttons.
Division 22 | Plumbing
Lavatory Faucets

General Notes
Faucets must be considered as part of the entire assembly.

Installation Notes
Specify projecting spouts only when the lavatory is positioned so that the lateral ligature hang is not possible (i.e. recessed in a niche).

Kohler Co.
www.kohler.com

K-922 Laminar Faucet

Note: This product's recess presents opportunity for wedge ligature.
Lavatory Grid Strainers

Oddball Industries
www.oddballindustries.com

SP-11-GDK Grid Drain Kit
Effective drainage is achieved only with the included air vent. Air introduction valve may not meet all local codes.

Caution: Although drainage holes are half the diameter as typical grid strainers, making threading of a thin ligature difficult, a paper clip can be woven through the perforations creating a tie off opportunity.

Typical Grid Strainer & Drain
Note: Typical grid strainers are rejected because ligature can be created by threading a ligature item through the perforations and be hung over the lavatory or vanity edge.
General Notes
Toilets located in inpatient areas shall be specified as either 3.5 gallons per flush (gpf) blowout or 1.6 gpf siphon jet. They are equally effective in forcing matter through the trap and clearing the bowl.

Blowout Toilets
Blowout toilets are designed to clear the bowl with a high volume of water discharged from the bowl rim. Although these toilets are louder than siphon jet toilets, it has been noted that the higher volume of water allows matter to be forced further down the waste piping system. Please note that 3.5 gpf blowout toilets may not be permissible by code in all jurisdictions, and should be evaluated before selecting this option.

- Provides high velocity and jet action
- Noisy

Siphon Jet Toilets
Siphon jet toilets are designed with an incorporated water jet in the trapway that forces matter through the trap by creating suction in the bowl to pull the contents through as well. Siphon jets are manufactured with 1.1, 1.28 and 1.6 gpf and must be paired with the appropriate flush valve. Currently the 1.6 gpf models are recommended due to evaluation and OMH acceptance of performance.

- Economical water usage
- More commonly used due to quiet actions
Division 22 | Plumbing
Toilets

General Notes
Due to the possibility of inappropriate behavior, 3.5 gpf blowout toilets and 1.6 gpf siphon jet toilets are recommended.

Installation Notes
The wall surface must be flush with the toilet to avoid gaps that can become ligature points.

Specify standard toilets with heavy duty carriers. Specify bariatric toilets with bariatric carriers. Coordinate with manufacturers for specific carrier model specifications.

Code Notes
3.5 gpf blowout toilets may not be permissible by code in all jurisdictions, and should be evaluated before selecting this option.

Cautions:
- Floor mounted toilets must be provided with complete closure between the toilet and wall to reduce ligature opportunities.
- Toilet seats that are not integral with the bowl create ligature opportunities.

American Standard
www.americanstandard-us.com

Huron Toilet

Behavioral Safety Products
www.besafeprod.com

Ligature Resistant Toilet #TN691
Floor mounted, back spud, 1.6 gpf siphon jet with integral seat or prepped for conventional toilet seat.

Kohler Co.
www.kohler.com

Anglesey K-4396 Toilet
Floor mounted, back spud, 1.6 gpf siphon jet with detachable seat.
Division 22 | Plumbing
Toilets

General Notes
Due to the possibility of inappropriate behavior, 3.5 gpf blowout toilets and 1.6 gpf siphon jet toilets are recommended.

Installation Notes
The wall surface must be flush with the toilet to avoid gaps that can become ligature points.

Specify standard toilets with heavy duty carriers. Specify bariatric toilets with bariatric carriers. Coordinate with manufacturers for specific carrier model specifications.

Code Notes
3.5 gpf blowout toilets may not be permissible by code in all jurisdictions, and should be evaluated before selecting this option.

Cautions:
- Floor mounted toilets must be provided with complete closure between the toilet and wall to reduce ligature opportunities.
- Toilet seats that are not integral with the bowl create ligature opportunities.

Intersan
www.intersan.us

CWC150-AST Toilet
CWC156-AST Toilet
Solid surface back-to-wall toilet with non-moving integral seat. 3.5 gpf valve available.

Whitehall Manufacturing
www.kohler.com

WH2142 Toilet
Floor mounted, powder coated stainless steel toilet with ligature-resistant ABS toilet seat. 3.5 gpf valve available.

Note: Interior of toilet should be powder coated white for use at NYS-OMH Facilities.
Division 22 | Plumbing
Toilets

General Notes
Due to the possibility of inappropriate behavior, 3.5 gpf blowout toilets and 1.6 gpf siphon jet toilets are recommended.

Installation Notes
The wall surface must be flush with the toilet to avoid gaps that can become ligature points.

Specify standard toilets with heavy duty carriers. Specify bariatric toilets with bariatric carriers. Coordinate with manufacturers for specific carrier model specifications.

Code Notes
3.5 gpf blowout toilets may not be permissible by code in all jurisdictions, and should be evaluated before selecting this option.

Cautions:
- Floor mounted toilets must be provided with complete closure between the toilet and wall to reduce ligature opportunities.
- Toilet seats that are not integral with the bowl create ligature opportunities.

Zurn
www.zurn.com

Z5647-BWL Toilet
Floor mounted, back spud, 1.6 gpf siphon jet with hinged seat.

Note: Toilet fails and breaks under heavy use.
Toilet Flushometers

General Notes
Concealed flush valves with remote infrared sensor controls reduce looping ligature opportunities.

Stainless Steel cover plate shall be surface-mounted to a steel angle assembly with securement to wall framing. Tamper-resistant sealant shall be applied to the perimeter of the plate to reduce looping opportunities.

Flushometer sensor shall be secured to the back side of the stainless steel plate with tamper resistant fasteners, with the plate cut to allow infrared sensor and/or push button operation.

Coordinate size of plate and angle assembly with water closet and grab bars selected to ensure adequate clearance for removal of plate.

Verify flush valve requirements of remote flushometer sensor to ensure it can be mounted to the rear of the stainless steel cover plate to reduce ligature opportunities.

NYS-OMH Standard
Concealed Flush Valve Assembly

Concealed Flush Valve Assembly with Push Button Actuator
Illustration shows a floor mounted toilet with a Sloan Flush Valve. Similar detail with infrared sensor.

HIGH RISK AREAS
MEDIUM RISK AREAS
LOW RISK AREAS
Division 22 | Plumbing
Toilet Flushometers

General Notes
Concealed flush valves with remote infrared sensor controls reduce looping ligature opportunities.

Installation Notes
This product category in particular warrants considerable coordination.

Manufacturer supplied infrared cover plates may be designed for surface mounting and may require customization to provide a flush installation.

Acceptable flush valve manufacturers indicate an ability to assemble offset installations to avoid conflicts with grab bars. Verify with each manufacturer the specific requirements for offset plumbing extensions, access panel size and positioning, and remote infrared sensor connections and cover plate dimensions.

Zurn
www.zurn.com
ZER6152AV Flush Valve
AquaSense AV concealed sensor operated, battery powered flush valve.

Sloan Valve Company
www.sloanvalve.com
Royal Optima 143 ESS Flushometer
Concealed offset flushometer with wall-mounted sensor.

Sloan Valve Company
www.sloanvalve.com
Royal Optima 152 ESS Flushometer
Concealed flushometer with wall-mounted sensor.

Regal Model 150ES Flushometer
Concealed push button (manual) activated, flushometer.
**General Notes**
Concealed flush valves with remote infrared sensor controls reduce looping ligature opportunities.

**Installation Notes**
This product category in particular warrants considerable coordination.

Manufacturer supplied infrared cover plates may be designed for surface mounting and may require customization to provide a flush installation.

Acceptable flush valve manufacturers indicate an ability to assemble offset installations to avoid conflicts with grab bars. Verify with each manufacturer the specific requirements for offset plumbing extensions, access panel size and positioning, and remote infrared sensor connections and cover plate dimensions.

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**Sloan Valve Company**
[www.sloanvalve.com](http://www.sloanvalve.com)

**Royal Optima Sensor Activated Flushometer 611 ES WB**
Concealed sensor operated, back spud, wall-mounted flushometer with accessible wall box.
Division 22 | Plumbing
Toilet Flushometer Covers

General Notes
Flush valve covers are only recommended for retrofitting existing fixtures.

Caution: Confirm that the flush valve covers fit the existing flush valve assemblies well enough to allow for free operation of the equipment, without providing a potential ligature point through the opening for the flushing mechanism.

Behavioral Safety Products
www.besafeprod.com

Ligature Resistant Flush Valve Cover #FV600
One piece unit, can be field cut to fit varying flush valve dimensions. Can be configured for left or right facing flush valves. White, high impact, abuse-resistant, heavy gauge material.

Whitehall Manufacturing
www.whitehallmfg.com

WH2802 Sloped Top Ligature Resistant Flush Valve Cover
16 gauge type 304 stainless steel with powder coated finish. Provide powder coated tamper-resistant fasteners.
Division 22 | Plumbing
Toilet Flush Valve Covers

General Notes
Flush valve covers are only recommended for retrofitting existing fixtures.

Caution: Confirm that the flush valve covers fit the existing flush valve assemblies well enough to allow for free operation of the equipment, without providing a potential ligature point through the opening for the flushing mechanism.

Norva Plastics
www.norvaplastics.com

ABS High-Impact Toilet Plumbing Cover
High-impact solid surface, customized to specifications.

Caution: Careful scribing to fixture is required for a proper fit and sealant joint.
**Division 22 | Plumbing**

**Hydration Stations**

**General Notes**
A remote cooler is required for chilled water dispensing and a drainage system is required for waste water.

The top of the hydration station access door must be sloped.

**Installation Notes**
Drain grilles must be securely fastened with tamper-resistant fasteners. Integral cup dispensers must be securely fastened to the filling station housing.

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**Filtrine Manufacturing Company**
www.filtrine.com

**B103-HR**
Stainless steel, constructed with a one-piece cover plate. The exterior is made without seams, exposed edges, or screws. Able to fit in a standard 4" wall.

Caution: Perforated drainage holes allow for wedging opportunities.

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**Whitehall Manufacturing**
www.whitehallmfg.com

**WHBF3 Pushbutton Ligature Resistant Cup Filler | WHBF4 Sensor Activated Ligature Resistant Cup Filler**
Semi- Recessed, stainless steel, white powder coated finish with a key latch and hinged access door with a sloped top.
Division 22 | Plumbing
Hydration Stations

General Notes
A remote cooler is required for chilled water dispensing and a drainage system is required for waste water.

The top of the hydration station access door must be sloped.

Installation Notes
Drain grilles must be securely fastened with tamper-resistant fasteners. Integral cup dispensers must be securely fastened to the filling station housing.

Filtrine Manufacturing Company
www.filtrine.com

B103-C2-HR
16 gauge type 304 stainless steel with a satin finish. Hinged access door with a sloped top and keyed lock. Fits in 4” cavity wall.

Note: Sharp corners and raw metal edges present opportunity for self-harm.
Division 22 | Plumbing

Shower Heads

Chicago Faucets
www.chicagofaucets.com
621-CP Institutional Shower Head

Oddball Industries
www.oddballindustries.com
SP-7 Shower Head

Intersan
www.intersan.us
Ceiling Mounted Shower Head SNC01

Galvin Engineering
www.galvinengineering.com
#40691 Shower Rose 65
Chrome plated Safe-Cell vandal resistant shower head.

Moen
http://pro.moen.com
M-Dura 8292
Division 22 | Plumbing
Shower Heads

Oddball Industries
www.oddballindustries.com
SP-7TF Tub Filler

Willoughby Industries, Inc.
www.willoughby-ind.com
CSH Ligature Resistant Head Assembly

Speakman Company
www.speakmancompany.com
S-2460-AF Shower Head

Whitehall Manufacturing
www.whitehall-mfg.com
CSH Conical Ligature Resistant Shower Head

Behavioral Safety Products
www.besafeprod.com
SH330 Shower Head

HIGH RISK AREAS
MEDIUM RISK AREAS
LOW RISK AREAS
Division 22 | Plumbing
Shower Heads

Symmons Industries, Inc.
www.symmons.com

4-150 Shower Head (Institutional Type)

Note: Plastic Nozzle is easily removable and product does not fasten tightly to the wall, allowing ligature.

Powers
www.powerscontrols.com

141 381 Institutional Shower Head

Note: Tie off ligature opportunity at end of shower head.

Delta
www.deltafaucet.com

060793A Vandal Resistant Wall Mounting Shower Head

Note: Tie off ligature opportunity at end of shower head.
Division 22 | Plumbing
Hand Showers

General Notes
Hand showers must be installed in addition to a primary ligature-resistant shower head at all ADA accessible showers.

Code Notes
Only provide hand showers where required by code. Review and understand ANSI A117.1-2003, Section 608.6 exception, which allows a second fixed shower head in lieu of hand shower in specific situations.

Installation Notes
When a fixed shower head and hand shower are both used, provide either a ligature-resistant diverter valve or separate ligature-resistant control system for each fixture.

Intersan
www.intersan.us

40707 Quick Release Handheld Shower
Hand held shower with ligature-resistant quick connect wall connection.

Oddball Industries
www.oddballindustries.com

SP-7WC Quick Connect Hand Shower
Hand held shower with quick disconnect adapter.

Caution:
Tie-off ligature opportunity exists at hose bib. Install hand shower at the low end of the permitted reach range to minimize potential ligature risk from fixture.

Intersan
www.intersan.us

Oddball Industries
www.oddballindustries.com

Intersan
www.intersan.us

Oddball Industries
www.oddballindustries.com
General Notes
Best practice recommends controlled (limited) flow time. Various mechanisms and controllers can provide this option; some are factory set and some can be adjusted by staff. Review and select products accordingly.

Best practice recommends temperature control by resident. Several of the acceptable mechanisms don't provide this option. Review and select products accordingly.

Installation Notes
When both shower heads and hand showers are provided, specify either a diverter valve or separate shower controls for both.

Armstrong International, Inc.
www.armstronginternational.com

Sense DMV2 Water Temperature Control
Stainless steel face plate is to be specified for all NYS-OMH facilities. Provide tamper-resistant sealant at perimeter of plate. Touchless on/off flow control. Touchless temperature adjustment

Cautions:
- Control buttons are plastic and have the potential to be damaged.
- Product can be specified with a plastic cover by facilities other than NYS-OMH, but should be used with caution due to the increased potential to be damage.

Behavioral Safety Products
www.besafeprod.com

Ligature Resistant Shower Valve, Handle & Escutcheon Plate #SV230

Intersan
www.intersan.us

50140 Ligature Resistant Shower Diverter
Division 22 | Plumbing
Shower Controls & Activators

General Notes
Best practice recommends controlled (limited) flow time. Various mechanisms and controllers can provide this option; some are factory set and some can be adjusted by staff. Review and select products accordingly.

Best practice recommends temperature control by resident. Several of the acceptable mechanisms don’t provide this option. Review and select products accordingly.

Installation Notes
When both shower heads and hand showers are provided, specify either a diverter valve or separate shower controls for both.

Leonard Valve Company
www.leonardvalve.com

4500 LR Series Aquatrol
Pressure actuated mixing valve.

Caution: This product does not meet ADA requirements for graspability.

Niekkamp Tool Company
www.niekampinc.com

SSK-1022E Suicide Prevention Shower Handle

Powers
www.powerscontrols.com

447 Infrared
HydroGuard ESP infrared sensor shower control.

447 Piezo
HydroGuard ESP pushbutton sensor shower control.
Division 22 | Plumbing
Shower Controls & Activators

General Notes
Best practice recommends controlled (limited) flow time. Various mechanisms and controllers can provide this option; some are factory set and some can be adjusted by staff. Review and select products accordingly.

Best practice recommends temperature control by resident. Several of the acceptable mechanisms don’t provide this option. Review and select products accordingly.

Installation Notes
When both shower heads and hand showers are provided, specify either a diverter valve or separate shower controls for both.

Oddball Industries
www.oddballindustries.com

SP-10 Shower Mixing Valve
The SP-10 Mixing Valve is available with two different styles of ligature resistant handles, designated A and B (shown).

Caution:
- A tamper-resistant fastener is not included and may be available for this product. A conventional fastener may be installed and filled with tamper-resistant sealant if tamper-resistant fastener is unavailable.

Oddball Industries
www.oddballindustries.com

SP-12 Diverter Valve
The SP-12 Diverter Valve is available with two different styles of ligature resistant handles, designated A (shown) and B.

Cautions:
- This product (handle Style A) does not meet ADA requirements for graspability. May be difficult to operate when wet.
- A tamper-resistant fastener is not included and may be available for this product. A conventional fastener may be installed and filled with tamper-resistant sealant if tamper-resistant fastener is unavailable.
General Notes
Best practice recommends controlled (limited) flow time. Various mechanisms and controllers can provide this option; some are factory set and some can be adjusted by staff. Review and select products accordingly.

Best practice recommends temperature control by resident. Several of the acceptable mechanisms don’t provide this option. Review and select products accordingly.

Installation Notes
When both shower heads and hand showers are provided, specify either a diverter valve or separate shower controls for both.
Division 22 | Plumbing
Shower Controls & Activators

General Notes
Best practice recommends controlled (limited) flow time. Various mechanisms and controllers can provide this option; some are factory set and some can be adjusted by staff. Review and select products accordingly.

Best practice recommends temperature control by resident. Several of the acceptable mechanisms don’t provide this option. Review and select products accordingly.

Installation Notes
When both shower heads and hand showers are provided, specify either a diverter valve or separate shower controls for both.

Willoughby
TPLR Ligature Resistant Shower Mixing Valve

www.willoughby-ind.com

Willoughby
DVLR Ligature Resistant Shower Diverter Valve

www.willoughby-ind.com

Willoughby
Electronic Piezo Switch

www.willoughby-ind.com
General Notes
Best practice recommends controlled (limited) flow time. Various mechanisms and controllers can provide this option; some are factory set and some can be adjusted by staff. Review and select products accordingly.

Best practice recommends temperature control by resident. Several of the acceptable mechanisms don’t provide this option. Review and select products accordingly.

Installation Notes
When both shower heads and hand showers are provided, specify either a diverter valve or separate shower controls for both.

Bradley Corporation
www.bradleycorp.com
HSC95 Ligature Resistant Front-Mounted Panel Shower
Note: Looping ligature opportunity at the shower control knob.

Symmons Industries, Inc.
www.symmons.com
B-40904-1 Recessed Shower Activator
Note: Recessed shower activator is loopable and does not meet the ADA requirements for graspsability.
Diffusers & Grilles
The selection of diffusers and grilles must be carefully considered in light of all relevant patient risk criteria, mechanical performance requirements, and the installed substrate. Louver and grille opening size and spacing is a critical consideration for structural performance, air flow and ligature resistance. The most secure and ligature-resistant assemblies are typically very heavy, requiring careful consideration for structural support and the sequence of construction.

The selection of radiator covers must be carefully considered with respect to all relevant patient risk criteria, mechanical performance requirements, and the installed substrate. Perforated radiator covers pose a particular risk as they can be looped by a thin shoe lace or similar object. Because these enclosures are typically surface-mounted, careful consideration must be given to the installation conditions at these covers to prevent wedging/looping opportunities at the installed substrate. Tamper-resistant sealant should be utilized to close all gaps at perimeter of enclosure.

Diffusers and grilles should be securely mounted in place using tamper-resistant fasteners. Diffusers and grilles, and all accessible elements of the housing should be attached to permanently affixed concealed back angles that are part of the assembly, or to wall or ceiling framing elements. Because of the inherent variations in the manufacturing process, specifiers should procure samples of diffusers prior to specifying. Variations in finish along with manufacturing tolerances have caused unsafe installations in some products where other instances of the same line have achieved safe installations.

It should be noted that all ligature-resistant diffusers and grilles reduce air flow. Evaluation of this reduction shall be performed prior to incorporation/replacement of these diffusers and grilles.

Escape
Where escape is a primary risk criterion, diffusers and grilles should be reduced in size to the greatest extent possible. If diffusers and grilles are required to be large enough to allow passage, they should be securely mounted in place using welded joints and/or tamper-resistant fasteners. Diffusers and grilles, and all accessible elements of the housing should be attached to wall or ceiling framing elements and to the ductwork. Face plate construction should be thick enough to resist impact assaults and should not be removable, except with special tamper-resistant fastener tools. Passage restrictors should be permanently welded in the sleeve housing within the assemblies.

Ligature Resistance
Where ligature resistance is a primary risk criterion, diffusers and grilles should be specifically designed with closely spaced welded deep “S” and “Z” shaped vanes that prevent looping, or they should be protected by heavy gauge metal face plates with small, tightly spaced, perforated holes. Perforated grilles with 11 ga. (1/8” thick) face plates with holes no larger than 1/8” in diameter on 3/16” staggered centers have been tested and tend to resist looping, however all perforated grilles should be reviewed prior to specification/installation as manufacturing tolerances and fabrication errors may result in conditions that allow looping.

Perforated diffusers, grilles and radiator covers utilizing the industry standard of 3/16” hole on 9/32” spacing pose a particular risk as they can be easily looped by a thin shoe lace or similar object. Because these devices are prevalent in existing inpatient environments, they are identified in this document as ACCEPTED in medium risk environments and noted with specific USE WITH CAUTION language. It should be noted that smaller holes and tighter spacing of holes, and heavier gauge metal plate are also available from several manufacturers as standard options. OMH will continue to perform additional testing on perforated grilles and diffusers and is researching alternative solutions. The risk of utilizing these devices shall be noted and evaluated by each facility.

Concealing Contraband
Where concealing contraband is a primary risk criterion, diffusers and grilles should be reduced in size to the greatest extent possible and securely mounted in place using tamper-resistant fasteners. Diffusers and grilles, and all accessible elements of the housing should be attached to wall or ceiling framing elements. Face plate construction should be thick enough to resist impact assaults and should not be removable, except with special tamper-resistant fastener tools.

Additional Information
CO2 sensors are not currently available in any ligature-resistant form and should only be used where accessible to patients in low or medium risk areas. CO2 sensors may be installed within ducts in high risk areas, but this will not qualify for the USGBC’s LEED credits for high occupancy mechanically ventilated spaces.
General Notes
Use covers and/or flat plate digital thermostats in high risk areas.

Automated Logic Corporation
www.automatedlogic.com
Sensor Thermistor, Plate ALC/10K-2-SP with Logo

Kele
www.kele.com
KTP Series Stainless Steel Flush-Mount Thermistor and RTD Sensors
General Notes
Perforated grilles and radiator covers utilizing the industry standard of 3/16" holes on 9/32" spacing are easily looped and may pose a ligature risk. Perforation patterns of 1/8" at 3/16" centers have shown to resist looping but do not entirely eliminate this risk. The specifier must carefully review these products to determine whether the inherent risk of perforated products is appropriate for use prior to specification.

Installation Notes
Careful detailing of diffusers and grilles with substrate is required.

Diffusers included in this document have several options for mounting, installation, and overall configuration. Several of the mounting options may limit access resulting in inaccessible ductwork for cleaning and maintenance. The specifier must carefully review these conditions with owner's representative and maintenance personnel prior to specification and installation.

Performance Criteria
Engineer back of systems to accommodate free area requirements.

Finish
Specify powder coated.

Anemostat
www.anemostat.com

Maximum Security Diffuser SSV22
Extra Heavy Duty Grille with 3/16" x 3/16" Openings.

Maximum Security Diffuser SSV23
Extra Heavy Duty Grille with 7/16" x 3/16" Openings.
General Notes
Perforated grilles and radiator covers utilizing the industry standard of 3/16" holes on 9/32" spacing are easily looped and may pose a ligature risk. Perforation patterns of 1/8" at 3/16" centers have shown to resist looping but do not entirely eliminate this risk. The specifier must carefully review these products to determine whether the inherent risk of perforated products is appropriate for use prior to specification.

Installation Notes
Careful detailing of diffusers and grilles with substrate is required. Diffusers included in this document have several options for mounting, installation, and overall configuration. Several of the mounting options may limit access resulting in inaccessible ductwork for cleaning and maintenance. The specifier must carefully review these conditions with owner’s representative and maintenance personnel prior to specification and installation.

Performance Criteria
Engineer back of systems to accommodate free area requirements.

Finish
Specify powder coated.

Anemostat
www.anemostat.com

Maximum Security Diffuser SSV26
Extra Heavy Duty Grille with 2" (nom.) x 3/16" Openings.

Anemostat
www.anemostat.com

Maximum Security Diffuser SV432
Ceiling Diffuser without Faceplate Deflection.
Division 23 | HVAC
Diffusers & Grilles

General Notes
Perforated grilles and radiator covers utilizing the industry standard of 3/16” holes on 9/32” spacing are easily looped and may pose a ligature risk. Perforation patterns of 1/8” at 3/16” centers have shown to resist looping but do not entirely eliminate this risk. The specifier must carefully review these products to determine whether the inherent risk of perforated products is appropriate for use prior to specification.

Installation Notes
Careful detailing of diffusers and grilles with substrate is required.

Diffusers included in this document have several options for mounting, installation, and overall configuration. Several of the mounting options may limit access resulting in inaccessible ductwork for cleaning and maintenance. The specifier must carefully review these conditions with owner’s representative and maintenance personnel prior to specification and installation.

Performance Criteria
Engineer back of systems to accommodate free area requirements.

Finish
Specify powder coated.

Behavioral Safety Products
www.besafeprod.com

Ligature Resistant Exhaust/Supply Grille #EG450
Designed to replace existing grilles that are not ligature-resistant. 11 gauge aluminum with 1/8” round holes.

Caution: Perforated diffusers, grilles and radiator covers pose a particular risk as they can be easily looped by a thin shoelace or similar object.
Division 23 | HVAC
Diffusers & Grilles

General Notes
Perforated grilles and radiator covers utilizing the industry standard of 3/16" holes on 9/32" spacing are easily looped and may pose a ligature risk. Perforation patterns of 1/8" at 3/16" centers have shown to resist looping but do not entirely eliminate this risk. The specifier must carefully review these products to determine whether the inherent risk of perforated products is appropriate for use prior to specification.

Installation Notes
Careful detailing of diffusers and grilles with substrate is required.

Diffusers included in this document have several options for mounting, installation, and overall configuration. Several of the mounting options may limit access resulting in inaccessible ductwork for cleaning and maintenance. The specifier must carefully review these conditions with owner’s representative and maintenance personnel prior to specification and installation.

Performance Criteria
Engineer back of systems to accommodate free area requirements.

Finish
Specify powder coated.

Anemostat
www.anemostat.com
Models ASSG & ASSG-RR
Extra Heavy Duty Grilles

Caution: Perforated diffusers, grilles and radiator covers pose a particular risk as they can be easily looped by a thin shoelace or similar object.

Carnes Company
www.carnes.com
Model RSPA51 Suicide Deterrent
Security R&G
Face and sleeve are 3/16" hot rolled steel. Hole pattern is 3/16" round holes on staggered 9/32" centers. 2 x 2 x 3/16" steel angles are provided as standard in four loose pieces for field welding. Mounting sleeve is for installation in CMU walls only. Specify with 1" flange.

Caution: Perforated diffusers, grilles and radiator covers pose a particular risk as they can be easily looped by a thin shoelace or similar object.
Division 23 | HVAC
Diffusers & Grilles

General Notes
Perforated grilles and radiator covers utilizing the industry standard of 3/16" holes on 9/32" spacing are easily looped and may pose a ligature risk. Perforation patterns of 1/8" at 3/16" centers have shown to resist looping but do not entirely eliminate this risk. The specifier must carefully review these products to determine whether the inherent risk of perforated products is appropriate for use prior to specification.

Installation Notes
Careful detailing of diffusers and grilles with substrate is required.

Diffusers included in this document have several options for mounting, installation, and overall configuration. Several of the mounting options may limit access resulting in inaccessible ductwork for cleaning and maintenance. The specifier must carefully review these conditions with owner’s representative and maintenance personnel prior to specification and installation.

Performance Criteria
Engineer back of systems to accommodate free area requirements.

Finish
Specify powder coated.

Kees, Inc.
www.kees.com

SEG-9SP3 Security Grille
Face is 3/16" steel stitch welded to sleeve with 1" face flange. Hole pattern is 3/16" round holes on staggered 9/32" centers. Two part polyurethane finish inside and out. 1 x 1 x 3/16" steel angles are provided as standard in two loose pieces for field welding. Available in aluminum and stainless steel.

Caution: Perforated diffusers, grilles and radiator covers pose a particular risk as they can be easily looped by a thin shoelace or similar object.

Kees, Inc.
www.kees.com

SEG-9LS3VH Security Diffuser
Face is 10 gauge steel stitch welded to sleeve with 1" face flange. Hole pattern is 3/16" round holes on staggered 9/32" centers. Two part polyurethane finish inside and out. Maximum single piece section is 48” in length. Available in aluminum and stainless steel.

Caution: Perforated diffusers, grilles and radiator covers pose a particular risk as they can be easily looped by a thin shoelace or similar object.
General Notes
Perforated grilles and radiator covers utilizing the industry standard of 3/16" holes on 9/32" spacing are easily looped and may pose a ligature risk. Perforation patterns of 1/8" at 3/16" centers have shown to resist looping but do not entirely eliminate this risk. The specifier must carefully review these products to determine whether the inherent risk of perforated products is appropriate for use prior to specification.

Installation Notes
Careful detailing of diffusers and grilles with substrate is required.

Diffusers included in this document have several options for mounting, installation, and overall configuration. Several of the mounting options may limit access resulting in inaccessible ductwork for cleaning and maintenance. The engineer of record must carefully review these conditions with owner’s representative and maintenance personnel prior to specification and installation.

Performance Criteria
Engineer back of systems to accommodate free area requirements.

Finish
Specify powder coated.

Titus
www.titus-hvac.com

SG-SD Maximum Security Suicide Deterrent Grille

Caution: Perforated diffusers, grilles and radiator covers pose a particular risk as they can be easily looped by a thin shoelace or similar object.

Carnes Company
www.carnes.com

Model RSPA41 Sleeved Security Ceiling Diffuser
Face and sleeve are 12 gauge hot rolled steel. Core has 12 gauge hot rolled steel louvers. 1-1/2 x 1-1/2 x 1/8" steel angles are provided as standard in four loose pieces for field welding. Mounting sleeve is for installation in CMU walls only. Specify with 1" flange and only as ceiling mounted. Do not mount in walls. Louver blades are sharp and also create a wedging opportunity.
General Notes

In new construction or substantial renovations, where arc fault and ground fault interruption are both provided, provide electrical cover plates that are either thermoplastic nylon or metal. In minor renovation projects, where providing arc fault and ground fault interruption are beyond the scope of the project, provide only metal electrical cover plates. In all cases fasten cover plates to receptacle with tamper-resistant fasteners that are accepted in the NYS-OMH Patient Safety Standards. Two fasteners are recommended, though not required, for all cover plates.

Accidental or Deliberate Self-Harm

Provide tamper-resistant receptacles with arc fault and ground fault interruption in all patient accessible areas of all psychiatric hospitals.

Tamper-resistant Receptacles

Tamper-resistant receptacles do not provide an adequate level of protection against self-harm alone. Tamper-resistant electrical receptacles are designed to prevent accidental electrical self-harm to toddlers and small children. They are not designed to protect against intentional self-harm due to deliberate attack by adults. The protective measures of a tamper-resistant receptacle can be easily defeated by older children and adults. Once defeated, electrical self-harm can be induced by either arc or ground fault. Arc fault self-harm can be induced by holding two insulated conductors (e.g. paper clips while holding them in flexible plastic or rubber as an insulator) and bending them close enough together to get an electrical current to arc between them, perhaps in an effort to create a cigarette lighter or start a fire. Ground fault self-harm can be induced by grounding oneself (e.g. to the floor) while holding one conductor (i.e., paper clips) in the hot side of the receptacle, causing the electrical current to flow through oneself to the ground.

AFCI (Arc Fault Circuit Interrupter) & GFCI (Ground Fault Circuit Interrupter) Protection

Dual function circuit interrupters utilize both GFCI and AFCI detection technology. GFCI protection guards against ground faults, and are an effective means of preventing electrical shocks. AFCI protection guards against damage or fires which can result from arcing and sparking that can arise from deteriorated wires, poor connections and breaches in wire insulation.
Division 26 | Electrical
Receptacles & GFCI/AFCI Circuit Breakers

General Notes
See comments on previous general notes page.

Provide dual function circuit breakers for all circuits with devices in patient accessible areas.

Circuit breakers are located within secure electrical panels outside of the patient environment. They are included in this document because they enhance the patient safety of the built environment.

Provide tamper-resistant receptacles with arc fault and ground fault interruption in all patient accessible areas of all psychiatric hospitals.

Eaton
www.cooperindustries.com

TR8200 Series Hospital Grade Receptacles
Tamper-resistant.

Hubbell
www.hubbell-wiring.com

8200 & 8300 Series Extra Heavy Duty Hospital Grade Receptacles
Tamper-resistant.

Legrand
www.legrand.us

PTTR62HW Series Extra Heavy Duty Hospital Grade Receptacles
Tamper-resistant.

Leviton
www.leviton.com

8200-SG Series Tamper-resistant Receptacles

Eaton
www.cooperindustries.com

CHF Circuit Breaker

General Electric
www.geindustrial.com

Dual Function Circuit Breaker

Schneider Electric
www.schneider-electric.com

QO Dual Function Circuit Breakers

Siemens
www.usa.siemens.com

Dual Function Circuit Breaker
Division 26 | Electrical
Wall Plates

General Notes
Thermoplastic nylon wall plates are recommended. They are more flexible than thermoset (urea) products and have a shinier, glossy finish. Molded thermoplastic nylon wall plates also perform for maximum resistance to impact, abrasion, fading and discoloration. Nylon is resistant to stresses associated with high abuse applications.

Polycarbonate is a thermoset plastic, so doesn’t perform as well in this application.

Installation Notes
Nylon is pliable so it should be installed in a bed of tamper resistant sealant.

Hubbell
www.hubbell-wiring.com

Nylon Wall Plates

Legrand
www.legrand.us

Unbreakable Nylon Wall Plates

Leviton
www.leviton.com

Unbreakable Nylon Wall Plates

Hubbell
www.hubbell-wiring.com

Security Wall Plates (Metal)

Caution: Intended for use in OMH facilities only when other alternatives are considered unsuitable due to excessive tampering by patients.
General Notes
Thermoplastic nylon wall plates are recommended. They are more flexible than thermoset (urea) products and have a shinier, glossy finish. Molded thermoplastic nylon wall plates also perform for maximum resistance to impact, abrasion, fading and discoloration. Nylon is resistant to stresses associated with high abuse applications.

Polycarbonate is a thermoset plastic, so doesn’t perform as well in this application.

Installation Notes
Nylon is pliable so it should be installed in a bed of tamper resistant sealant.

Cortech USA
[Website](www.cortechusa.com)

Tiger Plates
Caution: Intended for use in OMH facilities only when other alternatives are considered unsuitable due to excessive tampering by patients.

Kenall Manufacturing
[Website](www.kenall.com)

Mighty Mac WSP/WPP Series Wall Plates
Caution: Intended for use in OMH facilities only when other alternatives are considered unsuitable due to excessive tampering by patients.
**General Notes**
Infrared detection is not suitable for bathrooms with partitions and rooms with cubicles. Ultrasonic detection is more suitable for these locations.

Ceiling mounted sensors are preferable to wall-mounted sensors.

**Caution**
Concealed sensors function properly above acoustic and gypsum board ceilings. Functionality may be compromised when installed above metal ceilings.

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**Concealite Architectural Products**

- **CI-200 Series**

- **www.concealite.com**

**SpaceStation Series 2000 Occupancy Lighting Control System**

- SpaceStation operates at 120 or 277 VAC and utilizes super high frequency technology to control lighting based on occupancy.
- It sends out electromagnetic waves that bounce off nearby surfaces, and uses the Doppler principle to analyze changes in the return waves to detect motion in the area.

- Detects movement within a room when installed above suspended ceilings, gypsum board and decorative wood ceilings.
- Occupancy sensor is completely concealed from view, and installation requires no visible ceiling penetration.

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**Watt Stopper**

- **www.wattstopper.com**

**CI-200 Series Passive Infrared Ceiling Sensor**

- Note: Plastic dome covering sensor is not tamper-resistant and a wedge point can be established. Mounting escutcheon is not mechanically fastened and a wedge point can be established behind it if it is not installed flush to substrate.
Performance Criteria

Provide lighting that meets the following criteria:

- **Lighting:** High efficiency, maintaining visual performance where applicable. Provide dimmable ballasts as required.
- **Lamps:** NYS-OMH standard is LED due to its high efficiency, performance, reliability, and cost effectiveness.
- **Diffuser|Lens:** Provide 1/8” thick minimum polycarbonate prismatic or translucent lens. Lens frame requires enough edge bite in order to retain the lens during maximum deflection.
- **Housing:** Durable and indestructible.
- **Exposed Fasteners:** To be tamper-resistant with finish to match housing.
- **Switching:** All Seclusion Room lighting, both for children and adults, is to be dimmable. Dimmable ballasts can be installed in retrofit situations.
- **Maintenance:** Specify fixtures with standard replacement parts, lamps and ballasts. Consider the minimum number of security fasteners required for patient safety without creating unnecessary labor for relamping.
- **Approvals:** Underwriters Laboratories (UL) and others as applicable.

Installation Notes

Install light fixtures flush with substrate. It is critical to ensure there are no gaps for grasppability or ligature tie-off. Any remaining gaps shall be filled with tamper-resistant sealant.

Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Additional Notes

Verify photometrics of light fixtures with polycarbonate lenses during the project design.

The Office of Mental Health Lighting Standards Handbook is intended for use by Plant Supervisors at facilities as a reference guide when replacing light fixtures. The Handbook details which energy saving options may be best for each application. It is important to also reference the Office of Mental Health Patient Safety Standard Guidelines when replacing or specifying light fixtures in patient areas. OMH reinforces the importance of patient safety before energy efficiency in their facilities in all patient areas.
Division 26 | Electrical
Light Fixtures, Interior, General, Surface-mounted

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Eaton
www.cooperindustries.com

Fail-Safe FMW Confinement,
Size: 1’ x 4’
Mounting: drywall ceiling & wall (horizontal orientation only)
Inner Lens: prismatic polycarbonate
Outer Lens: clear polycarbonate
Housing: die formed 14 gauge cold rolled steel clamshell body with continuous welded and ground ends; continuous concealed piano hinge with welded pin end to prevent removal.
Finish: white high reflectance polyester powder coat.

Kenall Manufacturing
www.kenall.com

Enviroseal ES5 Linear Wraparound
Size: 2’
Mounting: drywall ceiling & wall (horizontal orientation only)
Inner Lens: prismatic polycarbonate
Outer Lens: 0.125” pearlescent polycarbonate
Housing: seam welded 20 gauge stainless steel
Finish: white powder coat
General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing
www.kenall.com

MedMaster Behavioral Health
MMAC14, MMAC22, MMAC24

Size: 1’x4’, 2’x2’, 2’x4’
Mounting: drywall ceiling only
Inner Lens: (standard) extruded high efficiency frosted DR acrylic
Outer Lens: 0.187” clear polycarbonate
Housing: 14 gauge cold rolled steel, spot welded.
Finish: TGIC polyester powder coat

Kenall Manufacturing
www.kenall.com

WCBU Mighty Mac

Size: 4’
Mounting: drywall ceiling & wall (horizontal orientation only)
Inner Lens: prismatic polycarbonate
Outer Lens: clear polycarbonate
Housing: 14 gauge cold rolled steel.
Finish: TGIC polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Surface-mounted

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing
www.kenall.com

Millenium Round MR13FL & MR17FL Series, Ceiling Mount
Size: 13", 17" diameter
Required Options: FL (full face)
Mounting: drywall ceiling only
Outer Lens: ligature-resistant pearlescent polycarbonate lens
Housing: marine grade die-cast aluminum
Finish: may vary

Kenall Manufacturing
www.kenall.com

MightyMac SSA
Size: 1’x2’
Required Options: must specify inner and outer lens
Mounting: drywall ceiling & wall
Inner Lens: prismatic polycarbonate
Outer Lens: clear polycarbonate
Housing: 16 gauge cold rolled steal. Clamshell housing with completely concealed internal dropslot piano hinge.
Finish: white TGIC polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Surface-mounted

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

L.C. Doane Company
www.lcdoane.com

SJ LED
Size: 2’
Mounting: wall only (horizontal orientation only)
Inner Lens: optic plus acrylic lens
Outer Lens: 0.187 clear polycarbonate
Housing: 16 gauge cold rolled steel
Finish: polyester powder coat

Luminaire LED, Inc.
www.luminairelighting.com

VPF-43, VPF-83, VPF-123
Size: 4.35” x 37.72”, 8.75” x 37.72”, 12.4” x 37.72”
Mounting: drywall ceiling & wall (horizontal orientation only)
Outer Lens: UV stabilized opal polycarbonate with infrared prisms
Housing: marine grade heat treated extruded aluminum
Finish: polyester powder coat
General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Luminaire LED, Inc.
www.luminairelighting.com

Supermax Wall Mount WM11, WM12, WM13
Size: 11”x15”, 11”x26”, 11”x37”
Mounting: drywall ceiling & wall (horizontal orientation only)
Inner Lens: prismatic polycarbonate
Outer Lens: 0.25” clear polycarbonate
Housing: one piece die formed 14 gauge cold rolled steel
Finish: polyester powder coat

Luminaire LED, Inc.
www.luminairelighting.com

Supermax Corner Mount CM12, CM13, CM14
Size: 9”x21”, 9”x35”, 9”x49”
Mounting: wall only (vertical orientation must be flush to ceiling)
Inner Lens: prismatic polycarbonate
Outer Lens: 0.25” clear polycarbonate
Housing: One piece die formed 14 gauge cold rolled steel
Finish: polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Surface-mounted

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Luminaire LED, Inc.
www.luminairelighting.com

Supermax Surface Mount SM12, SM13, SM22, SM23
Size: 11”x23”, 11”x37”, 17”x23”, 17”x37”
Required Options: must specify inner and outer lens
Mounting: drywall ceiling & wall
Inner Lens: prismatic polycarbonate
Outer Lens: 0.25” clear polycarbonate
Housing: 16 gauge cold rolled steel
Finish: polyester powder coat

New Star Lighting
www.newstarlighting.com

StarTile LED MAX (AGM11, AGM14, AGM22, AGM24)
Size: 1’x1’, 1’x4’, 2’x2’, 2’x4’
Mounting: drywall ceiling only
Inner Lens: polycarbonate
Outer Lens: 0.25” clear polycarbonate
Housing: extruded aluminum frame in 14 gauge cold rolled steel frame with beveled edges
Finish: polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Surface-mounted

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing

Millenium Stretch MLHA8-R, MLHA12-R

Size: 8"x4', 1'x4'
Required Options: (R) round end caps
Mounting: drywall ceiling & wall (horizontal orientation only)
Inner Lens: 0.156” prismatic
Outer Lens: clear or pearlescent polycarbonate
Housing: Marine grade extruded aluminum
Finish: polyester powder coat

Kenall Manufacturing

Millenium Round MR13FL & MR17L Series, Wall Mount

Size: 13", 17” diameter
Required Options: FL (full face)
Mounting: wall only
Outer Lens: ligature-resistant pearlescent polycarbonate lens
Housing: marine grade die-cast aluminum
Finish: may vary
General Notes
See comments on previous general notes page.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing
www.kenall.com

Ranger Strilight
Note: Wedging ligature opportunity at lens and housing.

Legion Lighting Co., Inc.
www.legionlighting.com

Vandalex Series 19
Note: Wedging ligature opportunity at lens and housing.

Luminaire LED, Inc.
www.luminairelighting.com

Swoop 610 Series
Note: Presents opportunity for downward ligature in both mounting orientations.
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Amico Lighting Solutions
www.amico.com

Behavioral Solar Duo Med Multifunction LED
Size: 6"x48"
Required Options: VRA (vandal resistant; 0.118" clear polycarbonate)
Mounting: drywall and grid ceilings
Outer Lens: 0.118" clear polycarbonate
Housing: 20 gauge cold rolled steel
Finish: white urethane powder coat finish, hospital grade

Amico Lighting Solutions
www.amico.com

Behavioral Solar Eclipse Multifunction LED
Size: 2'x2', 2'x4'
Required Options: VRA (vandal resistant; 0.118" clear polycarbonate)
Mounting: drywall and grid ceilings
Outer Lens: 0.118" clear polycarbonate
Housing: 20 gauge cold rolled steel
Finish: white urethane powder coat finish, hospital grade
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Eaton
www.cooperindustries.com

Fail-Safe FMR HS LED Recessed Flange Confinement

Size: 1’x4’
Required Options: HS (high security)
Mounting: drywall ceiling
Inner Lens: prismatic polycarbonate
Outer Lens: clear polycarbonate
Housing: 16 gauge die-formed cold rolled steel body with welded corners.
Finish: polyester powder coat

Eaton
www.cooperindustries.com

Fail-Safe ENV HS (DFVR)

Size: 2’x2’
Required Options: HS (high security); DFVR (vandal gasketed drywall framing kit)
Mounting: drywall ceiling (shallow plenum applicable)
Inner Lens: may vary
Outer Lens: clear polycarbonate
Housing: vandal resistant with closed cell polyvinyl chloride gasket on back-side.
Finish: baked white enamel
General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Eaton
www.cooperindustries.com
FSP HS Shallow Plenum
Size: 2’x4’
Required Options: HS (high security)
Mounting: grid ceiling
Outer Lens: 0.25” clear polycarbonate
Housing: aluminum & steel (above ceiling)

Installation Note: Apply tamper-resistant sealant around perimeter, between ceiling opening and fixture edge.

Hubbell Lighting
www.hubbellhealthcare.com
MediMode Behavioral
Size: 2’x4’
Mounting: drywall ceiling
Outer Lens: 0.25” clear polycarbonate
Housing: 20 gauge seam welded cold rolled steel housing with 18 gauge cold rolled steel flange. 18 gauge cold rolled steel door frame
Finish: Polyester white powder coat with antimicrobial additive
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

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Kenall Manufacturing
www.kenall.com

MedMaster Behavioral Health
MMAC14, MMAC22, MMAC24

Size: 1’x4’, 2’x2’, 2’x4’
Mounting: drywall ceiling
Inner Lens: (standard) extruded high efficiency frosted DR acrylic
Outer Lens: 0.187” clear polycarbonate
Housing: 14 gauge cold rolled steel, spot welded.
Finish: TGIC polyester powder coat

Kenall Manufacturing
www.kenall.com

MedMaster Behavioral Health
SafeSlot Luminaire BHRS4

Size: 4’, 3’, 2’
Required Options: FL (flange)
Mounting: drywall ceiling
Outer Lens: 0.187” diffused polycarbonate
Housing: extruded aluminum
Finish: TGIC polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing
[Website: www.kenall.com]

Mighty Mac RMCA, RMCD, RQCA Series

Size: 1'x2', 1'x4', 1'x1', 2'x2', 2'x4'
Required Options: white fasteners
Mounting: drywall ceiling
Inner Lens: 0.125" prismatic polycarbonate
Outer Lens: 0.125" clear polycarbonate
Housing: 16 gauge cold rolled steel
Finish: TGIC polyester powder coat

Kurtzon
[Website: www.kurtzon.com]

VL-RB-LED

Size: 2'x2'
Required Options: RB (recessed basket)
Mounting: drywall ceiling
Outer Lens: 0.125" clear flat polycarbonate
Housing: 18 gauge cold rolled steel housing and door.
Finish: polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Luminaire LED, Inc.
www.luminairelighting.com

Supermax Recessed Mount RM12, RM22
Size: 1’x2’, 2’x2’
Mounting: drywall ceiling
Inner Lens: 0.156” prismatic polycarbonate
Outer Lens: 0.25” clear polycarbonate
Housing: 16 gauge cold rolled steel housing and 14 gauge cold rolled steel door
Finish: polyester powder coat

L.C. Doane Company
www.lcdoane.com

CRF 2x2
Size: 2’x2’
Mounting: drywall ceiling
Inner Lens: optic plus acrylic lens
Outer Lens: 0.187 clear polycarbonate
Housing: 16 ga cold rolled steel
Finish: polyester powder coat
General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

New Star Lighting
www.newstarlighting.com

Confinement Series
37M and 57M Models

- Size: 2’x2’ (37M); 1’x1’ (57M)
- Mounting: drywall ceiling
- Inner Lens: 0.125” prismatic polycarbonate
- Outer Lens: 0.25” clear polycarbonate
- Housing: Die formed 16 gauge cold rolled steel, seam welded and ground smooth.
- Finish: polyester powder coat

New Star Lighting
www.newstarlighting.com

AuraMed AATB14, AATB22, AATB24

- Size: 1’x4’, 2’x2’, 2’x4’
- Required Options: O (overlapped door frame)
- Mounting: drywall ceiling
- Inner Lens: (standard) opal polycarbonate
- Outer Lens: 0.25” clear polycarbonate
- Housing: 16 gauge cold rolled steel
- Finish: polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Paco Lighting
www.pacolighting.com

MRGA1 Behavioral Center Lens
Recessed LED, 1x4, 2x2, 2x4

Size: 1'x4', 2'x2', 2'x4'
Mounting: drywall & grid ceilings
Outer Lens: 0.250" clear polycarbonate
Housing: 16 gauge cold rolled steel with continuously welded end plates; 14 gauge die formed door frame with tamper resistant fasteners
Finish: white antimicrobial paint

Selux Corporation
www.selux.com

M125 Series

Size: 3', 4'
Mounting: drywall ceiling
Outer Lens: prismatic polycarbonate
Housing: Continuous extruded aluminum, die cast aluminum end caps made from low copper marine grade aluminum alloy
Finish: polyester powder coat
General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Visa Lighting
www.visalighting.com

Serenity High Abuse CM1922, CM1924
Size: 2'x2', 2'x4'
Required Options: High Abuse
Mounting: drywall ceiling
Inner Lens: 0.118" satin ice acrylic with vinyl laminate pattern diffuser
Outer Lens: 0.118" clear polycarbonate
Housing: steel housing and aluminum mud flange
Finish: antimicrobial powder coat

Symmetry General Use Behavioral Health CM1988-W
Size: 24"
Mounting: drywall ceilings
Outer Lens: 0.1875" high impact clear polycarbonate
Housing: steel housing and aluminum mud flange
Finish: antimicrobial powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Visa Lighting
www.visalighting.com

Visage Behavioral Health Flush CV1680
Size: 4.5" x 48"
Required Options: TRS (tamper resistant fasteners)
Mounting: drywall ceiling & GWB wall
Outer Lens: clear polycarbonate
Housing: extruded aluminum
Finish: antimicrobial powder coat

Visa Lighting
www.visalighting.com

Lenga Behavioral Health Flush CM2062
Size: 4.5" x 48"
Required Options: FLGD (flanged drywall ceiling)
Mounting: drywall ceiling
Inner Lens: acrylic lens
Outer Lens: clear polycarbonate
Housing: extruded aluminum
Finish: antimicrobial powder coat
General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Viscor
viscor.com

Certolux VRUO
Size: 2’x2’
Required Options: O (overlapping door)
Mounting: drywall ceiling
Inner Lens: may vary
Outer Lens: .125 clear polycarbonate
Housing: 16 gauge cold rolled steel
Finish: polyester powder coat
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Eaton
www.cooperindustries.com

Failsafe SGI LED

Note: Light fixture housing construction at flange corners can be manipulated overtime. Gasket at lens and door comes out after repeated wedging and tampering.

Legion Lighting Co., Inc.
www.legionlighting.com

Securlume Series 672

Note: Fixture provides multiple ligature points and is not tamper-resistant.
Division 26 | Electrical
Light Fixtures, Interior, General, Recessed

General Notes
See comments on previous general notes page.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Philips Day-Brite
www.daybritelighting.com

Attune Series

Note: A polycarbonate lens is no longer available as an option.

Pixi Lighting
www.pixilighting.com

Flatlight Luminaire

Notes:
- Edges of housing allow for ligature.
- Gasketing material can be picked and removed.
Division 26 | Electrical
Light Fixtures, Interior, Task Lighting

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Eaton
www.cooperindustries.com

FLD6B HS LED Downlight
Size: 6” aperture
Required Options: vandal resistant enclosed bottom trim ring; HS (high security)
Mounting: drywall ceiling
Inner Lens: 0.06” frosted polycarbonate
Outer Lens: 0.125” clear polycarbonate
Housing: cast aluminum
Finish: matte white

Kenall Manufacturing
www.kenall.com

Millenium Downlight HADL & BHDL LED
Size: 6” aperture
Mounting: drywall ceilings
Inner Lens: diffused tempered-glass
Outer Lens: 0.125” clear polycarbonate
Housing: 18 gauge corrosion-resistant steel
Finish: flat powder coat.
Division 26 | Electrical
Light Fixtures, Interior, Task Lighting

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

The Kirlin Company
www.kirlinlighting.com

LRR-06020 6” LED Downlight
Size: 6”
Required Options: -25 (vandal resistant trim, hardware and lensing)
Mounting: drywall ceilings
Inner Lens: high strength prismatic acrylic
Outer Lens: 0.125” clear flat polycarbonate
Housing: acrylic enameled aluminum housing; seamless tapered aluminum self-flanged rigid cast trim
Finish: standard white

The Kirlin Company
www.kirlinlighting.com

Vandal Resistant Downlight, LRV-07469 (7”) & LRV-08470 (8”)
Size: 7”, 8” aperture (shallow plenum applicable)
Mounting: drywall ceilings
Inner Lens: clear prismatic acrylic
Outer Lens: 0.125” clear flat polycarbonate
Housing: vandal resistant smooth white seamless tapered aluminum self-flanged flare trim
Finish: standard
Division 26 | Electrical
Light Fixtures, Interior, Task Lighting

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kurtzon
www.kurtzon.com

VL PBD LED Behavioral Downlight
Size: 6” aperture
Required Options: tamper-resistant fasteners
Mounting: drywall ceilings
Outer Lens: clear non-prismatic 0.125” virgin polycarbonate silicone
Housing: stainless steel body and spun aluminum housing and plaster frame. 16 gauge stainless steel formed door frame
Finish: antimicrobial polyester powder coat

Lightolier by Signify
www.lightingproducts.signify.com

Calculite LED 3” Gen3 Downlight
Size: 4”, 6”
Required Options: C4RVPH/C6RVPH (IP65 rated vandal proof matte white accessory); (F) flangeless trim
Mounting: drywall ceilings
Outer Lens: clear polycarbonate
Housing: machine aluminum ring
Finish: standard matte white
Division 26 | Electrical
Light Fixtures, Interior, Task Lighting

General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

New Star Lighting
www.newstarlighting.com

DLM6 Downlight StarMed Series

Size: 6"
Required Options: TH (torx head screws)
Mounting: drywall ceilings
Inner Lens: 0.125" prismatic acrylic
Outer Lens: 0.250" clear polycarbonate
Housing: 16 gauge painted steel housing and trim
Finish: standard white antimicrobial powder coat

HIGH RISK AREAS
MEDIUM RISK AREAS
LOW RISK AREAS
General Notes
See comments on previous general notes page.

Specification Notes
Coordinate lighting fixture specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Visa Lighting
www.visalighting.com/

Gig Task Light CB1800-BH1

Size: 3.75”x6.75”
Required Options: BH1 (behavioral health high abuse mounting bracket)
Mounting: wall (downlight only)
Outer Lens: 0.25” polycarbonate lens with gel gasket
Housing: cast aluminum
Finish: powder coat

Sole Recessed Illuminated Mirror, Oval & Rectangle

Size: 20”x30” (rectangle), 24”x34” (oval)
Outer Lens: impact resistant 6mm polycarbonate mirror with abrasion resilient silicone hard coating for scratch resistance
Housing: Stainless steel frame, heavy gauge fabricated aluminum back box
Finish: powder coat
Division 26 | Electrical
Light Fixtures, Interior, Task Lighting

General Notes
See comments on previous general notes page.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing
www.kenall.com

Stratalume UC Series, UCBL
Size: 5”x12”, 5”x24”, 5”x36”, 5”x48”
Required Options: polycarbonate lens
Mounting: drywall ceilings
Outer Lens: 0.125” prismatic polycarbonate lens
Housing: 1.1” profile, 20 gauge cold rolled steel.
Finish: TGIC polyester powder coat

Note: Ballast must be modified to fit.
Division 26 | Electrical
Light Fixtures, Interior, Task Lighting

General Notes
See comments on previous general notes page.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Designplan Lighting, Inc.
www.designplan.com

RDL/RHL Downlight

Note: Installation may allow gasketing to be compromised.

Designplan Lighting, Inc.
www.designplan.com

Resistant Downlights RDD, RDO, RDP, & RDW Vandal

Note: Installation may allow gasketing to be compromised.
Division 26 | Electrical
Light Fixtures, Interior, Night Lighting

General Notes
See comments on previous general notes page.

Amber colored LEDs are recommended at patient bedrooms.

Night lights are recommended to be recessed at approximately 12” -18” above finish floor for proper use and to minimize potential ligature risk.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Amico Lighting Solutions
www.amico.com

Lunar Decorative Wall Mount LED Night Light

Size: 4.5”x2.75”
Mounting: wall
Outer Lens: polycarbonate
Housing: die-cast aluminum
Finish: antimicrobial powder coat

Eaton
www.cooperindustries.com

Fail-Safe MSN Night Light

Size: 3”x5”
Required Options: tamper-resistant fasteners
Outer Lens: acrylic
Housing: die cast aluminum face plate
Finish: standard painted

Caution: Product has an acrylic lens, versus typical recommendation of polycarbonate. However, small sized lens resisted breakage during testing.
General Notes
See comments on previous general notes page.

Amber colored LEDs are recommended at patient bedrooms.

Night lights are recommended to be recessed at approximately 12” -18” above finish floor for proper use and to minimize potential ligature risk.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Hubbell Lighting
www.hubbellhealthcare.com

NiteWay Night Light - Vertical, Horizontal

Size: 3”x5”, 5”x3”
Required Options: tamper-resistant fasteners
Outer Lens: polycarbonate optical lens
Housing: die cast aluminum faceplate; 0.05 aluminum backplate
Finish: antimicrobial polyester powder coat

Kenall Manufacturing
www.kenall.com

MedMaster SoftStep Contour Steplight, MCSL

Size: varies
Outer Lens: pearlescent polycarbonate
Housing: die cast aluminum. Reflector is die cast aluminum with integral heat sink.
Finish: antimicrobial polyester powder coat
General Notes
See comments on previous general notes page.

Amber colored LEDs are recommended at patient bedrooms.

Night lights are recommended to be recessed at approximately 12" -18" above finish floor for proper use and to minimize potential ligature risk.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

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Kenall Manufacturing
www.kenall.com

MedMaster SoftStep Steplight MSL
Size: 4”x10”
Required Options: MSL (standard model); (L) Internal Louver; AL (anti-ligature lens)
Outer Lens: polycarbonate
Housing: 18 gauge cold rolled steel
Finish: polyester powder coat

The Kirlin Company
www.kirlinlighting.com

MNS-05924-26 Square StepLight LED
Size: 5”x5”
Required Options: “26” (faceplate secured with tamperproof screws)
Outer Lens: 2” diameter translucent white 1/8” polycarbonate
Housing: 4” x 2-1/4” standard octagon galvanized steel outlet box with gasketed rustproof aluminum trim faceplate.
Finish: white standard
**General Notes**
See comments on previous general notes page.

Amber colored LEDs are recommended at patient bedrooms.

Night lights are recommended to be recessed at approximately 12” -18” above finish floor for proper use and to minimize potential ligature risk.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

**Philips Alkco**
[www.lightingproducts.philips.com](http://www.lightingproducts.philips.com)

**WayGlo WG2H**

*Note: Acrylic lens can be easily broken into small shards.*
Division 26 | Electrical
Light Fixtures, Exit Signage

General Notes
See comments on previous general lighting fixtures page.

Must be positively and mechanically attached, not friction fit. Specify fully recessed housing when available.

Suspended and side mounted exit lights present inherent ligature risks.

Suspended exit lights shall be mounted such that the mounting bracket is fully aligned with light box. Side mounted lights shall be mounted such that the mounting bracket is fully aligned with the light box, and that both are mounted tight to ceiling.

Specification Notes
Coordinate exit signage specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing
www.kenall.com

Millenium Metrex METSR Series
Exit Light (Recessed)
Diffuser|Lens: .188” thick clear polycarbonate.
Housing: 20 gauge Cold rolled steel one piece welded construction.
Finish: painted white, black or brushed stainless steel.

Kenall Manufacturing
www.kenall.com

Millenium Metrex METSW Series
Exit Light (Wall Mount)
Diffuser|Lens: UV stabilized, high impact, .120” thick injection molded clear polycarbonate.
Housing: High impact injection molded polycarbonate.
Division 26 | Electrical
Light Fixtures, Exit Signage

General Notes
See comments on previous general lighting fixtures page.

Must be positively and mechanically attached, not friction fit. Specify fully recessed housing when available.

Suspended and side mounted exit lights present inherent ligature risks.

Suspended exit lights shall be mounted such that the mounting bracket is fully aligned with light box. Side mounted lights shall be mounted such that the mounting bracket is fully aligned with the light box, and that both are mounted tight to ceiling.

Specification Notes
Coordinate exit signage specifications with new/existing ceiling substrate prior to ordering.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Kenall Manufacturing
www.kenall.com

Mighty Mac MMEX Series
Exit Light (Wall and Ceiling Mount)

Diffuser|Lens: .188” thick clear polycarbonate.
Housing: One piece die formed 14 gauge steel continuously seam welded.

Kenall Manufacturing
www.kenall.com

Millenium Metrex METDU Series
Exit Light (Wall and Ceiling Mount)

Diffuser|Lens: Injection molded clear polycarbonate captive with center pin fasteners.
Housing: High impact injection molded polycarbonate.
Division 26 | Electrical
Light Fixtures, Exit Signage

General Notes
See comments on previous general lighting fixtures page.

Must be positively and mechanically attached, not friction fit. Specify fully recessed housing when available.

Suspended and side mounted exit lights present inherent ligature risks.

Suspended exit lights shall be mounted such that the mounting bracket is fully aligned with light box. Side mounted lights shall be mounted such that the mounting bracket is fully aligned with the light box, and that both are mounted tight to ceiling.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Barron Lighting Group
www.barronltg.com

S900 Series Edge-Lit Exit


Note: Pivoting feature creates looping ligature opportunity.

Philips Chloride
www.lightingproducts.philips.com

Caliber Series Edge Lit Exit

Diffuser|Lens: High impact acrylic, silk screened. Housing: Premium die cast aluminum with recessed mounting.

Note: Lens is not mechanically fastened into housing. Fixture installation has inherit ligature risks.
General Notes
See comments on previous general lighting fixtures page.

Must be positively and mechanically attached, not friction fit. Specify fully recessed housing when available.

Suspended and side mounted exit lights present inherent ligature risks.

Suspended exit lights shall be mounted such that the mounting bracket is fully aligned with light box. Side mounted lights shall be mounted such that the mounting bracket is fully aligned with the light box, and that both are mounted tight to ceiling.

Only those models listed have been tested. Models with different options in any category warrant additional testing of a sample fixture.

Philips Chloride
www.lightingproducts.philips.com

CE-11500 SC Series Exit Light

Diffuser|Lens: No lens provided.
Housing: Two piece die cast aluminum with chevron cutouts.
Finish: Epoxy based powder coat or brushed aluminum.

Note: Cutout letters/chevrons allow access to interior of fixture.

Philips Chloride
www.lightingproducts.philips.com

CE-11500 SC Series Recessed Exit Light

Diffuser|Lens: Polycarbonate/Lens.
Housing: Two-piece die cast aluminum with 18 gauge recessed back box and vandal resistant lens.
Finish: Epoxy based powder coat or brushed aluminum.

Note: Lens does not sit flush inside recessed back box for tight and secure fit.
**General Notes**

Wireless routers shall be mounted above the ceiling systems in medium and high risk areas when possible. It should be noted that functionality may be compromised when routers are installed above metal ceilings.

Wireless routers can be mounted below the ceiling systems in low risk areas.

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**Oberon**

www.oberoninc.com

**Model 1041-WA**

11" single piece recessed ceiling Wi-Fi access point mount/white plastic dome
**Division 27 | Communications**

**Clocks**

*Installation Notes*

It is recommended to specify recessed wall clocks with polycarbonate lenses.

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**Primex Wireless**

[www.primexwireless.com](http://www.primexwireless.com)

**XR Series Transmitters**

Transmitters wirelessly synchronize time for analog and digital clocks, timers, and other time receivers throughout the facility. Specify GPS.
General Notes

Fire alarm notification devices are required to be ceiling mounted in high risk areas.

It is recommended that fire alarm notification devices be ceiling mounted in medium risk areas.
General Notes
Fire alarm notification devices are required to be ceiling mounted in high risk areas.

It is recommended that fire alarm notification devices be ceiling mounted in medium risk areas.

Caution:
Device covers are susceptible to abuse and can be looped/weaponized.

Johnson Controls
www.tycosimplexgrinnell.com

2099 Series Manual Fire Alarm Station
Single action with institutional cover, key operated only.