

# Division 09 | Finishes



# Division 09 | Finishes

## Wall Assemblies, General



### 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 1: 3-5/8" 25 ga actual or EQ (20 ga actual or EQ at single sided walls/plumbing chase) steel studs @ 16" oc. 1 layer 5/8" standard drywall. Refer to other wall assemblies for opposite side wall materials.

- Provide Type-X or Type-C drywall where part of a rated assembly (UL U419).
- Provide water and mold resistant (Green board or Type-M) drywall at locations exposed to moisture (bathrooms, showers, kitchens, dishwashing, pools) regardless of whether a waterproofing and reinforcing membrane system (i.e. Schluter) is provided.
- 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 2.1: 3-5/8" 20 ga. (actual, not EQ) steel studs @ 16" oc. 1 layer 5/8" VHI Mold drywall each side . (see OMH Gypsum Board Assemblies Specification Guideline Section 09 21 16). Refer to other wall assemblies for opposite side wall materials.

- 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.
- Refer to OMH Gypsum Board Assemblies Specification Guideline (Section 09 21 16) and manufacturer's specifications for locations where Level 5 finishing of abuse resistant drywall may be necessary.

OMH Wall Assembly 2.2: 3-5/8" 20 ga. (actual, not EQ) steel studs @ 16" oc. Floor to 4' aff: 2 layers 5/8" VHI Mold Tough or single layer with protective wainscoting finish material. 4' aff to ceiling: 1 layer 5/8" VHI Mold Tough, additional base layer 5/8" standard drywall if needed for uniform drywall thickness (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 drywall 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.
- Refer to OMH Gypsum Board Assemblies Specification Guideline (Section 09 21 16) and manufacturer's specifications for locations where Level 5 finishing of abuse resistant drywall may be necessary.

OMH Wall Assembly 3: 3-5/8" 20 ga. (actual or EQ) steel studs @ 16" oc. 1 layer 5/8" Type X drywall. Provide 3-1/2" fiberglass batt insulation. Protection padding system (see OMH Specification Guideline Section 13 99 99). Refer to other wall assemblies for opposite side wall materials.

- See IBC Table 509 Incidental use areas "I-2 patient rooms with padding". AHJ may or may not consider seclusion rooms as "patient rooms". Where a suite configuration is provided, rating the perimeter of the suite may be the most constructable solution. Where the functional program dictates an independent seclusion room configuration directly off a corridor without an ante room, a variance for the rating may be required. Consult OMH project manager for precedent variances on file.

(continued next page)

# Division 09 | Finishes

## Wall Assemblies, General



OMH Wall Assembly 4.1: 3-5/8" 20 ga. actual or EQ steel studs @ 16" oc. 1 layer 5/8" abuse resistant glass mat water-resistant backing board (i.e. GP DensArmor Plus Abuse Resistant (see OMH Specification Guideline Section 09 21 16). Reinforcing and waterproofing membrane (ie Schluter), see OMH Specification Guideline Section 09 30 13). Refer to other wall assemblies for opposite side wall materials.

- This Assembly is intended as a base for ceramic or porcelain tile installed with a waterproofing and reinforcing membrane system (i.e. Schluter). Refer to OMH Specification Guideline Section 09 30 13.
- Provide Type-X abuse resistant panels or additional layer(s) of Type-X or Type-C drywall 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 4.2: 3-5/8" 25 ga. actual or EQ (20 ga at single sided walls/plumbing chase) steel studs @ 16" oc. 1 layer 5/8" glass mat water-resistant backing board (i.e. GP DensArmor Plus, see OMH Specification Guideline Section 09 21 16). Refer to other wall assemblies for opposite side wall materials.

- This Assembly is intended as a base for ceramic or porcelain tile installed with a waterproofing and reinforcing membrane system (i.e. Schluter). Refer to OMH Specification Guideline Section 09 30 13.
- Provide Type-X abuse resistant panels or additional layer(s) of Type-X or Type-C drywall 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.

# Division 09 | Finishes

## Ceiling Assemblies, General



### 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 5/8" drywall. Metal framing.

- Provide Type-X or Type-C drywall where part of a rated assembly.
- Provide water resistant (Green board or Type-M) drywall at locations exposed to moisture (bathrooms, showers, kitchens, dish washing).
- Design metal framing and hangers to accommodate ceiling weight.

OMH Ceiling Assembly 2: 1 layer 5/8" abuse resistant drywall. Metal framing.

- Provide Type-X or Type-C abuse resistant drywall where part of a rated assembly.
- Design metal framing and hangers to accommodate ceiling weight.
- Access doors are necessary where required and may create a ligature issue.

OMH Ceiling Assembly 3: 3/4" suspended acoustic ceiling tile (fiberglass, mineral fiber or perforated aluminum). Intermediate duty suspension system.

- This is a non-fire rated ceiling system.
- Washable/water resistant panel to be used in food preparation areas, Kitchens, Pantries, and Dining Rooms.
- Do not use hold down clips, especially in any patient areas. Instead use an alternate Ceiling Assembly.
- Do not use loose batt insulation above ceilings to achieve acoustical separation between spaces.
- Consider use of perforated metal ceiling tiles. While an increased cost, they offer better acoustics and resistance to damage.

OMH Ceiling Assembly 4: Class A Fiberglass Reinforced Plastic (FRP) (Kemlite) ceiling panel. FRP suspension system (Kemlite Sanigrad II) with 12 ga. stainless steel hanger wire.

- This is a non-fire rated ceiling system.
- Select ceiling panel material based on code and surface finish requirements.

OMH Ceiling Assembly 5: Security type metal tile or plank system. Product specific security type suspension system braced to deck above and restrained at full perimeter with proprietary ceiling panels offering varying levels of abuse resistance and plenum access using special tools.

OMH Ceiling Assembly 6: Tectum panels. Continuous steel reinforced, corridor span panels with tegular edges and concealed suspension components.

- Verify Tectum availability with manufacturers. Armstrong Industries manufactures 1" ceiling tiles and 2" panels not suitable for this Assembly application. Condeck Corp. (NM) and Tectum, Inc. (OH) are resources for plank products with tegular steel channel reinforcing suitable for this assembly but primarily intended as roof deck materials.
- Plank products when properly detailed and installed do not offer above ceiling access. Access doors are necessary where required and may create a ligature issue.

# 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 Notes**

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.



### Johnsonite

[www.johnsonite.com](http://www.johnsonite.com)

#### 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.



# Division 09 | Finishes

## Wall Base

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

### Caution Notes

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](http://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](http://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

Coordination is required between security ceiling systems and installation of any devices and fixtures that penetrate the ceiling plane.



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

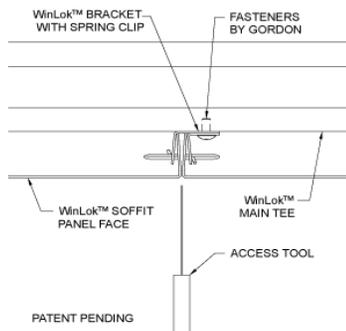
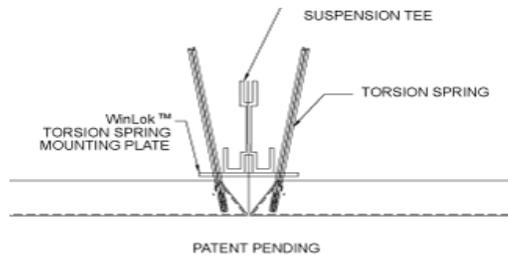
### Gordon Incorporated

[www.gordon-inc.com](http://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)



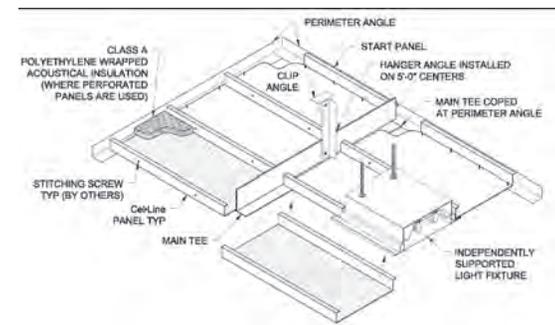
### Gordon Incorporated

[www.gordon-inc.com](http://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**

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**Installation Notes**

Coordination is required between security ceiling systems and installation of any devices and fixtures that penetrate the ceiling plane.

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



**Gordon Incorporated**

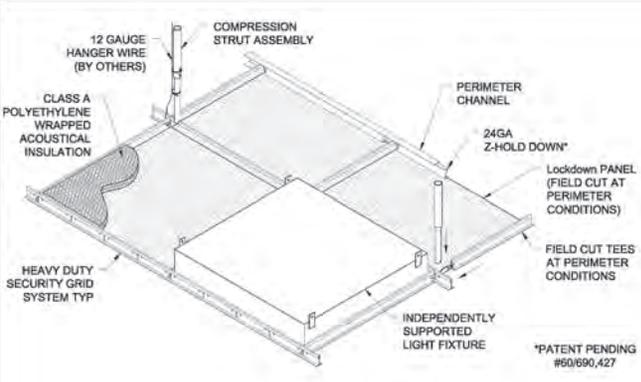
[www.gordon-inc.com](http://www.gordon-inc.com)

**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.

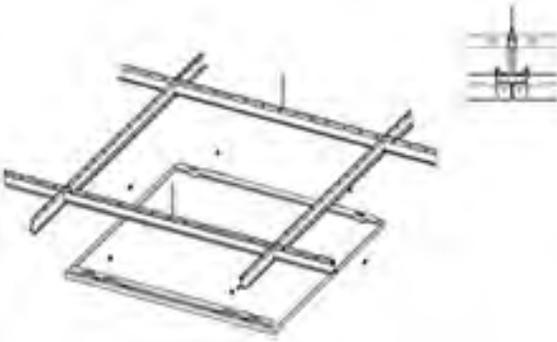
OMH Ceiling Assembly: 5b (page 86)



**Carritec**

[www.carritec.com](http://www.carritec.com)

**Series CO Clip-On Panel System**



# Division 10 | Specialties



# 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 ligation.

### Caution Notes

- End caps can create opportunity for a wedge ligation.
- 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.
- Track system may be weaponized if subjected to severe abuse and dismantled.



### InPro Corporation

[www.inprocorp.com](http://www.inprocorp.com)

#### Clickeze Ultra Cubicle Track

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

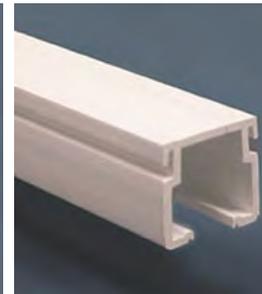
#### Clickeze Whisper Cubicle Track

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

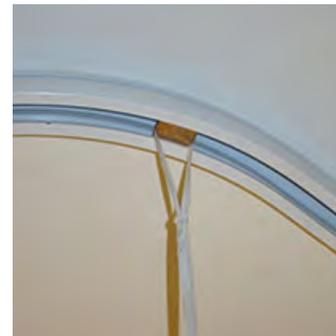
Ultra Track



Whisper Track



**Caution: Potential looping point at curtain tracks.**



### InPro Corporation

[www.inprocorp.com](http://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

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- Track system may be weaponized if subjected to severe abuse and dismantled.



### Oddball Industries

[www.oddballindustries.com](http://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](http://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

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Specify breathable fabric material for shower and privacy curtains.

### Installation Notes

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### Caution Notes

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- 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.
- Track system may be weaponized if subjected to severe abuse and dismantled.



### AFS Security

[www.afs-securitysystems.com](http://www.afs-securitysystems.com)

### Kestrel Movatrack

Movatrack curtain suspension system utilizes magnetic wall brackets where the track meets the wall, and ceiling 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](http://www.imperialfastener.com)

### IFC-69 Break-A-Way Track & IFC-79 Break-A-Way Track

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 ligation point.
- IFC-79 wall-mounted curtain track can be continuously looped end to end.

IFC-69 Break-A-Way Track



IFC-79 Break-A-Way Track



# 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.”

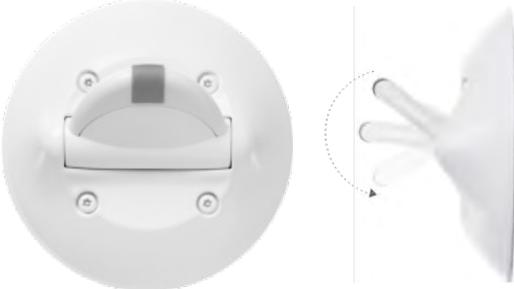


### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### TH770 Towel Hook

Powder-coated aluminum with center grip. Half moon holder releases and pivots downward under applied load.



### Whitehall Manufacturing

[www.whitehallmfg.com](http://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](http://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.**



### Kingsway Group

[www.kingswaygroupusa.com](http://www.kingswaygroupusa.com)

#### KG180 Coat Hook

Stainless steel surround. Rubber hook releases under downward applied load.



# 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](http://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.



### Bradley Corporation

[www.bradleycorp.com](http://www.bradleycorp.com)

#### Model SA36 Tension Towel Hook

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



### American Specialties, Inc.

[www.americanspecialties.com](http://www.americanspecialties.com)

#### 123 Square Clothes Hook

### Oddball Industries

[www.oddballindustries.com](http://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.



### HenkelHook

[www.henkelhook.com](http://www.henkelhook.com)

#### HenkelHook

**Note:** Hook can be wedged to create a ligature point.



# 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.”



### Laidlaw

[www.laidlawdirect.com](http://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](http://www.norix.com)

### Towel Hook

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



### Oddball Industries

[www.oddballindustries.com](http://www.oddballindustries.com)

### SP-1 Closet “Bar”

**Note:** Hangers may be ganged together to increase breakaway weight.



### Willoughby Industries, Inc.

[www.willoughby-ind.com](http://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 Notes

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 Notes**

Traditional code compliant handrails create obvious ligature opportunities.



**InPro Corporation**

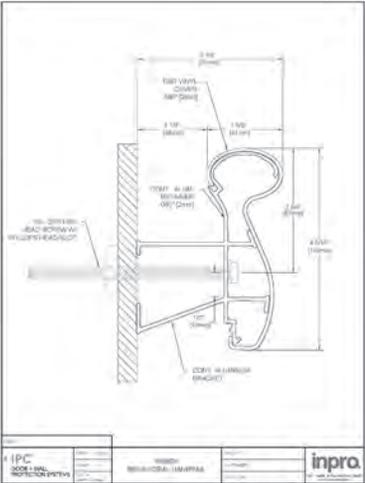
[www.inprocorp.com](http://www.inprocorp.com)

**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.**
- **Corner pieces are not available with this handrail system.**



# 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 Notes

Traditional code compliant handrails create obvious ligature opportunities.



### Pawling Corporation

[www.pawling.com](http://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](http://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 Notes

Traditional code compliant handrails create obvious ligature opportunities.



### Wallguard

[www.wallguard.com](http://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.

### 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.

Coordinate location of grab bars with concealed flushometer access panels.

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.

### Caution Notes

- 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

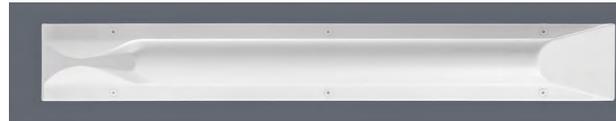
[www.besafeprod.com](http://www.besafeprod.com)

#### GB730 Ligature-Resistant Grab Bar

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

#### Notes:

- Water drains off open end of grab bar and will result in water on the bathroom floor if configured incorrectly.



### Kingsway Group

[www.kingswaygroupusa.com](http://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:

- Include "G" after model number when ordering to ensure that the required graspable length is provided.
- Water drains off open end of grab bar 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.



### 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.

Coordinate location of grab bars with concealed flushometer access panels.



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.

### Caution Notes

- 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](http://www.northwestsh.com)

#### NW Security Bar

### Cascade Specialty Hardware

[www.cascadesh.com](http://www.cascadesh.com)

#### Safebar Grab Bar

### Securing Cosmos

[www.securingcosmos.com](http://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](http://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.

### 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.

Coordinate location of grab bars with concealed flushometer access panels.

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

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### Caution Notes

- 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](http://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](http://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](http://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.



### 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.

Coordinate location of grab bars with concealed flushometer access panels.

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.

### Caution Notes

- 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](http://www.americanspecialties.com)

#### 0165 Grab Bar with Drain Holes

**Note:** This product may allow end to end looping ligature.



### Securing Cosmos

[www.securingscosmos.com](http://www.securingscosmos.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 Notes

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



### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### SD750 Ligature-Resistant Soap Dispenser

Powder coated all metal construction with a rounded, smooth-edged design.

**Caution: Dispenser area allows for wedging opportunities.**

#### Notes:

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



### Gojo Industries

[www.gojo.com](http://www.gojo.com)

#### 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**

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**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 Notes**

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



**Kingsway Group**  
[www.kingswaygroupusa.com](http://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.**



**Symmetry Hand Hygiene**  
[www.symmetryhandhygiene.com](http://www.symmetryhandhygiene.com)

**990114501 | 99014601 Resilient Hand Hygiene Dispenser**  
 Die cast aluminum dispenser. Soap is manually dispensed with a push button.

**Caution: Dispenser area allows for wedging opportunities.**



990114501  
 White with Alpine Gray Lever



99014601  
 White with Empathy Light Blue Lever

# Division 10 | Specialties

## Toilet Accessories, Soap Dispensers

### General Notes

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

### Caution Notes

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



### Gojo Industries

[www.gojo.com](http://www.gojo.com)

### ADX-12 Security Enclosure

Note: This product provides wedging opportunities.



### American Specialties, Inc.

[www.americanspecialties.com](http://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](http://www.americanspecialties.com)

### 9326 Soap Dispenser

Note: This product provides a loopable ligature.



### Bobrick

[www.bobrick.com](http://www.bobrick.com)

### B-26607 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 Notes

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

### Opsbox/Archer Manufacturing

[www.vandalproof.org](http://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.



### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### RS780 Ligature Resistant Recessed Shelf

Stainless steel with powder coated white finish. Install with tamper-resistant fasteners. Provide tamper-resistant sealant at flange perimeter.



### Whitehall Manufacturing

[www.whitehallmfg.com](http://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.



### Swanstone

[www.swanstone.com](http://www.swanstone.com)

#### AS-1075 Recessed Accessory Shelf

Solid surface accessory shelf. Install with strict adherence to manufacturer's installation instructions. Provide tamper resistant sealant at perimeter of accessory shelf trim.



# 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.



### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### Ligature-Resistant Paper Towel Dispenser PH235

Surface mount paper towel dispenser. Polycarbonate finish. Accepts center-pull paper towels.

#### Caution:

- Dispenser area allows for wedging opportunities.
- A difficult but possible side ligature opportunity exists with this product. A rigid implement can wedge a shoelace between the enclosure and backplate.



### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### Ligature-Resistant Paper Towel Dispenser #PH240

Semi-recessed paper towel dispenser. Polycarbonate finish. Accepts center-pull paper towels.



# 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.



### Georgia-Pacific

[www.gppro.com](http://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](http://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.



# 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.



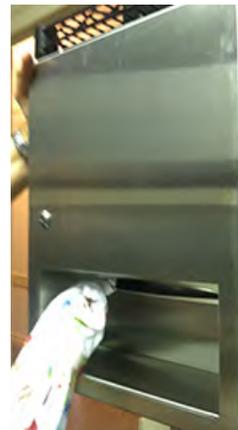
### American Specialties, Inc.

[www.americanspecialties.com](http://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](http://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](http://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](http://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.

### Caution Notes

- 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](http://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](http://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.

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

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### Cascade Specialty Hardware

[www.cascadesh.com](http://www.cascadesh.com)

#### C-400 Safety Toilet Paper Holder

Caution: Break away weight is 18 lbs and exceeds recommended.



### Kingsway Group

[www.kingswaygroupusa.com](http://www.kingswaygroupusa.com)

#### Recessed Toilet Roll Holder KG13

Caution: Break away weight is 16 lbs and exceeds recommended.



### Whitehall Manufacturing

[www.whitehallmfg.com](http://www.whitehallmfg.com)

#### Best-Care WH1845B Ligature-Resistant Spindle Button Recessed Toilet Paper Holder



# 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.

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- 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](http://www.americanspecialties.com)

#### 0262 Surface Mounted Folded Toilet Tissue Cabinet

**Note:** Slotted dispenser allows wedging opportunity for downward ligature.



### Bobrick

[www.bobrick.com](http://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](http://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 permits looping.

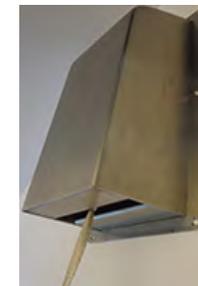


### Kingsway Group

[www.kingswaygroupusa.com](http://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.

### Caution Notes

- 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

[www.northwestsh.com](http://www.northwestsh.com)

#### NW 611 Toilet Paper Holder

**Note:** Spindle 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.com/en](http://www.sabic.com/en)

### Royal Adhesives & Sealants

[www.royaladhesives.com](http://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](http://www.besafeprod.com)

#### Ligature-Resistant Framed Stainless Steel Mirror FM760 (18"x24") | FM770 (24"x36")

Polished stainless steel mirror with #8 finish. Powder coated (white) stainless steel frame.

**Caution: Provide tamper-resistant sealant at full perimeter of frame.**



### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### Ligature-Resistant Wood Framed Stainless Steel Mirror FM160 (18"x24")

Polished stainless steel mirror with #8 finish. Wood frame available in birch, mahogany & walnut finish.

**Caution: Provide tamper-resistant sealant at full perimeter of frame.**



# Division 10 | Specialties

## Toilet Accessories, Mirrors

### General Notes

Only polycarbonate glazing is recommended for use in patient bathrooms.



### Whitehall Manufacturing

[www.whitehallmfg.com](http://www.whitehallmfg.com)

#### WH1811-SPLT Ligature-Resistant 13"x17" Stainless Steel Mirror

Type 400-series polished stainless steel mirror finish with Type 304 stainless steel frame powder coated white.

Caution: Provide tamper-resistant sealant at full perimeter of frame.



### Whitehall Manufacturing

[www.whitehallmfg.com](http://www.whitehallmfg.com)

#### WH1811-SPLT Ligature-Resistant 13"x23.625" Stainless Steel Mirror

Type 400-series polished stainless steel mirror finish with Type 304 stainless steel frame powder coated white.

Caution: Provide tamper-resistant sealant at full perimeter of frame.



# Division 10 | Specialties

## Toilet Accessories, Mirrors

### General Notes

Only polycarbonate glazing is recommended for use in patient bathrooms.



### American Specialties, Inc.

[www.americanspecialties.com](http://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](http://www.oddballindustries.com)

#### SP-8 Mirror Guard

**Note:** Mirror guard has sharp edges and does not sit flush to profile of mirror.



# 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 ligation.

### Caution Notes

- End caps can create opportunity for a wedge ligation.
- 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.
- Track system may be weaponized if subjected to severe abuse and dismantled.



### InPro Corporation

[www.inprocorp.com](http://www.inprocorp.com)

#### Clickeze Ultra Cubicle Track

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

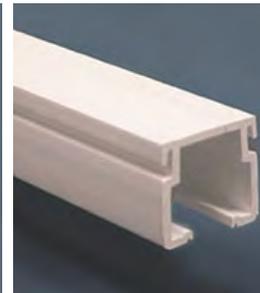
#### Clickeze Whisper Cubicle Track

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

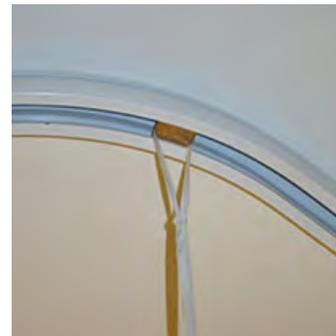
Ultra Track



Whisper Track



**Caution: Potential looping point at curtain tracks.**



### InPro Corporation

[www.inprocorp.com](http://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

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### Caution Notes

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- Track system may be weaponized if subjected to severe abuse and dismantled.



### Oddball Industries

[www.oddballindustries.com](http://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](http://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

## 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.

### Caution Notes

- 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.
- Track system may be weaponized if subjected to severe abuse and dismantled.



### Imperial Fastener Company

[www.imperialfastener.com](http://www.imperialfastener.com)

#### IFC-69 Break-A-Way Track & IFC-79 Break-A-Way Track

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.

IFC-69 Break-A-Way Track



IFC-79 Break-A-Way Track



### WebbShade

[www.inprocorp.com](http://www.inprocorp.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



### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### Ligature-Resistant Art Frame #AF550

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" polycarbonate glazing. Follow manufacturer's installation instructions.

**Caution: Provide tamper-resistant sealant at full perimeter of frame.**



### Custom Design Frameworks

[www.customdesignframeworks.com](http://www.customdesignframeworks.com)

#### 8 1/2 x 11 Custom Wood Frames with Ligature-Resistant Profile

Multiple wood types and finishes available. Specify with standard 3/16" polycarbonate glazing.

**Caution: Provide tamper-resistant sealant at full perimeter of frame.**



# 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 Notes

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



### Accurate Lock & Hardware

[www accuratelockandhardware.com](http://www accuratelockandhardware.com)

### CP-CAB Crescent Cabinet Pull



### Architectural Builders Hardware Mfg. Inc.

[www.abhmfg.com](http://www.abhmfg.com)

### 1931 Cabinet Pull



# 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 Notes**

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



**Kingsway Group**

[www.kingswaygroupusa.com](http://www.kingswaygroupusa.com)

**KG31 Anti-Ligature Easygrip Pull Handle Bolt Fixed**



**Kingsway Group**

[www.kingswaygroupusa.com](http://www.kingswaygroupusa.com)

**KG50 Anti-Ligature Small Cupped Pull Handle**



**Kingsway Group**

[www.kingswaygroupusa.com](http://www.kingswaygroupusa.com)

**KG41 Anti-Ligature Ergogrip Handle Bolt Fixed**



**Kingsway Group**

[www.kingswaygroupusa.com](http://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 Notes

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



### Hafele

[www.hafeleamericas.com](http://www.hafeleamericas.com)

#### 158.80 Flush Pull

**Note:** Recess creates an opportunity for wedging.



### Top Knobs Decor

[www.topknobsdecor.com](http://www.topknobsdecor.com)

#### M495 Somerset Cup Pull

**Note:** Recess creates an opportunity for wedging.



### Sugatsune America, Inc.

[www.sugatsune.com](http://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.



# Division 10 | Specialties

## Signage

### Installation Notes

Signage systems should be mechanically fastened to substrate with tamper-resistant fasteners. Double stick tape and Velcro are not acceptable.

Provide tamper resistant sealant at perimeter if signage is not tight to wall surface.



### 2/90 Sign Systems

[www.290signs.com](http://www.290signs.com)

#### SafeCare Signage

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



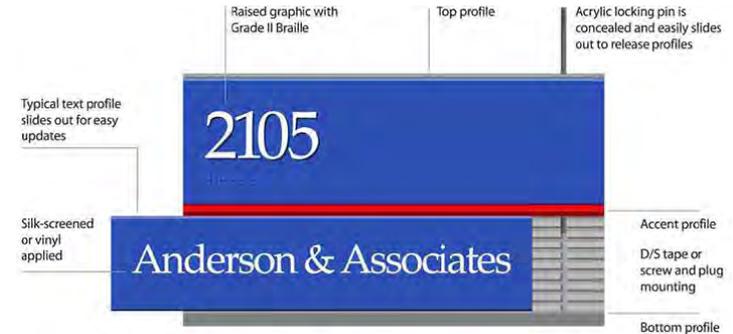
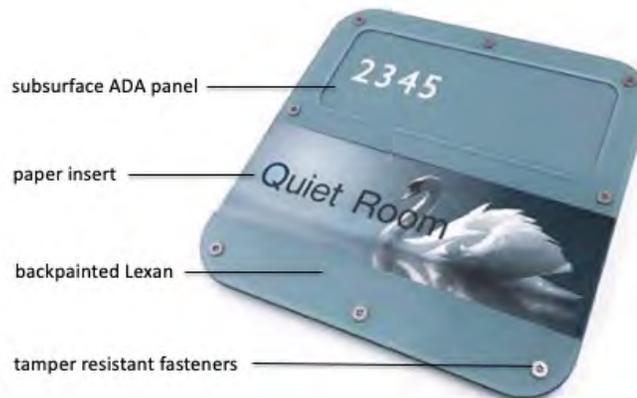
### King Architectural Products

[www.king-ap.com](http://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.**



# Division 10 | Specialties

## Signage

### 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](http://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 Notes

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



### Larsen’s Manufacturing Company

[www.larsensmfg.com](http://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.



### Larsen’s Manufacturing Company

[www.larsensmfg.com](http://www.larsensmfg.com)

#### DECS 2409-R4 Fire Extinguisher Cabinet



### Activar Construction Products Group, Inc.

[www.activarcpg.com](http://www.activarcpg.com)

#### JL Industries Cosmopolitan Series Fire Extinguisher Cabinet

**Note: Cabinet quality is not abuse or tamper-resistant and presents many sharp edges.**



# Division 10 | Specialties

## Wall Device Covers



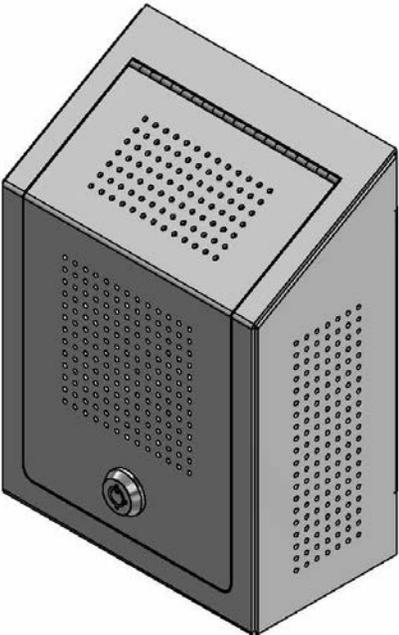
### ARSCO Manufacturing Co.

[www.arscomfg.com](http://www.arscomfg.com)

### Anti-ligature Thermostat Cover with Lock ACM0001-01A



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



# Division 12 | Furnishings



# Division 12 | Furnishings

## Furniture, General

### 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



# 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](http://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.

**Caution: Protective center cap can be removed upon severe tampering. Once removed, sprinkler head is susceptible to looping ligature.**



## Tyco Fire Protection Products

[www.tyco-fire.com](http://www.tyco-fire.com)

### Model TFP PH2 Sprinklers

## Reliable Automatic Sprinkler Co., Inc.

[www.reliablesprinkler.com](http://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](http://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



# 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.

# Division 22 | Plumbing

## Lavatory Assemblies

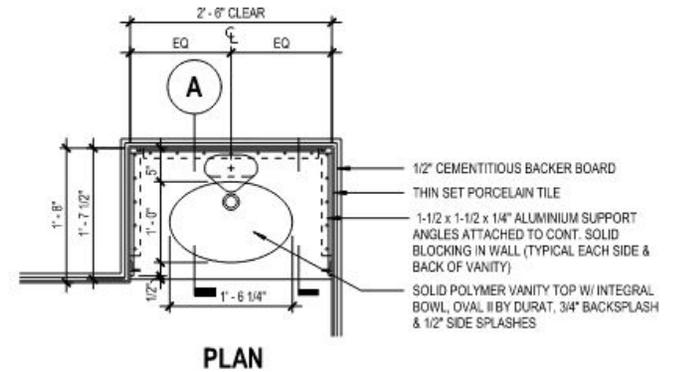
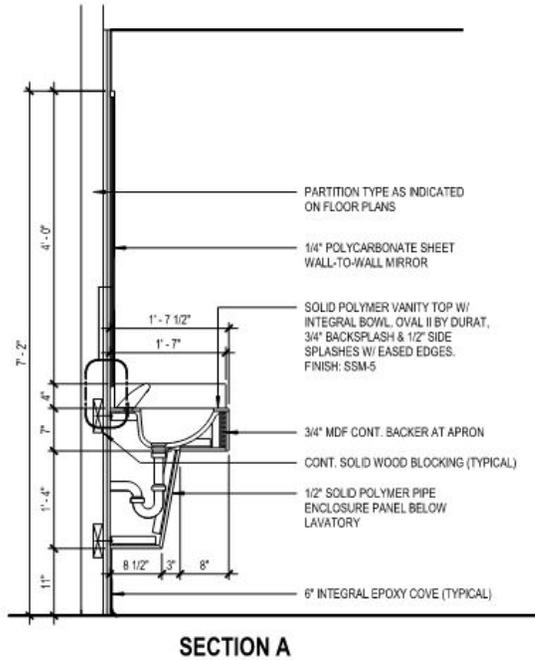
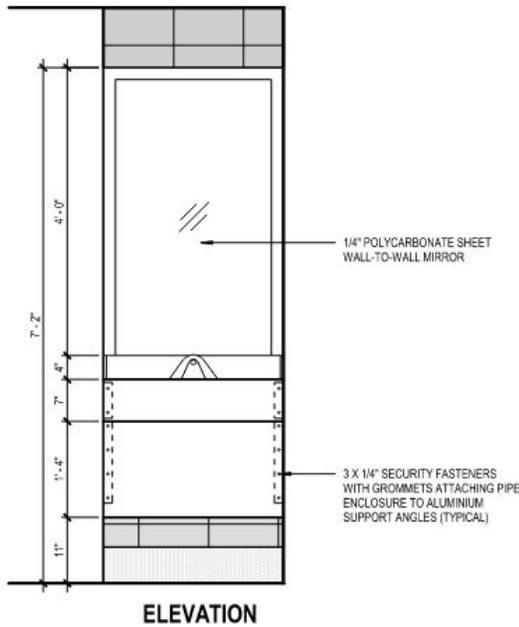
**Code Notes**  
Provide ADA compliant handicapped accessible lavatory assembly configurations where required.



### 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.



# Division 22 | Plumbing

## Lavatory Assemblies

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



### American Standard

[www.americanstandard-us.com](http://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](http://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.



# Division 22 | Plumbing

## Lavatory Assemblies

### Code Notes

Provide ADA compliant handicapped accessible lavatory assembly configurations where required.



### Whitehall Manufacturing

[www.whitehallmfg.com](http://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.

#### Cautions:

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



# Division 22 | Plumbing

## Lavatory Basins

### 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](http://www.americanstandard-us.com)

### Rondalyn Countertop Sink

High gloss stain resistant vitreous china sink. Specify without overflow.



### American Standard

[www.americanstandard-us.com](http://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](http://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](http://www.besafeprod.com)

#### SF400 Ligature-Resistant Sensor Faucet

Deck mounted faucet is a single temperature faucet without controls. It may be specified as hard-wired or with battery power.



### Behavioral Safety Products

[www.besafeprod.com](http://www.besafeprod.com)

#### SF380 Ligature-Resistant Metering Faucet

Deck mounted faucet is a dual temperature faucet with push button controls.



### Chicago Faucets

[www.chicagofaucets.com](http://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.



### T&S Brass and Bronze Works, Inc.

[www.tsbrass.com](http://www.tsbrass.com)

#### EC-3113-VF05 Sensor Activate Faucet

Deck mounted faucet is a single temperature faucet without controls.



# 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).



**Whitehall Manufacturing**

[www.whitehallmfg.com](http://www.whitehallmfg.com)

**WH3375-SO Best Care Ligature-Resistant Sensor Activated Faucet**

Deck mounted faucet is a single temperature faucet without controls. Designed to retrofit onto existing 4" center-set lavatory decks.



**Whitehall Manufacturing**

[www.whitehallmfg.com](http://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](http://www.kohler.com)

### K-922 Laminar Faucet

**Note: This product's recess presents opportunity for wedge ligature.**



# Division 22 | Plumbing

## Lavatory Grid Strainers

### Installation Notes

Coordinate plumbing fitting and piping length associated with drains to ensure fit in pipe enclosures.



### Oddball Industries

[www.oddballindustries.com](http://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.



# Division 22 | Plumbing

## Toilets, General



### 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.

## Caution Notes

- 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](http://www.americanstandard-us.com)

### Huron Toilet

## Behavioral Safety Products

[www.besafeprod.com](http://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](http://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

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## Caution Notes

- 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.aquadesignmfg.com](http://www.aquadesignmfg.com)

### CWC150-AST Toilet CWC156-AST Toilet

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



## Whitehall Manufacturing

[whitehallmfg.com](http://whitehallmfg.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.

## Caution Notes

- 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](http://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.**



# Division 22 | Plumbing

## 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.

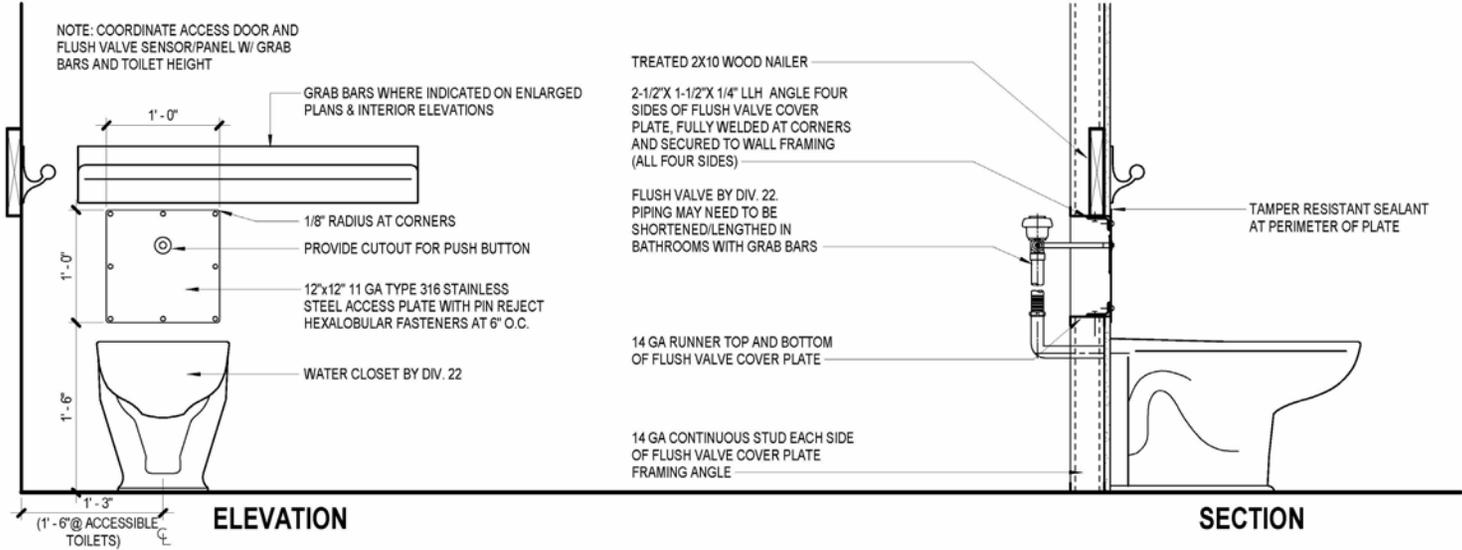
Verify flush valve requirements of remote flushometer sensor to ensure it can be mounted to the rear of the stainless steel cover plate to reduce ligature opportunities.



### 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.



**3** TYPICAL FLUSH VALVE DETAIL  
SCALE: 1" = 1'-0"

# 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](http://www.zurn.com)

**ZER6152AV Flush Valve**

AquaSense AV concealed sensor operated, battery powered flush valve.



**Sloan Valve Company**

[www.sloanvalve.com](http://www.sloanvalve.com)

**Regal Model 150ES Flushometer**

Concealed push button (manual) activated, flushometer.



**Sloan Valve Company**

[www.sloanvalve.com](http://www.sloanvalve.com)

**Royal Optima 143 ESS Flushometer**

Concealed offset flushometer with wall-mounted sensor.



**Sloan Valve Company**

[www.sloanvalve.com](http://www.sloanvalve.com)

**Royal Optima 152 ESS Flushometer**

Concealed flushometer with wall-mounted sensor.



# 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.



### 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 Notes

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](http://www.besafeprod.com)

#### Ligature-Resistant Flush Valve Cover #FV600

One piece unit, can be field cut to fit varying flush valve dimensions. White, high impact, abuse-resistant, heavy gauge material.

#### Note:

Specify handing and flush activator type.



### Whitehall Manufacturing

[www.whitehallmfg.com](http://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 Notes

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](http://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.

Coordinate appropriate wall depth and location for remote chiller.

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](http://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.**



**Whitehall Manufacturing**  
[www.whitehallmfg.com](http://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.

