085663-H: DETENTION WINDOWS (08660-H)

GENERAL
In general, follow the guidelines below when designing and specifying steel detention windows. Unless specifically indicated otherwise, these guidelines are not intended to restrict or replace professional judgment.

APPLICABILITY:
To be specified where required in Psychiatric units.

STANDARDS:

1. Steel detention windows typically consist of many components, including a main frame, concealment plate, rubber silencers, sub-frame, scribe, laminated glazing, concealed hinges and compression guards, bitt key detention locks, lock bolts, bitt keys, concealed anchors and related components as required for a complete installation.

2. Require detention windows to be of jamb-hinged design, in-swinging, manually operated. Windows should be designed to accept 9/16 inch thick laminated glass.
   a. Steel detention windows shall operate through approximately 90 degrees by use of bitt keys. Where indicated, steel detention windows may lift-out, non-hinged design.

3. Frames should be designed with a minimum 1 ¼ inch deep rabbet to provide for a full one inch edge engagement around the perimeter of each laminated glass unit and a full ¼ inch unobstructed free space beyond.

4. Concealment plate is required to be a minimum thickness of 0.0478 inches. Sub-frame shall have a minimum thickness of 0.1046 inches. Scribe shall be of a minimum thickness of 0.0598 inches.
   a. Hinge pins are required to be of bronze construction.
   b. Lock bolts shall be fabricated of tool steel.
   c. Concealment plate, main frame, sub-frame, scribe and hinges shall be manufactured of mild steel.

5. Sub-frame and main frame should have continuously-welded corners, welds ground smooth. Fabricate of unequal-leg angle iron to accept concealed fasteners and anchors.

6. Hinged detention windows should be designed to allow operation only by authorized persons with bitt keys. The bitt key locks must maintain the windows in the closed position, and operate one lock in the head and sill of each window.
   a. Lift-out, non-hinged detention windows shall require the use of four-point bitt key locking on each lite.
   b. The Health System requires that lift-out units be furnished with hinges for future use. Mount the hinges but remove the pins and store in the channel of the sub-frame.
   c. Equip detention window frames with grey molded rubber silencers, conforming to Federal Specification FF-H-111C, Type 1337A.

7. Provide the Project Coordinator with ten each bitt keys, to be forwarded to Security and Maintenance.

8. All detention window anchors are required to be of tamperproof, non-removable design.

9. Glazing beads should be integral to the hinged window section. Assure that the glazing beads are designed, fabricated and installed to receive the glazing specified in Section 08840.

10. Detention window components must be fabricated so that no portion of the assembly in a patient room can be used as a hook. All handles, knobs, latches, locks, limiting hardware or similar components are required to be smooth and flush with frame, or recessed, or removable.
FINISHES

1. Exposed surfaces of detention windows, mullions, glazing beads, sill closures, jamb and head closures, main frame, sub-frame, scribe, concealment plate and accessories shall receive baked enamel finish, color to be determined by the UMH Interior Design Office.

2. All components shall present a smooth, uniform appearance, free from blemishes, nicks, dents, cracks, pits or other flaws.