

Checklist for the “Suicide-Resistant” Design of Correctional Facilities

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The safe housing of suicidal inmates is an important component to a correctional facility's comprehensive suicide prevention policy. Although impossible to create a “suicide-proof” cell environment within any correctional facility, given the fact that almost all inmate suicides occur by hanging, it is certainly reasonable to ensure that all cells utilized to house potentially suicidal inmates are free of all obvious protrusions. And while it is more common for ligatures to be affixed to air vents and window bars (or grates), *all* cell fixtures should be scrutinized, since bed frames/holes, shelves with clothing hooks, sprinkler heads, door hinge/knobs, towel racks, water faucet lips, and light fixtures have been used as anchoring devices in hanging attempts. As such, to ensure that inmates placed on suicide precautions are housed in “suicide-resistant” cells, facility officials are strongly encouraged to address the following architectural and environmental issues:

1. Cell doors should have large-vision panels of Lexan (or low-abrasion polycarbonate) to allow for unobstructed view of the entire cell interior at all times. These windows should *never* be covered (even for reasons of privacy, discipline, etc.) If door sliders are not used, door interiors should not have handles/knobs; rather they should have recessed door pulls. Any door containing a food pass should be closed and locked. Interior door hinges should bevel down so as not to permit being used as an anchoring device. Door frames should be rounded and smooth on the top edges. The frame should be grouted into the wall with as little edge exposed as possible.

In older, antiquated facilities with cell fronts, walls and/or cell doors made of steel bars, Lexan paneling (or low-abrasion polycarbonate) or security screening (that has holes that are ideally 1/8 inches wide and no more than 3/16 inches wide or 16-mesh per square inch) should be installed from the *interior* of the cell.

Solid cell fronts must be modified to include large-vision Lexan panels or security screens with small mesh;

2. Vents, ducts, grilles, and light fixtures should be protrusion-free and covered with screening that has holes that are ideally 1/8 inches wide, and no more than 3/16 inches wide or 16-mesh per square inch;
3. Wall-mounted corded telephones should *not* be placed inside cells. Telephone cords of varying length have been utilized in hanging attempts;

4. Cells should not contain any clothing hooks. The traditional, pull-down or collapsible hook can be easily jammed and/or its side supports utilized as an anchor;
5. A stainless steel combo toilet-sink (with concealed plumbing and outside control valve) should be used. The fixture should not contain an anti-squirt slit, toothbrush holder, toilet paper rod, and/or towel bar;
6. Beds should ideally be either heavy molded plastic or solid concrete slab with rounded edges, totally enclosed underneath. If metal bunks are utilized, they should be bolted flush to the wall with the frame constructed to prevent its use as an anchoring device. Bunk holes should be covered; ladders should be removed. (Traditional metal beds with holes in the bottom, not built flush to the wall and open underneath, have often been used to attach suicide nooses. Lying flat on the floor, the inmate attaches the noose from above, runs it under his neck, turns over on his stomach and asphyxiates himself within minutes.);
7. Electricity should be turned off from wall outlets outside of the cell;
8. Light fixtures should be recessed into the ceiling and tamper-proof. Some fixtures can be securely anchored into ceiling or wall corners when remodeling prohibits recessed lighting. All fixtures should be caulked or grouted with tamper-resistant security grade caulking or grout. Ample light for reading (at least 20 foot-candles at desk level) should be provided. Low-wattage night light bulbs should be used (except in special, high-risk housing units where sufficient lighting 24 hours per day should be provided to allow closed-circuit television (CCTV) cameras to identify movements and forms).

An alternative is to install an infrared filter over the ceiling light to produce total darkness, allowing inmates to sleep at night. Various cameras are then able to have total observation as if it were daylight. This filter should be used only at night because sensitivity can otherwise develop and produce aftereffects;

9. CCTV monitoring does not prevent a suicide; it only identifies a suicide attempt in progress. If utilized, CCTV monitoring should only supplement the physical observation by staff. The camera should obviously be enclosed in a box that is tamper-proof and does not contain anchoring points. It should be placed in a high corner location of the cell and all edges around the housing should be caulked or grouted. Cells containing CCTV monitoring should be painted in pastel colors to allow for better visibility. To reduce camera glare and provide a contrast in monitoring, the headers above cell doors should be painted black or some other dark color.

CCTV cameras should provide a clear and unobstructed view of the entire cell interior, including all four corners of the room. Camera lens should have the capacity for both night or low light level vision;

10. Cells should have a smoke detector mounted flush in the ceiling, with an audible alarm at the control desk. Some cells have a security screening mesh to protect the smoke detector from vandalism. The protective coverings should be high enough to be outside the reach of an inmate and far enough away from the toilet so that the fixture could not be used as a

ladder to access the smoke detector and screen. Ceiling height for new construction should be 10 feet to make such a reasonable accommodation. Existing facilities with lower ceilings should carefully select the protective device to make sure it cannot be tampered with, or have mesh openings large enough to thread a noose through. Water sprinkler heads should not be exposed. Some have protective cones; others are flush with the ceiling and drop down when set off; some are the breakaway type;

11. Cells should have an audio monitoring intercom for listening to calls of distress (*only* as a supplement to physical observation by staff). While the inmate is on suicide precautions, intercoms should be turned up high (as hanging victims can often be heard to be gurgling, gasping for air, their body hitting the wall/floor, etc.);
12. Cells utilized for suicide precautions should be located as close as possible to a control desk to allow for additional audio and visual monitoring;
13. If modesty walls or shields are utilized, they should have triangular, rounded or sloping tops to prevent anchoring. The walls should allow visibility of both the head and feet;
14. Some inmates hang themselves under desks, benches, tables or stools/pull-out seats. Potential suicide-resistant remedies are: (a) Extending the bed slab for use as a seat; (b) Cylinder-shaped concrete seat anchored to floor, with rounded edges; (c) Triangular corner desk top anchored to the two walls; and (d) Rectangular desk top, with triangular end plates, anchored to the wall. Towel racks should also be removed from any desk area;
15. All shelf tops and exposed hinges should have solid, triangular end-plates which preclude a ligature being applied;
16. Cells should have security windows with an outside view. The ability to identify time of day via sunlight helps re-establish perception and natural thinking, while minimizing disorientation. If cell windows contain security bars that are not completely flush with window panel (thus allowing a gap between the glass and bar for use as an anchoring device), they should be covered with Lexan (or low-abrasion polycarbonate) paneling to prevent access to the bars, or the gap, should be closed with caulking, glazing tape, etc.

If window screening or grating is used, covering should have holes that are ideally 1/8 inches wide, and no more than 3/16 inches wide or 16-mesh per square inch;

17. The mattress should be fire retardant and not produce toxic smoke. The seam should be tear-resistant so that it cannot be used as a ligature;
18. Given the fact that the risk of self-harm utilizing a laundry bag string outweighs its usefulness for holding dirty clothes off the floor, laundry bag strings should be removed from the cell;
19. Mirrors should be of brushed, polished metal, attached with tamper-proof screws;
20. Padding of cell walls is prohibited in many states. Check with your fire marshal. If permitted, padded walls must be of fire-retardant materials that are not combustible and do not produce toxic gasses; and
21. Ceiling and wall joints should be sealed with neoprene rubber gasket or sealed with tamper-resistant security grade caulking or grout for preventing the attachment of an anchoring device through the joints.

NOTE: A portion of this checklist was originally derived from R. Atlas (1989), "Reducing the Opportunity for Inmate Suicide: A Design Guide," *Psychiatric Quarterly*, 60 (2): 161-171. Additions and modifications were made by Lindsay M. Hayes, and updated by Randall Atlas, Ph.D., a registered architect. See also Hayes, L.M. (2003), "Suicide Prevention and "Protrusion-Free Design of Correctional Facilities," *Jail Suicide/Mental Health Update*, 12 (3): 1-5. *Last revised in March 2011.*