

## FIX-N-FAX # 129

### CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Number 129

Date: February, 2003

#### **CCV Window Screens Fabrication and Installation Guidelines**

This Fix-N-Fax contains specifications and fabrication information regarding the approved installation of rigid CCV window screens.

**Note:** Proper fabrication and installation guidelines must be strictly followed in order to maintain compliance with regulated emergency exits, allow for proper air flow and light transmittal. **Under no circumstances shall the swing arc travel (exit clearance) of the OEM emergency windows be restricted after the window screen installation.**

The screens shall be installed in an effort to reduce the number of citizen complaints involving inmates traveling through congested areas as well as provide contraband control.

#### **Modification requirements:**

- In order to maintain emergency exit regulations, all screens must be fastened to the outside of the window frame, following approved measurements and installation points.
- All screens must be louvered following the guideline template allowing air movement across the open portion of the inside window. Proper louvers shall meet or exceed air flow volume as OEM window screens when measured with an Alnor Velometer, approximately 1000 FPS.
- All internal windows of the vehicle shall remain completely operational, including opening, closing, swing arc travel, and locking.
- All installations must be inspected and approved by the Unit Fleet Manager, including testing of all emergency devices.

### Installation instructions:

1. Remove window and frame from vehicle, if necessary.
2. Rivet mounting pieces to window frame flange (inside out). This step is for early style windows with tube frame requirements.
3. Place screen to match window, trim as necessary. Line up and mark for bolt holes.
4. Drill bolt holes in screen.
5. Attach screen to mounts with bolts provided.
6. Re-install window, reseal window frame, and arrange for inspection by the Unit Fleet Manager.

### List of Components:

- A. 2 - ½" x ½" x 2" Tube Spacers, .0625 wall thickness
- B. 4 - ½" x ½" x 5" Tube Spacers, .0625 wall thickness
- C. 2 - ½" x ½" x 11 7/8" Tube Spacers, .0625 wall thickness
- D. 16 – Rivets
- E. 10 – Bolts
- F. 1 – Screen with 4 ¾" louvers ([see attached drawing](#)).

Components listed above for tube spacers (items A, B, and C and D) are needed for early style CCV windows (LeVann) model. Later style windows (Hehr) do not require a tube frame, as the screen can be mounted to the window frame without impeding the swing arc travel. In all cases, screens shall be beveled 15 degrees at ends to ensure the swing arc travel is maintained as well as to keep brush and debris from damaging screen/window. Contact the Unit Fleet Manager to assist in window model identification.

Window screen packages may be ordered through the Conservation Camp program. *Camps to be identified.* Packages will require assembly and fitting after receipt. In all instances, whether ordered through the Camp program or fully fabricated at individual locations, all guidelines shall be followed, including material selection, installation, inspection and reseal.

**Note:** Previous window screen installations shall meet or exceed these requirements, and will require modification prior to reinstallation, including louvered pattern.

**Note:** Louvers are directional and shall be installed at original screen/window opening location, forward facing, to optimize air flow.

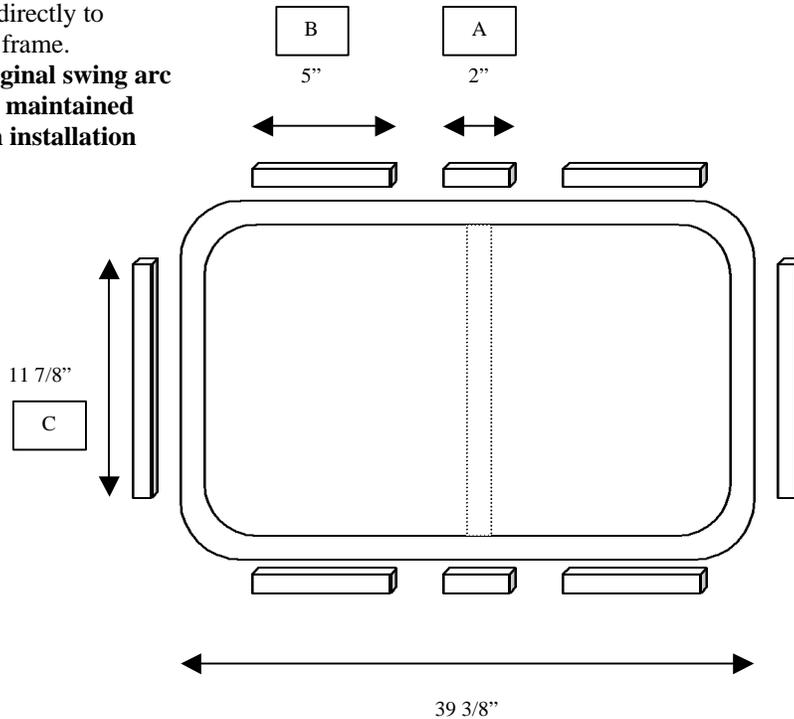
# CCV Window Screen Specifications

## List of Components

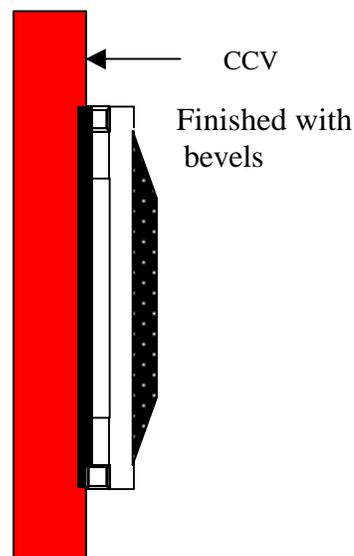
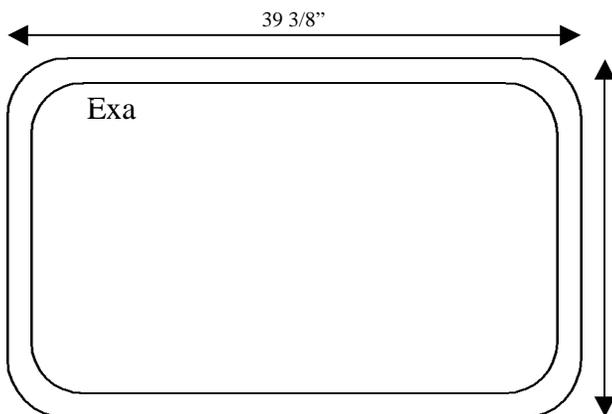
A	2 - 1/2" x 1/2" x 2" Tube Spacers
B	4 - 1/2" x 1/2" x 5" Tube Spacers
C	2 - 1/2" x 1/2" x 11 7/8" Tube Spacers 16 - Rivets

Frame illustration is shown to complete installation for early style (Levann) windows. Later model windows do not require frame, as screens can be fastened directly to the window frame.

**NOTE: original swing arc travel must maintained after screen installation**



Approximate dimension of screen, material may need to be trimmed to fit



Screen: 16 gauge perforated sheet with 3/32" diameter holes.

Holes are punched in a staggered pattern, with hole centers placed at 5/32" apart.

Ref. [www.McNicholsCo.com](http://www.McNicholsCo.com)