## Detention Hardware

## Heavy Weight Concealed Bearing Prison Hinges

IHTCB1901R - (ANSI A8111) - 3 knuckle - full mortise - steel - phosphated and painted
IHTCB1961R - (ANSI A5111) - 3 knuckle - full mortise - stainless steel - satin finish (32D)

- Specially designed for detention facilities
- Limited lifetime warranty
- Concealed bearing for trouble free, long life - no oil, no grease, no maintenance
- Sloped ends deter hangings
- Stainless steel, hardened, free turning, completely concealed pin
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Hinges can be furnished as follows:
- with concealed switch (CS)
- with current conducting feature (CE)
- with shear resistant studs (SRS)
- with 1/4-20 punching


Shear Resistant Stud

| Size Open |  | Gauge of Metal |  | Number of Flat Head Security Machine Screws Per Hinge |  | Quantity Per Box | Quantity Per Carton | Carton Weight |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inches | (mm) | Inches | (mm) |  |  | Los. |  | (Kg) |
| $41 / 2^{\prime \prime} \times 41 / 2^{\prime \prime}$ | $(114 \times 114)$ | . 180 | (4.6) | $8-12-24 \times 1 / 2$ | $8-12 \times 11 / 4$ |  | 3 ea. | 36 ea. | 54 | (24.5) |
| $5^{\prime \prime} \times 41 / 2^{\prime \prime}$ | $(127 \times 114)$ | . 190 | (4.8) | $8-12-24 \times 1 / 2$ | $8-12 \times 11 / 4$ | 3 ea. | 24 ea. | 42 | (19) |

## Suggested Specifications

Institutional type hinges should be fabricated from wrought steel or stainless steel. All dimensions as to size, thickness, and screw holes shall conform to ANSI-A156.7 "Standard for Template Hinge Dimensions". Both lateral and vertical loads will be accommodated by bearings which include anti-friction, self-lubricating materials. Pins shall be non-removable. The top and bottom ends of the hinge barrel shall be contoured to a uniform slope.
Hinges shall be tested to cycle a 300 lbs . ( 136 Kg ) door a minimum of $2,500,000$ times, $\left(0^{\circ}-90^{\circ}-0^{\circ}\right)$, installed in accordance with ANSI-156.1 type test fixtures. Vertical wear shall not exceed $.030^{\prime \prime}(.76 \mathrm{~mm})$ and lateral wear shall not exceed .060 " ( 1.5 mm ).
All hinges shall be subjected to a Door Impact Test in accordance with ASTM F1758-96 Standard Test Method for Detention Hinges Used on Detention-Grade Swinging Doors. They shall be capable of withstanding 200 repetitive blows of 200 foot pounds. (271.2-J) of force delivered on the door within 6 " (152m) of each hinge.

