

# Security Hollow Metal

Detention Hollow Metal Doors & Frames

Commerical Hollow Metal Doors & Frames

Leading Innovator of Security Products for Over 80 Years



## Detention Security Doors and Frames

Trussbilt's detention hollow metal products are used in prisons, jails, juvenile facilities and detention centers worldwide. With over 4000 successfully completed projects over the last 50 years, Trussbilt has the highest installed base in the country. We have pioneered rigorous standards for detention applications, helping to develop testing and performance standards used today across the country. We are ISO 9001:2000 certified and have been ISO certified since 1998.

Trussbilt's proprietary software system, TEAMS (Trussbilt Engineering Automation System), gives us a substantial advantage over our competitors. TEAMS makes Trussbilt the industry leader in on-time delivery and gives us the ability to manufacture what you need, when you need it. This advanced software system, combined with state-of-the-art equipment, a talented workforce, and a customer oriented business philosophy, makes us the most flexible hollow metal company in the industry.

Our flexibility allows designers, security consultants and architects

to maximize their expertise and creativity when designing secure and safe facilities.

Trussbilt works closely with national and regional architectural and security consultants, collaborating on the design of safe, secure, innovative and cost effective hollow metal products. Our Engineering and Research & Development staff members work with design-build teams, bringing Trussbilt's extensive experience and substantial detention products portfolio to the design effort. Trussbilt enjoys solid, long term relationships with detention equipment contractors. We are strong supporters of the DEC community and work hard to maintain these relationships.

Trussbilt's substantial retrofit experience means we can help modernize existing detention facilities. Our retrofit food passes, vision kits and lock pockets can be installed in security doors; frame retrofits include electrified lock pockets, intercoms, and door position switches. Trussbilt has helped upgrade hundreds of outdated detention facilities nationwide to current detention standards.



In total, our long experience, state-of-the-art manufacturing environment, flexible systems, strong industry relationships, and commitment to customer service mean Trussbilt will deliver high quality detention products on time, every time.



## Trussbilt Security Hollow Metal

## Detention Security Doors

Trussbilt doors are fabricated using Trusscore, a unique internal reinforcement system invented by Trussbilt in 1926. The Trusscore design gives us the ability to manufacture the strongest door in the marketplace at a weight 20% lighter than competing brands. Because of this innovative, lightweight construction, our doors will not overly fatigue expensive hardware and locking mechanisms, reducing lost time and costs associated with repairs and maintenance.

Trusscore is a truncated, triangular, roll-formed steel section extending continuously from one door face to the other. It spans the full length and width of the door. Trusscore is spot welded every 3" vertically and every 2 <sup>3</sup>/<sub>4</sub>" horizontally.

Special welding machines fuse the door face sheets to the Trusscore, forming a single welded structure. This design gives the door strength analogous to the structural strength of an I-beam. A typical Trusscore door has over 800 weld points, nearly 50% more than competing brands. This unified structure results in the strongest door on the market, one that will not delaminate over time.

Trussbilt doors are custom built to architectural specifications and can accommodate requirements for:

- larger size
- · bullet resistance
- vision and hardware configurations
- security level
- fire rating, including temperature rise
- cuff and shackle ports, with plate, flush and sliding options
- electrical or mechanical intercoms
- Trussbilt's Safe-T-Feed device
- lead lining
- additional vision reinforcement using wire mesh or bar grille
- speakers
- · louvers
- shutters

All options are available for both sliding and swing doors.

Trussbilt also offers the following value-added options to minimize field costs:

- · factory hardware installation
- factory glass/glazing installation
- factory hanger and guide installation



gives us the ability

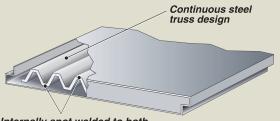
to manufacture the

strongest door in the

marketplace at a weight

20% lighter than

competing brands.



Internally spot welded to both face sheets 3" on center





## Trussbilt Security Hollow Metal

## Detention Security Frames

Trussbilt door frames, borrowed light frames, exterior window frames and curtain wall frames are fabricated using the most up-to-date equipment and software in the industry. Trussbilt's experience, flexibility and superior quality lead to on-time submittal drawings and deliveries, virtually guaranteeing a successful hollow metal installation.

Trussbilt frames are custom built to architectural specifications and can accommodate any requirement for:

- size and shape (includes arches, trapezoidal and tilt-out variations)
- vision and hardware configurations
- · security level
- fire rating
- bullet resistance
- electrical or mechanical intercoms
- glazing, infill, panel or wire mesh applications
- speak-through frame jambs for visitation areas
- lead lining
- key/paper pass
- · transaction drawers
- · thermobreak frames

- rough buck frames
- split frames
- round bars, mild steel or TR steel
- receiver columns

When inmate supervision is a concern, size does matter, and Trussbilt can fabricate borrowed light and curtain walls to the designer's maximum size. Entire walls can be designed as glazed window frames to maximize visual supervision in day rooms, recreation yards and visitation areas. These frames, as well as those in control rooms, can be additionally reinforced with heat treated bar or security wire mesh.

Our standard primer is specially formulated to withstand the rigors of the typical construction site. We also focus on preventing grout leaks by first covering hardware preps and screw holes with standard grout protection, then caulking them for double protection.



Flexibility and superior quality lead to on-time submittal drawings and deliveries to assure successful installations.



## Detention Hollow Metal Finishes

Trussbilt uses a high solid, low V.O.C. two-part urethane primer specially formulated for us by Four Seasons, a Diamond Vogel company. Our five stage cleaning system for frames uses a high pressure wash and phosphatizing station complete with an RO seal/rinse final stage. Doors are pressure sanded over the entire surface to ensure 100% primer adhesion.

Trussbilt recommends that all exterior doors and frames be fabricated using A60 galvannealed steel. Galvannealed steel has been successfully used by the auto industry for many years. For highly corrosive conditions our stainless steel series 409 is recommended, and series 304 is available.

## Code and Specification Complance Testing

Trussbilt pioneered many of the standard test methods used today. We belong to both HMMA and ASTM and comply with the following standards:

• HMMA 863

Guide Specifications for Detention Security Hollow Metal Doors and Frames

• ASTM F 2322

Standard Test Methods for Physical Assault on Vertical Fixed Barriers for Detention and Correctional Facilities

• ASTM F 1450

Standard Test Methods for Hollow Metal Swinging Door Assemblies for Detention and Correctional Facilities (Passes Security Level 1)

- Door Assembly Impact Load Test
- Door Static Load Test
- Door Rack Test
- Door Edge Crush Test
- ASTM F 1592
- Standard Test Methods for Detention Hollow Metal Vision Systems (Passes Security Level 1) – Single Light and Multi Light Assembly Impact Test
- Fire rating with UL and ITS, Intertech
  Testing Services
- Bullet Resistance Test UL-752

# **IA 863**

# 2322

## Integrated Security Systems

Trussbilt security products include doors, frames, cell walls (TrussWall), and ceiling systems (TrussDek, BarrierDek and SecureDek). We can help design complete, integrated secure space for minimum, medium or maximum security facilities. This integration across product lines gives architects, builders and owners the assurance of a single source security system backed by Trussbilt's experience, unsurpassed quality, and commitment to customer satisfaction.





## Commerical Security Hollow Metal

Using the same technologies as those used in our industry-leading detention hollow metal products, Trussbilt manufactures high quality hollow metal, wall and ceiling products for the commercial arena. These products meet security requirements posed by a variety of threats.

#### **Homeland Security/Terrorism**

Trussbilt's security walls, doors and frames are bullet and blast/pressure resistant, protecting facilities from forced entry and destructive actions. Military installations, petrochemical manufacturing plants, refineries, courthouses, power plants, water works, laboratories, airports and schools can all benefit from the extra security provided by our commercial security hollow metal.

#### **Severe Weather**

Trussbilt products have proven their ability to stand up to flying debris associated with tornadoes and hurricanes. They can be used in single family/residential construction as well as in shelters for multiple families and commercial facilities.

#### **Burglary and Vandalism**

Trussbilt products provide maximum security for residential and commercial Safe Rooms. Their light weight means they can easily be installed in high rise facilities, and TrussWall's innovative design makes it especially appropriate for retrofits. Similarly, businesses may need burglar and vandal-resistant products for their storefronts, rear entries, computer rooms, or areas holding highly proprietary equipment and information. And, in non-detention areas in correctional facilities, such as administrative offices, vocational and educational areas, laundry rooms, and food stores, Trussbilt commercial hollow metal can provide an extra level of security.

All Trussbilt commercial security products are available with the following options:

- · fire ratings
- thermal break properties
- lead-lining
- · pre-finished surfaces
- bullet resistance



We use the same technologies that provide security in a detention setting to meet security requirements posed by homeland security/ terrorism, severe weather, burglary and vandalism.



### Leading Innovator of Security Products for Over 80 Years

Trussbilt has designed and manufactured high quality security products since 1926. Trussbilt's products are used in over 2,000 prisons throughout the world.

- TrussWall Security Walls
- Security Ceilings
- Detention Doors and Frames
- Safe-T-Feed Food Pass System
- Detention Furnishings

We have developed and pioneered performance tests that demonstrate the superiority of hollow metal fabrication for security. Trussbilt's racking load test, static load test, impact test and edge crush load test have become industry standards.

Our expertise and experience position us as the detention industry's market leader.





#### www.trussbilt.com

#### **GENERAL OFFICES**

ISO 9001:2000 Certified

The product detail and specification information provided herein reflects past experience and is for reference purposes. Trussbilt reserves the right to modify designs and specification requirements. Details will be provided to meet project specification requirements or upon request for specific applications.

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