STEEL DOORS & FRAMES
ENJOY THE FREEDOM TO DESIGN ANYTHING
100 Millennium Blvd.
Moncton, NB, Canada

www.apexindustries.com
OUR PRODUCTS

ENJOY THE FREEDOM TO DESIGN ANYTHING

As a manufacturer with decades of experience, we’ve seen and built a lot of different types of doors, frames and windows. We manufacture and stock a complete line of standard designs, but what we truly excel in is our ability to make any architectural plan a reality: any size, any space, and any purpose. We make it happen with ease.

• Custom doors and frames
• Detention doors and frames
• Stainless steel doors and frames
• High security doors and frames
• Fire-rated doors and frames

OUR COMMITMENT

WE PROVIDE TOTAL SATISFACTION FROM BEGINNING TO END

Customer satisfaction comes naturally to us. Our team of dedicated project managers and professional staff work alongside customers to meet their needs and to remove the headache that can come with dealing with doors and frames.

Whatever your schedule, whatever your particular need, our people will make it happen.
Our custom capabilities are second-to-none, with custom profiles and sizes available for any project.

Our products are manufactured from steel ranging from 10-gauge to 20-gauge, and include products from true radius frames, to arched frames and doors, and everything in-between.
DETENTION

Apex Industries is a leading manufacturer of custom detention products and can customize to any project specification.

STAINLESS

Unlike many manufacturers, we are able to work with stainless steel up to 10-gauge, and can produce doors and openings of any size, design or specification.
OUR PROJECTS

WE HAVE A DEEP RANGE OF EXPERIENCE

Our depth of experience includes a wide-range of projects. Our portfolio of work includes schools, hospitals, office buildings, care facilities, industrial, retail, post-secondary, pharmaceutical, commercial applications and others. Additionally, our proximity to highway, rail, and ports allows us to ship to destinations all around the globe. Some of our high-quality projects include:

- Harvard Medical School
- University of Delaware
- Massachusetts Correctional Institution
- Lexington Policy Facility
- World Trade Center West
- East Boston Health Center
- Massachusetts General Hospital
- Holy Cross College Hall
- Tufts University Dental School
- MIT Graduate Housing
- Sheraton Boston - Phase 1 & 2
- Boston College Administration Building
- Sun Microsystems, Boston
- Olin College
- Berklee School of Music

Levi Heywood Memorial Library  » Gardner, Massachusetts
• Fordham University
• West Point Military Academy
• Portsmouth Regional Hospital
• Amgen, Boston
• Teradyne, Boston
• AstraZeneca Pharmaceuticals, Boston
• Millennium Village Project, Qatar
• Grantley Adams International Airport, Barbados
• Berkeley Institute Senior School, Bermuda
• Dubai International Airport, U.A.E
• Canadian High Commission, London, England
• Canadian Embassy, Beijing, China
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APEX INDUSTRIES
WE ARE A DIVERSE COMPANY BUILT ON QUALITY AND SERVICE

Since 1966, Apex has been manufacturing doors and frames for world-class clients all over the globe. Our success stems from our commitment to product quality, uncompromising customer service, category-leading innovation and by surrounding ourselves with the best people in the industry.

Our customer portfolio in North America and beyond is a veritable “who’s who” of companies. A sample of the organizations we’ve worked with include:

CONTRACTORS
• Turner Construction
• Suffolk Construction
• Fluor Corp.
• PCL Construction
• Skanska USA
• Tutor Perini
• Ellis Don
• Morganti/American International Contractors
• Clark Builders

ARCHITECTS
• Jacobs
• Elkus Manfredi Architects
• CBT Architects
• Payette
• Kasian Architecture
• Goody Clancy
• Skidmore, Owings & Merrill
• Robert A. M. Stern Architects

Printed in Canada
Our in-house machinery allows us to manufacture a wide-range of custom sizes and gauges of steel.

**AFFILIATIONS & ACCREDITATIONS**

- Door and Hardware Institute (DHI)
- National Association of Architectural Metal Manufacturers (NAAMM)
- Hollow Metal Manufacturers Association (HMMA)
- Detention Equipment Manufacturers Association (DEMA)
- American Correctional Association (ACA)
- ITS – Warnock Hersey
- Canadian Steel Door Manufacturers Association (CSDMA)
STEEL SPECIFICATIONS

ASTM A653/A653M-05a, specification for steel sheet, zinc coated (galvanized) or zinc-iron alloy coated (galvannealed) by the hot-dip process.

- A40 (ZF120)
- A60 (ZF180)
- G90 (ZF275)

Our galvannealed steel can be easily painted, however we do offer fully primed steel doors and frames.

ASTM A240/A240M Standard specification for chromium and chromium-nickel stainless steel plate, sheet, and strip for pressure vessels as well as for general applications.

- Type 304 #4 Finish
- Type 316 #4 Finish

FIRE RATINGS – INTERTEK WARNOCK HERSEY

Our products comply with the following:

- NFPA 80 National Fire Protection Association standard for fire doors and other opening protectives;
- UL 10 C Underwriters Laboratory standard for positive pressure fire tests of door assemblies;
- UBC-7-2 Uniform Building Code Standard for positive pressure fire tested door assemblies; and,
- CAN/ULC S104-10 Standards Council of Canada standard method for fire tests of door assemblies

SUSTAINABILITY

Apex Industries Inc. is committed to environmental responsibility and good stewardship of the earth’s resources. Apex has developed a comprehensive recycling program sending all scrap metal, paint and cooling fluids to local recyclers. We also recycle wooden transport pallets and use low VOC paints and primers.

Total recycled content of galvanized steel used in our doors and frames is 89.7% recycled steel scrap, with 33.3% post-industrial scrap and 50.6% post-consumer scrap. Our steel complies with the recycled content (credit 4) under the LEED rating system and can be credited with the maximum number of points for the materials credit aspect of the rating system.
HOLLOW METAL DOORS
10 SERIES | LAMINATED CORE

- Construction meets the requirements of ANSI A250.8 2003, ANSI / NAAMM / HMMA 861
- Door thickness 1 ¾” (45mm)
- Full height, adhesive filled, mechanically interlocking edge construction
- Beveled hinge and lock edges 1/8” in 2”
- High frequency 10-gauge hinge reinforcements at all hinge locations
- Welded 16-gauge top and bottom inverted channels
- Fire rated up to 3 hours

Steel Options
- A-40 (ZF-120) Galvanneal Steel
- A-60 (ZF-180) Galvanneal Steel
- G-90 (ZF-275) Bright Galvanized Steel
- Stainless steel 304, 316, #4 finish

Gauge Options
- 20-Gauge
- 18-Gauge
- 16-Gauge
- 14-Gauge

Core Options
- Honeycomb
- Polystyrene
- Polyurethane

Edge Options
- Exposed lock seam
- Seamless – Tack welded filled seam
- Seamless – Continuously welded edge seam

16-GAUGE CLOSER REINFORCEMENT BOX
HONEYCOMB
OR
POLYSTYRENE
OR
POLYURETHANE
LOCK REINFORCING BOX

EXPOSED EDGE SEAMS ON STANDARD DOORS. (SEAMLESS DOORS AVAILABLE)

TOP & BOTTOM SKINS ARE FULLY BONDED TO CORE.

16-GAUGE TOP & BOTTOM CHANNEL WELDED TO FACE SHEETS
HOLLOW METAL DOORS
20 SERIES | STEEL – STIFFENED

- Steel stiffeners offer increased durability and security
- Steel stiffeners can be laminated or welded to face sheets
- Construction meets the requirements of ANSI A250-8 2003, NAAMM / HMMA 861, 867
- Door thickness 1 ¾” (45mm)
- Full height, adhesive filled mechanically interlocking edge construction
- Beveled hinge and lock edges 1/8” in 2”
- High frequency 10-gauge hinge reinforcements at all hinge locations
- Welded 16-gauge top and bottom inverted channel
- Fire rated up to 3 hours

**Steel Options**

- A-40 (ZF-120) Galvanneal Steel
- A-60 (ZF-180) Galvanneal Steel
- G-90 (ZF-275) Bright Galvanized Steel
- Stainless steel 304, 316, #4 finish

**Gauge Options**

- 20-Gauge
- 18-Gauge
- 16-Gauge
- 14-Gauge

**Core Options**

- Polystyrene
- Honeycomb
- Polyurethane
- Mineral wool
- Rigid fiberglass

**Edge Options**

- Exposed lock seam
- Seamless – Tack welded filled seam ground smooth
- Seamless – Continuously welded edge seam
HOLLOW METAL DOORS
30 SERIES | EMBOSSED

- Construction meets the requirements of ANSI A250.8 2003, ANSI / NAAMM / HMMA 861
- Door thickness 1 ¾” (45mm)
- Full height, adhesive filled mechanically interlocking edge construction
- Beveled hinge and lock edges 1/8” in 2”
- High frequency 10-gauge hinge reinforcements at all hinge locations
- Welded 16-gauge top and bottom inverted channels
- Fire rated up to 3 hours

Steel Options
A-40 (ZF-120) Galvanneal Steel

Gauge Options  Core Options
18-Gauge    Honeycomb  Polystyrene

Edge Options
Exposed lock seam
Seamless – Tack welded filled seam ground smooth
Seamless – Continuously welded edge seam
Temperature rise doors limit the transmission of heat for a period of time. These doors are built with a core that is specifically designed to restrict the transmission of heat.

- Construction meets the requirements of ANSI A250-8 2003, NAAMM / HMMA 861, 867
- Door thickness 1 ¾” (45mm)
- Full height adhesive filled, mechanically interlocking edge construction
- Beveled hinge and lock edges 1/8” in 2”
- High frequency 10-gauge hinge reinforcements at all hinge locations
- Welded 16-gauge top and bottom inverted channel
- Fire rated up to 3 hours

### Steel Options

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<tr>
<td>A-40 (ZF-120) Galvanneal Steel</td>
<td>Temperature rise rated (TRR) core for ratings of 250 F (120 C), 450 F (250 C) and 650 F (340 C) at 30 or 60 minutes</td>
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### Gauge Options

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### Edge Options

- Exposed lock seam
- Seamless – Tack welded filled seam ground smooth
- Seamless – Continuously welded edge seam
Detention security hollow metal doors are the standard in prisons, jails, courthouses, police stations, and detention centers throughout the world.

Construction meets and exceeds industry performance standards and are third-party (ITS Warnock Hersey) tested to:

- ANSI / NAAMM / HMMA-863, ASTM-F1450 criteria
- 2” (50mm) door thickness standard
- Static load test
- Rack test
- Door impact test
- Glazing stop impact test
- Fire rated up to 3 hours

**Steel Options**
- A-40 (ZF-120) Galvanneal Steel
- A-60 (ZF-180) Galvanneal Steel
- G-90 (ZF-275) Bright Galvanized Steel

**Gauge Options**

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**Core Options**

**Edge Options**
- Continuously welded edges
- Continuously welded flush top and bottom end channels

**Steel Options**

- A-40 (ZF-120) Galvanneal Steel
- A-60 (ZF-180) Galvanneal Steel
- G-90 (ZF-275) Bright Galvanized Steel

**Gauge Options**

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**Core Options**

**Edge Options**
- Continuously welded edges
- Continuously welded flush top and bottom end channels
DOOR DETAILS

END CHANNELS

STANDARD TOP & BTM END CHANNELS

16-GAUGE END CHANNEL

STEEL CAP WELDED OPTION

PVC TOP CAP

PROJECTION WELDED TO BOTH SIDES

DOOR EDGES

STANDARD EXPOSED LOCK SEAM

ADHESIVE FILLED

EXPOSED LOCK SEAM TACK WELDED

LOCK SEAM CONTINUOUSLY WELDED ENTIRE HEIGHT OF DOOR GROUND SMOOTH & BODY FILLED SEAMLESS EDGE

LOCK SEAM TACK WELDED BODY FILLED & GROUND SMOOTH SEAMLESS EDGE
DOOR HARDWARE REINFORCEMENTS

CYLINDRICAL LOCK REINFORCEMENTS

- Cylindrical lock reinforcements
- Mortise lock reinforcements

MORTISE LOCK REINFORCEMENTS

- Door top skin
- Door bottom skin
- 12-gauge lock reinforcement
- 16-gauge lock reinforcement box (4.5" x 14.5 x 1.625")
- Projection welds
- 12-gauge offset clip
- (1) 12-24 tapped holes
- 8" x 1.1875 cut/ out for lock front
- Mortise lock holding clips
- Holes as per specific template

HIGH FREQUENCY HINGE REINFORCEMENT

- Door top skin
- Door bottom skin
- 12-gauge lock front
- Projection welds
- 4.5" x 1.25" x 10-gauge hinge reinforcement
- (4) 12-24 tapped holes
- 8" x 1.1875 cut/ out for lock front
- 16-gauge lock reinforcement box (4.5" x 14.5 x 1.625")
- High frequency hinge prep
LITE KITS

STANDARD SNAP-IN KIT

THERMAL GLASS KIT

OPTIONS

**Other lite options available**
PRESSED STEEL FRAMES

12-GAUGE CLOSER REINFORCEMENTS

HIGH FREQUENCY 10-GAUGE HINGE REINFORCEMENT

STEEL STUD ANCHOR (SPOT WELDED)

WOOD STUD ANCHOR (SPOT WELDED)

EXISTING WALL ANCHOR

FIXED FLOOR ANCHOR (SPOT WELDED)

CORRUGATED TAIL ANCHOR (SPOT WELDED)

MASONRY WIRE ANCHOR (SHIPPED LOOSE WITH FRAME)

FLUSH STEEL STUD ANCHOR

T ANCHOR

TYPICAL CORNER ASSEMBLY

Tabs and slots interlocking (not welded)

SIDE VIEW

MACHINE MITERED, CONTINUOUS WELD

TOP VIEW

12-GAUGE CLOSER REINFORCEMENTS

SPREADER BARS

12-GUAE CLOSER REINFORCEMENTS

TYPICAL CORNER ASSEMBLY

SLOT

SCREW HOLE

TABS

Jam tabs into head slots or attaches with screws

SIDE VIEW

MACHINE MITERED, CONTINUOUS WELD

TOP VIEW

12-GAUGE CLOSER REINFORCEMENTS
PROFILES

DOUBLE RABBIT, SINGLE RETURN  
DOUBLE RABBET, DOUBLE RETURN  
SINGLE RABBET, SINGLE RETURN (DOUBLE RETURN AVAILABLE)

DOUBLE EGRESS  
THERMAL BREAK FRAME  
THERMAL BREAK MULLION

DOUBLE RABBIT MULLION  
CENTER GLAZED, DOUBLE RABBIT  
CENTER GLAZED, MULLION

SLOPPED SILL  
SHADOW LINE  
CASED OPEN FRAME (SINGLE RABBIT, DOUBLE RETURN AVAILABLE)

CUTOFF (SANITARY) STOPS  
6’ MAXIMUM HEIGHT AT FIRE RATED OPENINGS

FIELD SPLICES FOR LARGE MULTI-OPENING FRAMES

1. To facilitate handling and/or shipping, large frames are spliced and prepared in the shop of mechanical attachment or field welding by others.

2.

3.

45 degree closed end
90 degree closed end
SPECIAL FRAMES
CUSTOM FRAMES MADE TO ORDER

ROUND

ARCHED

TRUE RADIUS

SECTION OF ROLLING BORROWED LITES

SEGMENTED FRAME

ELEVATION

PLAN VIEW
SPECIALTY DOORS AND FRAMES

IF YOU DESIGN IT... WE WILL SUPPLY IT

Apex’s true strength is our ability to manufacture a broad range of specialty doors and frames. This includes custom sizes, profiles, true radius and arched doors/frames, all manufactured from steel in the range of 20- to 10-gauge.

- Stainless steel doors and frames (304, 316, #4 finish)
- Lead lined doors and frames
- High security/bullet resistant/forced entry doors and frames
- Detention doors and frames
- Fire rated doors and frames