

# Index

Introduction	
List of References  Educational	4-5
Medical Care Municipal, Military and	6
Governmental	7
Corporate, Retail and Commercial Hotels	8 9
Libraries and Casinos	10
Hollow Metal Doors	
General Information	11
Door Details	12 13
1100 Polystyrene Core 1200 Steel Stiffened	13 14
1500 Lead Lined	14
1300 Temperature Rise	15
1600 Dutch Doors	16-17
Hollow Metal Frames	
General Information	18-19
Welded Frames	20
Knockdown (KD) Frames	21
Pocket Frames	22
Custom Frames	23
Tornado Resistant Opening	24
1400 FEMA Frame and Shutter	25-26
1400 FEMA Door and Shutter	27
Leadership in Energy and Environmental Design	28
Contact Information	29
Buy America Act	30
Certifications	30



Rocky Mountain Metals, Inc., is a manufacturer of Standard and Custom Hollow Metal Door and Frame Products located in Raton, New Mexico, just south of the Colorado border. Established in 1988, the company has over the years, supplied hollow metal products to numerous types of facilities from small offices and schools, to prestigious corporate headquarters, hospitals and exclusive hotels.

We offer excellent service with short lead times and very competitive prices. Customized and quick quoting as well as order processing through our knowledgeable and experienced staff. By the attached references, we hope that you get an understanding of not only our capabilities, but also that we are dependable and reliable. A partner you can count on.

Rocky Mountain Metals, Inc. is continually expanding capabilities, improving efficiencies and upgrading production facilities to meet today's high standards for quality and customer service. Our product program consists of among others:

#### **Hollow Metal Frames**

- Face and fully welded door and window frames. From standard frames to complex customized frame configurations. If you can design it, we can build it
- Lead lined door and window frames
- Knock down frames for welding and drywall applications
- Pocket frames

#### **Hollow Metal Doors**

- Polystyrene core construction
- Steel stiffened doors
- Lead lined doors
- Temperature rise doors
- Dutch doors

#### **Openings Solutions**

Classified to FEMA P-361 (2015) and certified to ICC 500 (2014)

Labeling and fire rating under the procedures from Underwriters Laboratory (UL). Rocky Mountain Metals, Inc. is authorized to label three-sided frames and doors for up to three hours and sidelights and windows for up to 90 minutes.

All our products qualify for full LEED Credits for recycled content MR.4.1 and 4.2, as they contain more than 25% recycled material as per the LEED Definitions (100% of Post Consumer and 50% of Pre Consumer Recycled Content).

We are a member of the National Association of Architectural Metal Manufacturers (NAAMM) and Hollow Metal Manufacturers Association (HMMA). Our products are manufactured in accordance with the applicable HMMA Standards such as HMMA 802-07 "Manufacturing of Hollow Metal Doors and Frames" and HMMA 841 -07 "Tolerances and Clearances for Commercial Hollow Metal Doors and Frames". Consequently, as per these standards, we meet and or exceed the applicable ANSI/SDI criteria.

We have an experienced management team in place with solid Hollow Metal background, as well as, experience from top level positions in the Door and Hardware Industry in the US and internationally.

Please take the time to review the information in this brochure to get a better understanding of our products and services we can provide. I hope that you will find this helpful enough to give us a chance to show what we can do for you in the areas of Standard and Custom Hollow Metal .

Sincerely yours,

Clas Thelin President

Clan Pull

### **Educational Facilities - Suitable solutions for any level**

Over the years we have supplied doors and frames to educational facilities all over the country. From small basic school facilities to state of the art universities and colleges. Our product program is constantly under development to cater to the ever changing life safety needs in this area. Additionally, our products are frequently used where complex and highly customized hollow metal solutions are chosen.

Greenway High School Thunderbird High School Tramonto Ridgeline Academy

Western School of Science and Technology

Mammoth Middle School San Diego State University Cherry Creek Middle School #11 Dakota Ridge State University American Academy

Dodge City High School USD 443 Sunnyside Elementary School

Unified School District #443 Soule Elementary

Lincoln Elementary School

Andre Agassi College Prep Academy

Clifford J. Lawrence Jr. High Hollingsworth Elementary School

Linda Rankin Givens Elementary School

Palo Verde High School Petersen Elementary School

Rancho High School UNLV Campus

Rio Grande High School

University of New Mexico Farris Engineering

Fort Wingate Elementary School New Mexico State University Grants

**Hobbs Schools** 

Santa Fe Indian School

West Las Vegas Middle School

Woodard Schools (FEMA)

More Educational listings are on the next page!

Phoenix, AZ

Phoenix, AZ Phoenix, AZ

Phoenix, AZ

Mammoth Lakes, CA

San Diego, CA

Aurora, CO

Littleton, CO

Parker, CO

Dodge City, KS

Dodge City, KS

Dodge City, KS

Hoisington, KS

Las Vegas, NV

Las Vegas, NV

Las Vegas, NV

Las Vegas, NV

Las Vegas, NV Las Vegas, NV

Las Vegas, INV

Las Vegas, NV

Las Vegas, NV

Albuquerque, NM

Albuquerque, NM

Fort Wingate, NM

Grants, NM

Hobbs, NM

Santa Fe, NM

Las Vegas, NM

Woodard, OK



New Mexico State University Grants Grants, New Mexico



Petersen Elementary School Las Vegas, NV

### **Educational Facilities - Suitable solutions for any level**

Over the years we have supplied doors and frames to educational facilities all over the country. From small basic school facilities to state of the art universities and colleges. Our product program is constantly under development to cater to the ever changing life safety needs in this area. Additionally, our products are frequently used where complex and highly customized hollow metal solutions are chosen.

University of Rhode Island-College of Pharmacy Adrian Independent School District Canyon Independent School District (FEMA) River Road Independent School District Antonian College Preparatory High School JFK Elementary School Lubbock Cooper Independent School District George W. Truett Elementary School **Decatur Elementary School** Dimmitt High School & Middle School Everman Joe C Bean High School TCU Annie Richardson Bass Building Frenship New Elementary School Sam Houston Elementary School Georgetown High School Texas Tech University—Architectural Bldg. Texas Tech University Horn Hall Texas Tech University Sports Performance Center Alice Ponder Elementary School **Brooks Wester Middle School** 

Glenn Harmon Elementary School J L Boren Elementary School Rogene Worley Middle School Barbara Fasken Elementary School Bynum Schools Southwest Elementary School **Austin Elementary** Judith A. Resnik Elementary School Taylor Independent School District **Boulter Middle School** Southwest Legacy High School

North Elementary School

Texas Christian University—Annie Richardson Bass Building—Fort Worth, TX

Adrian, TX Amarillo, TX Amarillo, TX Castle Hills, TX Corpus Christi, TX Cedar Park, TX Dallas, TX Decatur, TX Dimmitt, TX Everman, TX Fort Worth, TX Wolfforth, TX La Feria, TX Georgetown, TX Lubbock, TX Lubbock, TX Lubbock, TX Mansfield, TX Mansfield, TX Mansfield, TX Mansfield, TX Mansfield, TX Midland, TX Midland, TX Midland, TX San Angelo, TX San Antonio, TX Taylor, TX Tyler, TX Von Ormy, TX White Settlement, TX

Kingston, RI



**Texas Tech University Sports Performance Center** Lubbock. TX 5

## Medical Care Facilities - From clinics to full size hospitals

The width of our products as well as our capability to supply anything from a simple door opening to custom hollow metal configurations of almost any size and complexity has made us a favored choice when it comes to medical care facilities. We can competitively supply products and solutions on all different levels, from a small clinic to full scale hospitals like the VA Hospital in Denver and Walter Reed Army Medical Center. This has gained us substantial expertise in the special products and needs in this area.

Mayo Clinic	Scottsdale, AZ
Banner Estrella Medical Center	Phoenix, AZ
Clovis Community Medical Center	Clovis, CA
Veterans Affairs Hospital	Aurora, CO
D.I. Medical and Research Center	Denver, CO
Mercy Medical Life Safety	Denver, CO
Poudre Valley Hospital	Denver, CO
Greely Hospital	Greely, CO
Sterling Medical Center	Sterling, CO
St. Catherine Cancer Center	Garden City, KS



Georgetown Behavioral Health Institute Georgetown, TX



Walter Reed Medical Center Bethesda, MD

Annapolis Health Clinic Walter Reed Army Medical Center Walter Reed Behavioral Health Learning Center Henderson Hospital Mountain View Hospital Mountain View Regional Medical Sunrise Hospital UMC Trauma Center Behavioral Health Clinic Eufaula Indian Health (FEMA) Comanche County Memorial Hospital Conners State Allied Health & Nursing Facility Texas Rehabilitation Hospital Wolflin Medical Center	Annapolis, MD Bethesda, MD Bethesda, MD Henderson, NV Las Vegas, NV Las Vegas, NV Las Vegas, NV Fort Brigg, NC Eufaula, OK Lawton, OK Muskogee, OK Arlington, TX Amarillo, TX
Harmony Science Center Presbyterian Hospital	Cedar Park, TX Denton, TX
Forest Park Medical Center	Fort Worth, TX Fort Worth, TX
Mesa Springs Hospital Sundance Psychiatric Hospital	Garland, TX
Georgetown Behavioral Health Institute	Georgetown, TX
Greystar Texas Medical Center	Laredo, TX
Community Health Center	Lubbock, TX
J Cleo Wellness Center	Ozona, TX
CWC Health Science	Riverton, WY

## Municipal, Military and Governmental Facilities - Security and Safety

In today's society security and safety are top priorities for most municipal, military and governmental facilities. We are proud of the confidence that our customers put on us and our ability to provide this for different openings and other hollow metal solutions. With a strong base in the Colorado, Texas and Nevada areas we have also been trusted to provide supply our products to other areas.

Fort Mcclellan Army National Training Center (FEMA)

Davis-Monthan AFB-Aerospace Maintenance &

Regeneration Group F-35 Squadron Ops

4th ID CAB Consolidated Battalion HQ

Chemical Science Building Company Operations Facility **Division Headquarters** 

Mountain View Ops Visiting Officers Quarters German Air Facility

Taos County Administration and Detention

Cold Creek Prison

Clark County Detention Center

Federal Justice Tower Juvenile Treatment Facility

Las Vegas Metropolitan Police Department Las Vegas Metropolitan Police Department

- Fingerprint Bureau Regional Justice Center Visiting Officers Quarters

Lovelock Prison

McKinley County Justice Complex National Security and Science Building

Visiting Officers Quarters Sheppard Air Force Base **USPS** Distribution Center

Abilene Zoo

Visiting Officers Quarters DFW Airport Terminal E West Memorial Place Midland Municipal Courts

Bexar Metro 911 Call Center (FEMA)

MCESD #8 Fire Station (FEMA)

P-251 Training Facility & Hangar Naval Air Station Army Aviation

Anniston, AL

Davis-Monthan AFB, AZ

Luke AFB, AZ Fort Carson, CO Tinker AFB, OK Fort Carson, CO Fort Carson, CO

Buckley AFB, Aurora, CO

Peterson AFB, CO Holloman AFB, NM

Taos. NM

Indian Springs, NV Las Vegas, NV Las Vegas, NV Las Vegas, NV Las Vegas, NV

Las Vegas, NV Las Vegas, NV Nellis AFB. NV Lovelock, NV Gallup, NM Los Alamos, NM Altus AFB, OK Norman, OK Portland, OR Abilene, TX Dyess AFB, TX Dallas Ft. Worth, TX

Houston, TX Midland, TX San Antonio, TX Spring, TX

Whidbey Island, WA Warren AFB, Wyoming



**Clark County Detention Center** Las Vegas, NV

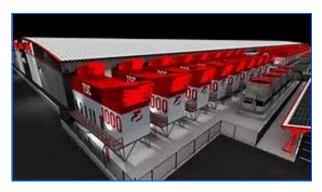
**Federal Justice Tower** Las Vegas, NV



## Corporate, Retail and Commercial Buildings - Image and cost efficiency

When it comes to corporate, retail and commercial buildings the top priorities are most often image and cost efficiency. You want to be able communicate strength and success but at the same keep things under pretty tight cost control. We have been trusted to support in these efforts by a number of very successful companies.

Intel Headquarters - Water Plant Albuquerque, NM Commerce, CO Rush Truck Center Village at the Peaks Longmont, CO ABC Studios New York, NY Ocean Spray III Henderson, NV Bonnie Lane Senior Housing Las Vegas, NV Hilton Executive Offices Las Vegas, NV Switch Super NAP 8 Data Center Las Vegas, NV Veer Towers at City Center Las Vegas, NV Mesa Microlab Albuquerque, NM Weapons Integration Facility Los Alamos, NM National Cowboy Hall of Fame Oklahoma City, OK Harley Davidson Dallas, TX KPMG Plaza at Hall Arts Dallas, TX Chase Building Farmers Branch, TX Fort Worth, TX Alcon Labs Facebook Data Center (FEMA) Fort Worth, TX Fort Worth, TX Pier One Headquarters Merrick Pet Foods Hereford, TX **Energy Plaza** Houston, TX West Memorial Place Houston, TX Lubbock, TX Cabela's



XTO Energy Office

Helmerich & Payne Facility Expansion

Switch SuperNAP 8 Las Vegas, NV



Midland, TX

Odessa, TX

West Memorial Place Houston, TX

## Hotels - Hospitality and comfort coupled with safety and security

With Nevada and Texas as a base, we are a trusted supplier to the hospitality industry. We have a proven track record to be able to support our customers need to provide a high level of comfort but at the same time not compromise the safety and security for their guests. Our products show up in a number of very prestigious facilities and also in more cost conscious environments.

Ritz Carlton
Adam's Mark Hotel
Vail Marriott
The Miami Beach EDITION Hotel
Embassy Suites
Hampton Inn
Howard Hughes Parkway
Mirage Hotel Theater Center

Polo Twin Towers Hilton Garden Inn

Winstar Hotel and Casino

Marriott North Marriott South Marriott

Hilton Garden Inn

Marriott

Hyatt

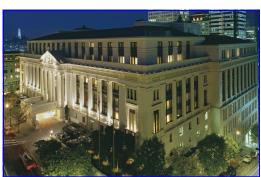
Townplace Suites

Sedona, AZ
San Francisco, CA
Denver, CO
Vail, CO
Miami, FL
Las Vegas, NV
Las Vegas, NV
Las Vegas, NV
Las Vegas, NV
Cas Vegas, NV
Cas Vegas, NV
Chas Vegas, NV
Chas Vegas, NV
Oklahoma City, OK
Thackerville, OK
Austin, TX

Austin, TX
Austin, TX
Ft. Worth, TX
Lubbock, TX
Plano, TX
Vernal, UT



The Miami Beach EDITION Hotel Miami, FL



Ritz Carlton San Francisco, CA



Hyatt Sedona, AZ



Marriott Vail, Colorado

#### **Libraries - Serenity and design**

We are proud of the trust we have been shown and the opportunity we have been given to be part of the more prestigious libraries in the country. These are buildings where design and the feel of serenity are top priorities and it is certainly prestigious for a hollow metal company like Rocky Mountain Metals to support this.

JFK Library Lied Library TCU Mary Couts Burnett Library Boston, MA Las Vegas, NV Fort Worth, TX

> JFK Library Boston, MA



### Casinos - Money, money, money...

Our base in Las Vegas has provided us with ample opportunities to supply products to some of the most prestigious casinos in the world. Our products have proven to provide the right level of security and aesthetics to cater to this demanding market.



Caesar's Palace Las Vegas, NV

The Orleans Hotel and Casino Las Vegas, NV

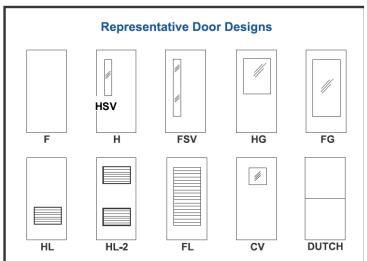


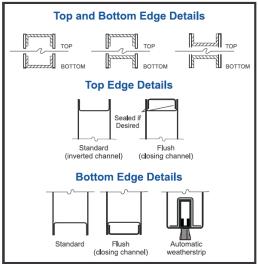


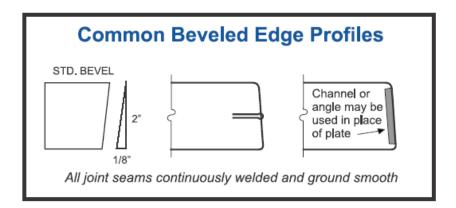
#### **Hollow Metal Doors**

#### A full line of Hollow Metal Doors

- 1100 Doors with Polystyrene Core
- 1200 Steel Stiffened Doors
- 1300 Temperature Rise Doors
- 1400 Doors for Tornado Solutions
- 1500 Lead lined Doors
- 1600 Dutch Doors







## **Manufacturing Tolerances**

Manufacturing tolerances shall be maintained within the following limits for Doors

Width +/- 1/32 in. (.08mm)

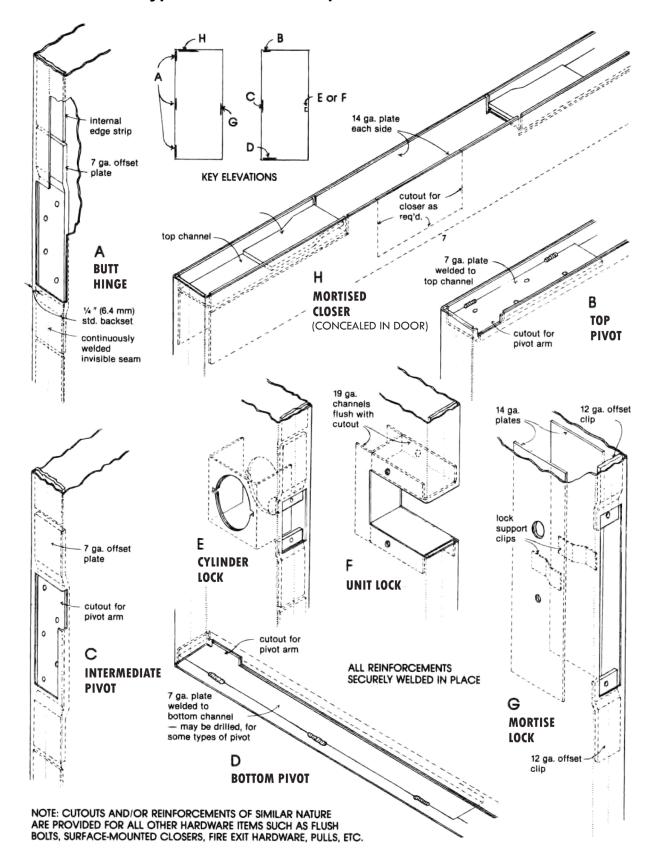
Height +/- 3/64 in. (1.2mm)

Thickness +/- 1/16 in. (1.6mm)

Hardware cutout dimensions/Template dimensions +0.015", -0"

Hardware location +/- 1/32 in. (.08mm)

## **Door Details - Typical Hardware Preparations**



## 1100 Hollow Metal Door with Polystyrene Core/Fire Rated

Face Material Galvannealed A40 or A60

ASTM-A-653

Face thickness 12, 14, 16 and 18 Ga.

Construction Rigid polystyrene core bonded to both face sheets

Door thickness 1 3/4" Standard

Hardware Locations Any specified locations

Reinforcements 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled and tapped

12 Ga. mortise hardware tabs, drilled and tapped 14 Ga. surface hardware and trim reinforcement

Edge reinforcement Both edges reinforced with 16 Ga. full length channels spot

welded to the face sheets

Vertical edges Fully welded with no visible seam (for doors up to 4' wide and 8'

height

Glazing/ Louvers Glazing stops to be set for 1/4" glass (3/8" space) unless other-

wise requested. Note: Glass should be cut 1/4" less than door cut out. Exposed glass opening is 1 5/16" less than cutout dimensions.

Louver size is actual size of door cutout

Handing Doors are handed

Appearance Faces and edges free of defects, warp and buckle

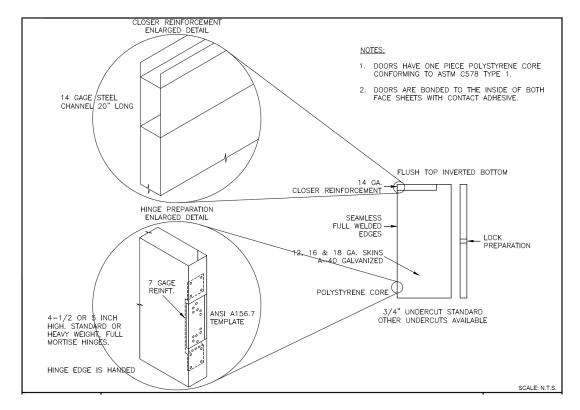
Finish Thoroughly cleaned and coated with a rust inhibiting primer meeting

requirements as per ANSI/SDI A250.10

Fire Rated 3 ft. wide, 7ft. High doors can be manufactured fire rated up to 3

hours. Hardware can be mortise or cylindrical locks. Mortise or rim type fire exit hardware. Surface mounted vertical rod type fire exit

hardware.



### 1200 Steel Stiffened Door / 1500 Lead Lined Door

Face Material Galvannealed A40 or A60

ASTM-A-653

Face thickness 12, 14, 16 and 18 Ga.

Lead Lining Center door lead lining (optional)

Construction Hollow metal with vertical steel stiffeners (ribs). Space between ribs

Insulated with glass wool insulation

Door thickness 1 3/4" Standard Hardware Locations Any specified location

Reinforcements 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled and tapped

12 Ga. mortise hardware tabs, drilled and tapped 14 Ga. surface hardware and trim reinforcement

Edge reinforcement Vertical and horizontal edges reinforced with 16 Ga. (min) full

length channels spot welded to the face sheets

Vertical edges Fully welded with no visible seam (for doors up to 10' height and

4' width)

Glazing/ Louvers Glazing stops to be set for 1/4" glass (3/8" space) unless other

wise requested. Note: Glass should be cut 1/4" less than door cut out. Exposed glass opening is 1 5/16" less than cutout dimensions.

Louver size is actual size of door cutout

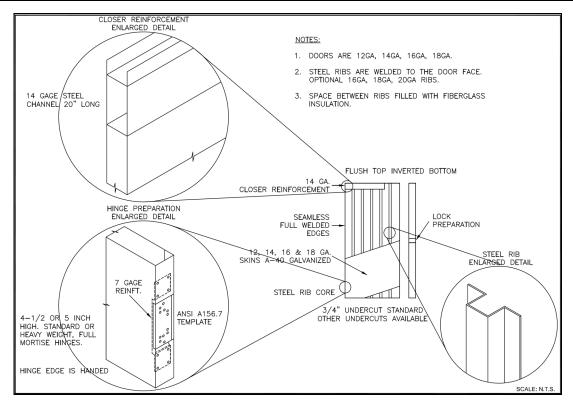
Handing Doors are handed

Appearance Faces and edges free of defects, warp and buckle

Finish Thoroughly cleaned and coated with a rust inhibiting primer meeting

requirements as per ANSI/SDI A250.10

Options UL Labeling requirements as specified



## 1300 Temperature Rise Door

Face Material Galvannealed A40 or A60

ASTM-A-653

Face thickness 12, 14, 16 and 18 Ga.

Construction Rigid mineral board core bonded to both face sheets

Door thickness 1 3/4" Standard

Hardware Location Any specified locations

Reinforcements 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled and tapped

12 Ga. mortise hardware tabs, drilled and tapped 14 Ga. surface hardware and trim reinforcement

Edge reinforcement Vertical and horizontal edges reinforced with 16 Ga. full length

channels spot welded to the face sheets

Vertical edges Fully welded with no visible seam (for doors up to 10' height and 4'

width)

Glazing Glazing stops to be set for 1/4" glass (3/8" space) unless other

wise requested. Note: Glass should be cut 1/4" less than door cut out. Exposed glass opening is 1 5/16" less than cutout dimensions.

Glass area up to 100 sq. inches.

Handing Doors are handed

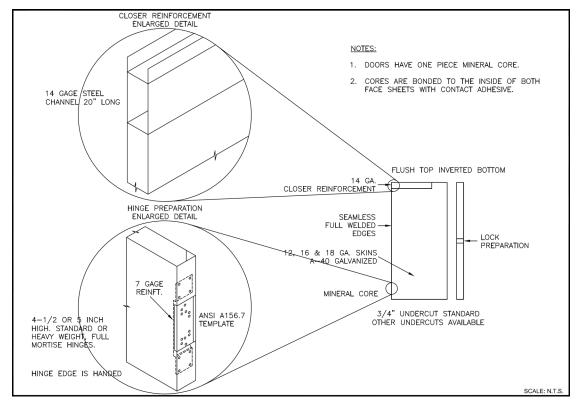
Appearance Faces and edges free of defects, warp and buckle

Finish Thoroughly cleaned and coated with a rust inhibiting primer meeting

requirements as per ANSI/SDI A250.10

Temperature 60-180 min. Labels available for 450 degree and 250 degree temp.

Options UL Labeling requirements as specified



### 1600 Dutch Doors

Face Material Galvannealed A40 or A60

**ASTM-A-653** 

Face thickness 12, 14, 16 and 18 Ga.

Construction Can be manufactured as a Polystyrene Core (1100 door) or Steel

Stiffened Door (1200 door)

Door thickness 1 3/4" Standard

Hardware Locations Any specified locations

Reinforcements 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled and tapped

12 Ga. mortise hardware tabs, drilled and tapped 14 Ga. surface hardware and trim reinforcement

Edge reinforcement Both edges reinforced with 16 Ga. full length channels spot

welded to the face sheets

Vertical edges Fully welded with no visible seam (for doors up to 4' wide and 8'

high)

Glazing/ Louvers Glazing stops to be set for 1/4" glass (3/8" space) unless other-

wise requested. Note: Glass should be cut 1/4" less than door cut out. Exposed glass opening is 1 5/16" less than cutout dimensions.

Louver size is actual size of door cutout

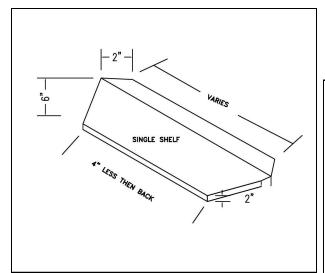
Handing Doors are handed

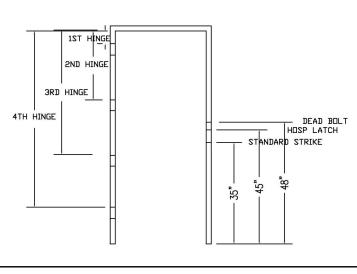
Appearance Faces and edges free of defects, warp and buckle

Finish Thoroughly cleaned and coated with a rust inhibiting primer meeting

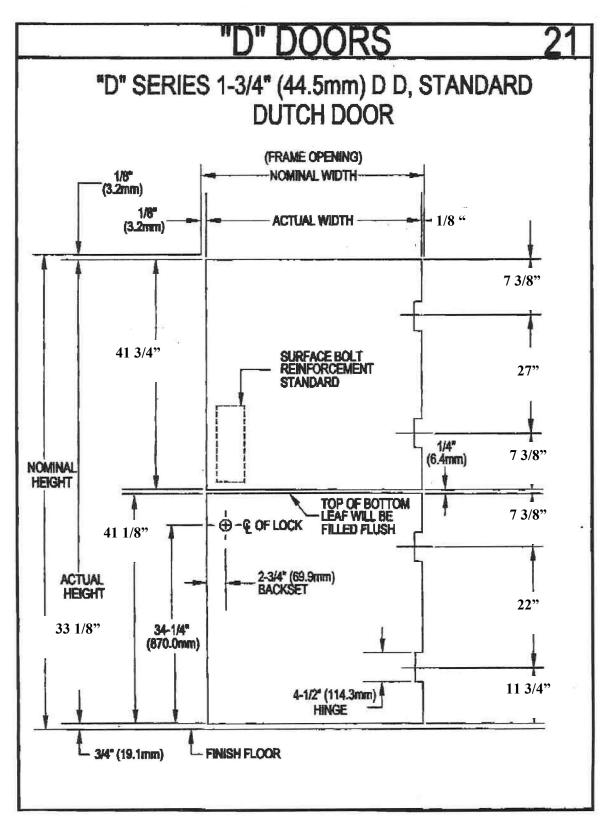
requirements as per ANSI/SDI A250.10

Options Shelf available as specified





### 1600 Dutch Doors



### **Hollow Metal Frames**

#### A full line of standard and custom frames:

- Standard door frames, fully or face welded, optional with Hospital stops
- Window frames
- Sidelights
- Standard, window and sidelight frames can be supplied lead lined
- Knock down (KD) frames for welding
- Dry wall knock down (KD frames)
- Custom frames
- Pocket Frames
- Double Egress Frames

## **Manufacturing Tolerances for Frames**

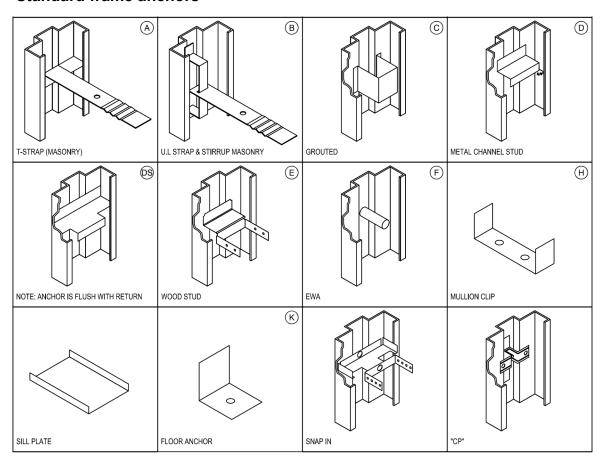
Frames for single door or pair of doors:

Width, measured between rabbets at the head; nominal opening width +1/18" - 1/32"

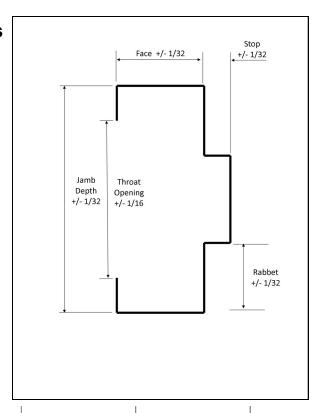
Height (total length of jamb rabbet): nominal opening height +/- 3/64"

Frames overlapping walls to have throat dimension 1/8" greater than dimensioned wall thickness to accommodate irregularities in wall construction.

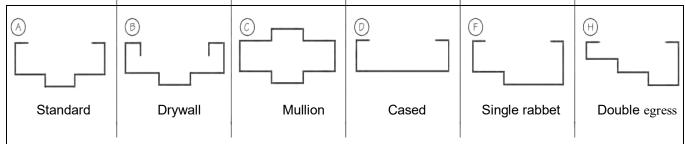
#### Standard frame anchors



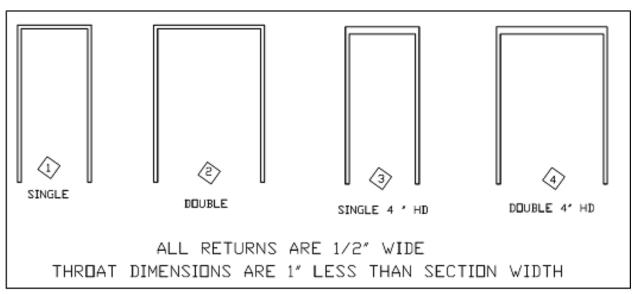
## **Hollow Metal Frames**



## Standard frame sections



## Standard frame elevations



### **Welded Frames**

Material Galvannealed A40

ASTM-A-653

12, 14 and 16 Ga. Thickness

Construction Mitered and welded face and back alternatively welded face only

Appearance Square, true and free of defects, warp and buckle

Hardware 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled and tapped. 12 Ga

hardware reinforcements. Backwelded for additional strength. Also mortised, enforced, drilled and tapped at the factory for hardware in accordance with approved schedule and templates provided by hardware contractor. Strike

jambs prepared for three rubber silencers, unless otherwise specified

Anchors as specified. For standard frames, four 16 Ga. weld in sill anchors per **Anchors** 

jamb

Guards Dust covers on all frames. Mortar guards on frames for masonry walls.

Temporary spreader bars welded to the bottom of all three sided frames. To be Spreaders

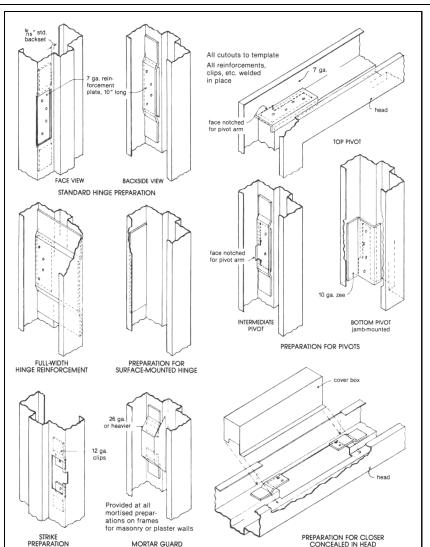
removed before installation

Embossed with opening numbers above the middle hinge. In the jamb for Marking

continuous hinge frames

Finish Thoroughly cleaned and coated with a rust inhibiting primer meeting require

ments as per ANSI/SDI A250.10



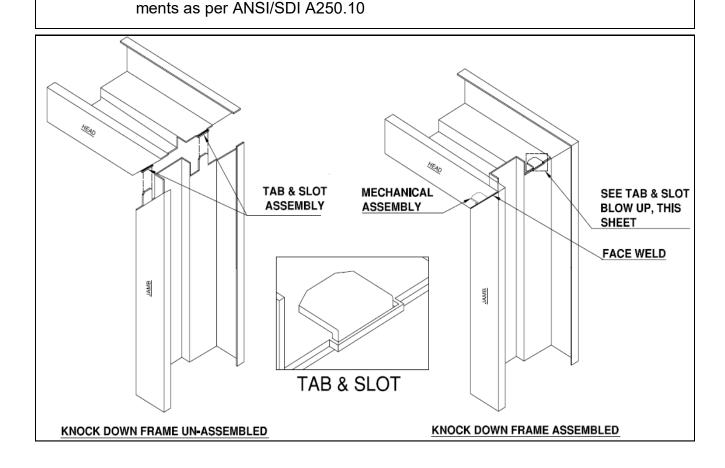
MORTAR GUARD

## **Typical Hardware Preparations**

## **Knockdown (KD) Frames**

The frames provided by Rocky Mountain Metals, Inc. are of two types. They are either made to be welded or to be installed in a pre-installed or existing drywall wall.

Material Galvannealed A40 ASTM-A-653 Thickness 12. 14 and 16 Ga. Construction Mitered with self aligning tabs and slots for securely locking the corners Appearance Free of defects, warp and buckle Hardware 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled and tapped. Back welded for additional strength. Also mortised, enforced, drilled and tapped at the factory for hardware in accordance with approved schedule and templates provided by Hardware Contractor. Strike jambs prepared for three rubber silencers, unless otherwise specified Anchors as specified. For standard frames, four 16 Ga. weld in sill anchors **Anchors** per jamb Dust covers on all frames. Mortar guards on frames for masonry walls. KD Guards frames for drywall walls supplied with one compression anchor per jamb Embossed with opening numbers above the middle hinge. In the head for Marking continuous hinge frames. Temporary marking of heads and jamb to ensure correct pairing Thoroughly cleaned and coated with a rust inhibiting primer meeting require Finish



## **Pocket Frames**

Material Galvannealed A40

ASTM-A-653

Thickness 12, 14 and 16 Ga.

Construction Mitered and welded face and back alternatively welded face only

Appearance Square, true and free of defects, warp and buckle Hardware Optional prep to accept hardware as specified

Anchors Anchors to meet any wall construction

Strike Any specified location

Jamb Width 6" Standard

Guards Dust covers on all frames. Mortar guards on frames for masonry walls.

Spreaders Temporary spreader bars welded to the bottom of all three sided frames.

To be removed before installation

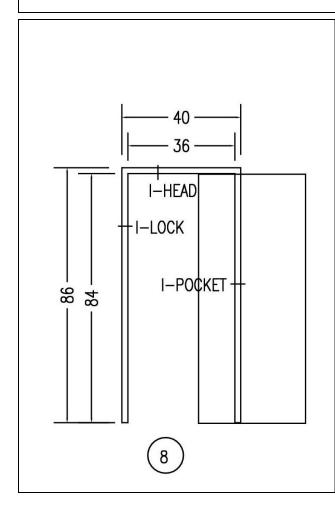
Marking Embossed with opening numbers above the middle hinge. In the jamb for

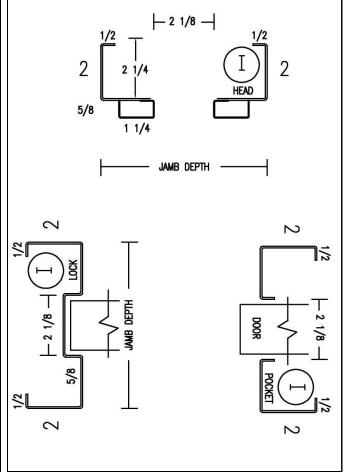
continuous hinge frames

Finish Thoroughly cleaned and coated with a rust inhibiting primer meeting re

quirements as per ANSI/SDI A250.10

NOTE Sliding and tracking not provided

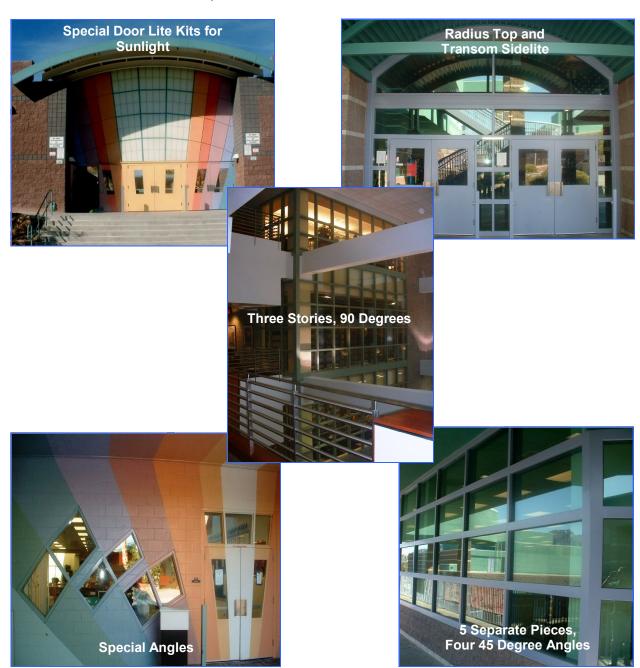




#### **Custom Frames**

Rocky Mountain Metals, Inc. has been in business since 1988 and our entire focus is on hollow metal manufacturing. Our plant is fully equipped with modern equipment to cater to your Standard and Custom Hollow Metal needs.

We have the ability to produce complex custom configurations to meet a wide variety of individual needs. Our strong focus is on quick quoting, quality, cost efficiency and quick shipping. In addition to your specific needs and specifications, our products are built by elements according to the NAAMM Standard HMMA 860, 861 and 862. We are a member of NAAMM and we manufacture products in accordance with the Steel Door Institute standards.



## **Tornado Resistant Openings**



Rocky Mountain Metals, Inc. introduces Openings Solutions classified to FEMA P-361 (2015) and certified to ICC 500 (2014). These openings are tested as complete assemblies including doors, frames and hardware as required by the International Building Code for use in tornado shelters in Group E occupancies. This includes among other applications new construction at K-12 schools and extends to critical emergency operation facilities.

The offerings consists of openings of up to 8 ft. in width and 9 ft. in height for double doors and 4 ft. in width and 9 ft. in height for single doors and is also extended to shutters (openings with four sided frames).

### Single Doors and Shutters

Min dimensions width 2 ft 6 inches height 4 ft

Max dimensions width 4 ft

height 9 ft

In and out swing

#### Double doors

Min dimensions width 6 ft

height 6 ft 8 inches

Max dimensions width 8 ft

height 9 ft

Out swing only

# 1400 FEMA Frame and Shutter Frame Details for Tornado Resistant Openings

Material Galvannealed A40

ASTM-A-653

Thickness 14 Ga. Galvannealed

Dimensions 2" jambs and 2" or 4" heads as specified

Construction Mitered and welded face and back

Appearance Square, true and free of defects, warp and buckle

Reinforcements 4 pcs 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled

and tapped.

Back welded for additional strength

Strike and bolt preps 12 Ga. x 12" long, spot and MIG

welded

Strike jambs prepared for three rubber silencers, unless

Otherwise specified

Hardware Locations Any specified locations

Guards Dust covers on all frames. Mortar guards on frames for

masonry walls

Wall Anchors Below 7' in Height - 4 anchors

7' and above in Height - 5 anchors

Head Anchors 5' and above in Width - 2 anchors

Bolts As per specified by RMMI

Spreaders Temporary spreader bars welded to the bottom of all three

sided frames. To be removed before installation

Marking Embossed with opening numbers above the middle hinge.

In the jamb for continuous hinge frames

Finish Thoroughly cleaned and coated with a rust inhibiting primer

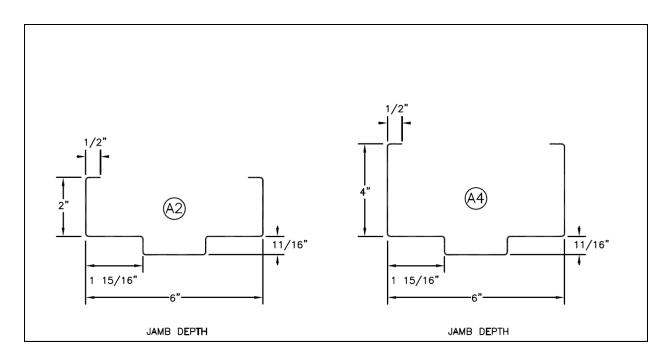
meeting requirements as per ANSI/SDI A250 10

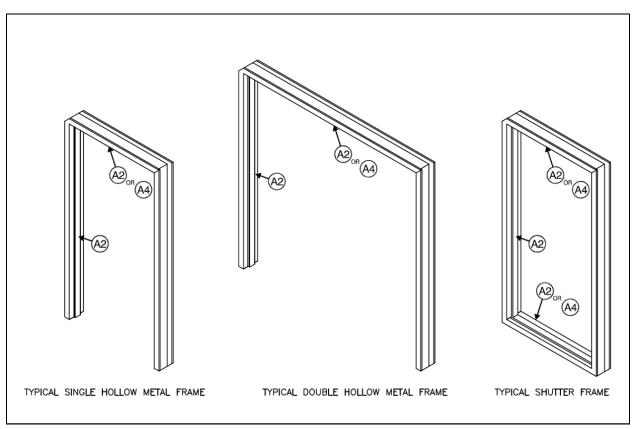
Options UL labeling requirements as specified

Shutter Frame Sizes Min: 2' 6" x4' Max: 4' x 9' Door Frame Sizes Min: 2' 6" x 4' Max: 8' x 9'

Shutter Frames are manufactured as four sided frames

# 1400 FEMA Frames for Tornado Resistant Openings





## 1400 FEMA Door/Shutter for Tornado Resistant Openings

Face Material Galvannealed A40 or ASTM-A-653

Face thickness 14 Ga.

Construction Hollow metal with 18 Ga. vertical steel stiffeners (ribs). Space

insulated with glass wool insulation between ribs. Flush construction

Door thickness 1 3/4" Standard

Hardware Locations Per Project Requirements

Reinforcements 7 Ga. 1 1/4" x 10" joggled hinge reinforcement, drilled and tapped

12 Ga. mortise hardware tabs, drilled and tapped 12 Ga. surface hardware and trim reinforcement

Edge reinforcement Horizontal and vertical edges reinforced with 12 Ga. (min) full

length channels spot welded to the face sheets

Vertical edges Fully welded with no visible seam

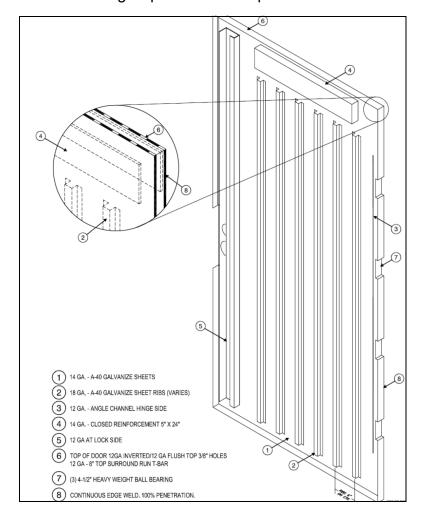
Handing Doors are handed

Appearance Faces and edges free of defects, warp and buckle

Finish Thoroughly cleaned and coated with a rust inhibiting primer meeting

requirements as per ANSI/SDI A250.10

Options UL Labeling requirements as specified



## Leadership in Energy and Environmental Design (LEED)

LEED – The Leadership in Energy and Environmental Design Green Building System is the nationally accepted rating system for the design, construction and operation of sustainable and energy efficient buildings. The LEED Certification promotes a complete building system and focuses on five key areas of human and environmental health:

- · Sustainable site development
- · Water savings
- · Energy efficiency
- · Materials selection
- · Indoor environmental quality

All products from Rocky Mountain Metals, Inc. qualify for LEED Credits as per below:

Full credit for recycled content MR.4.1 and 4.2 as Doors as well as Frames from Rocky Mountain Metals, Inc. contain more than 25% recycled material as per the LEED Definitions (100% of Post Consumer and 50% of Pre Consumer Recycled Content).

For further information about the requirements see below:

Credit	Requirement
Recycled Content MR 4.1	Use material with recycled content such that the sum of the post- consumer recycled content plus 50% of the pre-consumer content constitutes at least 10% of the total values of the material in the project
Recycled Content MR 4.2	Use material with recycled content such that the sum of the post- consumer recycled content plus 50% of the pre-consumer recycled content constitutes an additional 10% beyond MR 4.1 Credit (total 20%) based on cost of the total values of the material in the project
Regional Materials MR 5.1	Use a minimum of 20% of the combined value of construction and Division 12 materials and products that are manufactured (final assembly of components) within a radius of 500 miles.

#### Definitions:

*Post-consumer recycled content* – Waste material generated by households or by commercial, industrial or institutional facilities in their role as end-users of the product, which can no longer be used for its intended purposes.

*Pre-consumer (post-industrial) recycled content* – scraps left over during industrial or manufacturing processes, which are subsequently reused.

# **Contact Information**

You can reach us at Rocky Mountain Metals, Inc.

**Phone:** 575.445.2756 **Fax:** 575.445.2804

### **Email**

info@rockymountainmetals.com sales@rockymountainmetals.com

**Production / GM** 

Ron Gonzales rgonzales@rockymountainmetals.com

Sales and Estimating

Brittan Buchanan bbuchanan@rockymountainmetals.com

Jae Leavitt jleavitt@rockymountainmetals.com

**Delivery and Billing** 

Melanie Wahl mwahl@rockymountainmetals.com

**Engineering** 

Larry Whitish lwhitish@rockymountainmetals.com

## You can also find us online at

## Rocky Mountain Metals.com



Questions? Contact Us



#### **CERTIFICATIONS**







Read more at <a href="http://industries.ul.com/building-materials">http://industries.ul.com/building-materials</a>

### **BUY AMERICAN ACT**

All Rocky Mountain Metals, Inc. standard and custom hollow metal frames and doors are manufactured in their New Mexico manufacturing plant from materials produced substantially in the United States and as such, meet the requirements of 41 U.S.C 10, commonly known as the Buy-American Act. In addition, all Rocky Mountain Metals, Inc. products meet the "Made in USA" standards set forth by the Federal Trade Commission (FTC) Act and Enforcement Policy Statement.



National Association of Architectural Metal Manufacturers

## **MEMBER**

## **Rocky Mountain Metals, Inc.**

140 Coal St. · P.O. Box 1101 · Raton, New Mexico 87740

Phone: 575.445.2756 • Fax: 575.445.2804

info@rockymountainmetals.com

www.rockymountainmetals.com