Amweld Building Products LLC

1. Product Name
Steel Doors and Frames

2. Manufacturer
Amweld Building Products LLC
1500 Amweld Drive
Industrial Park
Garrettsville, OH 44231
(800) 248-6116
(330) 527-4385
Fax: (330) 527-3042
E-mail: marketing@amweld.com
www.amweld.com

3. Product Description

BASIC USE

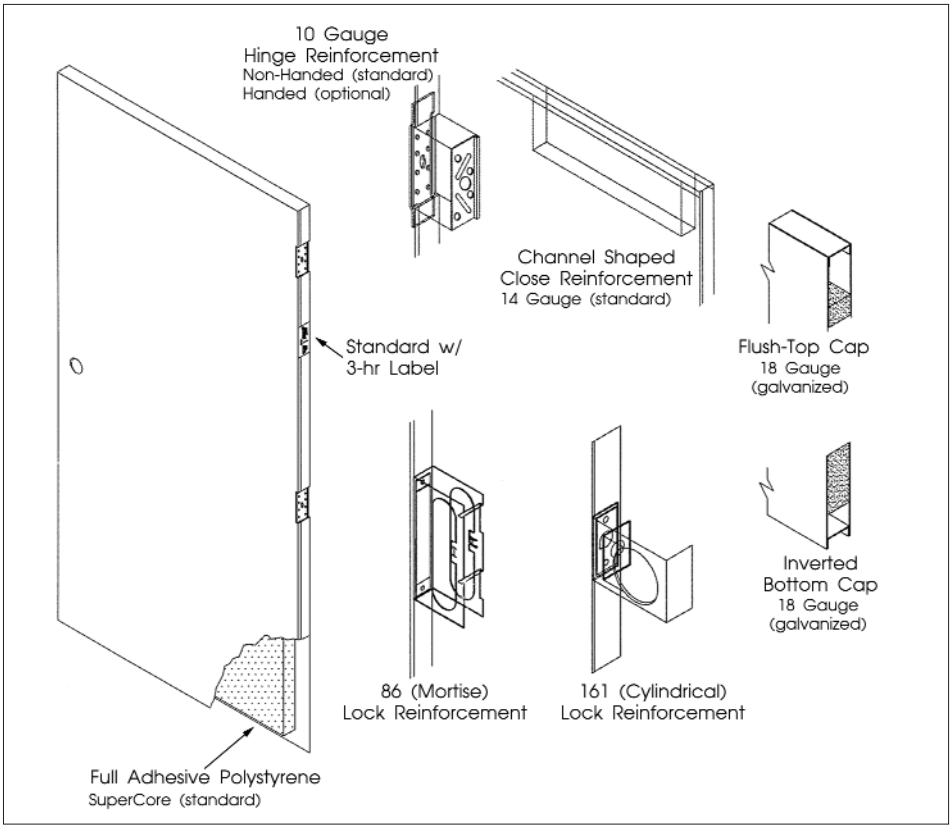
Amweld Building Products LLC manufactures a broad range of steel doors and door frames suitable for use in commercial, residential and industrial building applications. A brief summary of the product line follows. Consult manufacturer's Architectural Technical Data Manual for complete illustrations, swings and handing of doors and frames.

The complete line of doors includes cold-rolled steel, primed or pre-finished doors for interior applications, and galvanized steel with insulated cores for exterior applications. Continuously laser welded edge doors are standard on all full flush and seamless edge doors. Stile and rail doors are designed specifically for high use, high abuse entrances; bullet resistant doors for high security requirements; acoustical doors to meet specific sound retardant conditions; hurricane resistant doors for coastal areas; and fire labeled products to meet virtually every label requirement.

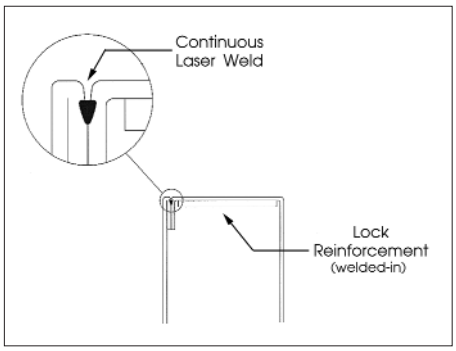
COMPOSITION & MATERIALS

Full Flush Doors (Model 1)

15LE Series and 25LE Series full flush 1 3/4" (44 mm) doors have each face formed of 14, 16, 18 or 20 gauge steel as required. The 15LE uses cold-rolled steel and the 25LE uses galvanized (A40) steel as standard. The doors are joined at the edge with a continuous laser welded seam (laser edge) using no filler material to create a smooth unbroken surface on the face and an aesthetically pleasing seam on the edge. The standard door is constructed as a nonhanded door using a handing plate for ease of use in the field. Beveled lock edge (1/8" in 2" (3.2 in 51 mm)), handed doors are available on special order. The doors come standard with an insulated polystyrene core that utilizes a full polyurethane adhesive to bond the core in place. The formed door is thermally cured and pressure rolled to ensure bonding and flatness. A variety of optional cores is available, including honeycomb, polyurethane and mineral board. The top and the bottom of the door are formed using 18 gauge galvanized channels securely welded to the door face. The top is closed flush. The doors come standard with a minimum 14 gauge closer reinforcement. They meet ANSI 250.8 levels 1 - 4, model 1.

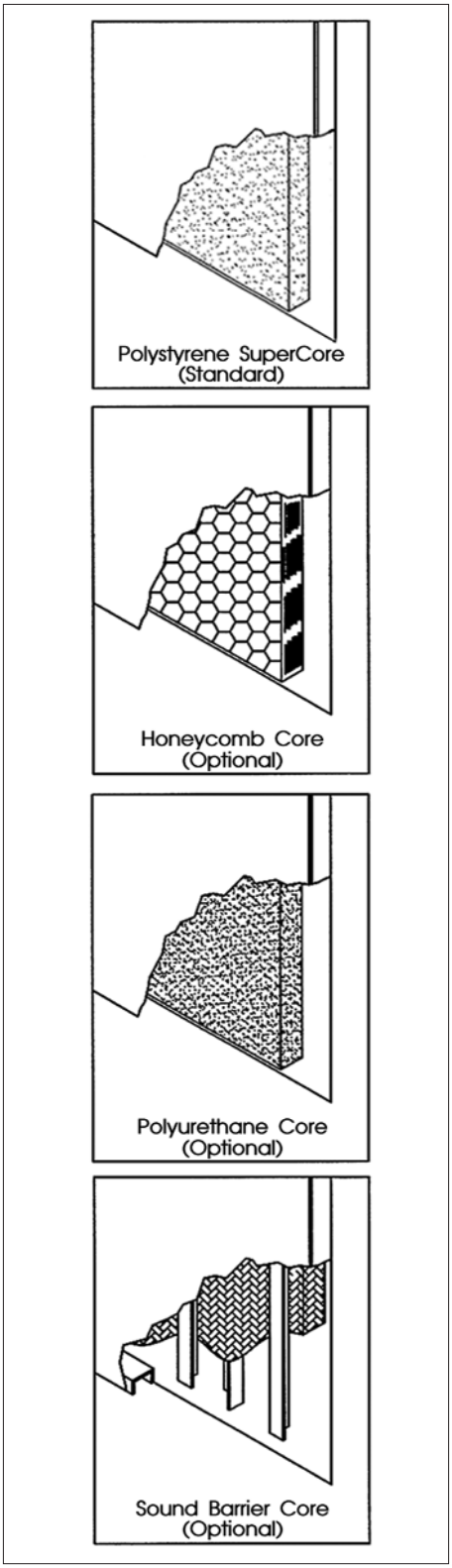


15LE Standard Laser Edge Door

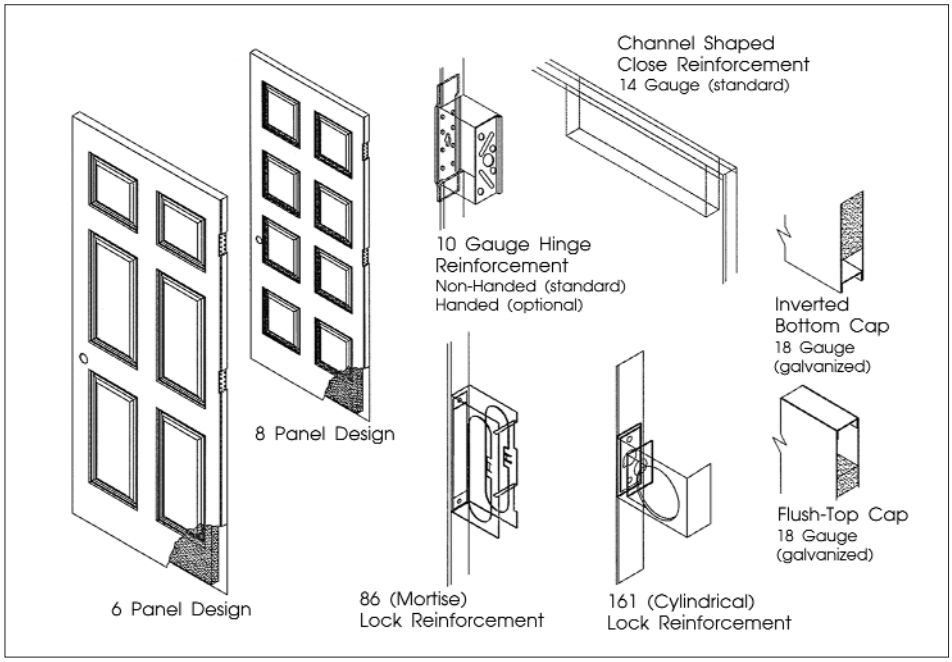


Laser Edge

61LE Series 6 panel or 8 panel, full flush 1 3/4" (44 mm) doors have each face formed of 16, 18 or 20 gauge steel as required. The 61LE Series doors use (A40) galvanized steel as standard. The doors are jointed at the edge with a continuous laser welded seam (laser edge) using no filler material to create a smooth unbroken surface on the face and an aesthetically pleasing seam on the edge. The standard door is constructed as a nonhanded door using a handing plate for ease of use in the field. Beveled lock edge (1/8" in 2" (3.2 in 51 mm)) handed doors are available on special order. The doors come standard with an insulated polystyrene core that utilizes a full polyurethane adhesive to bond the core in place. The formed door is thermally cured



Cross-sections of doors



61LE Series Doors

and pressure rolled to ensure bonding and flatness. The top and the bottom of the door are formed using 18 gauge channels securely welded to the door faces. The top is closed flush. Most doors come standard with a minimum 14 gauge closer reinforcement and a fire label applied.

Seamless Doors (Model 2)

17LE, 27LE and 63LE Series doors are similar in construction to the 15LE Series full flush doors. Since the standard door has a continuous laser welded edge, the design is achieved by applying a bonded metallic filler, sanding and refinishing as a seamless edge. This is aesthetically more appealing, but is not a structural improvement. The doors meet ANSI 250.8 levels 1 - 4, model 2.

700 Series 1 3/4" (44 mm) seamless doors have each face formed of 18, 16 or 14 gauge steel to present a smooth and unbroken surface on the face and edge of door. The door faces are joined at the vertical edges by continuous weld extending the full height of the door. All welds are ground, filled and dressed to provide a smooth, flat surface. Face sheets are stiffened by continuous vertical steel "HAT" shaped sections occupying the full thickness of the interior space between door faces. Spaces between the stiffeners are sound deadened and insulated the full height of the door with inorganic noncombustible batt material. Meets ANSI 250.8 levels 2 - 4, model 2.

500 Series 1 3/4" (44 mm) seamless doors have each face formed of 18 or 16 gauge steel. 500 Series doors are similar in construction to the 700 Series door with a nonhanded design using a handing plate for ease of use in the field.

Stile and Rail Doors (Model 3)

Series 300 1 3/4" (44 mm) doors are of rigid tubular stile and rail construction in flush or full glass design. Stiles and rails are 16 gauge steel, mitered, reinforced with channels, face welded and ground smooth at the corners. Panels are flat, 18 gauge steel, securely bonded by a thermosetting adhesive to Amweld's SuperCore®. Meets ANSI 250.8 level 3, model 3.

Security Doors (Bullet Resistant)

Series 1538 and Series 1544 1 3/4" (44 mm) security doors are rigid laser edge construction in flush panel design with two 14 gauge steel security plates. Panels are flat 18 gauge steel, and securely bonded by a thermosetting adhesive to Amweld's SuperCore. Meets Underwriters Laboratories, Inc., (UL) 752 level 1 for 1538 or level 3 for 1544 resistance ratings.

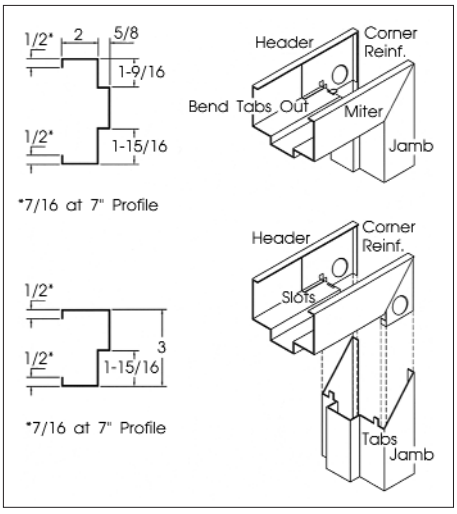
Note - 5" (127 mm) heavyweight hinge preparations are standard with all bullet resisting doors.

Transom Panels

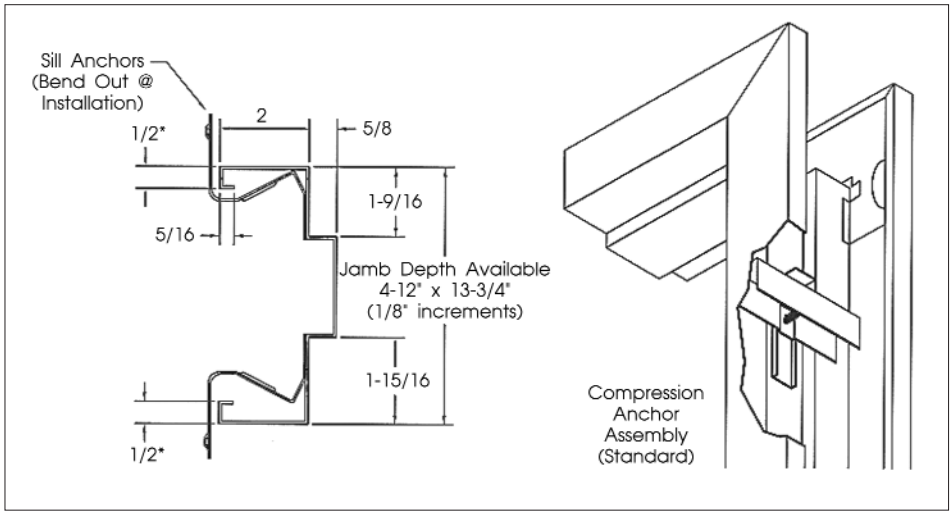
Series 55LE, 56LE and 57LE transom panels have faces formed of 18 gauge steel (16 gauge optional). With 16 gauge steel channels forming the top and bottom closures, the face panels are securely welded around their entire perimeter. Welding occurs 2" (51 mm) oc. The panels are securely bonded by a thermosetting adhesive to Amweld's SuperCore®.

Steel Frames

- 400 Series (Inter-Lok®) standard steel frames, 1 3/4" (44 mm) available in 16 or 14 gauge, cold rolled or (A40) galvanized steel construction. The series is available as Inter-Lok® knocked down design with precision fit corners or welded and ground smooth, and is available in 3" - 12 3/4" (76 - 324 mm) profiles to fit just about any wall condition. Anchors for masonry, wood or metal stud walls are standard (available labeled as required). They are ideal for high volume, high abuse situations
- 2600 Series (slip-on drywall) standard steel frames, 1 3/4" (44 mm) available in 16 gauge, cold rolled steel. They are designed to be installed knocked down over finished walls. Frames feature a screw adjusting anchor, welded-in sill strap and Sure-fit Inter-Lok® corner construction. Available (A40) galvanized on special order. Labeled as required, they are ideal for interior finish work
- 800 Series adjustable steel frames, 1 3/4" (44 mm) available in 16 gauge steel, cold rolled or (A40) galvanized. Designed to retrofit walls from 3 1/4" - 9 7/16" (83 - 240 mm) in wall size.



400 Series (Inter-Lok®) standard steel frames



2600 Series (slip-on drywall) standard steel frames

Standard frame is designed with 2" (51 mm) faces and 1/2" (13 mm) returns. Custom variations are available to wrap around almost any wall condition. It is the ideal frame for lead paint encapsulation

- 4400 Series double egress frames, 3000 Series thermal break frames, and a broad array of sidelights/transom frames complete the package for any size and type of project

Hardware

Lockset preparation provides for field installation of locksets manufactured in accordance with ANSI/DHI A115.1 (Mortise) or A115.2 (Bored). Lock reinforcing is 16 gauge. They are pierced and tapped for mounting specified locksets. Mounting holes for surface applied escutcheons are drilled in the field by others. All nonhanded doors require locksets with flat faces. Available standard lock preparations include:

- D - Meets ANSI/DHI A115.2
- L - Variation of ANSI/DHI A115.18
- Y - Meets ANSI/DHI A115.1
- T - Meets ANSI/DHI A115.18
- YBP - Sectional trim available
- U/FB - Universal strike, ANSI flushbolts
- PB - Rim Panic - blank faces
- MP - Mortise Panic, edge only, blank faces
- VR - Surface Vertical Rod Panic, blank faces
- PP - Push and Pull

Door Core Material

Standard construction: Door panels are securely bonded utilizing a full polyurethane adhesive to Amweld's SuperCore® (polystyrene). The formed door is thermally cured and pressure rolled to ensure bonding and provide maximum flatness. The polystyrene core is a nominal one pound per cubic foot density, odorless, rigid foam that is resistant to fungi, bacteria, moisture, mildew and rot. See Table 1 for details.

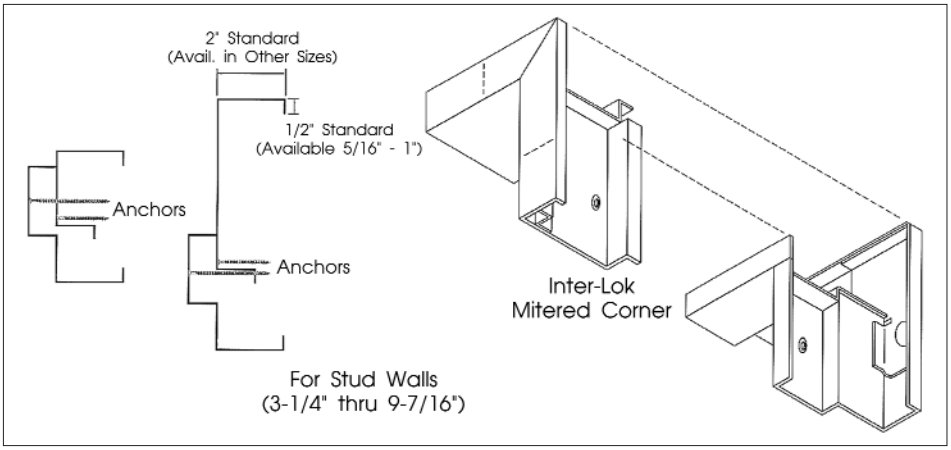
Optional construction: Additional core materials are available in honeycomb, polyurethane and mineral board to meet additional requirements for insulation and fire protection.

Glazing

Glass lite doors are furnished with formed steel glazing strips of the screw-in type to permit selection of secure side in the field. Muntin bars for multi-lite glazing are of the field applied type. Glazing arrangements accommodate 1/4" (6.4 mm) thick glass, supplied by others.

Galvanized steel options are recommended for exterior doors and frames. 25LE, 27LE, and 61LE and 300 Series doors are standard with an (A40) zinc coated steel (meets SDI 112). 400 Series frames are also available galvanized (A40) as required. Door panels, door channels and frame members are manufactured of hot dipped material in the 0.4 oz coating class conforming to ASTM A924 and A653 coating class A40. The material is treated in the mill to ensure superior prime paint adhesion. In addition, the galvanized doors and frames receive a coat of baked-on gray primer to ensure maximum adherence of field applied finish paints. In the galvanized process, the resultant coating is a 100% zinc-iron alloy whose composition is approximately 10% iron, balance zinc.

Amweld Building Products LLC



800 Series Adjustable Steel Frames

TYPES

The Amweld product line includes:

- Series 15LE & 17LE - 1 3/4" (44 mm) Full Flush & Seamless Solid Core Doors
- Series 25LE & 27LE - 1 3/4" (44 mm) Full Flush & Seamless Galvanized Solid Core Doors
- Series 61LE & 63LE - 1 3/4" (44 mm) Full Flush & Seamless Embossed Panel Doors
- Series 51LE & 53LE 1 3/4" (44 mm) Full Flush & Seamless Acoustical Doors
- Series 21LE & 23LE 1 3/4" (44 mm) Full Flush & Seamless Replacement Doors
- Series 300 1 3/4" (44 mm) Extra Heavy-Duty Stile and Rail Doors
- Series 700 & 500 1 3/4" (44 mm) Steel Stiffened Seamless Handed and nonhanded Doors
- Series 1538L 1 3/4" (44 mm) Level 1 Bullet Resistant Doors
- Series 1544L 1 3/4" (44 mm) Level 3 Bullet Resistant Doors
- Series 35LE & 37LE 1 3/4" (44 mm) Full Flush & Seamless 250°F (121°C) Temperature Rise Doors

Frames

- Series 400 1 3/4" (44 mm) Standard Inter-Lok®
- Series 800 1 3/4" (44 mm) Adjustable Steel Frames
- Series 2600 1 3/4" (44 mm) Slip-on Drywall Frames
- Series 4400 1 3/4" (44 mm) Double Egress Frames
- Series 3000 1 3/4" (44 mm) Thermal Break Frames
- Series 55LE, 56LE and 57LE Transom Panels

Sizes

Standard door sizes:

Width

- 2' (610 mm)
- 2' 4" (711 mm)
- 2' 6" (762 mm)
- 2' 8" (813 mm)
- 2' 10" (864 mm)
- 3' (914 mm)
- 3' 4" (1016 mm)
- 3' 6" (1067 mm)
- 3' 8" (1118 mm)
- 3' 10" (1168 mm)
- 4' (1219 mm)

Height

- 6' 8" (2032 mm)
- 7' (2134 mm)
- 7' 2" (2184 mm)
- 7' 10" (2388 mm)
- 8' (2438 mm)
- 8' 1" (2464 mm) - 10' (3048 mm)

Gauge Tolerances

Amweld uses the tolerances specified by the Underwriters Laboratories, Inc. (UL). Decimal thickness for uncoated flat rolled steel sheets, as endorsed by UL, are set forth in Table 2.

For zinc coated (galvanized) steel sheets, the coating thickness only slightly affects steel thickness. One ounce of zinc per square foot corresponds to an average thickness of 0.0017" (0.04 mm), total of both sides. A40 material has an average coating thickness of 1 mil (0.025 mm) or 0.0005" (0.01 mm) per side.

FINISHES

Exposed surfaces on doors are cleaned, treated with a 3-stage iron phosphate and given 1 shop coat of synthetic resin, rust-inhibitive alkyd enamel primer. The prime paint on Amweld doors and frames has been tested at a recognized independent testing laboratory, in accordance with ANSI/SDI Standard A250.10, and meets the acceptance criteria outlined in that document (120 salt spray hours, 240 humidity hours, etc.).

COLORS

Standard doors are primed with an EPA compliant gray base primer suitable for field painting. In lieu of base primer on a special order basis, Amweld offers 11 decorator colors that are intended as a substitute for field finish and should be comparable quality to a field applied finish. They meet ANSI A250.3 test procedure and acceptance criteria for factory applied finish painted steel surfaces for steel doors and frames.

SHAPES

See manufacturer's technical guide.

ADVANTAGES

Advantages of Zinc Coatings

- Zinc coating protects steel - Zinc coating serves as a barrier between the steel and the corrosive elements in the atmosphere and, if the coating is damaged, galvanic action continues to protect the steel by sacrificing itself

TABLE 1 DOOR CORE MATERIALS TECHNICAL DATA

Properties & test methods	Requirements
Flammability (oxygen index), ASTM D2863	AEB 60 mm max, ATB 50 sec., max
Density, ASTM D1622	1.0 lb/ft^3 (16.1 kg/m^3) [1]
Compressive strength, ASTM D1621 (Procedure A)	10 psi (68.9 kPa), min
Tensile strength, ASTM D1623 [2]	18 psi (124.1 kPa) min [3]
Dimensional stability, ASTM D2126 [4]	+5% volume change, max [5]
Holes and voids, visual examination	No single hole or void > 1/4" (6.4 mm) in any direction per 8 ft^2 (0.74 m^2) of surface area
Bead fusion, Fed. Spec. C578	Essentially fused bead structure [6]

[1] At 10% deformation or at yield point, whichever occurs first.
[2] Type B specimen (e.g., polystyrene foam is bonded with adhesive used for bonding in the door).
[3] Not greater than foam to steel face sheet bond strength.
[4] Dimensions and visual examination measurements only.
[5] No visible distortion after 7 days exposure at -15° F to 165° F (-26° C to 74° C).
[6] Indicated by an excess of broken or sheared beads.

TABLE 2 AMWELD STEEL GAUGES

Gauge no.	Thickness (minimum) in (mm)
6	0.184 (4.674)
10	0.123 (3.124)
11	0.108 (2.743)
12	0.093 (2.362)
14	0.067 (1.702)
16	0.053 (1.346)
18	0.042 (1.067)
20	0.032 (0.813)
22	0.026 (0.660)
24	0.020 (0.508)

- Porosity and rust resistance - Galvanizing is not affected by porosity due to sacrificial characteristics. If a spot of rust occurs due to surface damage, the rust will not travel back under the adjacent coating, nor will it pit deeply into the abrasion
- Ideal for salt water and chemical work environment - Because of its strong resistance to corrosion of any type, galvanized or electro zinc coated materials are recommended for use where a salt spray or chemical-laden atmosphere is especially corrosive or where the use of acid or salt bearing additives are used in conjunction with concrete
- Material integrity - Zinc alloys with the steel when utilizing the hot dip galvanizing process, becoming an integral part of the product instead of surface deposits
- Extended service life - The importance of the prime coat of paint should not be overlooked. Tests have been run by zinc producers using a very thin coat of paint over regular cold rolled steel and over a thin galvanizing coat. The combination of paint over zinc ensures more than double the service life of either used alone

TABLE 3 1500L SERIES THERMAL CONDUCTIVITY

Gauge	U-value Btu (ft^2 x h x °F) (W/m^2 x K))	R-value ft^2 x h x °F/Btu (m^2 x K/W)
20	0.28 (1.59) [1]	3.57 (0.63)
20	0.24 (1.36) [2]	4.16 (0.73)
18	0.28 (1.59) [1]	3.57 (0.63)
8	0.25 (1.42) [2]	4.00 (0.70)

[1] Apparent U-factor corrected to a winter design with 15 mph (24 kph) winds.
[2] Apparent U-factor corrected to still air both sides.

Advantages of Laser Welding
- Strength - The laser weld is stronger than the steel itself
- Appearance - Since the laser does not use filler material as used in stick and mig welding, the edge is more uniform. The result is a laser edge of excellence
- Precision - The laser edge is the most precise edge on the market. Lasers deal in 0.001" (0.03 mm) where comparable welding operations deal in 1/16" (1.6 mm) variances
- Durability - No grinding is required, so the edge stays strong and resistant to corrosion where galvanized steel is utilized
- Versatility - The laser edge is available as a square edge (nonhanded) door or as a handed, beveled door. The laser offers adjustment as required for the 1/8" in 2" (3.2 in 51 mm) beveled edge
- Lifetime warranty offered on edge of door

4. Technical Data

APPLICABLE STANDARDS

ASTM International
- ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- ASTM A924/A924M Standard Specification for General Requirements for Sheet Steel, Metallic-Coated by the Hot-Dip Process
- ASTM A1008 Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
- ASTM D610 Standard Test Method for Evaluating Degree of Rusting on Painted Steel Surfaces
- ASTM D714 Standard Test Method for Evaluating Degree of Blistering of Paints
- ASTM D1621 Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- ASTM D1622 Standard Test Method for Apparent Density of Rigid Cellular Plastics
- ASTM D1623 Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics
- ASTM D1654 Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- ASTM D2126 Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging
- ASTM D2863 Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-like Combustion of Plastics (Oxygen Index)

American National Standards Institute (ANSI)/Door Hardware Institute (DHI)
- ANSI/DHI A115.1 Preparation of Mortise Locks in 1 3/8" and 1 3/4" (34.9 and 44.5) Standard Steel Doors and Frames
- ANSI/DHI A115.2 Specifications for Preparation of 1 3/8" and 1 3/4" (34.9 and 44.5 mm) Standard Steel Doors and Frames
- ANSI/DHI A115.18 Specifications for Standard Steel Doors and Steel Frames Preparation for Bored Locks

American National Standards Institute (ANSI)/Steel Door Institute (SDI)
- ANSI 250.8 Recommended Specifications for Standard Steel Doors and Frames
- ANSI A250.10 Standard Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames

Federal Specification C578 - Bead Fusion Test

U.S. Department of Veterans Affairs - H-08-01 Approvals

U.S. Naval Facilities Engineering Command - Naval Facilities Guide Specification 08010

PHYSICAL/CHEMICAL PROPERTIES
- Cold rolled steel - Complies with ASTM A366 cold rolled carbon steel sheet
- Galvanized steel - Complies with ASTM A924 general requirements for steel sheet metallic coated by the hot dip process
- Specification for core materials - The Naval Facilities Guide Specification 08010 and the Veterans Administration H-08-01 contain the specifications set forth in Table 1

Amweld's 15LE Series SuperCore® door provides superior insulation values, including subzero temperature ranges. For the apparent U-values of the Amweld Series 15LE 1 3/4" (44.5 mm) doors, with R-values included, see Table 3.

Note - These ratings apply to operable steel door frame assemblies, not to panels.

FIRE RATING

Doors in openings in walls separating buildings, or parts of buildings, into fire areas may be provided with a 3 hour label. These units are normally available flush. Doors in openings in walls enclosing areas of vertical communication (i.e., stairwells) may be provided with a 1 1/2 hour label. These units are available flush or with V, N1, N2 and S3H lites or louvers with fusible

link. Doors in room and corridor partitions may be provided with a 3/4 hour label. These units are available flush G, V, N1, N2, S3H, N3, N4, N3H, N4H and LI designs.

Consult manufacturer for fire resistance performance data and specific installation requirements of tested designs.

Note - Unlike some wood doors classified by minutes, steel doors are normally classified by hourly ratings. The hourly designation indicates the duration of the fire test exposure and is called the "fire protection rating." The fire protection ratings of 3, 1 1/2, 3/4 or 1/3 hours indicate the duration of the test exposure. The following indicates suitable building locations for each:

- 3 hour rating - Openings in fire walls and in walls that divide a single building into fire areas
- 1 1/2 hour rating - Openings in enclosures of vertical communications through buildings and in 2 hour rated partitions that provide horizontal fire separations. Openings in exterior walls subject to severe fire exposure from outside of building
- 3/4 hour rating - Openings in walls or partitions between rooms and corridors that have a fire resistance rating of 1 hour or less. Openings in exterior walls subject to moderate or light fire exposure from outside of the buildings
- 1/3 hour rating - 1/3 hour doors are for use where smoke control is a primary consideration. They protect openings in partitions between a habitable room and a corridor when the wall is constructed to have a fire resistance rating of not more than 1 hour or across corridors where a smoke partition is required

The hourly classification indicates a door which has passed both the fire and hose stream criteria of the standard fire test. The hose stream criteria is sometimes deleted for 20 minute ratings. Since the deletion of hose stream does not qualify these units as true fire doors, the ratings are identified with a supplemental notation "no hose stream" or similar wording.

The units in question were subjected to fire tests conforming to UL 10b or 10c for 3 hours. Doors and frames are also available with the UL 10c mark when positive pressure resistance is required. These tests are accepted by fire-testing groups as standard for doors and frames. Successful tests confirmed that Amweld's doors are qualified to serve in fire resistant barriers.

The door label itself is of Mylar installed on hinge edge of the door. It is furnished with a premask to deter overpainting. The premask is marked with "Label - Do Not Remove." If the door is modified in any way by the distributor (i.e., louvers added), the action invalidates the label and it must be removed.

SOUND RATING

Consult manufacturer for acoustic performance data and specific installation requirements. The sound transmission classes of the standard units tested are as follows:

- 61LE Series 1 3/4" (44 mm) 18 gauge door - 31 STC
- 61LE Series 1 3/4" (44 mm) 20 gauge door - 31 STC
- 15LE (17LE) Series 1 3/4" (44 mm) 20 gauge door - 32 STC
- 15LE (17LE) Series 1 3/4" (44 mm) 16 gauge door - 35 STC

The sound transmission class of SoundShield units tested are as follows:

- 51LE (53LE) Series 1 3/4" (44 mm) 16 gauge door - 42 STC
- 51LE (53LE) Series 1 3/4" (44 mm) 16 gauge door - 45 STC

PRECAUTIONS

The proper function of acoustical doors relies on a combination of factors which are under the control of various firms, trades, specifiers, suppliers or designers. Without cooperation of all concerned, the installed opening may not function as intended. The most important factor influencing an acoustical door's function is correctly specifying the door capability for the job condition.

ENVIRONMENTAL CONSIDERATIONS

Amweld complies with U.S. Environmental Protection Agency (EPA) requirements regarding the use and disposal of non-hazardous primers. Steel components may be recyclable upon demolition and disposition. Some or all of the sheet steel may be from recycled sources.

LIMITATIONS

Amweld reserves the right to make changes in either design or specifications, and to make improvements to its products without prior notice and without incurring an obligation to incorporate such changes in products previously manufactured.

5. Installation

PREPARATORY WORK

Handle and store these products according to Amweld recommendations published in the technical materials. Leave product wrapped or otherwise protected and under clean and dry storage conditions until required on the job. Verify all door frame openings are installed plumb, true and level before beginning the installation process. Select fasteners of adequate type, number and quality to perform the intended functions.

Preparation for Field Painting

Before application of the finish coat of paint, surfaces must be dry and free of all dirt, oil and dust. In every case, the finish coat must be applied over a film which is intact. All scratches or bare edges should be field primed with a rust inhibiting paint before top coating. Follow the instructions on finish coat application provided by the paint manufacturer.

METHODS

Finish Coat Recommendations

Amweld's prime paint has been formulated to give the product maximum protection. It is important that compatible materials be used in the final or finished coat of paint. The painting contractor should test a small section of the door or frame if there is any doubt as to the composition of the finish coat. Certain finish coat materials are not recommended. Consult manufacturer.

Repriming

When Fab-A-Frame type modifications of either the door or the frame indicate the need for repriming surfaces from which the Amweld factory primer has been removed, a general-purpose lead- and metal-free rust inhibitive primer for steel substrates should be used.

Repainting

If it becomes necessary to add a field coat of finished paint to a factory finished door or frame, first sand the door or frame for better adhesion and prime any bare metal. Due to the many types of paint currently available, it is recommended that the customer test a small area of the door with their coating before proceeding.

Note - Complete painting and installation recommendations are available from the manufacturer. For detailed information on paint specifications, see Table 4.

BUILDING CODES
Installation must comply with the requirements of all applicable local, state and national code jurisdictions.

6. Availability & Cost

AVAILABILITY
Contact manufacturer for information on the Amweld distribution network and on product availability.

COST
Budget installed cost information may be obtained from a local Amweld distributor or through the manufacturer at the number above.

7. Warranty

For information on warranty conditions, duration and remedies, contact manufacturer.

8. Maintenance

Door assembly maintenance will vary depending on the location, severity of environment and level of usage. Periodic inspection is recommended to ensure integrity of the coating and hardware operation. Doors may require cleaning with a mild detergent. Hinges, locksets and other hardware may be lubricated using a suitable spray lubricant compatible with door and frame coatings.

9. Technical Services

A staff of factory trained service personnel offers design assistance and technical support. For technical assistance, contact Amweld.

10. Filing Systems

- First Source™
- MANU-SPEC®
- ARCAT® Spec-Disk
- First Source CAD
- Sweet's Catalog Files
- ARCAT® 1998
- www.amweld.com
- Additional product information is available from the manufacturer upon request.

TABLE 4 AMWELD PAINT SPECIFICATIONS

Properties & test methods	Door frame	Door	Door color
Method of application	Flo-coat	Electrostatic air spray	Electrostatic air spray
Cure	Bake oven, 220°F - 225°F (104°C - 107°C)	Bake oven, 220°F - 225°F (104°C - 107°C)	Air dry
Gloss	3 - 5 degrees	3 - 5 degrees	18 - 20 degrees
Surface preparation	3-stage iron phosphate	3-stage iron phosphate	3-stage iron phosphate
Dry film thickness, mil (mm)	1.0 - 1.2 (0.0254 - 0.0305)	0.9 - 1.1 (0.0229 - 0.0279)	0.9 - 1.1 (0.0229 - 0.0279)
Reduction	Water	Water, if needed	Water, if needed
Salt spray, 120 continuous hours duration, ASTM D1654	1/8" (3.2 mm) creepage	1/8" (3.2 mm) creepage	1/8" (3.2 mm) creepage [1]
Rust, ASTM D610	Grade scale #6	Grade scale #6	Grade scale #6
Acceptance criteria, ANSI A250.10	Yes	Yes	Yes
Water fog test (humidity), 240 continuous hours	No more than a few #6 blisters	No more than a few #6 blisters	-

[1] Over galvanized steel, unprimed.