



Section Contents

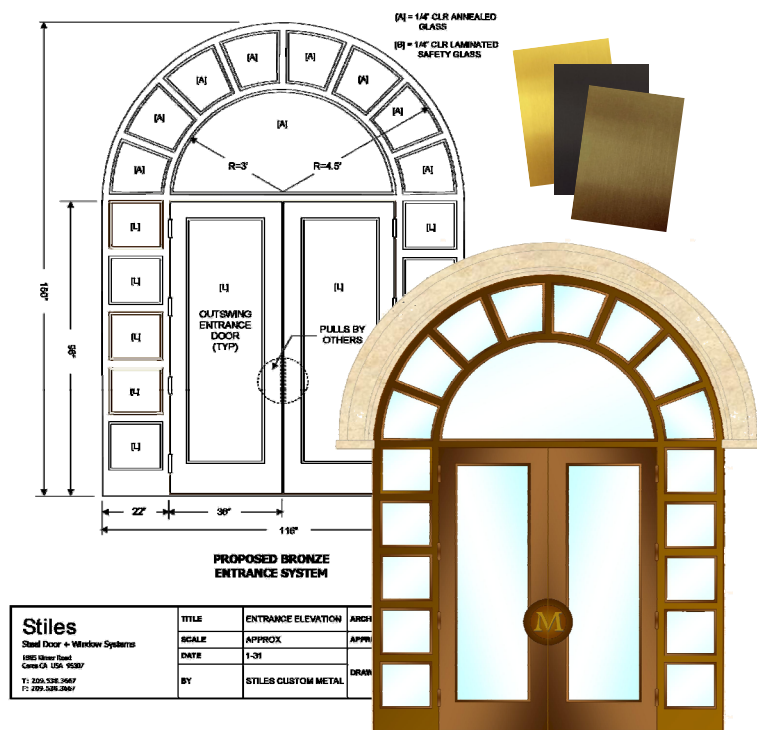
Introduction	BR-1.0
Bronze Finishes	BR-2.0
Patina Finishes	BR-3.0
Specifications	Appendix

Authentic Bronze Doors from Stiles...

Whether your project calls for historical replication or a creative new signature piece, we have the experience it takes to make your project a success. Bronze entrances make a statement of refinement and elegance like no other material. Our uncompromising attention to detail is reflected in every door we build.

- Commercial Entrance Systems
- Flush, Glass Lite and Solid Panel Configurations
- Constructed of Alloy 464 Bronze
- Custom designed to suit your requirements
- Sustainable materials and construction processes
- Abraded and Patina Finishes
- Multi features including: Bullet , Sound Control, Fire Rated

Built to Order.™



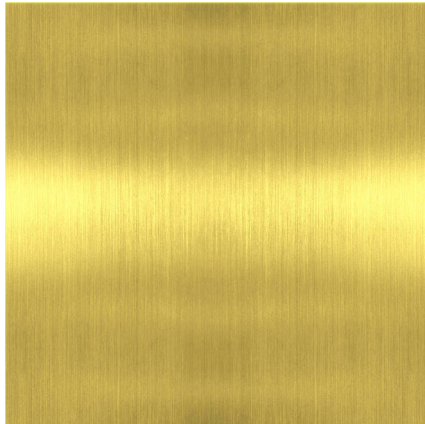
Authentic Bronze Doors from Stiles

When custom bronze doors and windows are required, you can count on Stiles for engineered high performance and outstanding visual appeal. Because Stiles Authentic Bronze Doors and Windows are built-to-order, unlimited opportunities exist for architects and designers to create signature-piece entrances. Features include:

- Entrance doors, frames, windows, storefront systems, and surrounds
- Historical replication or create new designs
- Alloy 464 Naval Brass construction
- A variety of finishes and factory-applied patinas
- Door elevations including flush, glass lite, raised panel and recessed panel
- Moulding options ranging from traditional to contemporary
- Proprietary multiple performance features such as fire rating and sound control

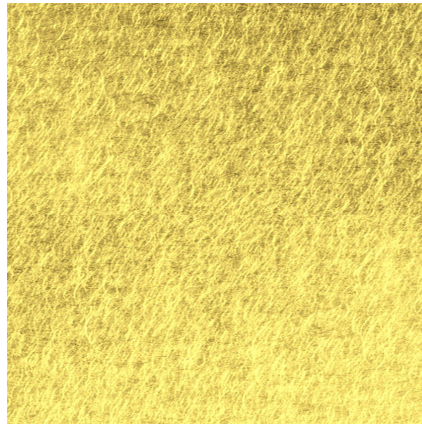
Bronze Abraded Finishes

(Shown on Alloy 464 Naval Brass)



No. 4 Finish

A lightly grained surface produced by single-directional abrading. The most common bronze finish for architectural products.



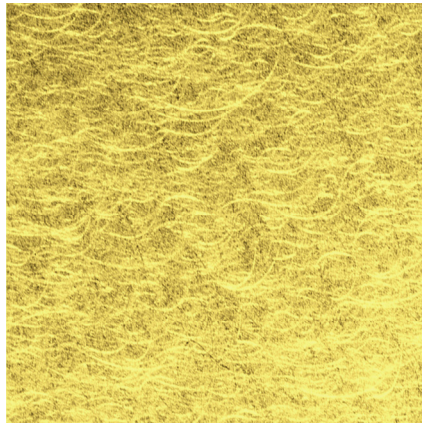
Non-Directional Finish

Produced by fine grit orbital sanding (non-directional) on mill finish bronze



No. 8 Finish (Mirror Polished)

Obtained by polishing with successively finer abrasives, then buffing with a very fine compound.



Angel Hair Finish

Produced by medium-fine grit orbital sanding, non-directional.



Random Swirl Finish

Grained surface produced by random multi-directional abrading.

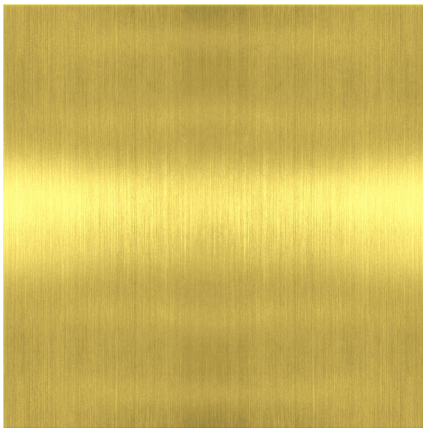
Clear Coat

An optional high-performance factory-applied clear coat is available in satin, semi-gloss, and high gloss sheens.

NOTE: Illustrations above may differ slightly from actual finishes. Finish samples will be provided for approval at time of order. Special finishes available - contact factory

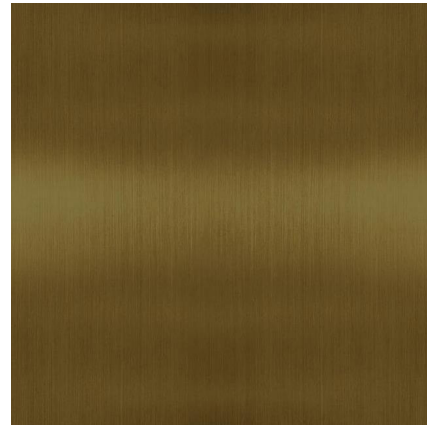
Patina Finishes

(Shown on Alloy 464 Naval Brass, #4)



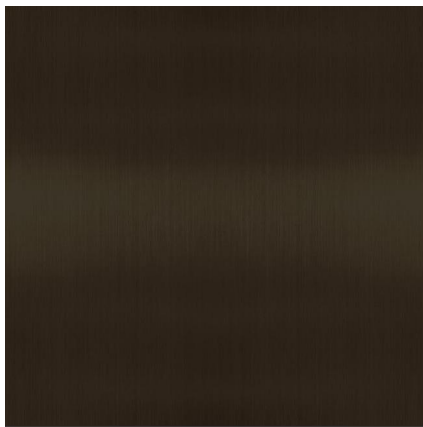
Natural

The natural color of Alloy 464 Naval Brass; a bright golden hue.



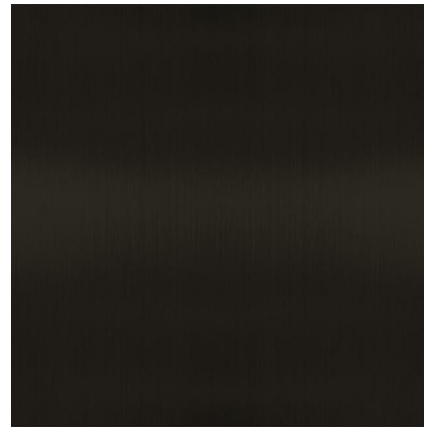
Medium Bronze

A rich medium brown with pronounced golden hues.



Oil Rubbed Bronze

A dark brown color with deep golden tones of varying intensities. Similar to US10B



Dark Statuary Bronze

A dark brown-black statuary color that varies slightly with the natural characteristics of the metal.

Important Facts About Stiles Patina Finishes

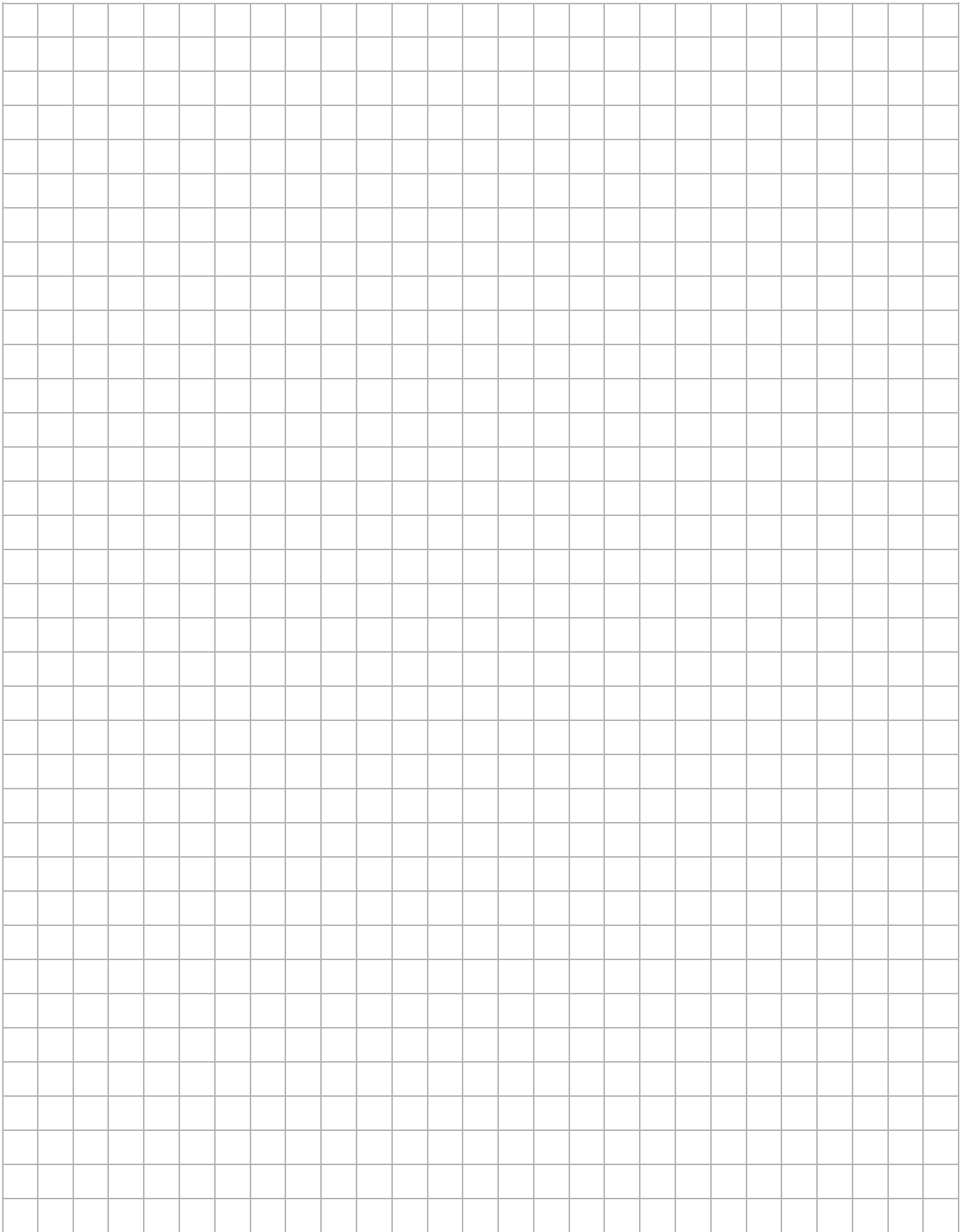
Patina finishes offer a natural color variation as opposed to paint or anodizing. The irregular patterns, color intensities and substrate metal all play a part in the ambience of a patina finish. In addition, each individual artist will produce a slightly different "application signature" to the piece. If you require a finish that is perfectly uniform in appearance, we suggest you specify a Tnemec or powder coated finish rather than a patina (metallic paints and powders available).

Clear Coat

An optional high-performance factory-applied clear coat is available in satin, semi-gloss, and high gloss sheens.

NOTE: Illustrations above may differ slightly from actual finishes. Finish samples will be provided for approval at time of order. Special finishes available - contact factory for more information.

Notes



Authentic™ BRONZE DOORS & FRAMES

Section 08 1140

PART I GENERAL

1.01 SUMMARY:

Description: Work includes Bronze Interior and Exterior Doors, Frames, and related Sidelites and Transoms where applicable.

Related work not included in this section:

1. Finish hardware including lock cylinders and thresholds.
2. Glass and glazing.
3. Caulking between frames and masonry.
4. Structural members.

1.02 QUALITY ASSURANCE:

- A. Applicable standards of the following as referenced herein:
 1. AAMA, American Architectural Manufacturers Association
 2. ASTM, American Society for Testing and Materials
 3. ADA, Americans with Disabilities Act
 4. CDA, Copper Development Association
 5. NAAMM / HMMA, National Association of Architectural Metals Manufacturers
- B. Quality is based on Authentic™ Bronze Doors and Frames manufactured by Stiles Custom Metal, Inc.
- C. Manufacturer shall have been regularly engaged in manufacturing bronze doors and frames for a period of ten years. Doors and Frames shall be fabricated by a single manufacturer. The manufacturer must have an effective quality control system in place.
- D. Allowable Tolerances as stated in NAAMM / HMMA Technical Manual.

1.03 SUBMITTALS:

- A. Shop drawings: Indicate in elevation with sections and details to scale. Include glass and metal thicknesses, joining details, field connections, anchorage, concealed and exposed fastening methods, door and framing reinforcement, and metal finishes. Indicate compliance with specified design criteria.
- B. Visual samples: Submit two (minimum 5" x 7") samples indicating texture and color to be expected in finished work.
- C. Maintenance data: Give instructions for general maintenance and repair of surfaces and finishes.

1.04 WARRANTY: Warrant Authentic™ Bronze Doors, Frames, and Window assemblies against defects in materials and workmanship for three (3) years beginning thirty days after shipment when handled, stored, and installed in accordance with manufactures instruction and NAAMM / HMMA Technical Manual. Adjustments occurring as a result of shifting or settling of building structure shall not be covered by warranty. Clear coat manufacturers warranty applies.

PART II PRODUCTS

2.01 DOORS:

- A. Acceptable products: Authentic™ Bronze Doors & Frames manufactured by Stiles Custom Metal, Inc.,
- B. Bronze Materials: CDA Alloy 464 Naval Brass, Doors minimum 0.06" thick.
- C. Finish: (Make Selections) *See www.stilesdoors.com for details
 1. Abraded Finish: (choose one) [#4 Satin], [#8 Polished], [Non-Directional], [Angel Hair], [Random Swirl]
 2. Color: (choose one) [Natural], [Medium Bronze], [Oil-Rubbed Bronze], [Dark Statuary Bronze]
 3. Clear Protective Lacquer Coating: (choose one) [No Clear Coat], [Satin], [Semi-Gloss], [High-Gloss]
- D. Fasteners: Bronze fasteners associated with door construction shall be concealed type.
- E. Design of stile and rail profiles: As indicated on drawings. Door thickness (choose one) [1-3/4"] or [2"]
Code may stipulate bottom rail height.

Authentic™ BRONZE DOORS AND FRAMES (continued)

- F. Door Construction: Doors shall be unitized construction with continuous forms reinforcement stiffening channels welded into door body. Three metal thicknesses, welded into door body, shall be required for all hardware reinforcement.
1. Stile and rail doors shall be blanked-out from one sheet of metal. No welding shall be performed on door faces. Exposed seams on door faces shall not be acceptable. Assembly with bolts, screws, or tie-rod connections shall not be acceptable.
 2. Doors shall have high impact resistant polyurethane core.
 3. Door edge construction: (choose one) [Stiles replaceable Air-Tek™ integral weather-strip], [Continuous Welded Seamless], [Hairline seam] *See www.stilesdoors.com for details. Adhesive or screw-applied weather-strip shall not be acceptable.
 4. Cladding over aluminum, steel, or wood construction shall not be acceptable.
- G. Glass Lite Kits: (choose one)
- [Molding type Lite Kit: Shall be mitered and welded type corners, finished smooth and re-grained to match. Molding on exterior side of door shall be permanently attached. Interior removable molding shall be attached with #8 oval head sheet metal screws of matching material.]
- [Internal Channel Type Flush Glass Moldings: Shall be securely welded to the inside of the door skin. Removable glass channel stops shall be butted at corner joints, secured to door with concealed #8 sheet metal screws. Exposed fasteners shall not be accepted.]

2.02 FRAMES:

- A. Construction:
1. Material shall be minimum 0.08" thick with the same texture and finish as doors.
 2. Fabricate components in accordance with approved shop drawings. Frames shall be fully welded construction with welds ground smooth and blended to be indistinguishable in finished work. Finish shall match entrance doors.
- B. Exposed fasteners shall be countersunk and shall match framing color.
- C. Exterior Door frames shall have Stiles Seal-Tek™ integral weather-strip at vertical jambs and head. Adhesive applied weather-strip shall not be acceptable.
- D. Hardware: Manufacturer shall prepare and reinforce for mortised templated hardware per manufacturer's templates and in accordance with NAAMM / HMMA.

PART III EXECUTION

3.01 CLEARANCES AND TOLERANCES shall be in compliance with NAAMM / HMMA standards.

3.02 SITE STORAGE AND PROTECTION OF MATERIALS

- A. Deliver and store materials to prevent damaging and marring to finishes.
- B. Protection: Protect metal surfaces from contact with lime, mortar, cement, acids, and other harmful substances / surfaces and from careless handling, storage or machining.

3.03 INSTALLATION

- A. Framing systems shall be installed per Stiles instructions and NAAMM / HMMA 840. Install frames without use of exposed fasteners, except where indicated on shop drawings.
- B. Door Installation: Install doors and hardware in accordance with manufacturer's product data. Adjust hardware for proper operation.

3.04 CLEANING: Clean doors and frames in accordance with manufacturer's special instructions.

3.05 MAINTENANCE: Instruct the Owner's Maintenance Personnel regarding the operation and maintenance of these doors.

End of Section

Bronze Clad Steel Doors and Frames**Section 08 1140****PART I GENERAL****1.01 SUMMARY**

- A. Description: Work includes Bronze Clad Interior and Exterior Steel Doors, Frames, and related Sidelites, and Transoms where applicable.
- B. Related work not included in this section:
 - 1. Finish hardware including lock cylinders and thresholds.
 - 2. Glass and glazing.
 - 3. Caulking between frames and masonry.
 - 4. Structural members.

QUALITY ASSURANCE

- A. Applicable standards of the following as referenced herein:
 - 1. AAMA, American Architectural Manufacturers Association
 - 2. ASTM, American Society for Testing and Materials
 - 3. ADA, Americans with Disabilities Act
 - 4. CDA, Copper Development Association
 - 5. NAAMM / HMMA, National Association of Architectural Metals Manufacturers
- B. Quality is based on Bronze Clad Steel Doors and Frames manufactured by Stiles Custom Metal, Inc.
www.stilesdoor.com
- C. Manufacturer shall have been regularly engaged in manufacturing bronze doors and frames for a period of ten years. Doors and frames shall be fabricated by a single manufacturer. The manufacturer must have an effective quality control system in place.
- D. Allowable Tolerances as stated in NAAMM / HMMA Technical Manual.

1.03 SUBMITTALS

- A. Shop drawings: Indicate in elevation with sections and details to scale. Include glass and metal thicknesses, joining details, field connections, anchorage, concealed and exposed fastening methods, door and framing reinforcement, and metal finishes. Indicate compliance with specified design criteria.
- B. Finish samples: Submit two (minimum 5" x 7") samples indicating texture and color and to be expected in finished work.
- C. Maintenance data: Give instructions for general maintenance and repair of surfaces and finishes.

1.04 WARRANTY: Warrant Bronze Clad Steel Doors, Frames, and Window assemblies against defects in materials and workmanship for three (3) years, beginning thirty days after shipment when handled, stored, and installed in accordance with manufacturer's instructions and NAAMM / HMMA Technical Manual. Adjustments made necessary due to shifting or settling of building structure shall not be covered by warranty. Clear coat manufacturers warranty applies.

PART II PRODUCTS**2.01 DOORS**

- A. Acceptable products: Bronze Clad Steel Doors & Frames manufactured by Stiles Custom Metal, Inc.
- B. Bronze Cladding Material: CDA Alloy 464 Naval Brass, minimum 0.045" thick.
- C. Finish: (Make Selections) *See www.stilesdoors.com for details
 - 1. Abraded Finish: (choose one) [#4 Satin], [#8 Polished], [Non-Directional], [Angel Hair], [Random Swirl]
 - 2. Color: (choose one) [Natural], [Medium Bronze], [Oil-Rubbed Bronze], [Dark Statuary Bronze]
 - 3. Clear Protective Lacquer Coating: (choose one) [No clear coat] [Satin], [Semi-Gloss], [High-Gloss]
- D. Design of stile and rail profiles: As indicated on drawings. Door thickness: (choose one): [1-3/4"] or [2"]
- E. Code may stipulate bottom rail height.

BRONZE CLAD STEEL DOORS AND FRAMES (continued)

F. Door Construction:

1. Base steel doors minimum 0.056" thickness and shall be unitized construction with continuous forms reinforcement stiffening channels welded into door body consistent with Stiles steel door construction. Assembly with bolts, screws, or tie rod connections shall not be acceptable.
2. Bronze Cladding: Minimum 0.045" thick. Cladding shall be blanked-out from one sheet of metal. No welding shall be permitted. Exposed seams on door faces are not acceptable. Prior to cladding, base door shall have a permanent coating applied which will prevent galvanic reaction. Cladding shall be applied to door with a tested, permanent, lifetime compression adhesive.
3. Door edge construction: (choose one) [Stiles replaceable Air-Tek™ integral weather-strip], [Hairline Seam] Adhesive or screw-applied weather strip shall not be accepted.
4. Bronze cladding over aluminum or wood construction shall not be accepted.

G. Glass Lite Kits: (choose one)

[Molding type lite kit with mitered corners welded, finished smooth and re-grained to match. Molding on exterior side of door to be permanently attached. Interior removable molding shall be attached with #8 oval head sheet metal screws of matching material].

[Internal channel type, flush glass moldings, securely welded to the inside face of the door skin. Removable glass channel stops shall be butted at corner joints, secured to the door with concealed, #8, sheet metal screws. Exposed fasteners shall not be accepted].

2.02 FRAMES

A. Construction:

1. Material shall be minimum 0.08" thick with the same texture and finish as doors.
2. Fabricate components in accordance with approved shop drawings. Frames shall be fully welded construction with welds ground smooth and blended to be indistinguishable from finished work. Finish shall match doors.

B. Exposed fasteners shall be countersunk and shall have finish to match framing color.

C. Exterior Door frames shall have Stiles replaceable Seal-Tek™ integral weather-strip at vertical jambs and head. Adhesive applied weather-strip shall not be accepted.

D. Hardware: Manufacturer shall prepare and reinforce for mortised templated hardware per manufacturers templates and in accordance with NAAMM / HMMA.

PART III EXECUTION

3.01 CLEARANCES AND TOLERANCES shall be in compliance with NAAMM / HMMA standards.

3.02 SITE STORAGE AND PROTECTION OF MATERIALS

- A. Deliver and store materials to prevent damaging and marring of finishes.
- B. Protection: Protect metal surfaces from contact with lime, mortar, cement, acids, and other harmful substances / surfaces, and from careless handling, storage or machining.

3.03 INSTALLATION

- A. Framing systems shall be installed per Stiles instructions and NAAMM / HMMA 840. Install frames without use of exposed fasteners, except where indicated on shop drawings.
- B. Door Installation: Install doors and hardware in accordance with manufacturer's product data. Adjust hardware for proper operation.

3.04 CLEANING: Clean doors and frames in accordance with manufacturer's special instructions.

3.05 MAINTENANCE: Instruct the Owner's Maintenance Personnel regarding the operation and maintenance of these doors.

End of Section