SECTION 05 52 00 – Exterior Metal Railing

PART 1: GENERAL

1.01 Scope of Standard

A. This standard provides general guidance concerning the specific preferences of the Texas State University for exterior metal railings.

B. Texas State University recognizes that project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification, it is expected that these guidelines will govern the design and specifications for Texas State University projects.

1.02 Design Guideline

A. Exterior metal railing at exterior stairs and guardrails on the site or on the Building shall have a Spanish Colonial influence, and follow the design for stairs, in Exhibit 1 and Exhibit 1a, and for guardrails, in Exhibit 2, for ramps, in Exhibit 3, Perimeter Campus Fence, in Exhibit 4 and Interior Campus Fence, in Exhibit 5 at the end of this Section.

1.03 Submittals

A. Shop drawings submittals are required for approval by the Project Representative.

PART 2: PRODUCTS

2.01 Metals

A. Metals shall conform to standards of ASTM A36 (ASTM A 36M).

B. Metal Railing product referenced components shall be as manufactured by King Architectural Metals, Dallas, Texas, 214-388-9834, or an approved equal.

C. Cutting, Assembly, welding, and painting shall be completed by the subcontractor.

2.02 Fabrication

A. Fabricate metal railings for connecting members, complying with ANSI A14.3, welded steel construction. All welds shall be ground smooth.
SECTION 05 52 00 – Exterior Metal Railing

2.03 Grouting in Concrete

A. Use non-shrink, non-metallic grout: factory packaged, non-staining, non-corrosive, non-gaseous grout complying with ASTM C 1107.

2.04 Finishes

A. Metal Railings shall be shop primed with a rust inhibitive primer for shop or field painting.

B. For exterior metal railing detached from a building, paint shall be Sherwin Williams, SW6258 "Tricorn Black", with a semi-gloss finish.

C. For exterior metal railing attached to a building, paint shall be Sherwin Williams, BRZ-3, Chestnut Bronze, semi-gloss finish.

PART 3: EXECUTION

3.01 Installation

A. Set Metal Railings accurately in location, alignment, and elevation: with surfaces level, plumb, true, and free of rack.

B. Anchor steel support bars and posts in concrete by forming or core-drilling holes; then fill with non-shrink grout as specified above.
Exhibit 1:

Exterior stair with Spanish Colonial
Vertical bars 4" apart, at non-fall protection requirement

Lamb's Tongue
13-00302-403

1" x 2" steel post
#61x1x2x14-24

1/4" W. MOLDED
STEEL HANDRAIL
#45-905.

Sg. Tubing 1" x 1"
#61-1x16-24

PLAIN SQ. BAR
1/4" x 1/4".
#13-45026-000

COLLAR #14-04-58

Lamb's Tongue
13-00302-403

1" x 2" STEEL
POST
#61-1x2x14-24.

FLAT BAR 1/4" x 1"
#67-14x1-20

NOTES
1. ALL RAIL COMPONENTS ARE
   BY KING ARCHITECTURAL METALS,
   DALLAS, TX: 214-386-9834

2. ALL RAIL COMPONENTS ARE PRIMED
   WITH RUST INHIBITIVE PRIMER AND
   PAINTED SHERWIN WILLIAMS, ENAMEL,
   SW 6258 "Tricorn Black", SEMI-GLOSS FINISH

Elevation
No Scale
CONSTRUCTION STANDARDS

DIVISION 05 - METAL

SECTION 05 52 00 – Exterior Metal Railing

Exhibit 1aa:

Stair railing without pickets, at non-fall protection requirement

1" x 2" steel post #61x1x2x14-24
1¼" w. MOLDED STEEL HANDRAIL #45 - 9005.
Sq. Tubing 1" x 1" #61-1x16-24

Lamb's Tongue 13-00302-403

NOTES
1. ALL RAIL COMPONENTS ARE BY KING ARCHITECTURAL METALS, DALLAS, TX: 214-388-9834
2. ALL RAIL COMPONENTS ARE PRIMED WITH RUST INHIBITIVE PRIMER AND PAINTED SHERWIN WILLIAMS, ENAMEL, SW 5258 "Tricorn Black", SEMI-GLOSS FINISH

Elevation
No Scale

Sheet No.: 1

Title: Standard Stair Handrail Elevation
File name: HandRail_Standard_2

Revised Jan-15 Exterior Metal Railings - 05 52 00 –4
Exhibit 1a: Exterior Stair Requiring Fall Protection

NOTES
1. ALL RAIL COMPONENTS ARE BY KING ARCHITECTURAL METALS, DALLAS, TX: 214-388-9834
2. ALL RAIL COMPONENTS ARE PRIMED WITH RUST INHIBITIVE PRIMER AND PAINTED SHERWIN WILLIAMS, ENAMEL, SW 6258 "Tricorn Black", SEMI-GLOSS FINISH

Elevation
No Scale
SECTION 05 52 00 – Exterior Metal Railing

Exhibit 2: Exterior Guard Rail Requiring Fall Protection

Elevation
No Scale

NOTES
1. ALL RAIL COMPONENTS ARE
BY KING ARCHITECTURAL METALS,
DALLAS, TX: 214-388-9634

2. ALL RAIL COMPONENTS ARE PRIMED
WITH RUST INHIBITIVE PRIMER AND
PAINTED SHERWIN WILLIAMS, ENAMEL,
SW 6258 "Tricorn Black", SEMI-GLOSS FINISH

Title: Standard Guardrail Elevation

File name: HandRail_Standard_1a

Scale: 1/2" = 1'-0"

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CONSTRUCTION STANDARDS

DIVISION 05 - METAL

SECTION 05 52 00 – Exterior Metal Railing

Exhibit 2A: Exterior Railing, at Non-Fall Protection Requirement

Elevation

No Scale

NOTES
1. ALL RAIL COMPONENTS ARE
BY KING ARCHITECTURAL METALS,
DALLAS, TX: 214-388-9834

2. ALL RAIL COMPONENTS ARE PRIMED
WITH RUST INHIBITIVE PRIMER AND
PAINTED SHERWIN WILLIAMS, ENAMEL,
SW 6258 "Tricorn Black", SEMI-GLOSS FINISH
Exhibit 3: ADA accessible ramp with pickets, at non-fall projection requirements

Elevation
No Scale

NOTES
1. ALL RAIL COMPONENTS ARE BY KING ARCHITECTURAL METALS, DALLAS, TX: 214-388-9834
2. ALL RAIL COMPONENTS ARE PRIMED WITH RUST INHIBITIVE PRIMER AND PAINTED SHERWIN WILLIAMS, ENAMEL, SW 6258 "Tricorn Black", SEMI-GLOSS FINISH
3. LAMB'S TONGUE: FILE THE EDGES OF 1 3/4" WIDE TONGUE TO MATCH THE WIDTH OF 1 5/8" TOP RAIL
EXHIBIT 4: Campus Perimeter Brick Fence & Metal Railing

- 2" SQ. Steel Tube #861-2x16-24
- SW 581 Steel Posts 10'-3" x 3'-0" x 1' -1" by King Architectural Metals
- Hammered Nap Steel Posts & Center Rail
- #13-117-7 by King Architectural Metals
- Accent Brick
- Acme, Band 120, Royal Blue
- Product Code 228-3801-27
- Standard 168, "Reflect," Acme, Band 120, Royal Blue
- Product Code 15100121
- Notes:
  1. Paint Finish: Steel fence to be painted semi-gloss finish.
  2. All brick joints 5" high.

Centerline of Knuckles must align with centerline of ascent of BC.

Vents - per Architectural Design

Title: Campus Perimeter Brick Fence and Ornamental Rail

File updated: 1/27/2009
Plot Date: 6/3/2013
File name: Fence_Standard

Sheet No.: 1 of 1
CONSTRUCTION STANDARDS

DIVISION 05 - METAL

SECTION 05 52 00 – Exterior Metal Railing

Exhibit 5: Campus Interior Fence @ Brick Columns

Field Verify

EQ.

1 5/8" W. handrail
#45-905, over
sq. tubing 1" x 1"
#61-1x16-24

2" x 1" x 14ga tubing
#61-2x1x14-24

5/8" x 5/8" plain sq. bar
#13-45026-000

5/8" Collar
#14-04-68

King Architectural

Mounting Brackets

Collar space
at 3 bars

4"

Verify

Cast stone base

Fence Elevation

No Scale

NOTES

1. ALL RAIL COMPONENTS ARE
BY KING ARCHITECTURAL METALS,
DALLAS, TX 214-388-9834

2. ALL RAIL COMPONENTS ARE PRIMED
WITH RUST INHIBITIVE PRIMER AND
PAINTED SHERWIN WILLIAMS, ENAMEL
SW 6256 "Tricorn Black", SEMI-GLOSS FINISH

Mounting Bracket

5/16" hole

Lead Expansion
Anchor

End View

No Scale

Flat Bar 1/4" x 1"
#67-14x1-20 (King)

1/4" x 2" screw in
anchor, part
#9-2826 (King)
Galvanized & Painted

Side View

No Scale

NOTES

All welded construction - all bolts completely welded

Title: Campus Interior Fence @ Brick Columns

File name: Interior_Fence_Standard

Sheet No.: 1 of 1

END OF SECTION 05 52 00

Revised Jan-15

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