

**SECTION 05 59 01
METAL EDGING**

GENERAL PROVISIONS

1.01 ATTENTION IS DIRECTED TO THE CONTRACT AND GENERAL CONDITIONS AND ALL SECTIONS WITHIN DIVISION 1 - GENERAL REQUIREMENTS WHICH ARE HEREBY MADE A PART OF THIS SECTION OF THE SPECIFICATIONS.

DESCRIPTION OF WORK

2.01 PROVIDE METAL EDGING WORK REQUIRED FOR PAVING AND LANDSCAPE EDGES AS INDICATED ON DRAWINGS AND AS SPECIFIED HEREIN. INCLUDE, BUT DO NOT LIMIT TO:

- A. Flat vertical steel edging.

RELATED WORK

3.01 EXAMINE CONTRACT DOCUMENTS FOR REQUIREMENTS THAT AFFECT WORK OF THIS SECTION. OTHER SPECIFICATION SECTIONS THAT DIRECTLY RELATE TO WORK OF THIS SECTION INCLUDE, BUT ARE NOT LIMITED TO:

- A. Section 13 42 00 SHIPPING CONTAINERS
- B. Section 32 93 00 PLANTING

REFERENCES

4.01 COMPLY WITH APPLICABLE REQUIREMENTS OF FOLLOWING STANDARDS. WHERE THESE STANDARDS CONFLICT WITH OTHER SPECIFIED REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN.

- A. American Society for Testing and Materials (ASTM):
 - 1. A 36 - Structural Steel
 - 2. A 123 – Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars, and Strip
 - 3. A 153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware
 - a. A 386 - Zinc Coating (Hot-Dip) on Assembled Steel Products

SUBMITTALS

- 5.01 PRODUCT DATA: SUBMIT MANUFACTURER'S PRINTED PRODUCT DATA, SPECIFICATIONS, STANDARD DETAILS, INSTALLATION INSTRUCTIONS, USE LIMITATIONS AND RECOMMENDATIONS FOR EACH MATERIAL USED. PROVIDE CERTIFICATIONS THAT MATERIALS AND SYSTEMS COMPLY WITH SPECIFIED REQUIREMENTS.**
- 5.02 SHOP DRAWINGS: PROVIDE LARGE SCALE SHOP DRAWINGS FOR FABRICATION, INSTALLATION AND ERECTION OF ALL PARTS OF THE WORK. PROVIDE PLANS, ELEVATIONS AND DETAILS OF ANCHORAGES, CONNECTIONS AND ACCESSORY ITEMS. SHOW ALL INTERFACES AND RELATIONSHIPS TO WORK OF OTHER TRADES.**
- 5.03 SAMPLES: SUBMIT REPRESENTATIVE SAMPLES OF EACH SHOP FINISHED MATERIAL THAT IS TO BE EXPOSED IN THE COMPLETED WORK. SHOW FULL COLOR RANGES AND FINISH VARIATIONS EXPECTED. PROVIDE SAMPLES HAVING MINIMUM SIZE OF 144 SQ. IN.**

ANCHORAGE

- 6.01 ANCHORAGE SHALL BE PROVIDED WHERE NECESSARY FOR FASTENING METAL EDGING SECURELY IN PLACE. ANCHORAGE NOT OTHERWISE SPECIFIED OR INDICATED SHALL INCLUDE SLOTTED INSERTS MADE TO ENGAGE WITH THE ANCHORS AND POWER-DRIVEN FASTENERS WHEN APPROVED FOR CONCRETE.**

PRODUCT HANDLING AND STORAGE

- 7.01 STORE WORK OFF GROUND AND UNDER COVER. PROTECT FROM DAMAGE. REPAIR AND CLEAN WORK BEFORE ERECTION.**

PART 2 PRODUCTS

8.01 STEEL EDGING

- 8.02 STEEL LANDSCAPE EDGING SIZE: COMPLY WITH ASTM A 569, HOT-ROLLED, STANDARD FLEXIBLE CARBON STEEL LANDSCAPE EDGING, FABRICATED IN SECTIONS WITH STAKE POCKETS STAMPED, PUNCHED, OR WELDED TO FACE OF SECTIONS APPROXIMATELY THIRTY INCHES (30") APART TO RECEIVE STAKES. STEEL LANDSCAPE EDGING (HEADER) SHALL BE DOUBLE STAKED AT OVERLAP JOINTS, AND DESIGNED TO RECEIVE TAPERED STEEL STAKES**

- A. Insert one of the following steel landscape edging sizes:
 - 1. 1/4" thick, 5" wide, by 16' length, with 7 stakes (actual coverage 15'-4")
 - 2. 3/16" thick, 4" wide, by 16' length, with 6 stakes (actual coverage 15'-4")
 - 3. 1/8" thick, 4" wide, by 16' length, with 6 stakes (actual coverage 15'-4")
 - 4. 12ga (.10"-105") x 4" wide, by 10' length, with 4 stakes (actual coverage 9'-4")
 - 5. 14ga (.07"-075") x 4" wide, by 10' length, with 4 stakes (actual coverage 9' -4")

METAL

9.01 GENERAL: PROVIDE PRODUCTS AND MATERIALS OF NEW STOCK, FREE FROM DEFECTS, AND OF BEST COMMERCIAL QUALITY FOR EACH INTENDED PURPOSE.

9.02 STEEL PLATES, SHAPES, AND BARS: ASTM A 36.

FINISHES

10.01 COMPLY WITH NAAMM'S "METAL FINISHES MANUAL FOR ARCHITECTURAL AND METAL PRODUCTS" FOR RECOMMENDATIONS FOR APPLYING AND DESIGNATING FINISHES.

STEEL LANDSCAPE EDGING FINISH : INSERT SELECTION

11.01 PAINTED FINISH SHALL BE SHERWIN WILLIAMS H68GT85 POWDER COAT PAINT ELECTROSTATICALLY APPLIED AND OVEN BAKED. MINIMUM THICKNESS TO BE 1.5 MILS. COLOR SHALL BE GREEN, BROWN, BLACK

11.02 HOT-DIPPED GALVANIZED FINISH TO BE APPLIED AFTER STEEL LANDSCAPE EDGING IS CUT TO LENGTH AND STAKE POCKETS ARE STAMPED, PUNCHED OR WELDED. GALVANIZATION SHALL COMPLY WITH ASTM AL23 /AL23M-97A. ZINC COVERAGE SHALL BE TO A STANDARD THICKNESS OF (AVAILABLE IN THESE THICKNESSES AND IN 118" ONLY IN THE DEEP-POCKET VERSION):

1. 1/4" x 5" wide, by 16' length - 3.3 mil
2. 3/16" x 4" wide, by 16' length - 3.0 mil
3. 1/8" x 4" wide, by 16' length - 2.6 mil

STEEL LANDSCAPE EDGING STAKES: INSERT SELECTION:

12.01 1/4", 3/16" AND 1/8" (DEEP POCKET VERSION) EDGING SPECIFY STAKE AS FOLLOWS:

- A. Steel, tapered, 16" minimum length, and finished to match specified steel landscape edging (header). Stakes designed specifically to anchor steel landscape edging (header) in place, and shall be made by the manufacturer of the steel landscape edging (header) for which they will be used.

12.02 1/8" (STANDARD POCKET VERSION), 12GA AND 14GA SPECIFY STAKING AS FOLLOWS:

- A. Steel, tapered, 12" or 14" (specify which) length and finished to match specified steel landscape edging (header). Stakes designed specifically to anchor steel landscape edging (header) in place, and made by the manufacturer of the steel landscape edging (header) for which they will be used.

ACCESSORIES:

13.01 STANDARD START/END SECTIONS, 90° CORNERS, SPLICERS AS REQUIRED, SECTIONAL AND ONE-PIECE CIRCLES

ACCEPTABLE MANUFACTURERS

14.01 "DURAEDGE", BY THE JD RUSSELL COMPANY, TUCSON, AZ (800-888-7425) OR EQUAL (NO KNOWN EQUAL), AS APPROVED BY THE CONSTRUCTION PROJECT MANAGER. THE LANDSCAPE ARCHITECT SHALL BE AFFORDED THE OPPORTUNITY TO REVIEW ANY SUBSTITUTION.

PART 3 EXECUTION

15.01 EXAMINATION

15.02 EXAMINE SUBSTRATES AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF METAL EDGING.

- A. Proceed with installation only after unsatisfactory conditions have been corrected.

INSTALLATION, GENERAL

- 16.01 PROVIDE ANCHORAGE DEVICES AND FASTENERS WHERE NEEDED TO SECURE METAL EDGING TO IN-PLACE CONSTRUCTION.**
- 16.02 PERFORM CUTTING, DRILLING, AND FITTING REQUIRED TO INSTALL METAL EDGING. SET EDGING ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; MEASURED FROM ESTABLISHED LINES AND LEVELS.**
- 16.03 BACKFILL MATERIAL ON EACH SIDE OF EDGE SHALL BE AS SPECIFIED FOR ADJACENT SURFACE AND SHALL BE THOROUGHLY COMPACTED BY MEANS OF POWER TAMPERS. EXTREME CARE SHALL BE TAKEN NOT TO DESTROY ALIGNMENT. EDGE SECTIONS DISTURBED DURING BACKFILLING OR OTHERWISE SHALL BE RESET TO LINE AND GRADE, AND PROPERLY BACKFILLED.**

STEEL EDGING

- 17.01 STEEL EDGING SHALL BE INSTALLED AT LOCATIONS INDICATED ON THE DRAWINGS. WHERE REQUIRED, EDGING SHALL BE CUT SQUARE AND ACCURATELY TO REQUIRED LENGTH.**
 - A. Steel edging shall be securely staked in required position, not to exceed ½ in. above finished grade. Stakes shall be driven through slots along length of edging.
 - B. Minimum 30 inches on-center, driven below top elevation of edging, or at every stake pocket location in landscape edging (header) sections designed and manufactured to receive stakes.
 - C. Stakes shall be located in solid undisturbed soil, or in soil set at 85% relative compaction.
 - D. Edging shall be set plumb and vertical at required line and grade. Straight sections shall not be wavy; curved sections shall be smooth and shall have no kinks or sharp bends.
- 17.02 HORIZONTAL ALIGNMENT: INSTALL STRAIGHT SECTIONS TRUE TO THE ALIGNMENTS AS INDICATED, FREE OF WAVES OR BENDS, USING STRINGS AS GUIDES. INSTALL CURVED SECTIONS TRUE TO THE ALIGNMENTS AS INDICATED, FREE OF WAVES OR BENDS, FOLLOWING MARKED ALIGNMENTS APPROVED IN THE FIELD BY THE CONSTRUCTION PROJECT MANAGER.**
- 17.03 VERTICAL ALIGNMENT : INSTALL PARALLEL WITH THE FINISHED GRADE.**

TOUCH-UP REPAIR

- 18.01 AFTER ERECTION ABRADED AREAS OF EDGING SURFACES SHALL BE TOUCHED-UP AND REPAIRED WITH MANUFACTURER'S STANDARD MATERIALS.**

END OF SECTION 05 59 01