

RW-002
JANUARY 2003

**ENGINEERING AND OPERATIONS
NORTHERN AIRPORTS**

**SPECIFICATION FOR
RUNWAY LIGHTING ANCHOR STAKES
FOR USE IN MEDIUM INTENSITY AIRFIELD
LIGHTING SYSTEMS**

**Manitoba
Transportation and
Government Services**



**TRANSPORTATION AND GOVERNMENT SERVICES
NORTHERN AIRPORTS**

**SPECIFICATIONS FOR RUNWAY LIGHTING
ANCHOR STAKES**

1. SCOPE

- 1.01 This specification defines the general requirements applicable to Runway Lighting Anchor Stakes. The intent of this specification is to establish minimum acceptable electrical, mechanical, design and performance requirements, which all runway lighting stakes must meet to ensure satisfactory and reliable operation. It is not intended to impose restrictions upon design or materials, which must conform to the FAA or Transport Canada TP 312 Technical standard. All FAA and Transport Canada TP 312 standards, current FAA and Transport Canada TP 312 specifications at time of contract, not specifically mentioned in this specification, will apply. Where there is a conflict between this specification and the latest FAA and Transport Canada TP 312 standard, this specification must apply.

2. REQUIREMENTS

- 2.01 Stake assembly must be 50mm x 50mm x 6mm galvanized angle iron. Stake design must allow the connecting cable to enter at the center of the runway light assembly fixture. Total length of the anchor stake must be 760 mm.
- 2.02 A cast aluminum coupling must be attached at the top to accept a standard 50mm pipe thread (NPT).
- 2.03 The stake must be complete with a copper ground lug, a stainless steel locking washer, ¼" bolt and nut.
- 2.04 All galvanizing must be hot dipped with minimum zinc coating of 600g/sq.m. (2oz. per sq. ft.) per CSA G164-M92 specification. Shop coat primer to CGSB 1-GP – 40m. Galvanizing primer must be zinc rich, ready-mix to CGSB 1 GP-181M.
- 2.05 See attached Drawing #NAP-002 for details.

3. WARRANTY

- 3.01 All units must be guaranteed against failure for one year from date of acceptance by the Traffic Engineering Branch of the Department of Transportation and Government Services.

4. INSPECTION AND ACCEPTANCE

- 4.01 The vendor must supply one evaluation sample unit of each type being supplied along with all testing and technical documentation.

Runway Stakes that conform to this specification and are not currently in use by this Department must be submitted to the Traffic Signal Workshop for a one-year evaluation period by the Department. At the end of the evaluation period the supplier will be advised by the Traffic Operations Engineer if the equipment submitted for evaluation is acceptable.

The total cost of supplying this equipment for evaluation must be borne by the supplier. The bidder must complete the attached "Specification Compliance Summary" (attached). Failure to complete the summary will result in disqualification from the bidding.

- 4.02 All shipments of Runway Stakes must be delivered to the Mechanical Equipment Warehouse facility at 1550 Dublin Avenue, Winnipeg, Manitoba. At that time they will be inspected by the Traffic Engineering Branch of the Department of Transportation and Government Services.

Acceptance will be based on the supplied equipment meeting the requirements of this specification.

- 4.03 For additional technical information please contact Mark Seniuk at (204) 945-7335 office, or (204) 799-8682 cellular.