

RW-009
JANUARY 2003

**ENGINEERING AND OPERATIONS
NORTHERN AIRPORTS**

**SPECIFICATION FOR FLEXIBLE SERIES
LIGHTING CABLE FOR USE IN MEDIUM INTENSITY
AIRFIELD LIGHTING SYSTEMS**

**Manitoba
Transportation and
Government Services**



**TRANSPORTATION AND GOVERNMENT SERVICES
NORTHERN AIRPORTS**

**SPECIFICATIONS FOR FLEXIBLE CABLE
SUITABLE FOR DIRECT EARTH BURIAL
(CSA TYPE DESIGNATION: SOOW)**

1. SCOPE

This specification defines the general requirements applicable to SOOW Cabtire Flexible Cable. The intent of this specification is to establish minimum acceptable electrical, mechanical, design and performance requirements, which all SOOW Cabtire Flexible Cable must meet to ensure satisfactory and reliable operation. It is not intended to impose restrictions upon design or materials, which must conform to the CSA technical standard. All CSA standards, current CSA specifications at time of contract, not specifically mentioned in this specification will apply. Where there is a conflict between this specification and the latest CSA standard, this specification will apply.

2. REQUIREMENTS

- 2.01 SOOW Cabtire must be manufactured in accordance with CSA specification LL-35441-B FT2. The cable must be constructed of stranded copper conductors, paper separators and ethylene propylene rubber insulation. The conductors must be twisted with fillers, have a hypalon jacket, and colour coded. They must be #12 AWG with a 600 volt rating.
- 2.02 The outside diameters of the flexible cable must match secondary connector kits supplied by the manufacturer. Immediately upon award of the Purchase Order the cable supplier must supply a cable specification to the manufacturer of the secondary connection kits for appropriate sizing.
- 2.03 The cable must be delivered in non-returnable reels of 305 metres per reel.
- 2.04 The cable must be clearly identified at 1 metre intervals for the entire length of each reel with the following information:
- the name of the manufacturer
 - the date of manufacture
 - the cable specification number/type
 - the rated voltage
 - the conductor size
- 2.05 In addition to the marking at 1 metre intervals, the cable must also be marked to show the length of cable remaining on the reel.

3. WARRANTY

- 3.01 The cable 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 Prior to the delivery the vendor must supply a 1 metre sample of the cable being supplied along with all test and technical documentation.

SOW Cabtire that conforms to this specification and which is 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 cable 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 SOW Cabtire 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.