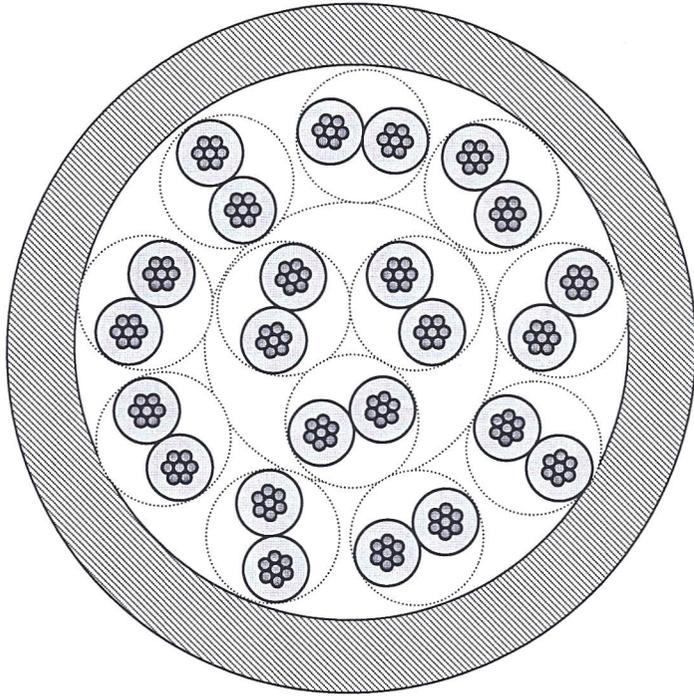


REVISION RECORD			
Rev	Date	Revisions	Auth
n/c	03/10/05	Initial release for client review	S. A.

**PROPRIETARY DOCUMENT**



# SPECIFICATION

Approvals	Date
Prep: S. Audish <i>[Signature]</i>	10/13/14
Engrng: S. Audish <i>[Signature]</i>	10/13/14
Mfg.: G. Lepe <i>[Signature]</i>	10-14/14
Q.A.: S. Godinez <i>[Signature]</i>	10-15-14

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NATIONAL WIRE & CABLE CORPORATION
FEDERAL MFGR CAGE NO. 04569
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<b>CABLE, SPCL PURPOSE, ELECTRICAL</b>	
<b>S10-4440</b>	Rev. n/c
Litton Amecon	Pg. 1 of 2

## S10-4440 Rev. N/C CABLE

1	Jacket	The cable shall have an outer jacket consisting of an extruded layer of Gray Polyvinylchloride (PVC) compound. Nominal wall thickness shall be 0.032 inch. Maximum finished cable diameter shall be 0.360 inch Temperature rating: -40 to +105°C.
2	Barrier Tape	A wrapped barrier layer of 0.001 inch thick polyester (Mylar) tape shall be applied directly over the cabled bundle of wires. Overlap of tape shall be 35% minimum.
3	Twisted Pairs (12) unshielded	The cable bundle shall have twelve (12) twisted pairs of AWG 24 (7x32) TC stranded tinned copper conductors. The conductors shall be PVC-insulated in accordance with the requirements of MIL-W-16878/1, rated 600 volts, -54 to +105°C. These insulated conductors shall also meet UL AWM Style 1061, rated 300 volts, 80°C.  Pairs color code: see table below.
4	Cable-forming	All twisted pairs shall be helically cable-formed into a rounded flexible bundle of two (2) layers. The cabled bundle of twisted pairs shall be formed using a planetary-type cable-forming machine in such a manner that there shall be no residual torque or twist deformation in the cabled members. The lay length (distance per turn) of the wires in each layer shall be individually selected to optimize flexibility, and flexing lifespan.
5	Testing	Continuity: All wires and shields shall pass electrical continuity test. In process: Before cabling, 100% of all single insulated wires shall pass a in-process high voltage "Spark Test" at 3400VAC to ensure integrity of insulation. Hi-Pot Test: For finished cable, all insulated wires shall pass a high voltage withstand test at 600 volts.

Pair #	Pair Color
1	White paired with Black
2	White paired with Brown
3	White paired with Red
4	White paired with Orange
5	White paired with Yellow
6	White paired with Green
7	White paired with Blue
8	White paired with Violet
9	White paired with Gray
10	Black paired with Brown
11	Black paired with Red
12	Black paired with Orange

NATIONAL WIRE & CABLE CORPORATION	<b>CABLE, SPCL PURPOSE, ELECTRICAL</b>	
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