WEAVER CONSTRUCTION MANAGEMENT, INC.
3679 S. Huron St., Suite 404
Englewood, CO 80110
Phone: (303) 789-4111 FAX: (303) 789-4310

S U B M I T T A L T R A N S M I T A L

November 30, 2011
WCM Submittal No: 16075-001

PROJECT: Harold Thompson Regional WRF
Birdsall Rd.
Fountain, CO 80817
Job No. 2908

ENGINEER: GMS, Inc.
611 No. Weber St., #300
Colorado Springs, CO 80903
719-475-2935 Roger Sams

OWNER: Lower Fountain Metropolitan
Sewage Disposal District
901 S. Santa Fe Ave.
Fountain, CO 80817
719-382-5303 James Heckman

CONTRACTOR: McDade Woodcock, Inc.
7222 Commerce Center Drive, #245
Colorado Springs, CO 80909
719-264-1236

SUBJECT: Electrical Identification Submittal

SPEC SECTION: 16075

PREVIOUS SUBMISSION DATES:

DEVIATIONS FROM SPEC: ___ YES _x_ NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver Construction Management and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto:

Contractor's Stamp:	Engineer's Stamp:
Date: 11/30/11 Reviewed by: H.C. Myers (X) Reviewed Without Comments ( ) Reviewed With Comments	

ENGINEER'S
COMMENTS:_____
_____
__

McDade-Woodcock, Inc.

7222 Commerce Center Dr. Suite 245

Colorado Springs, CO 80919

Phone: 719-264-1236
Fax: 719-264-1450

TRANSMITTAL
No. 00008

PROJECT: Harold D. Thompson WRF

DATE: 11/22/2011

TO: Weaver General Construction
,

REF: Electrical Submittal
16075-001
Electrical Identification

ATTN: Wes Weaver

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☑ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☑ Review and Comment	☐ Resubmit
☐ Plans		☑ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☑ Attached	☐ Returned for Corrections
☐ Other:	☐ Separate Cover Via	☑ Due Date 12/16/2011

ITEM	PACKAGE	SUBMITTAL	DRAWING	REV.	ITEM NO.	COPIES	DATE	DESCRIPTION	STATUS
					001	1	11/22/2011	Electrical Submittal 16075-001 Electrical Identification	OUT

Remarks: Electrical Submittal for Review and Approval
Via Email Only

CC:

Signed:
Janelle L Smith

McDADE-WOODCOCK, INC.

HAROLD D. THOMPSON RWRF HEADWORKS BUILDING

McDADE-WOODCOCK INC.
PROJECT NUMBER - 1402

ELECTRICAL SUBMITTAL

ELECTRICAL IDENTIFICATION

16075-001

Owner: Lower Fountain Metropolitan Sewage District
901 S. Santa Fe Avenue
Fountain, CO 80817

General Contractor: Weaver General Construction Co.
3679 S. Huron St. – Suite 404
Englewood, CO 80110

Electrical Contractor: McDade-Woodcock, Inc.
7222 Commerce Center Dr.
#245
Colorado Springs, CO 80919

Engineer: GMS Inc.
611 N. Weber St., Suite 300
Colorado Springs, CO 80903

CORPORATE
2404 Claremont Ave. NE
Albuquerque, NM 87107
Mailing Address
P.O. Box 11592
Albuquerque, NM 87192
Ph 505-884-0155
Fax 505-884-6073

DENVER
10700 E. Geddes Avenue
Suite 170
Englewood CO 80112
Ph 303-803-1809
Fax 303-803-1818

COLORADO SPRINGS
7222 Commerce Center Drive
Suite 245
Colorado Springs, CO 80919
Mailing Address
P.O. Box 7349
Colorado Springs, CO 80933
Ph 719-264-1236
Fax 719-264-1450

MWIEIC.com

McDADE-WOODCOCK, INC.

HAROLD D. THOMPSON RWRF HEADWORKS BUILDING

McDADE-WOODCOCK INC.
PROJECT NUMBER - 1402

ELECTRICAL SUBMITTAL

ELECTRICAL IDENTIFICATION

16075-001

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CORPORATE

2404 Claremont Ave. NE
Albuquerque, NM 87107

Mailing Address
P.O. Box 11592
Albuquerque, NM 87192

Ph 505-884-0155
Fax 505-884-6073

DENVER

10700 E. Geddes Avenue
Suite 170
Englewood CO 80112

Ph 303-803-1809
Fax 303-803-1818

COLORADO SPRINGS

7222 Commerce Center Drive
Suite 245
Colorado Springs, CO 80919

Mailing Address
P.O. Box 7349
Colorado Springs, CO 80933

Ph 719-264-1236
Fax 719-264-1450

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Current refinements (click to remove) Search Tips

Thermal Transfer Commercial Grade Heat Shrink Labels

H100X044F1T

- Labels offer crisp, clear legends with superior legibility
- Meets UL Standard 224 for flammability and UL Standard 2043 suitable for use in air handling spaces
- Shrink ratio 3:1
- Pre-cut flattened polyolefin is both thermal transfer and dot matrix printable and supplied roll mounted on plastic carrier
- Panduit labeling software packages include all label formats for quick and easy label production

Related Products

Heat Shrink Tools and Accessor ..
Thermal Transfer Military Grad ..

Part Number	H100X044F1T
RoHS Compliancy Status	Compliant
Note	H100X044F1T replaces LHS25W2
Part Description	White, 1/4" diameter polyolefin, 1000/roll
Material	3:1 Flattened Polyolefin
Color	White
Diameter (In.)	0.25
Diameter (mm)	6.4
Length (In.)	0.44
Length (mm)	11.2
Width (In.)	1.00
Width (mm)	25.4
Markers Per Roll	1000
Markers Per Row	2
Max. Wire O.D. (In.)	0.25
Max. Wire O.D. (mm)	6.4
Min. Cable O.D. (In.)	0.08
Min. Cable O.D. (mm)	2.0
Nominal Cable O.D. (In.)	0.08 - 0.25
Nominal Cable O.D. (mm)	2.0 - 6.4
Overall Size W x H (In.)	1.00 x 0.44
Pricing Description	ThermTrans, Heatshrink Tubing, Polyolefin, 1.00" W x .44" H, White, 1000 pieces
Web Width (In.)	3.50
Min. Order UOM	RL
Min. Order Qty.	1
BOM Qty. (# of Pkgs.)	0
Add to Favorite Product List	

Please register to utilize the 'Bill of Materials', 'Submit Quotes' and 'Favorite Product List' features.

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Thermal Transfer Commercial Grade Heat Shrink Labels

H100X064F1T

- Labels offer crisp, clear legends with superior legibility
- Meets UL Standard 224 for flammability and UL Standard 2043 suitable for use in air handling spaces
- Shrink ratio 3:1
- Pre-cut flattened polyolefin is both thermal transfer and dot matrix printable and supplied roll mounted on plastic carrier
- Panduit labeling software packages include all label formats for quick and easy label production

Part Number	H100X064F1T
RoHS Compliancy Status	Compliant
Note	H100X064F1T replaces LHS38W2
Part Description	White, 3/8" diameter polyolefin, 1000/roll
Material	3:1 Flattened Polyolefin
Color	White
Diameter (In.)	0.38
Diameter (mm)	9.7
Length (In.)	0.64
Length (mm)	16.3
Width (In.)	1.00
Width (mm)	25.4
Markers Per Roll	1000
Markers Per Row	2
Max. Wire O.D. (In.)	0.38
Max. Wire O.D. (mm)	9.7
Min. Cable O.D. (In.)	0.13
Min. Cable O.D. (mm)	3.3
Nominal Cable O.D. (In.)	0.13 - 0.38
Nominal Cable O.D. (mm)	3.3 - 9.7
Overall Size W x H (In.)	1.00 x 0.64
Pricing Description	ThermTrans, Heatshrink Tubing, Polyolefin, 1.00" W x .64" H, White, 1000 pieces
Web Width (In.)	3.50
Min. Order UOM	RL
Min. Order Qty.	1
BOM Qty. (# of Pkgs.)	0
Add to Favorite Product List	

Related Products

Heat Shrink Tools and Accessor ..
Thermal Transfer Military Grad ..

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Current refinements (click ⊠ to remove) Search Tips

Thermal Transfer Self-Laminating Labels

S100X150VA1Y

- Self-laminating adhesive labels supplied on rolls, include a colored print-on area and clear overlaminate
- Use with Panduit RMH4BL hybrid thermal transfer ribbon

Part Number	S100X150VA1Y
RoHS Compliancy Status	Compliant
Note	S100X150VA1Y replaces TTSL-13 , TTSL-2 , TTSL-2BU , TTSL-2IG , TTSL-2RD , TTSL-2YL and TTSL-3
Part Description	White print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.
Color	White
Length (In.)	1.50
Length (mm)	38.1
Width (In.)	1.00
Width (mm)	25.4
Max. Wire O.D. (In.)	0.32
Max. Wire O.D. (mm)	8.1
Min. Cable O.D. (In.)	0.16
Min. Cable O.D. (mm)	4.0
Pricing Description	ThermTrans. Self-Lam Label, Vinyl, 1.00" W x 1.50" H, .50" POA, Clear/White, 1 inch core
Print-On Area Color	White
Print-On Area Height (In.)	0.50
Print-On Area Height (mm)	12.7
Min. Order UOM	PC
Min. Order Qty.	2500
BOM Qty. (# of Pkgs.)	0
Add to Favorite Product List	

Please register to utilize the 'Bill of Materials', 'Submit Quotes' and 'Favorite Product List' features.

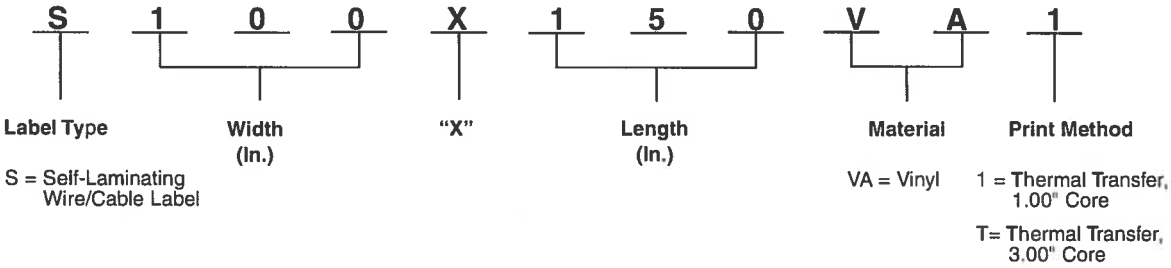
Thermal Transfer Self-Laminating Labels

- Self-laminating adhesive labels supplied on rolls, include a colored print-on area and clear overlaminate
- Use with Panduit RMH4BL hybrid thermal transfer ribbon

Material/Print Method Selection Guide

Material	Print Method	Temperature Range	Features
Self-Laminating Vinyl, White Print-On (VA)	Thermal Transfer (T)	-40°F to 200°F (-40°C to 93°C)	Indoor/outdoor rated; thin and conformable; preferred material for most general wire/cable labeling.

Part Number System for Self-Laminating Labels



Part Number	Part Description	Width		Length		Print-On Area Height		Min. Cable O.D.		Max. Wire O.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
S050X075VA1Y	White print-on area, vinyl label for 18 – 14 AWG wires.	0.50	12.7	0.75	19.1	0.25	6.4	0.08	2.03	0.16	4.0	5000	20000
S050X075VATY*	White print-on area, vinyl label for 18 – 14 AWG wires.	0.50	12.7	0.75	19.1	0.25	6.4	0.08	2.03	0.16	4.0	5000	40000
S050X125VA1Y	White print-on area, vinyl label for 12 – 10 AWG wires.	0.50	12.7	1.25	31.8	0.38	9.7	0.12	3.1	0.28	7.0	5000	20000
S050X125VATY*	White print-on area, vinyl label for 12 – 10 AWG wires.	0.50	12.7	1.25	31.8	0.38	9.7	0.12	3.1	0.28	7.0	5000	10000
S050X150VA1Y	White print-on area, vinyl label for Cat. 5e/Cat. 6 cables.	0.50	12.7	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	60000
S050X150VATY*	White print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	0.50	12.7	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	40000
S050X250VATY*	White print-on area, vinyl label for 6 – 2 AWG wires.	0.50	12.7	2.50	63.5	1.00	25.4	0.32	8.1	0.95	24.3	5000	20000

Order number of labels required in multiples of Std. Pkg. Qty.
Use with Panduit thermal transfer hybrid or wax ribbons.
*Labels are roll mounted on 3.00" cores; when using the TDP43MY printer and 3.00" cores, the roll stand (TDP43ME-RS) is required.

Table continues on page E2.8

Thermal Transfer Self-Laminating Labels (continued)

Part Number	Part Description	Width		Length		Print-On Area Height		Min. Cable O.D.		Max. Wire O.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
S075X075VATY*	White print-on area, vinyl label for 18 – 14 AWG wires.	0.75	19.1	0.75	19.1	0.25	6.4	0.08	2.03	0.16	4.04	5000	20000
S075X125VATY*	White print-on area, vinyl label for 12 – 10 AWG wires.	0.75	19.1	1.25	31.8	0.38	9.7	0.12	3.1	0.28	7.0	5000	20000
S075X150VATY*	White print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	0.75	19.1	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X075VA1Y	White print-on area, vinyl label for 18 – 14 AWG wires.	1.00	25.4	0.75	19.1	0.25	6.4	0.08	2.0	0.16	4.0	2500	10000
S100X075VATY*	White print-on area, vinyl label for 18 – 14 AWG wires.	1.00	25.4	0.75	19.1	0.25	6.4	0.08	2.1	0.16	4.0	5000	10000
S100X125VA1Y	White print-on area, vinyl label for 12 – 10 AWG wires..	1.00	25.4	1.25	31.8	0.38	9.7	0.12	3.1	0.28	7.0	2500	10000
S100X125VATY*	White print-on area, vinyl label for 12 – 10 AWG wires.	1.00	25.4	1.25	31.8	0.38	9.7	0.12	3.1	0.28	7.0	5000	10000
S100X150VA1Y	White print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	2500	30000
S100X150VATY*	White print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VBTY*	Blue print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VCTY*	Brown print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VDTY*	Green print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VETY*	Gray print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VFTY*	Orange print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VGTY*	Purple print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VHTY*	Red print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150VITY*	Yellow print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150V0TY*	Black print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X150V9TY*	Gold print-on area, vinyl label for Cat. 5e/Cat. 6/Cat. 6A cables.	1.00	25.4	1.50	38.1	0.50	12.7	0.16	4.0	0.32	8.1	5000	20000
S100X225VA1Y	White print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.4	2.25	57.2	0.75	19.1	0.24	6.1	0.48	12.1	1500	18000
S100X225VATY*	White print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.4	2.25	57.2	0.75	19.1	0.24	6.1	0.48	12.1	5000	20000
S100X225VBTY*	Blue print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.4	2.25	57.2	0.75	19.1	0.24	6.1	0.48	12.1	5000	20000
S100X225VCTY*	Brown print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.4	2.25	57.2	0.75	19.1	0.24	6.1	0.48	12.1	5000	20000

Order number of labels required in multiples of Std. Pkg. Qty.
Use with Panduit thermal transfer hybrid or wax ribbons.
*Labels are roll mounted on 3.00" cores; when using the TDP43MY printer and 3.00" cores, the roll stand (TDP43M-RS) is required.

33 Vinyl Electrical Tape

Data Sheet

LISTED
539H
Insulation Tape

Product Description

3M™ 33 Electrical Tape is a quality, general-purpose vinyl insulating tape. It has excellent resistance to: abrasion, moisture, alkalies, acid, copper corrosion and varying weather conditions (including sunlight). It is a polyvinyl chloride (PVC) tape that has a high dielectric strength, is flame-retardant and conformable, and provides excellent mechanical protection with minimum bulk. It is a UL Listed "Insulating Tape".

- UL Listed; UL 510 Standard "Insulating Tape" (product category OANZ), File E129200
- Polyvinyl chloride (PVC) backing
- Pressure-sensitive rubber based adhesive
- Inhibits corrosion of electrical conductor
- Compatible with solid dielectric cable insulation

Applications

- Primary electrical insulation for all wire and cable splices rated up to 600 volts
- Protective jacketing for high voltage cable splices and repairs
- Harnessing of wires and cables
- For indoor or outdoor applications
- For above or below grade applications

Typical Data/Physical Properties

Temperature Rating	
UL 510	80°C (176°F)
Flammability	
UL 510	Pass
ASTM D1000	4 sec.
Dielectric Strength*	
Standard Condition	>1000 V/mil
High Humidity	>90% of Standard
Insulation Resistance*	$>10^6$ Megohms
Thickness*	7 mils
Elongation*	200%
Breaking Strength*	17 lbs./in.
Adhesion*	
To Steel	24 oz/in.
To Backing	22 oz/in.
Flagging*	<0.1 in.
Telescoping	
24 hr. @ 50°C (120°F)	<0.1 in.

*Per ASTM D1000

Note: ***These are typical properties and should not be used for specification purposes.***

Installation Techniques

The tape shall be applied in half-lapped layers with sufficient tension to conform and produce a uniform covering. In most applications, this tension will reduce the tape's width to approximately 5/8 of its original width. On pigtail splices, the tape should be wrapped beyond the end of the wires and then folded back, leaving a protective cushion to resist cut-through. Always wrap the tape "uphill", taping from a smaller diameter surface to a larger diameter surface. Apply the tape with no tension on the last wrap to prevent flagging.

Shelf Life

3M 33 vinyl electrical tape has a 5-year shelf life (from date of manufacture) when stored under the following recommended storage conditions. Store behind present stock in a clean dry place at a temperature of 70°F (21°C) and 40-50% relative humidity. Good stock rotation is recommended.

Availability

3M 33 vinyl electrical tape is available from your local 3M authorized electrical distributor in the following standard roll sizes:

3/4" x 36 yd.
1 1/2" x 44 ft.

Other lengths and widths are available by special order.

Specification:

Product:
The tape is based on polyvinyl chloride (PVC) and/or its copolymers and has a rubber based, pressure-sensitive adhesive. The tape shall be 7.0 mils thick, and be UL Listed and marked per UL Standard 510 as "Flame Retardant and Weather Resistant". The tape must be applicable at temperatures ranging from 32°F (0°C) through 100°F (38°C) without loss of physical properties. The tape shall be classified for use in both indoor and outdoor environments. The tape shall be compatible with synthetic cable insulations, jackets and splicing compounds. The tape will remain stable and will not telescope more than 0.1 inches when maintained at temperatures below 120°F (50°C).

Engineering/Architectural Specifications:

Primary electrical insulation (branch wiring in wet or dry locations): All splices for 600 volt wire and rated 80°C (176°F) and below shall be insulated with a minimum of two half-lapped layers of 3M 33 Vinyl Electrical Tape. All connectors having irregular surfaces shall be padded with Scotchfil™ Electrical Insulation Putty or Scotch™ 130C Rubber Splicing Tape prior to insulating with 3M™ 33 Vinyl Electrical Tape. Mechanical protection (outer jacketing): All rubber and thermoplastic insulating high voltage power cable tape splices and repairs shall be overwrapped with at least two half-lapped layers of 3M 33 Vinyl Electrical Tape.

3M
Electrical Products Division
6801 River Place Blvd.
Austin, TX 78726-9000
www.3M.com/elpd

Scotch®

Vinyl Electrical Tape 35

Data Sheet **July 2011**

Description	Scotch® Vinyl Electrical Tape 35 is a 7 mil (0,178 mm) polyvinyl chloride (PVC) color-coding tape. Outstanding electrical and mechanical properties make this tape excellent for use in phase identification, color coding of motor leads and piping systems, and for marking safety areas. Scotch® Tape 35 operates over a wide range of temperatures – up to 221°F (105°C); applies smoothly and conforms well above 32°F (0°C). This tape is available in nine fade resistant colors.
Agency Approvals & Self Certifications	UL Listed - UL 510 Standard "Insulating Tape" (product category OANZ), File E129200; meets UL 510 labeling for "flame-retardant" for vinyl electrical tape. CSA Certification; Standard. C22.2 No. 197-M1983 "PVC Insulating Tape," File LR 48769. RoHS 2002/95/EC RoHS Compliant 2002/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under RoHS. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.
Applications	▪ Color coding for phase identification, job identification and safety ▪ Insulating electrical wiring ▪ Protecting electrical conductors, motor leads and piping from moisture, alkalis, acids, corrosion, abrasion and weather
Installation	▪ Apply in half-lapped layers with sufficient tension to conform and produce a uniform covering. In most applications, this tension will reduce the tape width to approximately 60% of its original width. ▪ On a pigtail splice, wrap the tape beyond the end of the wire and then fold back and over-wrap, leaving a protective cushion to resist cut-through. ▪ Wrap uphill, taping from a smaller diameter to a larger diameter surface. Apply the tape with no tension on the last wrap to prevent flagging.
Specifications	Scotch® Tape 35 is based on polyvinyl chloride (PVC) and/or its copolymers and has a rubber-based, pressure-sensitive adhesive. The tape shall be 7 mils thick, and be UL Listed and marked per UL Standard 510 as "Flame-Retardant." The tape shall be compatible with synthetic cable insulations, jackets and splicing compounds. The tape will remain stable and will not telescope more than 0.1 inches when maintained at temperatures below 122°F (50°C).

3M

Scotch® Vinyl Electrical Tape 35

Typical Properties

Not for specifications. Values are typical, not to be considered minimum or maximum. Properties measured at room temperature 73°F (23°C) unless otherwise stated.

Physical Property (ASTM D1000, unless noted)	**Typical Value** US units (metric)
Color(s)	Blue, Brown, Gray, Green, Orange, Red, Violet, White, Yellow
Adhesive	Pressure-sensitive rubber
Thickness	7 mils (0,178 mm)
Continuous Operating Temperature (max)	221°F (105°C)
Breaking Strength	17 lb/in (30,3 N/10 mm)
Elongation (% at break)	225%
Adhesion to Steel	20 oz/in (2,2 N/10 mm)
Adhesion to Backing	20 oz/in (2,2 N/10 mm)
Flagging	0.1 in (2,5 mm)

Electrical Property (ASTM D1000, unless noted)	**Typical Value** US units (metric)
Voltage Rating (UL 510)	600 volts
Dielectric Breakdown Standard condition Wet Condition (96 hrs @ 73.4°F (23°C)	 8,750 volts* 7875 volts *Note: Dielectric strength 1250 V/mil
High Humidity Insulation Resistance	> 1x 10^6 megohms

Shelf Life & Storage

Scotch® Vinyl Electrical Tape 35 has a 5-year shelf life from date of manufacture when stored in a humidity controlled storage (10°C/50°F to 27°C/80°F and <75% relative humidity).

Availability

Please contact your local distributor; available from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.

Important Notice

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3M

Electrical Markets Division
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Austin, TX 78726-9000
800-245-3573
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Scotch® Color Coding Vinyl Electrical Tape 35

Premium quality, 7-mil electrical insulating tape. Flame-retardant, weather-resistant; resists UV rays, abrasion, moisture, alkalies, solvents, many acids. For indoor and weather-protected outdoor applications. Available in 9 colors.

More information:

Scotch® 35 Vinyl electrical color coding tape - Electrical

Scotch® 35 Vinyl electrical color coding tape - Occupational Health

Available at ***shop3m.com***

Scotch® 35 Vinyl Electrical Color Coding Tape								
Scotch® 35 ½" wide tape	Blue	Brown	Gray	Green	Orange	Red	White	Yellow
Scotch® 35 ¾" wide tape	Blue					Red		


Scotch
Vinyl Electrical Tape
35 Red

Brimar
PIPE MARKERS & IDENTIFICATION PRODUCTS

Product Information Bulletin

P.O. Box 467 | 64 Outwater Lane, Garfield, NJ 07026 Ph: 973-340-7889 | Fax: 973-340-7809

Engraved Phenolic Valve Tags

Product Description:
Plastic valve tags offer a variety of colors and sizes to better identify hazards.

Material:
Glossy or Velvet/Low Glare finish. Rigid thermoset material with cap and core permanently fused together. Conforms to military spec. LP 387A, Type N.D.P., LP509. Electrically non-conductive and abrasion resistant.

Appearance:
All sides are beveled for a neat finished look. Straight edge cut also avail.

Application:
Valve Tags provided with mounting holes.

Physical Characteristics:
Standard: 3 ply 1/16" thick for engraving on one or two side.
Special: 3 ply 1/8" thick for engraving on one or two sides.

Dimensional Information:
Valve Tags are available in round or square 1½" or 2" sizes.
*Larger sizes also available.

Durability:
Indoor - Indefinite
Outdoor - Limited (6-12 months susceptible fading)

COLORS AVAILABLE

Background	Lettering
Black	White
White	Black
Red	White
Yellow	Black
Blue	White
Green	White

Letter Sizes:
3/16", 5/16", 9/16" and 1" Letter sizes are determined by size of tag, number of lines, and number of characters per line.

DATE: ____/____/____ JOB: _____

CONTRACTOR: _____

Detectable Underground Tapes

Features

- Solid aluminum foil core tapes for protection, location and identification of underground utility installations
- Meets or exceeds industry standards including the American Public Works Association (APWA) color code
- Formulated to resist degradation from acid and alkali found in soils
- Lead-free pigments and organic lead-free ink

Models **Specifications**

Description	Catalog #
Detectable Underground Tape: "CAUTION BURIED ELECTRIC LINE BELOW", Red, 3 in. x 1,000 ft.	42-201
Detectable Underground Tape: "CAUTION BURIED ELECTRIC LINE BELOW", Red, 6 in. x 1,000 ft.	42-251
Detectable Underground Tape: "CAUTION BURIED FIBER OPTIC LINE BELOW", Orange, 6 in. x 1,000 ft.	42-252