

*THE ZIPPERTUBING co.*

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GERMANY • JAPAN

## "Z-SHIELD" CLOSING PROCEDURE

( ZT93-98-001 ) ( 1/01 )

THE FOLLOWING PROCEDURE IS RECOMMENDED WHEN INSTALLING THE ZIPPERTUBING COMPANY'S "Z-SHIELD" PRODUCTS AROUND CABLE ASSEMBLIES.

**NOTE:** PRIOR TO CLOSING THIS PRODUCT AROUND ANY CABLE ASSEMBLY, A MEANS OF PROVIDING AN ELECTRICAL GROUND TERMINATION TO THE SHIELD SHALL BE DETERMINED BY IN-HOUSE ENGINEERING. (REFER TO ZIPPERTUBING'S "TERMINATION GUIDE FOR "Z-SHIELD" PRODUCTS, ZT93-98-002, IF NECESSARY) A GROUND TERMINATION METHODOLOGY MUST BE DEFINED AND INSTALLED PRIOR TO CLOSING THE SHIELDING AROUND A CABLE.

### CLOSING PROCEDURE:

1. PERSONNEL HANDLING THE "Z-SHIELD" PRODUCT SHOULD WEAR GLOVES OR FINGER COTS TO AVOID CONTAMINATING THE BONDING SURFACES WITH BODY OILS. GLOVES WILL ALSO ELIMINATE ANY SKIN IRRITATION FROM THE NICKLE PLATED POLYESTER FABRIC IN STANDARD "Z-SHIELD."
2. THE OUTER POLYURETHANE JACKET MATERIAL SHOULD BE CLEANED PRIOR TO INSTALLATION USING A RAG AND ISOPROPYL ALCOHOL (IPA). INSURE THAT THE JACKET SURFACE IS CLEAN AND DRY PRIOR TO CLOSING.
3. LAY THE "Z-SHIELD" JACKET ON A SMOOTH, FLAT SURFACE WITH THE SHIELD SURFACE FACING UP. LAY THE CABLE ASSEMBLY ON TOP OF THE SHIELDING MATERIAL. POSITION THE CABLE ON THE JACKET MATERIAL AS SHOWN IN THE EXAMPLES OF FIGURE 1.
4. HOLD THE CABLE AND THE JACKET TOGETHER AND WRAP THE JACKET AROUND THE CABLE ASSEMBLY. IT MAY BE ADVANTAGEOUS TO HAVE AN ASSISTANT HELP HOLD AND PRE-POSITION THE MATERIALS WHILE THE OPERATOR SEALS IT DURING ACTUAL INSTALLATION.

**VERIFY THAT THE EXPOSED ADHESIVE WILL LAND ON THE POLYURETHANE FILM JACKET AND NOT THE SHIELD MATERIAL ! IF THE ADHESIVE ALIGNS WITH THE SHIELD MATERIAL, THE CABLE DIAMETER IS TOO LARGE FOR THE JACKET !** VERIFY THAT THE CORRECT JACKET SIZE WAS SELECTED AND THE CABLE BUNDLE SIZE HAS NOT INCREASED SINCE THE JACKET WAS ORDERED.

5. PRIOR TO REMOVING THE ADHESIVE RELEASE LINER, BE SURE THAT THE JACKET IS POSITIONED SO THAT THE ADHESIVE SEAM LINE WILL BE PARALLEL TO THE CABLE.
6. PEEL BACK THE PAPER RELEASE LINER A FEW INCHES ONLY, PULL THE JACKET SO THAT IT IS SLIGHTLY SNUG ON THE CABLE AND PRESS THE EXPOSED ADHESIVE SURFACE TO THE CLEAN JACKET SURFACE (FIGURE 2). NOTE: ADHESIVE SHOULD NEVER CONTACT SHIELD MATERIAL!
7. CONTINUE TO WORK DOWN THE CABLE ASSEMBLY, CLOSING ONLY SHORT SECTIONS AT A TIME. YOUR ASSISTANT SHOULD INSURE THAT THE JACKET AND CABLE ASSEMBLY ARE ALIGNED PROPERLY. TRYING TO CLOSE TOO LARGE A LENGTH OF JACKET AT ONE TIME WILL RESULT IN WRINKLES APPEARING ALONG THE SEAM LINE.
8. ONCE THE SEAM HAS BEEN CLOSED COMPLETELY, USE A SMOOTH ROLLER OR MANDRAL TO APPLY UNIFORM PRESSURE TO THE SEAM LINE AND WORK OUT ANY WRINKLES.
9. FIGURE 3 SHOWS THE PROPER CLOSURE CONFIGURATIONS IN CROSS SECTIONAL VIEWS.

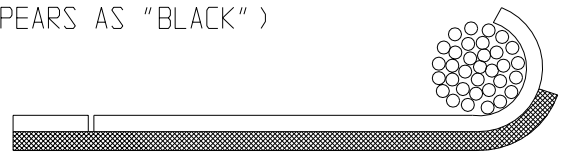
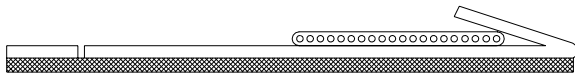
IS IT CLOSED CORRECTLY? SHOULD BE YES TO ALL!

- 1) THE SMOOTH POLYURETHANE FILM IS ON THE OUTSIDE.
- 2) THE SHIELDING MATERIAL IS FACING THE CABLE INSULATION. \*
- 3) THE SHIELD MATERIAL IS OVERLAPED AND CONTACTS ITSELF.
- 4) THE ADHESIVE MASS LANDED ON THE SMOOTH JACKET MATERIAL.

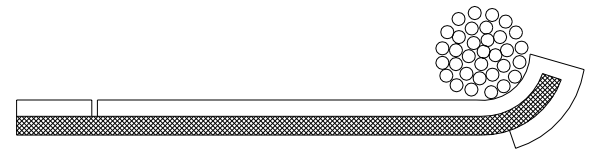
\* EXCEPT "Z-SHIELD-2L" WHERE A JACKET IS ON BOTH SIDES!

FIGURE 1. CABLE NESTING WITH "Z-SHIELD" PRODUCTS (X.S.)  
(NOTE: OUTER JACKET APPEARS AS "BLACK")

**"Z-SHIELD"**



**"Z-SHIELD-AL"**



**"Z-SHIELD-2L"**



FIGURE 2. CLOSING Z-SHIELD PRODUCTS (TYP)

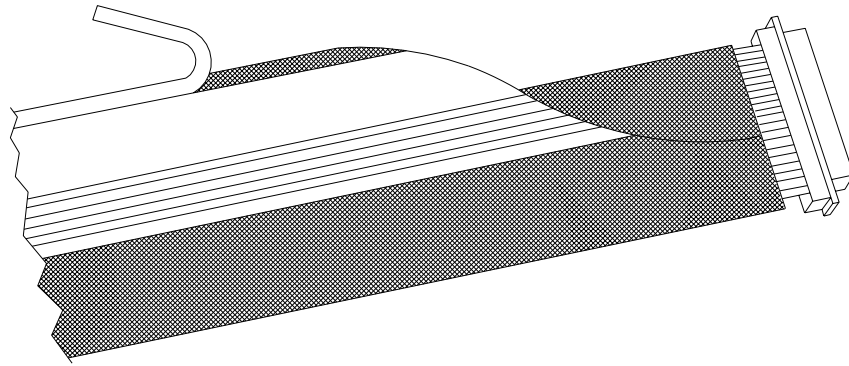
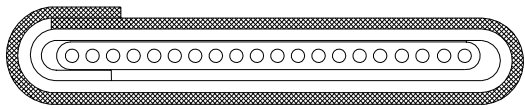
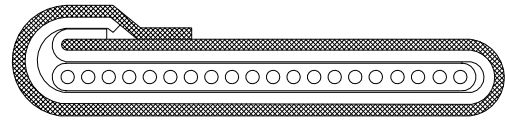


FIGURE 3. CLOSED AND SEALED Z-SHIELD PRODUCTS (X.S.)

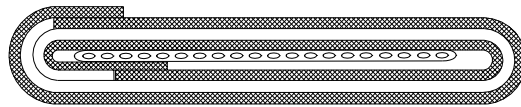
FLAT CABLE



"Z-SHIELD"

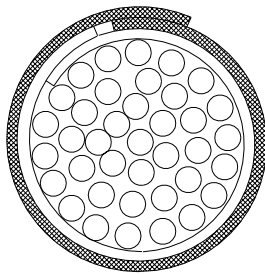


"Z-SHIELD-AL"

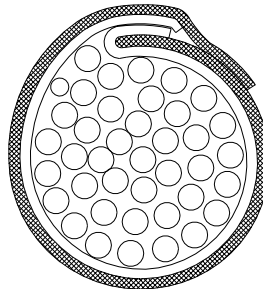


"Z-SHIELD-2L"

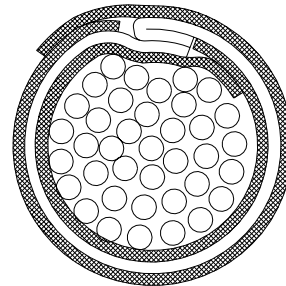
ROUND CABLE



"Z-SHIELD"



"Z-SHIELD-AL"



"Z-SHIELD-2L"