

# INSTRUCTION FOR JOINING PVC CONDUIT

THE CHEMICAL USED IN SOLVENT WELDING OF CONDUIT ARE INTENDED TO PENETRATE THE SURFACE OF BOTH PIPE AND FITTING, WHICH AFTER CURING, RESULT IN A COMPLETE FUSION AT THE JOINT. THE OVER-USE OR UNDER-USE OF CHEMICALS RESULTS IN LEAKY JOINTS OR WEAKENED PIPE.

A. CLEAN CONDUIT BY WIPING OFF ALL DUST, DIRT AND MOISTURE FROM SURFACE TO BE CEMENTED, EITHER BY MECHANICAL OR CHEMICAL CLEANING.

1. CLEAN CONDUIT BY WIPING-FINE ABRASIVE PAPER OR CLOTH (180 GRIT OR FINER) OR CLEAN OIL-FREE STEEL WOOL.

2. CHEMICAL CLEANING-CLEANER RECOMMENDED BY MANUFACTURER OR EQUIVALENT (METHYL, ETHYL KETONE-MEK).

B. WITH A NON-SYNTHETIC BRISTLE BRUSH, APPLY AN EVEN COATING OF CEMENT TO THE OUTSIDE OF THE PIPE AND INSIDE OF THE SOCKET. MAKE SURE THAT THE AMOUNT OF CEMENT APPLIED TO THE CONDUIT IS EQUAL TO THE DEPTH OF THE SOCKET. BEFORE ASSEMBLY, IF SOME EVAPORATION OF SOLVENT FROM SURFACE TO BE JOINED IS NOTED, REAPPLY CEMENT, THEN ASSEMBLE.

IF CEMENT BEING USED HAS AN APPRECIABLE CHANGE IN VISCOSITY, OR SHOWS SIGNS OF JELLING, IT SHALL BE DISCARDED. IN NO CASE SHALL THINNER BE USED IN AN ATTEMPT TO RESTORE JELLED PVC CEMENT. THINNER MAY ONLY BE USED TO CHANGE THE VISCOSITY OF A MEDIUM BODIED CEMENT TO THAT OF A REGULAR BODIED FOR APPLICATION ON PVC PIPE SMALLER THAN 2 1/2 INCH DIAMETER. A MEDIUM BODIED CEMENT SHALL BE USED ON 2 1/2 TO 6 INCH PVC PIPE.

IN COLD WEATHER, USE A PRIMER TO SOFTEN THE JOINING SURFACE BEFORE APPLYING CEMENT. ALLOW LONGER CURE TIME. (SEE ITEM E).

C. JOIN PIPE WITHIN 20 SECONDS OF APPLYING CEMENT. TURN THE PIPE 1/4 TURN TO ENSURE EVEN DISTRIBUTION OF CEMENT ON SURFACE TO BE BONDED. MAKE SURE THAT PIPE IS INSERTED TO THE FULL DEPTH OF THE SOCKET.

D. CLEAN OFF ANY BEAD OF EXCESS CEMENT THAT APPEARS AT THE OUTER SHOULDER OF THE FITTING. EXCESS CEMENT ALLOWED TO REMAIN IN CONTACT WITH THE MATERIAL IS APT TO CAUSE WEAKENING OF THE MATERIAL, AND SUBSEQUENT FAILURE.

E. NEWLY ASSEMBLED JOINTS SHOULD BE HANDELED CAREFULLY UNTIL THE CEMENT HAS CURED TO THE RECOMENDED SET PERIOD. SET PERIODS ARE RELATED TO THE AMBIENT TEMPERATURE AS FOLLOWS:

30 MIN. MINIMUM AT 60° TO 100° F  
 1 HR. MINIMUM AT 40° TO 60° F  
 2 HR. MINIMUM AT 20° TO 40° F  
 4HR. MINIMUM AT 0° TO 20° F

PVC JOINTING NOTES ARE FROM TXU ELECTRICAL DELIVERY SPECIFICATION FOR UNDERGROUND DISTRIBUTION SYSTEM FROM PADMOUNTED TRANSFORMATION, SECONDARY SERVICE ACCOUNTS. (SPECIFICATION DDS-4 UG REVISION 9, OCTOBER 2006)

P:\4328\60004153\205Bypass\CADD\Sheets\Phase 2- SH 66 To 120+00\Record Drawng 10-7-09\062Msc-Elect\111tyDetail101.dgn 11/23/2009

**RECORD DRAWING**  
 This drawing is a compilation of the original sealed engineering drawing and modifications by addenda, change orders and information furnished by the contractor. Information shown that was provided by the contractor and others not associated with the design engineer cannot be verified for accuracy or completeness. Original sealed drawing is on file at the office of AECOM USA Group, Inc., TBPE REG. NO. F-3082

**ORIGINAL DRAWING SEALED & SIGNED BY**  
 T.H. Gaertner, P.E.  
 TX NO. 37124

| NO. | REVISION | BY | DATE |
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City of Rockwall, Texas

205 BYPASS  
PHASE 2

MISCELLANEOUS ELECTRICAL UTILITY NOTES

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| <b>TCB</b> | <b>AECOM</b> | TCB INC.<br>WWW.TCB.AECOM.COM<br>17300 DALLAS PARKWAY, SUITE 1010<br>DALLAS, TEXAS 75248 |
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|----------|-----------|----------|----------------------------------|-------------|------------|
| Unit     | PW-DAL-FW | Scale    | Horz: AS SHOWN<br>Vert: AS SHOWN | Date        | 11/23/2009 |
| Designed | SDB       | Checked  | TCB                              | Project No. | 60004153   |
| Drawn    | TCB       | Approved | TCB                              | Sheet       | 62 of 142  |