

DIMENSION	2WX1H	2WX2H	2WX3H	2WX4H	2WX5H
A (MIN.)	46"	56"	66"	76"	86"
B (MIN.)	16"	26"	36"	46"	56"

TABLE 1 (DIMENSION HAS BEEN ROUNDED UP TO NEAREST INCH)

6 INCH DUCT CONDUIT	MAX. DISK DIAMETER	TOTAL WEIGHT
	5 1/2 INCH	6.20 LB.

TRENCH VIEW OF 2WX4H CONDUIT SYSTEM

NOTES:

- 1). CONDUIT FOR CONCRETE ENCASEMENTS IS TO BE SOLID WALL PVC DB-60 AND SHALL NOT BE A CELLULAR CORE PVC PRODUCT.
- 2). ALL CONCRETE OF THE ENCASEMENT IS TO HAVE A COMPRESSION TEST STRENGTH OF 3000 PSI AT TWENTY EIGHT DAYS.
- 3). INSTALL APPROVED DUCT SPACERS (SEE BELOW) EVERY 5 FEET ALONG THE ENTIRE LENGTH OF THE CONDUIT SYSTEM.
- 4). THE DUCT SPACERS ARE TO PROVIDE 3 INCHES OF VERTICAL AND HORIZONTAL SEPARATION BETWEEN CONDUITS.
- 5). THE DUCT LINE SHALL BE SECURED TO EARTH AT A MINIMUM OF EACH FOURTH SPACER LOCATION, OR EVERY 20 FT. ALONG THE DUCT PRIOR TO POURING CONCRETE TO PREVENT THE CONDUIT FROM FLOATING.
- 6). ALL CONDUIT/DUCT SPANS SHOULD SLOPE TOWARD ADJACENT MANHOLES TO PROVIDE DRAINAGE TO A PUMPABLE LOCATION.
- 7). ALL BACKFILL OF A CONDUIT/DUCT TRENCH SHALL BE REPLACED TO A MINIMUM COMPACTION OF 95%.
- 8). RED POWDER CONCRETE DYE IS TO BE PLACED ON TOP OF THE ENCASEMENT IMMEDIATELY AFTER THE CONCRETE IS POURED.
- 9). CONDUIT ENDS FOR INCOMPLETE DUCT LINES (STUBS) ARE TO REMAIN EXPOSED FROM THE ENCASEMENT FOR FUTURE RETRIEVAL. THE ENDS SHALL BE CAPPED WATERTIGHT AND HAVE AN ELECTRONIC MARKER INSTALLED.
- 10). EACH CONDUIT OF A CONCRETE ENCASED DUCT SHALL BE INSPECTED BY PULLING A DISK MANDREL OF PROPER SIZE THROUGH ITS ENTIRE LENGTH AS SOON AS POSSIBLE AFTER ENCASEMENT TO VERIFY INTEGRITY.
- 11). EACH 6" CONDUIT SHALL HAVE A 6000 LB. PULL TAPE INSTALLED.

APPROVED VENDORS FOR (TSN 300325) 6" BASE SPACER & (TSN 300332) 6" INTERMEDIATE SPACER.

- 1). CARLON (BASE PART NUMBER - S288RLN) & (INTERMEDIATE PART NUMBER - S289RLN).
- 2). CANTEX INDUSTRIES (BASE PART NUMBER - 6336039) & (INTERMEDIATE PART NUMBER - 6336038)

APPROVED VENDORS FOR (TSN 300398) 6" TYPE II DB-60 PVC SOLID WALL CONDUIT.

- 1). CANTEX INDUSTRIES (PART NUMBER - A79GA42)
- 2). PRIME CONDUIT (PART NUMBER - 48817)
- 3). HERITAGE PLASTICS (PART NUMBER - 63602)

**APPROVED BY ONCOR**

**CONCRETE ENCASED CONDUIT SYSTEMS**

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THE CHEMICALS 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. REMOVE ALL DUST, DIRT, AND MOISTURE FROM SURFACES TO BE CEMENTED EITHER BY MECHANICAL OR CHEMICAL CLEANING.

1. MECHANICAL CLEANING - 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 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 THE SURFACES 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 CEMENT 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 SURFACES 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 SURFACES TO BE BONDED. MAKE SURE THAT PIPE IS INSERTED TO THE FULL DEPTH OF THE SOCKET.

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

E. NEWLY ASSEMBLED JOINTS SHOULD BE HANDLED CAREFULLY UNTIL THE CEMENT HAS CURED TO THE RECOMMENDED 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  
 4 HR. MINIMUM AT 0° TO 20° F

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**INSTRUCTIONS FOR JOINING PVC CONDUIT**

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*Ch Morral* P.E. 10-24-13  
 Signature of Registrant Date

FIRM REGISTRATION NUMBER: 312

NO.	REVISION	BY	DATE
<b>ADDISON TOWN OF ADDISON</b> <b>DALLAS COUNTY, TEXAS</b>			
<b>BELT LINE ROAD</b> <b>UNDERGROUND ELECTRICAL</b>			
<b>ONCOR DUCT BANK DETAIL 4E6</b>			
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PROJECT	DESIGN	DRAWN	DATE
29350	HALFF	HALFF	OCT. 2013
FILE	SHEET		
29350 ELEC 22d	ELE-22		