Trench Former®

Pre-Engineered Cast In Place
Trench Drain Forming System

TFX® - Toggle Lock Installation Guide

P.O. Box 837 - 259 Murdock Road - Troutman, NC 28166
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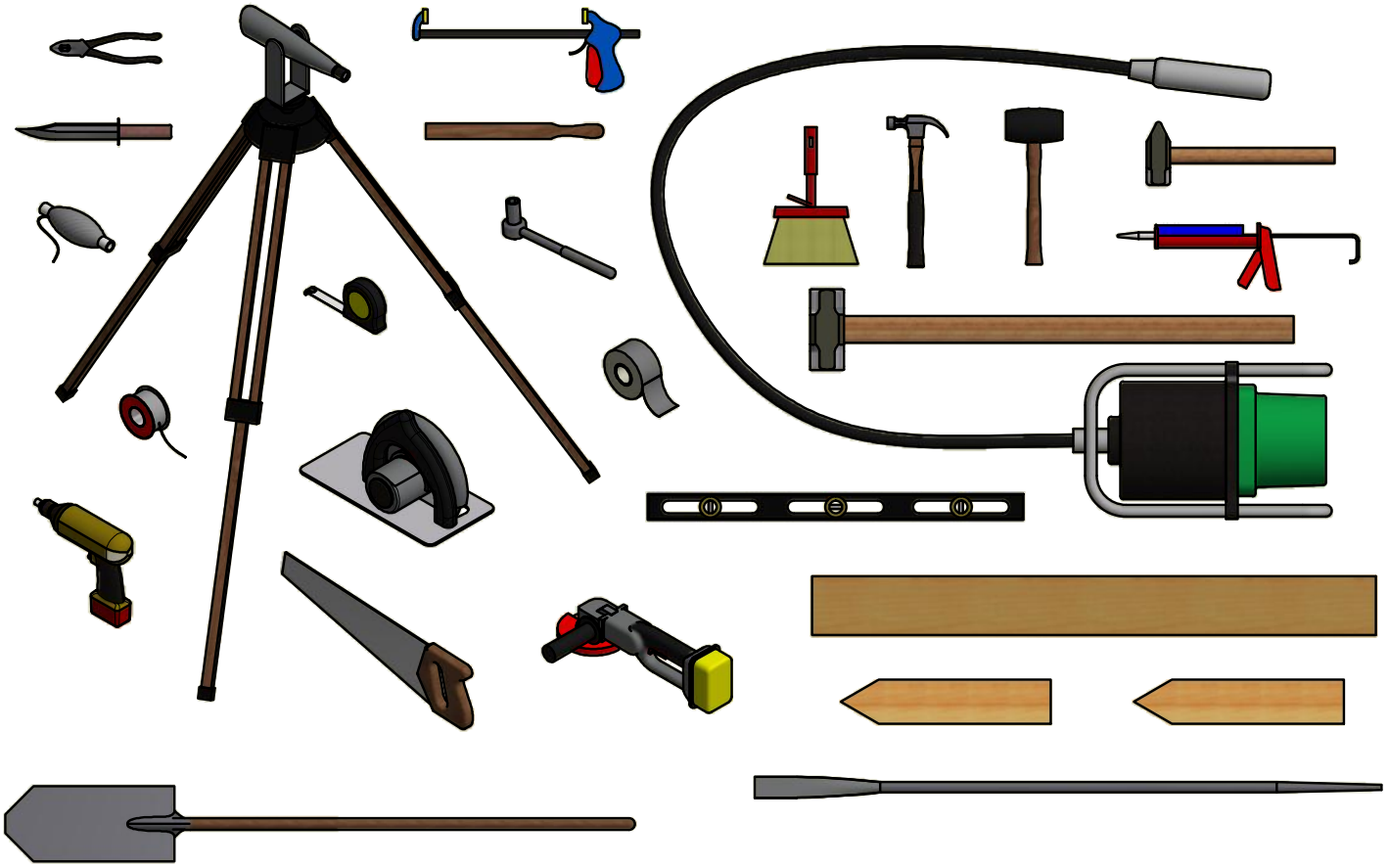
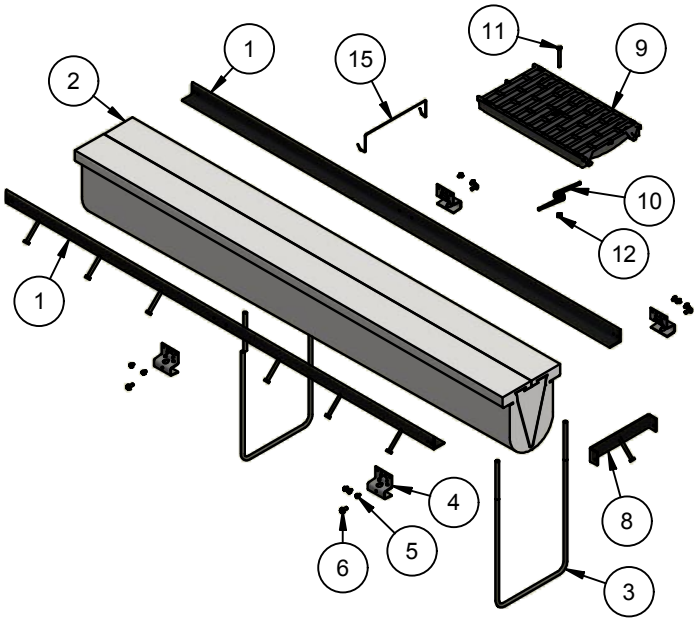
Toll free in the USA, Canada, and Mexico (800) 438-6057

USEFUL OR REQUIRED TOOLS



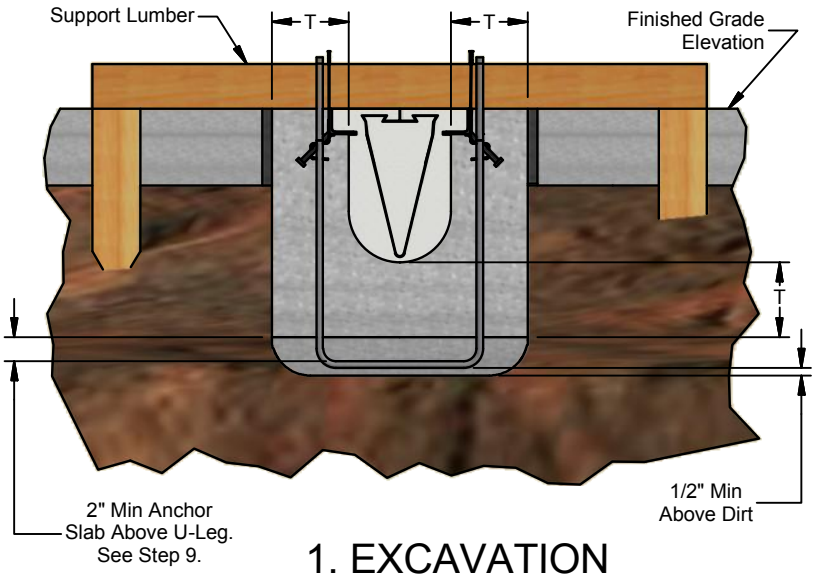
COMPONENT IDENTIFICATION



COMPONENTS	
ITEM	DESCRIPTION
1	Angle Frames/Rails
2	EPS Former
3	Rebar U-Leg
4	Leg Bracket
5	Assembly Screw - Ø1/4" x 3/8" Steel, Hex Head, Thread Forming
6	Rebar Leg Lock Screw - Ø5/16" x 3/4" Steel, Hex Head, Thread Forming
8	End Rail
9	Grate
10	Grate Retainer Toggle
11	Grate Retainer Screw and Washer - Ø5/16" UNC
12	Grate Retainer Nut - Ø5/16" Square Nut
15	

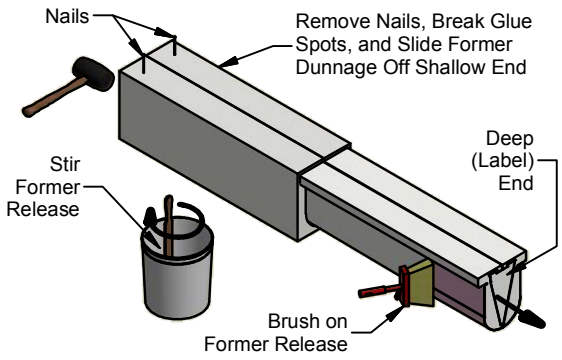
Some products sold by ABT contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Products sold by ABT may contain these chemicals in a smaller amount than Proposition 65's concern, or not at all, however, we have chosen to issue this warning on all of our products as an act of caution and because our customers have the right to know.

⚠WARNING: These products can expose you to chemicals such as nickel, lead, chromium, cobalt, styrene, methylene chloride, or silica, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

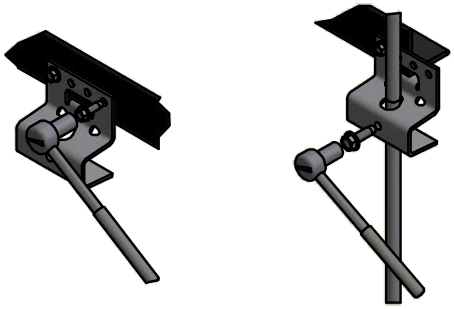


1. EXCAVATION

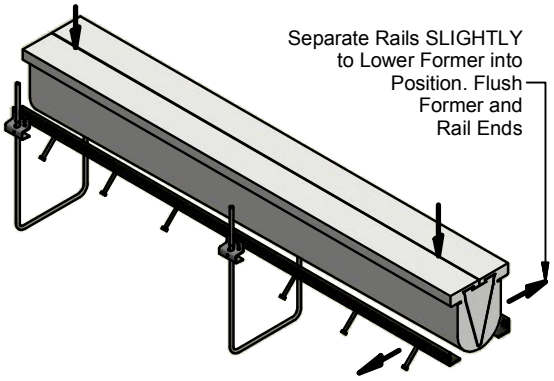
T = per Structural Specifications



2. FORMER PREPARATION



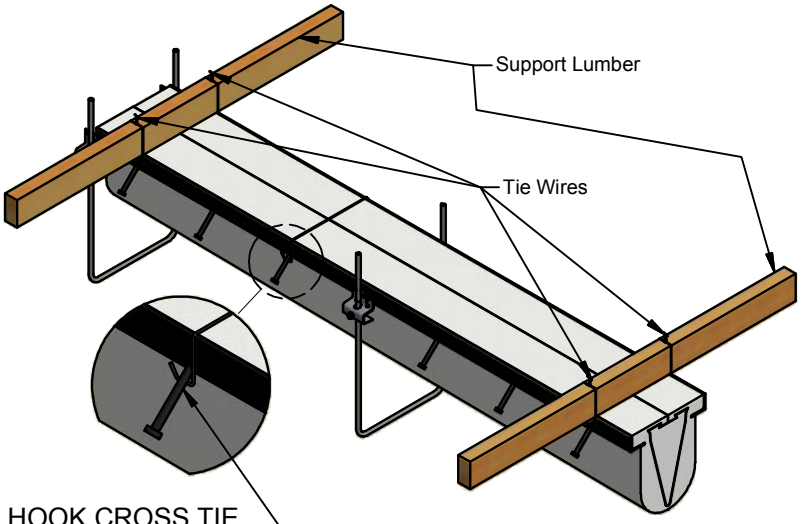
3. LEG ATTACH



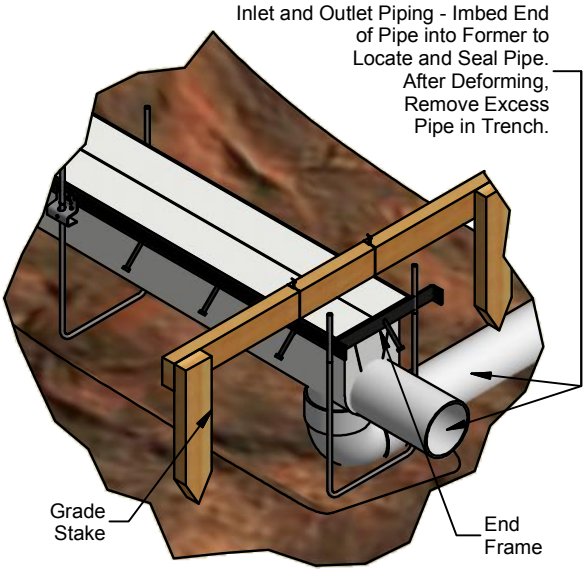
4. FORMER / RAIL ASSEMBLY

WARNING: FAILURE TO USE CROSS TIES MAY RESULT IN IMPROPER RAIL ALIGNMENT

CROSS TIES TO BE INSTALLED ON EVERY OTHER STUD.

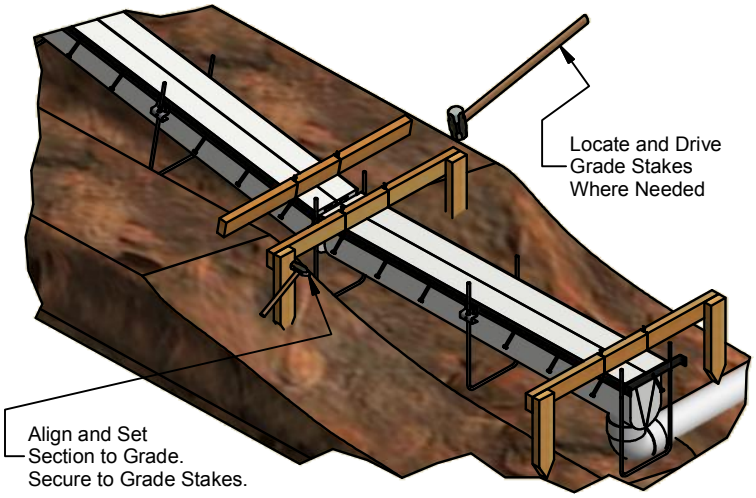


5. SUPPORT LUMBER ATTACH

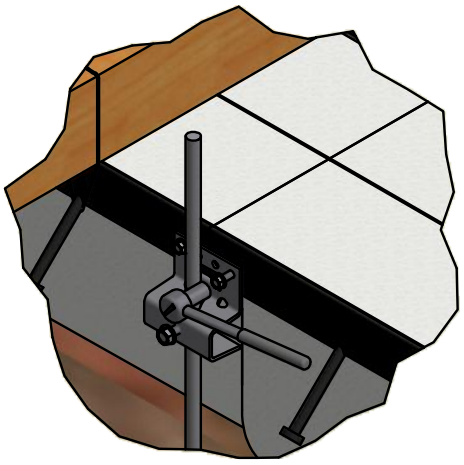


6. DISCHARGE PLACE & ALIGN

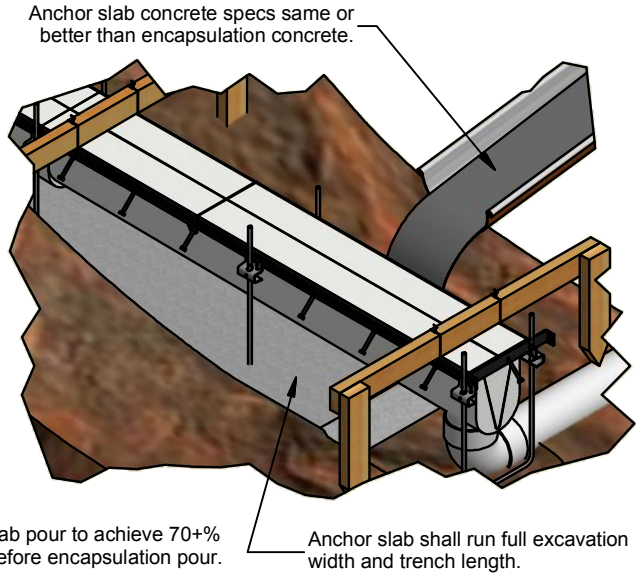
Locate and Align Outlet Channel First, Start at Deep End and Work to Shallow End



7. SECTION PLACE & ALIGN

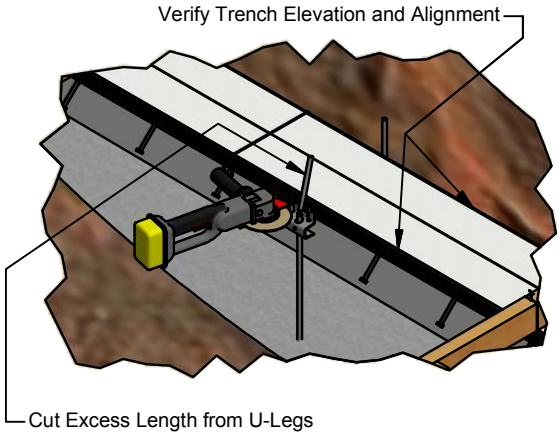


8. RAIL CONNECTION

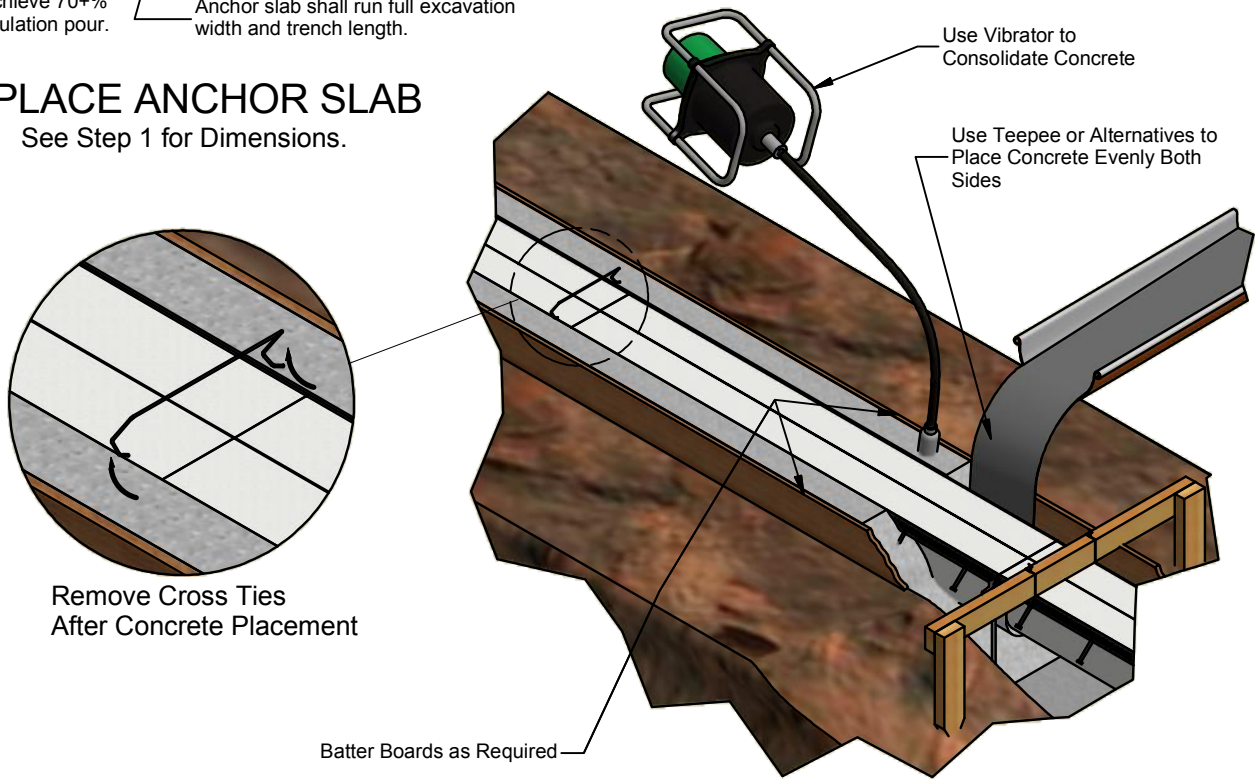


9. PLACE ANCHOR SLAB

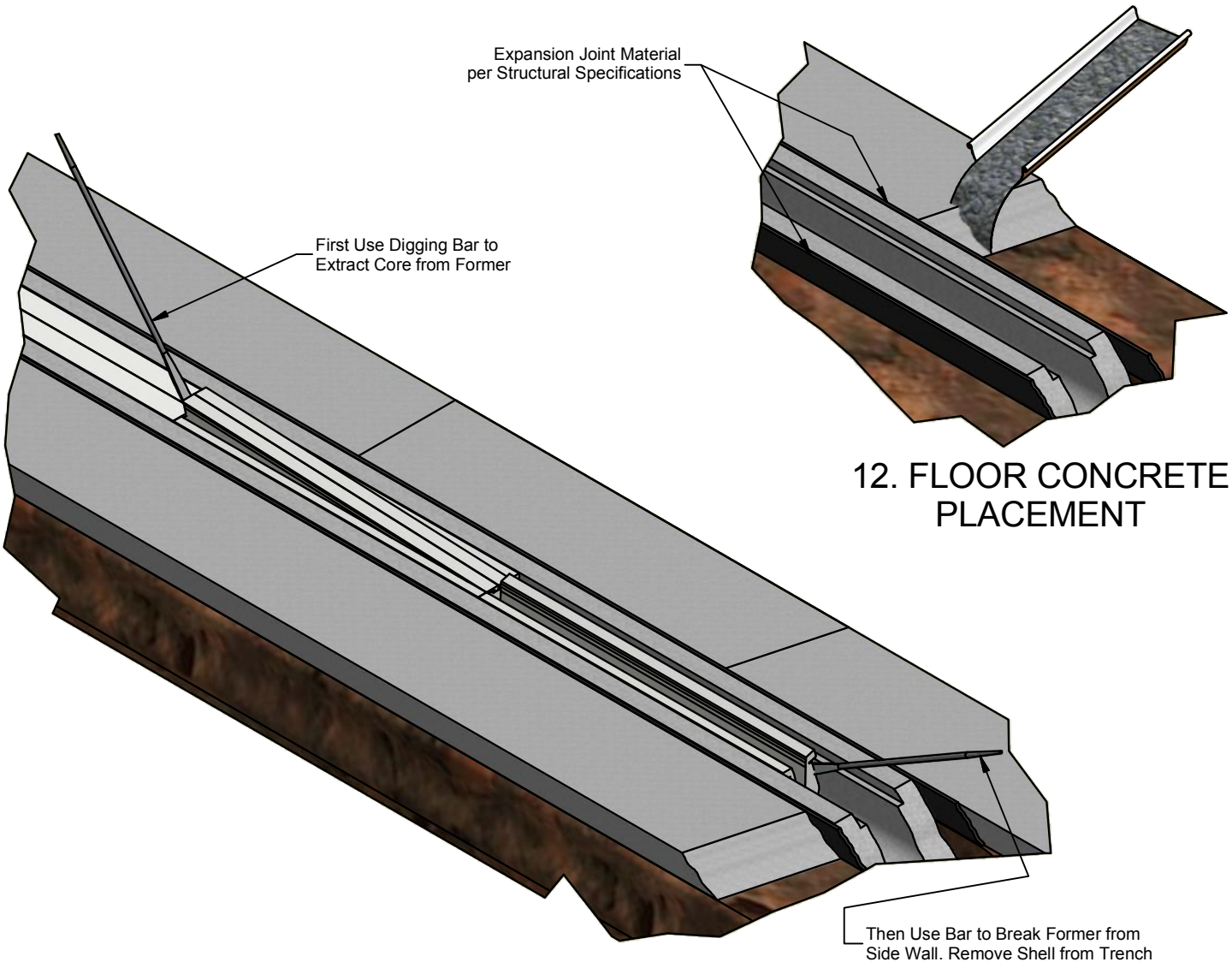
See Step 1 for Dimensions.



10. FINAL ALIGN & U-LEG TRIM

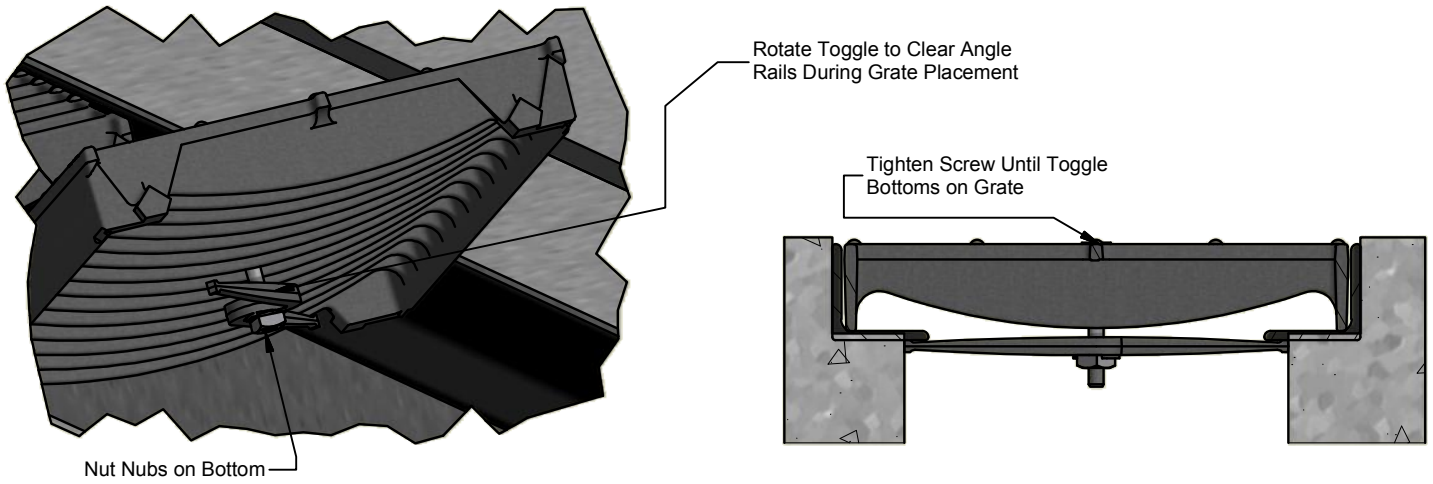


11. ENCAPSULATION CONCRETE PLACEMENT AND CONSOLIDATION



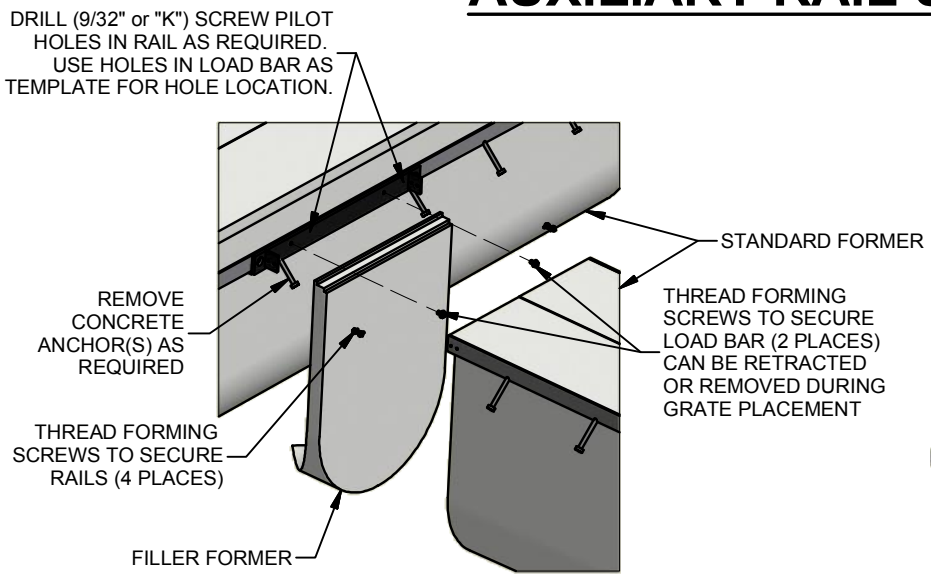
12. FLOOR CONCRETE PLACEMENT

13. FORMER REMOVAL



14. GRATE INSTALLATION

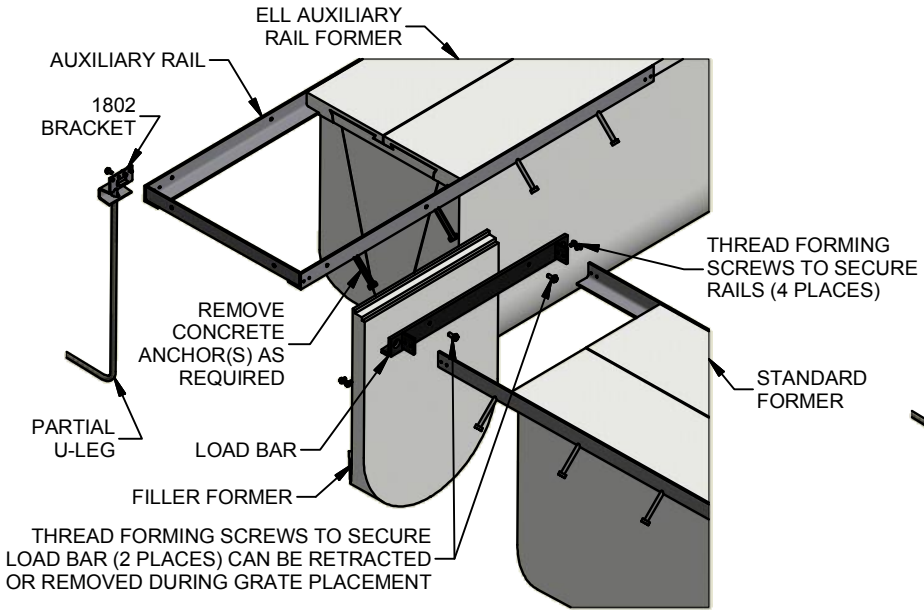
AUXILIARY RAIL USAGE



EXPLODED VIEW

ASSEMBLED VIEW

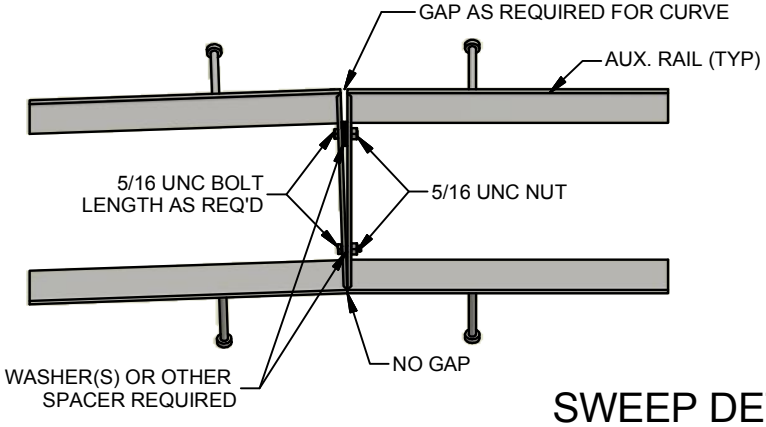
TEE DETAIL



EXPLODED VIEW

ASSEMBLED VIEW

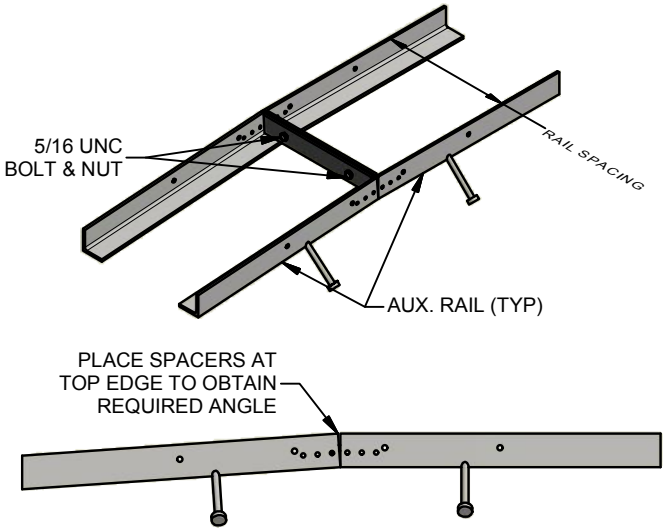
ELL DETAIL



NOTES:
1. INSTALL ANGLE ASSEMBLIES AS OFTEN AS REQUIRED TO PREVENT TRENCH RAILS FROM DEVIATING BEYOND DESIRED AMOUNT FROM TRUE RADIUS.
2. FILL ANY GAP AT END OF FORMER WITH FOAM-IN-PLACE FOAM OR COVER GAP WITH TAPE PRIOR TO FORMER RELASE APPLICAION.
3. CALCULATE GAP PER ASSEMBLY IS AS FOLLOWS:
GAP (INCH) = SPACING BETWEEN ANGLE ASSEMBLIES (INCH) * RAIL SPACING (INCH) / CURVE RAIDUS (INCH).

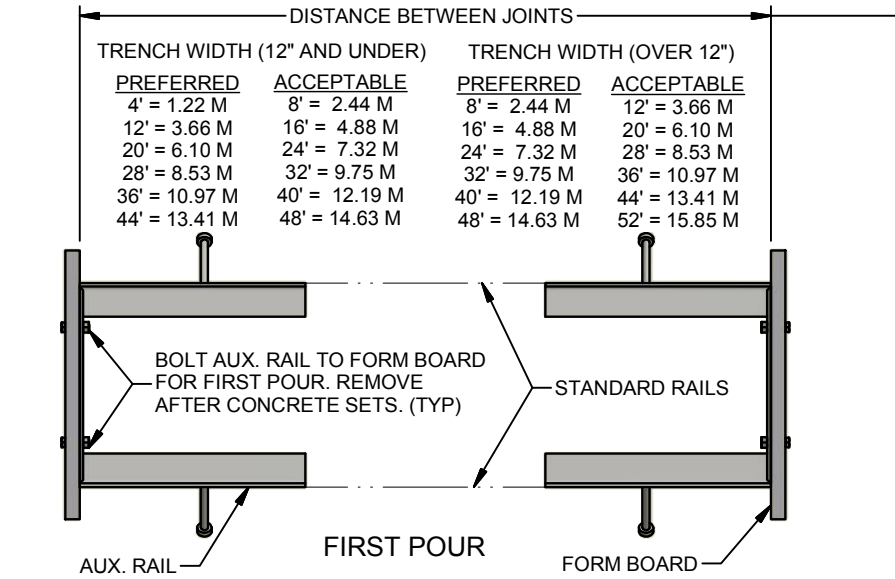
SWEEP DETAIL

AUXILIARY RAIL USAGE

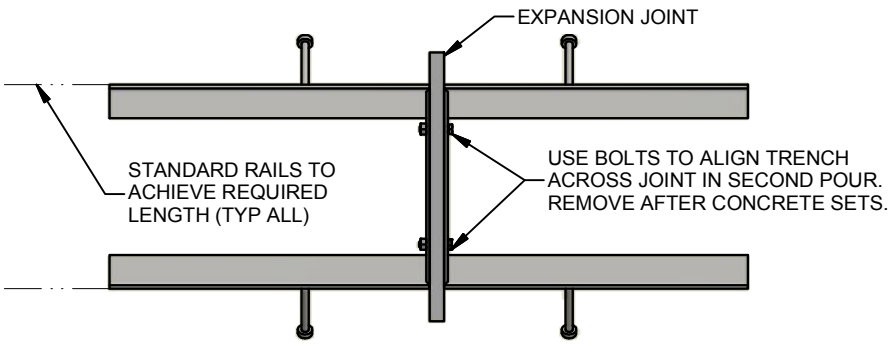


NOTES:
1. COORDINATE BREAK POINT OF SLOPE WITH POSSIBLE LOCATIONS OF AUXILLARY RAILS IN TRENCH RUN.
2. ADD OR REMOVE ESP FOAM AT END OF SECTIONS AT SLOPE BREAK AS REQUIRED.

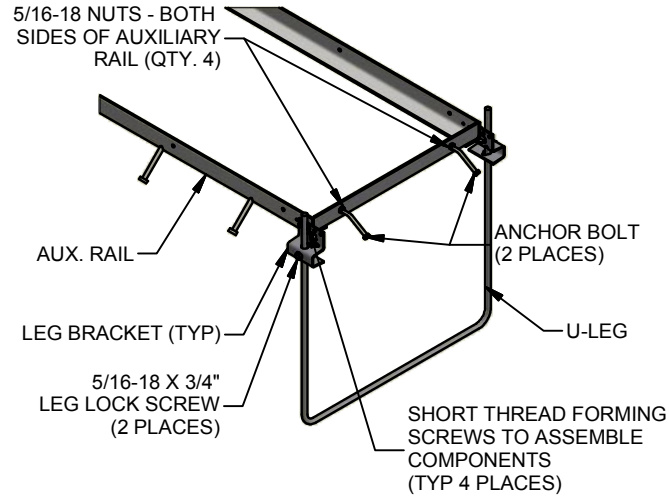
SLOPE BREAK DETAIL



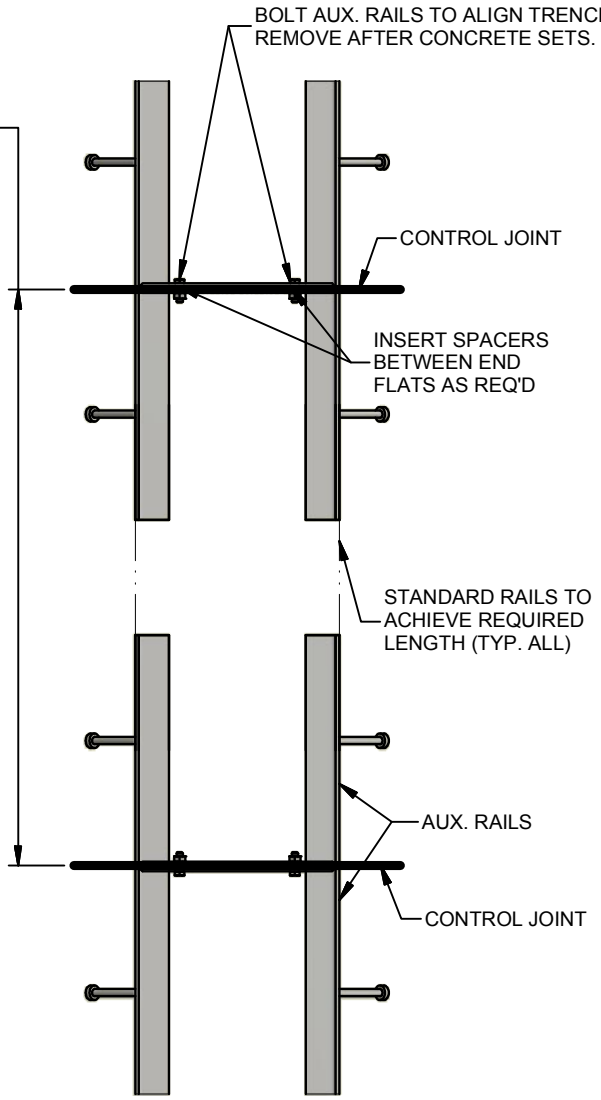
TRENCH WIDTH (12" AND UNDER)		TRENCH WIDTH (OVER 12")	
PREFERRED	ACCEPTABLE	PREFERRED	ACCEPTABLE
4' = 1.22 M	8' = 2.44 M	8' = 2.44 M	12' = 3.66 M
12' = 3.66 M	16' = 4.88 M	16' = 4.88 M	20' = 6.10 M
20' = 6.10 M	24' = 7.32 M	24' = 7.32 M	28' = 8.53 M
28' = 8.53 M	32' = 9.75 M	32' = 9.75 M	36' = 10.97 M
36' = 10.97 M	40' = 12.19 M	40' = 12.19 M	44' = 13.41 M
44' = 13.41 M	48' = 14.63 M	48' = 14.63 M	52' = 15.85 M



EXPANSION JOINT DETAIL



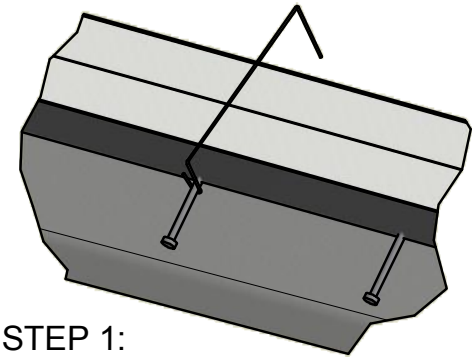
END OF RUN DETAIL



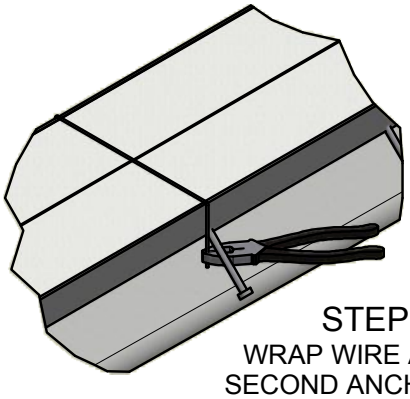
CONTROL JOINT DETAIL

WARNING: FAILURE TO USE CROSS TIES MAY RESULT IN IMPROPER RAIL ALIGNMENT
IF NO ABT PRE-FORMED CROSS TIES ARE ORDERED, INSTALLER IS RESPONSIBLE FOR SECURING RAILS TOGETHER USING TRADITIONAL REBAR TIE WIRES OR OTHER METHOD.
CROSS TIES SHALL BE INSTALLED ON EVERY OTHER ANCHOR STUD.

CROSS TIE #1



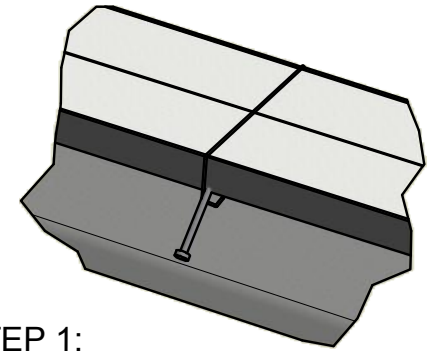
STEP 1:
HOOK PRE-FORMED END AROUND ONE ANCHOR STUD



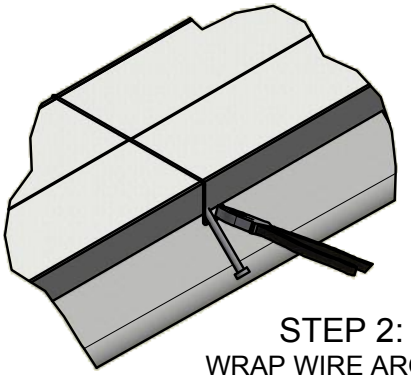
STEP 2:
WRAP WIRE AROUND SECOND ANCHOR STUD

STEP 3:
CUT CROSS TIE IN CENTER TO REMOVE WHILE CONCRETE IS CURING

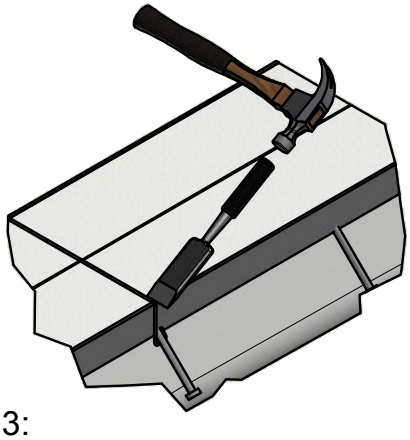
CROSS TIE #2



STEP 1:
HOOK CROSS TIE UNDER BOTH ANCHOR STUDS



STEP 2:
WRAP WIRE AROUND BOTH ANCHOR STUDS



STEP 3:
CUT CROSS TIE AT BOTH ENDS TO REMOVE AFTER CONCRETE HAS SET