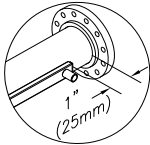
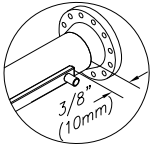
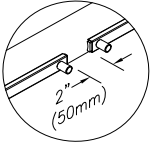
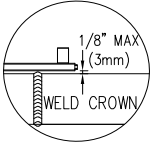
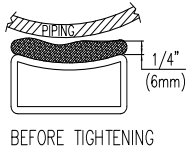
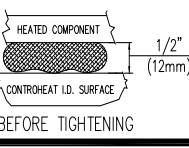
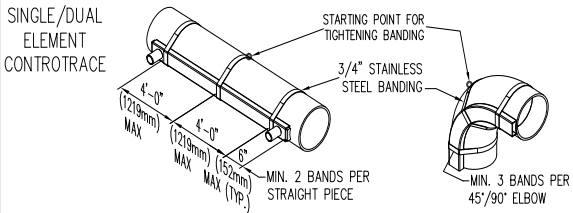
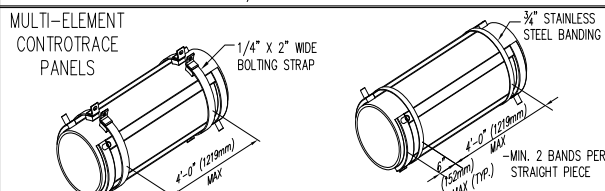
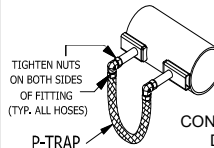
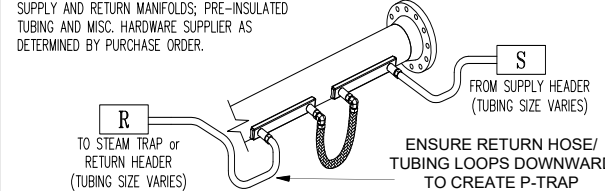
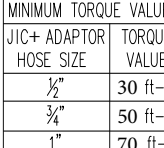


CONTROTRACE FOR PIPING INSTALLATION CHECKLIST

INSTALLATION GUIDE		SIGN OFF			REMARKS							
		CONST	CONST QA/QC	ENDUSER QA/QC								
1 DRY FIT (MAXIMUM SPACING AND WELD HEIGHT)	 											
	 											
2 APPLY HTC (DO NOT MIX W/ WATER OR DILUTE)	 <p>BEFORE TIGHTENING</p>											
	 <p>BEFORE TIGHTENING</p>											
3 FASTEN TARGET 1/8" MAXIMUM HTC THICKNESS AFTER TIGHTENING (NO AIR GAPS)	 <p>SINGLE/DUAL ELEMENT CONTROTRACE</p>											
	 <p>MULTI-ELEMENT CONTROTRACE PANELS</p>											
4 INSULATE	COMPLETELY INSULATE ALL: PIPING; FLANGES; SUPPORTS; PROCESS INSTRUMENTS SUCH AS VALVES; FLOW ELEMENTS; ETC...											
5 HOSES	 <p>TIGHTEN NUTS ON BOTH SIDES OF FITTING (TYP. ALL HOSES)</p> <p>P-TRAP</p> <p>CONSULT HOSE TAG FOR MORE DETAILED INFORMATION</p>											
6 CIRCUIT	 <p>SUPPLY AND RETURN MANIFOLDS; PRE-INSULATED TUBING AND MISC. HARDWARE SUPPLIER AS DETERMINED BY PURCHASE ORDER.</p> <p>R TO STEAM TRAP or RETURN HEADER (TUBING SIZE VARIES)</p> <p>S FROM SUPPLY HEADER (TUBING SIZE VARIES)</p> <p>ENSURE RETURN HOSE/ TUBING LOOPS DOWNWARD TO CREATE P-TRAP</p>											
	 <p>JIC+ ADAPTOR HOSE SIZE</p> <p>MINIMUM TORQUE VALUE</p> <table border="1"> <thead> <tr> <th>HOSE SIZE</th> <th>TORQUE VALUE</th> </tr> </thead> <tbody> <tr> <td>1/2"</td> <td>30 ft-lb</td> </tr> <tr> <td>3/4"</td> <td>50 ft-lb</td> </tr> <tr> <td>1"</td> <td>70 ft-lb</td> </tr> </tbody> </table>		HOSE SIZE	TORQUE VALUE	1/2"	30 ft-lb	3/4"	50 ft-lb	1"	70 ft-lb		
HOSE SIZE	TORQUE VALUE											
1/2"	30 ft-lb											
3/4"	50 ft-lb											
1"	70 ft-lb											
7 SYSTEM TEST	COMPLETED SYSTEM TEST CSI RECOMMENDS: A SOAPY WATER LEAK TEST (SNOOP) OF THE COMPLETED SYSTEM TO VERIFY PROPER ASSEMBLY OF THE CONNECTION POINTS. TEST SHOULD INCLUDE SUPPLY & RETURN MANIFOLDS.											