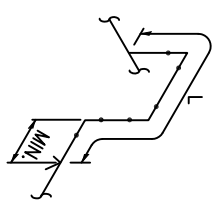
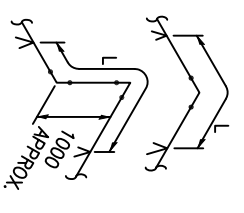
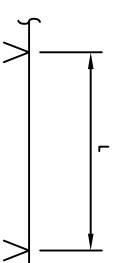


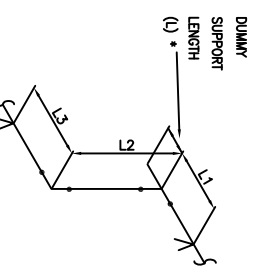
ALLOWABLE PIPING SPANS (NOTE 2)

PIPE SIZE	PIPE SCHEDULE	WALL THICKNESS	ALLOWABLE SPAN 'L' (mm)		DEFLECTION (mm)	ALLOWABLE SPAN 'L' (mm)	ALLOWABLE SPAN 'L' (mm)
			Diagram 1	Diagram 2			
3/4"	80	.154"	3050	1850	10	2450	
1"	80	.179"	3800	2150	12	3050	
1 1/2"	80	.200"	5000	3350	20	4000	
2"	40	.154"	5750	3650	25	4250	
2"	80	.218"	6000	4000	25	4600	
3"	40	.216"	7000	4900	25	5500	
4"	40	.237"	8000	5500	25	6100	
6"	40	.280"	9500	6700	25	7600	
8"	30	.277"	11000	7300	25	8200	
10"	20	.250"	11500	7600	25	8650	
10"	40	.365"	12500	8200	25	9450	
12"	20	.250"	12000	7900	25	9150	
12"	STD	.375"	13400	8850	25	10000	
14"	10	.250"	12800	8200	25	9450	
14"	STD	.375"	14000	9150	25	10400	
16"	10	.250"	13400	8550	25	10000	
16"	STD	.375"	14800	9450	25	11000	
18"	10	.250"	13700	8650	25	10400	
18"	STD	.375"	15200	10000	25	11600	
20"	10	.250"	14300	9450	25	11000	
20"	20	.375"	15800	10300	25	11900	
24"	10	.250"	14900	9750	25	11300	
24"	20	.375"	16700	11000	25	12500	



DUMMY SUPPORT SPANS

DUMMY SUPPORT SELECTION - CARBON STEEL			
PIPE DATA	DUMMY SUPPORT (NOTE 3)	SPAN	LIMITATION FACTOR
SIZE	WALL THICKNESS	SIZE	
2"	SCH. 40	1 1/2"	4200
3"	SCH. 40	2"	6700
4"	SCH. 40	3"	4500
6"	SCH. 40	4"	4200
8"	SCH. 40	6"	7600
10"	SCH. 40	8"	5100
12"	STD. WT.	10"	6400
14"	STD. WT.	12"	5500
16"	STD. WT.	12"	7600
18"	STD. WT.	14"	6400
20"	STD. WT.	14"	9100
24"	STD. WT.	16"	6700



* IF DUMMY SUPPORT LENGTH DOES NOT EXCEED $L1+L2$ AND $L1+L3$ DOES NOT EXCEED THE SPAN LIMITATION FACTOR, (SEE TABLE) NO FURTHER CALCULATIONS ARE REQUIRED. (SEE TABLE)

IF THESE CONDITIONS DO NOT EXIST, THEN USE FORMULA BELOW TO DETERMINE ALLOWABLE LOAD LIMITATIONS ON DUMMY SUPPORTS BASED ON THE PIPE SPAN.

DUMMY SUPPORT FORMULA:

$$\frac{L1+L2}{2} \text{ IS LESS THAN OR EQUAL TO } \frac{1800}{L} \times \text{SPAN FACTOR (TABLE)}$$

ACTUAL SPAN (\leq) MAX. SPAN LIMITATION

SAMPLE: GIVEN 6" SCH 40 L=2080 L1=1784 L2=1524 L3=2400

SOLUTION: $\frac{1784+2400}{2} + 1524 \leq \frac{1800}{2080} \times 4200 \Rightarrow 3616 \leq 3635$

3616 IS LESS THAN 3635, THEREFORE THE 4" DUMMY SUPPORT WITH LENGTH (L)=2080 IS ACCEPTABLE. CONSULT STRESS ENGINEER WHEN FORMULA CANNOT BE SATISFIED.

BASED ON USING CARBON STEEL PIPE (A106-GR. B) FILLED WITH WATER & 12 1/2% WALL TOLERANCE & .065 CORROSION TOLERANCE.

- NOTES:
1. SPANS ARE BASED ON INSULATED & UNINSULATED LINES BELOW 360°C.
 2. CONSULT STRESS ENGINEER FOR THE REQUIREMENT OF REINFORCEMENT AT THE POINT OF SUPPORT.
 3. DUMMY MATERIAL AND SCHEDULE TO MATCH PIPING LINE CLASS.

DRAWING NO.	REFERENCE DRAWINGS	REV.	DESCRIPTION	BY	DATE	CHK	APP.	CLIENT	CLIENT BY:	DATE	SCALE	JOB NO.	DRAWING NO.	REV.
DRAWN BY: _____ DATE _____											TITLE			
DESIGNED BY: _____ DATE _____											ALLOWABLE PIPE AND DUMMY SUPPORT SPANS			
CHECKED BY: _____ DATE _____											SAG16			
APPROVED BY: _____ DATE _____														