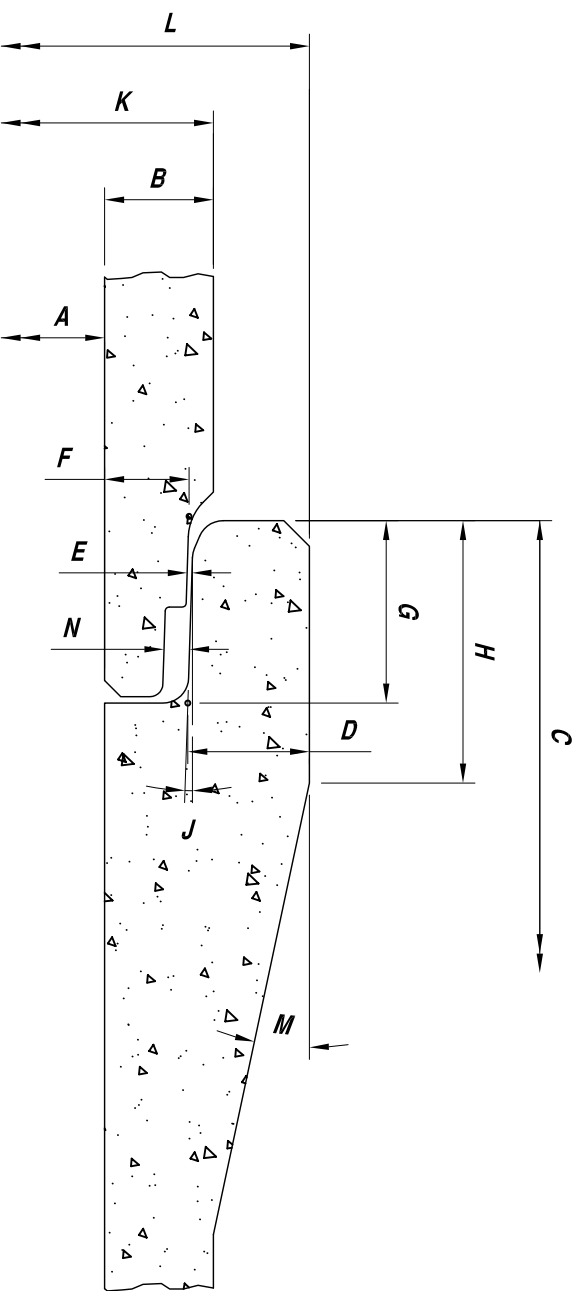
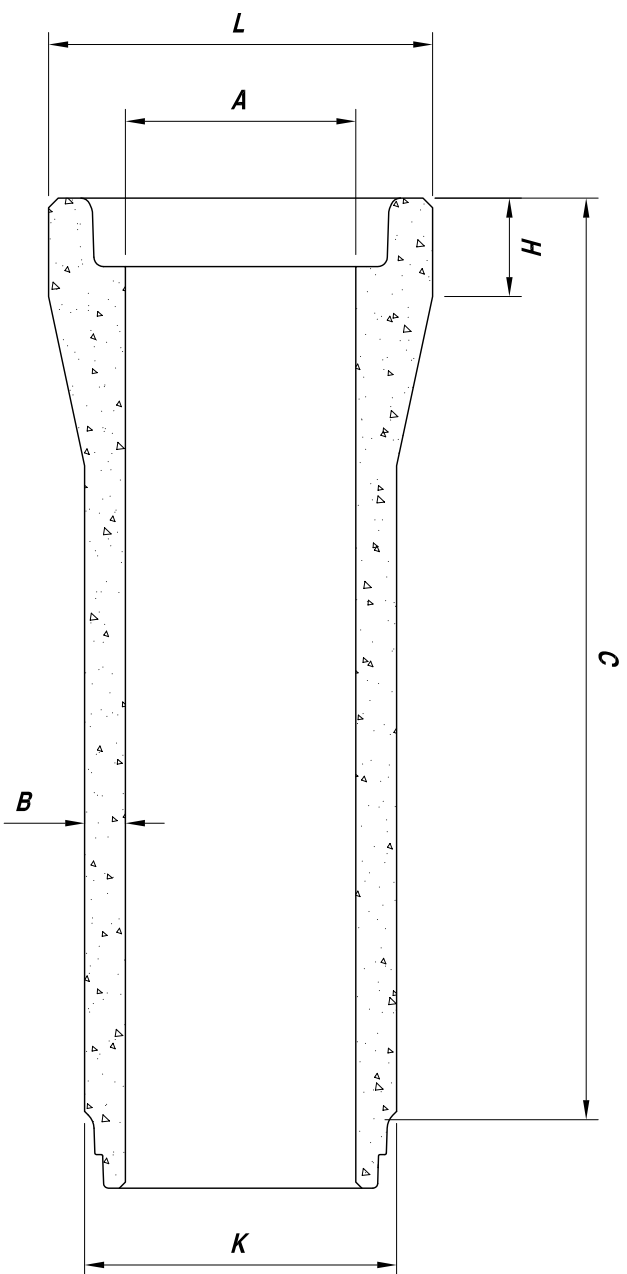


**NON-REINFORCED & REINFORCED
CONCRETE PIPE WITH STEP JOINTS
AND OFF-SET BELLS**



STEP JOINT DETAIL



PIPE - SECTION VIEW

BASIC DIMENSIONS & WEIGHTS - U.S. CUSTOMARY

		12"	15"	18"	21"	24"	27"	42"	48"
A	Nominal Pipe Diameter	In.	12"	15"	18"	21"	24"	27"	42"
B	Wall Thickness	In.	2.125	2.50	2.75	2.75	3.00		
	Wall Thickness	In.		C Wall					
C	Average Laying Length	Ft.	8.00	8.00	8.00	8.00	8.00	8.00	8.00
D	Bell Thickness (At Shoulder)	In.	2.374	2.562	2.625	2.875	3.121	3.389	4.517
E	Concrete Annular Space	In.	0.094	0.094	0.094	0.094	0.094	0.094	0.094
F	Spigot Thickness (At Shoulder)	In.	1.648	1.898	2.222	2.472	2.73	2.958	4.069
G	Joint Depth	In.	3.563	3.563	3.75	3.75	3.875	3.875	4.625
H	Bell Length (To Taper)	In.	5.125	5.25	5.25	5.25	5.75	5.875	7.125
J	Joint Taper	Deg.	1.83°	1.83°	1.83°	1.83°	1.83°	1.83°	1.83°
K	Wall Outside Dia.	In.	B/B+ Wall	16.25	20	23.5	26.5	30	
	Wall Outside Dia.	In.	C Wall					35	52.5
L	Bell Outside Diameter	In.	20	23.875	27.625	31.625	35.625	39.625	59.055
M	Bell Slope	Deg.	12°	12°	15°	15°	15°	15°	15°
N	Gasket Annular Space	In.	0.500	0.500	0.500	0.500	0.500	0.500	0.500
	Approx. Wt./Ft.	B/B+ Wall	116	168	217	255	320		
	Approx. Wt./Ft.	C Wall						466	939
		Lb.							1165

- Notes:
1. Non-Reinforced Concrete Pipe Is In Accordance With The ASTM C 14 Specification.
 2. Reinforced Concrete Pipe Is In Accordance With The ASTM C 76 Specification.
 3. Gaskets Are In Accordance With The ASTM C 443 Specification.
 4. Non-Reinforced Concrete Pipe Is Available In 12" \emptyset Through 36" \emptyset Only.

APPROVED BY: _____
 COMPANY: _____
 DATE: _____

PREMARC
 INFRASTRUCTURE SPECIALISTS SINCE 1927
 7505 Highway M-71
 Durand, Michigan 48429
 (989)-288-2661

Revisions:

No.	Date
1	
2	
3	
4	

Sheet Title:
 STEP JOINT PIPE DETAILS
 Producer:
 THE PREMARC CORPORATION

MICHIGAN
 NON-REINFORCED & REINFORCED
 CONCRETE PIPE WITH STEP JOINTS
 AND OFF-SET BELLS
 Drawing No. _____
 Drawn By: JKC
 Chk'd By: BAP
 Date: 11/29/05
 Scale: None
 Sheet No. P1