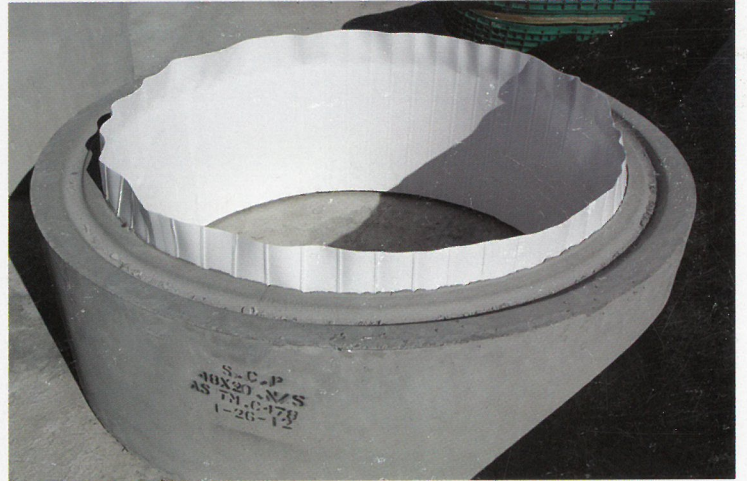
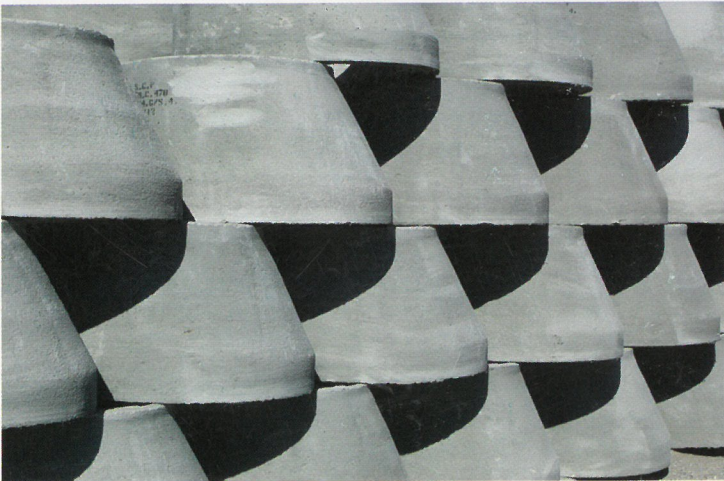
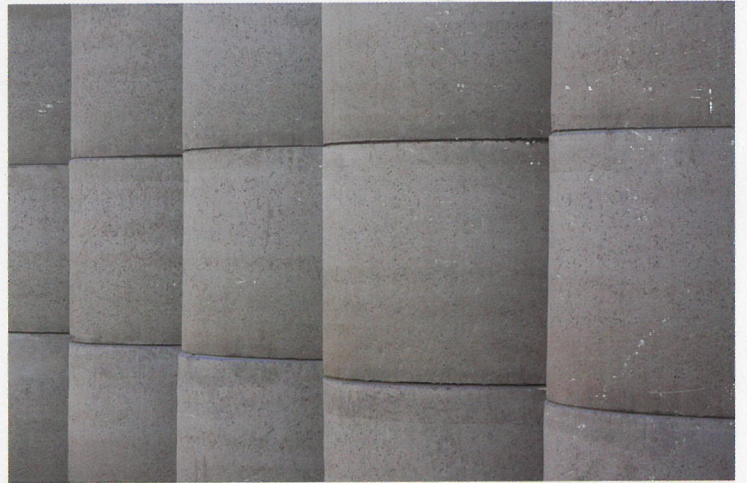
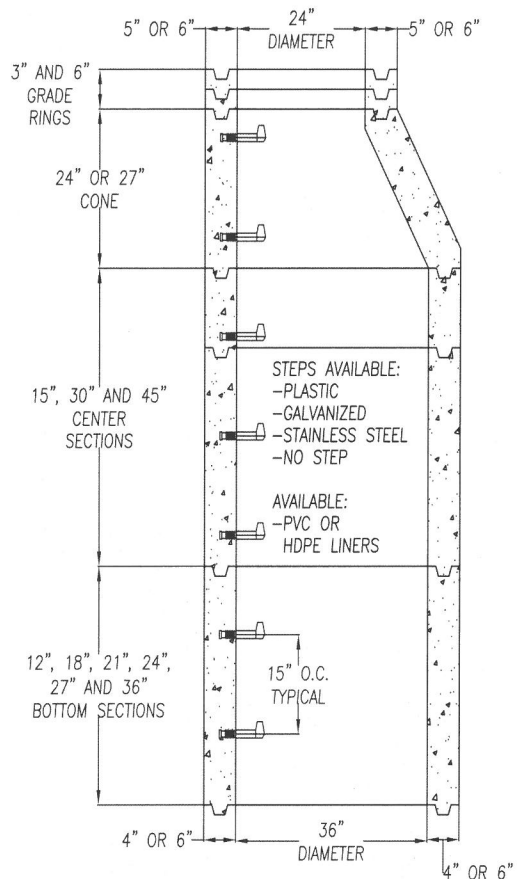




CALPORTLAND®



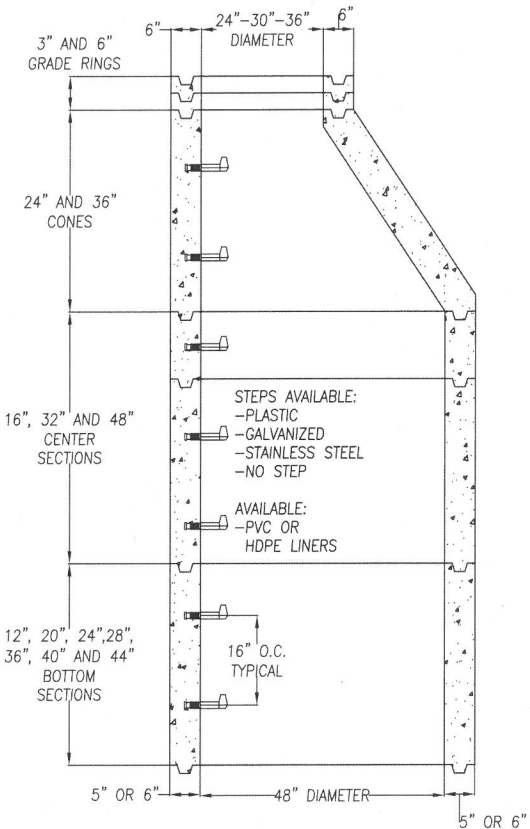
CONCRETE PRODUCTS
PRECAST CONCRETE MANHOLES



36" I.D. REINFORCED MANHOLE WITH ECCENTRIC CONE OR FLAT TOP

- NOTES:
- AVAILABLE WITH OR WITHOUT GALVANIZED, PLASTIC, OR STAINLESS STEEL STEPS.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 15" ON CENTER AT TIME OF MANUFACTURE.
 - CONES COME IN 24" AND 27" HEIGHTS WITH 24" OPENING.
 - CENTER SECTIONS COME IN 15", 30" AND 45" HEIGHTS.
 - BOTTOM SECTIONS COME IN 12", 18", 21", 24", 27" AND 36" HEIGHTS TO MAINTAIN 15" ON CENTER STEP SPACING.
 - AVAILABLE WITH OR WITHOUT PVCT-LOCK OR HDPE LINERS.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT	APPROX. WEIGHT 4"	APPROX. WEIGHT 6"
GRADE RING	3"	5"	24"	0	120 LBS.		
GRADE RING	6"	5"	24"	0	256 LBS.		
GRADE RING	3"	4" or 6"	36"	0	130 LBS.		
GRADE RING	6"	4" or 6"	36"	0	260 LBS.		
FLAT TOP	10"	4" or 6"	24" or 30"	0 to 1	579 LBS.		
REDUCER CONE	12"	6"	36" to 30"	0 to 1		N/A	800 LBS.
CONE ECCENTRIC	24"	4" or 6"	36" to 24"	1	1,030 LBS.		1,600 LBS.
CONE ECCENTRIC	27"	4" or 6"	36" to 24"	2	1,159 LBS.		1,800 LBS.
SHAFT CENTER SECTION	15"	4" or 6"	36"	1	643 LBS.		1,000 LBS.
SHAFT CENTER SECTION	30"	4" or 6"	36"	2	1,288 LBS.		2,000 LBS.
SHAFT CENTER SECTION	45"	4" or 6"	36"	3	1,931 LBS.		3,000 LBS.
SHAFT BOTTOM SECTION	12"	4" or 6"	36"	1	515 LBS.		800 LBS.
SHAFT BOTTOM SECTION	18"	4" or 6"	36"	1	773 LBS.		1,200 LBS.
SHAFT BOTTOM SECTION	21"	4" or 6"	36"	1	901 LBS.		1,400 LBS.
SHAFT BOTTOM SECTION	24"	4" or 6"	36"	1	1,030 LBS.		1,600 LBS.
SHAFT BOTTOM SECTION	27"	4" or 6"	36"	2	1,159 LBS.		1,800 LBS.
SHAFT BOTTOM SECTION	36"	4" or 6"	36"	2	1,545 LBS.		2,400 LBS.



48" I.D. REINFORCED MANHOLE WITH ECCENTRIC CONE

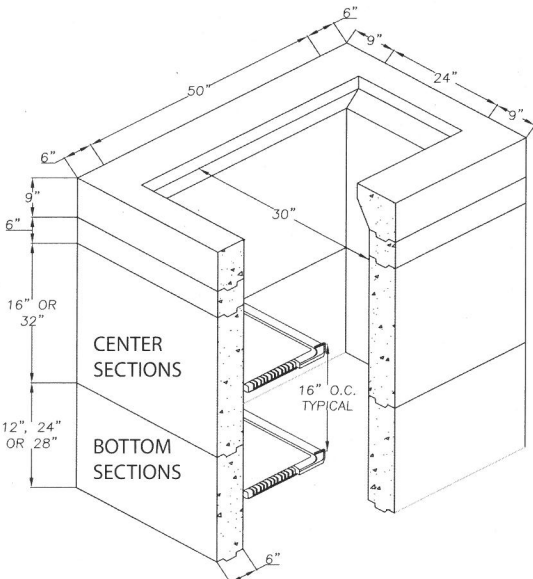
- NOTES:
- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL STEPS.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 16" ON CENTER AT TIME OF MANUFACTURE.
 - 16", 32" AND 48" SHAFTS ARE USED FOR CENTER SECTIONS
 - 12", 20", 24", 28", 36", 40" AND 44" SHAFTS ARE USED FOR BOTTOM SECTIONS ONLY, TO MAINTAIN THE 16" VERTICAL SPACING OF THE STEPS.
 - AVAILABLE WITH OR WITHOUT PVCT-LOCK OR HDPE LINER.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT 5"	APPROX. WEIGHT 6"
GRADE RING	3"	6"	24"	0		145 LBS.
GRADE RING	6"	6"	24"	0		309 LBS.
GRADE RING	3"	6"	30"	0		176 LBS.
GRADE RING	6"	6"	30"	0		356 LBS.
GRADE RING	3"	6" #	36"	0		203 LBS.
GRADE RING	6"	6"	36"	0		406 LBS.
CONE ECCENTRIC	24"	5" to 6"	48" to 24" - 30" or 36"	1	1,744 LBS.	2,100 LBS.
CONE ECCENTRIC	36"	5" to 6"	48" to 24" - 30" or 36"	2	2,616 LBS.	3,150 LBS.
SHAFT CENTER SECTION	16"	5" or 6"	48"	1	1,163 LBS.	1,400 LBS.
SHAFT CENTER SECTION	32"	5" or 6"	48"	2	2,325 LBS.	2,800 LBS.
SHAFT CENTER SECTION	48"	5" or 6"	48"	3	3,488 LBS.	4,200 LBS.
SHAFT BOTTOM SECTION	12"	5" or 6"	48"	1	872 LBS.	1,050 LBS.
SHAFT BOTTOM SECTION	20"	5" or 6"	48"	1	1,453 LBS.	1,750 LBS.
SHAFT BOTTOM SECTION	24"	5" or 6"	48"	1	1,744 LBS.	2,100 LBS.
SHAFT BOTTOM SECTION	28"	5" or 6"	48"	2	2,035 LBS.	2,450 LBS.
SHAFT BOTTOM SECTION	36"	5" or 6"	48"	2	2,616 LBS.	3,150 LBS.
SHAFT BOTTOM SECTION	40"	5" or 6"	48"	2	2,907 LBS.	3,500 LBS.
SHAFT BOTTOM SECTION	44"	5" or 6"	48"	3	3,197 LBS.	3,850 LBS.

30" X 50" REINFORCED RECTANGULAR MANHOLE

- NOTES:
- AVAILABLE WITH OR WITHOUT GALVANIZED, PLASTIC AND STAINLESS STEEL STEP.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 16" ON CENTER AT TIME OF MANUFACTURE.
 - TOP SECTIONS ARE 9".
 - CENTER SECTIONS AVAILABLE IN 16" AND 32".
 - BOTTOM SECTIONS ONLY AVAILABLE IN 6", 12", 24" AND 28".
 - AVAILABLE WITH OR WITHOUT PVC T-LOCK OR HDPE LINERS.

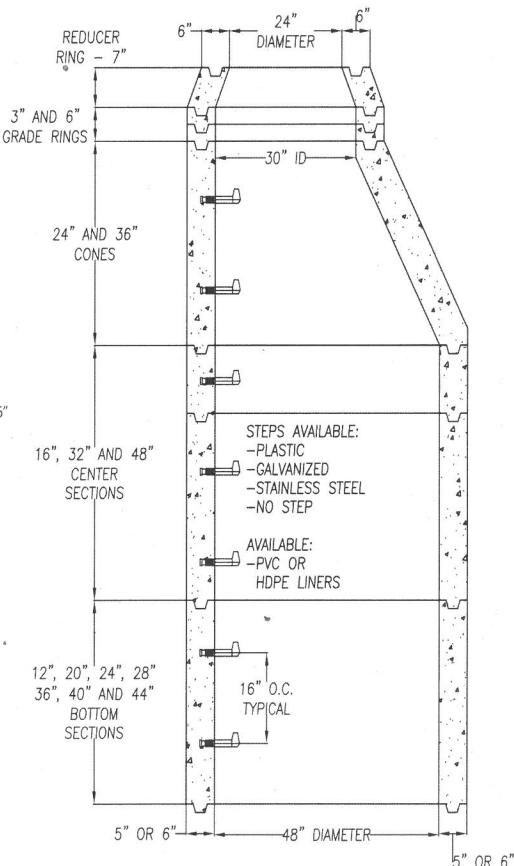
DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT
TOP SECTION	9"	AS SHOWN	AS SHOWN	0	1,128 LBS.
CENTER SECTION	16"	6"	30"X50"	1	1,538 LBS.
CENTER SECTION	32"	6"	30"X50"	2	3,075 LBS.
BOTTOM SECTION	6"	6"	30"X50"	0	564 LBS.
BOTTOM SECTION	12"	6"	30"X50"	1	1,128 LBS.
BOTTOM SECTION	24"	6"	30"X50"	2	2,255 LBS.
BOTTOM SECTION	28"	6"	30"X50"	2	2,665 LBS.

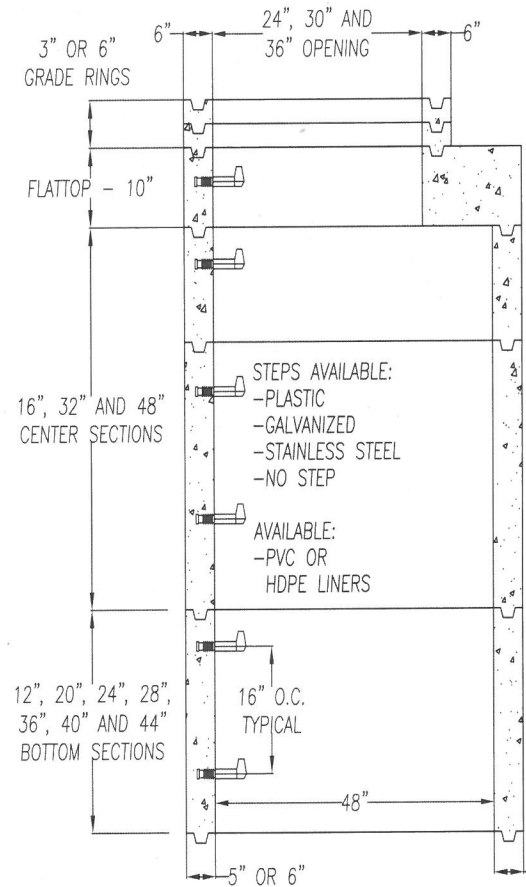


48" I.D. REINFORCED MANHOLE WITH 30" OPENING ECCENTRIC CONE AND REDUCER RING

- NOTES:
- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL STEPS.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 16" ON CENTER AT TIME OF MANUFACTURE.
 - 16", 32" AND 48" SHAFTS ARE USED FOR CENTER SECTIONS
 - 12", 20", 24", 28", 36", 40" AND 44" SHAFTS ARE USED FOR BOTTOM SECTIONS ONLY, TO MAINTAIN THE 16" VERTICAL SPACING OF THE STEPS.
 - AVAILABLE WITH OR WITHOUT T-LOCK OR HPDE LINER.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT 5"	APPROX. WEIGHT 6"
REDUCER RING	3"	6"	30" TO 27"	0		195 LBS.
REDUCER RING	7"	6"	30" TO 27"	0		444 LBS.
GRADE RING	3"	6"	24"	0		145 LBS.
GRADE RING	6"	6"	24"	0		309 LBS.
GRADE RING	3"	6"	30"	0		176 LBS.
GRADE RING	6"	6"	30"	0		356 LBS.
GRADE RING	3"	6"	36"	0		203 LBS.
GRADE RING	6"	6"	36"	0		406 LBS.
GRADE RING	12"	6"	30"	0		712 LBS.
CONE ECCENTRIC	24"	5" to 6"	48" TO 24" - 30" or 36"	1	1,744 LBS.	2,100 LBS.
CONE ECCENTRIC	36"	5" to 6"	48" TO 24" - 30" or 36"	2	2,616 LBS.	3,150 LBS.
SHAFT CENTER SECTION	16"	5" or 6"	48"	1	1,163 LBS.	1,400 LBS.
SHAFT CENTER SECTION	32"	5" or 6"	48"	2	2,325 LBS.	2,800 LBS.
SHAFT CENTER SECTION	48"	5" or 6"	48"	3	3,488 LBS.	4,200 LBS.
SHAFT BOTTOM SECTION	12"	5" or 6"	48"	1	872 LBS.	1,050 LBS.
SHAFT BOTTOM SECTION	20"	5" or 6"	48"	1	1,453 LBS.	1,750 LBS.
SHAFT BOTTOM SECTION	24"	5" or 6"	48"	1	1,744 LBS.	2,100 LBS.
SHAFT BOTTOM SECTION	28"	5" or 6"	48"	2	2,035 LBS.	2,450 LBS.
SHAFT BOTTOM SECTION	36"	5" or 6"	48"	2	2,616 LBS.	3,150 LBS.
SHAFT BOTTOM SECTION	40"	5" or 6"	48"	2	2,907 LBS.	3,500 LBS.
SHAFT BOTTOM SECTION	44"	5" or 6"	48"	3	3,197 LBS.	3,850 LBS.

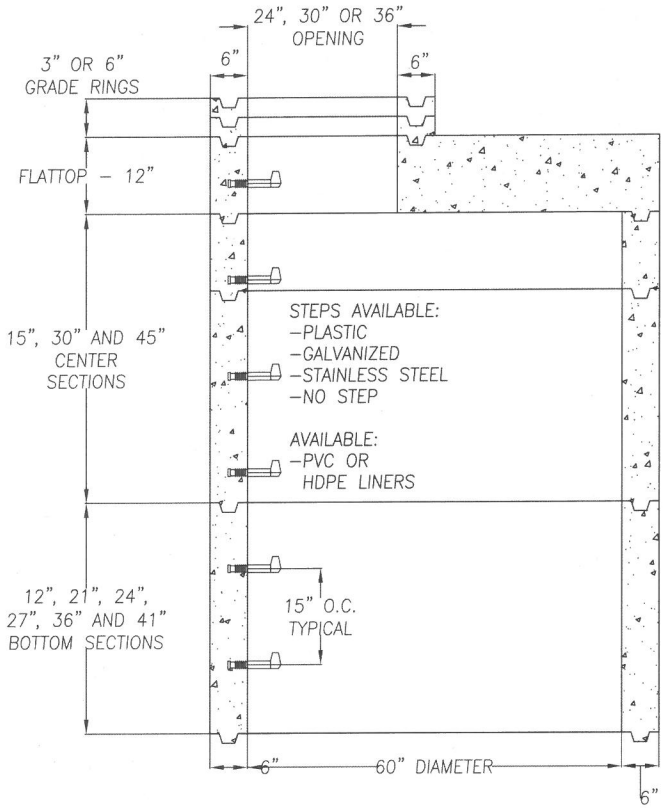




48" I.D. REINFORCED MANHOLE WITH 58" or 60" O.D. ECCENTRIC FLAT TOP

- NOTES:
- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL SAFETY STEPS.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 16" ON CENTER AT TIME OF MANUFACTURE.
 - 16", 32" AND 48" SHAFTS ARE USED FOR CENTER SECTIONS
 - 12", 20", 24", 28", 36", 40" AND 44" SHAFTS ARE USED FOR BOTTOM SECTIONS ONLY, TO MAINTAIN THE 16" VERTICAL SPACING OF THE STEPS.
 - AVAILABLE WITH OR WITHOUT T-LOCK OR HPDE LINER.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT 5"	APPROX. WEIGHT 6"
GRADE RING	3"	5" or 6"	24"	0		145 LBS.
GRADE RING	6"	5" or 6"	24"	0		309 LBS.
GRADE RING	3"	6"	30"	0		176 LBS.
GRADE RING	6"	6"	30"	0		356 LBS.
GRADE RING	3"	6"	36"	0		203 LBS.
GRADE RING	6"	6"	36"	0		406 LBS.
FLAT TOP (24" OPENING)	10"	5" or 6"	48" TO 24"	0 to 1	2,240 LBS.	2,440 LBS.
FLAT TOP (30" OPENING)	10"	5" or 6"	48" TO 30"	0 to 1	2,000 LBS.	2,200 LBS.
FLAT TOP (36" OPENING)	10"	5" or 6"	48" TO 36"	0 to 1	1,680 LBS.	1,880 LBS.
SHAFT CENTER SECTION	16"	5" or 6"	48"	1	1,163 LBS.	1,400 LBS.
SHAFT CENTER SECTION	32"	5" or 6"	48"	2	2,325 LBS.	2,800 LBS.
SHAFT CENTER SECTION	48"	5" or 6"	48"	3	3,488 LBS.	4,200 LBS.
SHAFT BOTTOM SECTION	12"	5" or 6"	48"	1	872 LBS.	1,050 LBS.
SHAFT BOTTOM SECTION	20"	5" or 6"	48"	1	1,453 LBS.	1,750 LBS.
SHAFT BOTTOM SECTION	24"	5" or 6"	48"	1	1,744 LBS.	2,100 LBS.
SHAFT BOTTOM SECTION	28"	5" or 6"	48"	2	2,035 LBS.	2,450 LBS.
SHAFT BOTTOM SECTION	36"	5" or 6"	48"	2	2,616 LBS.	3,150 LBS.
SHAFT BOTTOM SECTION	40"	5" or 6"	48"	2	2,907 LBS.	3,500 LBS.
SHAFT BOTTOM SECTION	44"	5" or 6"	48"	3	3,197 LBS.	3,850 LBS.



60" I.D. REINFORCED MANHOLE WITH 72" O.D. FLAT TOP

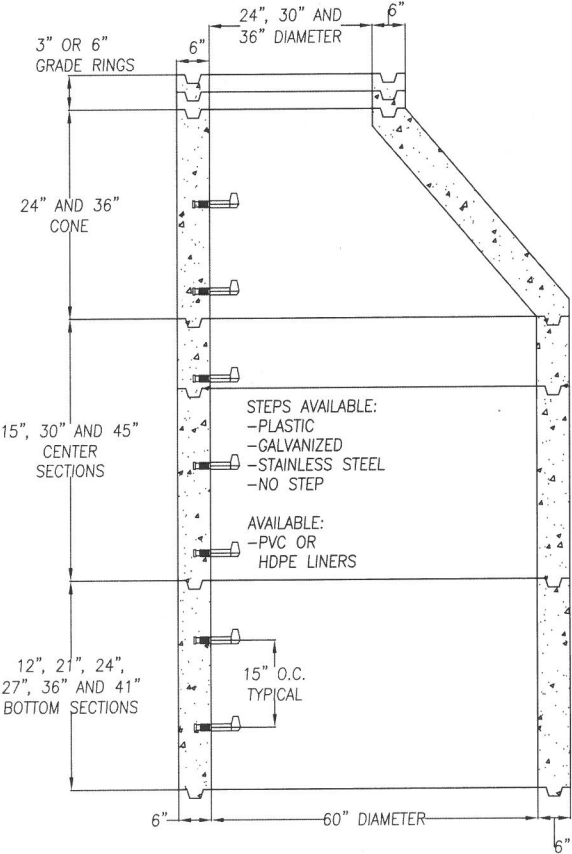
- NOTES:
- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL SAFETY STEPS.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 15" ON CENTER AT TIME OF MANUFACTURE.
 - CENTER SECTIONS COME IN 15", 30" AND 45" .
 - BOTTOM SECTIONS COME IN 12", 21", 24", 27", 36" AND 41" SECTIONS TO MAINTAIN THE 15" VERTICAL SPACING OF THE STEPS.
 - AVAILABLE WITH OR WITHOUT T-LOCK OR HPDE LINER.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT 6"
GRADE RING	3"	6"	24"	0	145 LBS.
GRADE RING	6"	6"	24"	0	309 LBS.
GRADE RING	3"	6"	30"	0	176 LBS.
GRADE RING	6"	6"	30"	0	356 LBS.
GRADE RING	3"	6"	36"	0	203 LBS.
GRADE RING	6"	6"	36"	0	406 LBS.
FLAT TOP (24" OPENING)	12"	6"	60" TO 24"	0 to 1	3,720 LBS.
FLAT TOP (30" OPENING)	12"	6"	60" TO 30"	0 to 1	3,480 LBS.
FLAT TOP (36" OPENING)	12"	6"	60" TO 36"	0 to 1	3,160 LBS.
SHAFT CENTER SECTION	15"	6"	60"	1	1,563 LBS.
SHAFT CENTER SECTION	30"	6"	60"	2	3,125 LBS.
SHAFT CENTER SECTION	45"	6"	60"	3	4,688 LBS.
SHAFT BOTTOM SECTION	12"	6"	60"	1	1,250 LBS.
SHAFT BOTTOM SECTION	21"	6"	60"	1	2,188 LBS.
SHAFT BOTTOM SECTION	24"	6"	60"	1	2,500 LBS.
SHAFT BOTTOM SECTION	27"	6"	60"	2	2,813 LBS.
SHAFT BOTTOM SECTION	36"	6"	60"	2	3,750 LBS.
SHAFT BOTTOM SECTION	41"	6"	60"	2	4,271 LBS.

60" I.D. REINFORCED MANHOLE WITH ECCENTRIC CONE

- NOTES:
- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL SAFETY STEPS.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 15" ON CENTER AT TIME OF MANUFACTURE.
 - CENTER SECTIONS COME IN 15", 30" AND 45" HEIGHTS.
 - BOTTOM SECTIONS COME IN 12", 21", 24", 27", 36" AND 41" HEIGHTS TO MAINTAIN THE 15" ON CENTER VERTICAL SPACING OF THE STEPS.
 - AVAILABLE WITH OR WITHOUT T-LOCK OR HPDE LINER.

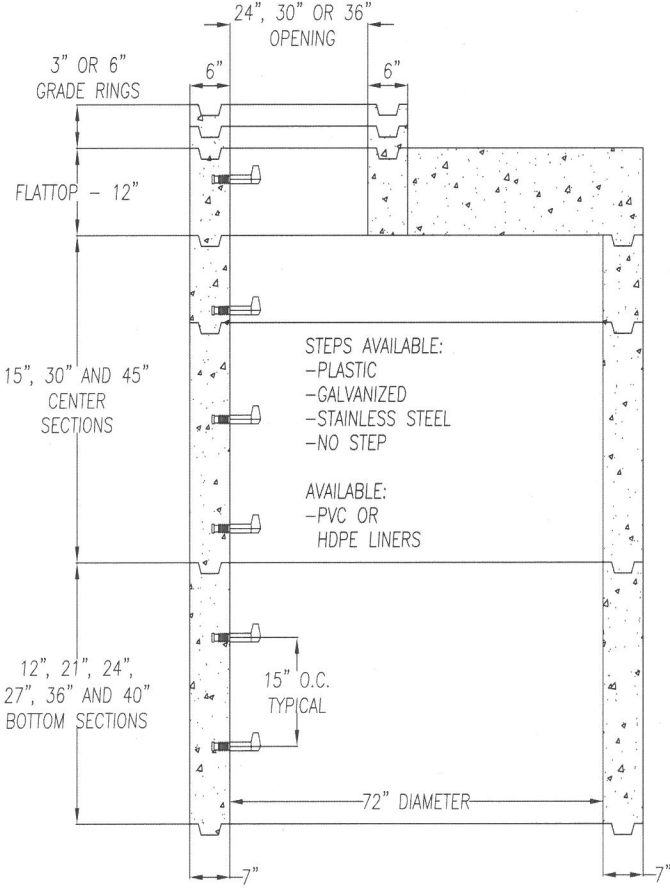
DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT 6"
REDUCER RING	3"	6"	30" TO 27"	0	195 LBS.
REDUCER RING	7"	6"	30" TO 24"	0	444 LBS.
GRADE RING	3"	6"	24"	0	145 LBS.
GRADE RING	6"	6"	24"	0	309 LBS.
GRADE RING	3"	6"	30"	0	176 LBS.
GRADE RING	6"	6"	30"	0	356 LBS.
GRADE RING	3"	6"	36"	0	203 LBS.
GRADE RING	6"	6"	36"	0	406 LBS.
CONE ECCENTRIC	36"	6"	24"	2	3,750 LBS.
CONE ECCENTRIC	36"	6"	30"	2	3,750 LBS.
CONE ECCENTRIC	36"	6"	36"	2	3,750 LBS.
SHAFT CENTER SECTION	15"	6"	60"	1	1,563 LBS.
SHAFT CENTER SECTION	30"	6"	60"	2	3,125 LBS.
SHAFT CENTER SECTION	45"	6"	60"	3	4,688 LBS.
SHAFT BOTTOM SECTION	12"	6"	60"	1	1,250 LBS.
SHAFT BOTTOM SECTION	21"	6"	60"	1	2,188 LBS.
SHAFT BOTTOM SECTION	24"	6"	60"	1	2,500 LBS.
SHAFT BOTTOM SECTION	27"	6"	60"	2	2,813 LBS.
SHAFT BOTTOM SECTION	36"	6"	60"	2	3,750 LBS.
SHAFT BOTTOM SECTION	41"	6"	60"	2	4,271 LBS.



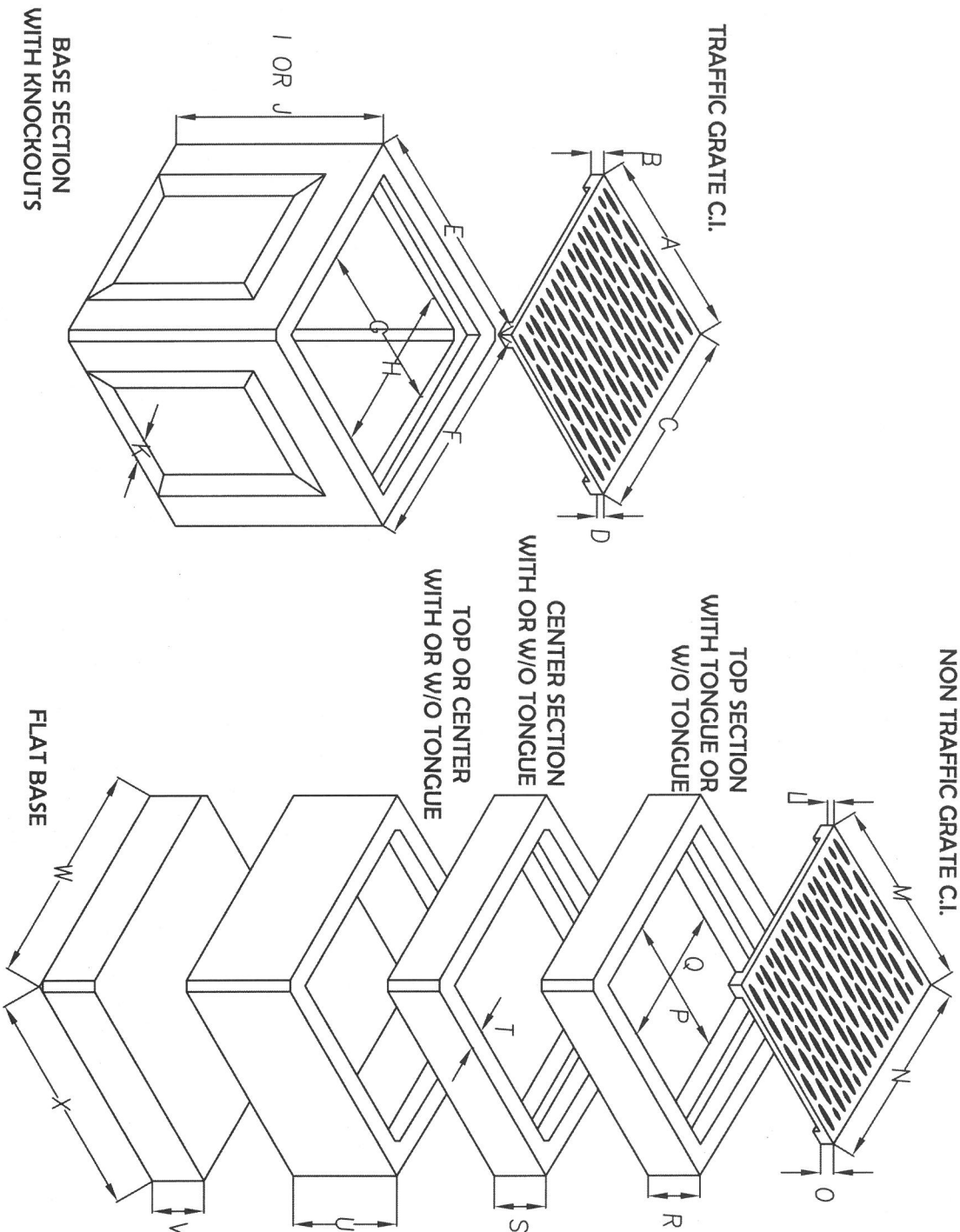
72" I.D. REINFORCED MANHOLE WITH 86" O.D. FLAT TOP OR 36" CONE

- NOTES:
- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL SAFETY STEPS.
 - WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 15" ON CENTER AT TIME OF MANUFACTURE.
 - FLAT TOPS COME IN 12" HEIGHTS WITH 24", 30" AND 36" OPENINGS.
 - CENTER SECTIONS COME IN 15", 30" AND 45" HEIGHTS
 - BOTTOM SECTIONS COME IN 12", 20", 24", 27", 36", AND 40" HEIGHTS TO MAINTAIN THE 15" VERTICAL SPACING OF THE STEPS.
 - AVAILABLE WITH OR WITHOUT T-LOCK OR HPDE LINER.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT
GRADE RING	3"	6"	24"	0	145 LBS.
GRADE RING	6"	6"	24"	0	309 LBS.
GRADE RING	3"	6"	30"	0	176 LBS.
GRADE RING	6"	6"	30"	0	356 LBS.
GRADE RING	3"	6"	36"	0	203 LBS.
GRADE RING	6"	6"	36"	0	406 LBS.
FLAT TOPS (24" OPENING)	12"	7"	72" TO 24"	0 to 1	5,480 LBS.
FLAT TOPS (30" OPENING)	12"	7"	72" TO 30"	0 to 1	5,240 LBS.
FLAT TOPS (36" OPENING)	12"	7"	72" TO 36"	0 to 1	4,920 LBS.
CONE ECCENTRIC	36"	7"	72" TO 36"	2	5,250 LBS.
SHAFT CENTER SECTION	15"	7"	72"	1	2,188 LBS.
SHAFT CENTER SECTION	30"	7"	72"	2	4,375 LBS.
SHAFT CENTER SECTION	45"	7"	72"	3	6,563 LBS.
SHAFT BOTTOM SECTION	12"	7"	72"	1	1,750 LBS.
SHAFT BOTTOM SECTION	21"	7"	72"	1	3,063 LBS.
SHAFT BOTTOM SECTION	24"	7"	72"	1	3,500 LBS.
SHAFT BOTTOM SECTION	27"	7"	72"	2	3,938 LBS.
SHAFT BOTTOM SECTION	36"	7"	72"	2	5,250 LBS.
SHAFT BOTTOM SECTION	40"	7"	72"	2	5,833 LBS.



CATCH BASINS



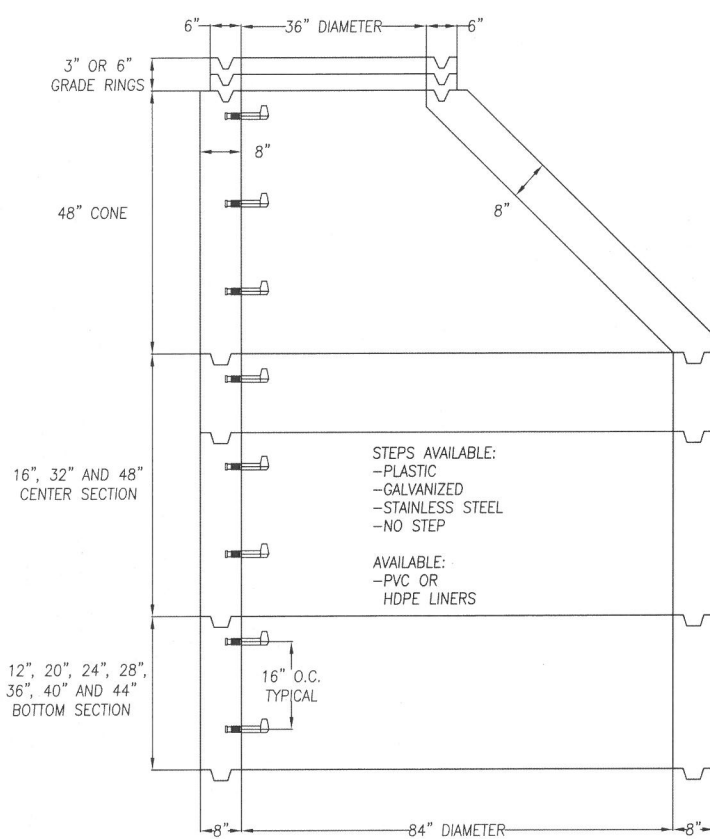
A	15 1/4"	21 1/2"	26 1/4"
B	1 1/2"	1 1/2"	2"
C	15 1/4"	21 1/2"	26 1/4"
D	1 1/4"	1 1/4"	1 7/8"
E	20"	26"	32"
F	20"	26"	32"
G	12"	18"	24"
H	12"	18"	24"
I	24"	24"	24"
J	18"	18"	18"
K	2"	2"	2"
L	3/4"	7/8"	1"
M	15 1/4"	21 1/2"	26 1/4"
N	15 1/4"	21 1/2"	26 1/4"
O	1 1/2"	1 1/2"	2"
P	12"	18"	24"
Q	12"	18"	24"
R	6"	6"	6"
S	6"	6"	6"
T	2 1/4"	2 7/8"	2 3/4"
U	12"	12"	12"
V	6"	6"	6"
W	20"	26"	32"
X	20"	26"	32"

84" I.D. REINFORCED MANHOLE WITH 100" O.D. FLAT TOP OR CONE

NOTES:

- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL SAFETY STEPS.
- WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 16" ON CENTER AT TIME OF MANUFACTURE.
- CENTER SECTIONS COME IN 16", 32" AND 48" HEIGHTS.
- BOTTOM SECTIONS ONLY 12", 20", 24", 28", 36", 41" AND 44" HEIGHTS TO MAINTAIN 16" VERTICAL SPACING OF THE STEPS.
- AVAILABLE WITH OR WITHOUT T-LOCK OR HPDE LINER.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT
GRADE RING	3"	6"	24"	0	145 LBS.
GRADE RING	6"	6"	24"	0	309 LBS.
GRADE RING	3"	6"	30"	0	176 LBS.
GRADE RING	6"	6"	30"	0	356 LBS.
GRADE RING	3"	6"	36"	0	203 LBS.
GRADE RING	6"	6"	36"	0	406 LBS.
FLAT TOP (24" OPENING)	12"	8"	84" to 24"	0 to 1	7,534 LBS.
FLAT TOP (30" OPENING)	12"	8"	84" to 30"	0 to 1	7,274 LBS.
FLAT TOP (36" OPENING)	12"	8"	84" to 36"	0 to 1	6,958 LBS.
CONE ECCENTRIC	48"	8"	84" to 36"	3	9,440 LBS.
SHAFT CENTER SECTION	16"	8"	84"	1	3,147 LBS.
SHAFT CENTER SECTION	32"	8"	84"	2	6,293 LBS.
SHAFT CENTER SECTION	48"	8"	84"	3	9,440 LBS.
SHAFT BOTTOM SECTION	12"	8"	84"	1	2,360 LBS.
SHAFT BOTTOM SECTION	20"	8"	84"	1	3,933 LBS.
SHAFT BOTTOM SECTION	24"	8"	84"	1	4,720 LBS.
SHAFT BOTTOM SECTION	28"	8"	84"	2	5,507 LBS.
SHAFT BOTTOM SECTION	36"	8"	84"	2	7,080 LBS.
SHAFT BOTTOM SECTION	40"	8"	84"	2	8,063 LBS.
SHAFT BOTTOM SECTION	44"	8"	84"	3	8,653 LBS.

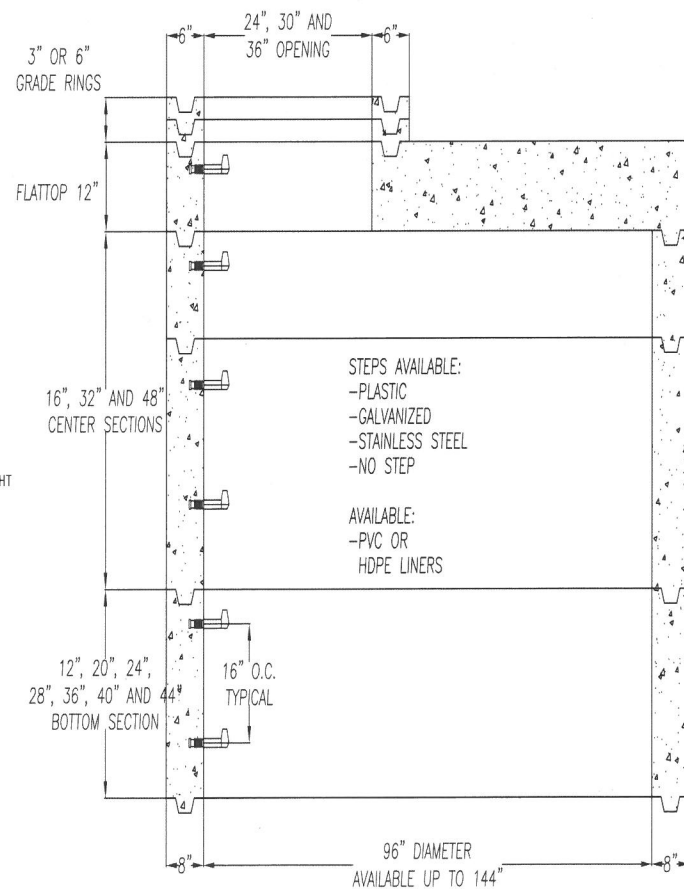


96" I.D. REINFORCED MANHOLE WITH 112" O.D. FLAT TOP OR 36" CONE

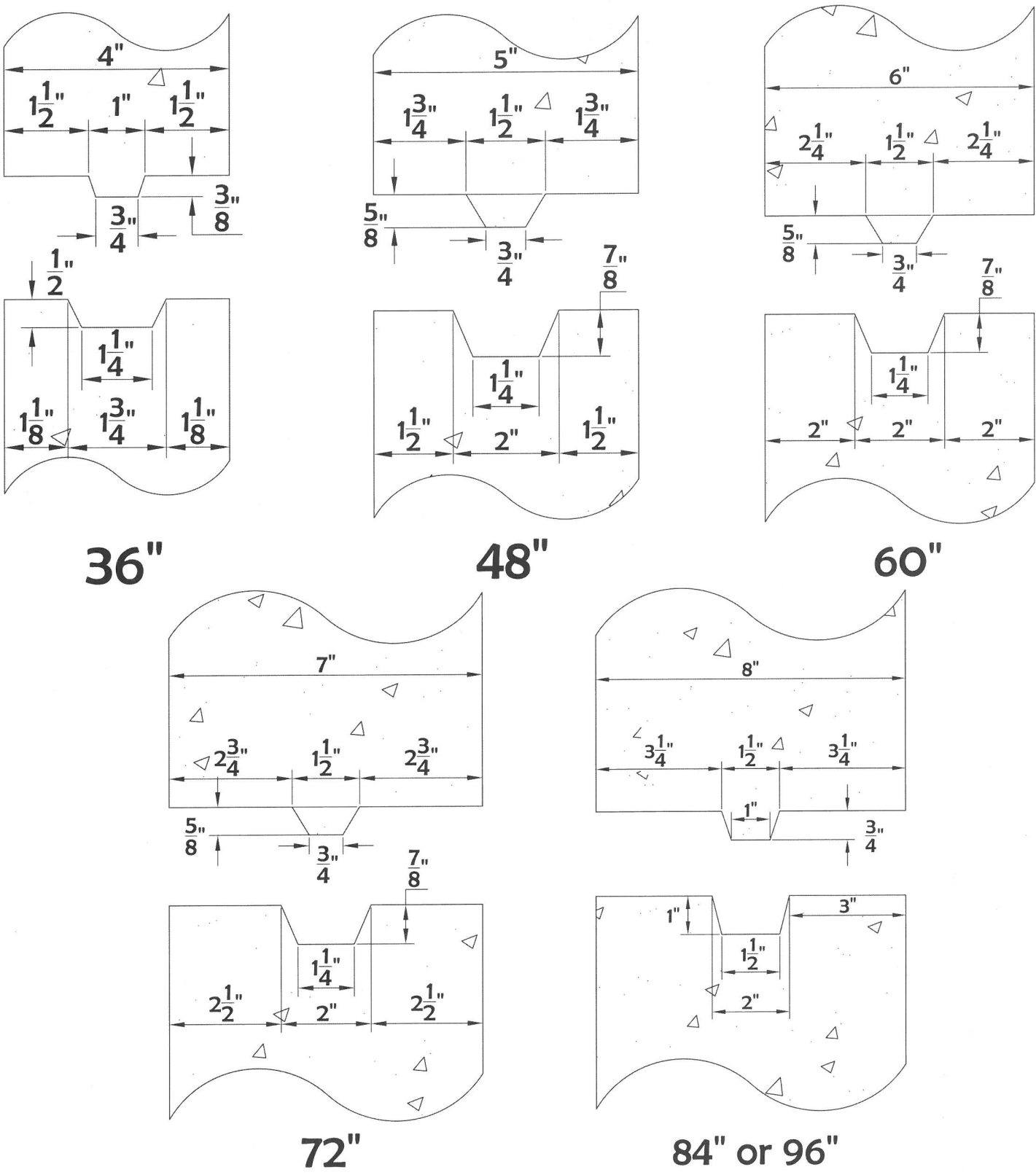
NOTES:

- AVAILABLE WITH OR WITHOUT PLASTIC, GALVANIZED OR STAINLESS STEEL SAFETY STEPS.
- WHEN STEPS ARE SPECIFIED THEY WILL BE CAST-IN AT 16" ON CENTER AT TIME OF MANUFACTURE.
- FLAT TOPS COME IN 12" HEIGHTS WITH 24", 30" AND 36" OPENINGS.
- CENTER SECTIONS COME IN 16", 32" AND 48" HEIGHTS
- BOTTOM SECTIONS COME IN 12", 20", 24", 28" AND 36" HEIGHTS TO MAINTAIN THE 16" VERTICAL SPACING OF THE STEPS.
- AVAILABLE WITH OR WITHOUT T-LOCK OR HPDE LINER.

DESCRIPTION	VERTICAL HEIGHT	WALL THICKNESS	INSIDE DIAMETER	NUMBER OF STEPS	APPROX. WEIGHT
GRADE RING	3"	6"	24"	0	145 LBS.
GRADE RING	6"	6"	24"	0	309 LBS.
GRADE RING	3"	6"	30"	0	176 LBS.
GRADE RING	6"	6"	30"	0	356 LBS.
GRADE RING	3"	6"	36"	0	203 LBS.
GRADE RING	6"	6"	36"	0	406 LBS.
FLAT TOPS (24" OPENING)	12"	8"	96" to 24"	0 to 1	9,640 LBS.
FLAT TOPS (30" OPENING)	12"	8"	96" to 30"	0 to 1	9,400 LBS.
FLAT TOPS (36" OPENING)	12"	8"	96" to 36"	0 to 1	9,080 LBS.
SHAFT CENTER SECTION	16"	8"	96"	1	3,573 LBS.
SHAFT CENTER SECTION	32"	8"	96"	2	7,147 LBS.
SHAFT CENTER SECTION	48"	8"	96"	3	10,720 LBS.
SHAFT BOTTOM SECTION	12"	8"	96"	1	2,680 LBS.
SHAFT BOTTOM SECTION	20"	8"	96"	1	4,467 LBS.
SHAFT BOTTOM SECTION	24"	8"	96"	1	5,360 LBS.
SHAFT BOTTOM SECTION	28"	8"	96"	2	6,253 LBS.
SHAFT BOTTOM SECTION	36"	8"	96"	2	8,040 LBS.
SHAFT BOTTOM SECTION	40"	8"	96"	2	8,934 LBS.
SHAFT BOTTOM SECTION	44"	8"	96"	3	9,827 LBS.

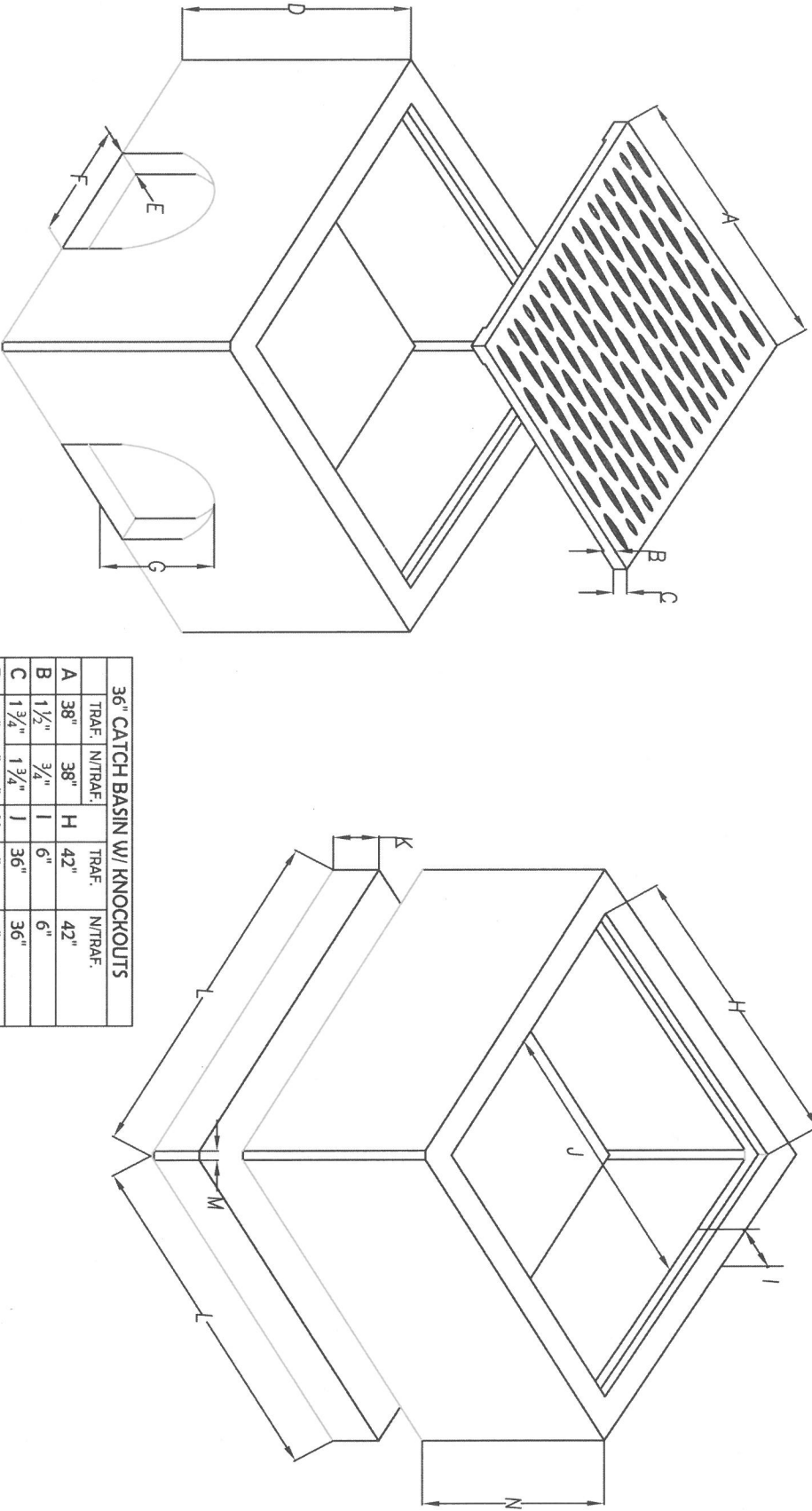


TONGUE AND GROOVE DETAILS

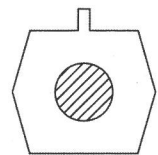
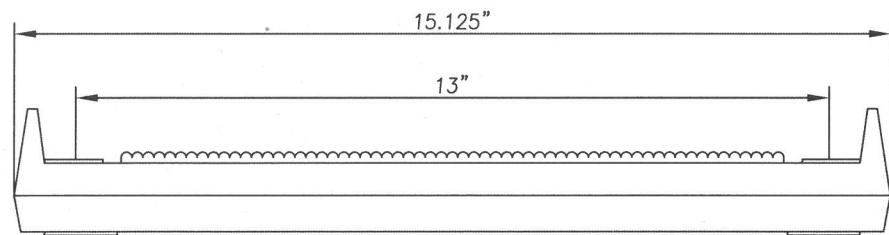
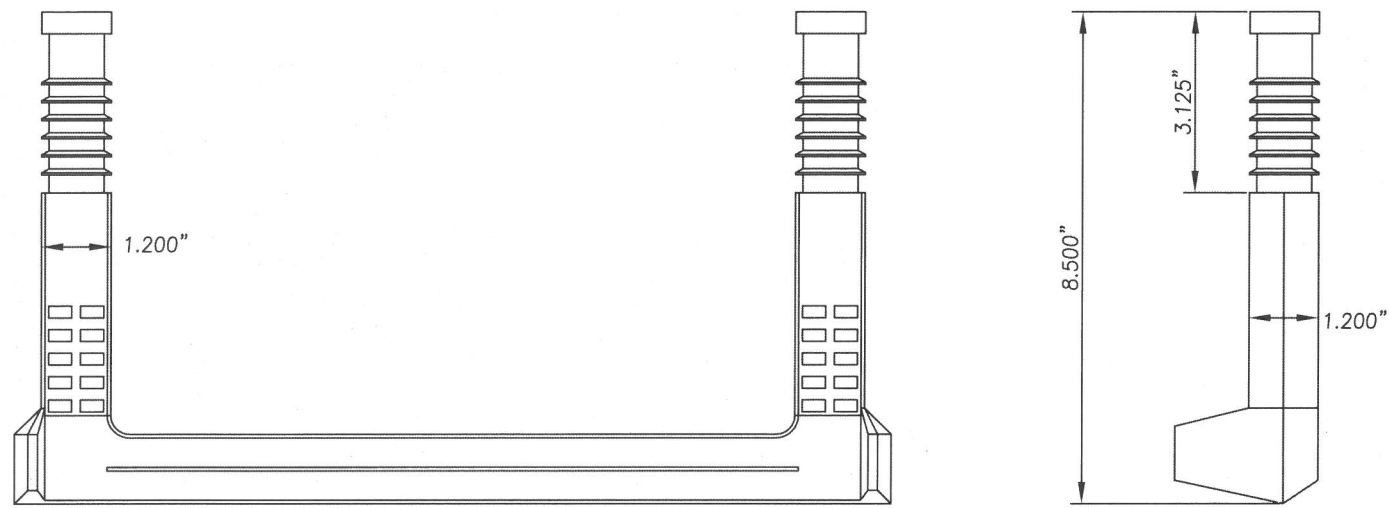


CATCH BASINS

36" CATCH BASIN W/ KNOCKOUTS			
TRAFF.	N/TRAFF.	TRAFF.	N/TRAFF.
A	38"	H	42"
B	1 1/2"	I	6"
C	1 3/4"	J	36"
D	24"-30"-36"	K	6"
E	3 1/2"	L	48"
F	16"	M	1"
G	16"	N	6"-12"-18"-24"-30"-36"



STANDARD CAST-IN-PLACE SAFETY STEPS



CALPORTLAND MANHOLE SAFETY STEPS

CALPORTLAND HAS TAKEN STEPS TO IMPROVE THE SAFETY OF MANHOLE STEPS AVAILABLE TO THE INDUSTRY. INTRODUCING THE FIRST COMPLETE PLASTIC STEP SYSTEM WITH BOTH CAST-IN-PLACE STEPS FOR SHAFTS AND CONES, PLUS AN EXCLUSIVE TOP-STEP FOR PLACEMENT BETWEEN GRADE RINGS, SPECIFICALLY DESIGNED FOR USE IN THE FIELD.

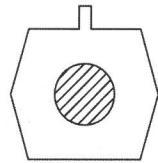
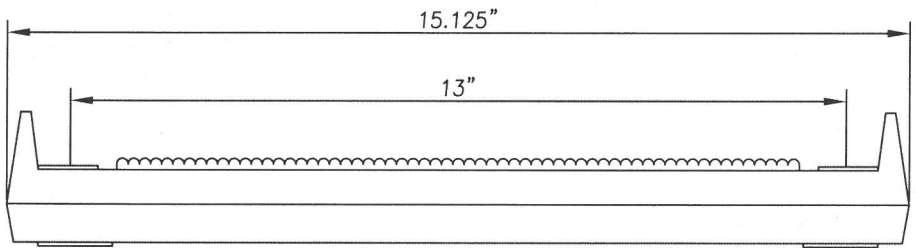
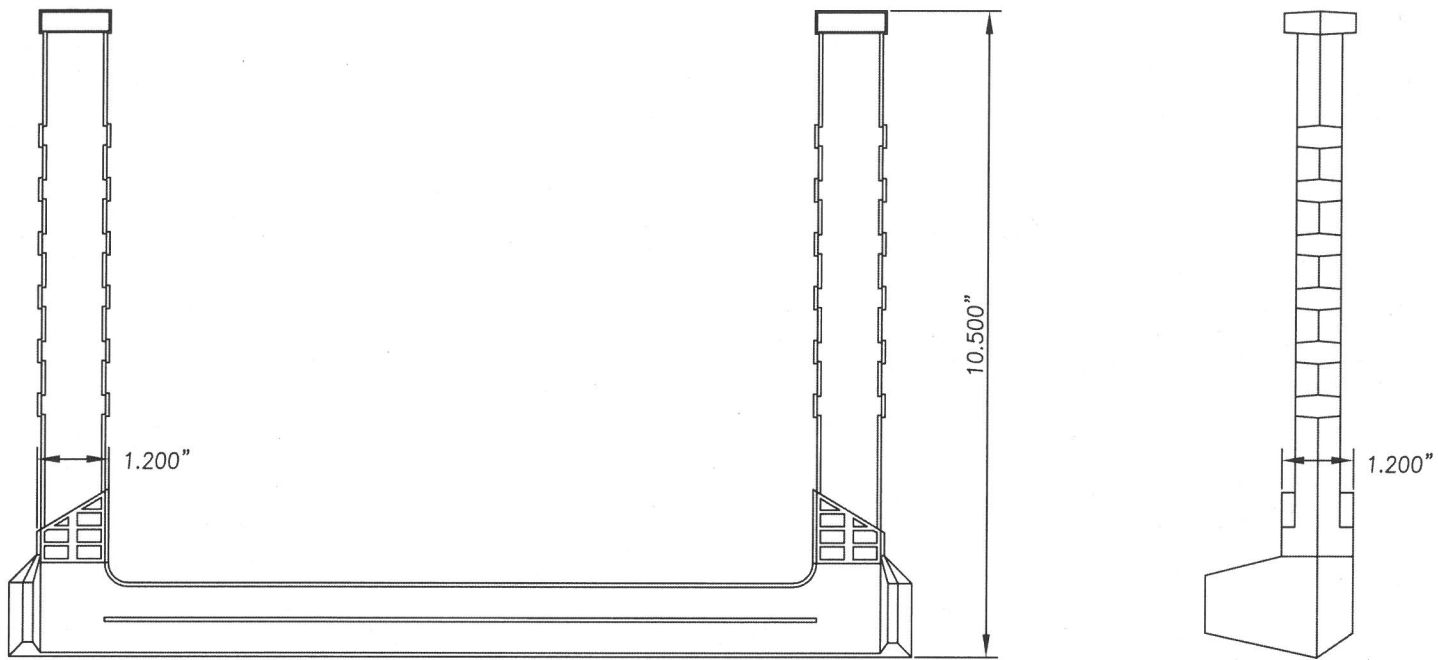
BOTH ARE INJECTION MOLDED, USING VIRGIN COPOLYMER POLYPROPYLENE, WITH A CENTER CORE OF 1/2" COLD DRAWN STEEL REINFORCEMENT WITH A MINIMUM 80,000 PSI TENSILE STRENGTH PER ASTM A-82.

POLYPROPYLENE IS THE SAME TOUGH PLASTIC MATERIAL USED IN TODAY'S CAR BATTERIES. IT IS EXTEREMELY RESISTANT TO NEARLY ALL CORROSIVE ENVIRONMENTS NORMALLY FOUND IN SANITARY SEWERS.

UNLIKE OTHER PLASTIC STEPS AVAILABLE IN THE MARKET TODAY, CALPORTLAND'S STANDARD CAST-IN-PLACE STEP WAS SPECIFICALLY DESIGNED FOR THAT PURPOSE, AND IT NECESSITATE VIRTUALLY DESTROYING THE CONCRETE AROUND THE STEP BEFORE IT COULD PULL OUT.

THERE ARE OTHER STEPS AVAILABLE THAT CAN BE CAST-IN-PLACE, BUT THEY WERE PRIMARILY DESIGNED TO BE PRESS FIT WITH A HAMMER, OR VIBRATED INTO GREEN CONCRETE. THIS TYPE OF STEP IS SUBJECT TO PULLING OUT IF IMPROPERLY INSTALLED. CALPORTLAND'S STEPS WERE DESIGNED WITH SAFETY IN MIND.

STANDARD GRADE RING SAFETY STEPS



SPECIFICATIONS

PLASTIC MATERIAL TO BE COPOLYMER POLYPROPYLENE PER STANDARD SPECIFICATIONS ASTM D-4101-98A.

REINFORCING STEEL BAR TO BE DOMESTIC CERTIFIED 1/2" COLD DRAWN STEEL, MINIMUM TENSILE STRENGTH 80,000 PSI PER ASTM A-82.

IN CONFORMANCE WITH ASTM C-478-97 SECTION 16.

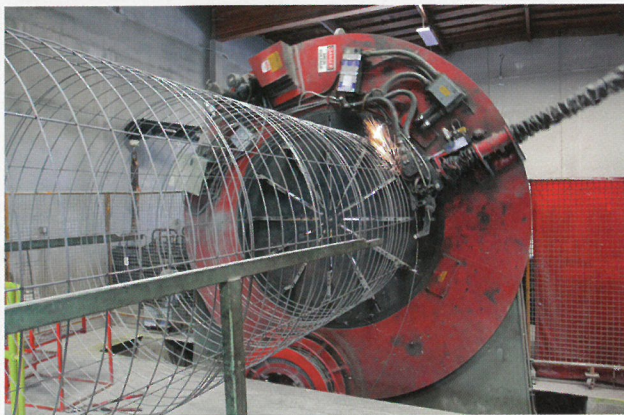
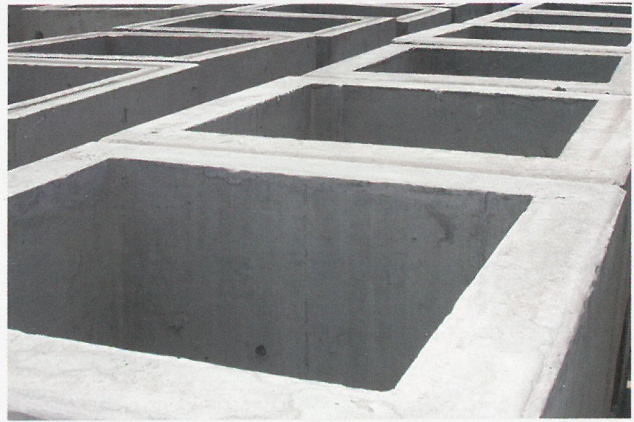
SURFACE TO HAVE A LIGHT SANDBLAST LIKE FINISH.

SAFETY

CAST-IN-PLACE. VIRTUALLY NO CHANCE OF LOOSE FIT OR ACCIDENTAL PULL OUT.

SAFETY END LUGS AND SCALLOPED SURFACE TO PREVENT FEET FROM SLIPPING OFF.

WILL NOT SPARK. WILL NOT IGNITE SEWER GAS.



**MANUFACTURERS OF
PRE-CAST MANHOLE PRODUCTS
SINCE 1966**

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