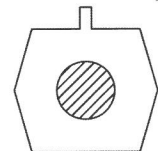
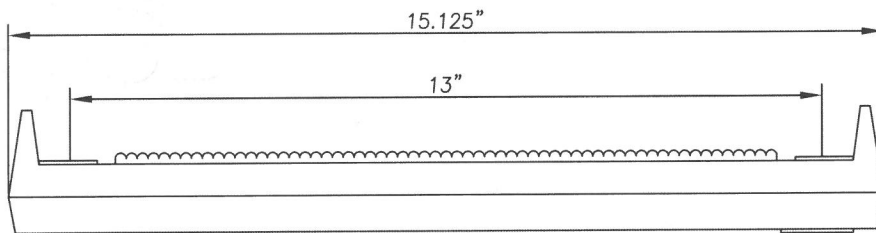
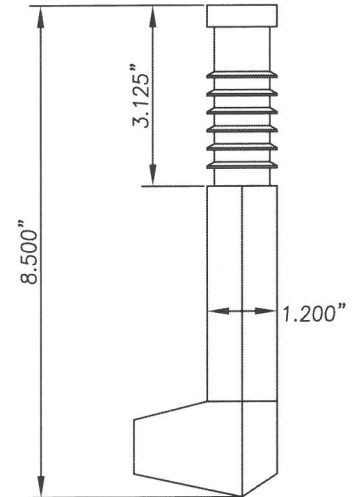


STANDARD CAST-IN-PLACE SAFETY STEPS



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.