



Frost Heave in Colder Climates

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Perfect to Remove Manhole Frames in Any Climate

The Mr. Manhole tool system is the best method in any climate, to remove manhole frames and the surrounding road surface. The question of frost heave arises when using the Mr. Manhole rebuild method, to level the manhole frame to the exact height and slope of the road.

Cone Shaped Repairs, Lift

Traditional square repair methods and air-hammered manhole frame excavations, leave a sloped cut along the road surface. This is due to the cut being performed from the road surface. Because of this slope, water that runs between the road surface and the repair section, can place lateral pressure on the repair, “squeezing” the repair in a conical fashion. During freeze and thaw cycles in colder climates, this cone shaped repair section may be lifted above the road surface during expansion of the water in cold temperatures.

Vertical to the Substrate

The Mr. Manhole rebuild and leveling method is included with the Gold Series Six Shooter package. The method provides a leak-proof, vacuum testable, chimney section that stops infiltration and inflow. The leveling method utilizes concrete that surrounds the flange of the manhole frame and rests on the road substrate at the level of the manhole cone structure. This ensures that the manhole frame will not move within the concrete rebuild section of the repair.

Because of the vertical, machine-cut sides of the repair, the rebuild has a parallel interface with the road surface. Water drains to the road substrate. Water trapped within the interface during freeze cycle, will place lateral pressure on the concrete rebuild section, holding the repair even more tightly to the road material.

Road Surface Degradation

In the event that the pavement suffers from erosion or insufficient substrate compaction, the road surface may sink slightly near the repaired manhole frame. This is a far better situation than the common sinking manhole frame, or rising square repair. The round repair profile used by the Mr. Manhole method minimizes the impact to drivers and snow plows. To learn more about round vs. square manholes, please [CLICK HERE!](#)



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