

PRECAST CONCRETE PLANT





PROJECT INDUSTRY LOCATION PRODUCTS

Precast Concrete Plant – Septic & Sewage Units Precast/Prestressed Fairfield, Iowa, USA PENETRON ADMIX®

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CASE SUMMARY

Fairfield Precast Concrete was looking for a lasting waterproofing solution to enhance the performance and reduce cracking in their precast concrete septic and sewage units. After a series of tests using both PENETRON® and PENETRON ADMIX, they made the decision to include PENETRON ADMIX as part of their normal concrete design mix.

During a quality control review, they identified a few tanks that had developed some early stage shrinkage cracks. One of the tanks was filled with water and left for observation to confirm the benefits of PENETRON ADMIX in their concrete.

"After seven days all leaks had stopped completely."

Initially, while there was no noticeable drop in the water level, a number of leaks became apparent, showing themselves as continuous, dripping leaks. After three days the leaks had been reduced to a slow seepage with moisture creeping down the face of the tank 3-4 inches before evaporating. At this time, crystals were plainly visible as they began to fill in the cracks. After seven days, all leaks had stopped completely as crystal growth continued in the cracks, self-healing them until there was no moisture. The customer also noted the shrinkage cracks that were appearing in the precast concrete lids of these tanks had lessened through the use of PENETRON ADMIX.

DAY 1: Leaks appear as the tank is filled





DAY 3:
Crystals begin to grow filling the cracks





DAY 7: All cracks have self-healed and leaks have completely stopped





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