



CASE STUDY

PARKING LOT VOID FILL

Problem

This church has had drainage challenges since construction. Water shedding off of the building would flow under the slab as it traveled to the drainage system. This created a channel for water to flow under the slab. Years of water flowing through this channel eroded the soils supporting the parking lot. Within the past 15 years the congregation elected to mudjack the void to support the slabs. Eventually the problem did arise again as the mudjacking grout eroded like the original soils, this time assisted by a leaking fire hydrant and sprinkler system. Seeking a more permanent solution, the congregation contacted a local contractor for other options.



FillFoam Solution

FillFoam was installed under the voided slab. The depth of voids ranged from 2-18", additionally there were up to 4 feet of weak soils below the slabs. The majority of the holes used to inject FillFoam under the slab were from the previous installation of mudjacking material. This provided a 10 foot grid pattern. Foam was pumped under the slab until it started to come up through adjacent holes and along the joints between slabs. The holes were then plugged and more foam was installed. This allowed the foam to build pressure and flow further. It also helped compact the loose soils and fill the voids under the slabs. Foam will travel the path of least resistance. Foam will not travel out other cracks, joints or holes until enough foam has been installed to build pressure and push out past the slab.

Summary

68 cubic yards of FillFoam were installed under the parking lot to support the slab. This job was completed within 8 hours with the Hi-Volume FillFoam System. The Church group can now be confident that the material supporting their parking lot will not wash away or interfere with drainage.

