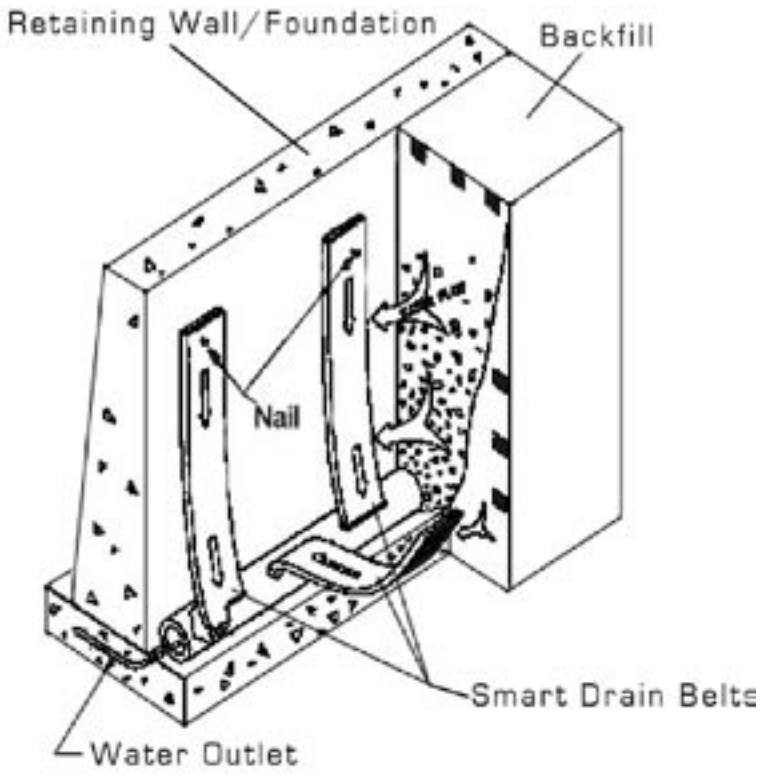
SMART DRAIN

ADVANCED MICRO SIPHON DRAIN BELT

INSTALLATION INSTRUCTIONS



FOR VERTICAL INSTALLATIONS OF THE SMART DRAIN™ SUBSURFACE DRAINAGE SYSTEM

GENERAL GUIDELINES

1. Smart Drain™ is ALWAYS laid with its inlet side facing slightly downward. Against walls, the inlet side faces the wall with the bottom coming away from the wall into the collection pipe. LAYING Smart Drain™ WITH ITS INLET SIDE FACING UPWARDS WILL RESULT IN CLOGGING.

2. Always cut Smart Drain™ with a sharp razor. Scissors tear at the material and can smear the micro siphon outlets.

3. The Smart Drain™ end that does not enter the collection pipe must be sealed with duct tape or glue. This ensures that particulates will not enter into the micro siphons from this side.

4. You can nail Smart Drain™ into the wall at the top with masonry nails, duct tape can also be used.

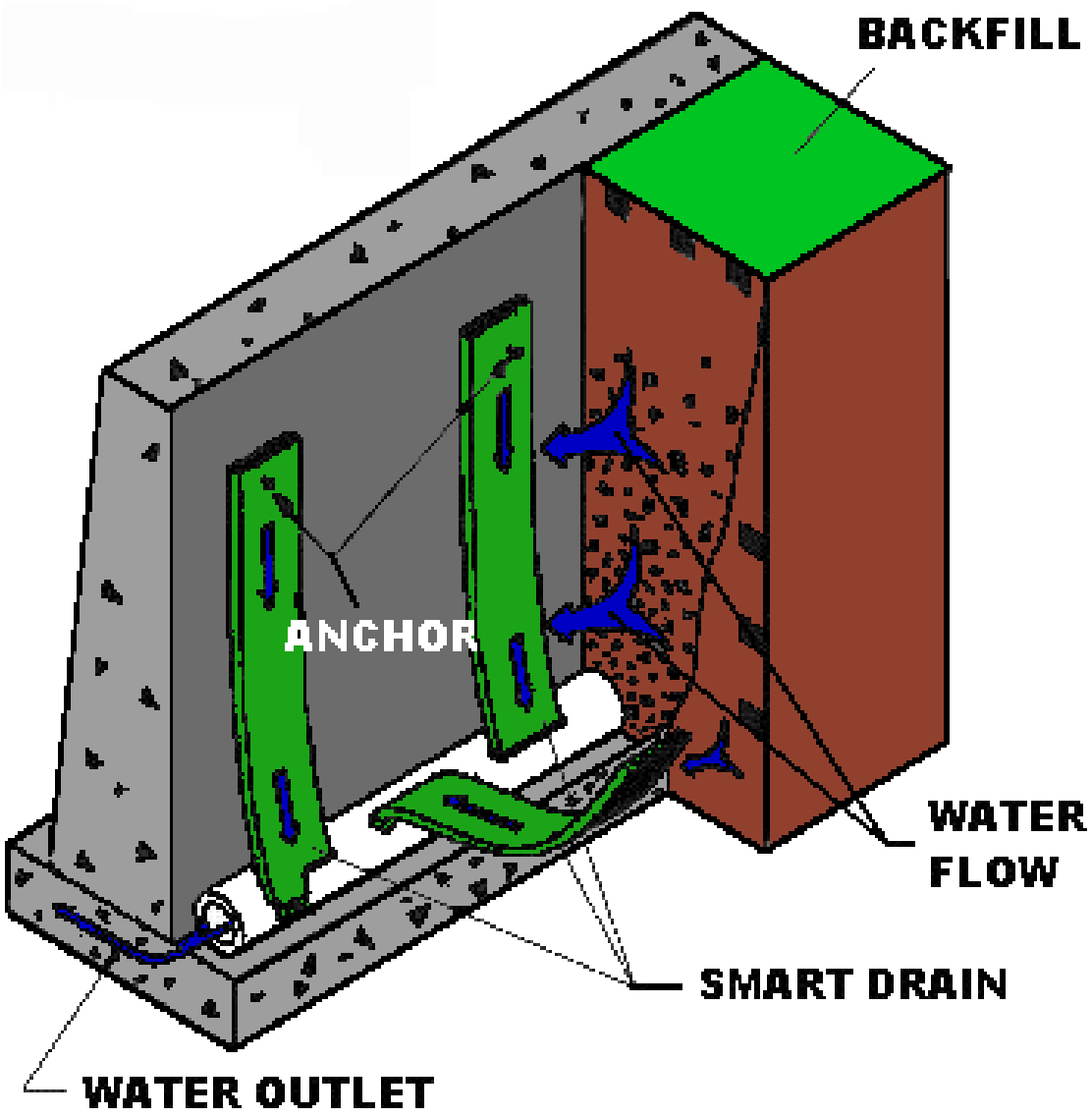
5. Do not lay Smart Drain™ directly against viscous mud. Placing Smart Drain™ directly against mud can cause clogging and decreased performance. To increase performance, sand should be placed where the Smart Drain™ enters the collection pipe.

6. Always use coarse and clean drainage sand. Fine and dirty sand mixtures will lead to decreased and slower performance.

7. Draw a straight line on the collection pipes to center the slots before cutting. This will ensure centered and straight placement of the slots.

SYSTEM LAYOUT

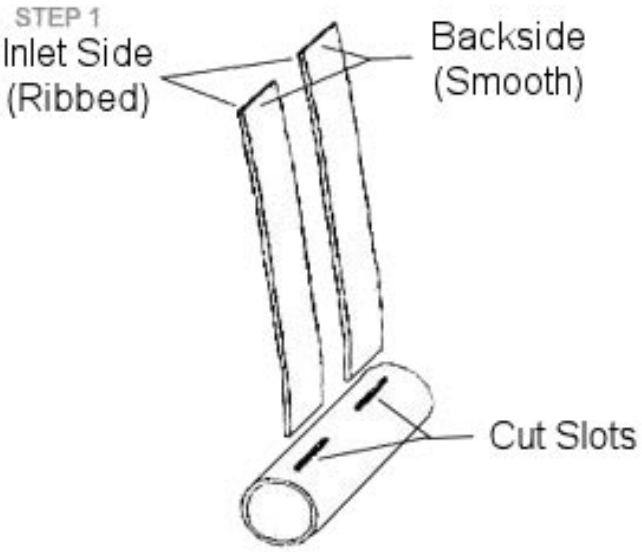
For foundation and retaining wall drainage, we recommend laying Smart Drain™ on 5 foot centers like the diagram below. It is always good practice to concentrate Smart Drain™ in very saturated areas to target problem areas. For very wet problem areas, shorten the centers to 3 foot spacing. This will ensure fast and efficient drainage.

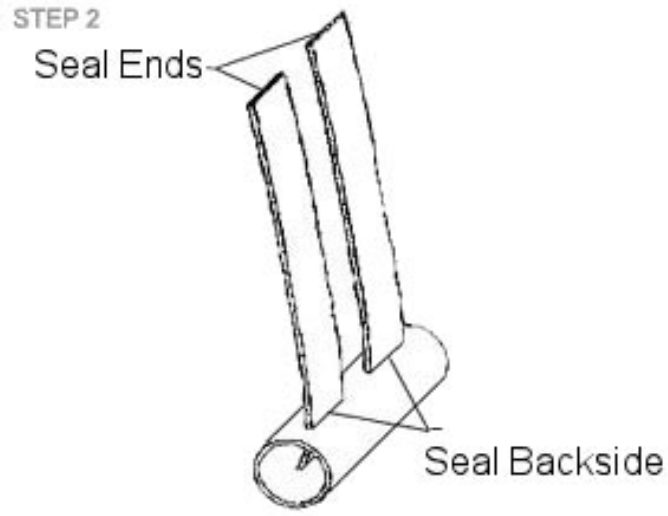


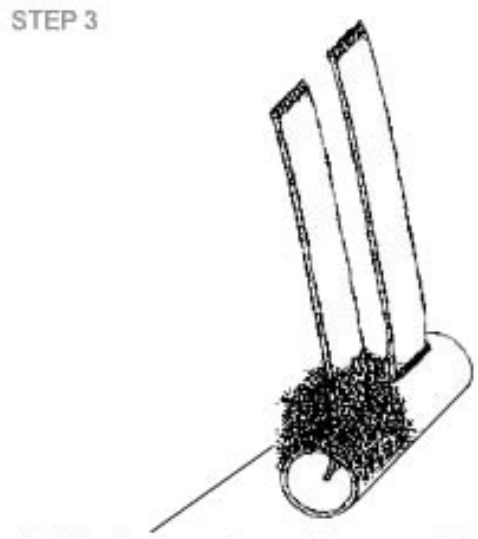
Connecting Drain Belt to PVC Pipe

First, using a circular hand grinder with a 1/16” wheel, cut an 8 inch slot. Then insert the Smart Drain™ belt into the pipe (for a 2” pipe insert belt 1” into the pipe). Then, using PVC cement, seal the back side (smooth side) of the Smart Drain™ where it intersects with the PVC. Also seal any extra space at the sides of the slot. Then seal the other end of the belt (fig.1) with either PVC cement or duct tape, this will prevent sediment from entering the belt.

fig. 1







A thin layer of sand around the base will increase efficiency. This is mandatory when the soil is muddy.

OTHER VERTICAL INSTALLATIONS

Smart Drain™ can be used vertically for other installation projects. It has been used successfully for dam seepage control and slope stabilization projects. The same general guidelines apply to these installations. For specialized projects, please call us for any unique applications.

Dam seepage project in China

FOR FURTHER
QUESTIONS
PLEASE CALL
410-381-2390