

Prefabricated Drainage Composites

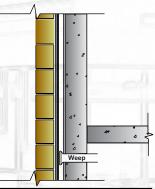
Highway Construction



Lagging Walls

Proper drainage is extremely important when building a lagging wall. In order to avoid the high costs to build the wall to handle heavier loads, **J-DRAIN ES** & **CD 1500 & 1800 series** can be installed to reduce the hydrostatic pressure that can build up against the built wall. These products create an air void while the filter fabric retains the soil and particles to allow water to pass through and flow efficiently down the wall to weep holes or the **J-DRAIN SD series** collection system.

Note: J-DRAIN CD series available in 12, 18, & 24" widths for chimney application.





Retaining Walls

J-DRAIN ES 1100, 1500, 1800 & SD series provides a truly unique drainage and collection system when building a retaining wall. Since proper drainage is a critical part of retaining wall construction, the J-DRAIN system consisting of either vertical chimneys or full wall coverage and a base collection system can be installed at a fraction of the cost of pipe and gravel french drains, which can clog and offer low flow rates. These products create an air void while the filter fabric retains the soil and particles to allow water to pass through and flow efficiently down the wall to weep holes or the J-DRAIN SD collection system. This system helps address hydrostatic pressure or additional pressure caused from water freezes which can cause leaks and failures.





Bridge Abutments

J-DRAIN 1100, 1500, 1800 & 4000 series provides a revolutionary drainage and collection system when constructing bridge abutments. Since proper drainage is a critical part of bridge abutment construction, the **J-DRAIN** system which combines a wall composite drainage system along with a base collection system can be installed at a fraction of the cost of pipe and gravel french drains, which can clog and offer low flow rates. These products create an air void while the filter fabric retains the soil and particles to allow water to pass through and flow efficiently down the wall to the **J-DRAIN SD** collection system. This system helps address hydrostatic pressure or additional pressure caused from water freezes which can cause leaks and failures.





Highway Edge Drain

J-DRAIN SD is a technically advanced cost effective alternative for highway edge drains. This composite drainage system consisting of a 3-dimensional, high flow, drainage core and a non-woven filter fabric requires only narrow trenches which eliminates the need for major equipment and reduces the amount of excavation to be removed. The filter fabric is wrapped and bonded to the drainage core, preventing intrusion into the flow

channels during the backfilling process. Soil particles are held back by the filter fabric allowing water to pass through to the drainage core to be collected and conveyed to the discharge point.

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Dimple Sheet Drain



J-DRAIN ES 1100 / 1500 / 1800

J-DRAIN ES series three dimensional dimpled core is formed from a chemical resistant polypropylene polymer. By extruding each dimple to exact performance standards, the high compressive strength of the core withstands installation and insitu earth stresses. The geotextile filter fabric is fused to the dimpled core for superior peel resistance and structural integrity. The integrated core and fabric system optimizes drainage channel consistency, minimizing soil particle intrusion for maximum flow capacity, allowing water to freely enter the drainage channel. Engineered for high flow requirements with heavy soil pressure conditions in vertical and horizontal applications, available with nonwoven or woven filter fabrics meeting AASHTO M288-06 specifications for survivability.

J-DRAIN ES 1102 / 1502 / 1802 (Dual Sided Drainage)

The dual sided **J-DRAIN ES series** products are identical, except the core is punched to allow double sided drainage, then bonded to a 2nd layer of geotextile filter fabric on the back side of the core.

Chimney Drain Core



J-DRAIN CD 1100 / 1500 / 1800

J-DRAIN CD (Chimney Drain) series are strips of .4" profile dimple drainage core that is attached to a geotextile filter fabric around the core. The purpose is to draw the ground water which migrates through the soil adjacent to the wall and quickly convey the water down to the base collection system (**J-DRAIN SD series**), providing hydrostatic relief. Often dense compacted soil layers form between the base part and the top of the backfill and water collecting against the wall has difficulty finding its way to the base collection system. Chimneys add very little to the overall cost of the system, but greatly enhance the effectiveness of the drainage system.

J-DRAIN CD 1102 / 1502 / 1802 (Dual Sided Drainage)

The dual sided **J-DRAIN CD Series** products are identical, except the core is punched to allow double sided drainage, then bonded to a 2nd layer of geotextile filter fabric on the back side of the core or fully wrapped.

J-DRAIN CD series available in 12, 18, & 24" widths for chimney application.

Geonet Drain Core



J-DRAIN ES 4000

The **ES 4000** series consists of a heavy duty HDPE geonet drainage core heat fused to a layer of non-woven filter fabric to one side. The geonet drainage core is virtually crush proof, yet flexible enough to conform to irregular surfaces. Due to the crushproof nature, geonet drainage composites can be used in the most extreme cases with heavy loads and/or heavy vehicular traffic. The integrated core and fabric system optimizes drainage channel consistency, minimizing soil particle intrusion for maximum flow capacity, allowing water to freely enter the drainage channel. The **ES 4000** series is engineered for intermediate flow requirements with high soil pressure conditions in vertical and horizontal applications and available with non-woven geotextile filter fabrics meeting AASHTO M288-06 specifications for survivability.

J-DRAIN ES 4002 (Dual Sided Drainage)

The dual sided **J-DRAIN ES 4002 series** products are identical, except the core is then bonded to a 2nd layer of geotextile filter fabric on the back side of the geonet core.

Strip Drain Core



J-DRAIN SD 600 / 950 / 1250

J-DRAIN SD series consists of a heavy duty polypropylene sheet cuspated under heat and pressure to form a 3-dimensional, high flow, dimpled drainage core. The core is then wrapped and bonded with a non-woven filter fabric meeting AASHTO M288-06 specifications for survivability. The filter fabric retains soil or sand particles as well as freshly placed concrete or grout, allowing filtered water to pass into the drainage core. Soil backfill is retained while allowing water to pass into the drainage system providing hydrostatic relief. Collected water is hen conveyed to a collection system. The drainage core is chemically resistant and designed for applications where chemical exposure is possible. The 1 inch (25 mm) profile design allows for higher venting and flow rates. J-DRAIN SD series is lightweight, easy to install and has drainage flow capacities that are 3-5 times that of traditional aggregate systems.

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