
PORTADAM®
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Solutions
Decades of Water Control Expertise

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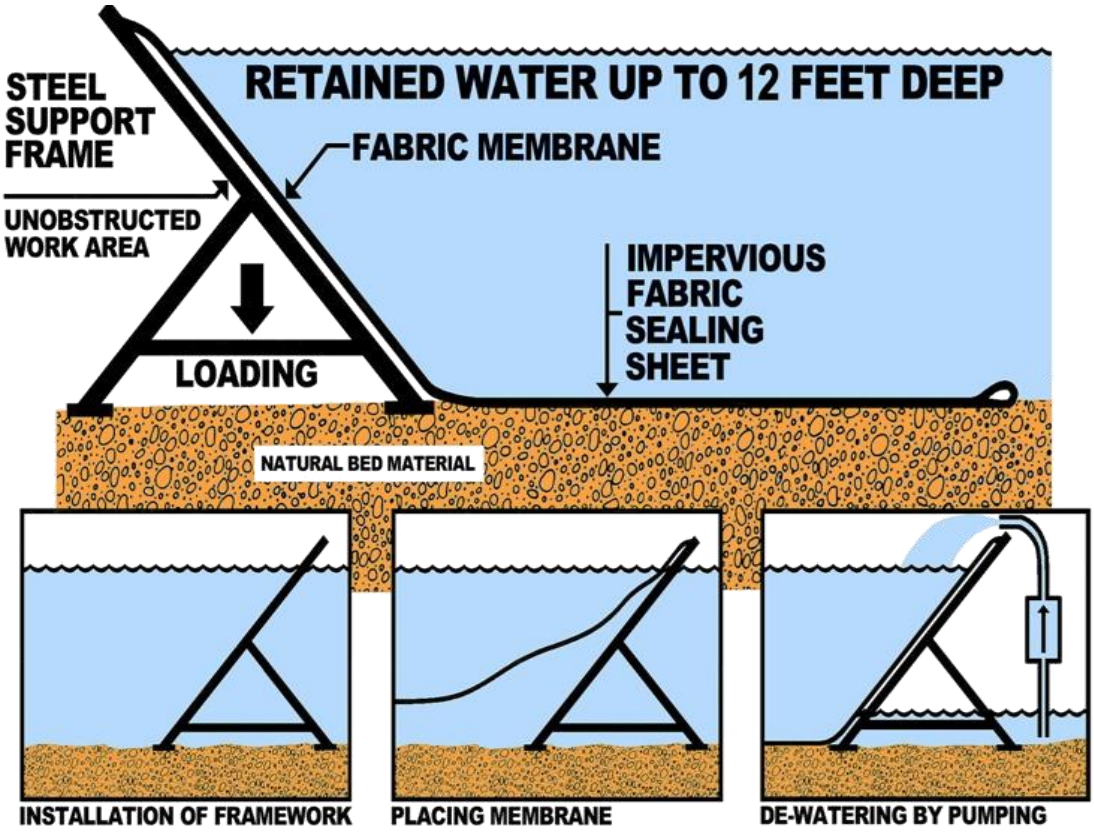

Decades of Water Control Expertise

For nearly four decades, Portadam has provided superior customer service and product quality in the water diversion, flood protection and temporary water storage industries. Our exceptional service and broad portfolio of engineered solutions deliver advantages in both cost and schedule to our customers, enabling project success. Combining knowledge with innovation, Portadam identifies exactly what is required - customizing our solution to your needs. Our team of experts have executed over 5000 projects in the US and internationally. Let us be your choice for your next water diversion, flood protection or temporary water storage project!

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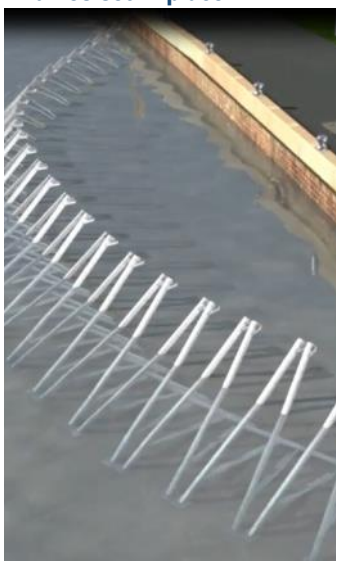
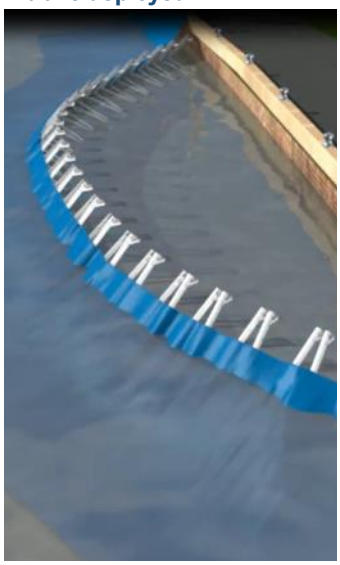
Frames set in place



Fabric deployed



Work area dewatered

Boathouses, Ramps & Structures

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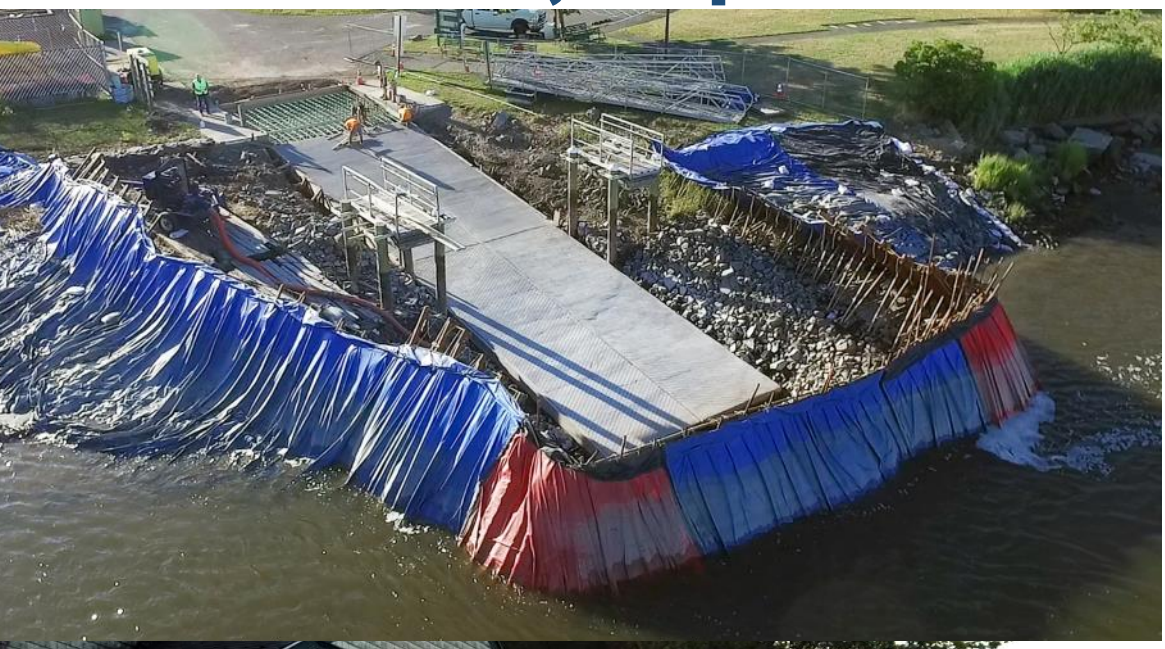

Installation or repair of boat ramps, boathouses and other related structures becomes an easy, land-based operation with the use of the Portadam cofferdam system. A 3-sided structure, open to the shore, allows full, open access to the boat ramp work area. No cross bracing is required, leaving the entire work area free of obstruction. No floating equipment or costly pile driving machinery is needed to install a Portadam.

Since the main component of the Portadam system is a nylon reinforced PVC fabric liner, the water body is completely protected from the work area. All excavation and concrete work is conducted behind a barrier that keeps the lake, river or stream completely free of siltation, turbidity and pollution.

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Bridge Construction & Maintenance

The Portadam system can be installed in virtually any configuration. It can be installed under existing spans, allowing for continued traffic flow. Expensive span removal is not required as with driven sheeting methods. If the bridge pier work area is close to shore, the customer might opt for a 3 -sided cofferdam structure so that they can access the pier directly from the shore. This configuration will allow for construction equipment and supplies to be utilized directly from the river bed (fill material is not required).

Excavation is made easier because the equipment operator is closer to the work (not digging through added fill) and can readily see the entire work area (not digging underwater). If the bridge pier is away from shore, as in large multi-span bridges, the system can be installed in a box or rectangular configuration.

The cofferdam is positioned directly on the river or lake bed. Access to the work area is either from the bridge deck or from floating equipment. Because the system is free-standing, the pier work area is unobstructed by cross-bracing or tie-backs to the pier face, thus improving project schedule flexibility.

This open space allows for clear access to excavate, assemble form-work and place protective measures. With the area dry, concrete pours become more visible, controllable, non-polluting and successful.

Canals & Channelization

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The flexibility of the proprietary Portadam system allows for installation in practically any configuration and over almost any contour. This feature permits installation along stream banks for restoration such as bulkheads, gabion structures, architectural walls and geoliners.

Dewatering these work areas allows for better control of excavation at toe of slope, so that proper “key-in” can be made to achieve the best possible construction techniques. Channelizing the flow permits access to both sides of the stream. This enables project execution flexibility.

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Dam & Spillway Repairs

Portadam systems can be utilized to divert river flow to allow spillway repairs under any conditions. Repairs can then be made to the entire dam, forebay, trashrack or tailrace structures. Portadam solutions are used extensively for additions of fish ladders and gate structures.

Low head dam rehabilitation and retrofit can easily be accomplished behind a Portadam cofferdam system. Water flow can be diverted to one side of the river in a two phase construction sequence, or diverted through an alternate bypass channel. The Portadam steel framework and liner components adapt easily to the spillway shape to construct a continuous cofferdam line, both upstream and downstream. This provides cost saving opportunities and schedule flexibility.

Dewatering upstream of a hydro plant intake structure can facilitate repair or replacement of old trashracks. Portadam technology is also used for tailrace area dewatering, gate replacement and concrete spillway repairs. This equipment offers plant operators alternatives for dewatering areas without the problems associated with earthen fill or the costs of sheet piling operations.

Environmental Remediation

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Keeping the affected area separated from the clean area is a major consideration on all HazMat remediation sites. Especially in water, there is a great advantage to keeping the clean water from making contact with the contaminated materials.

The Portadam system offers an effective method of surrounding an in-water remediation site and separating the clean water from the work area while maintaining natural stream or river flow. In addition, by working in a dry area, excavated material dewatering is minimized.

This cofferdam method is clean and re-usable. The system does not penetrate the subsurface, reducing the risk of additional contamination to the waterway.

The modularity of the Portadam system allows it to be utilized in a multi-phase remediation project while offering clear, unobstructed access to the work area (lake or river bed). This can drive significant cost and schedule benefits.

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Flume Bypasses

Portadam's custom flume bypass solutions allow the body of water to flow continuously without the need for pumping and filtration. Working with customers, we create custom fabric systems to fit the bypass configuration required. This can drive significant cost savings and schedule benefits.

Concrete intake structures situated along the edge of a river or lake can be repaired or constructed in a dry work area behind a Portadam system. The system can be installed in a 3-sided configuration to provide access into the water body without adverse effects to the water system. This cofferdam method produces an unobstructed work area for excavation and forming as required to construct a new intake structure.

Outfall pipelines with diffuser sections are easily installed in the dry behind a Portadam structure. The Portadam system provides river bed access in an unobstructed work area for trench excavation, pipe assembly and concrete encasement. Typically, no river bed preparation or fill material is required to install a Portadam system. No costly fill removal or contour grade adjustments are required after removal of the Portadam system. The water course remains virtually unaffected.

Intakes & Outfalls

Pipeline Crossings

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The Portadam system has proven to be a clean and effective method of enabling open cut construction of pipelines across rivers and streams. A two-phase operation provides schedule flexibility and allows for unimpeded flow of water around the work site. This provides an environmentally-friendly cofferdam system with no introduction of harmful materials to the watercourse.

Adjustment of the river or streambed prior to installation is normally not required. Flexibility of the Portadam system equipment allows for installation over irregular contours and around obstructions. The “free-standing” characteristic of this system leaves the work area unobstructed and completely free of cross bracing, allowing the pipeline installation to proceed from the land portion directly to the riverbed.

Since no fill material is required, excavation depths are greatly reduced. Concrete encasement can be poured in the dry without fear of watercourse contamination. Pipeline river crossing in a two-phase operation. Portadam can be used in most streams and rivers and be less costly than directional drilling.

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Silt & Sediment Containment

Disturbed soils on a construction site have the potential to leave the site via stormwater runoff and negatively impact receiving water, roadways, and neighboring property. The Portadam system can be used as a sediment trap or a basin to intercept concentrated flows of stormwater discharge from a construction site.

Shoreline Stabilization

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The flexibility of the Portadam system equipment allows for installation in practically any configuration and over almost any contour. This feature permits installation along stream banks for restoration such as bulkheads, gabion structures, architectural walls and geoliners.

Dewatering these work areas allows for better control of excavation at toe of slope, so that proper “key-in” can be made to achieve the best possible construction techniques.

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Treatment Facilities

Construction and rehabilitation of water and wastewater treatment plants can be facilitated with a temporary cofferdam. Facilities can remain operational and lagoons maintain activity. The modularity of the Portadam system allows for custom configurations, meeting the site-specific requirements.

Weir Structures

A variety of weir structures can be created with the Portadam temporary cofferdam system.

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