LAYFIELD GEOSYNTHETICS

TECHNICAL SPECIFICATIONS

AQUADAM® COFFERDAM

Water is one of the most challenging and costly obstacles in your construction project. AquaDam® Cofferdams play a critical role by blocking or diverting the flow of water from your site, allowing the work area to be dewatered. Creating a dry work environment also ensures that the work will be carried out safely and with minimal impact on the environment.

AquaDam® is lightweight, easy to handle, and can be used virtually anywhere. This unique combination of properties makes AquaDam® ideal for a wide range of applications, including stream crossings during pipeline installation, water containment during repairs to bridges, or used as a barrier to prevent erosion control through diversion or containment.

Material Properties

April 2023

AquaDam® Cofferdam

Inflated Height		Inflated Width		Water Depth for Dry Work Site		Water Depth for Wet Work Site	
Feet	Meter	Feet	Meter	Feet	Meter	Feet	Meter
2	0.6	4	1.2	1.5	0.4	1.6	0.5
3	0.9	7	2.1	2.3	0.7	2.6	0.8
4	1.2	10	3.0	3.0	0.9	3.5	1.0
6	1.8	20	6.0	4.0	1.2	5.3	1.6
8	2.44	23.5	7.16	6.0	1.83	7	2.13

May 2015

Woven Geotextiles – US Values[1]

Style	ASTM	LP 200	LP 250	LP 315
Grab Tensile (lbs)	D4632	200	250	315
Elongation (%)	D4632	15	15	15

AQUADAM® COFFERDAM

	Trapezoid Tear (lbs)	D4533	75	90	120
	CBR Puncture Strength (lbs)	D6241	700	900	1000
	AOS (Sieve Size)	D4751	50	40	40
	Permittivity (sec^{-1})	D4491	0.05	0.05	0.05
	Weight (oz/yd^2) (Typical)	D5261	4.0	5.0	6.3
	UV Resistance (500 hrs)	D4355	70	70	70
	Wide Width Seam Strength (lbs/in)	D4884	66	77	91
	Roll Size (ft) Typical		17.5 X 309	17.5 X 309	17.5 X 309
	Roll Weight (lbs) Typical		205	215	220
	Note1 – The physical properties presented in the table above are Minimum Average Roll Values or otherwise indicated.				

INSTALLATION

The installation of an AquaDam® is as much about the river (body of water) as it is about the AquaDam® product. Often site conditions will determine whether an AquaDam® installation will be successful. Because of the variation of job sites, all AquaDam® installations must be reviewed by Layfield before the sale. AquaDams® are delivered to the job site prefabricated in a compact roll. The first dam is unrolled as it is inflated with water, often with the assistance of ropes to control the rate of unrolling. The key to the installation of AquaDam® barriers is to elevate the open end of the inlet tubes above the maximum filled height of the barrier. Once the first dam has been inflated, other dams are connected to it using special collars. Layfield provides installation assistance for AquaDams® and may need to be on-site for larger sizes.