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BELOW FLOW WRAP™ (BFW)

Designed for use in sloped or curvilinear landscapes, KISSS Below Flow WRAP optimizes the efficiency of current sub-surface irrigation hardware through the use of a specialized geotextile and plastic membrane. The result is a patented product that enables a highly uniform and cost effective application of water to plantings and landscape. Through principles of capillarity the geotextile conveys water from pressure compensating emitters and saturates the entire fabric. Water travels through the geotextile many times faster than through most soils, hence the entire surface of the geotextile acts as 'one continuous emitter' to the surrounding soil media. This enables delivery of a uniform and continuous wetted front to the target root-zone.



William Jefferson Clinton Presidential Library Green Roof - Little Rock, AR

Applications:

- Commercial / Residential Landscapes
- Parks and Recreation
- Perennial Beds
- Sloped Landscape Areas
- Street Medians
- Green Roofs

Features:

- Proven pressure compensating mechanism for long runs and undulating terrain
- Non-drain capability improves irrigation efficiency reducing time at start-up
- Emitter design prevents soil from being ingested via the outlet hole
- Low entry pressure (7.25 PSI) into pressure compensating mode
- Physical Root Barrier
- Emitter has large pre-entry filter area, screens particulate matter
- Emitter has "self-flushing" action at beginning and end of every irrigation event
- Installed into existing turf by specially designed vibratory plow or conventional trenching

Operating Range:

- Pressure: 14-50 PSI (.999 - 3.44 bar)
- Sealing Pressure: 3.33 psi (.22 bar)
- Opening Pressure: 6.97 psi (.47 bar)
- Flow rates: See Table 1
- Application Rates: See Table 2
- Required Filtration: 120 mesh

Specifications:

- Outside Diameter: 0.67" (17.00mm)
- Inside Diameter: 0.606" (15.39mm)
- Wall Thickness: 0.045" (.63mm)
- Coil Length: 656 linear feet (200m)
- Use with KISSS BFF Fittings (Table 4, on back of this sheet)
- Available with Purple Identifier for non-potable water (Safety Flow)

Models:

- Below Flow Wrap White (BFW-WHITE)
- Below Flow Wrap Red (BFW-RED)
- Safety Flow Wrap White (SFW-WHITE)
- Safety Flow Wrap Red (SFW-RED)

Table 1: Flow Rates

Part Number	Flow Rate	Flow Rate	Emitter Flow (gal / hr.)	Emitter Spacing (in)	Emitter Flow (liter/hr.)	Max Length @ 30 PSI (ft.)
	gal / 100ft / min	liter / 100ft / min				
BFW-WHITE	0.631	2.39	0.621	19.7	2.35	554
BFW-RED	0.302	1.14	0.357	23.6	1.35	797

Table 2: Application Rates

BFW-WHITE						
Line Spacing	12"	14"	16"	18"	20"	
Application Rate (in/hr.)	0.608	0.521	0.456	0.405	0.365	
BFW-RED						
Line Spacing	12"	14"	16"	18"	20"	
Application Rate (in/hr.)	0.29	0.249	0.217	0.193	0.174	

Table 3: Maximum Run Lengths

BFW-WHITE						
Emitter Flow: .621 GPH / Emitter Spacing: 19.7 inches						
Operating Pressure	10 psi	15 psi	20 psi	25 psi	30 psi	
Max Run Length (ft.)	269	334	410	482	554	
BFW-RED						
Emitter Flow: .357 GPH / Emitter Spacing: 23.6 inches						
Operating Pressure	10 psi	15 psi	20 psi	25 psi	30 psi	
Max Run Length (ft.)	390	480	593	698	797	



SPECIFICATION SHEET

Table 4: BFW Fittings

Part Number	Part Name	Notes:
BFW-IN01 KIT	BFW 90° Start Connector Kit	Protrudes from the top of the header and footer piping
BFW-IN02 KIT	BFW Straight Start Connector Kit	Protrudes from the side of header and footer piping
BFW-IN02 KIT	End Feed 8" Riser Start Connector Kit	Includes an 8" riser and a Barbed 90°
BFW-IN04	BFW Barbed Coupler	Connects lines of BFW
BFW-IN05	BFW Barbed TEE	Connects lines of BFW, aides design of BFW around obstacles
BFW IN05 KIT	Center Feed 8" Riser Start Connector Kit	Includes an 8" riser and a Barbed TEE
BFW-IN07	BFW Barbed 90°	Connects lines of BFW, aides design of BFW around obstacles

Note: Headers / Footers shall be at minimum 1-1/2" Sch 40 or CL 200 PVC or HDPE Pipe

KISSSS Below Flow Wrap Success Stories



Abrams Courthouse, Fort Worth, TX



Street Medians, Palm Desert, CA



Street Medians and Streetscape, Lake Oswego, OR



