PRESERVER™ Manhole Sizing Chart
Energy Dissipator + Skimmer

PRESERVER — Patent Pending

Pipe Diameter[1]	Manhole Diameter[1]														
	4'		5'		6'		7'		8'		9'		10'		12'
	Recommended Minimum Angle Between Stock Preserver Components[2]														
12"	45°	46°	35°	37°	28°	29°	23°	24°	20°	20°	18°	18°	16°	16°	14°	13°
15"	51°	51°	41°	41°	33°	32°	27°	29°	23°	24°	20°	21°	18°	18°	15°	15°
18"	56°	56°	45°	46°	36°	34°	30°	33°	26°	27°	22°	23°	20°	20°	16°	16°
21"	61°	64°	49°	53°	39°	38°	33°	39°	28°	31°	25°	26°	22°	23°	18°	18°
24"	67°	71°	53°	61°	43°	42°	36°	44°	31°	36°	27°	29°	24°	25°	20°	20°
27"	72°	80°	57°	59°	46°	50°	39°	37°	33°	39°	29°	32°	25°	27°	21°	20°
30"			61°	65°	49°	58°	42°	42°	36°	42°	31°	34°	27°	29°	22°	22°
36"	*Contact Momentum*				56°	64°	47°	57°	41°	42°	35°	42°	31°	34°	26°	25°

1) Angles are accurate for circular pipes and manholes (any material). Contact Momentum to determine feasibility of designs with pipe and manhole sizes not listed, or for non-circular pipes and manholes.

2) Color legend: **Energy Dissipator**   **Floatables Skimmer**

Angles are conservative in that only stock components are included and space is included between components for ease of installation. Alternative installation methods and custom components may be used to reduce angles.

Contact Momentum for project specifc details to ensure fit and function (recommended).

USE THIS CHART TO DETERMINE THE FEASIBILITY OF USING THE PRESERVER IN STRUCTURES WITH MULTIPLE INLETS, AND/OR WHEN SKIMMING IS DESIRED.

THE CHART ANGLES REPRESENT THE ANGLE BETWEEN THE CENTER OF THE PIPE AND THE CENTER OF THE MANHOLE WALL BETWEEN THE PIPE OPENINGS.

ENERGY DISSIPATOR + SKIMMER EXAMPLE 1

Q: WHAT IS THE MINIMUM ANGLE POSSIBLE BETWEEN AN Ø18" INLET AND A Ø21" OUTLET IN A Ø5' MANHOLE?

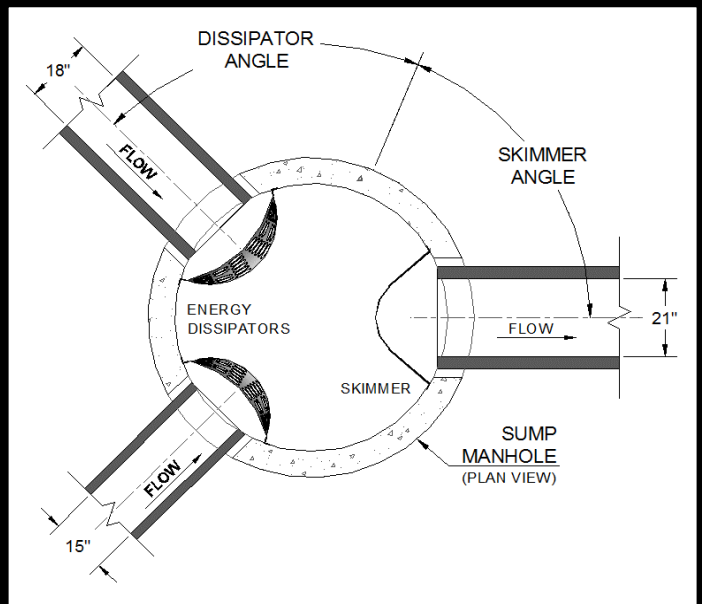A: Ø18" DISSIPATOR ANGLE = 45°
Ø21" SKIMMER ANGLE = 53°
45° + 53° = 98°

ENERGY DISSIPATOR + SKIMMER EXAMPLE 2

Q: WHAT IS THE SMALLEST DIAMETER MANHOLE THAT CAN ACCOMMODATE A 90° ANGLE BETWEEN A Ø15" INLET AND AN Ø18" INLET?

A: Ø4' MH: 51° + 56° = 107° ≤ 90°
Ø5' MH: 41° + 45° = 86° ≤ 90°

DISSIPATOR ANGLE
SKIMMER ANGLE
ENERGY DISSIPATORS
SKIMMER
SUMP MANHOLE (PLAN VIEW)
18"
21"
15"
FLOW

877-773-0073

MomentumEnv.com

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PRESERVER™ Manhole Sizing Chart
Energy Dissipater + Outlet Pipe

PRESERVER

Patent Pending

Pipe Diameter[1]	Manhole Diameter[1]														
	4'		5'		6'		7'		8'		9'		10'		12'
	Minimum Angle Between Stock Energy Dissipator and Outlet Pipe[2]														
12"	35°	32°	27°	26°	22°	22°	19°	19°	17°	17°	15°	15°	14°	14°	13°	13°
15"	41°	38°	33°	30°	26°	26°	22°	22°	20°	20°	18°	18°	16°	16°	15°	15°
18"	46°	43°	37°	34°	30°	29°	25°	25°	22°	22°	20°	20°	18°	18°	16°	16°
21"	51°	49°	41°	38°	33°	32°	28°	28°	25°	25°	22°	22°	20°	20°	18°	18°
24"	57°	56°	45°	43°	36°	36°	31°	31°	27°	27°	24°	24°	22°	22°	20°	20°
27"	62°	60°	49°	46°	40°	38°	33°	32°	29°	29°	25°	25°	23°	23°	21°	20°
30"	69°	69°	53°	51°	43°	42°	36°	35°	31°	31°	28°	28°	25°	25°	22°	22°
36"			62°	59°	50°	48°	42°	40°	36°	35°	31°	31°	28°	28°	26°	25°

1) Angles are accurate for circular inlet pipes and manholes (any material), and circular concrete outlet pipes. Contact Momentum to determine feasibility of designs with pipe and manhole sizes not listed, for non-circular pipes and manholes, and for non-concrete outlets.

2) Color legend: **Energy Dissipator**   **Outlet Pipe**

Angles are conservative in that only stock components are included and a concrete outlet pipe is assumed.
Custom components may be used to reduce angles.

Contact Momentum for project specifc details to ensure fit and function (recommended).

USE THIS CHART TO DETERMINE THE FEASIBILITY OF USING THE PRESERVER ENERGY DISSIPATOR IN STRUCTURES WHEN SKIMMING IS NOT DESIRED.

THE CHART ANGLES REPRESENT THE ANGLE BETWEEN THE CENTER OF THE PIPE AND THE CENTER OF THE MANHOLE WALL BETWEEN THE PIPE OPENINGS.

ENERGY DISSIPATOR ONLY EXAMPLE 1

Q: WHAT IS THE MINIMUM ANGLE POSSIBLE BETWEEN A Ø21" INLET AND A Ø24" OUTLET IN A Ø6' MANHOLE?

A: Ø24" DISSIPATOR ANGLE = 33°
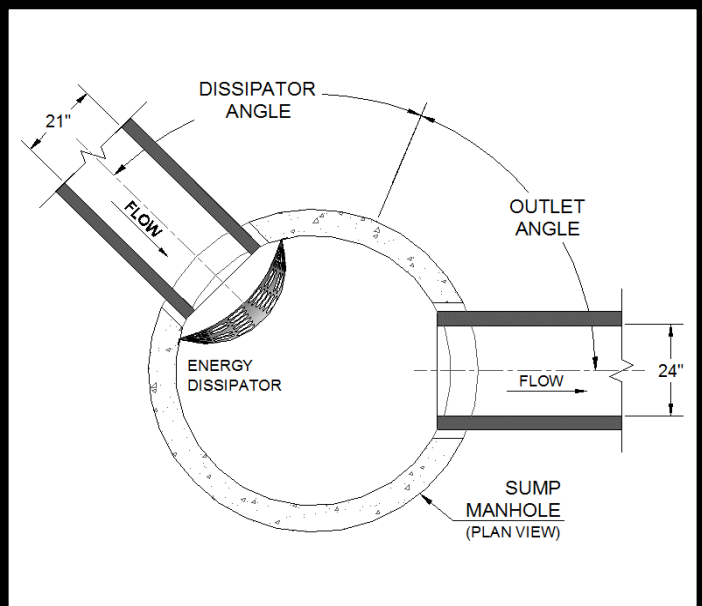
Ø27" OUTLET ANGLE = 36°

33° + 36° = 69°

ENERGY DISSIPATOR ONLY EXAMPLE 2

Q: WHAT IS THE SMALLEST DIAMETER MANHOLE THAT CAN ACCOMMODATE A 90° ANGLE BETWEEN A Ø21" INLET AND A Ø24" OUTLET?

A: Ø4' MH: 51° + 56° = 107° > 90°

Ø5' MH: 41° + 43° = 84° ≤ 90°

DISSIPATOR ANGLE

21"

FLOW

OUTLET ANGLE

ENERGY DISSIPATOR

FLOW

24"

SUMP MANHOLE (PLAN VIEW)

MOMENTUM ENVIRONMENTAL LLC
SIMPLE • EFFECTIVE • AFFORDABLE • STORMWATER SOLUTIONS

PROUDLY MADE IN THE USA

QUALITY MATERIALS:
·100% recycled HDPE
·Stainless steel brackets
·Stainless steel hardware

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