



Patent Pending

PRESERVER™ Manhole Sizing Chart

Energy Dissipator + Skimmer

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 specific 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°

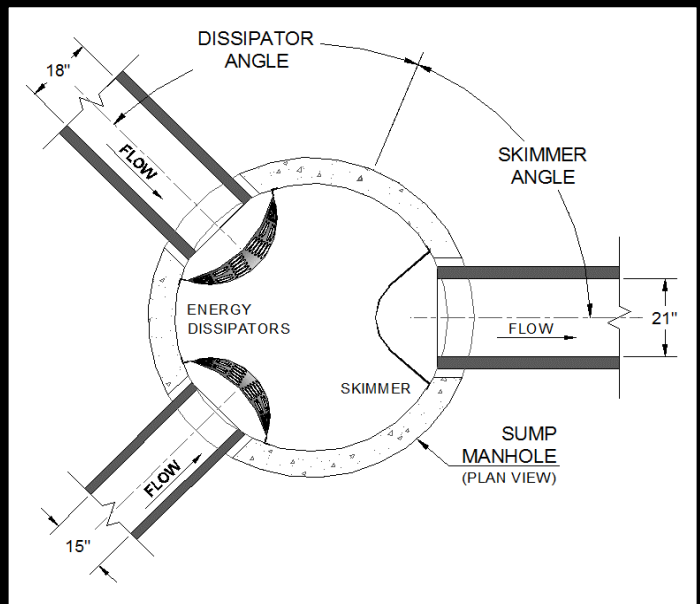
45° + 53° = 98°

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°





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PRESERVER™ Manhole Sizing Chart

Energy Dissipator + Outlet Pipe

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
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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 specific 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°

