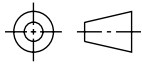
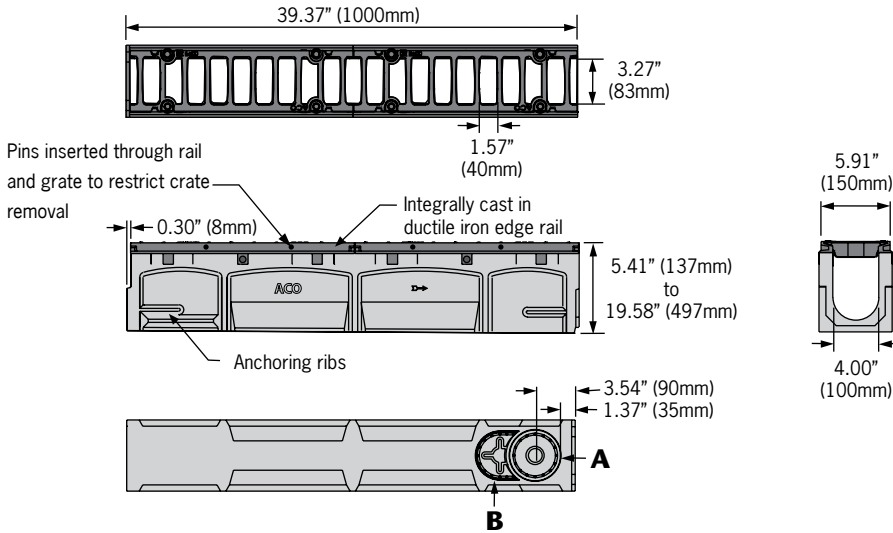




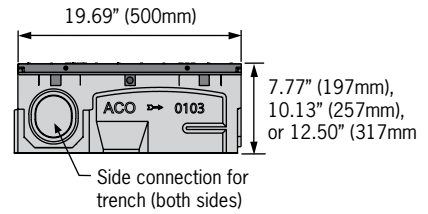
# TrafficDrain TD100 Non-Removable Grate NRG



## One Meter Channel

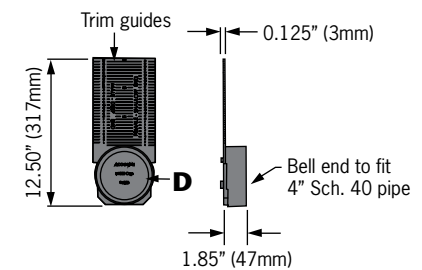


## Half Meter Channel



## End Caps -

### Closing/Inlet/Outlet Cap

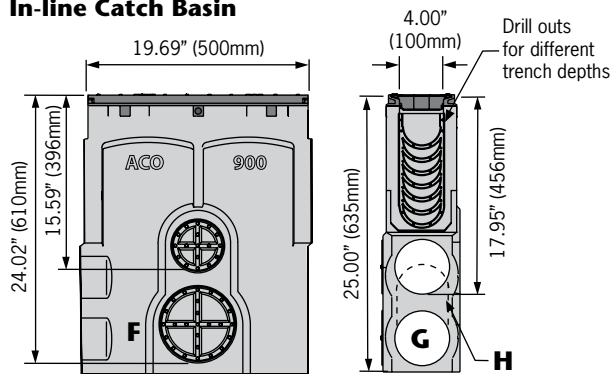


## Outlet flow rates

Product	Invert Depth	A - 4" dia		B - 6" Oval		D - 4" dia		E - 6" Oval	
		GPM	CFS	GPM	CFS	GPM	CFS	GPM	CFS
TD01	4.41	95	0.21	155	0.35	-	-	-	-
TD10	6.77	126	0.28	207	0.46	100	0.22	-	-
TD20	9.13	152	0.34	248	0.55	131	0.29	194	0.43
TD30	11.50	173	0.39	283	0.63	155	0.35	238	0.53
TD40	13.86	192	0.43	315	0.70	-	-	-	-
TD50	16.22	210	0.47	343	0.76	-	-	-	-
TD60	18.58	226	0.50	370	0.82	-	-	-	-

Note: These are the pipe flow rates at the specified outlet, **NOT** channel flow rates.

## In-line Catch Basin

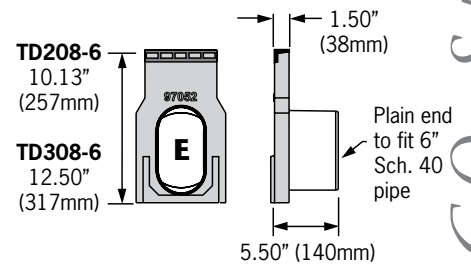
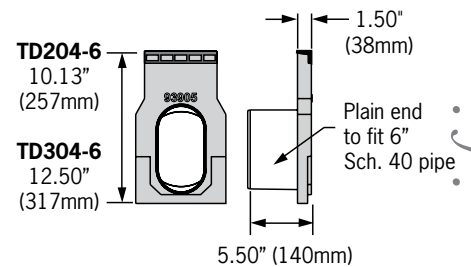


## Outlet flow rates

Product	Invert Depth	F - 6" dia		G - 6" dia		H	
		GPM	CFS	GPM	CFS	GPM	CFS
TD900	24.00	561	1.25	225	0.59	399	0.91

Note: Catch basin flow rates are without trash bucket - using trash bucket reduces flow.

## Oval Inlet Cap

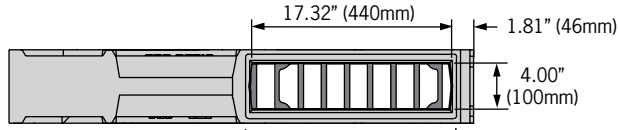
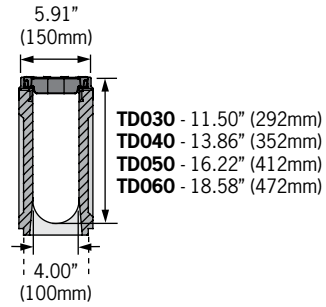
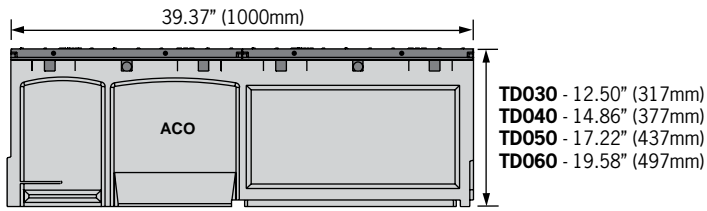


ACO Specification Information

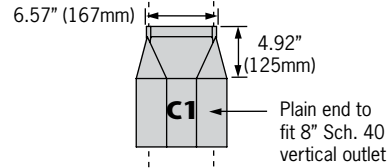
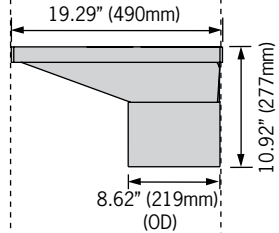


# ACO INFRASTRUCTURE

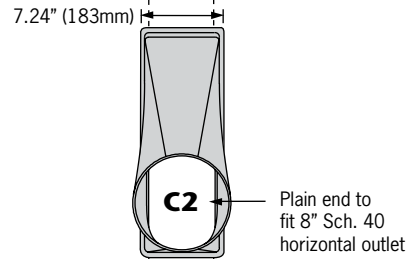
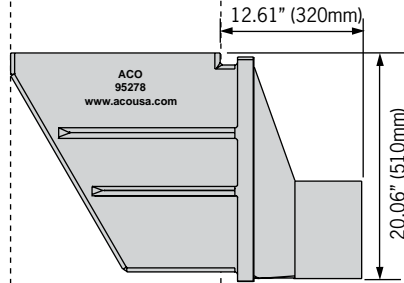
## Outlet Channels



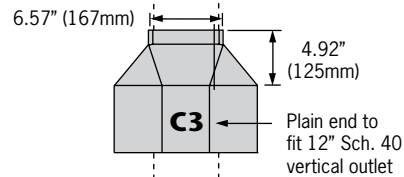
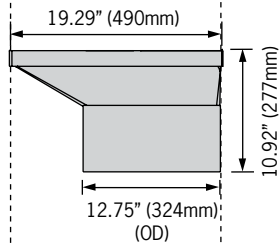
### Flume outlet 8" vertical



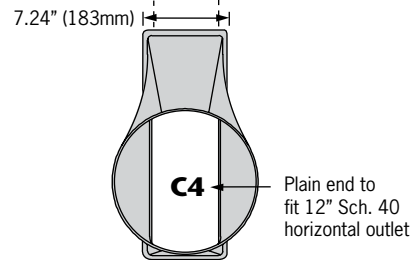
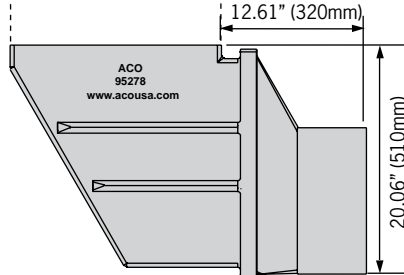
### Flume outlet kit 8" horizontal



### Flume outlet 12" vertical



### Flume outlet kit 12" horizontal



## Outlet flow rates

Product	Invert	C1 - 8" V		C2 - 8" H		Invert	C3 - 12" V		C4 - 12" H	
	Depth	GPM	CFS	GPM	CFS	Depth	GPM	CFS	GPM	CFS
TD030	17.12	872	1.94	1135	2.53	30.96	1962	4.37	2459	5.48
TD040	19.48	934	2.08	1184	2.64	33.32	2102	4.68	2571	5.73
TD050	21.84	992	2.21	1230	2.74	35.68	2232	4.97	2679	5.97
TD060	24.20	1047	2.33	1275	2.84	38.04	2356	5.25	2783	6.20

Note: These are the pipe flow rates at the specified outlet, NOT channel flow rates.

ACO Specification Information

# ACO INFRASTRUCTURE

## TrafficDrain Channels - Parts Table



Description	Part No	Length		Invert Depth - female		Invert Depth - male		Weight
		NRG <sup>1</sup>	inches	mm	inches	mm	inches	
<b>TD01 Neutral channel</b>	<b>05400</b>	<b>39.37</b>	<b>1000</b>	<b>4.41</b>	<b>112</b>	<b>4.41</b>	<b>112</b>	<b>62.7</b>
TD1 Sloping channel	05401	39.37	1000	4.41	112	4.65	118	63.8
TD2 Sloping channel	05402	39.37	1000	4.65	118	4.88	124	64.8
TD3 Sloping channel	05403	39.37	1000	4.88	124	5.12	130	65.8
TD4 Sloping channel	05404	39.37	1000	5.12	130	5.35	136	66.8
TD5 Sloping channel	05405	39.37	1000	5.35	136	5.59	142	67.8
TD6 Sloping channel	05406	39.37	1000	5.59	142	5.83	148	68.9
TD7 Sloping channel	05407	39.37	1000	5.83	148	6.06	154	69.9
TD8 Sloping channel	05408	39.37	1000	6.06	154	6.30	160	70.9
TD9 Sloping channel	05409	39.37	1000	6.30	160	6.54	166	71.9
TD10 Sloping channel	05410	39.37	1000	6.54	166	6.77	172	72.9
<b>TD010 Neutral channel</b>	<b>05432</b>	<b>39.37</b>	<b>1000</b>	<b>6.77</b>	<b>172</b>	<b>6.77</b>	<b>172</b>	<b>73.4</b>
<b>TD0103 Neutral channel</b>	<b>05435</b>	<b>19.69</b>	<b>500</b>	<b>6.77</b>	<b>172</b>	<b>6.77</b>	<b>172</b>	<b>38.4</b>
TD11 Sloping channel	05411	39.37	1000	6.77	172	7.01	178	73.9
TD12 Sloping channel	05412	39.37	1000	7.01	178	7.24	184	74.9
TD13 Sloping channel	05413	39.37	1000	7.24	184	7.48	190	75.9
TD14 Sloping channel	05414	39.37	1000	7.48	190	7.72	196	76.9
TD15 Sloping channel	05415	39.37	1000	7.72	196	7.95	202	77.9
TD16 Sloping channel	05416	39.37	1000	7.95	202	8.19	208	79.0
TD17 Sloping channel	05417	39.37	1000	8.19	208	8.43	214	80.0
TD18 Sloping channel	05418	39.37	1000	8.43	214	8.66	220	81.0
TD19 Sloping channel	05419	39.37	1000	8.66	220	8.90	226	82.0
TD20 Sloping channel	05420	39.37	1000	8.90	226	9.13	232	83.0
<b>TD020 Neutral channel</b>	<b>05433</b>	<b>39.37</b>	<b>1000</b>	<b>9.13</b>	<b>232</b>	<b>9.13</b>	<b>232</b>	<b>83.6</b>
<b>TD0203 Neutral channel</b>	<b>05436</b>	<b>19.69</b>	<b>500</b>	<b>9.13</b>	<b>232</b>	<b>9.13</b>	<b>232</b>	<b>42.2</b>
TD21 Sloping channel	05421	39.37	1000	9.13	232	9.37	238	84.0
TD22 Sloping channel	05422	39.37	1000	9.37	238	9.61	244	85.0
TD23 Sloping channel	05423	39.37	1000	9.61	244	9.84	250	86.0
TD24 Sloping channel	05424	39.37	1000	9.84	250	10.08	256	87.0
TD25 Sloping channel	05425	39.37	1000	10.08	256	10.31	262	88.0
TD26 Sloping channel	05426	39.37	1000	10.31	262	10.55	268	89.1
TD27 Sloping channel	05427	39.37	1000	10.55	268	10.79	274	90.1
TD28 Sloping channel	05428	39.37	1000	10.79	274	11.02	280	91.1
TD29 Sloping channel	05429	39.37	1000	11.02	280	11.26	286	92.1
TD30 Sloping channel	05430	39.37	1000	11.26	286	11.50	292	93.1
<b>TD030 Neutral channel</b>	<b>05434</b>	<b>39.37</b>	<b>1000</b>	<b>11.50</b>	<b>292</b>	<b>11.50</b>	<b>292</b>	<b>95.4</b>
<b>TD0303 Neutral channel</b>	<b>05437</b>	<b>19.69</b>	<b>500</b>	<b>11.50</b>	<b>292</b>	<b>11.50</b>	<b>292</b>	<b>46.4</b>
<b>TD030 Outlet channel</b>	<b>05375</b>	<b>39.37</b>	<b>1000</b>	<b>11.50</b>	<b>292</b>	<b>11.50</b>	<b>292</b>	<b>90.0</b>
TD31 Sloping Trench	05481	39.37	1000	11.50	292	11.73	298	98.4
TD32 Sloping Trench	05482	39.37	1000	11.73	298	11.97	304	101.0
TD33 Sloping Trench	05483	39.37	1000	11.97	304	12.20	310	103.6
TD34 Sloping Trench	05484	39.37	1000	12.20	310	12.44	316	106.2
TD35 Sloping Trench	05487	39.37	1000	12.44	316	12.68	322	106.4
TD36 Sloping Trench	05488	39.37	1000	12.68	322	12.91	328	107.5
TD37 Sloping Trench	05489	39.37	1000	12.91	328	13.15	334	109.2
TD38 Sloping Trench	05490	39.37	1000	13.15	334	13.39	340	111.0
TD39 Sloping Trench	05491	39.37	1000	13.39	340	13.62	346	112.8
TD40 Sloping Trench	05492	39.37	1000	13.62	346	13.86	352	114.9
<b>TD40 Neutral Trench</b>	<b>05372</b>	<b>39.37</b>	<b>1000</b>	<b>13.86</b>	<b>352</b>	<b>13.86</b>	<b>352</b>	<b>114.4</b>
<b>TD40 Outlet Trench</b>	<b>05376</b>	<b>39.37</b>	<b>1000</b>	<b>13.86</b>	<b>352</b>	<b>13.86</b>	<b>352</b>	<b>114.4</b>
TD41 Sloping Trench	05380	39.37	1000	13.86	352	14.09	358	117.4
TD42 Sloping Trench	05381	39.37	1000	14.09	358	14.33	364	118.8
TD43 Sloping Trench	05382	39.37	1000	14.33	364	14.57	370	120.2
TD44 Sloping Trench	05383	39.37	1000	14.57	370	14.80	376	121.6
TD45 Sloping Trench	05384	39.37	1000	14.80	376	15.04	382	122.9
TD46 Sloping Trench	05385	39.37	1000	15.04	382	15.28	388	125.4
TD47 Sloping Trench	05386	39.37	1000	15.28	388	15.51	394	127.0
TD48 Sloping Trench	05387	39.37	1000	15.51	394	15.75	400	128.6
TD49 Sloping Trench	05388	39.37	1000	15.75	400	15.98	406	130.2
TD50 Sloping Trench	05389	39.37	1000	15.98	406	16.22	412	131.9
<b>TD50 Neutral Trench</b>	<b>05373</b>	<b>39.37</b>	<b>1000</b>	<b>16.22</b>	<b>412</b>	<b>16.22</b>	<b>412</b>	<b>131.4</b>
<b>TD50 Outlet Trench</b>	<b>05377</b>	<b>39.37</b>	<b>1000</b>	<b>16.22</b>	<b>412</b>	<b>16.22</b>	<b>412</b>	<b>131.4</b>
TD51 Sloping Trench	05390	39.37	1000	16.22	412	16.46	418	135.4
TD52 Sloping Trench	05391	39.37	1000	16.46	418	16.69	424	136.6
TD53 Sloping Trench	05392	39.37	1000	16.69	424	16.93	430	137.8
TD54 Sloping Trench	05393	39.37	1000	16.93	430	17.17	436	139.0
TD55 Sloping Trench	05394	39.37	1000	17.17	436	17.40	442	139.9
TD56 Sloping Trench	05395	39.37	1000	17.40	442	17.64	448	143.9
TD57 Sloping Trench	05396	39.37	1000	17.64	448	17.87	454	145.5
TD58 Sloping Trench	05397	39.37	1000	17.87	454	18.11	460	147.1
TD59 Sloping Trench	05398	39.37	1000	18.11	460	18.35	466	148.7
TD60 Sloping Trench	05399	39.37	1000	18.35	466	18.58	472	150.3
<b>TD60 Neutral Trench</b>	<b>05374</b>	<b>39.37</b>	<b>1000</b>	<b>18.58</b>	<b>472</b>	<b>18.58</b>	<b>472</b>	<b>149.4</b>
<b>TD60 Outlet Trench</b>	<b>05378</b>	<b>39.37</b>	<b>1000</b>	<b>18.58</b>	<b>472</b>	<b>18.58</b>	<b>472</b>	<b>149.4</b>

ACO Specification Information

Accessories continued overleaf.

## TrafficDrain - Part List

Description	Part No	Length		Invert Depth		Weight lbs
		inches	mm	inches	mm	
<b>In-line Catch Basin</b>						
TD900 In-line catch basin	<b>96478</b>	19.69	500	24.00	610	96.5
Type 900 trash bucket	<b>01498</b>	-	-	-	-	1.1
Foul air trap	<b>90854</b>	-	-	-	-	1.2
<b>Accessories</b>						
Type 824 4" - 6" outlet adapter	<b>95140</b>	-	-	-	-	1.1
Flume outlet - 8" vertical	<b>95279</b>	-	-	-	-	2.4
Flume outlet kit - 8" horizontal	<b>95290</b>	-	-	-	-	7.5
Flume outlet - 12" vertical	<b>95285</b>	-	-	-	-	4.5
Flume outlet kit - 12" horizontal	<b>95287</b>	-	-	-	-	9.6
Closing/4" Inlet/Outlet cap	<b>95063</b>	-	-	-	-	0.4
TD204-6 6" Inlet cap	<b>93903</b>	-	-	-	-	4.8
TD208-6 6" Outlet cap	<b>97048</b>	-	-	9.13	232	4.8
TD304-6 6" Inlet cap	<b>93905</b>	-	-	-	-	6.1
TD308-6 6" Outlet cap	<b>97052</b>	-	-	11.50	292	6.1
TD100 installation device - joint clamp	<b>95286</b>	22.25	565	-	-	3.3
TD100 installation device - hanger clip	<b>95289</b>	-	-	-	-	0.6

**Notes:**

- TrafficDrain is sold complete, i.e., channel with non removable grate (NRG).
- Catch basins have removable bolted grates to allow access to pipework
- Add nominal 1" (25mm) to invert depth for overall trench unit depth.
- Preformed 4" dia. & 6" flumed drill-out outlet cast on underside of every channel (except outlet channel - 96448).
- Closing/4" inlet/outlet cap can be cut down to suit all channels.
- 6" Inlet & outlet caps cannot be cut to size.

## Specifications

**General**

The surface drainage system shall be ACO INFRASTRUCTURE TrafficDrain complete with gratings permanently locked by NRG mechanism as manufactured by ACO, Inc. or equal approved.

**Materials**

The trench system bodies shall be manufactured from polyester polymer concrete with minimum properties as follows:

Compressive strength: 14,000 psi  
 Flexural strength: 4,000 psi  
 Water absorption: 0.07%  
 Frost proof  
 Salt proof - B117 Salt Spray Test compliant  
 Dilute acid and alkali resistant

The nominal clear opening shall be 4.00" (100mm) with overall width of 6.375" (162mm). Modular units shall be manufactured with either an invert slope of 0.6% or with neutral invert and have a wall thickness of at least 0.67" (16mm). Each unit will feature a full radius in the trench bottom and a male to female interconnecting end profile. Units shall have horizontal cast in anchoring features on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement surface.

The ductile iron edge rail will be integrally cast in by the manufacturer to ensure maximum homogeneity between polymer concrete body and edge rail. Each edge rail shall be at least 0.25" (6mm) thick.

**Grates**

Grates are manufactured from ductile iron to ASTM A536-84 and shall be certified to load class E600 as defined by EN 1433 or able to withstand loadings up to 2,788 psi. Trench grates feature 60% (38.92 sq. ins. per linear ft.) open area for maximum hydraulic efficiency. Each trench grate shall be permanently fixed during manufacture; held by 2 sprung steel pins inserted horizontally through the ductile iron frame cast into the body and through the side wall of the grate. Catch basin grates are removable for maintenance purposes and bolted in place.

**Installation**

The trench drain system shall be installed in accordance with the manufacturer's installation instructions and drawings.

**ACO, Inc.**

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