

# Network Of Wastewater

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## المواسير المناسبة لنقل مياه الصرف الصحي

- الأنابيب البلاستيكية
- الأنابيب الخرسانية (المصنوعة من الباطون)

### • الأنابيب البلاستيكية

- بولي فينيل كلوريد (مختصر PVC)
- البولي بروبيلين (مختصر PP)
- البولي إيثيلين (اختصار PE)

### • منتجات الأنابيب الخرسانية

- أنابيب خرسانية concrete pipes
- أنابيب خرسانية مسلحة Reinforced Concrete Pipes
- المواسير الخرسانية Concrete Culvert Pipes
- غرف التفتيش الخرسانية Concrete Manholes
- تفتق غرف التفتيش Concrete Manholes Taper
- حلقة الغرفة Chamber Ring
- تغطية غرف التفتيش Manholes Cover
- الانحناءات وتركيبات الخرسانة Bends & Concrete Fittings

## أنابيب الصرف الصحي البلاستيكية

### من مزايا المنتجات البلاستيكية :

- وزن خفيف
- بساطة التثبيت , يتم قطع البلاستيك دون مشاكل ويصل بسهولة.
- المتانة , حيث مقاومة البيئات العدوانية، والتآكل، والرطوبة العالية.
- خدمة الحياة من أنابيب البلاستيك المجاري هو أطول بكثير.
- مقاومة الانسداد
- الحصانة للتغيرات في درجات الحرارة

### عيوب أنابيب الصرف الصحي المصنوعة من البلاستيك :

- نظام الصرف الصحي المصنوع من المنتجات البلاستيكية هو صاخبة أثناء العملية.
- عدم التسامح لدرجات الحرارة العالية - تتراوح درجة حرارة التشغيل لهذه المنتجات من 40 إلى 90 درجة.



# أسعار الأنابيب البلاستيكية (PVC)



## GRAVITY SEWER PIPES

EFFECTIVE JUNE 2017

Prices in USD excluding VAT  
(subject to modification)

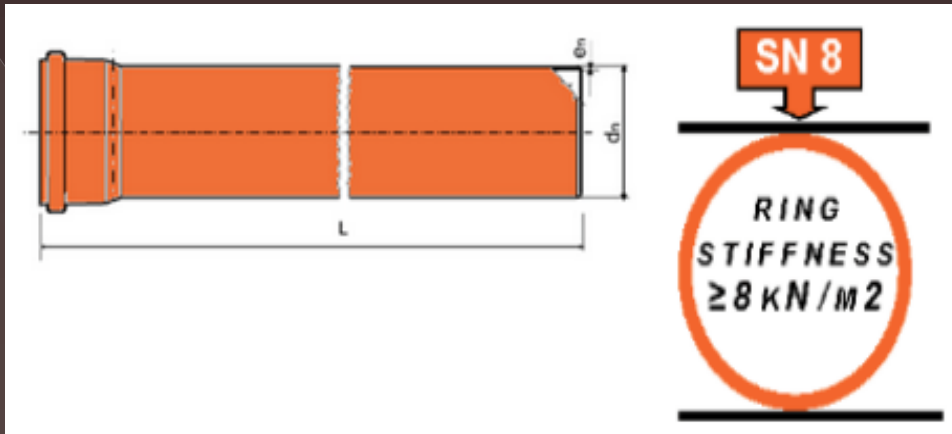
Designation SDR 41 UD	OD in mm	Wall Thick. in mm	Weight in kg/lm	Unit Price US\$ / lm
<i>110 SN4 see 110SN8</i>				
<b>125 SN4</b>	<b>125</b>	<b>3.2</b>	1.930	<b>8.30</b>
<b>160 SN4</b>	<b>160</b>	<b>4.0</b>	3.050	<b>12.50</b>
<b>200 SN4</b>	<b>200</b>	<b>4.9</b>	4.680	<b>18.40</b>
<b>250 SN4</b>	<b>250</b>	<b>6.2</b>	7.330	<b>29.30</b>
<b>315 SN4</b>	<b>315</b>	<b>7.7</b>	11.480	<b>44.80</b>
<b>400 SN4</b>	<b>400</b>	<b>9.8</b>	18.380	<b>74.00</b>

This range of standard sewer pipes **SN4 (ring stiffness  $\geq 4\text{kN/m}^2$ )** is perfectly adapted for **urban sewer networks under Normal conditions**.

**SN4** sewer pipes can be **directly buried underground between 0.9 m and 6 m depth** (expected average deflection less than 8%).



# أسعار الأنابيب البلاستيكية (PVC)



Designation SDR 34 UD	OD in mm	Wall Thick. in mm	Weight in kg/lm	Unit Price US\$ / lm
<b>110 SN8</b>	<b>110</b>	<b>3.2</b>	1.690	<b>6.80</b>
<b>125 SN8</b>	<b>125</b>	<b>3.7</b>	2.210	<b>9.50</b>
<b>160 SN8</b>	<b>160</b>	<b>4.7</b>	3.580	<b>15.00</b>
<b>200 SN8</b>	<b>200</b>	<b>5.9</b>	5.600	<b>22.20</b>
<b>250 SN8</b>	<b>250</b>	<b>7.3</b>	8.600	<b>34.50</b>
<b>315 SN8</b>	<b>315</b>	<b>9.2</b>	13.650	<b>53.60</b>
<b>400 SN8</b>	<b>400</b>	<b>11.7</b>	21.830	<b>88.00</b>

*Supplied upon request only*

This range of standard sewer pipes **SN8 (ring stiffness  $\geq 8 \text{ kN/m}^2$ )** is perfectly adapted for **urban sewer networks under Heavy-Duty soil conditions.**

**SN8** sewer pipes can be **directly buried underground between 0.6 m and 9 m depth** (expected average deflection less than 8%).

# أسعار الأنابيب البلاستيكية (PVC)



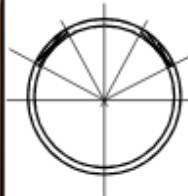
## SLOTTED UNDERDRAIN PIPE

EFFECTIVE JUNE 2017

Prices in USD excluding VAT  
(subject to modification)

Designation	OD in mm	Dis-charge Area in cm <sup>2</sup>	Water Inlet Area cm <sup>2</sup> /m	Slot Type	Unit Price US\$ / 1m
110 R2 SD	110	83	>50	MP	8.40
125 R2 SD	125	109	>50	MP	9.90
160 R2 SD	160	178	>70	MP	14.35
200 R2 SD	200	280	>80	MP	20.50
250 R2 SD	250	441	>90	MP	32.40
315 R2 SD	315	702	>110	MP	48.40

ULPI® Slotted Underdrain Pipes fulfill requirements of standards DIN-4262 and **NF P 16-351 type R2 SD**: Round drainage pipe with smooth internal surface (R2) designed for Standard Duty applications



**Slots Design MP**: slots are located on the **upper 135° of the pipe**. The lower part of the MP pipe will carry away drained water. Wall thickness according to NL-EN-1401 SN4.

# أسعار الأنابيب البلاستيكية (UPVC)

## UPVC Fittings FOR GRAVITY DRAIN & SEWER NETWORKS

REDI

EN -1401

EFFECTIVE JUNE 2017

Prices in USD excluding VAT  
(subject to modification)

BRANCH DOUBLE SOCKET 45°

تيه أيكرك ذكر



Φ	Φ	110	125	160	200	250	315	400
110		6.00						
125		12.92	14.71					
160		18.01	20.08	21.55				
200		33.24	40.87	38.25	45.21			
250				109.29	121.99	134.04		
315					190.63	328.40	325.17	
400								499.00

TEE DOUBLE SOCKET 87°

تيه أف ذكر



Φ	Φ	110	125	160	200	250	315	400
110		5.09						
125		15.90	11.77					
160		17.49	24.73	20.71				
200		45.20	40.30	41.47	39.80			
250					90.55	112.33		
315						290.60	210.38	
400								593.00

BEND

كوع ذكر



α	Φ	110	125	160	200	250	315	400
15°						74.75	123.15	194.00
30°		5.45	7.47	12.60	24.33			
45°		2.92	6.00	10.50	21.87	71.35	114.35	212.45
87°		3.54	7.59	11.93	26.44	82.89	152.00	393.40

BEND DOUBLE SOCKET

كوع أنثائية



α	Φ	110	125	160	200	250	315	400
45°		8.35	17.30	20.28	30.60			
87°		8.79	14.04	25.49	33.45			

INVERT REDUCER

وصل مخالف



Φ	Φ	110	125	160	200	250	315	400
110			4.57	7.20				
125				8.43	17.27	37.24		
160					14.95	37.68	66.72	
200						43.75	69.74	
250							72.38	
315								165.45



# أسعار الأنابيب البلاستيكية (UPVC)

## UPVC Fittings FOR GRAVITY DRAIN & SEWER NETWORKS

		EN -1401							EFFECTIVE JUNE 2017						
		Φ110	Φ125	Φ160	Φ200	Φ250	Φ315	Φ400	Prices in USD excluding VAT (subject to modification)						
	DOUBLE SOCKET with/ without central stop وصل / وصل تصليح	3.98	6.52	10.10	20.87	59.35	92.74	173.15							
	SINGLE SOCKET وصل جوان تلتزيق	4.80	6.65	10.80	23.45	50.45									
	ACCESS PLUG سدّة بسن / سدّة قلووز	5.80	7.83	10.34	14.55	59.29	101.64								
	SOCKET PLUG سدّة كبس ذكر	2.78	3.58	4.77	8.91	26.58	46.42	89.00							
	ACCESS PIPE تيه اف بسدّة	15.55	21.83	35.59	63.30	189.90	294.20								
	BRANCH TRIPLE SOCKET 45° تيه أيكرك أنثائية	12.50		26.55											
	TEE BRANCH 87° Swept أف ساتيتر Double Socket Triple Socket	12.60 16.30													
	DOUBLE BRANCH 45° تيه دوپل أيكرك ذكر 87° تيه دوپل أف	30.38 35.19													
	CLAMPS W 2S Rubber Lined	3.85	4.27	6.61	8.12										
	REDI LUBRICANT شحم	<table border="1"> <thead> <tr> <th colspan="2">REDI LUBRICANT</th> </tr> <tr> <th>500 gr</th> <th>1000 gr</th> </tr> </thead> <tbody> <tr> <td>11.71</td> <td>15.23</td> </tr> </tbody> </table>		REDI LUBRICANT		500 gr	1000 gr	11.71	15.23						
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## Concrete Pipes Products منتجات أنابيب خرسانية

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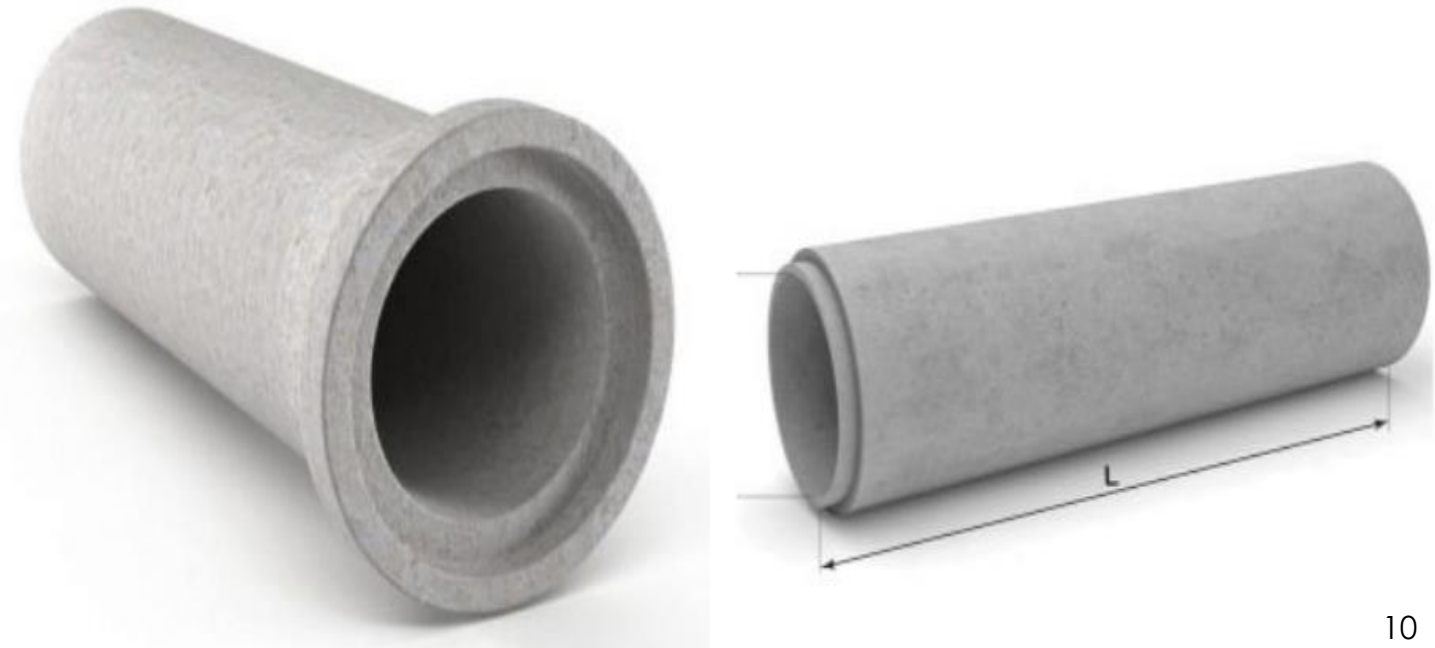
## منتجات أنابيب خرسانية Concrete Pipes Products

إذا تحدثنا عن فوائد هذه المنتجات ، فيجب ذكر ما يلي:

- لديهم قابلية ضئيلة للتآكل.
- مقاومة النمو الزائد ، لأنها دائمة وخاملة ، والجدران الداخلية الخشنة لا تؤثر على السوائل التي يتم ضخها من خلال الأنابيب ؛
- مقاومة جيدة للأثر المادي
- غير منفذة للسوائل.
- مقاومة للمواد البيولوجية والكيميائية.
- لديها قوة عالية
- يتم إنتاجها بطرق تسلسلية ذات خصائص أداء مختلفة ؛
- لديها تكلفة منخفضة.

بالإضافة إلى المزايا ، هناك أيضًا عيوب:

- كتلة كبيرة
- لا يتم استبعاد التآكل ، والذي يسبب ترسب الخرسانة والنمو وتخفيف الجدران.



# أسعار منتجات أنابيب خرسانية

## Concrete or PVC Connections

BRANCH SIZE (mm)	MAIN PIPE SIZE					
	300-525 \$/ea	600-825 \$/ea	900-1200 \$/ea	1350-1800 \$/ea	1950-2400 \$/ea	2550-3000 & Boxes \$/ea
100	125.70	132.10	168.40	228.50	273.70	317.00
125	138.20	144.70	185.00	250.40	300.50	347.40
150	152.20	159.90	203.70	276.30	331.00	383.40
200	202.90	213.20	271.90	368.50	441.90	511.10
250	227.40	238.50	304.20	412.60	494.80	572.20
300	309.40	438.20	568.60	805.60	1,042.70	1,421.50
375	374.30	501.10	674.90	945.40	1,243.90	1,530.20
450	457.50	566.50	742.10	1,012.60	1,311.30	1,597.20
525	494.10	584.20	760.60	1,031.20	1,329.40	1,615.60
600		731.00	911.40	1,182.00	1,480.20	1,766.50
675		1,040.50	1,180.30	1,451.10	1,749.50	2,035.70
750		1,343.70	1,465.10	1,735.50	2,034.10	2,320.00
825		1,537.10	1,639.70	1,910.60	2,209.10	2,495.10
900			1,906.80	2,177.60	2,475.80	2,761.70
975			2,171.00	2,419.60	2,718.40	3,004.30
1050			2,465.80	2,689.70	2,987.80	3,273.90
1200			3,042.80	3,229.40	3,528.10	3,814.00
1350				4,026.80	4,302.20	4,640.70

## Concrete Pipe

### Approximate Mass & Dimensions

INSIDE DIA. (mm)	OUTSIDE DIA. (mm)	WALL THICKNESS (mm)	LAY LENGTH (m)	MASS PER PIECE (kg)	TRUCKLOAD LOTS (pcs)*
300	444.5	69.9	2.44	550	74
375	533.4	76.2	2.44	746	54
450	622.3	82.6	2.44	930	44
525	711.2	88.9	2.44	1140	35
600	800.1	95.3	2.44	1410	29
675	889.0	101.6	2.44	1680	24
750	977.9	108.0	2.44	1905	21
825	1066.8	114.3	2.44	2225	18
900	1155.7	120.7	2.44	2535	16
975	1244.6	127.0	2.44	2915	14
1050	1333.5	133.4	2.44	3115	13
1200	1511.3	146.1	2.44	3810	10
1350	1689.1	158.8	2.44	4731	8
1500	1828.8	162.4	2.44	5180	7
1650	2006.6	165.1	2.44	6101	6
1800	2184.4	177.8	2.44	6991	5
1950	2362.2	190.5	2.44	8110	5
2100	2540.0	203.2	2.44	9290	4
2250	2717.8	215.9	2.44	10520	3
2400	2895.6	228.6	2.44	11880	2
2550	3073.4	241.3	2.44	12637	2
2700	3251.2	254.0	2.44	14035	2
3000	3606.8	279.4	2.44	17185	1

# أسعار منتجات أنابيب خرسانية

## Reinforced Concrete Bends

ONE-QUARTER (90°) & ONE-EIGHTH (45°) BENDS, BELOW PRICES ARE PER PIECE

SIZE (mm)	CLASS 50-D \$/ea	CLASS 65-D \$/ea	CLASS 100-D \$/ea	CLASS 140-D \$/ea	MAX. ANGLE
300	416.90	416.90	416.90	416.90	90°
375	516.40	516.40	516.40	516.40	90°
450	532.10	532.10	532.10	664.80	90°
525	579.60	579.60	677.60	798.10	90°
600	736.60	736.60	845.90	995.20	90°
675	1,107.20	1,107.20	1,260.80	1,476.20	90°
750	1,459.50	1,459.50	1,668.50	1,949.30	90°
825	1,692.20	1,692.20	2,152.00	2,262.00	90°
900	2,028.60	2,028.60	2,321.20	2,709.40	90°
975	2,227.70	2,346.00	2,688.80	3,121.60	90°
1050	2,550.90	2,679.50	3,067.20	3,573.50	90°
1200	3,196.30	3,358.30	3,842.40	4,477.40	90°
1350	4,113.30	4,316.80	4,938.60	5,751.80	90°
1500	5,028.40	5,277.00	6,034.50	7,040.30	90°
1650	6,023.30	6,328.20	7,232.00	8,429.70	75°
1800	7,277.20	7,650.40	8,735.50	10,192.70	70°
1950	8,440.80	8,870.60	10,125.10	11,820.00	65°
2100	9,684.50	10,158.90	11,617.40	13,549.10	62°
2250	11,006.80	11,560.10	13,209.50	15,413.50	60°
2400	12,882.20	13,515.30	15,447.20	18,024.00	56°
2550	14,509.20	15,221.30	17,402.20	20,306.60	53°
2700	16,102.90	16,905.30	19,323.60	22,543.80	50°
3000	19,718.70	20,713.40	23,674.10	27,617.50	45°

## Reinforced Concrete Box Units - OPSS 1821

SPAN x RISE (mm)	WALL THICKNESS (mm)	WATERWAY AREA (m2)	APPROX. MASS (kg/m)	Design Earth Cover (m)	OPSS 1821 (\$ /metre)
1800 x 900	200	1.61	3380	0.6 to 5.5	1,664.00
1800 x 1200	200	2.16	3690	0.6 to 5.5	1,816.40
2400 x 1200	200	2.89	4560	0.6 to 3.6	2,317.60
2400 x 1500	200	3.63	4870	0.6 to 3.6	2,482.90
2400 x 1800	200	4.38	5170	0.6 to 3.6	2,648.70
3000 x 1500	250	4.51	6860	0.6 to 3.6	3,626.00
3000 x 1800	250	5.44	7250	0.6 to 3.6	3,834.00
3000 x 2100	250	6.37	7630	0.6 to 3.6	4,040.00
3000 x 2400	250	7.30	8020	0.6 to 3.6	4,245.60

## Reinforced Concrete Box Units - CHBDC CAN/CSA S6-06

SPAN x RISE (mm)	WALL THICKNESS (mm)	WATERWAY AREA (m2)	APPROX. MASS (kg/m)	Design Earth Cover (m)	CHBDC CAN/CSA S6-06 (\$ /metre)
1800 x 900	200	1.61	3380	0.0 to 0.6 & 5.5 to 8.0	2,094.00
1800 x 1200	200	2.16	3690	0.0 to 0.6 & 5.5 to 8.0	2,278.10
2400 x 1200	200	2.89	4560	0.0 to 0.6 & 3.6 to 6.0	2,913.40
2400 x 1500	200	3.63	4870	0.0 to 0.6 & 3.6 to 5.0	3,145.70
2400 x 1800	200	4.38	5170	0.0 to 0.6 & 3.6 to 5.0	3,314.90
3000 x 1500	250	4.51	6860	0.0 to 0.6 & 3.6 to 5.0	4,459.40
3000 x 1800	250	5.44	7250	0.0 to 0.6 & 3.6 to 5.0	4,646.40
3000 x 2100	250	6.37	7630	0.0 to 0.6 & 3.6 to 5.0	4,888.60
3000 x 2400	250	7.30	8020	0.0 to 0.6 & 3.6 to 5.0	5,133.20

# أسعار منتجات أنابيب خرسانية

## Reinforced Concrete Maintenance Holes

SIZE (mm)	DESCRIPTION	HEIGHT (m)	APPROX. MASS	PRICE \$
1200	taper top c/w steps	1.320	1905 kg/pc	884.80 ea.
1200	flat cap	0.305	715 kg/pc	504.10 ea.
1200	riser c/w steps	0.305 to 1.829	1324 kg/m	644.80 /m
1200	monolithic base c/w steps	0.762	1760 kg/pc	1,065.20 ea.
1200	monolithic base c/w steps	0.914	1960 kg/pc	1,163.30 ea.
1200	monolithic base c/w steps	1.067	2160 kg/pc	1,261.80 ea.
1200	monolithic base c/w steps	1.372	2550 kg/pc	1,457.20 ea.
1200	monolithic base c/w steps	1.524	2750 kg/pc	1,555.30 ea.
1200	base slab	0.203	780 kg/pc	504.10 ea.
1200	safety grate supplied & installed			1,208.00 ea.
1200	prebenching			581.20 ea.
1500	flat cap	0.430	1810 kg/pc	1,004.40 ea.
1500 to 1200	transition c/w steps	0.610	1678 kg/pc	1,004.40 ea.
1500	riser c/w steps	3.05 to 2.438	1927 kg/m	977.10 /m
1500	monolithic base c/w steps	1.067	3430 kg/pc	2,343.20 ea.
1500	monolithic base c/w steps	1.372	4040 kg/pc	2,641.20 ea.
1500	monolithic base c/w steps	1.676	4645 kg/pc	2,938.20 ea.
1500	monolithic base c/w steps	1.829	5050 kg/pc	3,087.80 ea.
1500	monolithic base c/w steps	1.981	5350 kg/pc	3,236.30 ea.
1500	base slab	0.305	1770 kg/pc	1,004.40 ea.
1500	safety grate supplied & installed			1,701.00 ea.
1500	prebenching			782.10 ea.
1800	flat cap	0.430	2720 kg/pc	1,354.50 ea.
1800 to 1200	transition c/w steps	0.610	2400 kg/pc	1,354.50 ea.
1800	riser c/w steps	0.610 to 2.438	2756 kg/m	1,389.40 /m
1800	base slab	0.305	2630 kg/pc	1,354.50 ea.
1800	safety grate supplied & installed			2,207.20 ea.
2400	flat cap	0.430	4980 kg/pc	2,684.00 ea.
2400 to 1200	transition slab c/w steps	0.430	4210 kg/pc	2,684.00 ea.
2400	riser c/w steps	0.610 to 2.438	4598 kg/m	2,477.20 /m
2400	base slab	0.305	4620 kg/pc	2,684.00 ea.
2400	safety grate supplied & installed			3,451.50 ea.
3000	flat cap	0.450	7847 kg/pc	4,520.10 ea.
3000 to 1200	transition slab c/w steps	0.450	7258 kg/pc	4,520.10 ea.
3000	riser c/w steps	0.610 to 2.438	7043 kg/m	3,875.30 /m
3000	base slab	0.305	8225 kg/pc	4,520.10 ea.
3000	safety grate supplied & installed			on request
3600	flat cap	0.450	10500 kg/pc	7,981.70 ea.
3600 to 1200	transition slab c/w steps	0.450	10500 kg/pc	7,981.70 ea.
3600	riser c/w steps	0.610 to 1.829	11042 kg/m	8,445.60 /m
3600	base slab	0.305	10500 kg/pc	7,981.70 ea.
3600	safety grate supplied & installed			on request

# أسعار منتجات أنابيب خرسانية

## Reinforced Concrete Pipe, Caps, and Plugs

SIZE (mm)	UNIT MASS (kg/m)	CLASS 50-D \$ /metre	CLASS 65-D \$ /metre	CLASS 100-D \$ /metre	CLASS 140-D \$ /metre	Caps and Plugs \$ /ea.
300	225	77.40	77.40	77.40	77.40	77.40
375	306	95.50	95.50	95.50	95.50	95.50
450	381	98.40	98.40	98.40	123.00	123.00
525	470	107.30	107.30	125.30	148.00	148.00
600	578	144.40	144.40	166.00	195.10	195.10
675	691	221.30	221.30	252.10	295.20	295.20
750	780	291.80	291.80	333.50	389.90	389.90
825	912	338.50	338.50	430.50	452.30	452.30
900	1039	406.10	406.10	464.50	542.30	542.30
975	1195	445.50	469.00	533.70	624.60	624.60
1050	1277	510.20	535.80	613.60	714.60	714.60
1200	1561	639.50	671.80	768.50	895.50	895.50
1350	1939	822.40	863.40	987.80	1,150.40	1,150.40
1500	2123	1,005.90	1,055.70	1,206.90	1,408.00	1,408.00
1650	2500	1,204.50	1,265.60	1,446.60	1,686.50	1,686.50
1800	2865	1,455.50	1,530.30	1,747.00	2,038.70	2,038.70
1950	3324	1,688.00	1,774.30	2,025.20	2,364.10	2,364.10
2100	3807	1,936.90	2,031.80	2,323.70	2,710.10	2,710.10
2250	4311	2,201.30	2,312.30	2,641.90	3,082.60	3,082.60
2400	4869	2,576.50	2,703.00	3,089.70	3,604.90	3,604.90
2550	5179	2,901.90	3,044.40	3,480.60	4,061.20	4,061.20
2700	5752	3,220.60	3,381.10	3,864.70	4,508.90	4,508.90
3000	7043	3,943.80	4,143.00	4,734.90	5,523.60	5,523.60

## Scribed Holes & Knockouts

MAINLINE PIPE SIZE	Price Per Hole \$ /each
Up to 1350 mm	94.90
1500mm and over	189.50

## Elliptical Reinforced Concrete Pipe

EQUIV. DIA. (mm)	RISE x SPAN (mm)	HE I \$ /metre	HE II \$ /metre	HE III \$ /metre	HE IV \$ /metre	MASS (kg/m)
900	735 x 1145	560.40	591.80	657.00	753.80	931
1050	865 x 1345	686.10	717.60	809.30	927.70	1214
1200	965 x 1525	843.00	881.60	990.40	Available Upon Request	1490
1350	1090 x 1725	1,058.10	1,113.90	1,249.20	Available Upon Request	1840
1500	1220 x 1930	1,261.30	1,326.60	1,493.10	Available Upon Request	2198
1650	1345 x 2110	1,495.60	1,572.80	1,763.60	Available Upon Request	2600
1800	1475 x 2310	1,799.90	1,886.90	2,118.50	Available Upon Request	3040
1950	1600 x 2490	2,067.90	2,176.70	2,440.20	Available Upon Request	3502
2100	1725 x 2690	2,357.90	2,481.00	2,783.10	Available Upon Request	3993



# أسعار منتجات أنابيب خرسانية

## Flexible Connectors

Pipe to maintenance hole connectors, supplied and installed.

CONCRETE PIPE	PVC PIPE	PRICE (\$/ea.)
	150	177.50
150		177.50
	200	177.50
200		177.50
	250	231.80
250		231.80
	300	231.80
300		303.20
	375	303.20
375		364.40
	450	364.40
450		461.00
	525	461.00
525		544.20
	600	515.70
600		645.10
	675	544.20
675		727.00

## Monobox Maintenance Holes

SIZE (mm)	PRICE \$ /metre
2400 x 1800	3,784.20
3000 x 2400	6,068.00
3900 x 2400	8,562.80
3900 x 3000	11,033.40

## Utility Maintenance Holes & Valve Chambers

INTERNAL HORIZONTAL DIMENSION (mm)	BASE SLAB		RISER		FLAT CAP	
	PRICE \$ /ea	MASS (kg/pc)	PRICE \$ /metre	MASS (kg/m)	PRICE \$ /ea	MASS (kg/pc)
2400 x 1800 (200mm Wall)	2,648.70	3660	2,781.10	5170	2,648.70	4050
3000 x 2400 (250mm Wall)	4,245.60	6090	4,457.90	8020	4,245.60	6850



# أسعار منتجات أنابيب خرسانية

## Concrete Endwalls for Sewers & Culverts

OPS 804.030 "MODIFIED"

PIPE DIA. (mm)	ENDWALL ONLY \$ /ea	ENDWALL c/w GRATE \$ /ea
300	2,693.60	3,355.70
375	2,693.60	3,355.70
450	3,274.60	4,003.30
525	3,274.60	4,003.30
600	4,181.70	4,964.20
675	4,181.70	4,964.20
750	5,107.10	6,034.50
825	5,107.10	6,034.50

## Appurtenances

DESCRIPTION	HEIGHT (mm)	APPROX. MASS	PRICE \$
maintenance hole safety steps OPSD 405.010			22.90 ea
solid aluminum steps OPSD 405.020			33.00 ea
outside rebar steps - supplied & installed			30.50 ea
maintenance hole clean out steps - supplied & installed			33.70 ea
maintenance hole frames & covers OPSD 401.010	150	180 kg ea	563.30 ea
catch basin frames & covers OPSD 400.020	150	225 kg ea	583.10 ea
ditch inlet catch basin gratings - type "A" (fits 600 x 600 Ditch Inlet CB)			502.50 ea
ditch inlet catch basin gratings - type "B" (fits 600 x 1200 Ditch Inlet CB)			739.50 ea
ditch inlet catch basin gratings - type "C" (fits 600 x 1200 Ditch Inlet CB)			811.90 ea
ditch inlet grate fasteners			129.40 /set
hatches cast into flat caps (hatch by others)			517.90 ea
point of entry trap			587.60 ea
point of entry trap filter			56.50 ea
catch basin inlet control devices (inserts installed only)			114.60 /set
modutape (6.1 metres per roll)			13.80 /roll
swift lift lifting eyes (4 tonne capacity)			349.10 ea
swift lift lifting eyes (8 tonne capacity)			656.80 ea
engineering surcharge (non-standard engineering requirements)			750.00 ea

## Grade Rings

DESCRIPTION	HEIGHT (mm)	APPROX. MASS	PRICE \$ /ea
maintenance hole grade ring - 12 per bundle	50	52 kg ea	39.10
maintenance hole grade ring - 8 per bundle	75	75 kg ea	41.40
maintenance hole grade ring c/w step - 8 per bundle	75	75 kg ea	60.80
maintenance hole grade ring	150	150 kg ea	143.50
maintenance hole grade ring c/w step	300	430 kg ea	183.90
catch basin grade ring - 12 per bundle	50	36 kg ea	37.10
catch basin grade ring - 8 per bundle	75	51 kg ea	39.30
catch basin grade ring	125	105 kg ea	58.80
catch basin grade ring	150	125 kg ea	131.40
catch basin grade ring	300	245 kg ea	174.80

# أسعار منتجات أنابيب خرسانية

## Maintenance Hole Estimate Sheet

### 1200 mm DIAMETER MONOBASE MH

DEPTH (m)		PRICE \$/ea
FROM	TO	
1.37	1.52	1,788.00
1.53	1.68	1,863.90
1.69	1.85	1,962.50
1.86	2.01	2,060.40
2.02	2.17	2,159.20
2.18	2.33	2,047.90
2.34	2.50	2,146.70
2.51	2.66	2,244.80
2.67	2.82	2,343.30
2.83	2.98	2,441.30
2.99	3.15	2,540.10
3.16	3.31	2,637.90
3.32	3.47	2,736.30
3.48	3.63	2,834.70
3.64	3.80	2,932.70
3.81	3.96	3,030.60
3.97	4.12	3,129.20
4.13	4.28	3,225.80
4.29	4.45	3,423.90
4.46	4.61	3,522.60
4.62	4.77	3,620.60
4.78	4.99	3,719.20
5.00	5.15	5,092.60
5.16	5.31	5,289.40
5.32	5.48	5,388.10
5.49	5.64	5,486.30
5.65	5.80	5,584.70
5.81	5.96	5,682.00
5.97	6.13	5,781.30
6.14	6.29	5,878.70
6.30	6.45	5,976.80
6.46	6.61	5,977.30
6.62	6.78	6,075.30
6.79	6.94	6,174.20
6.95	7.10	6,272.00
7.11	7.26	6,468.70
7.27	7.43	6,566.80
7.44	7.59	6,664.70
7.60	7.75	6,763.60
7.76	7.91	6,861.30
7.92	8.08	6,959.90

### 1500 mm DIAMETER MONOBASE MH

DEPTH (m)		PRICE \$/ea
FROM	TO	
1.37	1.67	3,348.20
1.68	1.99	3,646.20
2.00	2.30	3,943.40
2.31	2.62	4,241.40
2.63	2.93	4,539.40
2.94	3.25	4,837.40
3.26	3.56	5,240.10
3.57	3.88	5,436.70
3.89	4.19	5,632.90
4.20	4.51	5,718.90
4.52	4.82	5,817.50
4.83	4.99	5,915.40
5.00	5.30	7,289.80
5.31	5.62	7,486.30
5.63	5.93	7,682.70
5.94	6.25	7,879.80
6.26	6.56	8,075.60
6.57	6.88	8,272.30
6.89	7.19	8,469.20
7.20	7.51	8,665.50
7.52	7.82	8,861.70
7.83	8.14	9,058.20

# أسعار منتجات أنابيب خرسانية

## Maintenance Hole Estimate Sheet

### 1800 mm DIAMETER BASE SLAB MH

DEPTH (m)		PRICE \$ /ea
FROM	TO	
1.37	1.67	4,402.70
1.68	1.99	4,826.60
2.00	2.30	5,250.20
2.31	2.62	5,673.80
2.63	2.93	6,096.10
2.94	3.25	6,521.10
3.26	3.56	6,374.60
3.57	3.88	6,571.10
3.89	4.19	6,767.50
4.20	4.51	6,853.40
4.52	4.82	6,951.90
4.83	4.99	7,148.10
5.00	5.30	8,699.90
5.31	5.62	8,883.90
5.63	5.93	9,080.70
5.94	6.25	9,276.60
6.26	6.56	9,473.20
6.57	6.88	9,669.80
6.89	7.19	9,866.60
7.20	7.51	10,062.50
7.52	7.82	10,259.30
7.83	8.14	10,455.80

### 2400 mm DIAMETER BASE SLAB MH

DEPTH (m)		PRICE \$ /ea
FROM	TO	
1.37	1.67	8,387.60
1.68	1.99	9,143.40
2.00	2.30	9,898.70
2.31	2.62	10,654.00
2.63	2.93	11,407.10
2.94	3.25	12,108.10
3.26	3.56	12,304.40
3.57	3.88	12,499.90
3.89	4.19	12,628.60
4.20	4.51	12,685.20
4.52	4.82	12,880.70
4.83	4.99	12,968.80
5.00	5.30	14,628.40
5.31	5.62	14,646.90
5.63	5.93	14,813.80
5.94	6.25	15,010.40
6.26	6.56	15,206.50
6.57	6.88	15,403.00
6.89	7.19	15,599.70
7.20	7.51	15,796.60
7.52	7.82	15,992.40
7.83	8.14	16,189.20

## Maintenance Hole Estimate Sheet

3000 mm DIAMETER  
BASE SLAB MANHOLE

DEPTH (m)		PRICE \$ /ea
FROM	TO	
1.37	1.67	13,764.30
1.68	1.99	14,946.30
2.00	2.30	16,128.10
2.31	2.62	17,310.20
2.63	2.93	18,488.20
2.94	3.25	19,189.00
3.26	3.56	19,385.80
3.57	3.88	19,483.70
3.89	4.19	19,569.80
4.20	4.51	19,766.40
4.52	4.82	19,962.80
4.83	4.99	20,072.60
5.00	5.30	21,644.50
5.31	5.62	21,662.00
5.63	5.93	21,828.50
5.94	6.25	22,025.20
6.26	6.56	22,221.40
6.57	6.88	22,417.80
6.89	7.19	22,614.40
7.20	7.51	22,811.40
7.52	7.82	23,007.10
7.83	8.14	23,204.00

## مضخات مياه الصرف الصحي

### ■ أشكال المضخات

#### 1. نوع الغوص

- الأكثر شيوعاً WQ type diving sewage pump

#### 2. نوع الجاف

- الأكثر شيوعاً

- W-type horizontal sewage pumps
- WL type vertical sewage pumps

### ■ أنواع المضخات

- نوع من هيكل المكروه Type of impeller structure
- دوامة The swirl impeller
- المكروه سجي The shrouded impeller
- دافع ممر التدفق The flow passage impeller
- دوامة الطرد المركزي اللولبي The spiral centrifugal impeller

## أسعار مضخات مياه الصرف الصحي

### **BGP Grinder Pump 3P**

- Gallons Per Hour: 2640 (44 GPM) [230v/3 2HP]
- Price: (\$1,688.00 )
- Applications: Sewage Grinding, Sewage, Effluent and Wastewater Removal or Transfer



## Submersible Sewage "Non-Clog" Pump

- Gallons Per Hour: 7680 (128 GPM) [115v Manual, 2", switch optional]
- Price: (\$409.50)
- Applications: Sewage, Slurry, Slush & Sludge, Submersible





### 16S Sewage Ejector Pump (16S-CIM)

- Gallons Per Hour: 9600 (160 GPM) [1 HP 200/208V]
- Price: (\$1,827.00)
- Applications: sewage



## أسعار مضخات مياه الصرف الصحي

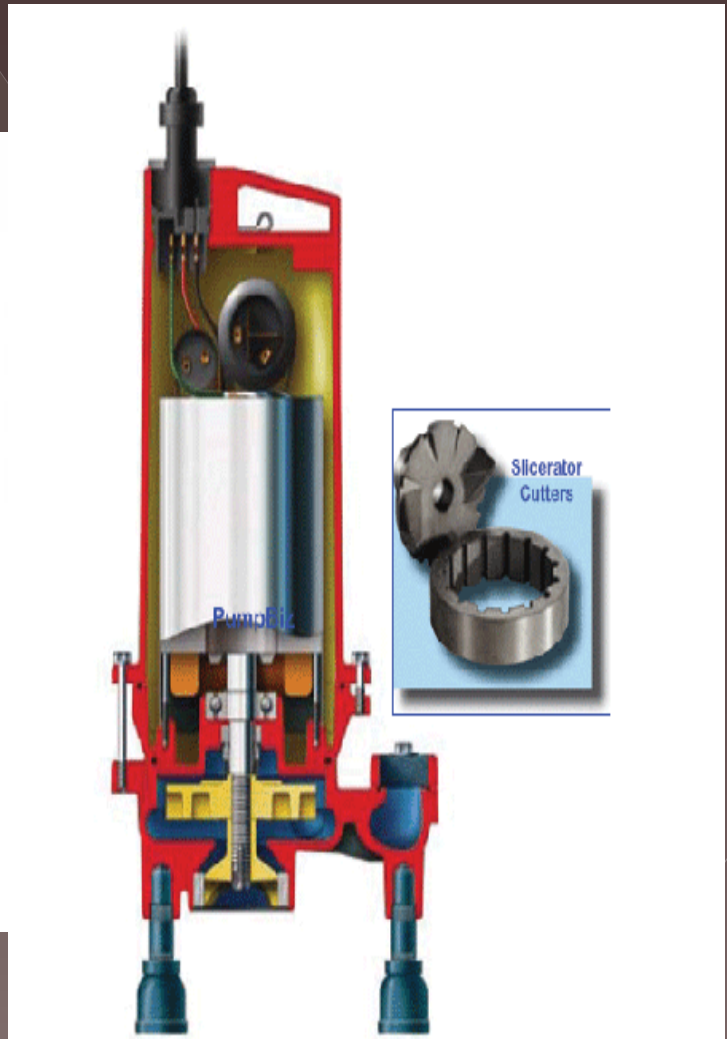
### Ebara DW Submersible Sewage Pump Stainless Steel (SS sewage 1.5hp)

- Gallons Per Hour: 10800 (180 GPM) [1-1/2HP 230v/1]
- Price: (\$1,184.22)
- Applications: Contractor, Dewatering, Fountain, Pond, Sewage, Slurry, Slush & Sludge, Submersible Sump



## Grinder Pump 3HP

- Gallons Per Hour: 6300 (105 GPM) [3HP 230v/3 double seal]
- Price: (\$3,011.00)
- Applications: Grinder, Sanitary, Slurry, Slush & Sludge, Submersible, Sump



## 2CT Trash Pump PEO

- Gallons Per Hour: 150 GPM
- Price: (\$1,641.00)
- Applications: Contractor, Dewatering, Fuel Oil, Irrigation, Marine, Pond, Self-Priming, Sewage, Slurry, Slush & Sludge



## MIT High Pressure Pedestal Pumps (FMIT-30 MIT)

- Gallons Per Hour: 21900 (365 GPM)
- Price: (\$4,004.00)
- Applications: Dewatering, Marine, Sanitary, Self-Priming, Sewage, Slurry, Slush & Sludge



## أسعار مضخات مياه الصرف الصحي

### Sewage Trash pump 7.5HP

- 230/460v 3P 20,400GPH, 3" 394A
- Price : (\$1,942.40)
- Applications: Contractor, Dewatering, Flooded Suction, Fountain, Self-Priming, Sewage, Slurry, Slush & Sludge



## Submersible "Non-Clog" Pump 8"

- Gallons Per Hour: 210000 (3500 GPM) [460v/3P 48HP 8"]
- Price: (\$18,350.00)
- Applications: Dewatering, Sewage, Submersible





## References

- <http://www.cosmictherap.com/%D8%A3%D8%A8%D8%B9%D8%A7%D8%AF%D8%A3%D9%86%D8%A7%D8%A8%D9%8A%D8%A8%D8%A7%D9%84%D8%B5%D8%B1%D9%81-%D8%A7%D9%84%D8%B5%D8%AD%D9%8A/>
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دمتم بأمان الله