AECENAR
Association for Economical and Technological Cooperation in the Euro-Asian and North-African Region

بسم الله الرحمن الرحيم

IEP
مركز دراسات السياسات الاقتصادية
Institute for Economical Policy (IEP)
www.aecenar.com/institutes/iep

Network of Wastewater

Concrete Pipes Products منتجات أنابيب خرسانية

من فوائد المنتجات الخرسانية ، 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.

Concrete Pipes

Concrete Culvert Pipes

Manholes Cover

Reinforced Concrete Pipes

Concrete Manholes base

Chamber Ring

Concrete Manholes Taper

Bends & Concrete Fittings

المواسير المناسبة لنقل مياه الصرف الصحي

- **الأنابيب البلاستيكية**
  - بولي فينيل كلوريد (مختصر PVC)
  - البولي بروبلين (مختصرPP)
  - البولي إثيلين (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

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 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	152.4	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

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	2,668.80	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 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

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

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

Scribed Holes & Knockouts

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

Utility Maintenance Holes & Valve Chambers

INTERNAL HORIZONTAL DIMENSION (mm)	BASE SLAB PRICE $ /ea	BASE SLAB MASS (kg/pc)	RISER PRICE $ /metre	RISER MASS (kg/m)	FLAT CAP PRICE $ /ea	FLAT CAP 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

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

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

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

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

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

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

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

Maintenance Hole Estimate Sheet

1200 mm DIAMETER
MONOBASE MH

DEPTH (m) FROM	TO	PRICE $ /ea
1.37	1.52	1,766.00
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	3,325.80
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

2400 mm DIAMETER
BASE SLAB MH

DEPTH (m) FROM	TO	PRICE $ /ea
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

1500 mm DIAMETER
MONOBASE MH

DEPTH (m) FROM	TO	PRICE $ /ea
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

1800 mm DIAMETER
BASE SLAB MH

DEPTH (m) FROM	TO	PRICE $ /ea
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

3000 mm DIAMETER
BASE SLAB MANHOLE

DEPTH (m) FROM	TO	PRICE $ /ea
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
WL type vertical sewage pumps & W-type horizontal sewage pumps)

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

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

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

Sewage Trash pump 7.5HP

PumpBiz®.com
1/10/2017

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

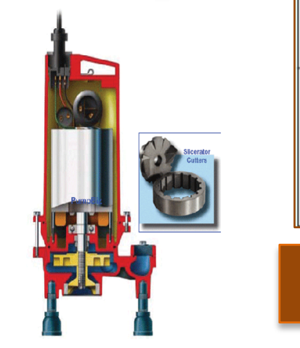
MIT High Pressure Pedestal Pumps (FMIT-30 MIT)

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

Submersible "Non-Clog" Pump 8"

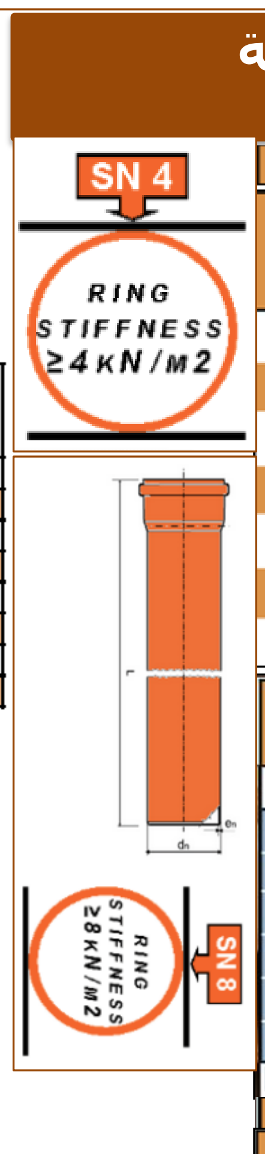
- Gallons Per Hour: 210000 (3500 GPM) [460v/3P 48HP 8"]
- Price: ($18,350.00)
- Applications: Dewatering, Sewage, Submersible

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

أسعار الأنابيب البلاستيكية
(PVC & UPVC)



GRAVITY SEWER PIPES

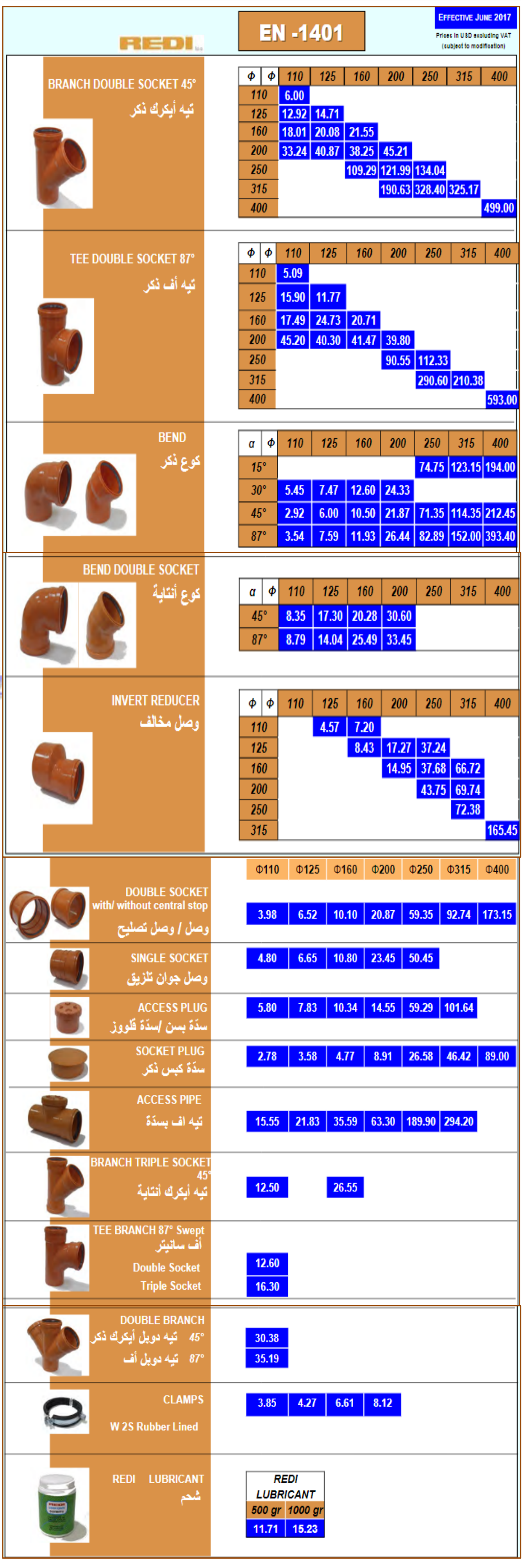
Designation SDR 41 UD	OD in mm	Wall Thick. in mm	Weight in kg/lm	Unit Price US$ / lm
110 SN4 see	110SN8			
125 SN4	125	3.2	1.930	8.30
160 SN4	160	4.0	3.050	12.50
200 SN4	200	4.9	4.680	18.40
250 SN4	250	6.2	7.330	29.30
315 SN4	315	7.7	11.480	44.80
400 SN4	400	9.8	18.380	74.00

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

▨ Supplied upon request only

SLOTTED UNDERDRAIN PIPE

Designation	OD in mm	Dis-charge Area in cm²	Water Inlet Area cm²/m	Slot Type	Unit Price US$ / lm
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



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 أنثاية

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

	Φ110	Φ125	Φ160	Φ200	Φ250	Φ315	Φ400
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 تلزيق	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 أنثاية	12.50		26.55				
TEE BRANCH 87° Swept أف سانيتر Double Socket	12.60						
Triple Socket	16.30						
DOUBLE BRANCH تيه دوبل أيكرك ذكر 45°	30.38						
تيه دوبل أف 87°	35.19						
CLAMPS W 2S Rubber Lined	3.85	4.27	6.61	8.12			

REDI LUBRICANT
شحم

REDI LUBRICANT 500 gr	1000 gr
11.71	15.23

Maryam EL-REZ @AECENAR/2020