

ACO TECHNIC

KD200 Combined Bridge/Kerb Unit



Manufactured from Vienite, ACO's high strength recycled material, ACO BridgeDrain is strong and durable and yet lighter in weight than traditional concrete kerbs. The product is ideal for use in many applications such as highways, car parking, elevated roads and bridges

Based on traditional Half Battered kerb stone profiles, the system is suitable for new and renovation projects and has a range of product accessories to provide a comprehensive drainage solution

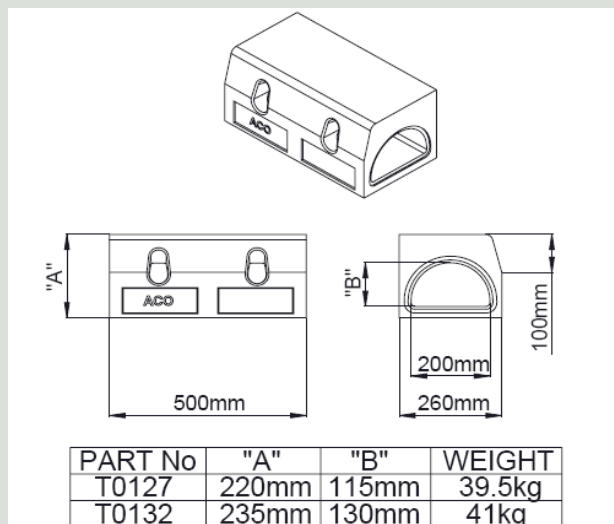
ACO BridgeDrain is fully certified to BS EN 1433:2002 Load Class D 400



ACO BridgeDrain 200 is a shallow combined kerb drainage system for use in applications with restricted construction depths. It is the first system of its kind to use recycled materials and be independently certified and Kitemarked to BS EN 1433:2002.



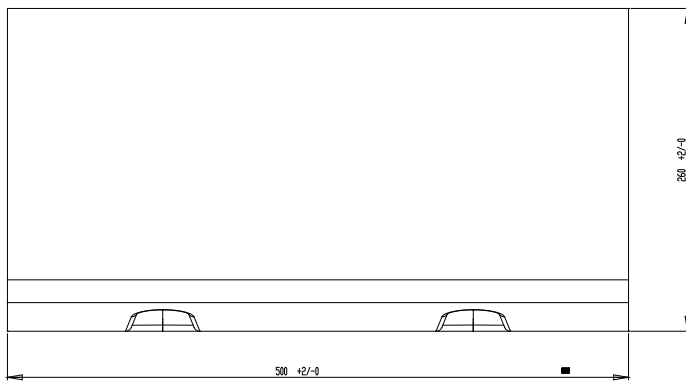
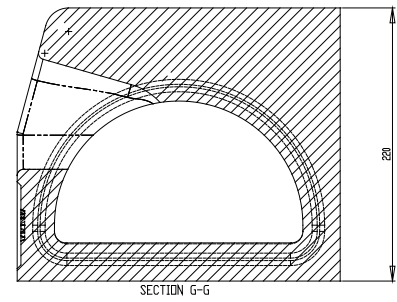
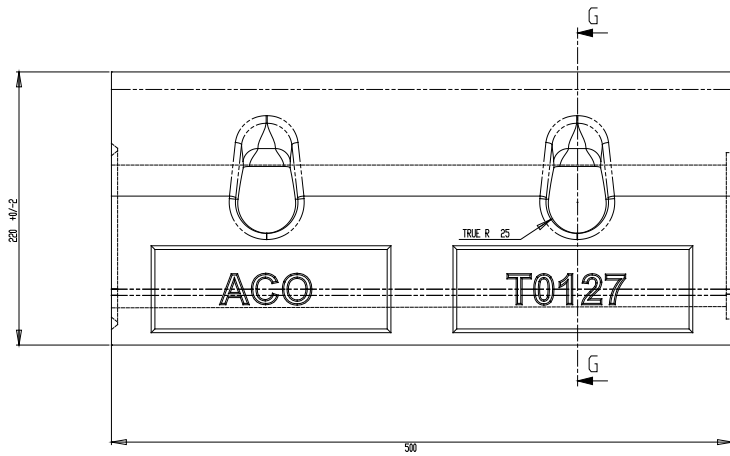
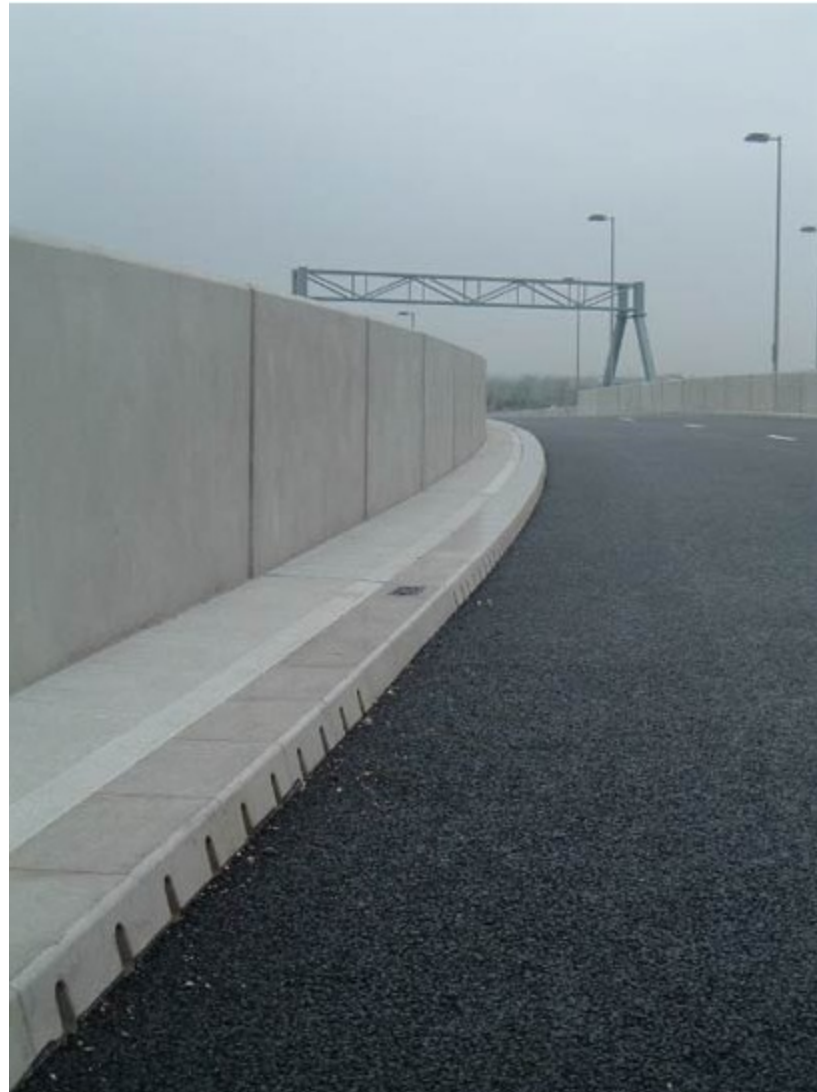
- **Shallow depth combined kerb drainage system**
- **Manufactured from strong, lightweight recycled material**
- **Range of accessories available for simple connection to underground drainage**
- **Tough and robust channel design**
- **One piece construction means no separate parts to bed and level**
- **Compact design reduces installation costs**
- **Removes ironwork from the carriageway, reducing potential failure points and hazards to motorists**



Recommended Applications

- Elevated roads
- Bridges
- Highways
- Car Parking





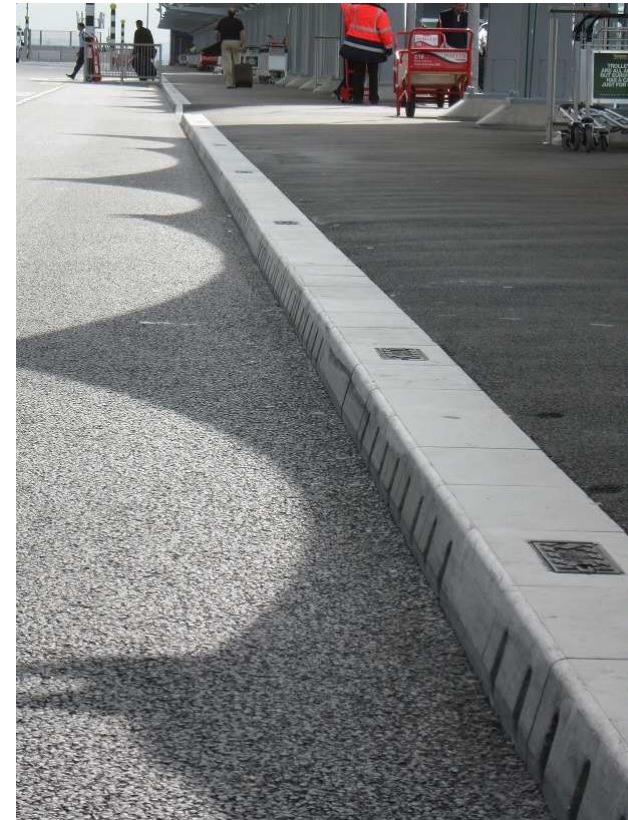


ACO TECHNIC KERBDRAIN / BRIDGEDRAIN 200 ACCESS UNIT





TERMINAL 5 LONDON HEATHROW AIRPORT



HYDRAULIC PERFORMANCE TABLES (for lateral inflow)

ACO KerbDrain 200 (BridgeDrain 200)

Maximum capacities for each constant depth channel, assuming uniform lateral inflow to the channel



Q (l/s) is the maximum total flow that the channel can carry

q (l/s/m) is the maximum possible lateral inflow.

The maximum possible catchment depth is $q+i$, where i is the rainfall intensity in $l/s/m^2$

A (m²) is the maximum area that can be drained at a rainfall intensity of 50mm/h (0.014 l/s/m²)

At other rainfall intensities, the area can be determined by proportion, e.g. at 75mm/h, the maximum area drained will be the tabulated area $\times \frac{50}{75}$

KD200 T0127 Overall depth 220mm									
Length to outlet (m)	slope (%)								
	0%			0.25%			0.5%		
	Q	q	A	Q	q	A	Q	q	A
10	4.5	0.45	324	6.1	0.61	439	7.3	0.73	526
20	4.2	0.21	302	6.6	0.33	475	8.2	0.41	590
30	3.9	0.13	281	6.9	0.23	494	8.7	0.29	624
40	3.7	0.09	266	7.2	0.18	518	8.9	0.22	640
50	3.5	0.07	252	7.4	0.15	530	9.2	0.18	664
60	3.3	0.06	238	7.5	0.13	540	9.4	0.16	678
70	3.1	0.04	226	7.6	0.11	546	9.7	0.14	699
80	3.0	0.04	213	7.7	0.10	551	9.9	0.12	715
90	2.9	0.03	207	7.7	0.09	553	10.2	0.11	732
100	2.8	0.03	202	7.7	0.08	554	10.3	0.10	742

KD200 T0132 Overall depth 235mm									
Length to outlet (m)	slope (%)								
	0%			0.25%			0.5%		
	Q	q	A	Q	q	A	Q	q	A
10	6.2	0.62	443	8.0	0.80	576	10.0	1.00	720
20	5.8	0.29	418	8.7	0.44	629	10.6	0.53	763
30	5.5	0.18	394	9.1	0.30	657	11.2	0.37	809
40	5.2	0.13	377	9.3	0.23	672	11.8	0.30	852
50	5.0	0.10	360	9.5	0.19	682	12.2	0.24	880
60	4.8	0.08	346	9.6	0.16	691	12.6	0.21	907
70	4.5	0.06	326	9.8	0.14	702	12.9	0.18	930
80	4.4	0.05	314	9.8	0.12	707	13.2	0.16	948
90	4.2	0.05	301	9.9	0.11	713	13.3	0.15	960
100	4.1	0.04	295	10.0	0.10	720	13.4	0.13	965

ACO Drain Design Services Team

Please contact the Design Services Team on 01562 816666 for advice on channels with stepped or sloping inverts, channels with non-uniform inflow, or channels receiving point inflows at the end or at intermediate locations.

The Design Services Team will be pleased to assist with any technical queries, scheme designs or parts schedules.