Dura Slab Fibreglass
TRENCH COVERS

For new or replacement covers, work platforms, structural flooring

Applications:

- Trench Covers
- Industrial Flooring
- Work Platforms
- Tank Covers
- Service Duct Covers
- Bridge Decking
- Gully Covers
- Balcony Flooring
- Chemical Plant Flooring

Benefits:

- Light weight / High strength
- Easy installation
- Anti-Slip Surface
- Corrosion/Fire resistant
- Impact resistant
- Zero maintenance
- High Load Capacity
- One or two man lift
- Safety Compliant.

CONSTRUCTION
High performance composites

Accrue Construction Materials Inc

Accrue

dura composites

ISO 9002 SGS · BSI EN.124 · Achilles · ACCEPTABLE TO ABS CRITERIA · No. 23175 Link-up

Dura Slab Structural Trench Covers

Hi Tech Construction

Dura Slab is a precision engineered fibreglass structural flooring system manufactured using a unique construction technique that provides an incredible strength to weight ratio. A one piece high strength fibreglass profile is protruded in one mass to produce a consistent quality flooring structure that is stiff, strong, light-weight, non-corrosive with an anti-slip walking surface.

New or Refurbishment Projects

Dura Slab is ideal for new constructions but is also well suited for refurbishment applications to replace old, heavy & cumbersome traditional flooring materials. The characteristics of Dura Slab make it more favourable than using steel, timber or concrete systems due to its lower weight, anti-slip surface, ease of installation and absence of maintenance.

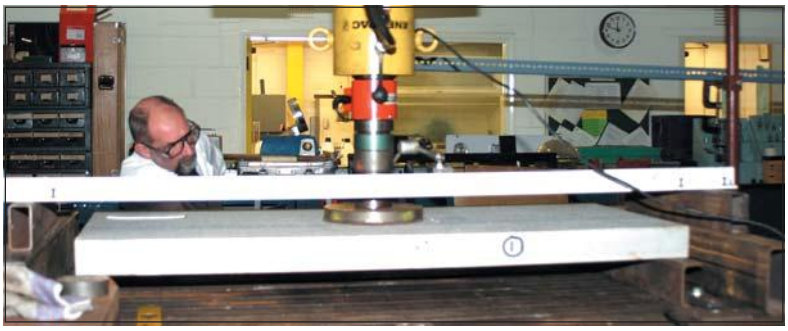
Health and Safety Compliant

Dura Slab is alone in providing such a comprehensive list of Health and Safety benefits. Dura Slab has one of the highest degrees of slip resistance ever measured for a walking surface, especially in wet, oily and frosty conditions. It is a fraction of the weight of steel or concrete and can be supplied in 25kg or 50kg panel sizes. This allows a one or two man lift which complies with health and safety regulations. This means that routine inspections and repairs can be made easily by simply removing the appropriate panels. This obviates the need for expensive heavy lifting machinery in cases where access is limited.

British Standard Compliant

Dura Slab can be BS EN 124 approved. This European standard applies to gully tops and manhole tops for vehicular and pedestrian areas. In order to reach this approval a Dura Slab panel is subjected to a repeated load as per BS EN 124 standards. The test is continued to evaluate absolute failure level.

Damaged concrete trench covers in need of replacement to meet Health & Safety Regulations



Dura Slab undergoing BS EN 124 testing

BS EN 124 Load Classifications

Classification	Code	Working Load	Ultimate Load
Class A	A15	5kN	15kN
Class B	B125	50kN	125kN
Class C	C250	65kN	250kN
Class D	D400	108kN	400kN

Dura Slab Load Capacities

Ultimate Failure Loads (kN)

Product	Width	Kg/sqm	Load Type	500mm	600mm	750mm	1000mm	1200mm	1500mm	2000mm	2500mm	3000mm
Type 40	500mm	17.2	Point	59	49	35	30	28	25	21	12	10
			UDL	118	98	70	60	55	50	42	24	20
Type 45	700mm	23.6	Point	70	70	70	74	85	70	65	43	36
			UDL	140	140	140	148	170	140	130	86	72
Type 50	475mm	40.5	Point	168	168	164	144	125	91	68	54	45
			UDL	336	336	328	288	250	182	136	108	90
Type 75	600mm	62.0	Point	305	304	294	286	238	190	142	108	85
			UDL	610	608	588	572	476	380	284	216	170
Type 100	600mm	82.4	Point	504	513	481	445	401	321	255	180	158
			UDL	1008	1026	962	890	802	642	510	360	316

BS EN 124 Classification met by span

Product	Width	Kg/sqm	Load Type	500mm	600mm	750mm	1000mm	1200mm	1500mm	2000mm	2500mm	3000mm
Type 40	500mm	17.2	Point	A	A	A	A	A	A	A	na	na
Type 45	700mm	23.6	Point	A	A	A	A	A	A	A	A	A
Type 50	475mm	43.7	Point	B	B	B	B	A	A	A	A	A
Type 75	600mm	62.0	Point	C	C	C	C	B	B	B	A	A
Type 100	600mm	82.4	Point	D	D	D	D	D	C	C	B	B

Span deflection 1/200 (0.5%) - KN/m² or kN/m panel width

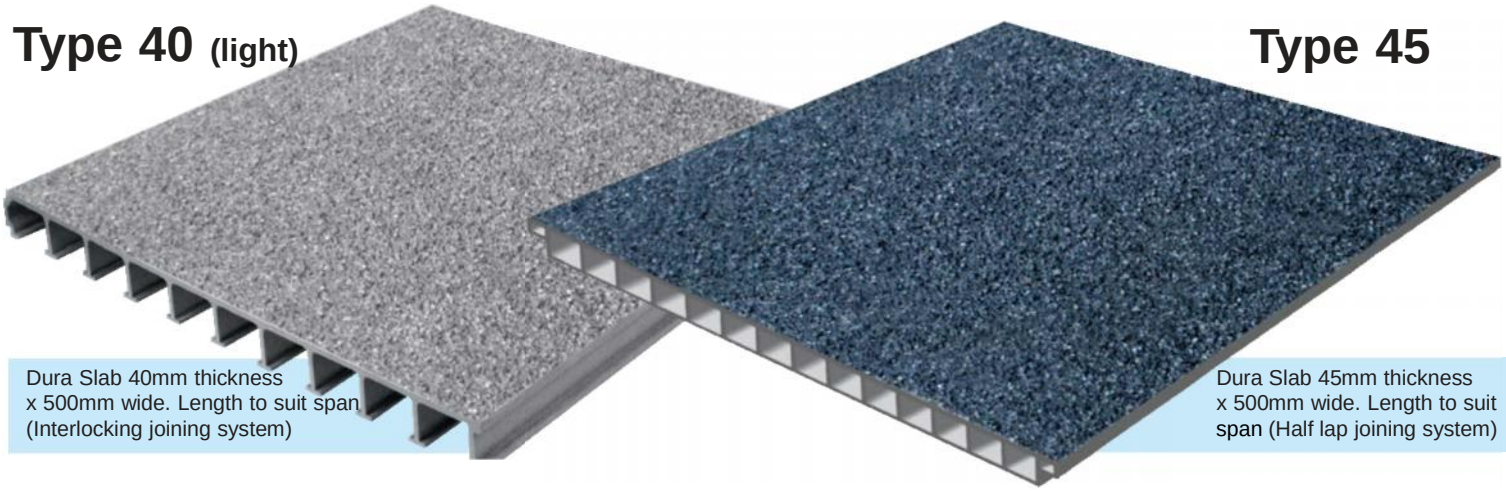
Product	Width	Kg/sqm	Load Type	500	600	750	1000	1200	1500	2000	2500	3000
Type 40	500mm	17.2	Point	28	19	12	7	5	3	1	1	1
			UDL	90	52	26	11	7	3	1	1	0
Type 45	700mm	23.6	Point	38	26	17	10	13	9	5	3	2
			UDL	122	70	36	15	17	9	4	2	1
Type 50	475mm	43.7	Point	76	53	34	19	14	9	4	3	2
			UDL	243	141	72	30	19	9	3	2	1
Type 75	600mm	62.0	Point	199	188	172	152	105	67	38	24	17
			UDL	637	501	367	243	140	71	30	15	9
Type 100	600mm	82.4	Point	255	240	220	195	140	89	50	32	22
			UDL	816	640	469	304	187	95	40	20	12

All data is produced based on live testing carried out by Environmental Scientifics Group

DURA SLAB Fibreglass Trench Covers

Precision Engineered Pultruded Fibreglass Trench Covers to BS EN124

Type 40 (light)

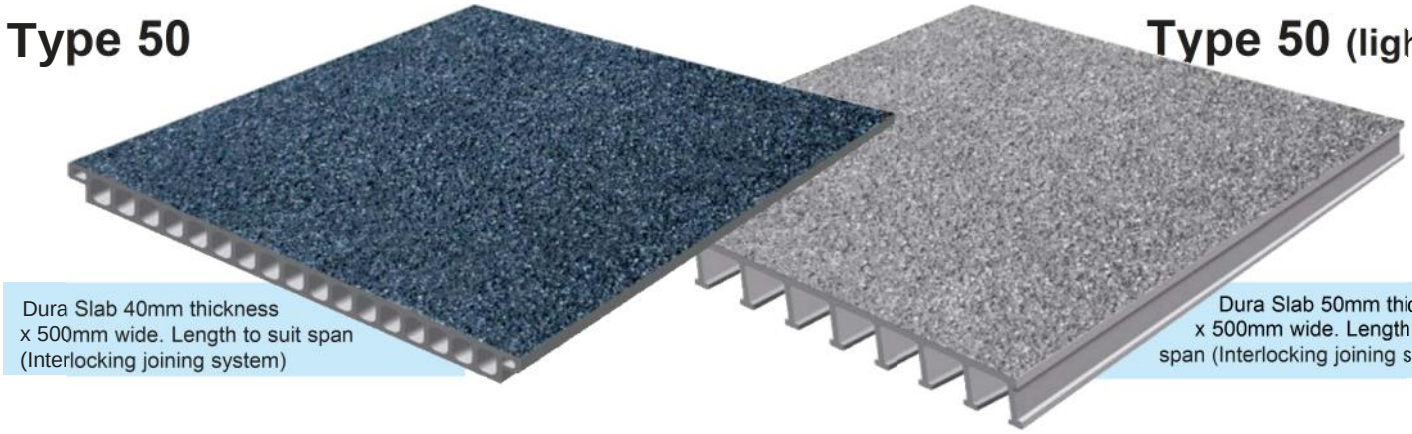


Dura Slab 40mm thickness
x 500mm wide. Length to suit span
(Interlocking joining system)

Type 45

Dura Slab 45mm thickness
x 500mm wide. Length to suit
span (Half lap joining system)

Type 50

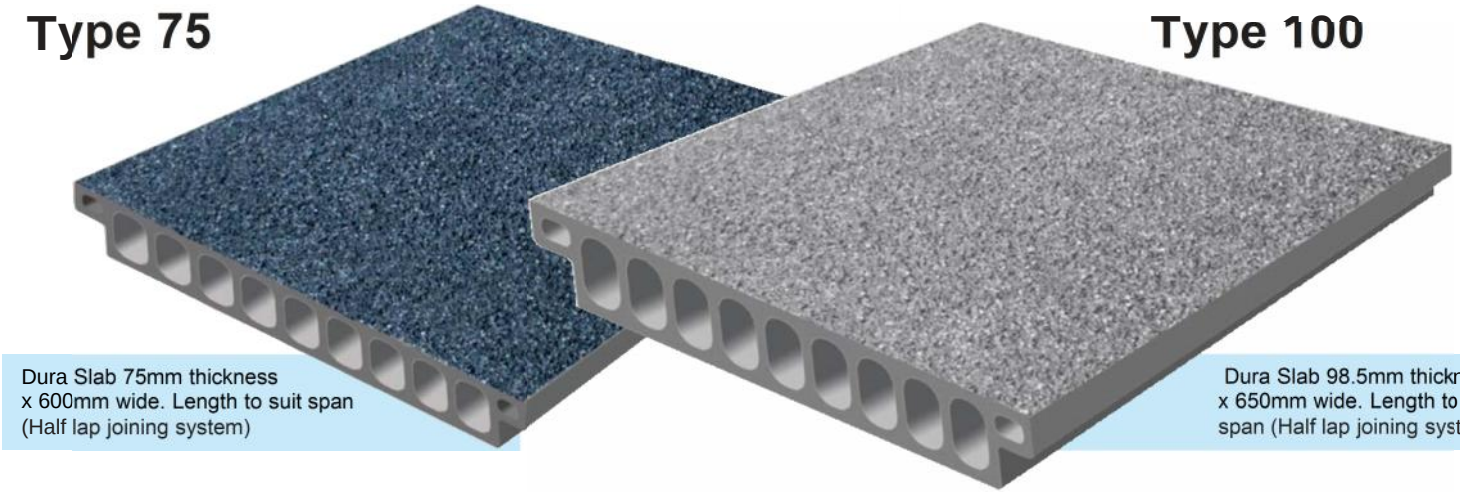


Dura Slab 40mm thickness
x 500mm wide. Length to suit span
(Interlocking joining system)

Type 50 (light)

Dura Slab 50mm thickness
x 500mm wide. Length to suit
span (Interlocking joining system)

Type 75



Dura Slab 75mm thickness
x 600mm wide. Length to suit span
(Half lap joining system)

Type 100

Dura Slab 98.5mm thickness
x 650mm wide. Length to suit
span (Half lap joining system)

Available shortly, please ask for details

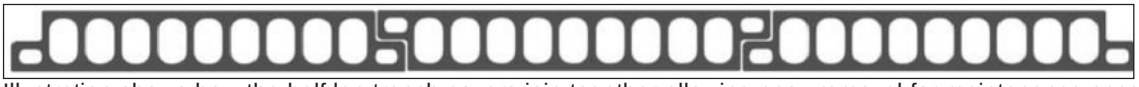


Illustration shows how the half lap trench covers join together allowing easy removal for maintenance access

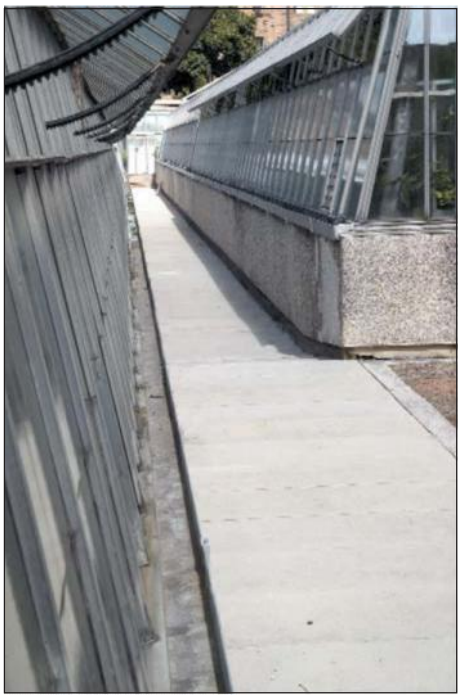
Duct Covers for Royal Botanic Garden, Edinburgh

Comments

"When MEP were asked to replace all the pipe-work for the services, we took the opportunity to recommend an alternative duct cover to replace the original concrete material. The idea was to better fulfil key functional criteria: light weight for easy handling and easy access, high load bearing strength, anti-slip surface for all conditions and colour matched to surrounding flooring. Probably the biggest benefit and single biggest reason Dura Slab was specified, was its light weight construction. This allows a 2 person lift and does away with the need for bulky and expensive heavy lifting equipment. The previous concrete duct cover only provided access to the services via manholes which were 10 metres apart. This meant that maintenance teams had to work in a confined space with limited light to reach control valves and carry out burst pipe repairs."

Key Benefits for this application

- **Anti-Slip walking surface**
- **Light Weight**
- **Health & Safety compliant**
- **Covers easily removed for access**



Completed Dura Slab installation

Dura Slab allows easy maintenance access

Cable Duct Covers for British Telecom

Dura Slab panels were chosen by British Telecom for use as Cable Duct Covers at their Martlesham Heath laboratories as a result of the unique combination of benefits offered.

Dura Slab was found to provide the perfect blend of characteristics that enables low cost installation plus easy and quick access for routine maintenance.

Key Benefits for this application

- **Fire resistant**
- **Covers easily removed for access**
- **Anti-Corrosive**
- **Fast installation**
- **Zero maintenance**

Balcony Flooring for Kier Construction London

Dura Slab panels are ideal for installations above ground level such as this new build residential development. Each Dura Slab panel can be joined seamlessly without the need for traditional grouting. The finished balcony proved extremely successful and as a consequence of this project, Kier London have gained further business with their clients.

Key Benefits for this application

- **Fire resistant**
- **No lifting equipment required**
- **Safe Anti-Slip surface**
- **Light Weight for easy installation**
- **Zero maintenance**

Kier London, a division of Kier Regional Ltd.

Dura Slab was used on several floors of this residential development

Trench Covers for National Electrical Grid Network

Customer Comments:

"The Dura Slab 5 ton trench cover was the only solution on the market that met all of our clients' requirements. The biggest benefit of Dura Slab is that given the sensitive nature of the equipment on site and their light weight, they could be installed without the need for heavy lifting equipment. Once installed, the high load bearing capacity allows site staff to travel around the site using the trench covers without having to worry about specific crossing points"

"We also specified Dura Slab with built-in lifting eyes and lifting keys. This makes it very simple to install the panels and also to remove them for maintenance and servicing using the tools supplied. The anti-slip surface has already proven to be very effective. The installation period has coincided with very wet weather and I can report that there have been no incidents of site staff slipping or falling."

Contract Manager, Trant Construction (on behalf of National Grid)

Key Benefits for this application

- **5 ton load capacity**
- **No lifting equipment required**
- **Anti-Slip walking surface**
- **Light Weight**
- **Covers easily removed for access**
- **Fast installation**

Installation process made easy through lightweight panels and lifting keys

Service Duct Covers for Intervet UK Limited

Customer Comments:

"Some of the key advantages of using Dura Slab for our replacement service duct covers relate to better accessibility and its light weight construction. Dura Slab improves Health & Safety in several ways. Previous concrete covers required at least 2 men to lift them and as a result of their significant weight, there was a risk of injury. Now that Dura Slab has been installed, it means that one man can now lift a duct cover by himself and then work on the services without any need for additional man power. This saves money and time and also means that we don't have any problems carrying out maintenance. Finally, we found that Dura Slab was cheaper than the quote we received for bespoke concrete covers with the special lifting eyes to suit a 2/3 man lift"

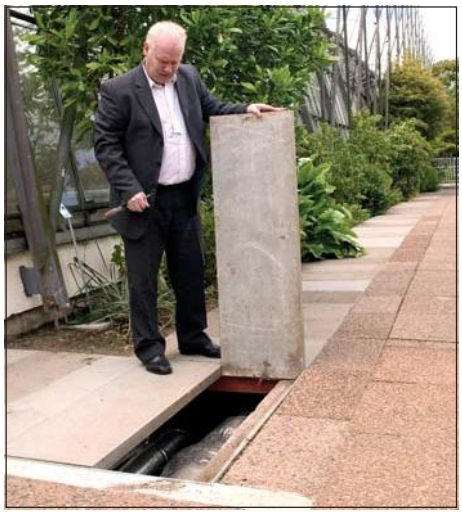
Civil Project Manager, Intervet UK Limited

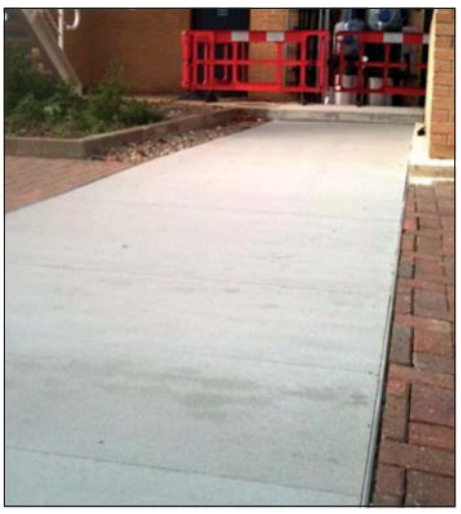
Key Benefits for this application

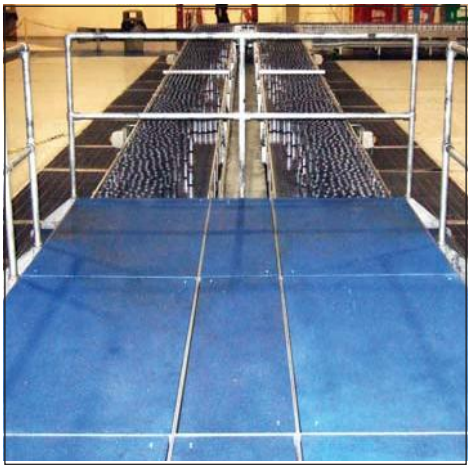
- **No lifting equipment required**
- **Lower purchase cost**
- **Anti-Slip walking surface**
- **Light Weight**
- **Covers easily removed for access**
- **Zero maintenance**

Dura Slab allows easy access, is lightweight and has built-in lifting eyes

DURA SLAB – Mixed Installation Options





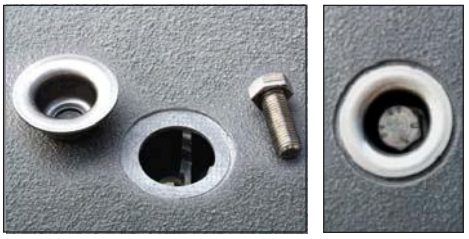


Dura Slab fixing systems

Fixing types

- Nut and bolt
- Fischer Rawlbolts
- Coach screw (Anti-tamper available)

Securing Methods



- Recessed collar (illustrated)
- Counter sunk
- Dome head bolt and washer

Lifting Systems

- T-Bar lifting handles (illustrated)
- Lifting Eyes

(*Can suit 1,2 or 4 man lift*)

Dura Slab manufacturing process

Glassfibre rovings and matting reinforcement

Chemical grade resin dip bath

Final pultruded resin glassfibre Dura Slab

Pultruded Dura Slab Profiles are manufactured by combining various resins with pure glass-fibre reinforcement. They are formed and cured in a continuous process creating a product of extraordinary strength and resilience. The resultant profile offers a combination of benefits and mechanical properties exceeding those of metal. Weighing up to 80% less than steel and concrete, Dura Slab offers equivalent performance for considerably less weight. This results in major weight savings and lower installation and servicing removal costs due to more economical transportation, handling and on site positioning. The high strength to weight ratio has particular relevance for many applications in the structural flooring, trench, gully and duct cover industries.

Concrete and steel trench covers deteriorate over time and require replacement to meet Health and Safety regulations

Photographs illustrate existing concrete and steel trench covers. They show signs of severe damage and weakened strength which may result in trip hazards, serious injuries or even vehicles breaking through old concrete covers.

Why use Dura Slab Structural Flooring?

LOWER COSTS

Dura Slab can provide significant savings over the use of most other materials when taking into account 'life cycle costs'. This is due to the fact that heavy installation equipment is eliminated, there is zero maintenance plus the fact that access can be provided for servicing simply by lifting the panels.

ANTI-SLIP

Dura Slab flooring features a gritted surface that provides outstanding anti-slip protection for personnel - in wet and oily environments. The grit is embedded in the top surface of each panel prior to curing. This combination of integral construction, plus depth of the embedded grit, creates a long-lasting maximum anti-slip top surface.

MAINTENANCE FREE

The use of **Dura Slab** virtually eliminates maintenance. This can drastically reduce costs since painting is not required, and UV inhibitors protect against degradation from the sun which means the material does not need replacing.

MECHANICAL STRENGTH

Breaking strength under a lateral force is exceptional. The uni-directional continuous fibreglass reinforcement offers numerous advantages, including rigidity, shock-resistance and no permanent deformation after overloading. These factors provide excellent mechanical strength and a generous factor of safety. Fibreglass is designed for maximum safety in intensive industrial use.

EASY INSTALLATION

Dura Slab panels weigh about one-quarter as much as steel covers. Two men can easily handle full panels, without the need for hoists, pulleys or dollies. If the panels need to be moved for cleaning, maintenance or utility access, there is less chance of back injuries. The lightweight design of the material therefore reduces installation costs.

LOW INSTALLATION COSTS

Fibreglass weighs considerably less than conventional materials, and is easier and less expensive to transport, install and remove. Only simple hand tools are required for installation and removal, eliminating the need for costly equipment and labour costs associated with heavy lifting, cutting and welding equipment.

Website: AccrueConstructionMaterials.com

UK *(Head Office)*
ACM International Inc.
Auckland Hill,
West Norwood, SE27,
London**, UK.**

Contact: Andy Lee - GGM
Office: + 44 75 535 83910
Andyaccrue@gmail.com
andylee@accruegroup.com

USA / Canada
ACM [USA]
9 Pinewood Lane,
Warren, New Jersey,
07059, **USA.**

Contact: John Ross
Office: + 173274 27179
Jr.adriatik@gmail.com

BALKANS Region
ACM [Albania]
Tirana Sheraton Hotel
Shopping Mall, Zyra G2
Tirana, **Albania**.

Contact: Petro Vjero
Int'l: +355 423 79607
Mobil: 069 5430 934
Mobil: 069 4094 340
Petro.vjero@gmail.com
Jr.adriatik@gmail.com

KOSOVO
ACM [Kosovo]
Kalabria rr Rexhep
Kransniqi 30/6
Pristina, **Kosovo.**

Contact: Jeton Mehmeti
Int Tel: +377 45 600 584
jetonmehmeti@gmail.com

Accrue Construction Materials Inc