

## Asphalt - Benefits/features matrix

#### **Branded asphalt products**

													•	•										
		Tuff range									Dura range								_	Sports range		Airfield		
Additive options		Tuffgrip®	Tuffpave®	Tuffdrive®	Tuffdrain®	Tufflex®/ Tufflex® XD	Tufflex®+	Tufflex® TX	Tufflex® D	Tufflex® HD/HD+	Tufflayer® (SAMI)	Durafalt PMB	Durafalt (942)	Durafalt° -fill	Duradrive®	Durafalt® HD and HD+	Durafalt° D	Duralayer (+) Multi	Duralayer Velo	Duralayer path	Courtfalt*	Courtfalt <sup>®</sup> Multi	BBA	049 SMA
Low carbon	era era®	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	era 140	-	
	CL CarbonLock®	CL	CL	CL	CL	CL	CL	CL	CL			CL		CL	CL			CL	CL	CL	CL	CL	CL	
	AL AgeLast®	AL	AL	AL	AL	AL	AL	AL	AL	AL	AL	AL											AL	AL
Recycled content	RAP RAP	RAP	RAP	RAP		RAP	RAP	RAP	RAP	RAP		RAP	RAP	RAP	RAP	RAP	RAP	RAP	RAP	RAP				
	RP RecyclePlast®			RP	RP	RP	RP	RP	RP	RP	RP													
Emissions reduction	CA CleanAir®	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA

#### **Standard asphalt products**

Additive options		Hot rolled asphalt (HRA)	Stone mastic asphalt (SMA)	Asphalt concrete (AC)				
	era era®	era* 140	era 140	140 140				
Low carbon	CL CarbonLock®	CL*	CL*	CL*				
	AL AgeLast®	AL	AL	AL				
Recycled	RAP RAP	RAP	RAP	RAP				
content	RP RecyclePlast®	*	*	*				
Emissions reduction	CA CleanAir®	CA	CA	CA				

\*Please contact the technical team about this option: asphaltsales@heidelberg.co.uk



#### era®

era 140 is our warm mix asphalt option. It can cut scope  $1 \text{ CO}_2$  emissions by up to 15% compared with hot mix asphalt and, importantly, can be used to produce a number of different products with recycled or secondary aggregates. era 140 offers increased durability, enhancing these savings.



era 100 is our half warm mix asphalt option offering carbon reductions up to 50%.



#### **CarbonLock®**

CarbonLock asphalt contains biogenic material within the binder, which absorbed and stored atmospheric CO<sub>2</sub> during its formation. This CO<sub>2</sub> is 'locked' into the material for its entire service life, even when planed and recycled.

CarbonLock can be produced using our era 140 warm mix process, which allows the asphalt to be manufactured at a lower temperature.

As a result, CarbonLock provides at least a 25% reduction in scope 3 carbon emissions compared with standard hot mix asphalt.



### **RecyclePlast®**

Our RecyclePlast asphalt contains additives derived from waste plastics. It can also be produced at lower temperatures using our era 140 warm mix process.

The chemically modified waste plastic in RecyclePlast is compatible with bitumen without compromising performance. RecyclePlast provides a beneficial use for plastic at the end of its life rather than it going to landfill. RecyclePlast can also be recycled back into new asphalt at the end of its life.



#### **CleanAir®**

CleanAir helps to minimise the impact of asphalt production and laying on local air quality by reducing the emissions of specific gases and particulate matter from asphalt mixes. This is particularly beneficial for ultra-low emission zones and areas of confined spaces such as tunnels.

CleanAir can reduce emissions of nitrogen oxides, sulphur dioxide, volatile organic compounds (VOCs) and particulates by up to 40% compared to conventional hot mix asphalt.



## **AgeLast®**

AgeLast asphalts contain an additive that reduces the rate of bitumen ageing to delay the onset of embrittlement and prolong the life of asphalt surfacing. This reduces the need for intervention and associated carbon emissions.

AgeLast materials can be produced using our era 140 warm mix process, reducing the CO<sub>2</sub> emissions associated with production, compared with traditional hot mix asphalt.



#### **RAP**

Asphalt is 100% recyclable and can be incorporated back into new asphalt at the end of its service life.

Using recycled asphalt planings (RAP) in the production process reduces the use of primary aggregates and bitumen, preserving natural resources for future generations.

The addition of RAP fully supports the circular economy and significantly reduces the carbon emissions associated with the production of asphalt.



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	Tuff range										Dura range										range	Airfield	
	Tuffgrip®	Tuffpave®	Tufflex® TX	Tufflex®/ Tufflex® XD	Tufflex®+	Tufflex® D	Tufflex® HD/HD+	(SAMI) Tufflayer®	Tuffdrive®	Tuffdrain®	Durafalt PMB	Durafalt (942)	Duralayer Multi® and Multi® +	Duralayer Path	Duralayer Velo	Durafalt® HD and HD+	Duradrive®	Durafalt® D	Durafalt® -fill	Courtfalt®	Courtfalt® Multi	ВВА	049 SMA
													muiti® +										
Sustainability  Enhanced durability																							
- whole life cost benefit  Improved efficiency	•	•	-	-	-	•	•	•	•	-	•	•	•	•	•	•	•	•	•	•	•	•	•
Designed for improved drainage/hydraulic	-	•	_	-	-	•	-	•		-	•	•	•	•	•	•		•	•		_	•	•
conductivity  Workability benefits										_									_	•	•		
Quicker installation			-	-	-												_					-	
Approval process																							
Single layer application				•	•		•									•			•				
Sustainability	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			-
								-															
Applications																							
Highways - Major																							
Highways - Local																•							
Car parks				•	•				•				•				•	•					
Housing				•	•	•			•	•			•	•			•	•					
Driveway and car parks				•	•				•	•			•										
Sport										•										•	•		
Industrial/commercial				•	•	•	•	•					•			•		•					
Airports																						_	•
Agricultural/farm use				•	•		•						•										
Durability																							
Enhanced durability				•	•	•	•	•	•	•	•	•			•		•			•			•
Low air void which prevents water ingress	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•			•	•
Improved scuff resistance	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•	•		•	•	•
Premium polymer modified bitumen (PMB)	•	•	•	•	•	•	•	•	•	•	•					•						•	
Fuel resisting properties (+ versions)					•		•									•							
Fatigue resistance				•	•	•	•	•			_•					•						_ •	
Multi-layer crack resisting asphalt solution			•	•	•	•		•								•						•	
Skid resistance																							
Range of aggregate PSV sources											•												
Reduced texture and increased tyre contact patch				•	•	•							•						•				
Reduced rolling resistance	•	•	•	•	•	•	•				•	•	•	•	•	•		•					
Deformation resistance																							
Peformation resistance																							
Increased stiffness		-	-	-	-		-	_			-	-	-				-	-				-	-
Heavy duty slow	_	_	_	_	_	_	•		_		_	_	_			_	_						•
moving vehicles																							
Noise and spray																							
Noise reduction	•	•	•	•	•	•	•				•	•	•			•	•	•				•	
Spray reduction	_		-	-	-		-	-								-							-
Nominal size options																							
4mm				•	•			•					•	•	•								
6mm	•	•		•	•	•	•	•	•	•			•	•	•	•	•	•		•	•		
10mm	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•		•	•
										•				•		•		•		•			•
14mm	•																						